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*The Role of the Primary Balance in Local Government Risk  
Management – a European Perspective*

**Keywords:** local finances; financial risk; stability of local finances; primary balance

**JEL:** H72; H74; R51

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**Abstract**

**Theoretical background:** One of the main aspects of assessing the financial health of local government units is, among other things, ensuring liquidity and analysing the risks associated with the burden of repayment and debt service costs on the budget. It is also important to comply with the fiscal rules laid down in the legal and financial system. The results of the study of the primary balance at the local level in Poland prompted the authors of this research to undertake a more comprehensive study of the primary balance. For this reason, the study will focus on units belonging to the local government sector in the European Union countries.

**Purpose of the article:** The purpose of this study is to attempt to use a measure such as the primary balance to assess the financial health of local government entities and to highlight its importance in the risk management of the units under study.

**Research methods:** The authors of this study propose to include in the assessment an additional financial category, i.e., the difference between the entity's total budget revenue and expenditure excluding debt service costs. Compared with the budget balance, this measure makes it possible to examine the extent to which the entity's budget is burdened by debt servicing costs. The study was carried out for the period 2005–2022, using International Monetary Fund data for the local government sector compared with the general government sector as a whole.

**Main findings:** The results obtained make it possible to compare the burden of debt service costs on local government units in different European countries, also against the background of the entire public finance sector. The results justify the need to use the primary balance as an important indicator for assessing the financial situation of local government units.

## Introduction

A frequent response to various types of fiscal crises has been to propose new rules aimed at moving towards balanced public finances. At the European Union (EU) level, the basic measures for assessing the financial sustainability of countries are the debt and deficit-to-GDP ratios (Art. 126 TFEU). Different types of fiscal rules can be identified in the EU countries, which are also intended to lead to compliance with the fiscal rules of the European Community as a whole. These include debt rules (e.g., Poland, Bulgaria, Malta), budget balance rules, both nominal and relative to GDP, or structural balance rules (e.g., Poland, Italy, Germany, Latvia, Belgium, Slovakia). A primary balance rule in relation to GDP has also been identified (Greece).

Monitoring financial risks is particularly important in times of crisis. For example, during the COVID-19 pandemic, public authorities at all levels of the general government sector were faced with the challenge of increasing the cost of financing public services while budget revenue were declining. Efforts included, on the one hand, state aid and, on the other, the need to review the fiscal strategies adopted, including the fiscal rules in place.

In addition, the COVID-19 pandemic coincided with the climate crisis, forcing an increase in spending on environmental measures related to climate change. For the EU, based on the proposed scenarios (EEA 2013), climate neutrality is targeted for 2050. Another challenge for governments during the crisis is the potential decline in interest in purchasing a country's debt instruments (Arellano et al., 2021).

It is important to take into account the effects of the political budget cycle, which can have a negative impact on the absorption of shocks by public authorities. The literature has repeatedly identified negative fiscal effects as a consequence of politicians' interests, which are often misaligned with actual fiscal policy objectives (Persson & Svensson, 1989; Rogoff & Sibert, 1988; Samuelson & Nordhaus, 2000; Veiga & Veiga, 2007).

An analysis of the literature on the subject has identified a research gap in the importance of the primary balance for assessing the financial risk of the local government sub-sector. Most studies focus on the central level. Research is available on the links between vertical transfers from the state budget, revenue autonomy and excessive deficits in local government units (Foremny, 2014; Hallerberg & von Hagen, 1999). Furthermore, Jochimsen and Raffer (2020, p. 18) point out that the balanced budget rule is important from the perspective of public finance discipline. They argue that applying the rule exclusively at the central government level is insufficient, as vertical transfers result from a deteriorating primary balance. In the context of both national and international (e.g., European) regulations, the primary results of local government units may be of particular importance. Indeed, these units constitute an important part of the general government sector and are therefore an area of interest for this study, particularly in the light of financial crises. The primary balance is important for the assessment of financial risk exposure, as it provides information on the burden of debt service expenditure on the budget and the sources of its financing. It can therefore influence the assessment of the financial security of the general government sector.

Complementing the above considerations and the existing fiscal rules would be the ratio of the primary balance to government revenue. This concept is applicable in European law, as according to the Regulation on the effective coordination of economic policies and on multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97 (Art. 8 Regulation (EU), 2024/1263) the annual improvement in the structural primary balance to achieve the required margin shall be 0.4 percentage points of GDP, which shall be reduced to 0.25 percentage points of GDP in the case of an extension of the adjustment period. Operational indicator anchored in debt sustainability should serve as a basis for setting the fiscal path and for carrying out annual fiscal surveillance for each member state. In addition that indicator, which is not affected by the operation of automatic stabilisers and other expenditure fluctuations outside the direct control of the government, provides leeway for counter-cyclical macro-economic stabilisation (Council Regulation (EU) 2024/1264).

The aim of this study is to attempt to use a measure, such as the primary balance, to assess the financial condition of local government units and to indicate its importance in the risk management of the units under study.

## Literature review

The financial security of public sector entities, understood as the assurance that they have the financial capacity to meet public responsibilities, is the foundation of the public financial system. In the absence of assurances about the ability to finance their functions, governments may use debt instruments, leading to excessive debt and uncontrolled increases in debt service costs (Buiter, 1985, p. 15).

The above becomes particularly important in the context of changing economic circumstances due to emerging crises, including financial crises. Therefore, the stability of the financial system is important, which is related to ensuring settlements between market participants, the possible mitigation of financial risks, the stability of financial institutions and the State, or the absence of signs of economic downturns or financial crises in a broader sense (Allen & Wood, 2006; Crockett, 1997; Padoa-Schioppa, 2002; Radke, 2005, pp. 14–15).

The recent COVID-19 pandemic confirmed a number of links between the international economy and health issues, but also the impact of different types of constraints on the economic activity of society. In particular, the pandemic crisis exacerbated debt problems in developing and emerging countries, leading to the emergence of systemic debt crises (Agarwal, 2024, p. 3).

The link between primary deficits and the impact of the COVID-19 crisis was also pointed out by Rogoff (2022, p. 155), who pointed out that if primary deficits are too high, debt ratios can rise to unsustainable levels. Negative interest rate growth differentials were more common just before the crisis. A similar conclusion was reached in studies of financial crises between 1870 and 2008. The natural rate gap (interest rate minus growth rate) was significantly lower in the period before the four crises analysed, even though inflation and real interest rates were not deviating from trend. In addition, credit growth was higher before the crises (domestic and global) (Jorda et al., 2011, p. 372).

In this context, it is important to highlight the need for fiscal reforms following different types of crises. The likelihood of changing fiscal policy rules is significantly higher when fiscal crises occur (Hallerberg & Scartascini, 2015). However, there is a legitimate risk that rules aimed at fiscal sustainability will be rejected in favour of support rules due to their divergence from policy objectives (Wyplosz, 2013, p. 523).

High structural primary deficits and interest payments relative to GDP have a negative impact on economic growth in subsequent years. Therefore, a reduction in the debt-to-GDP ratio should be pursued (Rangarajan & Srivastava, 2005). Thus, from a financial risk reduction perspective, the concepts of fiscal stabilisation become important. This is because an increase in debt associated with the financing of budgetary expenditure has the effect of shifting the burden over time, leading to high budget deficits. At this point, it is worth noting the limitations on the part of future generations of taxpayers, who are deprived of any influence on the decisions taken by current taxpayers. Thus, moral hazard will be possible by borrowing more than is actually needed (Wagner, 2004, pp. 197–198).

This can lead to the persistence of deficits in the long term and, consequently, to a loss of confidence in those in power. Assuming that taxpayers are rational, the process of public debt should only take place within a specific timeframe and within a formal-legal framework that citizens understand. It should therefore not lead to a loss of confidence among taxpayers (Peukert, 2006, pp. 491–495). In addition, it should be borne in mind that lenders will be willing to lend to the government

if they receive an attractive interest rate (Stiglitz & Rosengard, 2015, p. 52). The consequence of excessive debt can also be an excessive increase in the tax burden, which can drive capital out of the country (Roberts, 1942, pp. 260–261).

The change in tax revenue occurs in response to an expenditure shock financed by the debt incurred. Despite the smoothing of tax rates, tax revenues will finance investment spending to a small extent, responding to changes in the level of public debt in line with the concept of fiscal restraint. In this sense, tax revenues are also linked to the economic cycle and can be used as a tool to minimise the impact of fiscal shocks (Bhandari et al., 2017, p. 630; Canzoneri et al., 2016, pp. 50–52; Corden, 2010, pp. 44–46).

In the context of the importance of the primary balance for the countries of the European Union, attention should be paid to the rules relating to the assessment of the safety of public finances. One important rule is the ratio of the budget deficit and public debt to a country's GDP (Art. 126 TFEU). These indicators are the starting point for considering the primary balance as a potential rule for the system of public finances in EU countries.

The primary balance as a measure to assess the safety and sustainability of public finances is a popular focus in the literature. However, it is important to note that these studies are largely at the national level and only rarely at the LGU level. Table 1 presents and summarises the findings of selected studies.

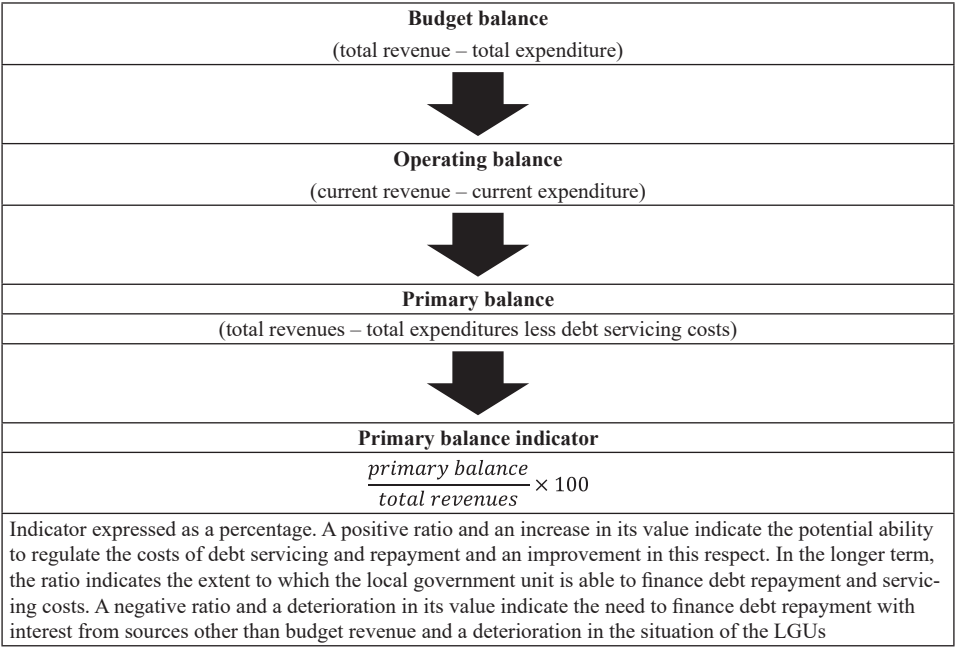
Table 1. Primary balance in research

| Element                                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fiscal rules                                               | Maintaining a primary surplus to ensure debt servicing (ECB, 2011; EU, 2012), positive impact of public expenditure restraint rules on the primary balance (Nerlich & Reuter, 2013), element of annual fiscal surveillance (Regulation 2024/1263)                                                                                                                                                                                                                                                                                                                 |
| Assessment of public finances condition and financial risk | Taking into account the impact of a balanced budget on the local government sector (Guarini & Pattaro, 2016); low primary deficits as a result of the ability to increase government revenue (Artés & Jurado, 2018); the negative difference between accumulated primary deficits and growth-weighted surpluses as a cause of debt accumulation (Rangarajan & Srivastava, 2003); an indicator to assess debt stabilisation and sustainability of public finances (EU, 2012; Heun, 2014; Marchewka-Bartkowiak & Wiśniewski, 2015; Qin et al., 2006; Uryszek, 2011) |

Source: Authors' own study based on references.

The effectiveness of fiscal rules in enforcing fiscal discipline was highlighted by Alesina and Bayoumi (1996) who, using a study of US states as an example, showed a relationship between strict fiscal rules and a surplus and lower volatility of the budget balance. In addition, studies at the sub-national level have found a link between the positive response of the primary deficit to the business cycle and a reduction in the volatility of the budget balance (Seitz, 2000, p. 208).

Recognising the important relationship between the performance of the general government sector and the local government sector, the primary balance has been proposed as a measure to assess the financial risk of LGUs. It is intended to complement existing public sector indicators.



**Figure 1.** Primary balance as a measure of LGUs’ financial risk assessment

Source: Authors’ own study.

The primary balance approach presented in Figure 1 to assess the fiscal sustainability of LGUs is in line with the study conducted by Artés and Jurado (2018). The basis for fiscal stability is a primary surplus. Thus, a persistent deficit may indicate fiscal difficulties (Zioło, 2015, p. 18). Due to the lack of data on local GDP, they related the size of the primary balance to revenue, which allowed for comparative values across municipalities. One of the main findings was that single-party governments achieve higher primary surpluses than coalition governments. In the case of Spanish LGUs, it is worth noting that local governments should not only be able to control the deficit, but also influence it through the effective provision of public services, including those aimed at reducing unemployment and stimulating economic activity among residents. In fact, economic growth has a positive impact on deficit reduction, including primary services (Cifuentes-Faura et al., 2022).

To summarise the literature review, it is important to note that the existence of primary deficits at central and local level is a consequence of both choices in the area of fiscal policy rules and the real level of interest rates. The persistence of primary deficits over time will lead to an increase in the tax burden that may not be acceptable to future generations (Ferguson, 2001, p. 198). It is therefore important to conduct an analysis that reflects the behaviour of the primary balance at both the general government and local government levels. This will allow an assessment to be made of the importance of the primary balance to the financial risk of LGUs.

## Research methods

The aim of this study is to attempt to use a measure, such as the primary balance, to assess the financial condition of local government units and to indicate its importance in the risk management of the units under study. In comparison with the budget balance, this measure makes it possible to examine the burden of the entity's budget on debt service costs.

As a preliminary step, it is important to define precisely the measures used in the study. In the data collection methodology used by the International Monetary Fund (IMF) and Eurostat, the general government budget balance is referred to as net lending (+) / net borrowing (-). It is generally defined as the difference between total revenue and total expenditure of the sector. If a government or local authority spends more than it receives in the form of government revenue, the value of this balance is negative and indicates a deficit – in the opposite situation it is a surplus. The value of the balance is also given by general government subsectors (ECB, 2019, pp. 11–12; IMF, 2024).

Among government expenditure, a distinction is made between those related to the ongoing servicing of government debt, which are referred to as interest (according to the IMF) or interest payable (according to Eurostat). The budget balance less debt service costs is referred to as the primary balance, which is termed primary net lending / borrowing according to the IMF and primary balance according to Eurostat, which can take the form of primary surplus or primary deficit, respectively (ECB, 2014, p. 10; IMF, 2024). This balance reports the difference between general government budget revenue and “pure” expenditure, i.e., excluding expenditure incurred on interest costs paid on the debt taken on. The analysis of the primary balance in comparison with the budget balance provides an indication of how much the public budget is burdened by current debt service expenditure. In addition, it makes it possible to see to what extent debt service expenses add to the budget deficit, but also from which “sources” they are financed. The OECD adds in its studies that the existence of a primary deficit means that the government must borrow money to pay for the everyday public goods and services it provides for citizens, which may not be sustainable. The primary balance is thus a critical indicator of the short-term sustainability of a government's finances (OECD, 2021).

As a matter of order, it has been assumed that in the article the authors will generally use the terms adopted by the IMF, i.e., primary net lending and net lending, but primary balance (deficit or surplus) and budget balance (deficit or surplus) may also be used instead.

The study was carried out for the years 1995–2022, using data from the International Monetary Fund for the local government sub-sector and the entire general government sector in individual European Union countries.<sup>1</sup> The results are intended

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<sup>1</sup> IMF data were used because Eurostat (unlike the IMF) does not publish primary balance data for the local government sector, but only for the general government sector as a whole. Furthermore, it should

to show the burden of local government debt service costs in various European countries, also in comparison with the entire public finance sector. Due to the volume of the study, it was obviously not possible to take into account the specific features of the functioning and financing of local government in individual countries, including the proportion to which the realisation of public tasks is divided between local government and government. Nevertheless, it was possible to show general trends in the development of the financial condition of local government units in the period under study. Due to the significant diversity of the studied population, as well as the different currencies in which the data was denominated, in order to ensure comparability of the studied financial figures, their values were expressed in a relative manner, in relation to the GDP of a given country.

The study, conducted using the indicators described above, is of an aggregate nature; i.e., the analysed values will be calculated as averages for the sectors and subsectors under review, including a breakdown by specified subperiods. While this approach allows for the identification of general trends, it loses sight of the individual characteristics of each local government unit, what should be identified as a limitation of the method used.

## Results

Due to the volume of research material, it was necessary to make some aggregation of the results obtained. Firstly, the development of the average value of the primary and budgetary balances in the local sectors of individual EU countries in relation to GDP is presented (Figure 2). In addition to the average values for all countries, averages for the countries of the so-called “old EU” and “new EU” are also presented, meaning respectively the group of countries that formed the EU before and after 2004, i.e., before and after the biggest enlargement.

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be noted that data on this measure were not available for Greece until 1996, Lithuania until 2003 and Portugal until 2009. Despite these shortcomings, it was decided to carry out surveys for the whole population from 1995 onwards, noting the above deficiencies.



**Figure 2.** Budget and primary balance of the local government sector in relation to GDP – EU average and breakdown by old and new EU countries (%)

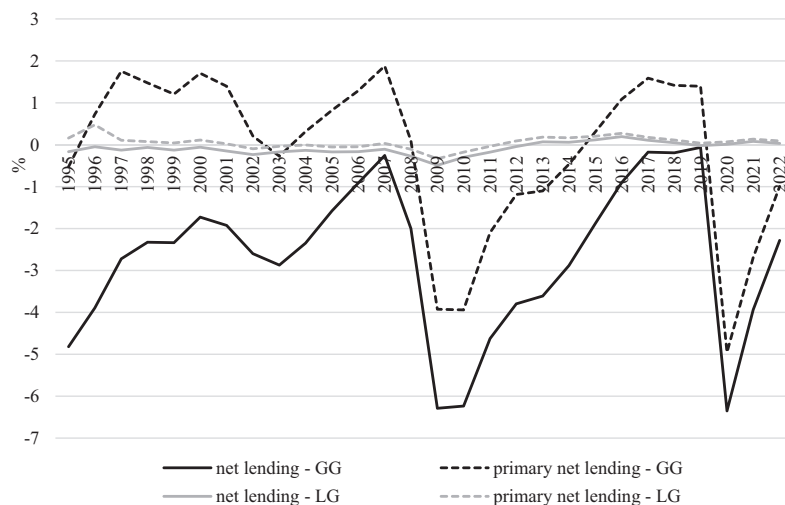
Source: Authors' own study based on IMF data.

In the early period, on average, local government units in the EU recorded budget deficits. Only from 2013 and 2014 onwards local government budgets were characterised by a surplus, with the exception of 2019, when deficits occurred again. The primary balance, on the other hand, used to be characterised by positive values – at the beginning of the study period, until the beginning of the 20<sup>th</sup> century, when units recorded primary deficits, which widened significantly during the global crisis, i.e., between 2008 and 2011. An improvement took place from 2012 onwards, and since then the local government sector on average in the EU has recorded a primary surplus. From the perspective of the groups of countries studied, it is difficult to note divergences in the development of the examined figures. In the first years of the period under review, the “new EU” countries performed worse and were the ones that understated the

average value of the primary and budgetary balance for the EU as a whole. In recent years, however, these differences have been practically non-existent.

The patterns presented here show that the financial health of local government was, on average, weakest in the first decade of the 20<sup>th</sup> century, when average budget balances, but also primary balances, were negative. This means that in those years, local government units on average spent more than they accrued in revenue, and the cost of debt only added to these deficits. In addition, this was not a phenomenon that only occurred during the crisis, but also before. Improvements have occurred since 2012 and since then, local finances on average have been characterised by a primary surplus, but also a budget surplus.

Furthermore, it is also worth assessing the financial situation of the local government against the general government sector as a whole. Figure 3 shows the mean values of the analysed balances against GDP for these two sectors.



**Figure 3.** Local government (LG) and general government (GG) budget and primary balances in relation to GDP – EU average (%)

Source: Authors' own study based on IMF data.

It is easy to see that changes in the value of the balances over time tended to follow similar directions as a result of changes in the economy. However, the changes for the general government sector as a whole were much stronger than for the local sector. This is, obviously, due to the fact that the general government sector is the dominant part of the general government sector and the local sector represents a much smaller part. In the population studied, the share of local revenue in the revenue of the whole sector was around 23% throughout the period – the highest in Denmark (61%) and the lowest in Malta (1.6%). Thus, the situation of the general government sector depends predominantly on the performance of national governments. The situation of

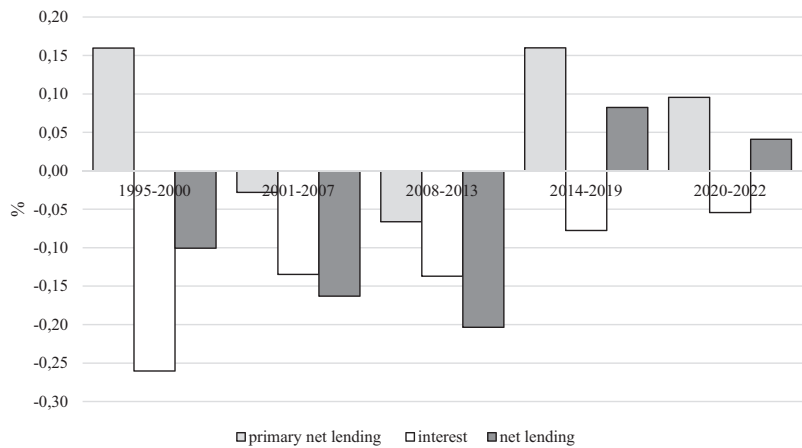
local finances should therefore be assessed positively in recent years, when, as a result of phenomena such as the COVID-19 pandemic or the war in Ukraine, state budgets recorded significant deficits, while in the case of local government units surpluses persisted. It is worth noting that in the case of the previous recession – during the global financial crisis – significant budget deficits affected both sectors, while only the general government sector has been in deficit since 2020.

In order to present more synthetically the differences between the primary and budget balances, as well as debt service expenditure, it was decided to divide the study period into sub-periods, distinguished by differences mainly in terms of economic circumstances:

- I sub-period – 1995–2000 – the period from the time all data were available to early 2000s recession, and dot-com bubble;
- II sub-period – 2001–2007 – the time between early 2000s recession and dotcom bubble, and the global financial crisis;
- III sub-period – 2008–2013 – the time of the global financial crisis and recovery;
- IV sub-period – 2014–2019 – the time of economic prosperity, the period between the financial crisis and the COVID-19 pandemic, the period of relatively low and stable interest rates;
- V sub-period – 2020–2022 – the time of the COVID-19 pandemic, as well as a period of turbulence related to Russia's invasion of Ukraine, resulting in higher spendings by LGUs due to, among other things, increased energy costs and spendings on war refugee aid.

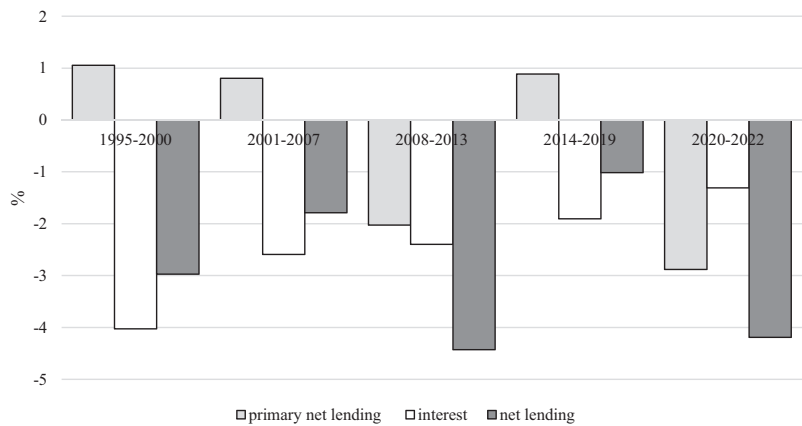
Figures 4 and 5 show, on average, the values of the examined balances and debt service expenditure in relation to GDP – for local and general government sectors. Debt service expenditure are shown as negative values, reducing the primary balance into the budget balance.

The data presented in the highlighted sub-periods allow the trends indicated earlier to be observed more easily. For both sectors, the second half of the 1990s was characterised by a positive primary balance and high debt costs, which on average resulted in a budget deficit. This appeared to be due to the high global interest rates during this period, especially as debt costs were relatively lower in subsequent periods, while public debt continued to rise. The beginning of the 21<sup>st</sup> century looked worse on average for local government than for the public sector as a whole. During the global financial crisis, the situation of the two sectors under study deteriorated to the point where they were unable to generate even a positive primary balance, with debt service expenditure adding to budget deficits. In the second half of the 2010s, the situation improved, reflected in the ability to generate a primary balance, but debt servicing costs remained high during this period – despite the extremely low interest rates during this period – as a result of the substantial increase in the volume of debt. In contrast, in the last of the sub-periods under review, despite the recession caused by the pandemic – the situation worsened on average only for the general government sector as a whole. On



**Figure 4.** Primary balance, debt service expenditure and budget balance in relation to GDP (%) – average values for local government sector in selected time periods

Source: Authors’ own study based on IMF data.



**Figure 5.** Primary balance, debt service expenditure and budget balance in relation to GDP (%) – average values for general government sector in selected time periods

Source: Authors’ own study based on IMF data.

average, the local sector maintained a positive primary and budgetary balance during these years, which should be assessed as an opposite trend.

The data presented above were aggregated to show general trends. However, each country had different characteristics despite experiencing similar problems. Table 2 shows the average values of the surveyed balances for the local sector in the highlighted sub-periods in each EU country. To make it easier to identify the trends taking place, conditional formatting has been applied to the table, taking 0

as the average (primary or fiscal balance). The more the fill colour is red, the worse the financial health – the more green, the better.

In the first period under review, the worst financial situation was recorded in Slovakia, Poland and Bulgaria. In the 2000s, the financial situation of the local sector was worst in Finland, Latvia, the Netherlands, Poland, Romania and Sweden. After the global financial crisis, the health of local finances improved in most countries except in Finland and Sweden. From the early 2020s onwards, despite the pandemic and its negative effects, local finances were on average on a sound basis, with primary and budget balances on average positive.

**Table 2.** Average value of primary (PNL) and budgetary (NL) net lending of the local government sector in relation to GDP in the distinguished sub-periods (%)

|             | 1995–2000 |        | 2001–2007 |        | 2008–2013 |        | 2014–2019 |        | 2020–2022 |        |
|-------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
|             | PNL       | NL     | PNL       | NL     | PNL       | NL     | PNL       | NL     | PNL       | NL     |
| Austria     | 0.018     | -0.158 | 0.079     | 0.004  | -0.141    | -0.210 | 0.020     | -0.036 | -0.009    | -0.050 |
| Belgium     | 0.378     | 0.037  | 0.236     | -0.010 | 0.098     | -0.097 | 0.179     | 0.040  | 0.116     | 0.029  |
| Bulgaria    | -0.545    | -0.568 | -0.005    | -0.019 | -0.072    | -0.102 | -0.073    | -0.108 | 0.239     | 0.215  |
| Croatia     | -0.062    | -0.090 | -0.089    | -0.119 | -0.123    | -0.169 | -0.021    | -0.050 | -0.188    | -0.211 |
| Cyprus      | -0.085    | -0.159 | 0.000     | -0.107 | 0.105     | -0.012 | 0.229     | 0.204  | 0.032     | 0.011  |
| Czechia     | 0.736     | 0.628  | -0.107    | -0.198 | -0.132    | -0.205 | 0.648     | 0.613  | 0.803     | 0.771  |
| Denmark     | -0.051    | -0.260 | -0.043    | -0.182 | 0.084     | -0.079 | 0.252     | 0.187  | 0.245     | 0.183  |
| Estonia     | -0.053    | -0.203 | -0.319    | -0.422 | -0.139    | -0.237 | 0.072     | 0.039  | -0.175    | -0.200 |
| Finland     | 0.540     | 0.249  | -0.350    | -0.501 | -0.436    | -0.588 | -0.572    | -0.683 | -0.098    | -0.197 |
| France      | 0.538     | 0.035  | 0.169     | -0.118 | 0.011     | -0.256 | 0.228     | 0.008  | 0.115     | -0.051 |
| Germany     | 0.193     | -0.101 | 0.029     | -0.201 | 0.105     | -0.082 | 0.318     | 0.209  | 0.231     | 0.165  |
| Greece      | 0.022     | 0.014  | 0.032     | 0.006  | 0.146     | 0.105  | 0.314     | 0.278  | -0.055    | -0.070 |
| Hungary     | 0.126     | -0.012 | -0.272    | -0.373 | 0.549     | 0.398  | 0.316     | 0.305  | 0.020     | 0.000  |
| Ireland     | 0.025     | -0.090 | 0.063     | -0.033 | -0.043    | -0.120 | 0.071     | 0.043  | -0.057    | -0.080 |
| Italy       | 0.145     | -0.244 | -0.313    | -0.593 | 0.148     | -0.114 | 0.366     | 0.206  | 0.065     | -0.028 |
| Latvia      | 0.482     | 0.358  | -0.386    | -0.507 | -0.542    | -0.832 | 0.110     | -0.067 | -0.009    | -0.122 |
| Lithuania   | n/a       | -0.073 | -0.120    | -0.147 | -0.180    | -0.250 | 0.258     | 0.234  | 0.181     | 0.172  |
| Luxembourg  | 0.451     | 0.363  | 0.121     | 0.060  | 0.302     | 0.262  | 0.312     | 0.305  | -0.010    | -0.016 |
| Malta       | 0.010     | 0.010  | 0.013     | 0.012  | 0.001     | -0.001 | 0.052     | 0.051  | 0.040     | 0.039  |
| Netherlands | 1.066     | 0.163  | 0.094     | -0.346 | -0.357    | -0.702 | 0.093     | -0.146 | 0.200     | 0.057  |
| Poland      | 0.371     | -1.346 | -0.018    | -0.138 | -0.506    | -0.671 | 0.022     | -0.081 | 0.207     | 0.112  |
| Portugal    | n/a       | -0.063 | n/a       | -0.346 | 0.049     | -0.283 | 0.450     | 0.327  | -0.060    | -0.141 |
| Romania     | 0.111     | 0.109  | 0.038     | -0.012 | -0.307    | -0.457 | 0.307     | 0.233  | 0.081     | 0.021  |
| Slovakia    | -1.144    | -1.230 | 0.210     | 0.145  | -0.067    | -0.116 | 0.176     | 0.146  | -0.053    | -0.069 |
| Slovenia    | 0.187     | 0.160  | -0.066    | -0.089 | -0.192    | -0.240 | 0.059     | 0.021  | 0.040     | 0.024  |
| Spain       | 0.267     | 0.019  | 0.008     | -0.096 | -0.157    | -0.269 | 0.567     | 0.500  | 0.178     | 0.137  |
| Sweden      | 0.168     | -0.266 | 0.231     | -0.069 | 0.098     | -0.164 | -0.435    | -0.553 | 0.497     | 0.404  |

Source: Authors' own study based on IMF data.

For comparison, Table 3 presents a similar overview for the general government sector. It can easily be seen that the situation of the general government and the local sector was not identical. This is also confirmed by the value of the correlation

coefficient between the above tables at 0.22 (the correlation between indicators values' across different countries and time periods – as is the case for panel data). For example, during the global financial crisis, countries strongly affected by the debt crisis such as Greece, Ireland, Spain or Portugal had a stable situation in local finances. In the other direction – the countries with the largest deficits at the local level were not among those with the largest deficits at the general government level, for example, Latvia, the Netherlands, Poland or Finland. But the key finding is that in recent years, despite the pandemic, local finances have been characterised by soundness and sustainability. In contrast, at the general government level, on average only Denmark showed a primary and budget surplus and Cyprus a primary surplus. The remaining countries were in deficit. In contrast, at the local level, most countries were characterised by surpluses (17 countries primary surplus, 15 budget surplus).

**Table 3.** Average value of primary (PNL) and budgetary (NL) net lending of the general government sector in relation to GDP in the distinguished sub-periods (%)

|             | 1995–2000 |        | 2001–2007 |        | 2008–2013 |         | 2014–2019 |        | 2020–2022 |        |
|-------------|-----------|--------|-----------|--------|-----------|---------|-----------|--------|-----------|--------|
|             | PNL       | NL     | PNL       | NL     | PNL       | NL      | PNL       | NL     | PNL       | NL     |
| Austria     | 0.453     | -3.485 | 1.212     | -2.148 | -0.026    | -2.993  | 1.172     | -0.892 | -4.525    | -5.769 |
| Belgium     | 5.846     | -2.069 | 4.507     | -0.618 | 0.059     | -3.732  | 0.861     | -1.896 | -4.077    | -5.961 |
| Bulgaria    | 5.440     | -1.749 | 2.857     | 0.641  | -0.905    | -1.661  | 0.542     | -0.238 | -3.103    | -3.570 |
| Croatia     | -2.161    | -3.757 | -2.021    | -3.784 | -3.270    | -5.787  | 1.358     | -1.485 | -1.553    | -3.234 |
| Cyprus      | -0.513    | -3.084 | 0.792     | -2.240 | -1.776    | -4.373  | 0.963     | -1.709 | 0.088     | -1.714 |
| Czechia     | -3.901    | -4.905 | -2.778    | -3.880 | -1.939    | -3.235  | 1.025     | 0.112  | -3.791    | -4.688 |
| Denmark     | 3.995     | -0.823 | 5.035     | 2.575  | 0.263     | -1.519  | 2.177     | 1.065  | 3.199     | 2.590  |
| Estonia     | 0.272     | -0.217 | 1.877     | 1.652  | -0.432    | -0.612  | 0.041     | -0.083 | -2.840    | -2.953 |
| Finland     | 3.499     | -0.038 | 5.460     | 3.628  | 0.311     | -1.090  | -0.488    | -1.595 | -2.405    | -3.042 |
| France      | 0.465     | -2.995 | -0.070    | -2.940 | -2.548    | -5.258  | -1.251    | -3.247 | -5.107    | -6.758 |
| Germany     | -0.186    | -3.636 | 0.265     | -2.664 | 1.020     | -1.413  | 2.440     | 1.252  | -2.828    | -3.475 |
| Greece      | 2.165     | -6.678 | -1.548    | -6.713 | -6.037    | -11.658 | 2.402     | -1.131 | -3.519    | -6.341 |
| Hungary     | 1.865     | -5.711 | -2.786    | -6.956 | 0.474     | -3.849  | 0.826     | -2.190 | -4.471    | -6.968 |
| Ireland     | 5.072     | 1.594  | 2.115     | 0.957  | -10.582   | -13.579 | 1.274     | -1.015 | -0.796    | -1.608 |
| Italy       | 4.690     | -3.998 | 1.978     | -3.114 | 1.312     | -3.553  | 1.759     | -2.333 | -4.946    | -8.913 |
| Latvia      | -0.138    | -1.144 | -0.551    | -1.226 | -3.346    | -4.891  | 0.437     | -0.773 | -4.746    | -5.380 |
| Lithuania   | n/a       | -4.266 | 0.085     | -1.354 | -4.028    | -5.642  | 1.542     | 0.123  | -2.375    | -2.926 |
| Luxembourg  | 3.780     | 3.252  | 2.082     | 1.801  | 1.313     | 0.809   | 2.281     | 1.855  | -0.842    | -1.052 |
| Malta       | -4.058    | -7.077 | -0.850    | -4.560 | 0.119     | -3.011  | 2.712     | 0.752  | -6.467    | -7.595 |
| Netherlands | 2.469     | -2.024 | 1.295     | -1.154 | -1.656    | -3.627  | 1.389     | 0.100  | -1.292    | -2.015 |
| Poland      | 0.119     | -4.013 | -1.614    | -4.281 | -2.754    | -5.235  | -0.219    | -1.859 | -2.824    | -4.140 |
| Portugal    | n/a       | -4.043 | n/a       | -4.739 | -3.146    | -7.320  | 1.249     | -2.822 | -0.494    | -3.013 |
| Romania     | -0.261    | -3.731 | -0.247    | -1.944 | -3.795    | -5.622  | -0.907    | -2.326 | -6.081    | -7.561 |
| Slovakia    | -4.565    | -7.443 | -1.794    | -4.197 | -3.395    | -4.946  | -0.355    | -1.924 | -3.079    | -4.183 |
| Slovenia    | -1.204    | -3.414 | -0.251    | -1.995 | -4.589    | -6.335  | 1.144     | -1.478 | -3.773    | -5.091 |
| Spain       | 0.600     | -3.598 | 2.688     | 0.569  | -6.649    | -9.032  | -1.321    | -4.081 | -4.944    | -7.193 |
| Sweden      | 3.342     | -1.168 | 3.009     | 0.874  | 0.867     | -0.346  | 0.882     | 0.347  | -0.180    | -0.561 |

Source: Authors' own study based on IMF data.

The studies carried out initially indicate a differentiated situation according to the EU fiscal criterion. As noted, the old EU countries were characterised by a better situation and thus a lower budget burden in terms of debt service costs relative to GDP. As a result of the comparisons used, the study confirmed that the adoption of a primary balance measure for assessing the financial situation (including risk) at the local level is crucial. As noted, the situation within particular sectors was different. In this case, the use of the measure analysed would have made it possible to counteract in advance phenomena that could have a negative impact on the financial situation in the local government sector. In fact, a systemic financial collapse of LGUs (i.e., over a long period of time) could result in an increase in the burden on the state budget in order to improve the situation immediately.

## Conclusions

The theoretical considerations and empirical research carried out in this article clearly show the importance of the primary balance in assessing the financial health of local government units. The literature review shows that the primary balance measure should be used in assessing the sustainability of local government finances. Thus, it can constitute one of the fiscal rules in the medium and long term.

In turn, the authors' study has shown that an analysis of the value of the primary balance in combination with the budget balance provides important information on the financial sustainability of entities, in particular on the extent of the burden of debt service expenditure on the budget. It is extremely important to analyse the local budget taking into account the burden of debt service expenditure on it. For the stability of the financial economy of local government, it is extremely important to design the system of revenue assigned to this sector in such a way that they are sufficient to fulfil the public tasks entrusted to it at a sufficiently good level. In the absence of a positive primary balance, local government runs the risk of having to finance the tasks entrusted to it by incurring liabilities, which may lead to a spiral of debt. A situation in which a unit does not achieve a positive primary balance and, in addition, debt service significantly increases the budget deficit should raise concerns about the state of its finances and trigger supervisory action. For this reason, the authors advocate the inclusion of this measure in the common assessment of LGUs' financial security.

The study also shows the extent to which debt servicing costs are a burden on local sector units. Over the almost three decades studied, the worst financial situation of the local sector was in the second half of the 1990s and the first decade of the 21<sup>st</sup> century, particularly during the global financial crisis. In 2014, the EU average for the local sector was in both primary and budgetary surplus. The very good news is that during the recession triggered by the COVID-19 pandemic, the local sector performed significantly better than the general government sector as a whole. On

average, primary and budget surpluses were recorded during this period, both in terms of the value of the average itself and the number of countries with surpluses. This situation shows that it is essential for the public revenue system to be properly structured in order to ensure the stability of the financing of the tasks entrusted to the local sector.

Obviously, the authors are aware of the limitations of the method used, which highlights general trends while ignoring the individual characteristics of specific units. However, the purpose of the article was to demonstrate the potential of incorporating the primary balance as a useful tool for assessing the financial health of local government units. The study presented here is, of course, of an aggregate nature, and for each country the situation of individual units of the local government sector may be more or less different. For example, a previous study conducted by the authors for different levels of local government in Poland showed that the financial situation of the local government sector has generally improved in recent years, with the exception of *poviat* cities (Wiśniewski & Budzeń, 2025). This fact should be taken into account, as similar phenomena may characterise local sectors in individual EU countries. However, the overall assessment of the financial situation of the local sector in EU countries is positive on average, especially taking into account the recession and the generally bad financial situation of the entire general government sector.

The study carried out showed that the final budget deficit depends to a large extent on debt servicing expenditure, which in turn depends directly on the level of debt and the cost of debt, i.e., interest rates in the economy. The research shows that in the 1990s, when interest rates were high, there was significant debt servicing expenditure, but the debt was not as high as it is today. The years following the global financial crisis up to the COVID-19 pandemic had some of the lowest interest rates in history. Therefore, if the cost of debt had been higher during this period, it could have led to budget deficits on average, despite an average positive primary balance. The inflation that occurred in the early years of the third decade of the 21<sup>st</sup> century, which led to an increase in interest rates, led to an increase in debt servicing costs. In conclusion, therefore, it is worth pointing out the need to introduce scenario methods in the financial planning of local government units, so that the resilience of the units to a potential increase in financing costs caused by a rise in interest rates can be examined.

The findings support the recommendation to use the primary balance as a supplementary measure for assessing financial health and risk management. A detailed comparative analysis of financial health should also take into account fiscal rules in individual countries; however, this was not the aim of this article. Further research could also consider including in the analysis of local government financial security an assessment of gross and net borrowing needs in the context of refinancing risk management. The measures used refer to net needs, but the refinancing of local government debt and the extent of this phenomenon is also relevant, which may imply potential refinancing risks in the context of a volatile environment, including interest

rate volatility. Moreover, the evolution of the primary balance, in particular deficits in election years, offers prospects for using this measure to identify the political cycle and its impact on the local government subsector. In addition, an attempt could be made to examine the determinants of local government debt service expenditure, in particular its vulnerability to changes in interest rates and sovereign credit ratings.

## References

- Agarwal, R. (2024). *What Is Day Zero Financing? A Global Security Perspective for Pandemic Response*. Center for Global Development. <http://www.jstor.org/stable/resrep58670>
- Alesina, A., & Bayoumi, T. (1996). The costs and benefits of fiscal rules: Evidence from U.S. States. *NBER Working Paper Series. Working Paper 5614*, 1–14. [https://www.nber.org/system/files/working\\_papers/w5614/w5614.pdf](https://www.nber.org/system/files/working_papers/w5614/w5614.pdf)
- Allen, W.A. & Wood, G. (2006). Defining and achieving financial stability. *Journal of Financial Stability*, 2(2). <https://doi.org/10.1016/j.jfs.2005.10.001>
- Arellano, C., Bai, Y., & Mihalache, G.P. (2021). Deadly debt crises: COVID-19 in emerging markets. *NBER Working Paper 27275*.
- Artés, J., & Jurado, I. (2018). Government fragmentation and fiscal deficits: A regression discontinuity approach. *Public Choice*, 175(3/4), 367–391. <https://doi.org/10.1007/s11127-018-0548-y>
- Bhandari, A., Evans, D., Golosov, M., & Sargent, T. (2017). Fiscal policy and debt management with incomplete markets. *The Quarterly Journal of Economics*, 132(2), 617–663. <https://doi.org/10.1093/qje/qjw041>
- Buiter, W.H. (1985). A guide to public sector debt and deficits. *Economic Policy*, 1(1), 13–79. <https://doi.org/10.2307/1344612ECB>
- Canzoneri, M., Cumby, R., & Diba, B. (2016). Optimal money and debt management: Liquidity provision vs tax smoothing. *Journal of Monetary Economics*, 83, 39–53. <https://doi.org/10.1016/j.jmoneco.2016.08.004>
- Cifuentes-Faura, J., Simionescu, M., & Gavurova, B. (2022). Determinants of local government deficit: Evidence from Spanish municipalities. *Heliyon*, 8(12). <https://doi.org/10.1016/j.heliyon.2022.e12393>
- Corden, W. (2010). The theory of the fiscal stimulus: How will a debt-financed stimulus affect the future?. *Oxford Review of Economic Policy*, 26(1), 38–47. <https://doi.org/10.1093/oxrep/grq001>
- Council Regulation (EU) 2024/1264 of 29 April 2024 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.
- Crockett, A. (1997). Why is financial stability a goal of public policy? *Economic Review*, 82(4), 7–36.
- EEA. (2013). *Towards a green economy in Europe – EU environmental policy targets and objectives 2010–2050*.
- ECB. (2011). Ensuring fiscal sustainability in the Euro Area. *European Central Bank Monthly Bulletin*, April Newsletter, 61–77. [https://www.ecb.europa.eu/pub/pdf/other/art1\\_mb201104en\\_pp61-77en.pdf?7e60e35118a9713b28501fa1819b9880](https://www.ecb.europa.eu/pub/pdf/other/art1_mb201104en_pp61-77en.pdf?7e60e35118a9713b28501fa1819b9880)
- ECB. (2014). *Government Finance Statistics Guide*.
- ECB. (2019). *Government Finance Statistics Guide*.
- EU. (2012). Fiscal sustainability report. *European Economy*, 8/2012. European Commission.
- Ferguson, N. (2001). *Niebezpieczne związki. Pieniądże i władza w świecie nowożytnym 1700–2000*. Wydawnictwo Literackie.
- Foremny, D. (2014). Subnational deficits in European countries: The impact of fiscal rules and tax autonomy. *European Journal of Political Economy*, 34, 86–110.

- Guarini, E., & Pattaro, A. (2016). Deficit control and fiscal austerity in the EU: time to consider the local impact, *International Journal of Public Sector Performance Management*, 2(4), 348–369.  
**<https://doi.org/10.1504/IJPSPM.2016.079717>**
- Hallerberg, M., & Scartascini, C. (2015). When do governments improve fiscal institutions? Lessons from financial crisis and fiscal reform in Latin America. *Economia*, 16(1), 41–76. <http://www.jstor.org/stable/24570865>
- Hallerberg, M., & von Hagen, J. (1999). Electoral institutions, cabinet negotiations, and budget deficits in the European Union. In *Fiscal Institutions and Fiscal Performance* (pp. 209–232). National Bureau of Economic Research.
- Heun, W. (2014). Budget requirements and debt brakes feasibility and enforcement. *German Economic Review*, 15(1), 100–115. **<https://doi.org/10.1111/geer.12033>**
- IMF. (2024). *IMF data*. [data.imf.org](http://data.imf.org)
- Jochimsen, B., & Raffer, Ch. (2020). Local government fiscal regulation in the EU: The impact of balanced budget rules. *Beiträge zur Jahrestagung des Vereins für Socialpolitik 2020: Gender Economics*. ZBW – Leibniz Information Centre for Economics.
- Jorda, Ö., Schularick, M., & Taylor, A.M. (2011). Financial crises, credit booms, and external imbalances: 140 years of lessons. *IMF Economic Review*, 59(2), 340–378. <http://www.jstor.org/stable/41290964>
- Marchewka-Bartkowiak, K., & Wiśniewski, M. (2015). Rola salda pierwotnego w stabilizowaniu długu publicznego w krajach członkowskich strefy euro w latach 1999–2013. In E. Małuszyńska, G. Mazur, & P. Idczak (Eds.), *Unia Europejska wobec wyzwań przyszłości – aspekty prawne, finansowe i handlowe* (pp. 159–170). Wyd. Uniwersytetu Ekonomicznego w Poznaniu.
- Nerlich, C., & Reuter, W.H. (2013). The design of national fiscal frameworks and their budgetary impact, *Working Paper Series 1588*. European Central Bank.
- OECD. (2021). *Government at a Glance*. OECD iLibrary.
- Padoa-Schioppa, T. (2002). The transformation of the European financial system. In *Central Banks and Financial Stability: Exploring the Land in Between*. Central Banking Conference, Frankfurt am Main. <https://www.ecb.europa.eu/events/pdf/conferences/tps.pdf>
- Persson, T., & Svensson, L. (1989). Why a stubborn conservative would run a deficit policy with time-inconsistent preferences, *The Quarterly Journal of Economics*, 104(2), 325–345.  
**<https://doi.org/10.2307/2937850>**
- Peukert, H. (2006). Justi's moral economics and his system of taxation (1766). *Journal of Economic Behavior and Organization*, 59(4), 478–496. **<https://doi.org/10.1016/j.jebo.2005.06.006>**
- Qin, D., Cagas, M. A., Ducanes, G., Magtibay-Ramos, N., & Quising, P. (2006). Empirical assessment of sustainability and feasibility of government debt: The Philippines case. *Journal of Asian Economics*, 17(1), 63–84. **<https://doi.org/10.1016/j.asieco.2005.12.003>**
- Radke, M.P. (2005). Financial crises and financial instability: Definitions and principles. In *Explaining Financial Crises: A Cyclical Approach* (pp. 13–70). Peter Lang AG. <http://www.jstor.org/stable/j.ctv9hj6xc.7>
- Rangarajan, C., & Srivastava, D.K. (2003). Dynamics of debt accumulation in India: Impact of primary deficit, growth and interest rate. *Economic and Political Weekly*, 38(46), 4851–4858. <http://www.jstor.org/stable/4414278>
- Rangarajan, C., & Srivastava, D.K. (2005). Fiscal deficits and government debt: Implications for growth and stabilisation. *Economic and Political Weekly*, 40(27), 2919–2934. <http://www.jstor.org/stable/4416847>
- Regulation of the European Parliament and of the Council of 29 April 2024 on the effective coordination of economic policies and on multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97, L 2024/1263 from 30.4.2024.
- Roberts, R. (1942). Ricardo's theory of public debts. *Economica*, 9(35), 257–266.  
**<https://doi.org/10.2307/2549539>**
- Rogoff, K. (2022). Emerging market sovereign debt in the aftermath of the pandemic. *The Journal of Economic Perspectives*, 36(4), 147–166. <https://www.jstor.org/stable/27171134>

- Rogoff, K., & Sibert, A. (1988). Elections and macroeconomic policy cycles. *Review of Economic Studies*, 55(1), 1–16. <https://doi.org/10.2307/2297526>
- Samuelson, P., & Nordhaus, W. (2000). *Oeconomia*, Vol. 1. PWN.
- Seitz, H. (2000). Fiscal policy, deficits and politics of subnational governments: The case of the German Laender. *Public Choice*, 102(3/4), 183–218. <https://doi.org/10.1023/A:1005000124300>
- Stiglitz, J.E., & Rosengard, J.K. (2015). *Economics of Public Sector*. W.W. Norton & Company.
- The Treaty on European Union and The Treaty of The Functioning of The European Union, Official Journal C 202 from 7.6.2016.
- Uryszek, T. (2011). Determinanty nierównowagi budżetowej sektora jednostek samorządu terytorialnego w Polsce w warunkach kryzysu finansowego. In B. Filipiak (Ed.), *Zarządzanie długiem publicznym. Aspekty finansowe i płynnościowe* (pp. 119–128), *Zeszyty Naukowe Wyższej Szkoły Bankowej w Poznaniu*, 36.
- Veiga, L.G., & Veiga, F.J. (2007). Political business cycles at the municipal level. *Public Choice*, 131(1/2), 45–64. <https://doi.org/10.1007/s11127-006-9104-2>
- Wagner, R. (2004). Debt, money, and public finance. In J. Backhaus & R. Wagner (Eds.), *Handbook of Public Finance* (pp. 195–215). Kluwer Academic Publishers. <https://doi.org/10.1007/b109135>
- Wiśniewski, M., & Budzeń, D. (2025). The role of the primary balance in assessing the financial situation of local government. *Research Papers in Economics and Finance*, 9(2), 169–186. <https://doi.org/10.18559/ref.2025.2.2493>
- Wyplosz, Ch. (2013). Fiscal rules: Theoretical issues and historical experiences. In A. Alesina & F. Giavazzi (Eds.), *Fiscal Policy after the Financial Crisis* (pp. 495–525). University of Chicago Press.
- Zioło, M. (2015). Diagnosing fiscal distress: Regional evidence from Polish municipalities. *Romanian Journal of Fiscal Policy*, 6(2), 14–33.