

# Slovakia's Public Debt - the Greek Path?

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## Abstract

The article focuses on the analysis of public finances of Slovakia in the context of public debt. The article covers the overview of empirical literature on indebtedness and debt management framework of Slovakia and the EU. It describes the current status of public debt, deficit, and long-term sustainability of Slovakia. The views of different economists on whether public finances are evolving according to the "Greek" scenario are also discussed. The main objective is to provide an empirical basis for assessing the veracity of these narratives by comparing the evolution of indicators of the long-term sustainability of public finances in Slovakia and Greece.

**Keywords:** public finances, public debt, long-term sustainability, consolidation

## Introduction

During the parliamentary term of Iveta Radičová (2010-2012), after the Great Recession (which caused the Greek government-debt crisis of 2009) and the increase of Slovakia's public debt in the media, narratives began to spread that Slovak public finances were going by the "Greek" path (scenario), which means a continuous and significant surplus of public spending and an increase in public indebtedness, which would cause an increase in interest rates on the financial markets for Slovakia.

Following the recent crisis caused by the COVID-19 pandemic and the Russian invasion of Ukraine, public spending in Slovakia has increased, leading to an increase in public debt. Based on the assessment and projections of public finances in 2023 and 2024, the Council for Budget Responsibility concludes that public finances need to introduce consolidation measures, otherwise public debt will exceed the Maastricht criteria of 60 % of GDP already in 2025. These warnings from the Council for Budget Responsibility have reignited the debate in the media that Slovakia's public finances are going by the "Greek" path. Some economists point out that these narratives are realistic, while others argue that such a scenario is unlikely. It is important to note that we cannot prove these statements stand on the empirical research of crucial indicators as these data are not presented in media. Because of this missing information, we decided to verify it.

The aim of this article is to empirically verify the narratives about the "Greek" scenario of the development of public finances of Slovakia based on a comparison of the development of long-term sustainability indicators of Greece and Slovakia. The work will be a useful material

that can be used to compare the long-term sustainability indicators S1 and S2 of Greece and Slovakia. For the objectives defined in this article, we will use analytical methods, such as analysis, synthesis, induction, deduction and, most importantly, comparison (extrapolation of trends). In the comparison paragraph we will compare the S1 and S2 indicators of Greece at the beginning of the Greek government-debt crisis (2006 to 2009) with the same S1 and S2 indicators of Slovakia at present (2019 to 2022). The aim of the comparison is to find in the current trends of Slovakia's public finances according to S1 and S2 whether their evolution is like that of Greece when Greece was in crisis. The article will also define the concept of the "Greek" path (scenario) and the key indicators by which it is measured. The data obtained will be the basis for assessing whether Slovak public finances are developing according to such a scenario.

The article will explain the different definitions of public debt according to different authors. It is also important to define the public debt ceilings in Slovakia according to the Constitutional Act on Fiscal Responsibility, which sets the level of public debt (the so-called debt brake) to maintain the long-term sustainability of public finances. Within the European Union, this is the Stability and Growth Pact, which sets limits for Member States on the percentage of public deficit and public debt (Maastricht debt).

We will focus on explaining fiscal consolidation as a tool for alleviating public debt. We will highlight the indicators by which consolidation is measured as well as the lack of broad definitions that are often misused by politicians. We will also discuss long-term indicators, which include the long-term sustainability indicator (according to the Council for Budget Responsibility methodology) and indicators S1 and S2 (according to the European Commission methodology). The chapter will also define public expenditure limits, which are the main instrument to ensure long-term sustainability.

We have also included actual indicator data. Finally, we also describe the Budget Responsibility Council's assessment of the Government's consolidation measures.

## **1. Literature Overview**

The Great Recession of 2007-2009 has focused attention on the issue of debt sustainability (Farkasovský, Lawson, Zimková, 2015). Therefore, we observe an increase in discussions in the Slovak and international literature and media regarding the long-term sustainability and its impact on public debt.

In 2012, the Council for Budget Responsibility (CBR) was established in Slovakia to evaluate fiscal performance of Slovakia, including long-term sustainability, which is considered key in assessing the state's consolidation measures which therefore reduces public debt (Council for Budget Responsibility, Kotian, 2024).

Most of these discussions in the literature have focused on long-term sustainability, in particular, on the causes of its deterioration and forecasts. For example, in 2015 Farkasovský, Lawson and Zimková analysed debt to GDP ratio and primary balance of Slovakia in different scenarios and assessed their value for public debt's sustainability from 2015 to 2022. In 2016 Raisová, Pavliková and Semančíková discussed the impact of social expenditures on long-term sustainability and show that negative demographic trends coupled with a strong wave of immigrants arriving in Europe raises questions about the sustainability of public finances combined with growing indebtedness of economies and other consequences of the economic crisis, as in the case of Slovakia.

Referring to the above-mentioned scientific articles and papers, consolidation of public finances, along with the enhancement of constitutional legislation, is considered as crucial for reducing public debt in literature. This can primarily be accomplished through pension system reform, the abolition of certain social packages, and improved tax collection efficiency (Raisová, Pavliková and Semančíková, 2016). Unsustainable public finances undermine investor confidence, increase the cost of debt refinancing, endanger the country's credit rating, and constrain investment in future growth and public service enhancement.

Based on this information, we have identified the following logical connection. A key instrument for the government to reduce public debt is consolidation. When we talk about consolidation, the most important measure of consolidation is the long-term sustainability indicator, by which we can assess whether the government is taking good measures and whether the public finances are improving. Consequently, to improve the long-term sustainability indicator, the government uses various measures, among which limits on public spending are the most crucial.

### **1.1. Debt Ceilings Under the Stability and Growth Pact and Slovak Legislation**

For the purposes of the EU (or Slovakia), in accordance with the Treaty on European Union, Eurostat monitors the so-called Maastricht debt. Ministry of Finance of the Slovak Republic defines the Maastricht debt as "the consolidated sum of all outstanding liabilities of

the general government sector at the end of the year at nominal (face) value arising from deposits received, securities other than shares issued (excluding financial derivatives) and loans taken but excluding in principle outstanding interest liabilities" (Ministry of Finance of the Slovak Republic, 2024a).

The Stability and Growth Pact (SGP) was introduced as part of the third stage of economic and monetary union. Its aim was to ensure that EU Member States maintain sound public finances after the introduction of the single currency.

According to the Ministry of Finance of the Slovak Republic (Ministry of Finance of the Slovak Republic, 2024b), Articles 121 and 126 of the Treaty on the Functioning of the European Union provide the legal basis for the Stability and Growth Pact. Article 121 provides the legal basis for the preventive arm of the SGP, Article 126 forms the basis for the corrective arm of the SGP. Protocol 12 of the Treaty defines ceilings for Member States of 3 % of GDP for government deficit and 60 % of GDP for government debt (Maastricht debt). The European Union suspended the Pact in 2020 due to the economic impact of the COVID-19 pandemic. Its emergency relaxation was then extended, due to the energy crisis caused by the Russian invasion of Ukraine (European Commission, 2022a).

In Slovakia, Constitutional Act No. 493/2011 on Fiscal Responsibility has been in force since March 2012, which sets a limit on the amount of public debt (the so-called debt brake). Its aim is to prevent Slovakia's debt from rising to a critical level by means of sanction and correction mechanisms. According to Article 5 of the Constitutional Act on Fiscal Responsibility, "The upper limit of the general government debt shall be set at 50 % of the share of gross domestic product (GDP)" (Council for Budget Responsibility, 2024a). Determining a debt limit that separates safe levels of debt from critical levels is a debated issue. The safe level of debt can vary from country to country and can also vary depending on the situation in Slovakia.

Although the Stability and Growth Pact sets the debt ceiling at 60 % of GDP, given the analysis of the size and relative output of the economy, the 60 % threshold may already be problematic for the Slovak economy. For this reason, an upper limit of 50 % of GDP has been proposed for Slovakia (Council for Budget Responsibility, 2024a).

## **2. Consolidation of Public Finances**

Consolidation does not have a specific definition but is defined by the indicators that calculate it. Consolidation is understood by economists and institutions as a permanent reduction of the deficit and for this purpose they refer to the change in the structural deficit, which is the permanent part of the deficit (deficit net of one-off measures and the impact of the economic cycle on government revenue and expenditure). According to Kotian (2024), the most intuitive interpretation of consolidation (and the most abused) is the year-on-year

reduction in the government deficit. In this case, it is the most superficial and simplest expression of consolidation, which gives a very distorted view of whether public finances are improving or deteriorating.

The aim of consolidating public finances is to ensure the long-term sustainability of public finances and improve the country's economic stability. A deterioration in the state of public finances is reflected in an increase in the long-term sustainability indicator, while a recovery (consolidation) of public finances is reflected in a decrease in the indicator.

To understand the concept of consolidation, it is necessary to depend on what indicators it is measured by, and which ones play a greater role. Therefore, we understand consolidation as a process where the objective is to achieve positive states of a certain set of indicators in the public finances of a country.

These are the short, medium, and long-term indicators in the consolidation calculation. The short and medium-term indicators include the *size of the measures, the change in the structural balance and the consolidation effort of the government*, according to a study by the Council for Budget Responsibility (Novysedlák and Bugyi, 2014).

When assessing the budget or consolidation, it is preferable to use medium- and short-term indicators because of the availability of data and the speed of calculation, which provide immediate information on the budgetary performance over a given period.

*The change in the structural deficit* is the deficit net of one-off measures and the impact of the business cycle on government revenue and expenditure. In simplistic terms, consolidation is the year-on-year improvement in the structural deficit, and this notion, although already a better illustration of consolidation, does not give a complete picture of the situation.

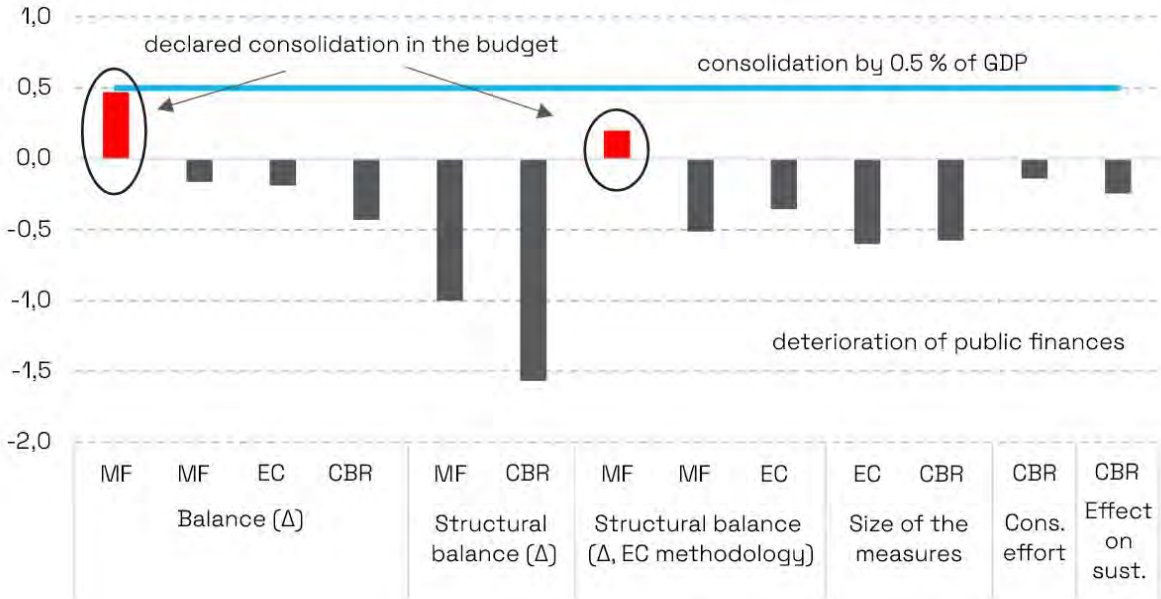
*The size of the measures* reflects the overall impact of the government's budgeted measures on the resulting government balance. No distinction is made between whether measures are one-off or permanent. It does not only include deficit-improving measures, which are referred to as consolidation measures or consolidation packages, but also deficit-worsening measures. Due to the reasons mentioned above, this indicator also does not give a sufficient overview of the consolidation situation.

*The consolidation effort* of the government is an indicator that can quantify the government's contribution to the change in the structural balance and, according to Kotian (2024), is the best measure for sustained fiscal adjustment. The indicator considers the no policy change (NPC) scenario — the development if no action were taken - and thus better reflects the government's actual effort. Depending on the evolution of public finances under a no-policy-change assumption, the consolidation effort can be the opposite of the change in the structural balance.

Because of the high share of temporary measures in the process of consolidation, combined with the expansion of permanent expenditure measures, the overall budgetary

impact on sustainability has been assessed by the CBR in as -0,2 % of GDP in the best scenario. The budget has not consolidated by any metric by at least 0,5 % which is the minimum plan for the government (Kotian, 2024).

The figure 1 shows assessments of budget consolidation of 2024 by different institutions, such as Ministry of Finance of the Slovak Republic (MF), European Commission (EC) and Council for Budget Responsibility (CBR). It shows declared consolidation in the budget and comparison to assessments of other institutions which shows the difference between declared and real consolidation.



**Figure 1: Budget Consolidation Assessment for 2024**  
 Source: Council for Budget Responsibility, 2024

To assess the impact of measures on the long-term sustainability of public finances, it is important to monitor the impact of measures beyond the next few years, in addition to the government's consolidation efforts. If the government's consolidation effort is positive, the government contributes to a comparable extent to improving the sustainability of public finances.

As far as possible, it is necessary to ensure that these indicators (medium- and short-term) do not create the wrong incentives for politicians, i.e. that they do not favour short-term over long-term measures and vice versa.

**2.1 Long-Term Indicators**

Long-term indicators capture the evolution of public finances over the long term. They can thus provide a comprehensive estimate of the long-term effects of fiscal policy and should therefore play a key role in formulating an assessment of the evolution of public finances.

In general, the long-term indicators (or long-term sustainability indicator) are more complex than the short- and medium-term ones because of the input data requirements and the long-term assumptions used. Their main drawback is that they are based on long-term projections, which have a higher degree of uncertainty associated with them. Increasing attention needs to be paid to long-term indicators for the effective implementation of long-term consolidation measures. Long-term measures are key in the consolidation.

In the scope of this paper, we consider the long-term sustainability indicators S1 and S2 (according to the European Commission method) as one of the most relevant tools for assessing the long-term dynamics of public finance development in the context of our problem.

### **2.1.1 Long-term Sustainability Indicator**

To assess the level of long-term sustainability of public finances, the Council for Budgetary Responsibility (CBR) primarily uses the *long-term sustainability indicator* (GAP), which expresses how much public revenue needs to be immediately and permanently increased and/or public expenditure reduced to keep gross public debt below 50 % of GDP over a 50-year horizon. The CBR calculates this indicator based on the European Commission's monitors and its own information provided by the authorities and institutions of Slovakia.

The calculation of this indicator is based on the balance of government revenue and expenditure assuming unchanged policies for the next 50 years (the 'baseline scenario'), with expected changes in macroeconomic and demographic parameters. Indicators S1 and S2 are quantified on the projection of the baseline scenario, considering the current demographic (population ageing) and macroeconomic assumptions and the legislative status (Novysedlák and Bugyi, 2014).

Looking at Constitutional Act No. 493/2011 on Fiscal Responsibility, the Council considers the following when determining the long-term sustainability indicator:

- the value of the structural primary balance,
- demographic projections published by Eurostat,
- the macroeconomic forecasts of the Committee on Macroeconomic Forecasts and the long-term macroeconomic forecasts of the European Commission,
- long-term projections of age-sensitive expenditure calculated by the European Commission,
- long-term capital revenue forecasts calculated by the European Commission,
- implicit commitments and contingent liabilities,
- other indicators affecting long-term sustainability.

Unlike the European Commission, which only considers the projection of selected expenditure policies in the long term, the Council considers long-term projections of all revenue and expenditure items of the general government budget in its baseline scenario (Council for Budget Responsibility, 2023a). The methodology for calculating long-term sustainability according to the Council for Budget Responsibility is therefore more representative in terms of being able to update information more frequently and to include more information in the calculation of long-term sustainability. Therefore, we consider the long-term sustainability indicator according to the CBR to be more representative compared to the European Commission methodology.

Public expenditure limits are the main budgetary instrument to ensure long-term sustainability and are a necessary operational tool for budget management, complementing the existing debt limit rules anchored in the Constitutional Act No. 493/2011 on Fiscal Responsibility. The CBR will calculate the limits on public expenditure and submit them to the National Council within 60 days after the approval of the government's programme statement and the vote of confidence in the government (Council for Budgetary Responsibility, 2023b).

### **2.1.2 Indicators S1 and S2**

For the European Union, the Debt Sustainability Monitor and the Fiscal Sustainability Report are published through the European Commission, providing an updated assessment of the risks to the fiscal sustainability of EU countries in the short, medium, and long term. It is based on a methodology agreed with the Economic Policy Committee (EPC).

S1 measures the consolidation effort needed to reduce debt to 60 % of GDP within 15 years. S2 measures the consolidation effort needed to stabilise debt in perpetuity (European Commission, 2023). Hence, the higher the S1 or S2, the more money the government must compensate through consolidation to alleviate public debt. The higher the percentage of indicators S1 and S2, the worse the long-term sustainability of the public finances of a given state.

Indicators S1 and S2 are improvements to the methodology in the fiscal sustainability analysis that were proposed in 2021 and are now the most sophisticated way of measuring long-term sustainability in the European Union (European Commission, 2022b). "In fact, the revised S1 indicator suggests a return to the approach used in the 2006 and 2009 fiscal sustainability reports, when 60 % of GDP was to be achieved in the long run" (European Commission, 2023).

Indicator S1 includes only selected general government expenditure policies and, of the long-term projections, only projections related to population ageing. S2 shows the necessary fiscal adjustment to stabilise the debt-to-GDP ratio over an infinite horizon. These



indicators are used for monitoring and coordinating the fiscal policies of EU member states and are important in EU economic governance (European Commission, 2023).

### 3. Methodology

For the objectives defined in this article, we used the following analytical methods: analysis, synthesis, induction, deduction and, most importantly, comparison.

The comparative method of our research was extrapolation of trends. The aim is to compare the growth rates of selected indicators, such as S1 and S2 which, according to our research, we consider key and representative in terms of assessing the evolution of public debt. Therefore, we will compare S1 and S2 of Greece right before and at the beginning of the crisis and to try to find a similar trend in contemporary Slovakia.

Primarily, we conducted a secondary analysis and used secondary data from Council for Budget Responsibility, European Commission and Statistical Office of the Slovak Republic. The objects of study are Slovakia and Greece.

### 4. Current State of Public Finances of Slovakia and Greece

According to the table 1, in 2019 we can observe a slight surplus in deficit. In 2020, the collapse was caused by bigger expenditures and recession due to the pandemic of COVID-19 and it still seen in 2021. In 2022 Slovakia's economy began to recover from the collapse but faced other difficulties caused by the (as much as other EU countries) faced other difficulties caused by the Russian invasion in Ukraine.

In 2023, the deficit of the general government of the Slovak Republic significantly increased year-on-year, exceeding 6 billion €. As a share of GDP, it rose from 1,7 % in 2022 to 4,9 % in 2023. General government debt in 2023 reached 68,83 billion €, which corresponded to 56 % of GDP. It increased by 5,45 billion € in 2023 compared to 2022, but the debt-to-GDP ratio decreased by 1,7 % due to increased GDP (Statistical Office of The Slovak Republic, 2024).

**Table 1: Deficit and Debt of Public Finances of Slovakia (2019-2023)**

INDICATOR	2019	2020	2021	2022	2023
Deficit (in million €)	1 269	-4 999	-5 195	-1 836	-6 010
<b>Deficit as % of GDP</b>	<b>1,4%</b>	<b>-5,3%</b>	<b>-5,2%</b>	<b>-1,7%</b>	<b>-4,9%</b>
Debt (in million €)	45 486	54 993	61 238	63 379	68 830
<b>Debt as % of GDP</b>	<b>48,5%</b>	<b>58,8%</b>	<b>61,1%</b>	<b>57,7%</b>	<b>56,0%</b>
GDP (in million €)	93 865	93 450	100 245	109 762	122 813

Source: Statistical Office of The Slovak Republic

Similarly to situation in Slovakia and the rest of EU countries (by a bigger or smaller margin), Greece's economy suffered from COVID-19 which is seen by more than 10 times higher deficit of public finances (+8,9 % deterioration of deficit from 2019 to 2020). The situation with public debt worsened as well with debt to GDP ratio raising by 26,4 % (10,5 billion €).

According to the table 2, after year 2020, Greece's economy began to recover rapidly with improving of deficit to GDP ratio by 2,8 % in 2021, 4,5 % in 2022 and 0,9 % in 2023 compared to previous years. The debt to GDP ratio has been also improving by 10,4 % in 2021, 23,9 % in 2022, 10,8 % in 2023 (Hellenic Statistical Authority, 2023 & 2024).

**Table 2: Deficit and Debt of Public Finances of Greece (2019-2023)**

<b>INDICATOR</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Deficit (in million €)	1 575	-16 128	-12 676	-5 143	-3 508
<b>Deficit as % of GDP</b>	<b>0,9%</b>	<b>-9,8%</b>	<b>-7,0%</b>	<b>-2,5%</b>	<b>-1,6%</b>
Debt (in million €)	331 144	341 588	356 910	356 796	356 695
<b>Debt as % of GDP</b>	<b>180,6%</b>	<b>207,0%</b>	<b>196,6%</b>	<b>172,7%</b>	<b>161,9%</b>
GDP (in million €)	183 347	165 016	181 500	206 620	220 303

Source: Hellenic Statistical Authority

These data on the state of the deficit and public debt can broaden the understanding of the economic situation in both countries in terms of this paper. Although, we do not recommend making predictions based only on these macroeconomic indicators as we assume that these numbers alone can become misleading. Greece's public debt is almost three times larger than Slovakia's due to Greece 2009 government-debt crisis and its consequences and we assume that comparing such metrics for both countries could be unrepresentative. We believe that more attention should be paid to the assessment of more complex economic indicators, which indicate the long-term development of the economy and provide more representative information that is important to achieve the aim of our scientific paper.

The 2024-2026 general government budget of Slovakia approved on 21 December 2023 is the first budget presented by the government that emerged from the parliamentary elections held in September 2023. The Council for Budget Responsibility estimates that the current poor state of public finances of Slovakia has been influenced by the security and economic crisis and pandemic, the initial high structural deficit, as well as due to the lack of implementation of expenditure limits (Council for Budget Responsibility, 2024b).

"Objectively, it must be stated that the current government has taken over public finances after two crises [the COVID-19 pandemic, the economic and energy crisis caused by Russian invasion of Ukraine] in a complicated state, which means that without the

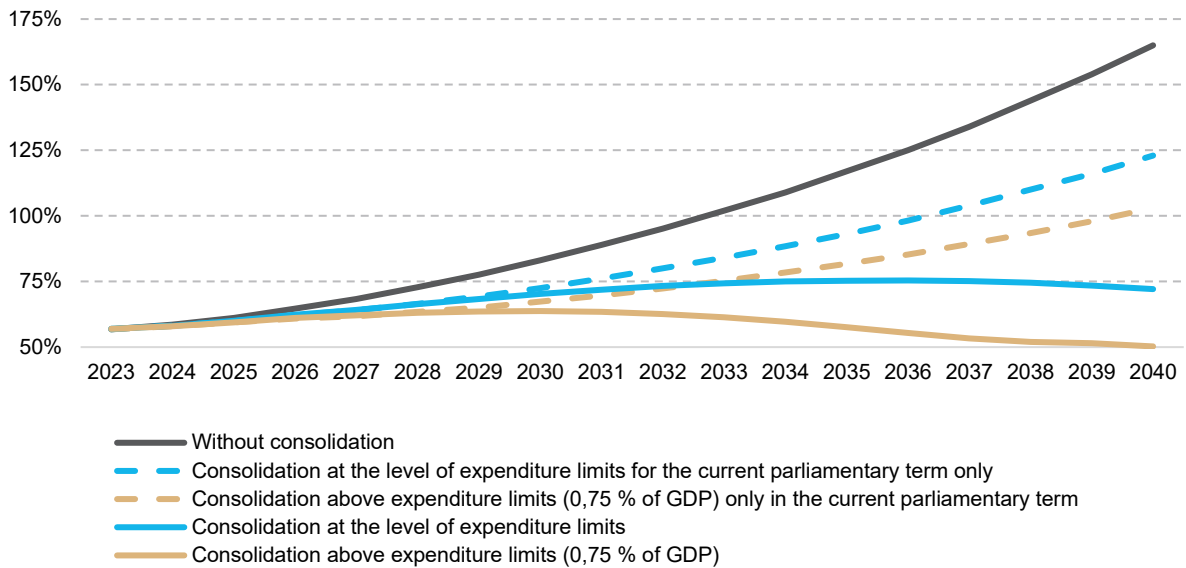
government's measures, the deficit would be at 6 % of GDP between 2024 and 2027 and the debt of Slovakia would gradually increase to almost 70 % of GDP" (Council for Budget Responsibility, 2024b).

According to the result of the assessment of submitted by the National Council of the Slovak Republic budget of the public administration by the Council for Budget Responsibility, they note that the budget was not prepared in accordance with the expenditure limits and this budget was anyway approved by the National Council of Slovakia (Council for Budget Responsibility, 2024b).

On 9 May 2024, the National Council of the Slovak Republic approved an amendment to the Act on Budget Rules of Public Administration. Between 2020 and 2023, due to the COVID-19 pandemic and the energy crisis affected by Russian invasion of Ukraine, the spending limits have been cancelled in the EU. Under the new EU fiscal rules, public spending limits are again mandatory. The limit on public expenditure is set at 57 694 232 457 € (Ministry of Finance of the Slovak Republic, 2024c).

#### **4.1 Development of Slovakia's Public Debt**

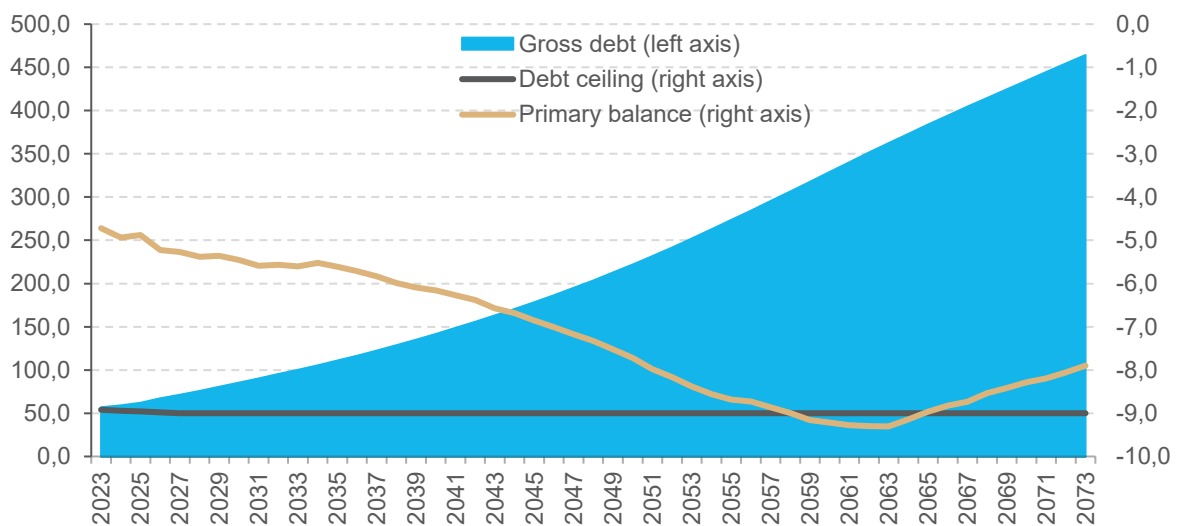
Slovakia's gross debt is heading towards 58 % of GDP and, without a total adjustment (consolidation) of public finances, it will more than triple by 2040, approaching 170 % of GDP (Figure 2). This is the no-policy-change (NPC) scenario. Considering current policies, this means that neither domestic nor European fiscal rules for consolidation would be respected, nor are there any positive developments in that case (Můčka, 2024).



**Figure 2: Evolution of Public Debt on Long-Term Liabilities Depending on the Consolidation Strategy (% of GDP)**

Source: Council for Budget Responsibility, 2024

Similarly, government debt would rise unstoppably over the entire horizon. In no single year would it fall below the debt brake's highest sanction band and would already exceed the Maastricht criterion of 60 % of GDP in 2025 and, assuming unchanged policies, debt would reach 464,3 % of GDP at the end of 2073 (Figure 3) (Council for Budget Responsibility, 2023b).

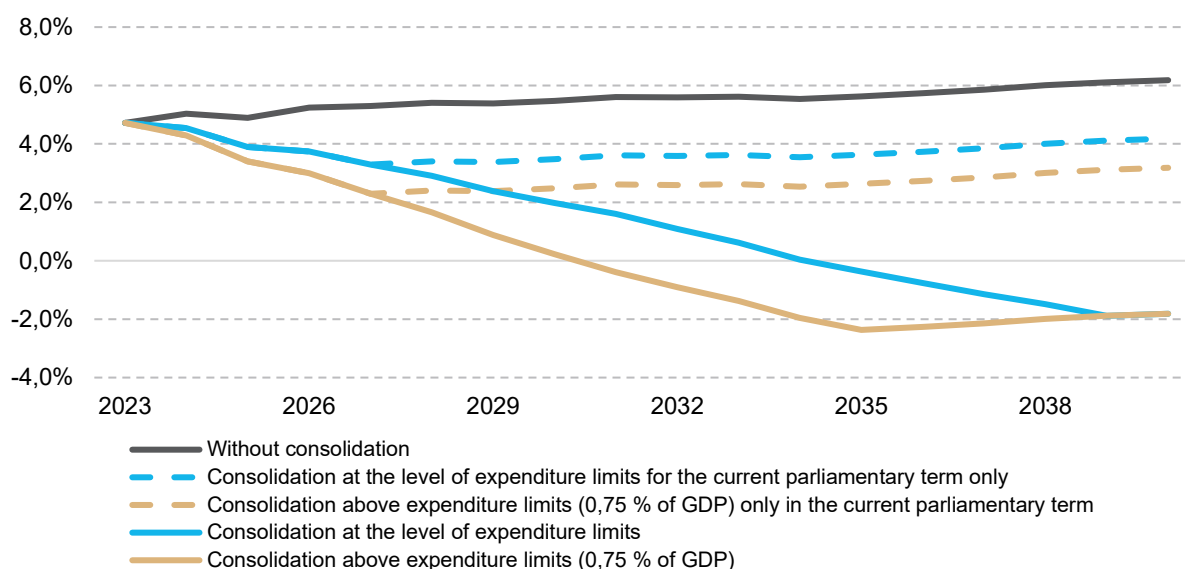


**Figure 3: Projection of Debt and Primary Balance in the Baseline Scenario (% GDP)**

Source: Council for Budget Responsibility, 2023

The figure 4 shows different scenario in the long term with the consolidation on various levels of expenditures, where we can compare how the primary deficit could develop by different consolidation strategies.

"If the current and future governments were able to [consolidate] at a rate slightly higher than required by the expenditure limits, for example, at 0,75 % per year, the stated time needed to consolidate public finances (3 terms) in order to make them sustainable in the long run in terms of the expenditure limits would be able to be halved" (Figure 4) (Múčka, 2024).



**Figure 4: Evolution of the Primary Deficit Depending on the Consolidation Strategy**  
Source: Council for Budget Responsibility, 2024

#### 4.2 Consolidation Measures and Level of Long-Term Sustainability

To assess the impact of government measures on long-term sustainability, it is important to distinguish between measures with short-term and long-term effects on the structural balance. It is true that the impact of short-term measures is minimal in terms of sustainability (Kotian, 2024). On the contrary, measures with a permanent impact on the structural deficit have a direct impact on the change in sustainability.

The general government budget is not in line with the expenditure limits and the overall impact of the budget on sustainability has been assessed by the Council for Budget Responsibility as negative at -0,2 % of GDP. Without this inclusion of local government savings, the government deconsolidates by 0,5 % of GDP in the budget precisely because of the high proportion of temporary measures in the consolidation measures combined with the expansion of permanent expenditure measures (Kotian, 2024). Hence, the budget presented by the Slovak Government does not offer an improvement in Slovakia's public finances and does not fully consider the suggestions of the Council for Budget Responsibility.

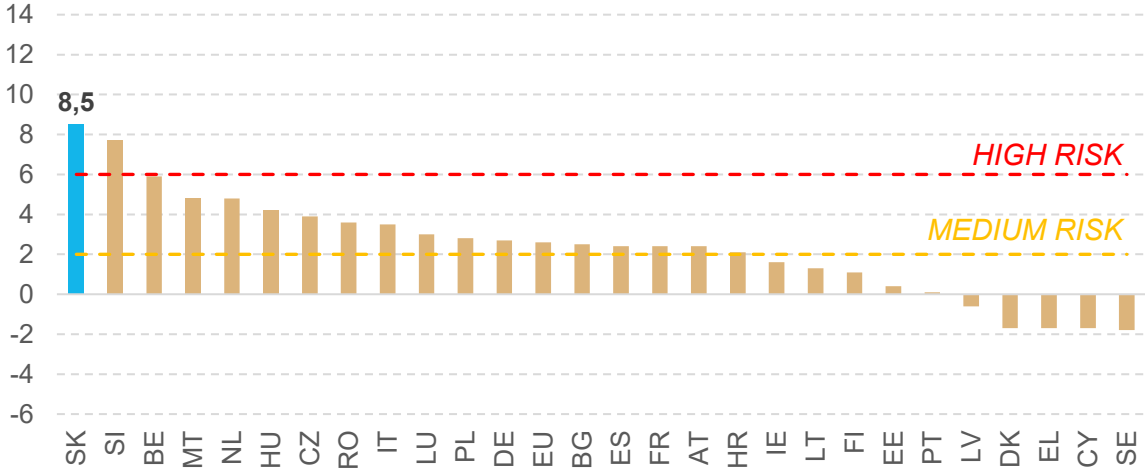
According to the assessment of the public administration budget for the years 2024 to 2026, the approved public administration budget exceeds the expenditure limits by 1,7 billion in 2024 and subsequently by 2,2 billion € in 2025 and 2 billion € in 2026.

As the public expenditure limit is the main budgetary instrument for achieving long-term sustainability of public finances, its omission from the budget may violate Article 55a of the Slovak Constitution, which commits Slovakia to protect the long-term sustainability of its economy (Council for Budget Responsibility, 2024b).

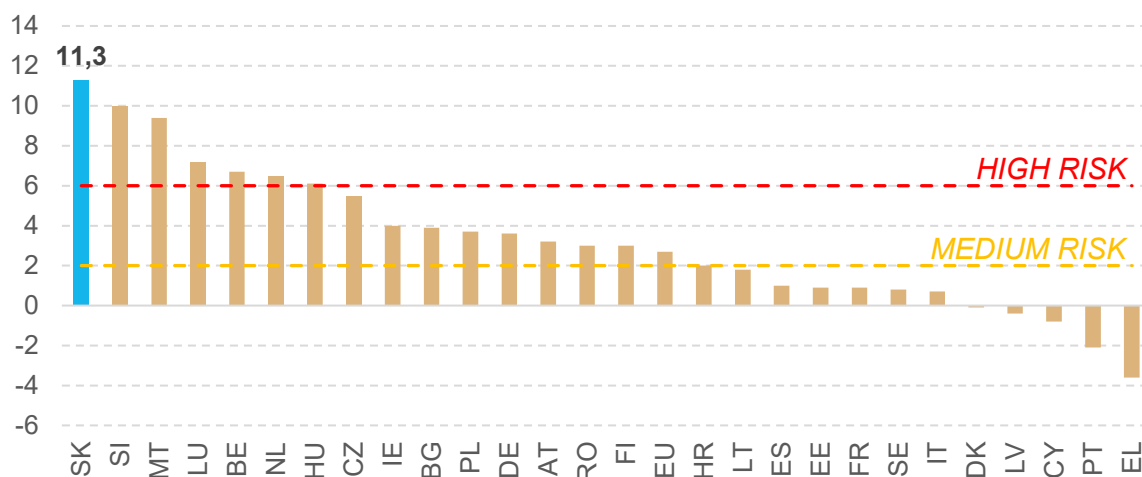
In the approved budget for 2024, the government declared that it plans to consolidate by 0,5 % of GDP compared to the previous year by reducing the deficit from an expected 6,5 % of GDP in 2023 to 6 % of GDP in 2024. Considering the data, the approved budget itself will not lead to a reduction but instead to an increase in the deficit from 6,2 % to 6,3 %. In its assessment of the budget, the Council for Budget Responsibility expects the deficit to worsen by 0,4 % of GDP, as it estimates a lower deficit for 2023 (5,7 % of GDP) than the government's approved target of 6 % of GDP for 2024 (Kotian, 2024).

Slovakia will face increased costs arising from demographic developments over the next decades, which will put public finances under increasing pressure, especially based on data on the European Commission's S1 indicators (European Commission, 2023).

Regarding the key long-term sustainability indicators S1 and S2 based on data from the Debt Sustainability Report of European Commission, the latest published estimate (European Commission, 2023) places Slovakia in the worst position in the EU (Figure 5 and 6).



**Figure 5: Comparison of S1 Indicator of EU Member States in 2022**  
 Source: European Commission, 2022



**Figure 6: Comparison of S2 Indicator of EU Member States in 2022**  
 Source: European Commission, 2022

"Unlike the European Commission, which only takes into account the projection of selected expenditure policies in the long term, the Council's baseline scenario takes into account long-term projections of all revenue and expenditure items in the general government budget. The blue part of the graph for the SK is comparable (in terms of not including the impact of the second pillar on revenues) to the European Commission's results" (European Commission, 2023).

## 5. Slovakia's "Greek" Path — a Plausible Scenario

The main objective is to assess, by comparing the evolution of the public finances of Slovakia and Greece, the claims that the public finances of Slovakia are evolving in a scenario like that of Greece during the debt crisis. In the following analysis, we compare the long-term sustainability position of Greece right before and during the crisis and the current situation and long-term sustainability position of Slovakia.

### 5.1 The Emergence of Narratives About Slovakia's "Greek" Path

The period of the beginning of the spread of narratives that Slovak public finances are following the "Greek" path of increasing public debt refers to the parliamentary term of Iveta Radičová between 2010 and 2012 (Tódová, Fila, 2010). Based on the studied materials, the narrative of the "Greek" path is understood as a set of negative states of the basic economic indicators of the state (respectively public debt and long-term sustainability) that trigger an increase in interest rates on the financial markets for the state in question. High interest rates are triggered by creditors' lack of confidence that the state will be able to pay for its liabilities in the long term.

Some economists warn that this scenario is possible if the right policies and consolidation measures are not implemented (or in line with the recommendations of the CBR). "Slovakia still has a decent credit rating and average debt. However, financial markets do not see our future well. Our debt servicing costs are rising sharply", says Vladimír Baláž, an economist at the Slovak Academy of Sciences (Onuferová, 2023). "Greece had the same debt-to-GDP ratio in 1989 as Slovakia has now. It took 5 years to get to 100 %. It survived with that level of debt for two decades until the debt skyrocketed during the last financial crisis. [...] At the moment, the second phase of Greek debt development seems to me the most likely. A decades-long inability to push the debt down to sufficiently small numbers", says Radovan Ďurana, an analyst at INESS (Onuferová, 2023). However, other economists have positive views on the state of public finances and their future development. "We are not facing the Greek scenario because the facts are different: our debt is below the Maastricht threshold, the Greek debt is almost triple", says former finance minister Schmögnerová (Onuferová, 2023).

"The scare of the Greek scenario, as it has become widespread, is total stupidity. [...] we are far from the Greek scenario", says Igor Daniš. He also points out that Slovakia has a debt of over 55 % of GDP, Greece had around 140 % 12 years ago, now it has less than 200 %, Japan has 250 %, Italy about 150 % and the US, France, Spain, and the UK have also jumped the 100 % mark, Germany has at least 10 % more than [Slovakia]". "[Slovakia has] a constitutional act on the debt brake (fiscal responsibility) and every government with a public debt of 57 % must start saving and prepare a balanced budget", says Igor Daniš (2023).

"I don't think Slovakia is on its way to a Greek scenario, and I see the probability as very small. We have a much lower level of public debt, Greece has a debt ratio of around 200 percent of GDP", says Mária Valachyová, chief economist at "Slovenská sporiteľňa" (Onuferová, 2023).

On the basis of these data, we conclude that these comments do not consider the most crucial indicators of long-term sustainability and forecasts of the European Commission and the Council for Budget Responsibility as these data are not presented in economic news in media. Therefore, we cannot prove that statements about the falsity of Slovakia's so-called "Greek" path stand on the empirical research and analysis of crucial indicators.

## **5.2 Comparison of the Long-Term Sustainability of Slovakia and Greece**

We consider long-term sustainability indicators as a key measure for assessing the evolution of Greece's public finances during the crisis. To compare the evolution of the long-term sustainability indicators of Greece, based on the knowledge gained, we consider indicators S1 and S2 to be the most relevant. However, to make the comparison as representative as possible, we use the methodology of the European Commission when comparing indicators S1 and S2. Although the article states that the long-term sustainability



indicator according to the CBR includes more aspects compared to S1 and S2 according to the European Commission's methodology, in our comparison S1 and S2 are more appropriate, as the methodology for their calculation is the same for Slovakia and Greece, which suggests better comparability.

The results of the European Commission's monitors and reports assessing long-term sustainability do not apply to countries implementing the Economic Adjustment Programme (or in the case of Greece in the period 2010-2018). For countries under the Economic Adjustment Programme, macroeconomic and budgetary prospects are assessed more frequently than for other Member States in the annual reports on long-term (fiscal) sustainability (European Commission, 2012).

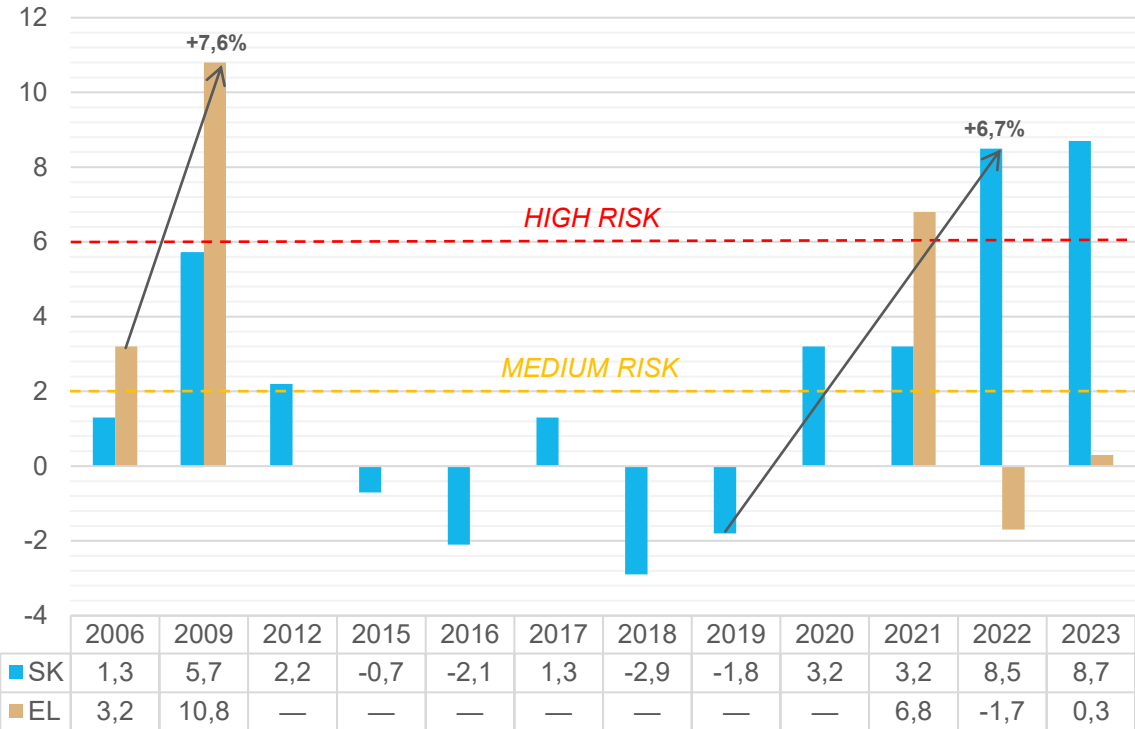
Based on the above, data on indicators S1 and S2 of Greece during the implementation period of the first, second and third Economic Adjustment Programmes (2010-2018), which aim to lead the country out of the debt crisis, are not available. In 2019 and 2020, the S1 and S2 indicators are still not available due to the transition from the programme implementation period to the standard calculations of the long-term sustainability of EU countries (European Commission, 2021). It is true that the higher the S1 or S2 indicator, the more money the state must compensate through consolidation. The higher the percentage of the S1 and S2 indicators, the worse the long-term sustainability of the public finances of the country. The lower the S1 and S2 indicator, the better the sustainability of public finances.

In assessing the time frame, we conclude that the most relevant is to examine the state of long-term sustainability over the period from 2006 to the present data from 2023 (according to the most recent data at the time of conducting a comparison). For the comparison of the long-term sustainability of Greece and Slovakia according to indicators S1 and S2, comparisons at the beginning and end of the four-year periods are used. For Greece, the years are 2006 to 2009, which is the period before the debt crisis, and the beginning of the debt crisis (2009), where a rapid increase (deterioration) of the S1 and S2 indicators is visible. For Slovakia, the years are 2019 to 2022, which is also a four-year period and is the most recent data available. The aim is to compare the growth rates of the S1 and S2 indicators of Greece right before and at the beginning of the crisis and to try to find a similar trend in contemporary Slovakia (extrapolation of trends).

Looking at the trends in the graphs (Figures 7 and 8), we see similarities in the growth of the S1 indicators of Greece (2006 to 2009, at the beginning of the crisis) and S1 of Slovakia (2019 to 2022). The changes are linked to demographic developments (ageing population).

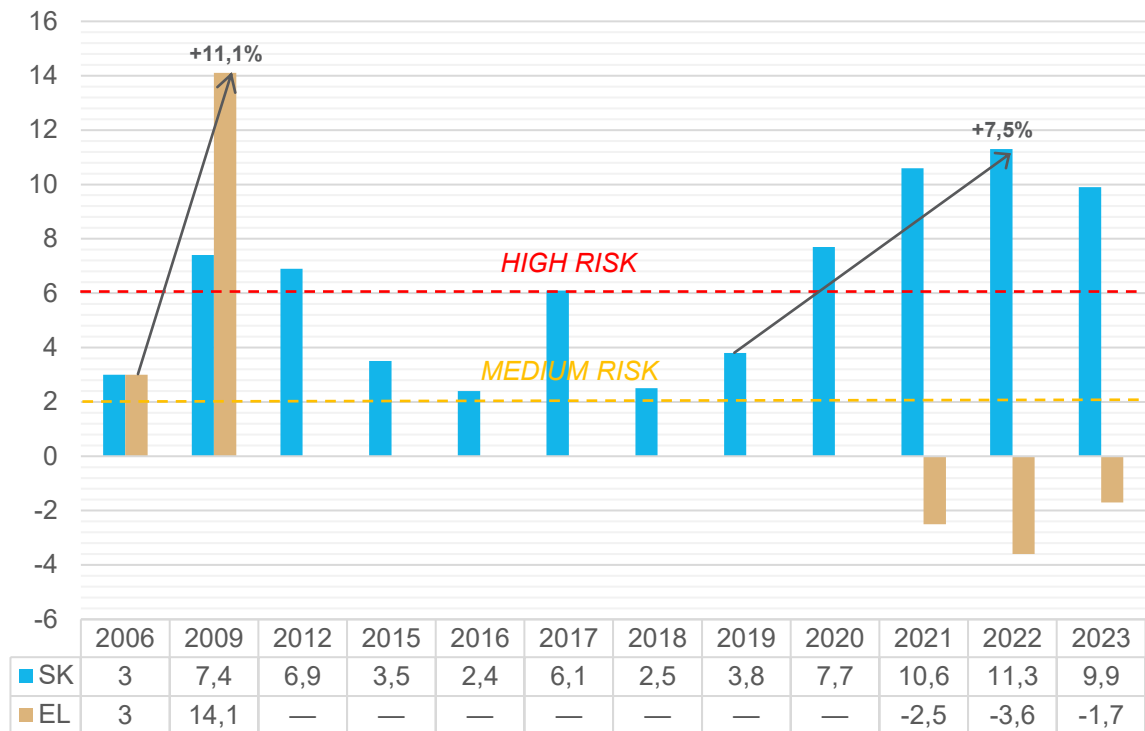
Over the 4-year period (2006 to 2009), Greece's S1 indicator changed from 3,2 % to 10,8 %, an increase of 7,6 % of GDP. Over the 4-year period 2019 to 2022, Slovakia's S1 indicator changed from -1,8 % to 8,5 % of GDP, an increase of 6,7 % of GDP. Over the period

2006 to 2009, Greece's S1 indicator increased by 0,9 % of GDP more than Slovakia's same indicator over the period 2019 to 2022 (Figure 7).



**Figure 7: S1 Indicator of Slovakia and Greece 2006-2023 (% of GDP)**  
 Source: own elaboration based on data of the European Commission

As for indicator S2, we used the same time frame. Over the four-year period 2006 to 2009, the S2 indicator of Greece changed from 3 % to 14,1 % of GDP, an increase of 11,1 % of GDP. Over the four-year period (2019 to 2022), the S2 indicator of Slovakia changed from 3,8 % to 11,3 % of GDP, an increase of 7,5 % of GDP. Over the period 2006 to 2009, the S2 indicator of Greece increased by 3,6 % of GDP more than the same indicator of Slovakia over the period 2019 to 2022 (Figure 8).



**Figure 8: S2 Indicator of Slovakia and Greece 2006-2023 (% of GDP)**

Source: own elaboration based on data of the European Commission

Based on the obtained results, we conclude that the trends of the S1 and S2 indicators of Greece during the crisis period were more pessimistic than the current S1 and S2 indicators of Slovakia. However, there is a visible trend towards a deterioration of Slovakia's S1 and S2 indicators, although they do not have such bad tendencies in 2019-2022 as it was the case for Greece in 2006-2009.

If the trend of increasing S1 and S2 indicators (and overall long-term sustainability) continues, and only if consolidation measures are insufficient and their duration is not long-lasting, Slovakia's public debt could theoretically more than triple by 2040 and approach 170 % of GDP (Múčka, 2024). Unless spending limits are implemented, achieving long-term sustainability will not be possible and we can assume that unsustainable finances in the long term would cause uncertainties in financial markets, which would already resemble a "Greek" scenario.

## Conclusion

The aim of this article was to empirically verify the narratives about the "Greek" path (scenario) of the development of public finances of Slovakia based on a comparison of the development of indicators of long-term sustainability of Greece and Slovakia. In the process, material was developed that can be used to compare the S1 and S2 long-term sustainability indicators of Greece and Slovakia.

The article explained the different definitions of public debt according to different authors. The public debt ceilings in Slovakia according to the Constitutional Act on Fiscal Responsibility, which sets the level of public debt (the so-called debt brake) for maintaining the long-term sustainability of public finances, were presented. Within the European Union, this is the Stability and Growth Pact, which sets limits for Member States on the percentage of public deficit and public debt (Maastricht debt).

Based on the topic we have examined; we have identified the following objectives and instruments in the process of public debt reduction. The government's instrument to reduce public debt is consolidation of public finances. The most important measure within its framework is the long-term sustainability indicator, by which we can assess whether the government is taking good measures and whether the state of public finances is improving. To improve the long-term sustainability indicator, the government uses various measures, key among them limits on public spending.

An important part of this thesis was an overview of the concept of fiscal consolidation as a tool for public debt relief. The different indicators by which consolidation is measured were described. We defined what indicators can be properly counted (and thus defined). These were also long-term indicators, among which are the long-term sustainability indicator (according to the Council for Budget Responsibility methodology) and indicators S1 and S2 (according to the European Commission methodology). The chapter highlighted the main instrument to ensure long-term sustainability — public expenditure limits.

In the paper, we also present actual data on gross debt indicators with projections for the future based on the Council for Budget Responsibility materials, which show that in the absence of consolidation measures amounting to 0,75 % of GDP (i.e. above the expenditure limits), public debt would approach 170 % of GDP by 2040 under a no-policy-change scenario and would theoretically reach 464,3 % of GDP in 2073.

The key analysis was to compare the S1 and S2 indicators of Greece at the beginning of the Greek government-debt crisis (2006 to 2009) with the same S1 and S2 indicators of Slovakia at present (2019 to 2022). The aim of the given comparison was to find in the current trends of Slovakia's public finances according to S1 and S2 whether their development is like the Greek development at the beginning of the Greek government-debt crisis (extrapolation of trends).

Based on the obtained results, we conclude that the trends of the S1 and S2 indicators of Greece during the crisis period were more pessimistic than the current S1 and S2 indicators of Slovakia. However, there is a visible trend of deterioration of the S1 and S2 indicators of Slovakia, although they do not have such bad tendencies in 2019-2022 (deterioration of S1 by 6,7 % of GDP and S2 by 7,5 % of GDP), as it was the case in Greece in 2006-2009 (deterioration of S1 by 7,6 % of GDP and S2 by 11,1 % of GDP).

We assume that until spending limits are implemented, achieving long-term sustainability will not be possible and unsustainable long-term finances would also cause problems in the financial markets, which would already resemble a "Greek" scenario.

Based on the results of our research, we recommend the National Council of the Slovak Republic and Ministry of Finance of the Slovak Republic to strictly follow sufficient consolidation measures (approved limits of expenditures) in the budget to continue the recovery of Slovakia's public finances and avoid the possibility of "Greek" scenario.

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