REPUBLIC OF SLOVENIA
FISCAL COUNCIL

Fulfilment of conditions for the existence of exceptional circumstances in 2022

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Introduction and summary

The general government debt reflects imbalances in public finances, which makes it one of the most important indicators of the macroeconomic situation of a country. After the general government debt failed to reach pre-crisis levels following its significant increase in the previous global financial crisis, the current crisis contributed to its renewed strong increase in the entire EU and in Slovenia. In the current crisis, in which a temporary deviation from the fiscal rules has been allowed and some bounds regarding the operation of monetary policy have been reached, the role of fiscal policy as an important tool of the counter-cyclical economic policy has strengthened. In spite of the simultaneous increase in government debt, it was the exceptionally accommodative monetary policy, which maintains favourable financing conditions on the government debt markets, that changed the perception of financial markets and credit rating agencies regarding the medium-term risks of public finances. Analyses show that, considering standard shocks and maintaining the accommodative monetary policy stance, the general government debt would remain sustainable in the next five years. However, when planning the economic policy, the increased frequency of extensive endogenous and exogenous shocks, which usually substantially increase the level of debt, should be taken into consideration. Such caution is also required, since in favourable economic times, the fiscal policy is generally unable to ensure adequate debt reduction and fails to create sufficient fiscal space, which would, even without the support of monetary policy – such as provided in the current crisis – grant access to the market and support an adequate, extensive and active counter-cyclical policy in a recession. Furthermore, particularly long-term risks relating to debt sustainability will remain in place and will continue to increase if no economic policy actions are taken. These risks would come to the fore, especially if a potential deterioration in financing conditions would coincide with the forecast rapid growth of ageing related fiscal expenditure, which is covered in the long-term debt sustainability analysis. Even this however does not cover all risks, because fiscal expenditure may also rise in the future, for example, due to measures related to climate change or any other additional liabilities that the general government might assume.

In the analysis, the basic relationships between debt and primary budget balance, interest rates and the growth of economic activity will be reviewed, which substantially determine the level of the general government debt in the long term. The analysis also includes the development of Slovenia's general government debt and presents various related indicators. The relationship between the general government debt and other macroeconomic indicators will also be examined and compared to other EU Member States. In a large part of the analysis covering the assessment of medium-term and long-term sustainability of the general government debt, possible courses of future debt development are simulated based on various assumptions that primarily determine debt dynamics. The analysis concludes with an overview of risks and potential consequences of their materialisation on the dynamics and the level of debt.

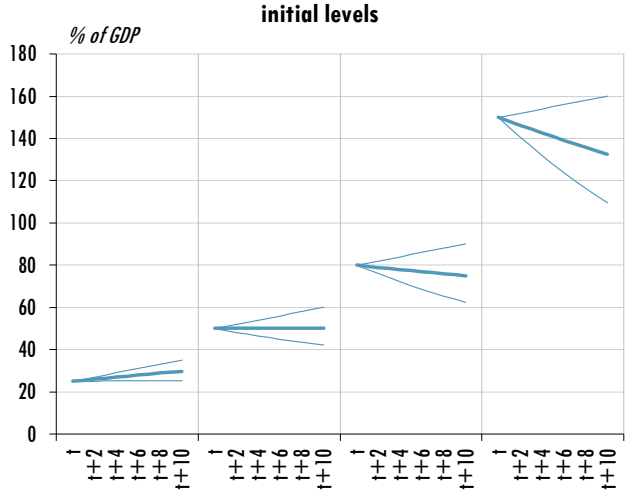
1. General government debt, primary balance, interest rates and the growth of economic activity

In the past, a high level of general government debt and in particular its rapid increase have generally indicated the high probability of a financial and fiscal crisis. Such conclusions have usually been drawn from debt sustainability analyses, although empirical analyses on the correlation between debt, fiscal crisis and economic activity point allow for no unambiguous conclusions.[1] In the current crisis, which has coincided with a period of exceptionally low interest rates, the concept that public debt is cost free has become the subject of many academic and political discussions, especially following the Blanchard's analysis (2019). This concept is based on the assumption that the fiscal policy does not have to produce primary budget surplus if the interest rates are lower than the economic growth for a prolonged period. In this section, some basic findings are described on the basis of this relation.

The general government debt trends are basically determined by two factors: primary budget balance as well as the difference between interest rates and the growth of economic activity. The primary budget balance (PB), i.e. the balance of the general government excluding the costs of debt servicing or interest expenditure, is largely dependent on the economic situation, including the structural position and discretionary fiscal policy measures. The snowball effect, i.e. the difference between interest rates (i)[2] and the nominal growth of economic activity (g), causes the debt-to-GDP ratio (D) to increase if the above difference is positive, with all other variables remaining unchanged. The opposite also applies: the debt-to-GDP ratio decreases, *ceteris paribus*, if interest rates are lower than the economic activity growth. The latter currently applies for most developed economies and is evident from the equation, where the change of debt in a particular year (t) is given as: :

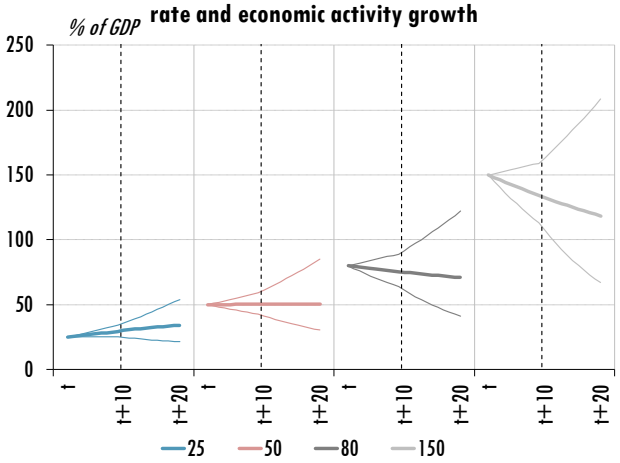
$$\Delta D_t = D_{t-1}\frac{(i_t - g_t)}{(1+g_t)} - PB_t + SF_t \qquad [1]$$

Figure 1.1: Government debt development conditional on its initial levels



Note: Thicker lines represent government debt assuming its various initial levels, primary deficit of 1 % of GDP and i-g =-2 p.p. Thinner lines represent the debt if i-g is 2 p.p higher or lower.
Source: FC.

Figure 1.2: Government debt development conditional on its initial levels and shocks to the difference between interest rate and economic activity growth



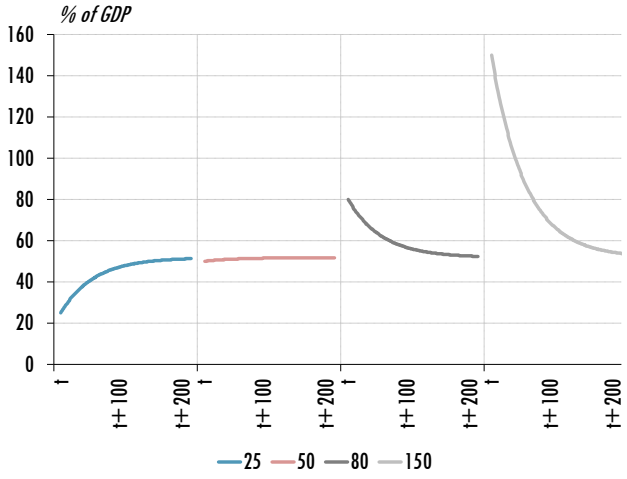
Note: Thicker lines represent government debt assuming its various initial levels, primary deficit of 1 % of GDP and i-g =-2 p.p. Thinner lines represent the debt if i-g is 2 p.p higher or lower. After the shock in t+11 the i-g difference additionally increases or decreases by 2 p.p.
Source: FC.

[1] Analyses (Badia et. al, 2020) show that the public debt level is the most important indicator and a harbinger of a crisis showing strong non-linearities, since a high debt affects the emergence of a crisis more profoundly than a low debt affects the absence thereof.

[2] In the snowball effect calculation, the implicit interest rate is taken into consideration, which indicates the difference between the interest expenditure in the current year in relation to the general government debt from the previous year. Therefore, this interest rate reflects the cost of financing the entire debt and not the country's current financing costs on financial markets, which is why its fluctuations are smaller than the respective required yield of financial markets.

The debt change residual is determined by stock-flow adjustments, which reflect debt modifications not related to the change of the general government balance and are examined in greater detail, including data for Slovenia, in the next section. Upon first examination, the equation seems to paradoxically indicate that if the difference between the interest rates and economic activity growth remains negative, the debt ratio is declining faster in the case of a higher initial debt level (Figure 1.1). In this context, it is important to highlight the risks arising from potential changes to this difference. Studies (e.g. Presbitero and Wiriadinata, 2020) show that such sudden changes are particularly frequent when the debt is high and affected countries are exposed to domestic and global shocks to a large extent. Due to an increased sensitivity to the changes to variables determining the debt, the higher debt level may constitute an additional source of instability. Because the macroeconomic situation and, even more so, financial market conditions may change rapidly, the uncertainties related to fiscal policy management may also increase due to the high level of debt. These are, inter alia, reflected in wide ranges of possible debt ratios when a shock appears due to the difference between the interest rates and the growth of economic activity with existing high levels of debt (for example, see Figure 1.2).[3] After a shock of the same extent, the ranges of debt ratios in cases of lower levels of debt are considerably lower and thus easier to manage.

Figure 1.3: Convergence of governement debt share given the primary balance and i-g



Note: Simulation of government debt assuming primary balance at -1% BDP and i-g=-2 p.p. (highlighted text in Table 1.1) with various initial debt levels. Period up to t+200 is shown, total convergence is achieved around t+400.
Source: FC.

Table 1.1: Matrix of convergence values of debt share in GDP with regard to primary balance and to the difference between interest rate and GDP growth

		i-g (p.p.)					
		-1	-2	-3	-4	-5	-6
PB (% GDP)	3	<0	<0	<0	<0	<0	<0
	2	<0	<0	<0	<0	<0	<0
	1	<0	<0	<0	<0	<0	<0
	0	0	0	0	0	0	0
	-1	103	**52**	34	26	21	17
	-2	206	103	69	52	41	34
	-3	309	155	103	77	62	52
	-4	412	206	137	103	82	69
	-5	515	257	172	129	103	86

Note: Values represent shares of debt in GDP as a result of long convergence period with regard to different combinations of interest rate (i) and GDP growth (g) and the primary balance (PB). The convergence values presented are typically reached in approximately t+400. "g" is assumed at 4 %, whereas its realistically defined alternative values would not change the results in a substantial manner.
Source: FC.

At the same time, equation [1] implies that, with the difference between the interest rates and the growth of economic activity remaining unchanged, the debt-to-GDP ratio converges to a specific debt value regardless of the initial debt-to-GDP ratio, provided that the interest rates are lower than the growth of economic activity. In the case of a primary budget balance deficit, the difference between the interest rates and the growth of economic activity must be adequately negative. Otherwise, the debt ratio convergence cannot be achieved.

Based on equation [1], the value of the PB* can be determined, which, with the given general government debt level and selected combinations of differences between the interest rates and the growth of economic activity, stabilises the initial debt level.

[3] In this case, a more restrictive fiscal policy is optimal for active (i.e. in usual conditions without an exceptionally accommodative monetary policy) debt reduction, also because with high debt levels the interest (risk premium) become more susceptible to debt increase (for theoretical basis, see Hauptmeier and Kamps, 2020, for the actual existence of the non-linearity, see the demonstration in European Commission, 2020a: p. 53). Such a finding might be inconsistent with the usual counter-cyclical role and underlines the arguments for a cautiously devised fiscal policy in favourable times.

$$PB^* = D\frac{(i-g)}{(1+g)}$$

Calculations show that, with the given assumptions about the interest rates and the GDP growth, a PB that would stabilise the debt at its base level could in most combinations be even less favourable than the PB in the years before the crisis. The pre-crisis five-year PB average surplus of Slovenia was around 1.8% of GDP. It should be noted that the average PBB surplus of the last 20 years (excluding the expenditure for the banking sector restructuring in 2013) totalled 0.3% of GDP. For six years within this period, the PB was negative, while in the years following the global financial crisis the PB also reached levels that, with the current debt level and despite the currently favourable difference between the interest rates and the forecast growth of economic activity, could not stabilise the debt.

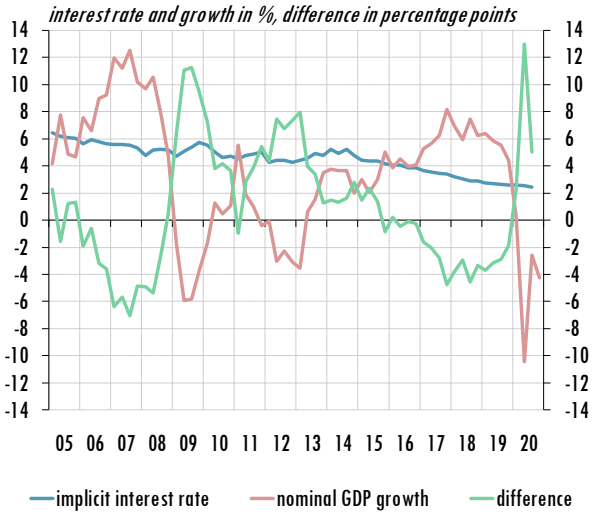
In spite of the shown favourable impact of the difference between the interest rates and the growth of economic activity on the debt dynamics, and despite the current period of favourable financing conditions, which is expected to ensure a relatively rapid recovery, however, caution in borrowing is still advised. In accordance with a study carried out by the European Commission (2021b), in periods of a negative difference between the interest rates and the growth of economic activity, the public debt is reduced by less than a half compared to periods when the interest rates are higher than the GDP growth. The findings of an IMF study (Mauro and Zhou, 2020), in which the historical data of the i–g difference were analysed, show that the difference was negative in most cases, in both advanced and in emerging economies, and often persisted for long stretches. Nevertheless, one of the study's

Table 1.2: Primary balance (PB*) required to stabilize the debt-to-GDP ratio

% GDP		interest rate i (%)		
		2	3	4
GDP growth rate	3	-0.8	0.0	0.8
g (%)	4	-1.5	-0.8	0.0
	5	-2.3	-1.5	-0.8

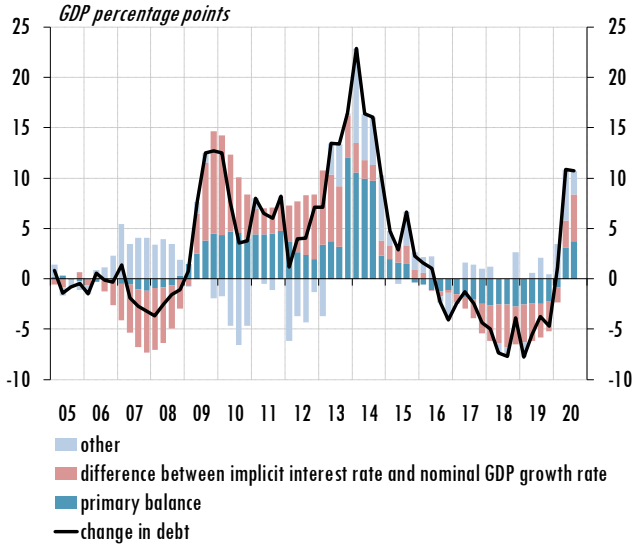
Note: The initial debt value is assumed at 80 % of GDP.
Source: FC.

Figure 1.4: The difference between implicit interest rate and nominal GDP growth



Source: SORS; FC calculations.

Figure 1.5: Contributions to general governement gross debt change



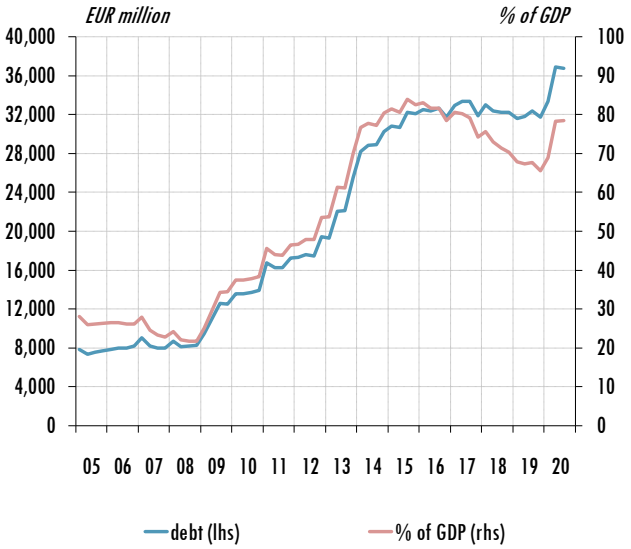
Source: SORS, FC calculations.

findings also suggest that, in general, the negative i–g difference before a debt crisis does not change substantially and that, compared to the economic growth, financing costs generally rise abruptly and sharply just prior to default. Similar trends are also typical for Slovenia. Periods with a positive i–g difference coincide with periods of economic crisis and largest debt increase, while even the prolonged periods of negative difference of the aforementioned ratio (e.g. 2016–2019) were insufficient for the debt to return to pre-crisis levels. This is also important, because an analysis conducted by the European Commission (2021a) reveals that EU Member States reduce their efforts most in the periods of negative difference between the interest rates and the growth of economic activity and that this often occurs especially in the countries with a high debt-to-GDP ratio. Such trends further highlight the necessity of creating sufficient fiscal space in favourable economic conditions.

2. Slovenia's general government debt

In the third quarter of 2020, the general government debt was EUR 36.7 billion, i.e. 78.5% of GDP. In accordance with the last public forecast by the Ministry of Finance when the Draft Budgetary Plan 2021 was prepared, the debt is expected to amount to 82.4% of GDP at the end of 2020 and 80.9% of GDP at the end of 2021. Public data for the general government debt have been available since the end of 1994, when the debt totalled EUR 1.6 billion, i.e. around 20% of GDP. The state budget debt constitutes the bulk of the general government sector debt. In 2020, the state budget debt was EUR 34.3 billion and, in comparison to the data on the general government debt, more detailed data on its structure are available, which will be presented below.

Figure 2.1: General government debt (ESA) - Slovenia



Source: SORS, FC calculations.

Table 2.1: Year, when debt as a share in GDP would reach the pre-crisis level with regard to assumptions on GDP growth rate and general government balance

		GDP growth - g (%)			
		3	4	5	6
balance (% GDP)	1	2025	2025	2025	2024
	0	2027	2026	2025	2025
	-1	2033	2029	2027	2026
	-2	-	2039	2031	2028
	-3	-	-	2060	2035

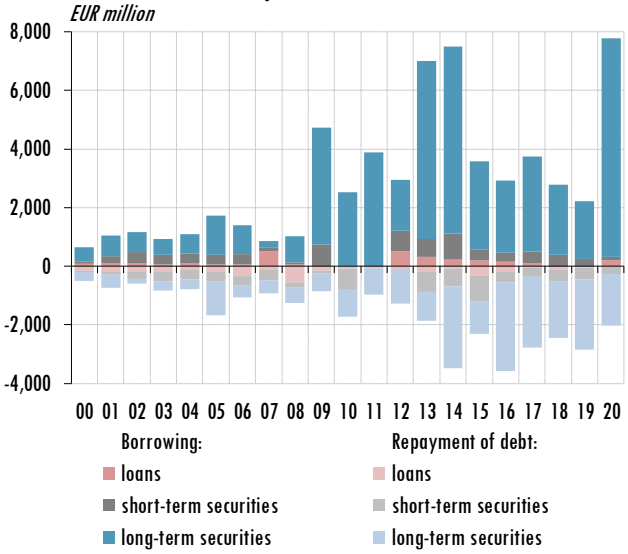
Note: General government balance and debt up to 2021 according to DBP21 projection, GDP up to 2022 according to IMAD Winter projection 2020. Behind the stated periods, the assumptions from matrix are used.
Sources: IMAD, MoF, FC calculations.

It is very likely that the general government debt will only see a gradual reduction to the pre-crisis level. If the equation [1] is further simplified for easier demonstration (a two-dimensional table), the debt dynamics will primarily depend on the difference between the growth of economic activity and the general government balance. Simulations indicate that if the deficit persisted at the Maastricht reference value of 3% of GDP and the GDP growth would be close to the current estimates of the long-term economic potential growth (around 4% nominally), the debt level from the pre-crisis period, i.e. in

the end of 2019 (around 65% of GDP), could not be achieved. If these assumptions materialised, the debt would stagnate at just below 80% of GDP.

Securities dominate among the debt instruments in the state budget debt structure. At the end of 2020, the share of securities in the total debt constituted around 97% of the total debt, while the remainder related to loans. Long-term securities, i.e. bonds, whose outstanding value in the end of 2020 totalled EUR 32.3 billion, form the predominant part of the debt securities structure. To regulate liquidity, the MoF Treasury issues by way of regular auctions primarily short-term securities, i.e. treasury bills, whose value at the end of 2020 amounted to EUR 1.1 billion. Due to favourable financing conditions, the major part (around 70%) of these consisted of treasury bills with a maturity of 18 months.

Figure 2.2: Borrowing and repayment of state budget debt by instrument



Source: Ministry of Finance, FC calculations.

The state budget debt of Slovenia is also characterised by the dominance of the fixed interest rate, which reduces uncertainty over the financing cost, and the dominance of debt denominated in the local currency, which minimises the debt's currency risk. While most (around three quarters) of the state budget debt was indexed in times of high inflation in 1994 and 1995, this share has been negligible since 2007. At the end of 2020, the share of the floating-rate debt constituted only 0.7% of the total state budget debt (the share of the floating-rate debt in the total state budget debt was the highest in 1996 and 1997, standing at around 30%). At the end of 2020, the share of debt denominated in foreign currencies (predominantly in USD) amounted to less than 4% of the total state budget debt, being the highest in 2014 when the dollar-denominated debt exceeded one quarter of the total debt.

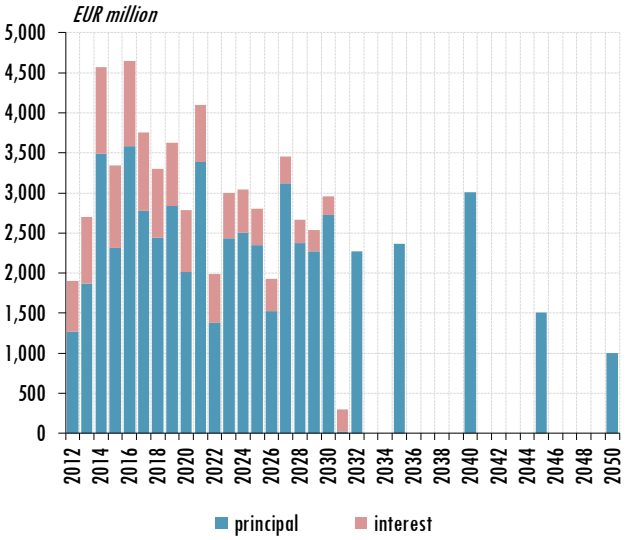
Due to the improved macroeconomic situation and the resulting reduced risk attributed to Slovenia by the investors, effective debt management by the MoF Treasury, and recently due to the ECB's exceptionally accommodative monetary policy, the implicit interest rate decreased[4] significantly and has reached historically low levels. The implicit interest rate projections depend on all the above factors and the maturity profile of individual debt instruments. This is concentrated up to 2030 when approximately two thirds of all currently issued bonds fall due. In the case of a gradual tightening of the mon-

[4] A consequence of the ECB's exceptionally expansionary monetary policy is reflected in the high share of Slovenian government bonds purchased by the Eurosystem under the Pandemic Emergency Purchase Programme during the pandemic, whose value in terms of debt was among the largest in the euro area (at the end of January 2021, it totalled almost 12% of the general government debt from the end of 2019; for data, see https://www.ecb.europa.eu/mopo/implement/pepp/html/index.en.html, to compare the purchased share in terms of debt per country, see Fiscal Council, 2021).

Figure 2.3: Harmonised long-term interest rate and implicit public debt interest rate

Source: ECB, SORS, FC calculations.

Figure 2.4: State budget debt repayments until 2050*



** Note: As of 31 January 2021. After 2031 no data on interest payments.*
Source: MoF.

etary policy, there is a possibility that the implicit interest rate[5] and thus the cost of financing the public debt at its maturity together with a potential need for refinancing the existing debt increase.[6]

The rise in general government debt should not necessarily align with the general government balance deficit. As shown in equation [1], in addition to the primary budget balance and interest expenditure, the debt change is also influenced by stock-flow adjustments. In this context, the stock refers to the debt and the flow refers to the general government balance. The adjustments indicate a change of stock, not impacted by changes in flows. Such adjustments are needed because of transactions that are not directly linked to budget balance results, such as financing, not related to deficit financing and is thus reflected, for example, in an increased government cash flow and deposits, revenue from privatisation or foreign exchange changes in case debt is not denominated in the local currency. In the last decade, these factors have, on average, contributed an additional fifth of the total debt and their share is growing. This is mainly explained by the growth of the cash flow and deposit category, mirroring a pre-financing of future liabilities and is, inter alia, reflected in the relatively high Treasury single account balance, which currently indicates a favourable liquidity of the state budget.

In addition to the usual debtor relationships, which develop due to the yearly deficit, the state budget debt also includes the debt arising from the aid provided to European countries, which is included in the general government debt under the ESA 2010 methodology.[7] This refers to the bilateral aid to Greece provided together with the remaining parties of the loan agreement, totalling EUR 263.7 million, the participation within the EFSF assistance programme, totalling EUR 881.5 million, and the payment of capital to the ESM, totalling EUR 376.9 million. The above amounts were paid in proportion to the share of the Republic of Slovenia in the ECB capital and at the end of 2019 the

[5] The change of implicit interest rate depends on the difference between the existing implicit interest rate and the required yield at the time of refinancing the existing debt and on the difference between the volume of outstanding and the refinanced debt. The required yield of government securities also increases with the increased risk premium, generally requested by investors if macroeconomic imbalances or merely changed preferences are detected. For other factors involved in determining the required yield in Slovenia, see e.g. Jesenko et al., 2011.

[6] In July 2018, the Ministry of Finance started implementing an interest rate hedging programme aimed at partially limiting the effect of a potential increase in interest rate on the interest expenditure within the state budget. By the end of 2019, the Ministry of Finance concluded around EUR 4.6 billion worth of interest rate swap agreements (around 16% of the then state budget debt). For more information, see Section 4.3 in Ministry of Finance (2020).

[7] Ministry of Finance (2020).

Box 2.1: Slovenia's general government debt in relation to the Recovery and Resilience Facility

In the following years, the general government debt will depend on expenditure and the statistical recording of funds of the new EU instruments. In the next six years, Slovenia has around EUR 13.3 billion funds from various EU facilities at its disposal. Around EUR 5.8 billion will be provided from the Next Generation EU instrument and disbursed from the new Recovery and Resilience Facility (RRF)[1] subject to a positive opinion given by the European Commission on the National Recovery and Resilience Plans (NRRP), and from the European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE). Over a quarter of these funds will be provided as grants and the remainder as loans.[2]

Under the ESA 2010 methodology, Eurostat has drafted instructions for the statistical processing of funds spent under the RRF, focusing on three dilemmas.[3] The first dilemma concerns the recording of grants received by the Member States under the Next Generation EU instrument and the question of whether such a transaction will be statistically processed in the same manner, i.e. applying the neutrality rule, in line with the regular payments to the Member States under other EU programmes in relation to the impact of such grants on the general government balance. The decision adopted in this regard supports the equal processing of such cash flows, even if time lags between the RRF revenue on the one hand and the expenditure, e.g. for Member States' investments, on the other hand occur. The second dilemma is related to the recording of grants from the EU borrowing. To finance new instruments the European Commission will borrow on international financial markets.[4] The Member States will repay the related loans in the 2028–2058 period. In accordance with Eurostat's decision, the borrowing performed by the EU to finance grants for individual Member States will only be included in the EU's debt and not in the debt of individual Member States as grant recipients. The third Eurostat clarification refers to the loans provided to the Member States under the RRF. These will be approved under the same conditions that will apply at the moment of the EU's borrowing, which means that the EU will not expose itself to the interest-rate risk. Such transactions will thus be reflected below the line and as Member State's expenditure and will be recorded as general government debt. In the case of a time lag between the loan and expenditure, e.g. if the expenditure arises before the loan is received, the Member State in question will have to take out a temporary loan, which, according to Eurostat, should be of a temporary nature and limited in scope. Further harmonisation procedures between the Member States, Eurostat and the European Commission regarding the representation of retroactive expenditure for 2020 (under special conditions, the Member States may use a part of received RRF funds to cover the cost of measures that were implemented after 1 February 2020)[5] and the manner of reporting on RRF-related funds in the context of regular Excessive Deficit Procedure reports are ongoing.

Analyses show that the utilisation of new EU instruments in the next five years is expected to reduce the debt-to-GDP ratio. Simulations by the European Commission (2020a) reveal that the debt ratio is projected to decline particularly in relatively less developed countries (including Slovenia), regardless of the initial debt level. In relatively more developed countries, the debt ratio is expected to slightly increase in the medium term, while no significant deviations from the baseline scenario are expected in the long-term. In the analysis from the European Commission (2021a), the effect of RRF funds is additionally divided into direct and indirect effects. The direct effect is related to the above described statistical recording of individual transactions and their debt impact. The indirect debt effect of the RRF funds depends largely on their impact on GDP in terms of both increased demand in the short term and strengthening of economic potential in the long term. Additionally, the RRF funds may

also affect the debt if the use of RRF funds triggers government spending, which is higher than projected by the NRRP, and if the interest expenditure declines due to the more favourable costs of RRF loans compared to the costs of loans available to an individual Member State on the financial markets.

[1] The text of the Regulation establishing a Recovery and Resilience Facility is available at: https://data.consilium.europa.eu/doc/document/PE-75-2020-INIT/en/pdf.

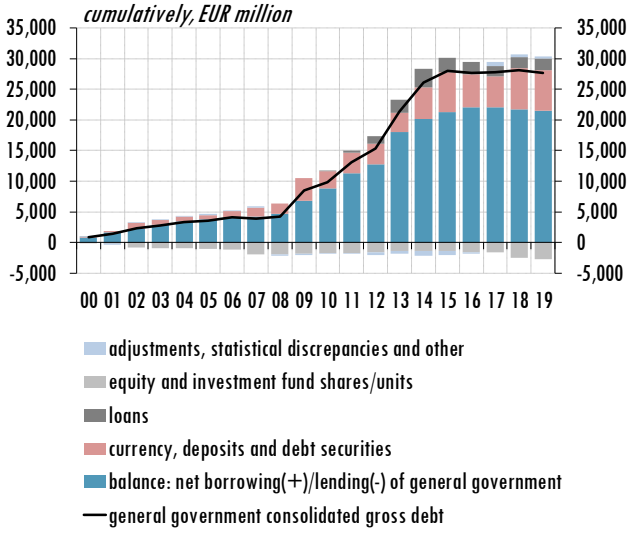
[2] For more information on available funding, see, for example, Box 2.3 in Fiscal Council (2020).

[3] Eurostat (2020). A comprehensive range of methodological guidelines on data preparation and processing during the COVID-19 epidemic is available at: https://ec.europa.eu/eurostat/data/metadata/covid-19-support-for-statisticians.

[4] See items A.3–A.10 from the conclusions adopted by the European Council in July 2021, available at: https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf.

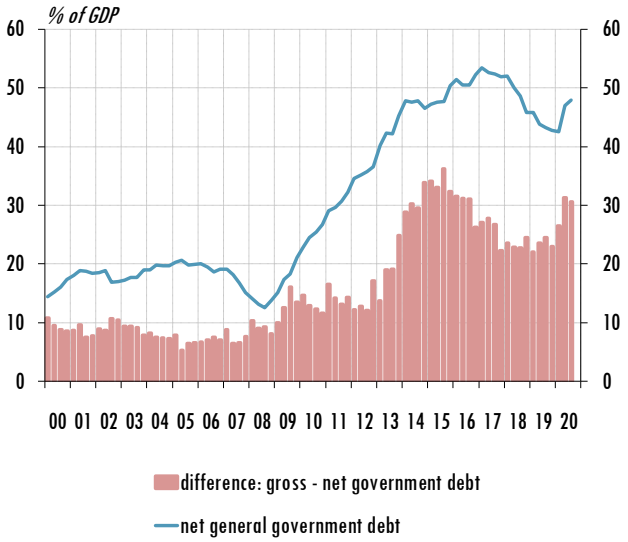
[5] Article 17 of the Regulation establishing a Recovery and Resilience Facility.

Figure 2.5: Changes in general government balance and gross debt since 2000



Source: SORS, FC calculations.

Figure 2.6: Gross/net general government debt difference



Source: Eurostat, ECB, FC calculations.

above assistance amounted to around EUR 1.5 billion. This corresponds to 3.2% of Slovenia's GDP, i.e. 4.8% of the entire general government debt.

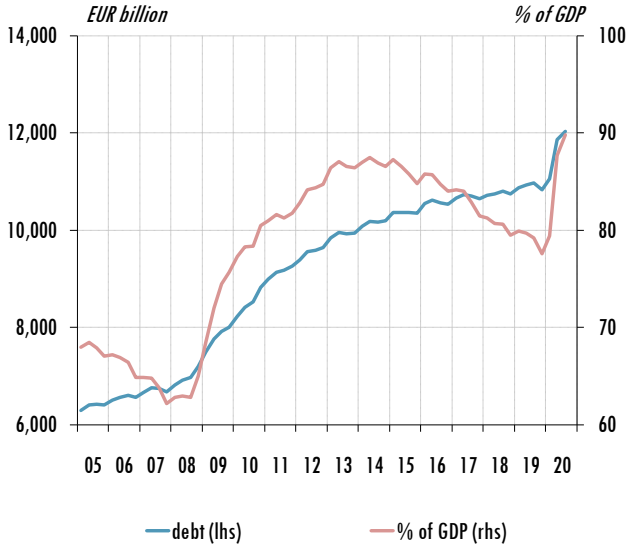
Because debt and liquidity management may result in an even higher general government debt than mere deficit financing might indicate, the gross public debt may not always be the most appropriate indicator of the general government debt. The gross debt does not demonstrate the actual ability to repay debt without further borrowing. In uncertain conditions or in conditions deemed favourable for borrowing, the treasuries usually keep higher amounts on their accounts than required for regular debt liquidity management. Therefore, the indicator of net public debt is frequently used in analyses. In the context of the net public debt indicator, financial assets that correspond to the use of debt instruments is subtracted from the liabilities (see Eurostat, 2014). Such assets include cash and deposits, debt securities and loans (items A.2, A.3 and A.4 from the financial accounts statistics), i.e. financial assets with a relatively high liquidity. On average, the indicator of Slovenia's net public debt shows that of its share in GDP is around 16 pps lower compared to the gross public debt of the last 20 years, with the difference between them increasing and the dynamics of net debt growth slowing down compared to the gross public debt growth during and after the global financial crisis. The largest recorded difference between the shares of gross and net public debt was around 34 pps of GDP in 2015.

3. Comparison of the general government debt in Slovenia and in other EU Member States

Similarly to the previous crisis, the general government debt massively increased in this crisis as well. Before the current crisis, the debt-to-GDP ratio declined only by around two fifths of the increase during the global financial crisis a decade ago.[8] In over a half of the period for which data or projections are available (2000–2022), the number of EU Member States with a general government debt-to-GDP ratio lower than 60% was higher than the number of Member States whose ratio was higher than 60%. However, the number of such Member States increased during this period, while the general government debt-to-GDP ratio is projected to reach the highest levels so far in 2022. If the number of countries with a debt ratio below 60% in 2000 was similar in the EU and the euro area Member States, over a third of EU Member States and only a quarter of the euro area Member States are expected to be classified in this category in 2022.

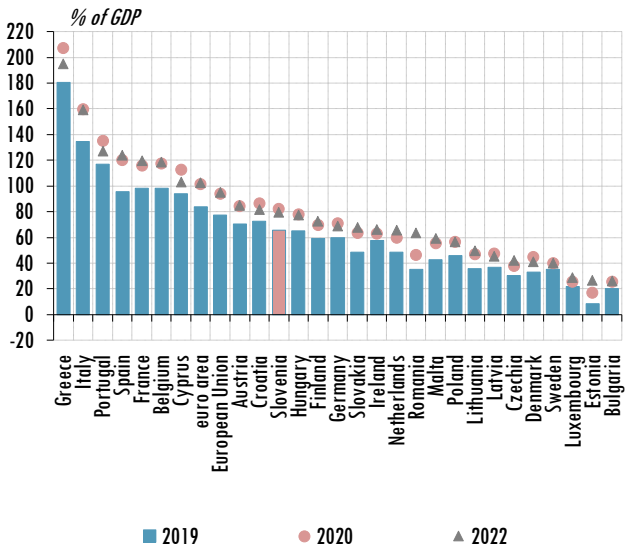
Slovenia's gross debt-to-GDP ratio is smaller than the EU average ratio, while the increase in the debt-to-GDP ratio shifted Slovenia's ranking to the upper third of EU Member States when the period before the current crisis is taken into consideration. According to the autumn 2020 forecasts of the European Commission (European Commission, 2020b), the increase in Slovenia's debt-to-GDP ratio is expected to fall under the average increase in debt-to-GDP ratio in the EU by the end of 2022. Eurostat data for the general government debt available up to the third quarter of 2020 shows that the increase in the debt ratio during the crisis (since the end of 2019) was generally higher in countries with a high pre-crisis debt ratio. The general government debt structure suggests that Slovenia's debt structure is similar to most EU Member State's structure, dominated by bonds. Bonds constitute less than half of all debt instruments only in three EU Member States (Sweden, Estonia and Greece).

Figure 3.1: General government debt (ESA) - EU27



Source: Eurostat, FC calculations.

Figure 3.2: Consolidated general government debt

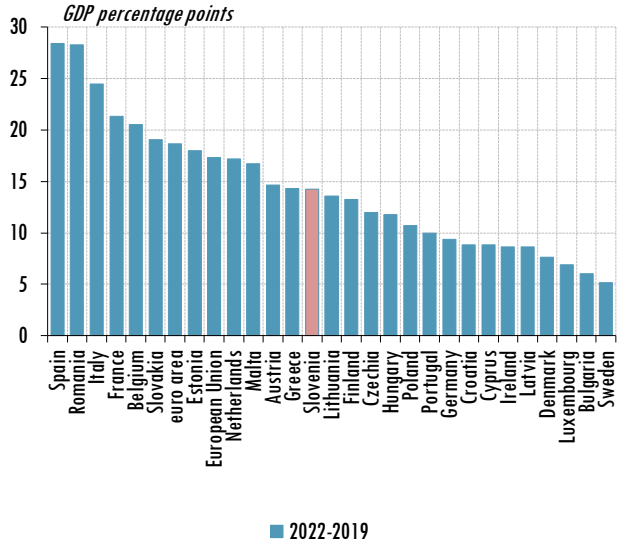


Source: Eurostat, EC forecast (Autumn 2020), FC calculations.

Slovenia's debt servicing costs exceed average EU costs, while the difference between the implicit interest rate and the growth of economic activity is slightly more favourable. Due to a relatively high increase in the general government debt, Slovenia is among the countries with the lowest projected reduction of interest expenditure, although financing conditions are exceptionally favourable. According to the European Commission's forecasts, in six EU Member States the share of general government

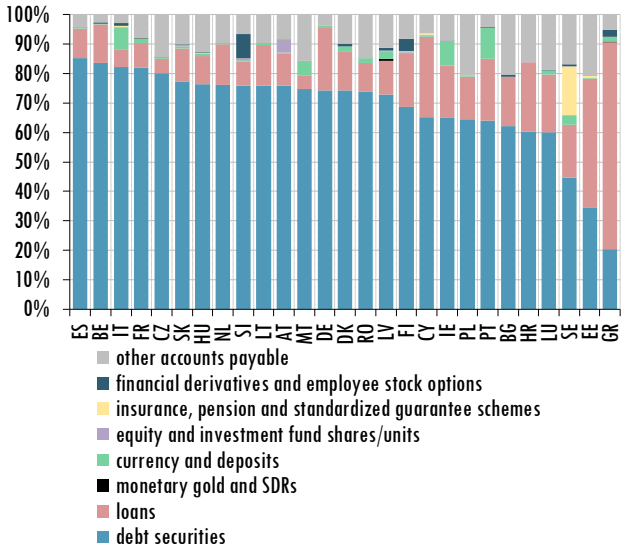
[8] This finding is in accordance with the European Commission (2021b).

Figure 3.3: Change in consolidated general government debt



Source: Eurostat, EC forecast (Autumn 2020), FC calculations.

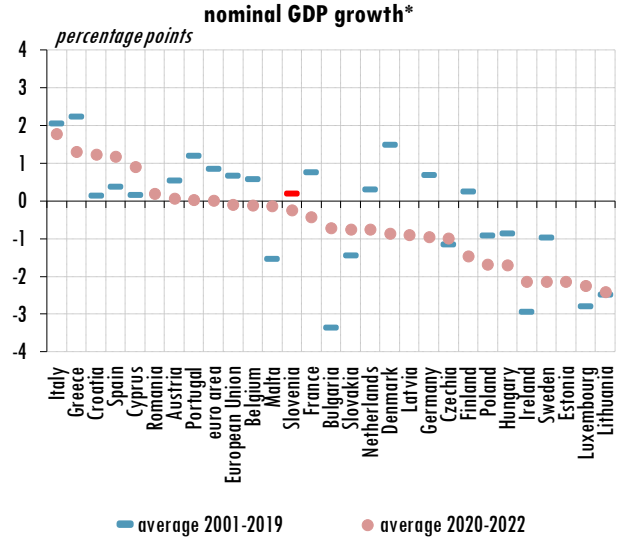
Figure 3.4: Structure of general government liabilites by EU countries - 2020Q3



Source:ECB, FC calculations.

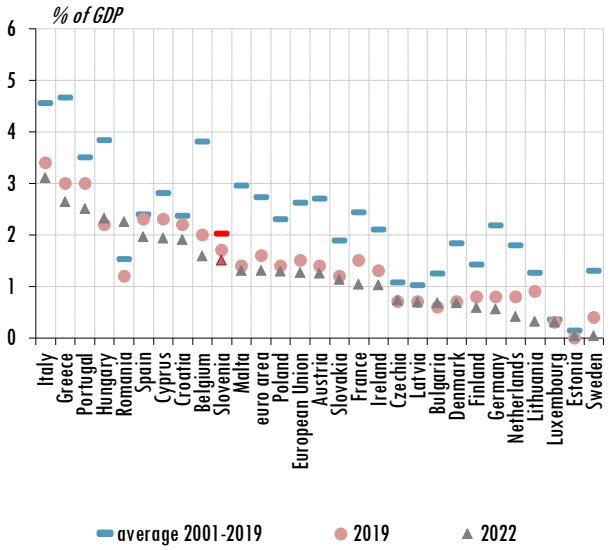
expenditure for 2022 is expected to decline less than in Slovenia given the long-term average and in 12 EU Member States compared to 2019.[9] Therefore, a large share of countries with the highest interest expenditure and an unfavourable difference between the implicit interest rate and the economic growth includes countries with a high debt. In addition, the group of countries with an expected favourable difference between the implicit interest rate and the economic growth also includes countries with a debt close to the average EU debt, which enjoy high credit ratings on financial markets (e.g. Finland, Germany) or are characterised by a projected substantial economic growth (e.g. Ireland, Hungary). Considering the long-term average in Slovenia, the difference between the implicit interest rate and the growth of economic activity is expected to become more favourable during and after the crisis. Nevertheless, this difference is projected to be smaller than the EU average, i.e. lower than in less than a half of EU Member States. In addition, the difference between the implicit interest rate and the eco-

Figure 3.5: Difference between implicit interest rate and nominal GDP growth*



*Note: * 2020 nominal GDP growth outturn.*
Source: Eurostat, EC forecat (Autumn 2020), FC calculations.

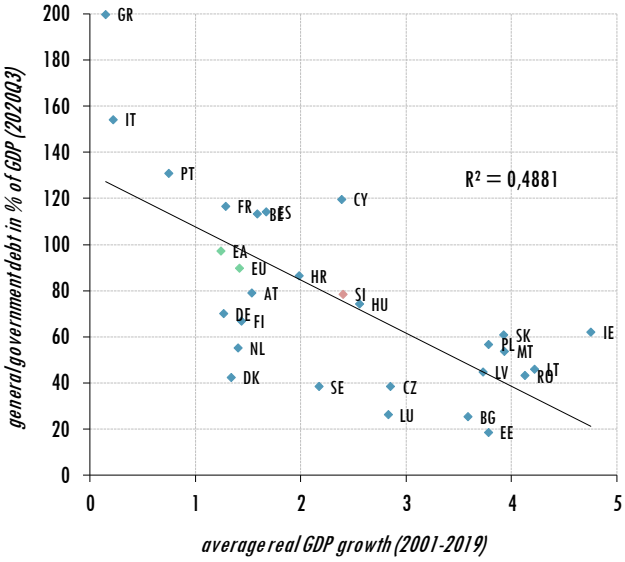
Figure 3.6: General government interest expenditure



Source: Eurostat, EC forecat (Autumn 2020), FC calculations.

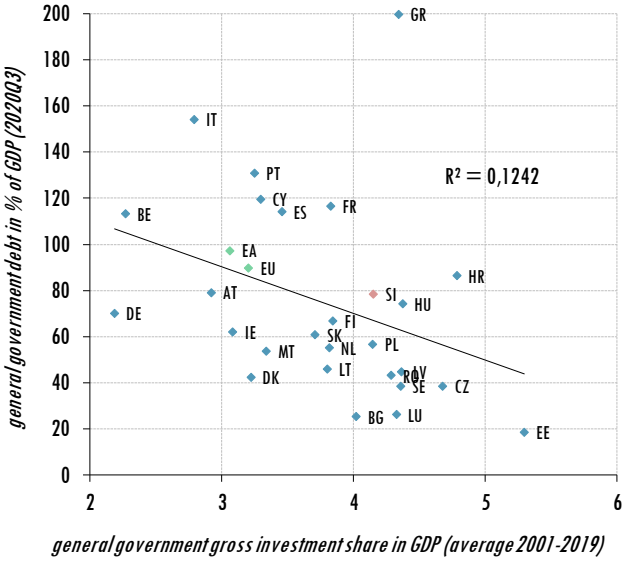
[9] According to this comparison, the share of interest expenditure in the Czechia, Estonia, Romania and Hungary is expected to increase.

Figure 3.7: General government debt share in GDP and real GDP growth



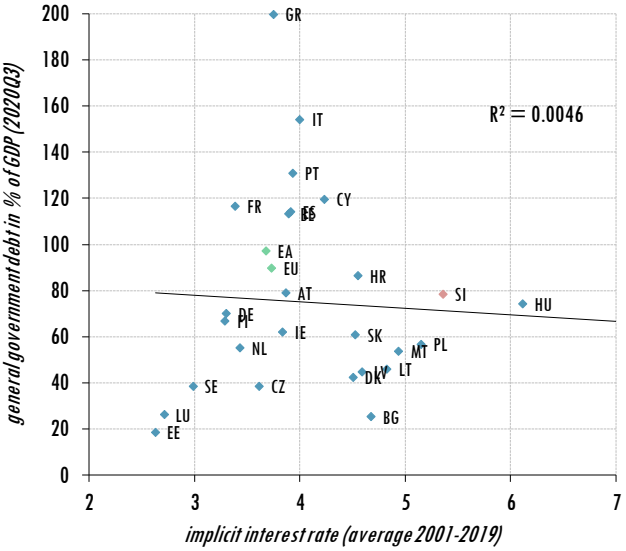
Source: Eurostat, FC calculations.

Figure 3.8: General government debt and investment shares in GDP



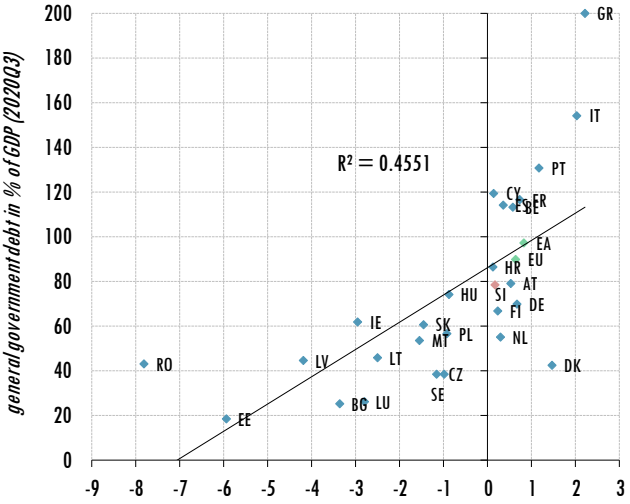
Source: Eurostat, FC calculations.

Figure 3.9: General government debt share in GDP and implicit interest rate



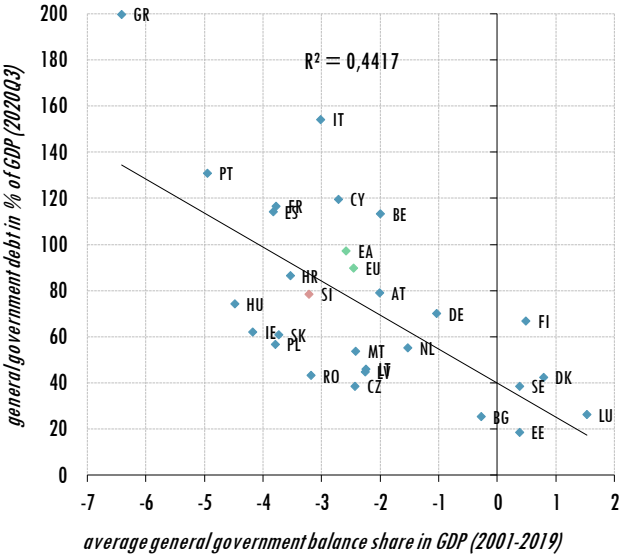
Source: Eurostat, FC calculations.

Figure 3.10: General government debt share in GDP and the difference between implicit interest rate and nominal GDP



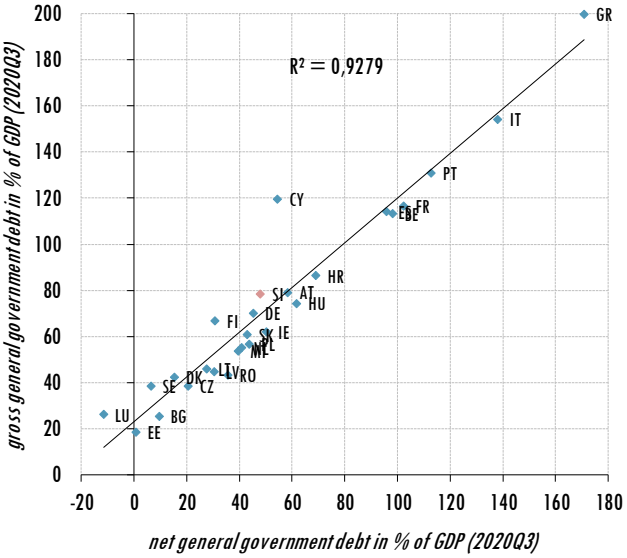
avg. difference between implicit interest rate and nominal BDP growth (01-19)
Source: Eurostat, FC calculations.

Figure 3.11: General government debt and balance



Source: Eurostat, FC calculations.

Figure 3.12: Gross and net general government debt shares in GDP



Source: Eurostat, FC calculations.

nomic growth is forecast to become less favourable in a third of EU Member States in the above period.

The comparison of the general government debt with some macroeconomic indicators of the EU Member States suggests the existence of expected relationships. The public debt level negatively correlates to the growth of GDP and general government investment. While the comparison of the public debt level and the implicit interest rate does not reflect a significant correlation, countries with a stronger snowball effect, that is a less favourable difference between the implicit interest rate and economic growth, are generally burdened with a higher debt. On average, a relatively strong correlation exists between high debt and high general government expenditure, while almost the unity correlation is observed in the relationship between the net and gross public debt. In all given correlations, Slovenia is close to the regression line and does not deviate significantly from the average in any of the above correlations. Among the EU Member States, only Austria is also similarly close to the average correlation between debt and the remaining macroeconomic indicators reviewed.

4. Medium-term debt sustainability

A debt sustainability analysis indicates the ability of government to finance liabilities resulting from the previous and future fiscal policy in the context of certain macroeconomic and fiscal shocks. In analysing the debt sustainability based on the procedure developed by the International Monetary Fund,[10] a baseline scenario based on macroeconomic and fiscal projections is first developed, followed by several alternative scenarios, showing the responsiveness of debt to various shocks. The responsiveness and the changes in the dynamics and levels of the general government debt indicate the vulnerability of the economy in the event of shocks, not included in the baseline scenario; however, the actual shocks may deviate from the ones used in the analysis both in terms of their direction and size.

In the medium-term debt sustainability analysis, the baseline scenario of the 2021 Draft Budgetary Plan and the IMAD's winter forecast for 2020, adjusted for 2020 outturn, were taken into consideration. The analysis covers the 2021–2026 period. The projections of fiscal aggregates from the end of the 2021 Draft Budgetary Plan projection period (for 2021) until the end of the analysed period were populated by the standard elasticities for revenue, while expenditure was calculated by taking into account the difference between revenue and expenditure growth in the 2010–2019 period.[11] The baseline scenario also considered the assumption that the high balance of cash flow and deposits (Treasury single account balance) in 2021 and 2022 is reduced by EUR 1 billion a year. The medium-term debt sustainability analysis contains several alternative scenarios, in which standardised shocks are primarily related to the historical fluctuations of variables that are subject to shocks in scenarios. Shocks in the alternative scenario of a lower real GDP growth are set at one standard deviation of real GDP growth in the 2011–2020 period, where the elasticity of the response of inflation and interest rate to the change in GDP and the worsening of PB by 0.25 and −0.25 respectively is taken into

[10] The currently available framework is available at: https://www.imf.org/external/pubs/ft/dsa/mac.htm. The IMF (2021a) suggests the development of an updated framework for performing a debt sustainability analysis, which will also include short-term indicators and the elements of a long-term (ten-year) debt sustainability analysis. It is precisely the IMF framework that is used by most independent fiscal institutions in the EU to analyse medium-term debt sustainability. For details on the current use of methodologies in the analyses of debt sustainability performed by independent fiscal institutions, see EU IFI (2021a).

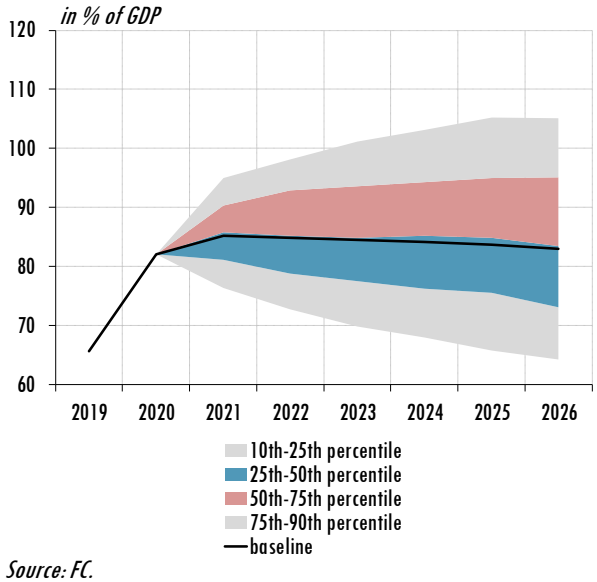
[11] In this case, the general government expenditure excluding the interest expenditure for the 2021–2026 period grows by 4.3% a year on average. With such an assumption, their growth lags the revenue growth for this period by around 1.5 pps a year on average. In the 2010–2019 decade, the same applied to the difference between the growth of revenue and expenditure of the general government sector excluding the expenditure on interest and capital transfers (especially the aid provided to the banking sector). With such assumptions, the general government deficit is reduced to approximately 3% of GDP in 2026. Applying a fixed ratio between the revenue and expenditure growth ensures that the general government debt projections remain virtually unchanged even if IMAD's forecasts change.

account. According to this scenario, real GDP would only grow by 1% a year (given the assumptions used in the baseline scenario, the growth of real GDP is expected to be at around 4%) in 2022 and 2023. The alternative scenario of a worsened PB is also based on a long-term deviation and the response of interest rate in the same extent as in the case of a real GDP shock. Following such a scenario, the PB deficit in the 2022–2023 period would be approximately twice as high as in the baseline. Interest rate shock is implemented by increasing the interest rate from the baseline by a standardised rate of 200 basis points in the 2022–2026 period.

The analysis with the given assumptions indicates sustainable dynamics of the general government but with some risks in case of certain medium-term shocks. Risks are asymmetric and somewhat skewed upwards (see Figure 4.1). The assessment on the risks to debt sustainability in the medium term is primarily based on potential slower economic growth, while a deteriorated PB would also have an impact on a higher risk assessment. In the above cases, the debt could reach a level close or equal to 90% of GDP, whereas in the case of a combined macroeconomic–fiscal shock, it could rise to just under 100% of GDP. The impact of an interest rate shock to the debt level would not be significant due to (i) high pre-financing and the resulting relatively low need for financing with a new debt, (ii) the assumption of a continuous relatively low interest rate of renewed borrowing and (iii) the debt structure containing only a negligible share of liabilities that depend on the variable interest rate. The results of additional simulation related to the potential realisation of implicit liabilities reveal that the general government debt would become unsustainable and that high risks to its medium-term sustainability would arise if, for example, in the individual year of the observed period a shock of around 3% of GDP (EUR 1.4 billion)[12] would arise or if such shocks would amount close to or just under 1% of GDP (EUR 0.5 billion) each year.

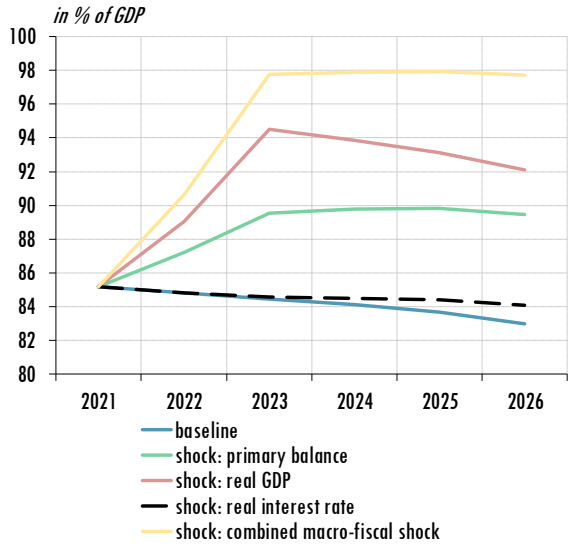
It is important to reiterate that relatively large endogenous and exogenous shocks have occurred in the last decade. It is also true that a favourable difference (even if only temporary) between interest rates and economic activity growth may obscure the imbalances, that the change in this difference is

Figure 4.1: Probability distribution of general government debt projections



Source: FC.

Figure 4.2: General govenment debt response to shocks



Source: FC.

[12] According to the situation in December 2020 (last available data), this is over a quarter of all state guarantees issued or approximately two thirds of state guarantees issued to public non-financial corporations (see Section 6). Given previous experience, potential liabilities or the fiscal costs of private sector issues at a global scale were realised at similar debt-to-GDP ratios (excluding financial institutions, see Table 6.2).

usually rapid and is normally followed by a major increase in general government debt. At the same time, the fiscal policy in favourable economic times is generally unable to ensure adequate debt reduction and fails to create sufficient fiscal space, which would support an adequate, extensive and active counter-cyclical policy response in a recession. A relatively lower responsiveness of simulation results to standardised shocks compared to the general government debt increase during the global financial and banking crisis in the beginning and in the middle of the previous decade might be explained precisely with significantly larger combined shocks in economy during the crises that exceeded the standardised shocks in the analysis of the medium-term debt sustainability.

The findings on the medium-term debt sustainability are largely similar to the findings from the analysis performed by the European Commission (2021b).[13] Based on this analysis and the various assumptions used, Slovenia's general government debt is close to 80% of GDP in the entire analysis period. The response of Slovenia's general government debt to standardised shocks related to interest rates and economic growth is even weaker than the average response of EU Member States, although in the European Commission's analysis the related risks together with an increased debt level during a crisis have been identified as a factor ranking Slovenia among the countries with a high risk of medium-term debt sustainability.[14] Stochastic simulations prepared by the European Commission (2020c) indicate with a probability of over 50% that Slovenia's debt-to-GDP ratio in 2025 will be higher than in 2020, which is likely to apply to more than a half of EU Member States and the EU average. Considering the S1[15] indicator, Slovenia has been ranked among the countries with a medium risk of medium-term debt sustainability. Such a result is predominantly (almost double the EU average) affected by the forecast increased cost of the ageing population and, to a smaller extent (half the EU average), by fiscal consolidation, required since the debt level exceeds 60% of GDP.

5. Long-term simulations

The long-term simulations indicate a high probability of unsustainable debt trends if no action is taken with regard to social security systems. In particular, this applies if the continued increase in expenditure on the ageing population is accompanied by a gradual tightening of the monetary policy, notwithstanding that other future fiscal costs, such as those related to climate change, were excluded from the analysis. In spite of the relatively favourable results of the medium-term debt sustainability until 2026, the long-term simulations using a narrow range of future implicit fiscal liabilities show that, with no policy change, in most – or at least in more realistic – scenarios for the next 30 years, the general government debt would considerably exceed 150% of GDP.

In addition to our default assumption on expenditure, the assumptions on the difference between the interest rate and economic growth together with trends in general government revenue play a crucial role in long-term simulations. In all scenarios, the default values of revenue, expenditure and debt-to-GDP ratio for 2020 and 2021 as the starting years of the simulations were taken from the 2021 Draft Budgetary Plan. The assumption on the implicit interest rate was adjusted in accordance

[13] The EC's analysis defines the medium term as a period of ten years, i.e. the 2021–2031 period. A longer analysis period, in which, for example, an increased general government cost of the ageing population might additionally accumulate, could explain why a high risk was attributed to the medium-term debt sustainability.

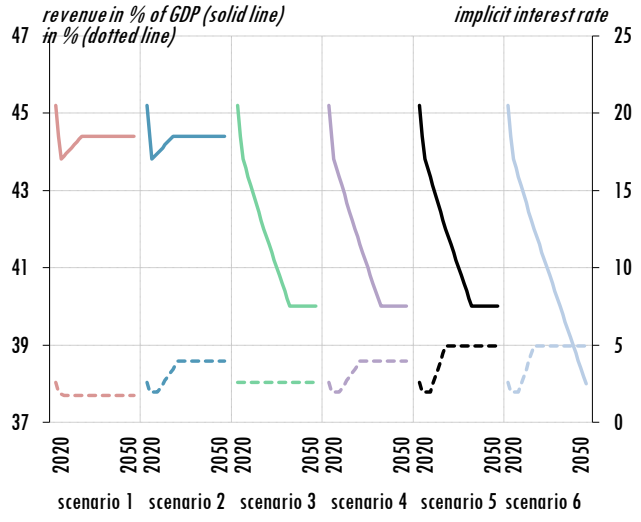
[14] According to the EC, the additional indicators that should imply increased risks include the relatively high share of the general government debt held by non-residents and a high share of non-performing loans.

[15] A medium-term debt sustainability indicator used by the European Commission. For more information, see European Commission (2021c), Section 3.3.

with a potential aggregate change of two variables: risk-free interest rate and risk premium.[16] The assumption on the economic growth for 2021 and 2022 is based on IMAD's forecast. For the years remaining until the end of the decade, a real GDP growth of 3% was assumed, followed by a growth in accordance with the projections of the 2019 Stability Programme. It was assumed that the GDP deflator would grow at a rate of 2% a year throughout the entire simulation period. The entire primary expenditure dynamics are based on the long-term projections of the trends in general government expenditure related to an ageing population, taken from the last Ageing Report (2018).[17] The assumption on revenue is related exclusively to the potential consequences of ageing on the size of the economically active population. The simulations presented below are not forecasts, because they take into consideration the no-policy-change assumption. Therefore, long-term simulations primarily provide an overview of potential trends of the general government debt in the long term with the realisation of exogenous assumptions used and thus reflect the risks that the general government debt might be subject to.[18] Basic difference between the long- and medium-term simulations from the previous section relates to the time horizon, over which specific trends become more obvious due to the prolonged cumulation and particularly due to the projected accelerated growth of the cost of the ageing population behind the simulation period of the medium-term analysis.

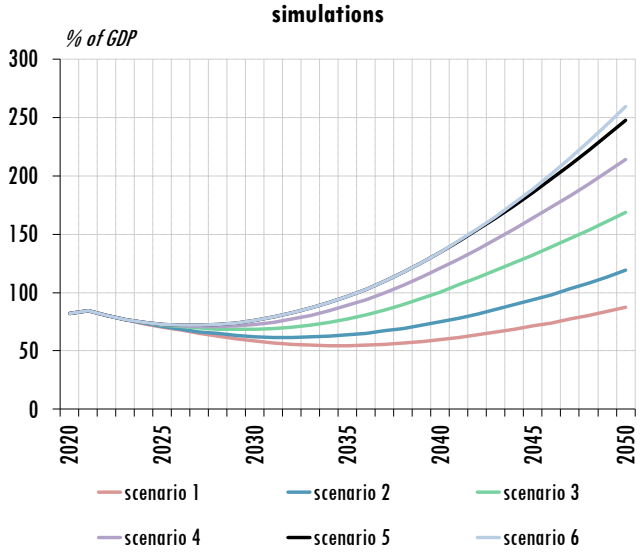
The assumptions on the shares of revenue, primary expenditure and implicit interest rate are determined to enable as wide a range of reasonable scenarios as possible to be prepared. Therefore, Sce-

Figure 5.1: Long-term scenario asumptions



Source: 2020 and 2021 - MoF DBP21, rest of the period FC assumptions.

Figure 5.2: Long-term general government debt simulations



Sources: DBP21 and FC assumptions, FC calculations.

[16] The analysis thus does not explicitly consider the possibility of a change to risk premium (which is usually measured as a surcharge on the risk-free interest rate, e.g. on the monetary policy rate or on the required yield of German government bonds) due to the changed debt levels. Due to usually non-linear effects of the debt level on the risk premium (see, for example, European Commission, 2020a: p. 53) and the reverse effects of the premium on the debt, it can be assumed that the results of debt simulations – especially for higher levels of debt – are probably underestimated. In general, the analysis is very simplified and, inter alia, it does not take into consideration the situation and potential changes to the debt maturity structure. Due to a long analysis period, which considerably exceeds the average maturity of the Slovenian state debt (which according to the Ministry of Finance's data was 9.6 years in the end of January 2021), the effects of this element are less important in this context compared to, for example, a medium-term debt sustainability analysis.

[17] The Fiscal Council plans to reinforce the analytical capacity for the analysis of long-term general government debt sustainability, particularly by including more parameters of social protection systems thanks to technical assistance financed by the European Commission. See https://ec.europa.eu/slovenia/news/tsi-projects_sl.

[18] For similar simulations, see EU IFI, 2021b.

nario 1 uses the combination of a virtually unchanged implicit interest rate[19] and a relatively stable share of revenue in GDP. With an assumption of gradually rising interest rates, the same level of revenue is also used in Scenario 2. Instead of a constant share of revenue in GDP, a gradual decline in revenue, which is in accordance with the projected decline of the size of the active working population from the assumptions taken from the previous (2018) and the upcoming Ageing Report (2021), is assumed in the remaining scenarios, while the size of the decline is largely somewhat bigger compared to the long-term projections from the 2019 Stability Programme. Particularly in Scenarios 5 and 6, the assumption of a relatively strong increase in interest rates, which reach their highest level in 2030, while remaining unchanged in the remaining period of both scenarios is used. The assumption of a strong increase in interest rates in both scenarios can be explained by the potentially swifter normalisation of the monetary policy or by an increase in risk premium. In all scenarios featuring an increase in interest rates, it only starts in 2025. The highest level of the assumed implicit interest rate in Scenarios 5 and 6 is just under 5%. That is around 0.3 pps below the highest level of implicit interest rates reached in the 2011–2020 decade. Given the current situation and forecasts, there is an increased probability of the normalisation of interest rates and of a decline in the general government revenue, which is why the scenarios using such assumptions are assessed as more likely to materialise. Therefore, Scenario 4 is assessed to be the most probable scenario, with Scenarios 3, 5 and 6 being somewhat less likely. In all long-term scenarios presented, a favourable difference between the interest rate and economic growth is assumed, which is negative at least until 2030 (Scenarios 5 and 6) and throughout the entire period until 2050 in Scenarios 1 and 2.[20]

The results of long-term general government debt simulations indicate relatively high debt sustainability risks due to changed macroeconomic and demographic circumstances. Given the assumptions used, a relatively large range of results in the simulations of debt-to-GDP ratio, between 90% and 250% of GDP, or over 150% of GDP in the more realistic scenarios in 2050, is understandable. With the realisation of the expected cost of the ageing population in the form of increased general government expenditure, simulations also signify the vital importance of revenue developments, which, for example, can be seen in the difference between the results of Scenarios 2 and 4. At the same time, with revenue levels remaining the same, the differences between Scenario 1 and 2 signal the importance of interest rate trends for the dynamics of the general government debt or, to an even greater extent, this can be seen in the differences between Scenarios 3 and 5, both assuming a decline in revenue. Accordingly, the results of scenario simulations, with the exception of the less likely Scenarios 1 and 2, point to the risks to the long-term sustainability of the general government debt. Specifically, these risks become even more obvious if the unfavourable fiscal consequences of demographic trends on the expenditure and revenue side are accompanied by an exogenous or – in the worst-case scenario – an additional endogenous tightening of financing conditions.

[19] We bring attention to the assumption on exceptionally high implicit interest rate underlying the baseline scenario of long-term projections presented in the last publicly available long-term scenario (Table 13) from the 2019 Stability Programme (April 2019). In this document, the increase in interest expenditure was, for example, almost four times higher than the increase in ageing-related expenditure. Such an assumption probably reflected the model-conditioned endogenous response of the required yield of securities to the increase in general government debt. Due to an unrealistically high increase in implicit interest rate (according to our calculations this interest rate would have exceeded 20% in 2070), such a scenario was not included in our long-term debt sustainability analysis.

[20] The same assumption also underlies the forecast for the 2020–2022 period, but not the actual difference between the interest rate and economic growth from the long-term 2001–2019 period. Both are shown in Figure 3.5.

6. Debt risks and contingent liabilities

Risk assessment is a fundamental component of debt analysis. Fiscal risks can be divided into direct and indirect ones, while liabilities can be either explicit or implicit. Direct risks include liabilities that will undoubtedly arise, while direct liabilities denote liabilities that might or might not affect the fiscal results, depending on the outturn of certain events. Explicit liabilities are liabilities that arise from laws or agreements and that the government must acknowledge. Implicit liabilities constitute the moral commitments of the government that the latter generally recognises due to expectations or political pressure, even though no laws bind it to do so.

Using only debt data is not sufficient to draft a comprehensive assessment of long-term sustainability of public finances, because it does not include all contingent liabilities of general government accounts. Direct liabilities from the left side of the matrix, which are related to the current budget liabilities, and liabilities related to, for example, the ageing of the population, were examined in the previous two sections, which is why this section covers the remaining long-term risks to public finances and particularly the scope of state guarantees.

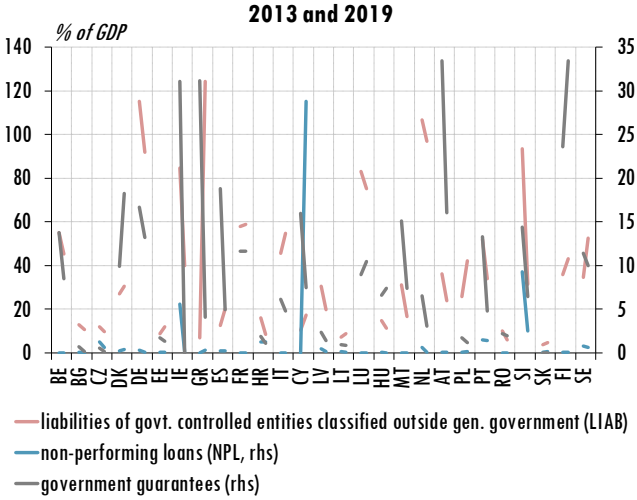
International comparisons indicate that general government expenditure arising from state's implicit liabilities can be relatively high. The IMF (Bova et al., 2016) assessed these liabilities in 200 cases in 80 countries over the 1990–2014 period. From a fiscal point of view, the most expensive were the outturns of implicit liabilities in the financial sector, close to 10% of GDP on average. The realisation of implicit liabilities usually occurs during a recession, which generally results in a simultaneous materialisation of several events that lead to high general government expenditure. The same analysis also

Table 6.1: Fiscal risks matrix

Sources of liabilities	**Direct liabilities** *(liability arises in any event)*	**Contingent liabilities** *(liability arises if a certain event materialises)*
Explicit *The government's liability arising from laws or agreements*	• Government debt (government-issued loans and securities) • Expenditure based on budget legislation	• State guarantees for borrowing and assuming liabilities by general government institutions as well as public and private entities (development •Umbrella state guarantees for various types of loans (mortgage loans, loans for students, farmers and small businesses) • Government-issued guarantees in international trade and currency protection • State guarantees for private investment • State insurance systems (insurance on deposits, revenue from private pension funds)
Implicit *The government's moral commitment arising from the public and interest group pressure*	• Future pensions • Social security systems • Future costs of active public investment projects	• Failure to meet the liabilities of general government institutions as well as of public and private entities for the part of debt not guaranteed by the govt. • Banking sector issues (additional support to the existing state guarantee, if applicable) • Assuming the liabilities of privatised entities • Failure to meet the liabilities of non-guaranteed pension or employment funds or other social security funds (protection of retail investors) • Potential negative net worth and/or default of the central bank • Environment restoration, costs of natural disasters

Source: Brixi and Schick (2002).

Figure 6.1: General government contingent liabilities, 2013 and 2019



Source: Eurostat. Note: If data for 2013 and 2019 not available, nearest year with data shown as start/end year:
NPL: start BE:2017, HR:2015, end FR:2014,
LIAB: start CY:2012, end FR, NL, AT: 2018.

shows that general government expenditure related to implicit liabilities is lower in countries with small fluctuations in economic activity, effective institutions (e.g. those that oversee financial markets), adequately managed state-owned companies, effective natural disaster response systems, etc.

In the EU, reporting on indirect contingent liabilities is required by Directive 2011/85/EU, which stipulates that Member States shall publish data on contingent liabilities with a potentially large impact on the general government balance. According to the Directive, these liabilities particularly include the data on government guarantees, non-performing loans and liabilities arising from the operation of state-owned public corporations, which are methodologically not included in the general government sector. Member States shall annually report the above liabilities to Eurostat, which has been publishing this data on its website since 2014 (the first report referred to 2013).[21]

Slovenia ranks among the countries with a relatively high share of contingent liabilities with regard to GDP, however, it is also among those that have seen the largest reduction of this share in the period for which data is available (for the 2013–2019 period in general). This applies to both state guaran-

Table 6.2: Fiscal costs of implicit general government liabilities

Type of contingent liability realised	Average fiscal costs (% of GDP)	Maximum fiscal costs (% of GDP)
Financial sector	9.7	56.8
Legislation	7.9	15.3
Sub-sector of general government	3.7	12
State-owned companies	3.0	15.1
Natural disasters	1.6	6.0
Private non-financial corporations	1.7	4.5
PPPs	1.2	2.0
Other	1.4	2.5
Total	**6.1**	**56.8**

Source: Bova et al. (2016).

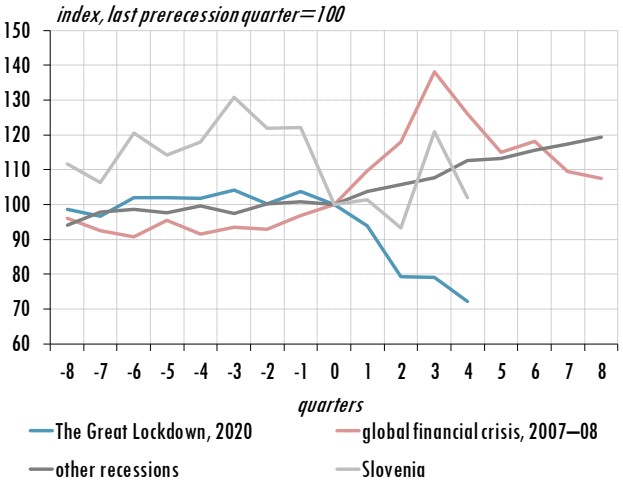
[21] Clarifications on the collection of information on contingent liabilities of the general government sector in EU Member States are available at: https://ec.europa.eu/eurostat/web/government-finance-statistics/contingent-liabilities, where a link to relevant data collections can be found.

Box 6.1: Bankruptcies in a crisis and government's implicit liabilities

The deep economic recession has not resulted in a large number of company bankruptcies so far. Data for developed countries suggest that one year after the epidemiological crisis began, the number of bankruptcies is declining, which is contrary to the usual crisis trends. This also applies to Slovenia, where the bankruptcy dynamics are nevertheless somewhat more consistent with the usual number of bankruptcies, but are still lower than the number of bankruptcies in an average recession. Considering international comparisons (Ebeke et al., 2021) and a more favourable starting point due to economic policy measures, the share of insolvent companies in Slovenia during the crisis remains clearly below the average of the developed EU Member States, although the number of over-leveraged companies has increased similarly to the EU average. This leads to the conclusion that given the current situation, the need of Slovenian companies for additional capital is somewhat smaller.[1]

In addition to a better starting point in respect to previous crises, these trends are probably largely the result of measures adopted by the Slovenian government to mitigate the consequences of the epidemic. At the same time, this crisis differs from a usual crisis, which primarily occurs due to accumulated imbalances that can be rectified by changing the structure of the economy. Compared to previous crises, Slovenian companies entered the crisis with relatively high liquidity reserves and low debt levels (e.g. Bank of Slovenia, 2020 and Ebeke et. al 2021).[2] In the current course of the crisis, most measures were aimed at enhancing the liquidity of companies. According to the Fiscal Council, these measures in Slovenia include deferred and instalment payments of tax liabilities, unaccounted and unpaid advance tax payments, the reimbursement of fixed costs, guarantees and liquidity loans (the SID bank and the Slovenian Enterprise Fund – SPS) and deferred credit payments.[3] Up to February 2021, the direct or indirect impact of these measures on the state budget totalled approximately EUR 1 billion, which constitutes around a third of all measures adopted to mitigate the consequences of the epidemic. In addition, emergency legislation (Article 97 of the Act Determining the Intervention Measures to Contain the COVID-19 Epidemic and Mitigate its Consequences for Citizens and the Economy adopted in April 2020)[4] also introduced a moratorium on bankruptcy proceedings which would have been initiated as a result of a deterioration in business performance due to the declared epidemic.

Figure: Bankruptcies in Slovenia in current crisis and in developed economies in recent and current crises



Note: Data for Slovenia refers to a total number of subjects deleted from the Slovenian Business Register due to bankruptcy.
Source: IMF World Economic Outlook Update January 2021 (Figure 6) and AJPES (Agency of the Republic of Slovenia for Public Legal Records and Related Services), FC calculations.

If the supporting measures required to ensure capital stability of companies were lifted too early or would not have been adopted, their situation could drastically deteriorate. At the same time, it will only be possible to ascertain the actual impact on the economy a few years after the measures have been lifted, if the trends following the global financial crisis[5] are taken into account. Simulations (European Commission, 2021d) indicate that almost a quarter of EU companies would face difficulties if they were left unaided.[6] With the companies that were financially vulnerable even before the crisis, these difficulties primarily arise as solvency issues, while the comparison between countries shows that such difficulties depend on the structure of the economy, the exposure to the epidemic and the measures applicable in individual countries. Contrary to the practice of companies in certain euro area Member States, Slovenian companies did not rely on bank loans; what is more, SMEs have even reduced their reliance on loans. At the same time, they increased the scope of approved, yet undrawn loans. Slovenian companies primarily relied on the loans of foreign parent companies and foreign equity capital. A survey conducted among SMEs in the EU after the first wave revealed that the access to financing was not the main obstacle in their operations, although the share of Slovenian companies assessing that the access to the government's financial support, including guarantees, had improved was approximately three times smaller compared to the EU average.[7] Nevertheless, their financial standing deteriorated in at least some sectors considering the varied impact of crisis across sectors. This is also confirmed by the Bank of Slovenia's data on the non-performing exposures of the banking sector, which have increased in agriculture, transport, warehousing, hospitality, information and communications industry and in recreation and culture industries over the period of one year up to December 2020. According to the ECB's Bank Lending Survey data available for the euro area, banks started to tighten credit standards and requests for credit insurance after the end of 2020.

Further deterioration in the situation of companies could cause contingent liabilities of the general government to be called, for which the risks are currently not explicitly pronounced, however it could cause indirect effects with negative consequences for public finances. Direct effects could arise from the enforcement of issued state guarantees or issues arising from the operation of majority state-owned companies. The composition of the Slovenian Sovereign Holding's portfolio is strongly concentrated, because 20 of the largest investments, mostly from the energy, transport and telecommunications industries, constituted more than 96% of the book value of the entire managed portfolio in the end of 2019, which amounts to somewhat over EUR 10 billion (SDH, 2020). Even if the structure of companies that might cause such direct effects can be inferred from the list of companies referred to in footnote 28, these effects should not be high, because most of these companies operate in the energy and other infrastructure sectors or as public agencies. The guarantees approved during the crisis by the SID bank and the SPS totalled around EUR 200 million in mid-February.

The indirect effects of the additionally worsened financial position of companies in the event of measures being lifted are primarily related to the deterioration of labour market conditions, potential vertical and horizontal consequences in economies' supply chains and the deterioration in the banking sector. Compared to the previous crisis, a considerably lower share of Slovenian banks is owned by the state, which resulted in a decline of contingent liabilities of the general government (see Figure 6.1). In addition to due caution with regard to the timeline of measure lifting and more targeted measures, a timely adjustment of the bankruptcy legislation and the option of restructuring the liabilities of companies which show growth potential in the period following the epidemic, as well as, in certain cases and predominantly temporary, the involvement of the state with an active participation of banks are required.[8] Such coordinated action could largely prevent the existence of

an excessive number of zombie[9] companies or, in accordance with the nature of the crisis, zombie activities. Not only do these activities limit the allocation of production factors and lower the aggregate productivity and thus reduce general government revenue, but they also increase the risk of emergence of contingent liabilities for the general government sector in the long-term.

[1] These findings probably underestimate the actual situation, because all announced measures were considered in the analysis, which were actually not implemented.

[2] In this context, we highlight an analysis performed by Bircan et al. (2020) suggesting that SMEs in Slovenia entered the crisis with relatively small liquidity reserves and relatively high indebtedness. According to the analysis conducted by Lušina and Tavčar (2021), this applies primarily to micro companies (up to 9 employees), which, based on the business results for 2019, constituted more than a half of over-indebted companies. In 2019, micro companies comprised almost three quarters of legal entities with outstanding liabilities, owing more than a half of all outstanding liabilities.

[3] See the Fiscal Council's regular monitoring of the measures to mitigate the consequences of the epidemic at www.fs-rs.si.

[4] Available at: http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8190

[5] See analysis in Tavčar (2021).

[6] An analysis on SMEs in Austria (KMU Forschung Austria, 2021) yielded very similar results, showing that, without state aid, the share of insolvent companies could increase by three to five times with regard to the pre-crisis period.

[7] This may also indicate the relatively late introduction of state guarantees in the emergency legislation. The SAFE survey results that cover the period from April to September 2020 are available at: https://ec.europa.eu/growth/access-to-finance/data-surveys/ On the contrary, large companies and the companies referred to in the analysis conducted by the Bank of Slovenia and the SID bank stressed that the access to state aid during the crisis was not a constraint in their operations (the survey, in which the answers received by the end of November 2020 were taken into consideration, is available at: https://bankaslovenije.blob.core.windows.net/publication-files/rezultati-ankete-o-virih-financiranja-podjetij-2020.pdf - Only in Slovene).

[8] This call was also voiced by the Bank of Slovenia. See https://www.bsi.si/en/media/1621/ureditev-na-podrocju-moratorijev.

[9] Zombie companies are companies that are unable to cover the costs of their own debt, which is why their existence depends on their creditors. This term was coined based on the Japanese experience following the real estate market crisis in 2001 when the banks approved and renewed loans to insolvent companies to cover the losses in their own balance sheets and to avoid public criticism for being unwilling to help troubled companies. For more information on this topic during the coronavirus crisis, see Laeven et al. (2020).

tees and liabilities arising from the operation of state-owned public corporations as well as to non-performing loans on the assets side of state institutions balance.[22] In the given period, Ireland has achieved the most substantial reduction considering the average of the above three categories. According to the current data, countries with a larger share of state guarantees in GDP compared to Slovenia include, for example, Belgium, Denmark, Germany, Austria and Finland, while the share of liabilities arising from state-owned public corporations (which, methodologically speaking, are not included in the general government sector) is – apart from the above mentioned countries – also larger in Luxembourg, Sweden and in the Netherlands.

Guarantees issued by the Slovenian government are regularly monitored by the Ministry of Finance. They are published in monthly overviews of fiscal trends and presented in detail in annual reports on the public debt management of the Republic of Slovenia (see Ministry of Finance, 2020).[23] The last available data for December 2020 indicate that state guarantees amounted to around EUR 5.1 billion, i.e. 11.2% of GDP. The largest share or over two fifths of guarantees are related to public non-financial corporations (of which around 85% are related to the Motorway Company of the Republic of Slovenia (DARS), with a large majority of all liabilities arising from borrowing being 100%-secured by guarantees issued by the Republic of Slovenia), while less than a third is related to the guarantees for EFSF loans. With regard to maturity and creditor, three quarters are related to the long-term external debt.

[22] In Slovenia, these mostly refer to the non-performing loans managed by the Bank Asset Management Company, which is included in the general government sector under the ESA 2010 methodology.

[23] Although the report is comprehensive, it does not include the list of legal entities referred to in Article 87 of the ZJF. Article 87 of the ZJF stipulates that the government, inter alia, issues guarantees to indirect spending units of the central government budget, the Health Insurance Institute of Slovenia and the Pension and Disability Insurance Institute of Slovenia and public utility institutes, public enterprises and legal entities in which the central government has a decisive influence over their management. The list of the above legal entities from 2019 is available at: https://www.gov.si/assets/ministrstva/MF/Javno-premozenje/DOKUMENTI/SUJP/e-Dolg-drzavni-nivo/Seznam-pravnih-oseb-iz-87.-clena-Zakona-o-javnih-financah.pdf

Contingent liabilities of the general government in the form of issued guarantees are primarily reflected in the debt of business entities that are defined under Article 87 of the Public Finance Act (ZJF) and published in the Ministry of Finance's report (2020). At the end of 2019, the debt of these legal entities stood at EUR 5.1 billion, i.e. 10.5% of GDP. The debt of legal entities defined under Article 87 of the ZJF has been reduced in the last five years, whereas its peak levels were reached in 2013 and 2014, when the debt stood at around 20% of GDP.

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