

BOX 5: THE SUSTAINABILITY OF MALTESE GOVERNMENT DEBT¹

This box assesses the sustainability of Maltese general government debt over different time horizons and evaluates risks stemming from macro-financial linkages. It updates previous debt sustainability analysis (DSA) published by the Bank.^{2,3} The term ‘sustainability’ as used throughout this analysis is in line with the IMF’s definition that ‘sovereign debt is sustainable if the country is able to finance its policy objectives and service the resulting debt, without resorting to unduly large adjustments which could otherwise compromise its stability’.

Main messages

The main messages can be summed up as follows:

- According to a heatmap of relevant indicators, in 2022 risks related to the structure and financing of debt, and risks related to contingent liabilities have abated somewhat compared with 2021.
- This box presents two scenarios which explore the impact on the debt-to-GDP ratio arising from different fiscal policies in the medium term. In most simulations, the debt ratio is not expected to embark on an explosive path. However, the debt ratio can be explosive in periods of prolonged large fiscal deficits, coupled with a shock in GDP growth. In all simulations, the debt ratio is expected to remain above pre-pandemic levels. The extent to which the debt ratio can be brought down depends on the extent and speed of the economic recovery and the pace of fiscal consolidation.
- There exist risks which could not be quantified and incorporated in the scenario analysis. In the immediate term, these mainly reflect the likelihood of state aid to Air Malta. Medium-to-long term risks include the impact of the Government’s open-ended commitment to retain fixed energy prices, the pre-1995 rent reform on government finances, the reform in the international corporate tax framework and the introduction of new EU-wide revenue raising measures. While these risks may be substantial, the resulting changing structure of the Maltese economy, including those as a result of reforms implemented in the context of the national Recovery and Resilience Plan, may bring both a positive impact on debt sustainability as well as a negative impact.

Scenario analyses

In the coming years, Government is expected to reduce the deficit from the level it incurred in 2021 and 2022, driven by a subdued expenditure profile and resilient economic activity. At the same time, Government is committed to subsidise energy prices such that they remain at a fixed level. The following two scenarios explore the impact on the debt-to-GDP ratio arising from different fiscal policies in the medium term.

Up until 2025, assumptions for GDP growth, inflation and Government’s borrowing costs in both scenarios are in line with the Bank’s latest forecast exercise.⁴ Thereafter, a series of common assumptions govern the path of macro variables, prices and interest rates (see section at the end of this box). The scenarios differ mainly in the forecast path of fiscal consolidation which is assumed to take place.

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² For further details on government debt dynamics and fiscal sustainability, see Farrugia, J. and Grech, O., “The Sustainability of Maltese Government Debt Revisited”, in Grech, A.G., and Zerafa, S. (eds.), *Challenges and Opportunities of Sustainable Economic Growth: the Case of Malta*, Central Bank of Malta, 2017.

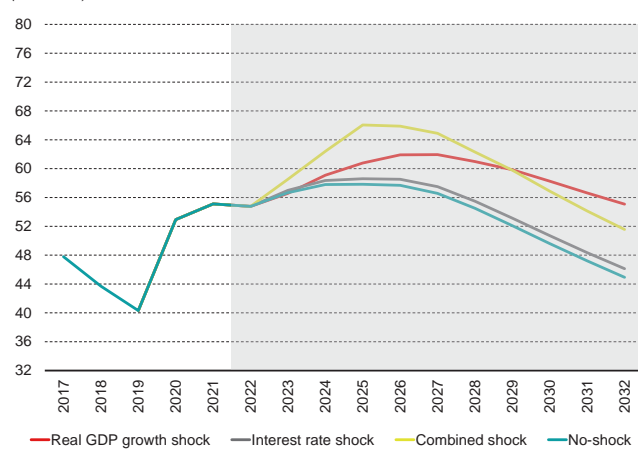
³ This study uses the national accounts vintage up to the fourth quarter of 2022, published in February 2023 and the general government data vintage up to the third quarter of 2022, published in January 2023. The cut-off date for projections is 16 February 2023.

⁴ This exercise is available here: <https://www.centralbankmalta.org/economic-projections>

Scenario 1 – Baseline Scenario

In this scenario, fiscal deficit targets until 2025 are in line with the Bank's latest projections. Thereafter, it is assumed that Government reverts to a budget surplus in structural terms. Consequently, additional fiscal consolidation measures are assumed to take place between 2026 and 2028. In this scenario, a balanced structural budget is achieved by 2028 and a small surplus is posted in subsequent years.

Chart 1
DEBT-TO-GDP RATIO IN BASELINE SCENARIO
(% of GDP)



Source: Author's calculations.

On the basis of these assumptions and excluding the impact of any shocks, the general government debt is expected to peak in 2025 before declining to around 45.0% of GDP by 2032 (see Chart 1).

Owing to the relatively low effective interest rate on government debt at the start of the forecast period, a mechanical permanent interest rate shock is expected to exert a small impact on public debt. On the other hand, owing to the denominator effect, a mechanical permanent shock to GDP growth would have a significant impact on the debt ratio. In the event of a combined shock, where fiscal policy is more supportive in periods of shocks to GDP growth but reverts to a contractionary stance thereafter, the debt-to-GDP ratio stands at around 52.0% by 2032.

In this scenario, the debt ratio is not explosive even during periods of shock. In fact, it remains on a downward trajectory even in the combined shock scenario, which reflects a more plausible outcome compared with the pure GDP and interest rate mechanical shocks. These estimates hinge on the assumption that Government remains committed to adhere to fiscal consolidation targets. That said, by the end of the simulation horizon, the debt ratio is expected to remain above its pre-pandemic level. Indeed, in the event of a combined shock, the debt ratio would decline below 2020 levels only by 2032.

Scenario 2 – Alternative Scenario

In this scenario, it is assumed that fiscal consolidation is not pursued as aggressively as in the baseline scenario. Between 2022 and 2025, the general government deficit-to-GDP ratio is wider by around one percentage point compared with the baseline scenario. Thereafter, Government is assumed to target a headline deficit-to-GDP target of just under 3.0%. Consequently, the structural balance remains in deficit throughout the simulation horizon.

Excluding the impact of any shocks, general government debt is expected to continue increasing, albeit at a slow pace. It is set to stand just over 61.0% of GDP by 2032 (see Chart 2).

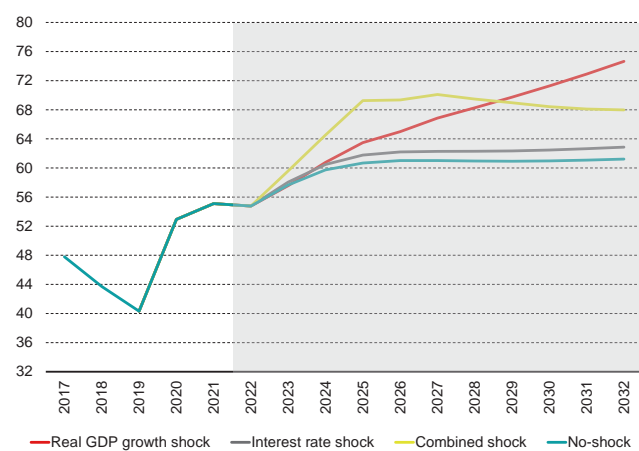
A mechanical and permanent interest rate shock is not expected to significantly affect the debt-to-GDP path. However, owing to the continuous projected large deficits, a mechanical and permanent shock to GDP growth puts the debt ratio on an upward and explosive path. In a more credible scenario as envisaged by the combined shock simulation, the debt-to-GDP ratio is set to gradually decline

once the supportive fiscal stance is scaled down. However, since Government is still assumed to retain a deficit throughout this simulation, the debt ratio is set to decline at a very slow pace and to remain around 68% of GDP by 2032.

In this scenario, government adopts a looser fiscal stance compared with the baseline scenario. Consequently, in a mechanical shock simulation, debt may embark on an explosive path. In the combined shock simulation, which offers a more plausible

path for GDP and fiscal policy in the event of a shock, debt is not explosive. That said, the debt ratio remains significantly above the debt ratio in the baseline scenario. When compared with the baseline scenario, therefore, the alternative scenario highlights the significance of short-to-medium term consolidation measures in bringing down the debt burden.

Chart 2
DEBT-TO-GDP RATIO IN ALTERNATIVE SCENARIO
(% of GDP)



Source: Author's calculations.

Heat map of indicators

This section assesses a number of indicators which, according to the literature, are highly relevant for debt sustainability in the short and long term. The thresholds used to grade these indicators are mainly sourced from the European Commission's *Debt Sustainability Monitor* and *Fiscal Sustainability Report* series. The threat that each indicator poses to the debt ratio is colour coded – red indicates a high threat, yellow indicates a medium threat and green signals a low threat to sustainability. The heat map is presented in Table 1.

This is a backward looking analysis using information up to 2021. At the time this exercise was completed, data at end-2022 was not available for most indicators.

Risks surrounding the structure of debt and availability of liquidity are considered as relatively low, and have abated somewhat compared with 2020. Although the share of short-term debt in total debt declined in 2021 from a year earlier (to 14.1% from 15.6% in 2020) it is still considered to be a medium threat. This is due to a higher level of Treasury bills outstanding, compared with pre-pandemic levels, as well as holdings of Malta Government Retail Savings Bonds, which are classified as deposits in the ESA methodology.

Gross financing needs have decreased compared with 2020, as the general government deficit declined. Consequently, they are now considered as low risk. However, net financing needs after accounting for government deposits remain substantial and continue to be classified as medium risk. From a macro-financial perspective, the main risks to debt sustainability stem from the elevated share of non-performing loans in the total loans extended by the core domestic banks compared with the applicable threshold.⁵ This metric however improved compared with 2020, and reached historic lows later on in 2022.

⁵ The high-risk threshold applied in this study has a value of 2.3%. This metric amounted to 3.4% by end-2021 and reached 2.9% by the third quarter of 2022.

Table 1
HEAT MAP

	2017	2018	2019	2020	2021
Structure of debt					
Share of short-term debt	Green	Yellow	Yellow	Yellow	Yellow
Change in share of short-term debt (y-o-y)	Green	Red	Green	Red	Green
Share of foreign currency denominated debt	Green	Green	Green	Green	Green
Share of debt with variable interest rate in GDP	Green	Green	Green	Green	Green
Share of debt held by non-residents	Green	Green	Green	Green	Green
Liquidity risks					
Gross financing needs (% of GDP)	Green	Green	Green	Yellow	Green
Net financing needs (% of GDP)	Green	Green	Green	Yellow	Yellow
Ten year government bond spread over German Bund	Green	Green	Green	Green	Green
Macro-financial risks					
Private sector debt (% of GDP)	Green	Green	Green	Yellow	Green
Private credit flow (% of GDP)	Green	Green	Red	Green	Green
Net international investment position (% of GDP)	Green	Green	Green	Green	Green
Share of non-performing loans to gross loans: core banks	Red	Red	Red	Red	Red
Change in share of non-performing loans (core banks) (y-o-y)	Green	Green	Green	Red	Green
Bank loans-to-deposits ratio (core banks)	Green	Green	Green	Green	Green
Change in nominal house prices (y-o-y)	Green	Green	Green	Green	Green
Competitiveness risks (High/Low risk)					
ULCs (% change over 3 years)	Yellow	Red	Red	Red	Red
Real EER (% change over 3 years)	Green	Green	Green	Green	Green
Current account balance (3 yr average as % of GDP)	Green	Green	Green	Green	Green
Export market shares (% change over 5 yrs)	Green	Green	Green	Green	Green
Implicit/contingent risks					
Commission Ageing Report: 2019-2070 ageing costs (pp of GDP)	Green	Green	Red	Red	Green
General government guarantees (% of GDP)	Red	Yellow	Yellow	Red	Yellow

Source: Author's calculations.

Regarding implicit liabilities, ageing costs (pensions, healthcare and long-term care) as a share in GDP form another significant risk to sustainability. According to the Commission's 2021 *Ageing Report* projections, at 8.0 points, Malta is set to have the fourth highest increase in age-related spending in the euro area between 2019 and 2070. Compared with the previous Ageing Report publication, costs are expected to increase at a faster rate. However, whereas in the previous Report costs were set to reach the euro area average by 2070, they are now set to remain below it.

Government-guaranteed debt as a share of GDP declined from its level in 2020, when pandemic-related support schemes were first introduced. At 8.0% of GDP, this ratio stood lower than the euro area average and remains lower than the recent peaks observed in 2012 and 2014. It also declined further during 2022, reaching 6.9% by the third quarter of the year. Consequently, the risk of guarantees being called is now considered as medium, rather than high. However, pandemic-related guarantees remain substantial, and form the third largest source of guarantees after those in the energy and logistics sectors.⁶

⁶ See National Audit Office Malta (2022). "Annual Audit Report: Public Accounts 2021" for further details.

Non-quantifiable risks

This section outlines other debt sustainability risks which are likely to materialise but cannot be quantified at present.

In the immediate term, the main risks to debt sustainability concerns the likelihood of state support to Air Malta. The company is in the midst of a restructuring exercise in which around two-thirds of its original staff complement have either opted for an early retirement scheme or else applied to be transferred to new jobs within the public sector. Apart from financing this transition, Government remains in talks with the European Commission over the possibility of additional State aid.

In the short-to-medium term, sustainability risks reflect the Government's open-ended commitment to retain fixed energy prices. By February 2023, oil and natural gas prices had declined from the peaks observed following the outbreak of war in Ukraine. However, commodity prices remain higher than their levels at end-2021, before the war caused prices to spike and Government to intervene. In future, prices might well regain their former high levels in response to adverse developments in the war or stronger than expected global demand. Should this risk materialise, subsidies on energy prices would need to increase by more than forecast. In its 2022 Article IV consultation, the IMF called for the Maltese Government to prepare an exit strategy from the fixed-energy-price policy while protecting vulnerable groups.

Other short-to-medium term risks reflect the impact of a reform in rental costs for properties bound under pre-1995 leases. Under the reform, which came into effect in June 2021, landlords can increase the annual rent up to two per cent of the property's market value. However, tenants in gainful employment will not spend more than 25% of their income on rent, while pensioners and social welfare beneficiaries will not experience an increase in rent. Instead, the difference in rent will be borne by the State. This reform may affect up to 10,000 families. Since any increases in rent need to be determined on a case-by-case basis by the Rent Regulation Board, the full impact of this measure on the public finances cannot be ascertained at present.

Medium-to-long term sustainability risks reflect the impact of a reform in the international corporate tax framework, as agreed by members of the Organization for Economic Co-operation and Development (OECD)/G20 Inclusive Framework. The reforms affect large multinational companies and seek the partial re-allocation of taxing rights from their home countries to markets where they also earn turnover. The reforms are also set to introduce a 15% global minimum effective corporate tax rate. In December 2022 the Council of the EU reached unanimous agreement to implement the EU Minimum Tax Directive (Directive 2022/2523); Member States are required to transpose the rules into domestic law by 31 December 2023. The impact of these proposals on Government finances is hard to quantify at this stage but could prove to be material.

Other medium-to-long terms risks reflect the likelihood of new EU-wide revenue raising measures, which Member States in principle agreed to introduce in order to repay financing of the Next Generation EU rescue package. These include a revision of the EU Emissions Trading System, the introduction of a carbon border adjustment mechanism and an own resource requirement from the above mentioned international corporate taxation framework.⁷ If implemented, such measures have the potential to significantly affect the Maltese economy and public debt sustainability. On the one hand, the introduction of new taxation systems may disrupt existing industries and negatively affect inflows from corporate taxes. On the other hand, the shift towards new industries may boost competitiveness and productivity, leading to increased investment. The long-run impact of structural reforms implemented as part of the national Recovery and Resilience Plan – which ought to reduce sustainability risks – is also difficult to gauge.

⁷ See https://ec.europa.eu/commission/presscorner/detail/en/ip_21_7025

Assumptions and technical information

Scenario analyses: common assumptions (from 2026 onwards)

Potential output growth is determined exogenously in this framework. Real GDP growth is set to grow in line with the forecast structural primary balance and potential output growth. The growth is therefore determined by the fiscal multiplier – i.e. the degree to which fiscal policy affects economic growth – and the output gap, which eventually closes. For further details, refer to the 2018 Annual Report Box.

Inflation, which in this box is measured by growth in the GDP deflator, is assumed to revert to around 2.0%, in line with the ECB's target for inflation over the medium term.

Meanwhile, the level of the deficit-debt adjustment is assumed to revert to its long-run average. No temporary fiscal measures are assumed to take place.

Government debt is forecast on the basis of different types of maturity. The share of each category of debt is assumed to revert to its long-run average. Interest payment projections are based on separate interest rate estimates applied to each maturity category.

The forecast path of interest rates is based on ECB assumptions for the EURIBOR (used to determine interest payments on short-term debt) and the ten-year yield on Malta Government Bonds (used to determine interest payments on rolled-over, long-term debt).⁸ Interest rates on non-maturing debt are based on the maturity profile of outstanding Malta Government Bonds.

The forecast path for the main determinants of debt is shown in Table 2.

Scenario analyses: shocks (applied from 2023 onwards)

Permanent mechanical shocks to GDP growth and interest rates are based on the standard deviation of historic data, similar to the approach used by the IMF in its Article IV Mission. On average, compared with the no-shock scenarios, there is a 2.1 percentage points decrease in the yearly, real GDP growth and a 1.0 percentage point increase in the interest rate.

Combined shock simulations assume a 1.0 percentage point decline in real GDP growth for three years, and a permanent 1.0 percentage point increase in interest rates. At the same time, the pace of fiscal consolidation is relaxed in the years when GDP growth is negatively affected, but is then pursued more vigorously compared with the no-shock simulation.

Table 2
SCENARIO ASSUMPTIONS: MAIN DETERMINANTS OF DEBT

Percent; averages over simulation period

	Baseline scenario				Alternative scenario			
	2026-2032 average	Mechanical GDP shock	Mechanical interest rate shock	Combined shock	2026-2032 average	Mechanical GDP shock	Mechanical interest rate shock	Combined shock
Real GDP growth rate	3.7	1.6	3.7	3.7	3.7	1.6	3.7	3.7
Inflation (GDP deflator growth rate)	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.1
Interest rate applied to								
Short-term debt	3.1	3.2	4.1	4.2	3.1	3.2	4.1	4.2
Long-term debt maturing within a year	3.3	3.3	4.3	4.3	3.3	3.3	4.3	4.3
Non-maturing long-term debt	2.6	2.5	2.5	2.5	2.6	2.5	2.5	2.5
Deficit-debt adjustments (% of GDP)	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4
Headline balance (% of GDP)	-0.6	-1.6	-1.7	-2.5	-2.9	-3.8	-3.7	-4.5

Source: Authors' calculations.

⁸ The euro area interest rate projections were sourced from the ECB's technical assumptions.