AIReF Autoridad Independiente de Responsabilidad Fiscal

Debt Monitor

March 2022

- *2022 has started with a less vigorous outlook for global economic recovery than initially expected. Moreover, this scenario has worsened as a result of the outbreak of war in Ukraine.*
- *Inflation expectations remain anchored, but the persistence of price tensions, intensified following the start of the armed conflict, might trigger upward spirals and second-round effects, which would hamper the normalisation of monetary policy in an environment of worsening global growth forecasts.*
- *In this complex context, the Spanish debt-to-GDP ratio stood at 118.7% at the end of 2021, a reduction of 1.3 percentage points over the year. Although this year-end 2021 level is an improvement on all the forecasts, both from national and international organisations, it is 23.1 points higher than the pre-pandemic level.*
- *The Central Government and the Social Security Funds have borne most of the increase in debt in the last two years (20.9 points) by financing most of the expenditure associated with the pandemic relief measures.*
- *In the short term, the macro-fiscal forecasts published by AIReF in January project a reduction in the debt-to-GDP ratio of 4.9 points on the level recorded in 2021, placing the ratio at 113.8% in 2023.*
- *This forecast is in line with the 115.1% projection presented by the Government in the 2022 Draft Budgetary Plan. The projections of international organisations show a similar debt reduction path for the next two years, although from a starting point slightly higher than the one eventually recorded by the end of 2021.*
- *The reduction in the debt ratio will be mainly supported by economic growth as the persistent deficit will continue to contribute substantially to the increase in debt despite the reduction in the financial burden.*
- *Despite higher borrowing, the cost of debt has continued to fall, recording a new all-time low and placing the average cost of the Treasury's issues for the year as a whole in negative territory for the first time.*
- *The low issuance rates have made it possible to reduce and stabilise the financial burden despite a marked increase in debt. The current low interest rate environment continues to favour the dynamics of the debt ratio in the long term, helping to generate a positive "snowball" effect over the coming years.*
- *In the short term, AIReF's models project that this trend of a slight reduction in the financial burden and average debt rates will continue.*
- *The latest meetings of the Governing Council of the ECB point towards a certain withdrawal of stimulus measures through the termination of purchasing programmes such as the PEPP. However, the door is left open to calibrate this type of non-conventional tool according to the evolution of the economic situation.*

- *The new crisis scenario that has emerged following the invasion of Ukraine may alter the pace of normalisation of monetary conditions expected over 2022, following the sharp increase in inflation worldwide. These increases have exceeded all forecasts month after month, thereby casting doubt on the temporary nature of inflation.*

- *Financial markets have started the year by adjusting to this new scenario of high inflation and expected rises in interest rates, favouring a correction in equities and an increase in yields in all sovereign debt tranches. However, with the invasion of Ukraine, financial markets have begun to reassess the outlook for monetary policy, with sharp falls recorded in the yields on sovereign debt, driven by its nature as a safe-haven asset.*

- *The yield on the Spanish 10-year bond stood at around 1% as at the date of the Debt Monitor, an increase of almost 60 basis points in the last three months. The spread between the Spanish and Italian 10-year bonds and the German bond (risk premium) has widened by 30 and 40 points compared with last year's average, to 100 and 155 basis points, respectively. The US 10-year bond, which has even exceeded 2%, stands at around 1.85%, while the German bond has returned to negative territory after a month of trading at positive figures.*

- *Following 2021, a year with interest rates close to historical lows, the sovereign debt yield curve stands close to two-year highs, in the vicinity of the levels recorded at the start of the pandemic. However, from a historical perspective, interest rates can be considered low.*

- *For 2022, the Public Treasury proposes a borrowing schedule similar to that of last year, maintaining the goal of net issuance at the €75 billion recorded at the end of 2021. In 2022, the Public Treasury will once again have the Next Generation EU funds as an additional source of financing.*

- *A stabilisation of gross borrowing in monetary terms is expected over the coming years. This will result in a gradual decrease of gross borrowing as a share of GDP. The State debt has a low refinancing risk with a well-distributed maturity profile over the coming years, with moderate maturities in the short term and a granular distribution in the medium and long term.*

- *Over recent years the ECB has made net purchases of Spanish debt in excess of 100% of net borrowing, which has helped preserve very favourable financing conditions for government debt. The Bank of Spain has become one of the leading holders of Spanish government debt, increasing its share of total debt by 25 points in the last five years to around 35%.*

- *Regarding sustainability risks, the invasion of Ukraine raises the risk of stagflation in the European Union, where high inflation could become more persistent, triggering upward spirals and second-round effects that would complicate the normalisation of monetary policy.*

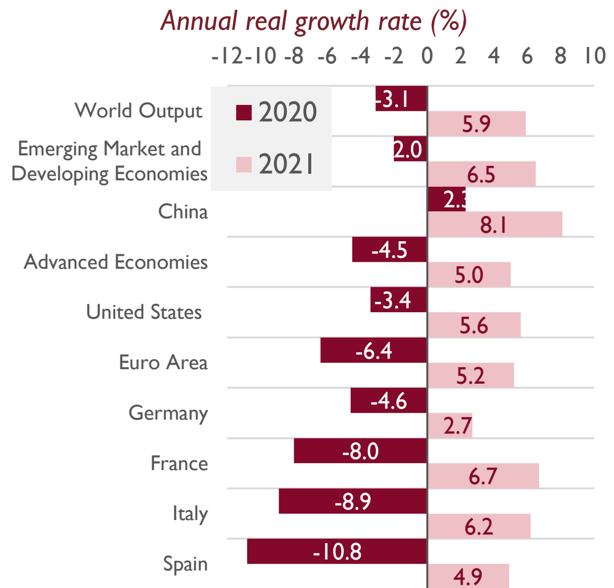
- *In the short term, a rise in sovereign debt interest rates would have a limited impact on interest expenditure due to the high average maturity of the portfolio. However, a low interest rate environment over the medium and long term will be essential to alleviate the fiscal effort required to keep public debt on a downward path.*

- *The increase in contingent liabilities through Government Guarantee Lines poses a risk in the short and medium term, although its potential impact is assessed as limited.*

- *The expected increase in healthcare spending and pension spending as a result of population ageing is one of the main risks for the sustainability of public finances in the medium and long term.*

2022 has started with a less vigorous outlook for global economic recovery than initially expected. Moreover, this scenario has worsened as a result of the outbreak of war in Ukraine. After the contraction of global GDP in 2020 (-3.1%) and the rebound of 2021 (5.9%), growth is expected to moderate in 2022 (4.4%) and 2023 (3.8%) (WEO of January 2022). This lower dynamism associated with the virality of the Omicron variant of COVID-19 and the fragility of the Chinese real-estate sector has been aggravated by the outbreak of the war in Ukraine with unpredictable consequences. Inflation is also expected to have a degree of continuity as long as the bottlenecks in global value chains and tensions in energy markets persist.

Annual real growth rate (%)

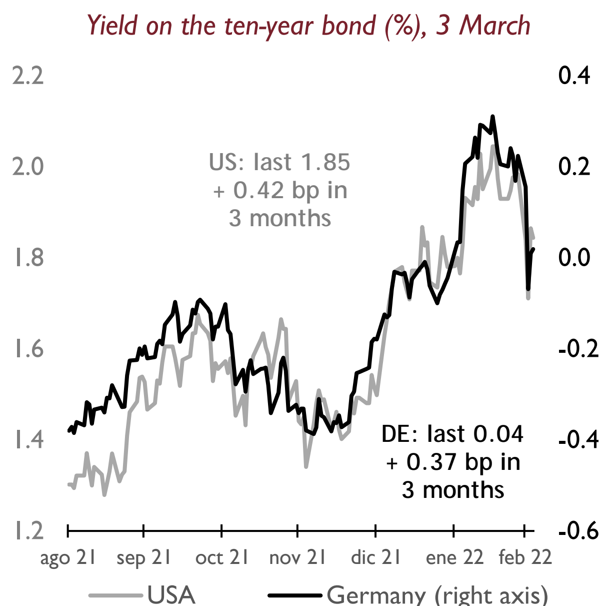


Source: IMF (WEO Jan 2022)

Inflation expectations remain anchored, but the persistence of price tensions might trigger upward spirals and second-round effects. Financial markets started the year by adjusting to a new scenario of high inflation and foreseeable rises in interest rates, favouring a correction in equities and an increase in yields in all sovereign debt tranches. However, with the start of the invasion of Ukraine, financial markets have begun to reassess the outlook for monetary policy, with sharp falls recorded in the yields on sovereign debt, driven by its nature as a safe-haven asset. The economic scenario has changed dramatically for the main central banks. Both the Federal Reserve (Fed) and the European Central Bank (ECB) will incorporate at their next monetary policy meetings (16 and 10 March, respectively) a factor beyond their control capable of modifying their respective roadmaps: the war and Russian invasion of Ukraine.

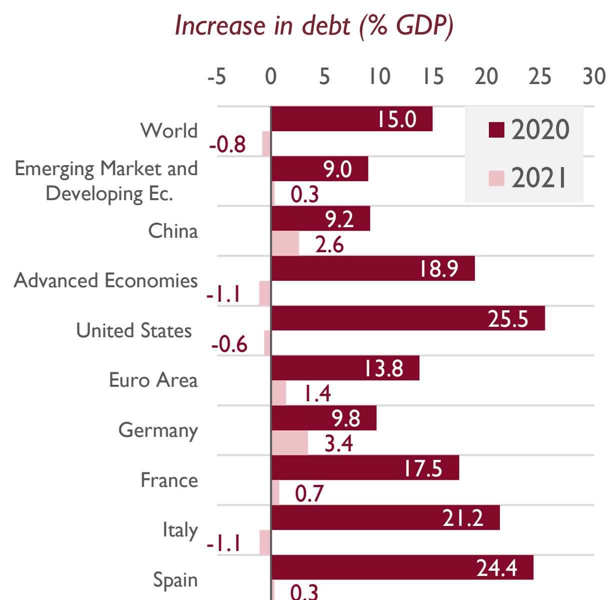
The economic consequences of the pandemic have been mitigated by the combination of monetary easing and fiscal support that has led to a severe accumulation of debt. For example, the public debt ratio in the euro area increased by around 15 points to 100% in 2021. In the last year, the debt ratios stabilised after the sharp increase recorded in 2020 due to the rebound in economic activity and a certain improvement in the cyclical component of the public balance.

Yield on the ten-year bond (%), 3 March



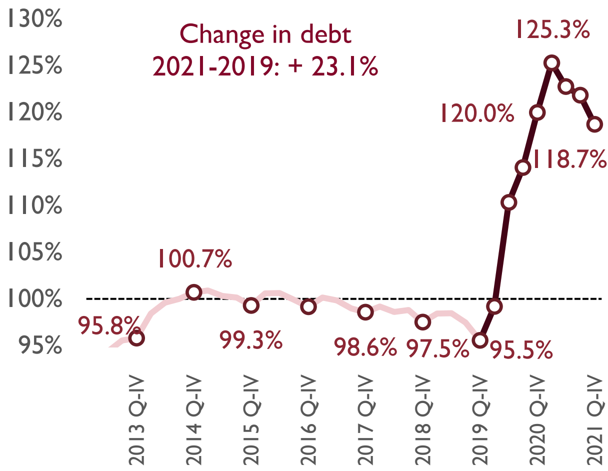
Source: Refinitiv

Increase in debt (% GDP)



Source: IMF (Fiscal Monitor Oct 2021)

Debt (GDP), quarter-on-quarter evolution



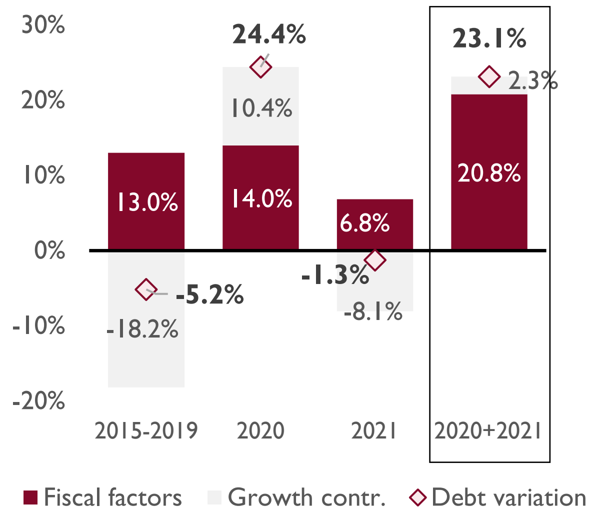
Source: INE and Bank of Spain

The Spanish debt-to-GDP ratio stood at 118.7% at the end of 2021, a reduction of 1.3 points over the year and an increase of 23.1 points on the pre-pandemic level. In monetary terms, public debt has continued to grow in 2021 to reach €1.48tn. However, the rate of debt growth has been lower than that of nominal GDP, which has led to a reduction in the public debt ratio.
The quarterly profile shows three consecutive quarters of reduction in the ratio after five quarters of rises, with the ratio falling by 6.6 points from the ceiling reached in the first quarter of 2021 (125.3%).

The debt ratio eventually recorded in 2021 (118.7%) is an improvement on the different forecasts made both by international bodies - European Commission (120.6%), IMF (120.4%), OECD (120.1%) - and by national bodies - Government of Spain (119.5%), Bank of Spain (120.4%) and AIReF (119.8%).

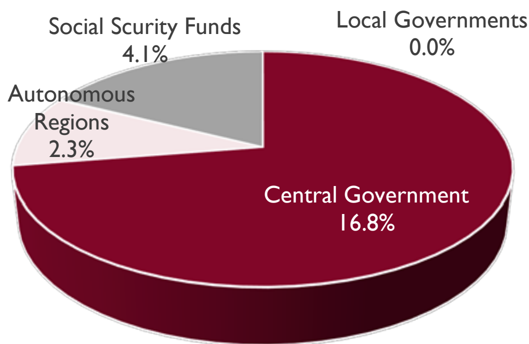
Following the sharp increase caused by the pandemic, the debt ratio is stabilising. A certain reduction in the high public deficit resulting from the health crisis together with the rebound in activity has caused the debt ratio to stabilise in 2021, following the sharp increase in 2020. The negative contribution of growth (2.3 points), the denominator of the ratio, still weighs slightly in the 2020-2021 period as a whole, while 90% of the increase in the period is determined by the public deficit and the stock-flow adjustment (20.8 points).

Contribution to the change in debt (% GDP)



Source: AIReF

Increase in debt (% GDP) between 2021 and 2019 by sub-sector

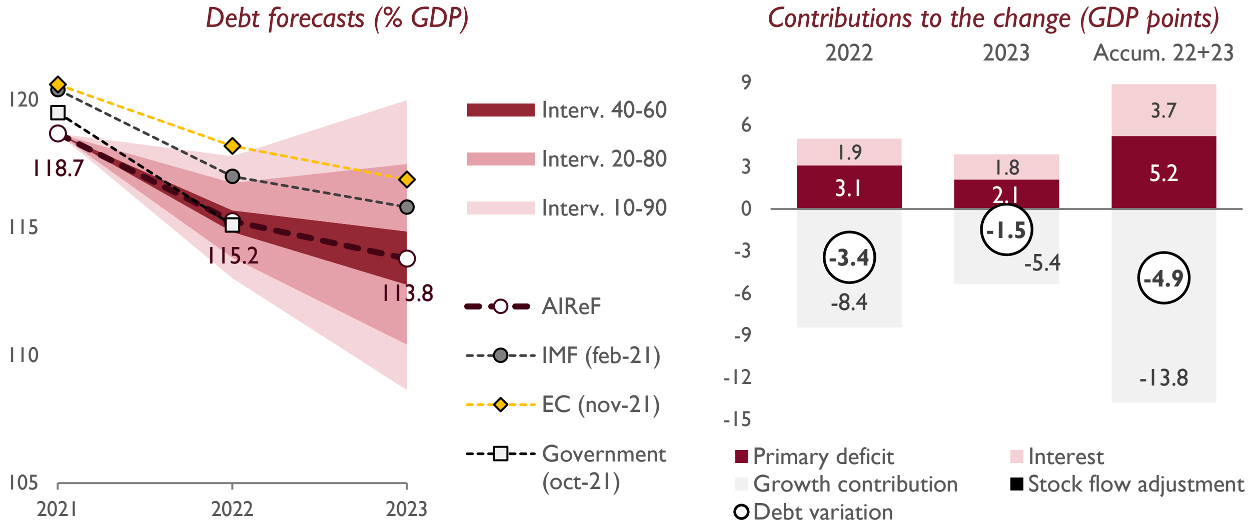


Source: Bank of Spain

The Central Government and the Social Security Funds have borne 90% of the increase in debt in the last two years (20.9 points) by financing most of the expenditure associated with the pandemic. The extraordinary transfers and the non-impact of the fall in tax revenues on payments to the Autonomous Regions under the ordinary regime have mitigated the increase in the debt ratio of the Autonomous Regions. This ratio has only grown by 2.3 points – to 26% of GDP – of which 0.8 points are attributable to the denominator effect. For their part, Local Governments saw no increase in their debt.

In the short term, the macro-fiscal forecasts published by AIReF in January project a reduction in the debt-to-GDP ratio of 4.9 points on the level recorded in 2021, placing the ratio at 113.8% in 2023. In the first quarter of 2021, the debt ratio reached an all-time high (125.3%), which, according to AIReF's forecasts, will be the ceiling after which a downward path has begun that has put the ratio at 118.7% of GDP at the end of 2021. It is forecast to stand at around 115.2% and 113.8% at the end of 2022 and 2023, respectively. This forecast is in line with the 115.1% forecast presented by the Government in the draft Budgetary Plan for 2022. The projections of international organisations show a similar profile of reduction in the debt ratio for the next two years (the IMF and the European Commission estimate reductions of 4.6 points and 3.7 points, respectively), although from a starting point slightly higher than the one eventually recorded at year-end 2021. The reduction in the ratio will be mainly supported by economic growth as the persistent deficit will continue to contribute substantially to the increase in debt despite the reduction in the financial burden.

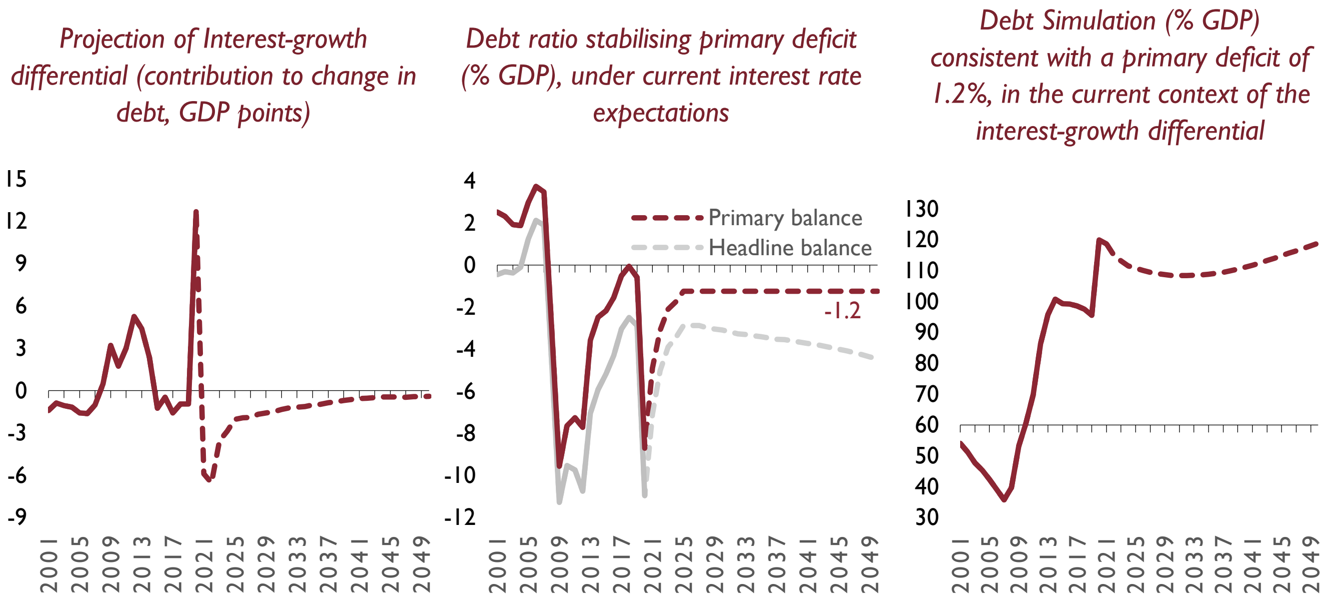
Short-term forecasts



Source: AIReF, IMF, European Commission and Government

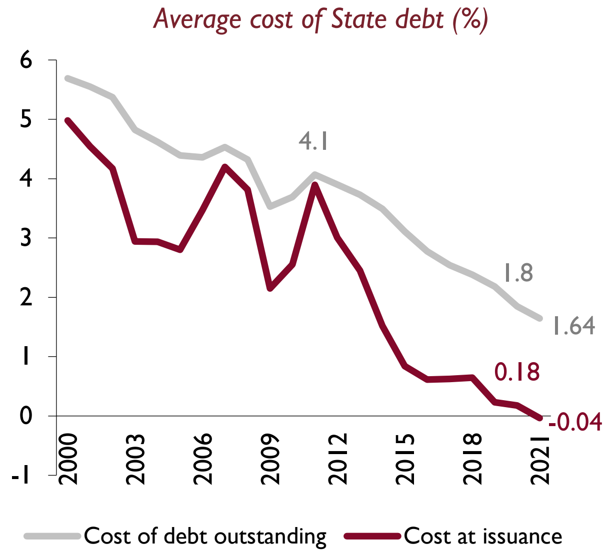
The current environment of low interest rates in historical terms continues to favour the dynamics of the debt ratio in the long term, helping to generate a positive "snowball" effect over the coming years. A negative interest rate differential over growth allows the debt ratio to remain stable even while maintaining a certain structural primary deficit in the medium term. This low interest rate environment offers greater room for manoeuvre when designing a medium-term consolidation strategy, and in theory makes it possible to return to a balanced budget in a gradual manner. Achieving a balanced budget will be essential to generate sufficient fiscal space to face future challenges such as the pressure associated with the dynamics of an ageing population.

Snowball effect and debt dynamics

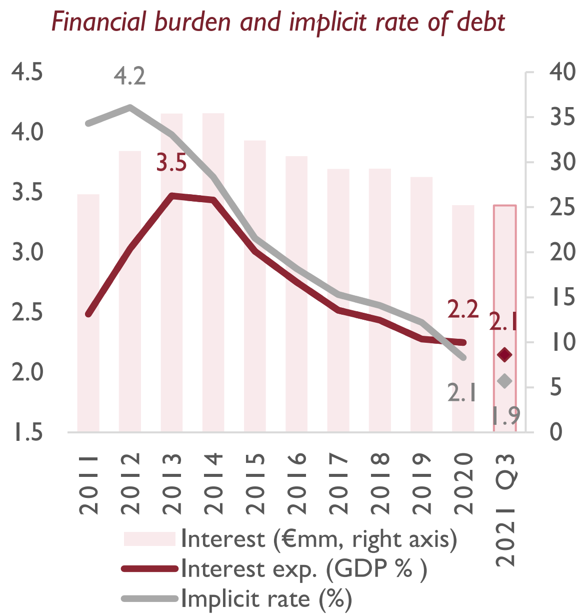


Source: AIReF

Despite higher borrowing, the cost of debt has continued to fall, recording a new all-time low. For the first time, the average cost of the Treasury's issues for the year as a whole was in negative territory. The low yields recorded in all sovereign debt issue maturities, close to all-time lows, have placed the average rate of new issues in negative territory for the first time. In 2021, the Public Treasury placed over 60% of its debt issues at negative rates. This has made it possible to maintain the path of reducing the average cost of financing, which has reached a new all-time low. Specifically, the average cost of new issues fell in 2021 to -0.04%, from 0.18% at the end of 2020, which meant that the average cost of the entire State debt portfolio stood at 1.64% at that date, down from 1.86% at the end of 2020.



Source: Public Treasury



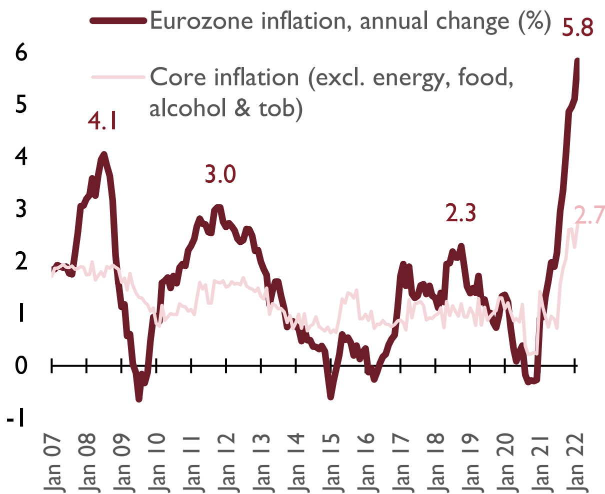
Source: IGAE, INE, Bank of Spain and AIReF

The low issuance rates have made it possible to reduce and stabilise the financial burden despite a marked increase in debt. Interest expenditure stood at 2.1% of GDP in the third quarter of 2021. This is below the value at year-end 2020, although in absolute terms the accumulation of the last four quarters remains stable at the 25.2 billion of year-end 2020. The implicit rate continued the downward trend that started in 2012, to stand at 1.9% in September.

In the short term, AIReF's models project that this trend of a slight reduction in the financial burden and average debt rates will continue. The issuance of debt at interest rates similar to (or slightly higher than) those recorded throughout 2021 will allow for a further reduction in the average portfolio rate, stabilising interest expenditure at an absolute level despite the greater stock of debt, which will result in a slight reduction as a percentage of GDP.

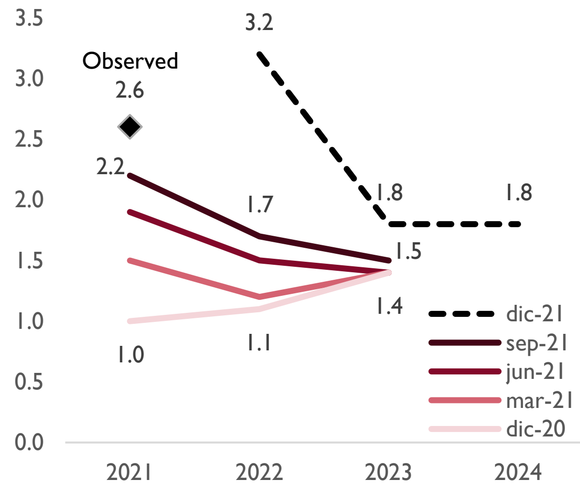
The reactivation of the economy together with the rise in the price of oil and other raw materials and supply chain problems have generated a rise in prices that has far exceeded the initial forecasts. The sharp upturn in inflation worldwide continues to surprise with ongoing rises, beating all forecasts month after month, calling into question its temporary nature. The year-on-year inflation rate in the euro area stood at 5.8% in February, the highest figure since records began in 1997. The increase in prices has surprised the monetary authorities, who have been continuously revising their forecasts upwards. The ECB underestimated its forecast for 2021 by 1.6 points. It has recently revised its inflation forecast for 2022 by 1.5 points to 3.2%. The monetary policy body expects higher inflation over a longer period, but continues to anchor medium-term expectations at around 1.8%. Core inflation has also picked up from its lowest level reached at the end of 2020 to stand above the 2% target for price stability. Inflation levels and forecasts are expected to worsen in the coming months as a result of the armed conflict.

Harmonised inflation in the euro area



Source: Eurostat

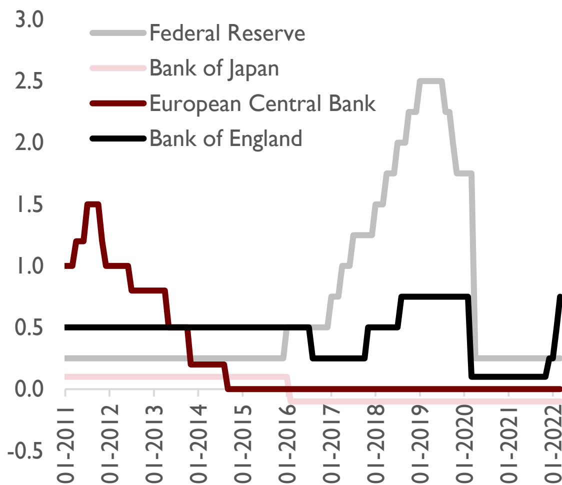
ECB's European inflation forecasts



Source: European Central Bank

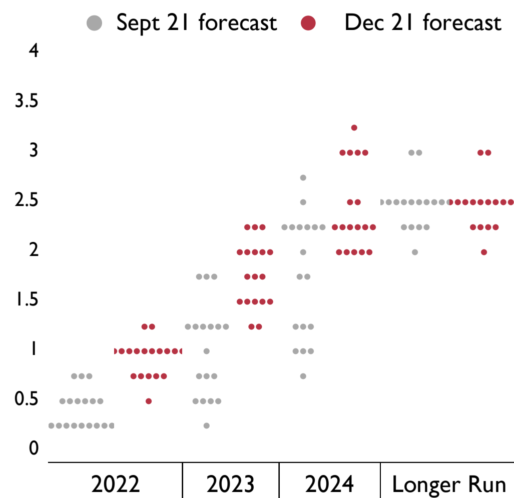
The new crisis scenario that has emerged following the invasion of Ukraine may alter the normalisation of monetary policies expected over 2022. Monetary authorities around the world have already begun the gradual withdrawal of stimulus measures and some, such as the Bank of England, have already raised interest rates by about half a percentage point. The US Federal Reserve, as can be seen in its dot plot, is already discounting the first rate hikes for the next few years. The context of major uncertainty following the invasion of Ukraine may alter the monetary authorities' road map.

Official interest rates



Source: Central Banks of the US, Euro, Japan and England

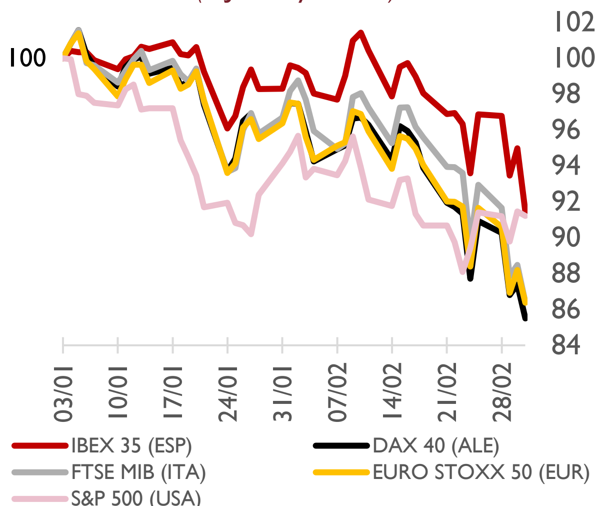
FED dot plot (*)



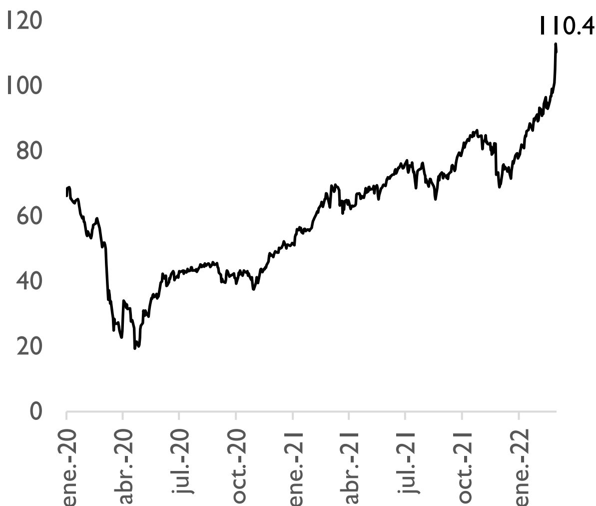
Source: United States Federal Reserve

(*) The *"dot plot"* is a chart used by the Federal Reserve to indicate the perspectives of the various members of the Fed on the path of interest rates

Evolution of stock market indices in the year (1 January = 100)



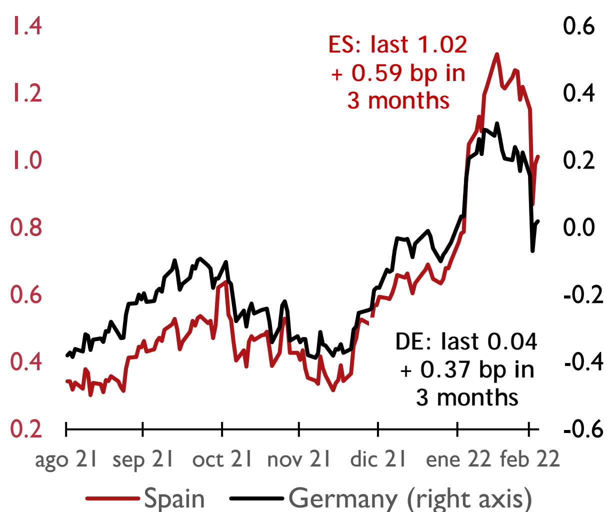
Oil price (Brent, USD), 3 March



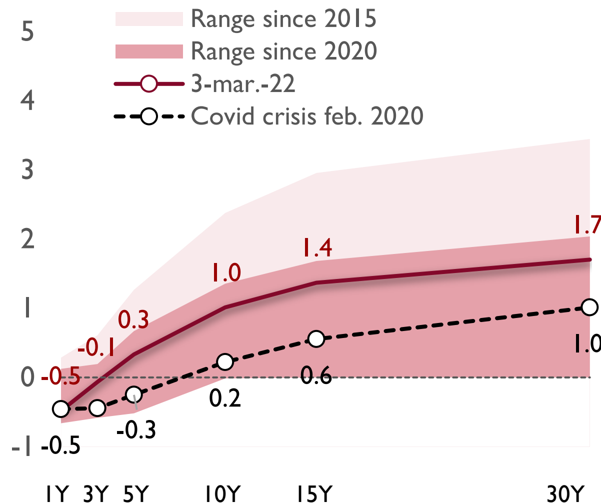
Source: Refinitiv

Financial markets have started the year by adjusting to the new scenario of high inflation and foreseeable rises in interest rates favouring a correction in equities and an increase in yields in all sovereign debt tranches. However, in recent sessions and with the start of the invasion of Ukraine, public debt has acted as a safe-haven asset with falls in its yields. The possibility of the episode of inflation becoming more permanent due to the persistence of price tensions that might trigger upward spirals and second-round effects has focused the attention of financial markets on inflation data, energy prices and the statements of the various members of the leading central banks. Long-term interest rates on sovereign debt of the highest credit quality have started an upward trend, interrupted for the time being by the safe-haven nature of this class of asset in situations of major uncertainty and the revaluation of the monetary policy outlook. The US 10-year bond, which has even exceeded 2%, stands at around 1.85%, while the German bond has returned to negative territory after a month of trading at positive figures. The yield on the Spanish 10-year bond stands at around 1%, an increase of almost 60 basis points in the last three months. The spread between the Spanish and Italian 10-year bonds and the German bond (risk premium) has widened by 30 and 40 points compared with last year's average, to 100 and 155 basis points, respectively.

Yield on the ten-year bond (%), 3 March



Spanish interest rate curve (%)



Source: Refinitiv

The sovereign debt interest rate curve stands close to two-year highs, in the vicinity of the stress levels recorded at the start of the pandemic. Following a year, 2021, with interest rates close to all-time lows, the sovereign debt yield curve stands close to two-year highs. However, from a historical perspective, interest rates can be considered to be low.

For 2022, the Public Treasury proposes a borrowing schedule similar to that of last year, maintaining the goal of net issuance at the €75bn recorded at the end of 2021. The lower volume of amortisations will imply a 10% reduction in gross issuance in 2021. Compared with 2020, net issuance will be down by 31.8% and gross issuance by 14.3%. The Treasury's financing strategy is that all net financing will be obtained through the issuance of medium and long-term instruments, with a negative net issuance of short-term instruments.

In 2022, the Public Treasury will once again have the Next Generation EU funds as an additional source of financing. Specifically, the General State Budget for the coming year expects revenue of €20.23bn from this instrument.

Looking ahead to the coming years, a stabilisation of the gross borrowing in monetary terms is expected, which will gradually decrease in relation to GDP. After rising sharply as a result of the global financial crisis – from 5% of GDP in 2007 to 20% in 2010 – borrowing stabilised (lower as a percentage of GDP) over the following years. It then shot up in 2020 to 25%. Looking ahead to the coming years, a decrease in borrowing is expected as a result of the normalisation of the health situation. This decrease will be partly offset by the higher amortisations associated with a much higher level of debt, which will result in a stabilisation of gross borrowing in monetary terms, which will gradually decrease in relation to GDP.

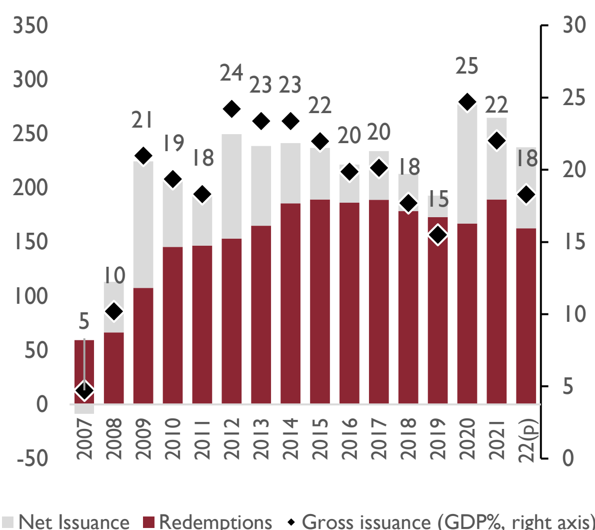
State debt has a low refinancing risk. The maturity profile of State debt shows well-distributed borrowing over the next few years, with moderate maturities in the short term and a granular distribution in the medium and long term, with no concentration of maturities in any one year.

Treasury borrowing in 2021 and 2022 (€bn)

(billions euros)	Initial fore. 2021	Execution 2021	Forecast 2022
Net Issuance	**100.0**	**75.3**	**75.0**
Gross Issuance	**289.1**	**264.3**	**237.5**
Medium and long term			
Gross Issuance	184.4	169.9	148.1
Redemptions	94.4	94.4	68.1
Net Issuance	90.0	75.5	80.0
Letras del Tesoro			
Gross Issuance	104.8	94.4	89.4
Redemptions	94.8	94.8	94.4
Net Issuance	10.0	-0.3	-5.0

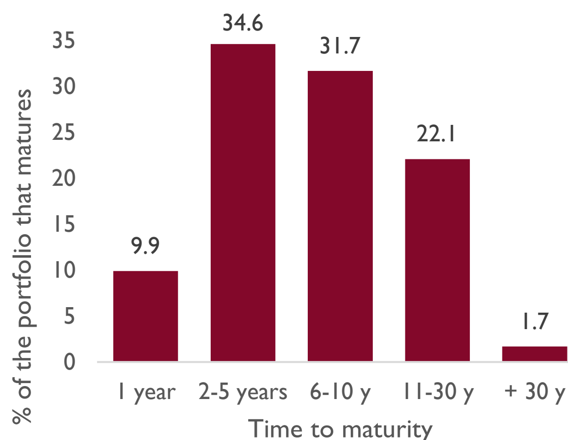
Source: Treasury

Treasury borrowing (€bn and % GDP)



Source: Treasury and AIReF

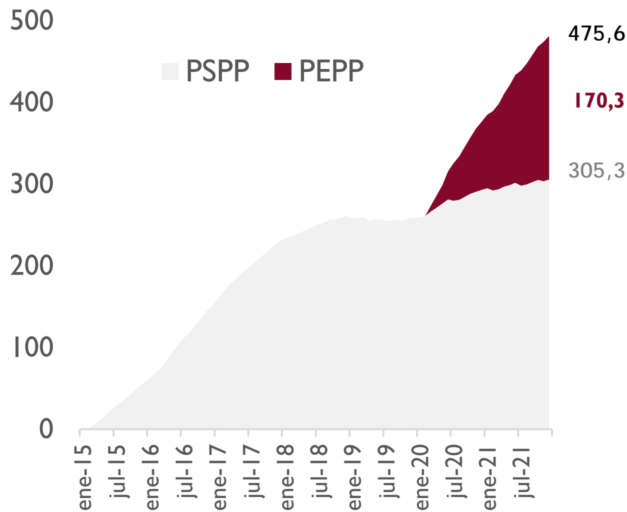
Maturity profile of State debt (Jan-21) (percentage of portfolio and maturity)



Source: Treasury and AIReF

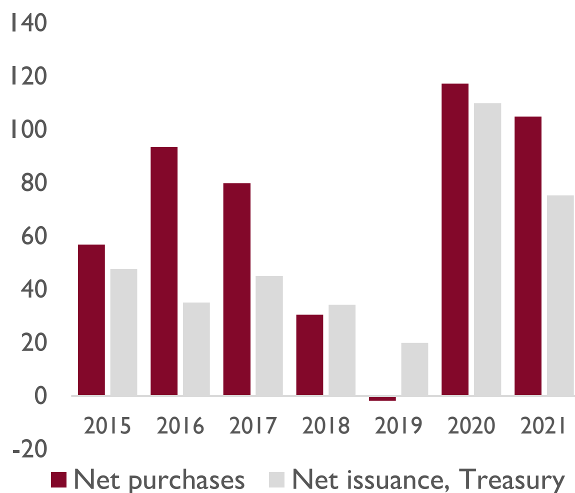
Purchase and distribution of Spanish public debt

Net cumulative purchases of Spanish debt by the ECB (€bn), 31 December



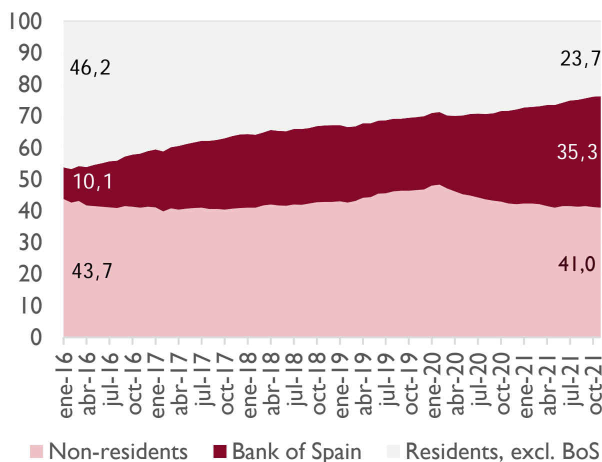
Source: ECB

ECB net purchases vs. Treasury net issuance



Source: ECB and Public Treasury

Holdings of government debt by investor type (%)



Source: Bank of Spain

Large-scale monetary policy support in response to the health crisis has helped to maintain very favourable financing conditions for public debt. The emphatic and swift action by the monetary policy body has avoided casting doubts about the sustainability of historically high debt levels accumulated following the pandemic. Thus, the Pandemic Emergency Purchase Programme (PEPP) has made it possible to maintain stability in European sovereign debt markets, with yields close to their historical lows, covering most of the extraordinary borrowing.

Over recent years, the ECB has made net purchases of Spanish debt for an amount greater than 100% of net borrowing. The ECB's various public asset purchase programmes initiated in 2015 and intensified in 2020 and 2021 have made the Bank of Spain one of the main holders of Spanish government debt, with its share of the total debt rising by 25 points over the last five years to around 35%. This increase in holdings has displaced part of the resident investor base, with non-resident investment in securities remaining stable at slightly over 40%.

Recent ECB Governing Council meetings point to a certain withdrawal of stimulus measures through the termination of purchasing programmes such as the PEPP. While it is true that the monetary authorities have signalled a certain withdrawal of stimulus measures, the door has always been left open to calibrate this type of non-conventional tool according to the evolution of the economic situation. This context of geopolitical crisis triggered by the invasion of Ukraine opens up a period of major uncertainty. A possible reduction in debt purchase programmes by the monetary authorities in the secondary market might add some pressure when the various national Treasuries issue large volumes of debt.

In the long term, the reduction in sovereign debt on the ECB's balance sheet might pose a major challenge that is not without risk as it will require the return of a significant part of the resident investor base that has been displaced over recent years.

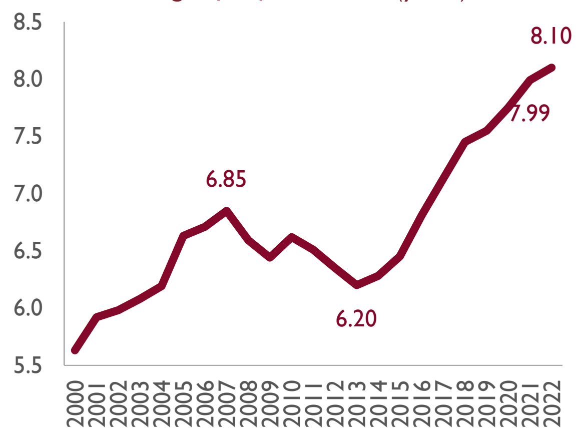
The invasion of Ukraine by the Russian army raises the risk of a scenario of stagflation in the European Union. The most important indirect economic impact of this war will be through price increases, causing even higher and more persistent inflation. A worsening of the supply crisis affecting the global economy as a result of the breakdown of global supply chains triggered by the COVID-19 crisis is also likely, together with a downward revision of growth forecasts and an accumulation of imbalances in some neighbouring countries. Geopolitical risk always implies volatility and polarises the evolution of equity markets and safe-haven assets such as sovereign debt.

Therefore, one of the main risks in the short term is that the current episode of high inflation becomes more persistent, unleashing upward spirals and second-round effects on labour costs that force the monetary authorities to take stronger actions. The pandemic has heightened the challenges associated with high levels of public debt, the future sustainability of which is strongly linked to the policies of the ECB. The swift action by the monetary policy body has avoided the resurgence of any doubt about the sustainability of historically high debt levels. The purchase of public assets through the Pandemic Emergency Purchase Programme (PEPP) has covered most of the extraordinary borrowing needs, while managing to place the entire yield curve at historic lows, minimising spreads between euro area countries. The current episode of inflation, which is higher and longer lasting than initially expected, is forcing a change in the monetary policy stance towards a less accommodative one with the withdrawal of stimulus measures (termination of the PEPP), clearing the way for an expected rise in interest rates, which is starting to be discounted in the markets with a steepening of the yield curve.

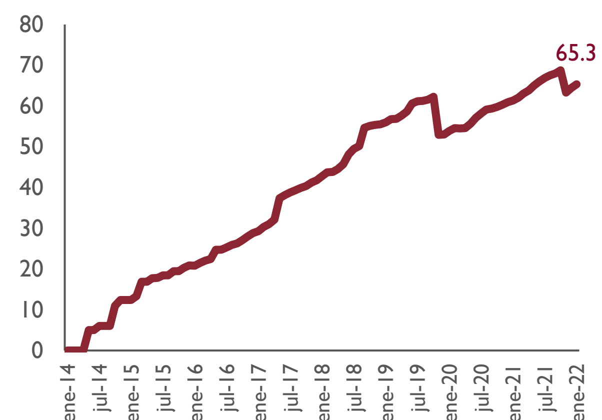
In the short term, a rise in sovereign debt interest rates would have a limited impact on the interest expense due to the high average maturity of the portfolio. However, in the medium and long-term, a low interest rate environment will be essential to alleviate the fiscal effort. The strategy of lengthening the average maturity of debt issues has generated some protection against possible interest rate rises, which, should they occur, would take eight years to be fully transferred to the average rate of the portfolio. Although in the short term the impact of a rise in rates is small, in the medium and long term, the impact would end up being very significant in the evolution of the financial burden and, if not offset by adjustments in other expenditure or revenue items, in the debt path.

Beyond the transfer of inflation expectations to nominal debt yields, the increase in prices has a direct and substantial impact on the financial burden. The exposure to inflation through the portfolio of government bonds linked to European inflation has been increasing since the start of the programme in 2014, with a value of €65.3 billion in January 2022. This exposure means that, for example, the ECB's latest upward revision in the inflation forecast for 2022 (1.5 points higher) will represent an increase in the financial burden of close to €1bn.

Average life of State debt (years)



Outstanding debt indexed to inflation (€bn)



Source: Public Treasury

The COVID-19 crisis has raised, albeit not very significantly, the refinancing risk. Gross borrowing will grow in the coming years as a greater stock of debt is repaid. Once again, the strategy implemented by the Public Treasury of lengthening the average maturity of the debt portfolio, together with its appropriate management of the maturity profile, will mitigate this risk. In the long term, the reduction of sovereign debt on the ECB's balance sheet might pose a major challenge that is not without risk as it will require the return of a significant part of the resident investor base that has been displaced over recent years.

The increase in contingent liabilities through the Guarantee Lines poses a risk in the short and medium term, although its impact is limited. In 2020, the Government approved the implementation of two lines of guarantees for a joint amount of up €140bn aimed at guaranteeing the financing granted to self-employed workers and Spanish companies affected by the economic effects of COVID-19. This has led to a significant increase in contingent liabilities. At the end of January 2022, the COVID-19 Guarantee Lines had deployed guarantees for an amount in excess of €100bn. Although there is a significant risk that part of the COVID-19 Guarantee Lines will be enforced, the impact of the materialisation of these contingent liabilities on government debt is limited and does not, in itself, endanger its sustainability.

The expected increase in healthcare spending and pension spending as a result of the ageing population is one of the main risks for the sustainability of public finances in the medium and long term. Higher structural expenditure that is not covered by additional revenue will lead to a very significant rise in debt from levels that are already very high in historical terms.