



ECOCHARTS

PUBLIC FINANCES

Public debt will increase in most countries
by 2030

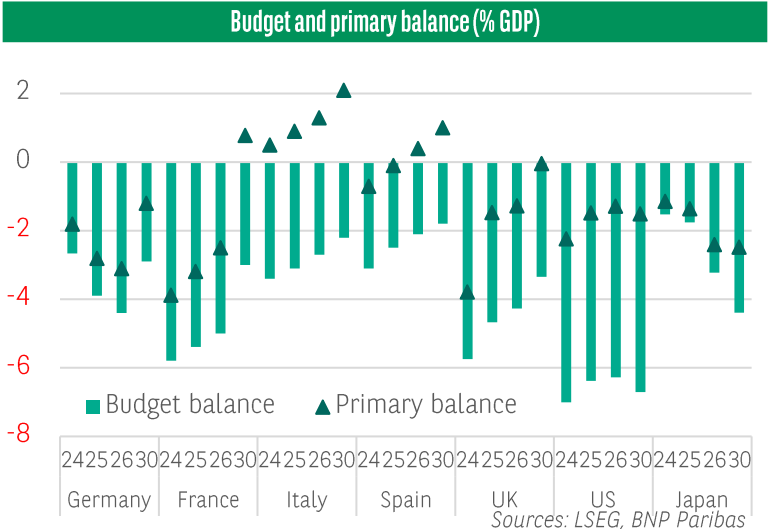
November 2025



BNP PARIBAS

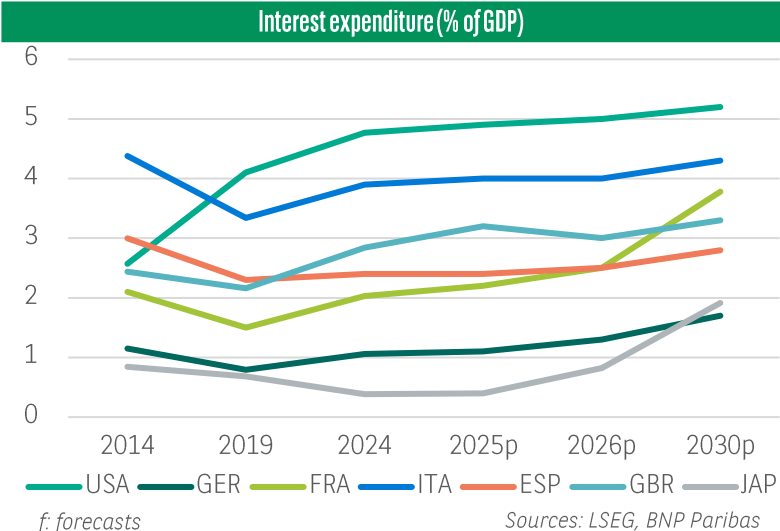
The bank
for a changing
world

SUMMARY: Public debt set to increase in most countries by 2030



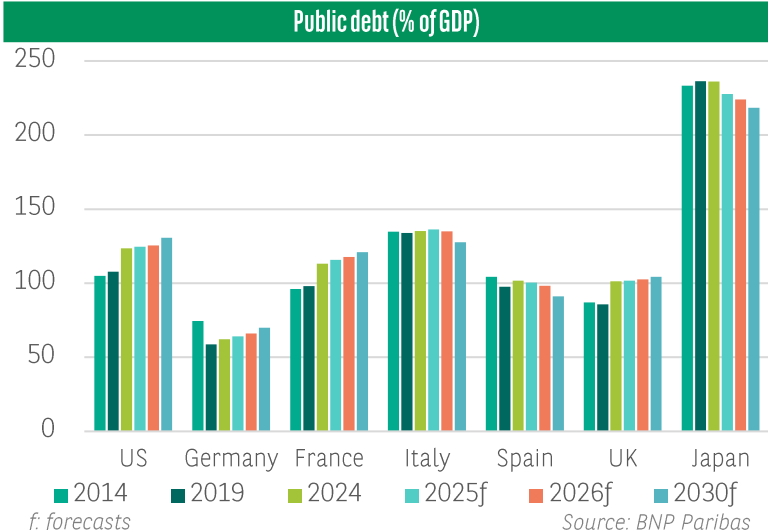
In the major advanced economies, public deficits remain high, particularly in the United States, the United Kingdom and France, where fiscal consolidation is expected to continue. However, the effort required to reduce the primary deficit would be partly offset by an increase in interest payments.

Italy and Spain are expected to continue to post more moderate deficits, mainly due to their ability to generate primary surpluses, which are expected to increase further. Japan and Germany are expected to see their budget balances deteriorate in 2025–26, due to an increase in spending in line with the priorities of the governments that came to power in 2025. In Germany, however, this development is expected to be followed by consolidation, bringing the public deficit back below 3% in 2030.



Interest expenditures are expected to rise in countries where they are currently low – Germany, Japan and France – and stabilise at a high level in countries where they are currently higher – Spain and Italy – without, however, increasing (the effect of the reduction in the public debt ratio offsetting the rise in apparent interest rates).

In the United Kingdom, the slowdown in inflation (24% of debt is indexed) would limit interest expenditure, despite the rise in interest rates. In the United States, interest expenditure would increase further under the dual effect of high interest rates (despite the reduction in the average maturity of debt) and an increase in the public debt-to-GDP ratio.

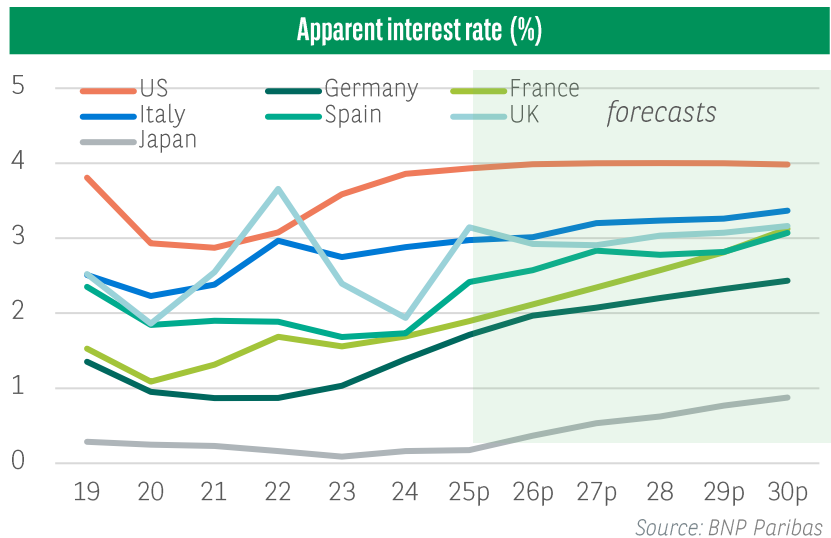
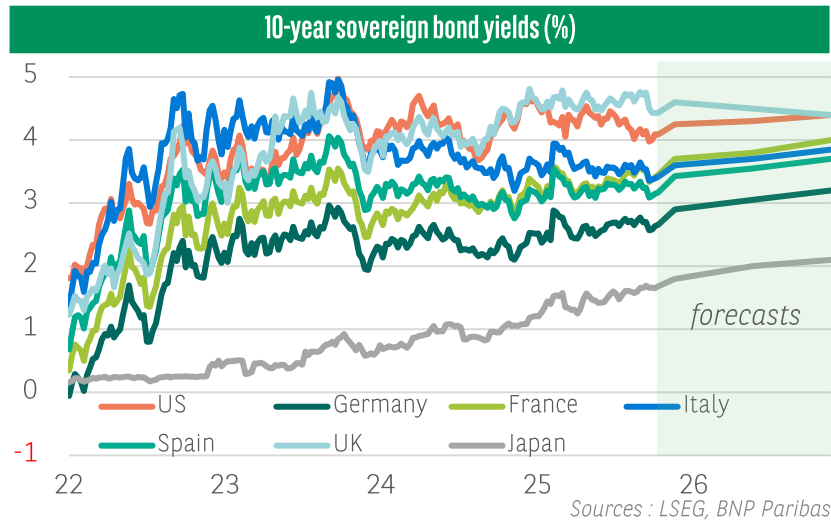


By 2030, according to our forecasts, the dynamics of the public debt-to-GDP ratio would reflect differences in public deficit scenarios. The increase would therefore be significant in the United States, the United Kingdom and France. In the latter two countries, however, it would slow down by the end of the decade due to fiscal consolidation. This will not be the case in the United States, where consolidation is expected to remain marginal.

Germany would see a moderate rebound in its public debt. In Italy, Spain and Japan, the public debt ratio would decline. In Japan, the anticipation of a more pronounced deficit, due to the political choices of the new government, would not slow this decline (due, in particular, to historically high inflation for the archipelago and its impact on real interest rates).



Public finance indicators



		Germany	France	Italy	Spain	UK	US	Japan
Average residual maturity (years)	Oct. 2025	9.0	8.0	7.0	9.0	14.3	5.8	9.5
	Dec. 2019	8.0	7.8	6.9	7.6	15.7	5.8	9.2
Net debt¹ (% of GDP)		47.4	104.9	125.1	87.3	93.7	97.4	133.9
% short-term debt (less than 1 year)		4.4	7.3	4.3	4.1	2.7	21.6	3.6*
% debt held by non-residents		70.0	55.4	33.1	45.8	33.4	34.1	12.2
% debt indexed to inflation		3.4	11.0	8.3*	5.9	23.9	7.0	1*
Share of debt held by the Central Bank	Oct. 2025	34.2	22.5	22.0	48.8	23.3	20.8	40*
	Dec. 2019	33.3	21.4	18.1	24.9	23.0	18.9	42*
Primary expenditure (% of GDP)		48.4	55.1	46.5	42.6	41.2	29.6	38.7
Structural expenditure² (% of primary expenditure)		70.4	73.8	73.6	75.3	81.0	83.5	77.0
Revenue (% of GDP)		46.8	51.4	47.1	41.8	38.3	27.3	37.6

*Central government data

¹Net debt: sum of all liabilities minus financial assets that are debt instruments (IMF)

²Expenditure on defence, law enforcement, health, education and old age

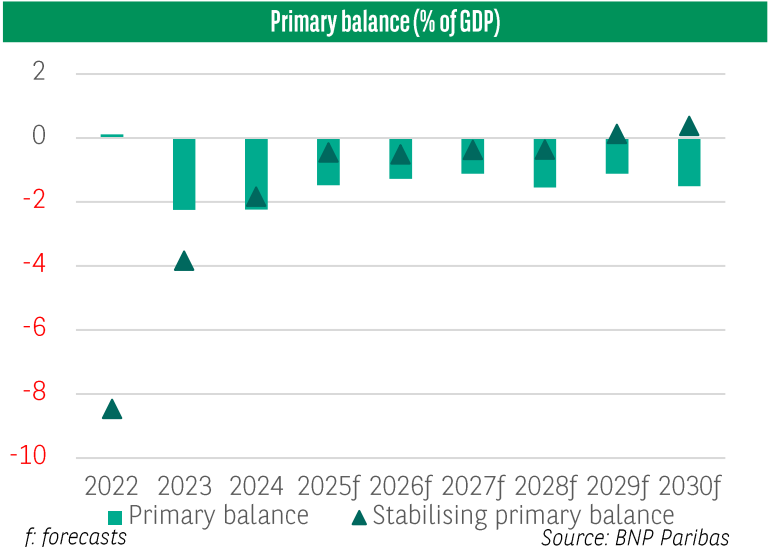
Sources: IMF, European Commission, OECD, national sources



BNP PARIBAS

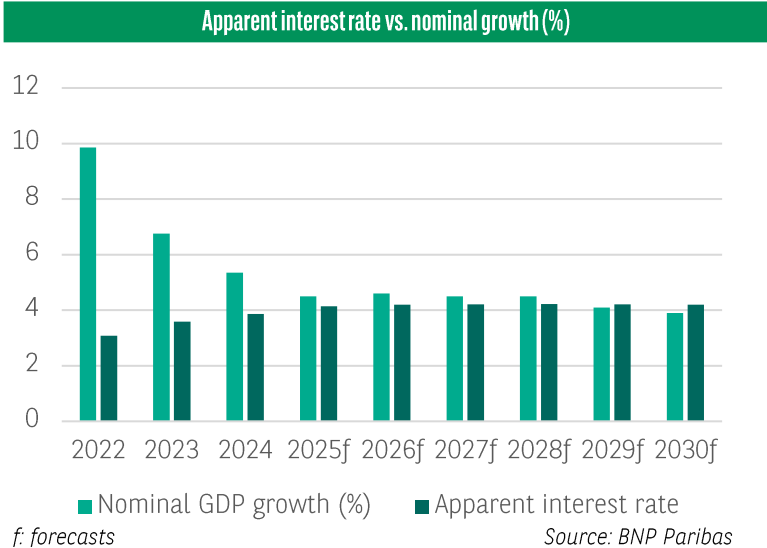
The bank for a changing world

UNITED STATES: High interest rates will prevent any reduction in the budget deficit (1)

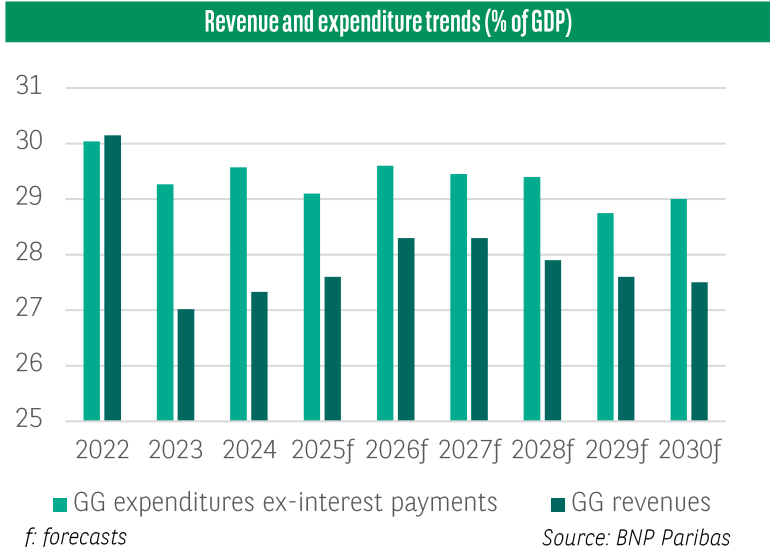


The US primary deficit is expected to narrow in 2025 and stabilise at around 1.0–1.5% of GDP in the coming years thanks to higher customs revenues.

However, the deficit would not fall below the level needed to stabilise public debt, mainly due to relatively high interest rates.



The excess growth relative to the apparent interest rate is expected to dissipate. This is the main consequence of the end of above-average growth from 2025 (1.9%) onwards (1.9% until 2027). In the short term, nominal growth will remain buoyed by persistent inflation (between 2.5% and 3.0%), a phenomenon that is likely to erode by the end of the decade.

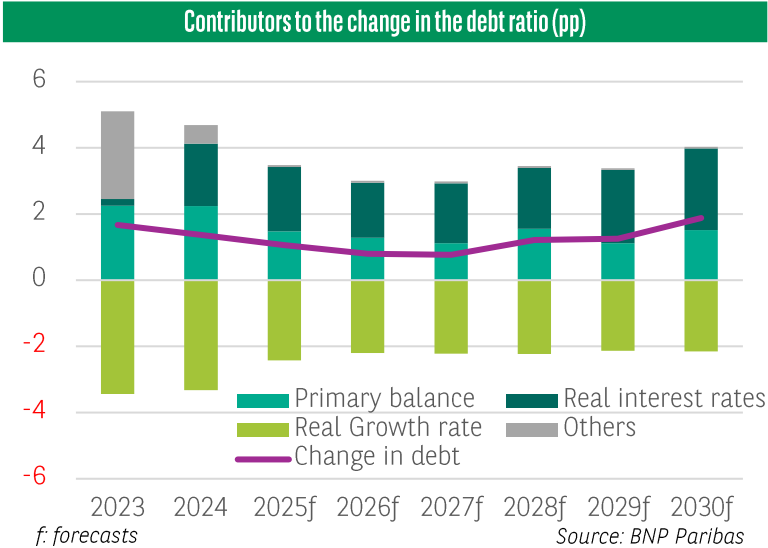


Primary public expenditure in the United States is expected to remain relatively stable until 2030, within a range of 29–30% of GDP. The variations are due to the provisions of the One, Big, Beautiful Bill Act (OBBBA), notably the reform of student loans, whose downward effect on expenditure is concentrated in 2025, followed by increased security and defence spending from 2026 onwards.

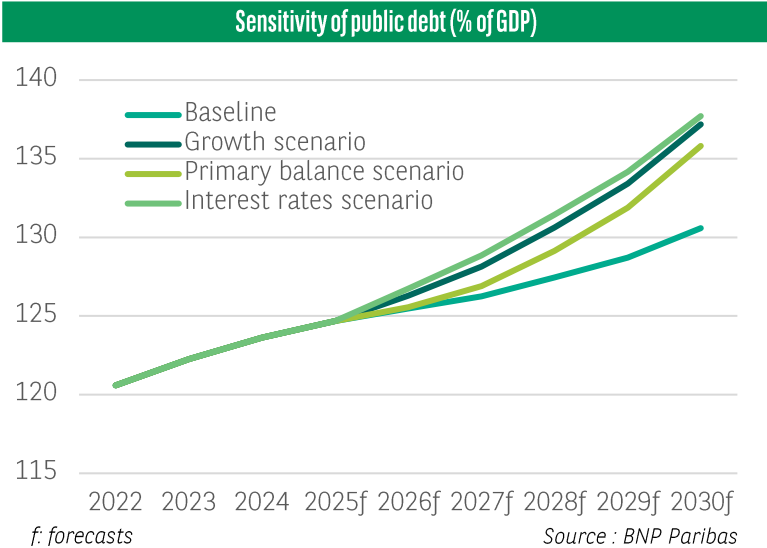
On the revenue side, the tax structure inherited from the Tax Cuts and Jobs Act (TCJA, 2017) is preserved, with the addition of revenue from additional customs duties. As a result, the share of revenue in GDP is expected to grow by one percentage point to 28.3% between 2024 and the end of Donald Trump's term of office.



UNITED STATES: High interest rates will prevent any reduction in the budget deficit (2)

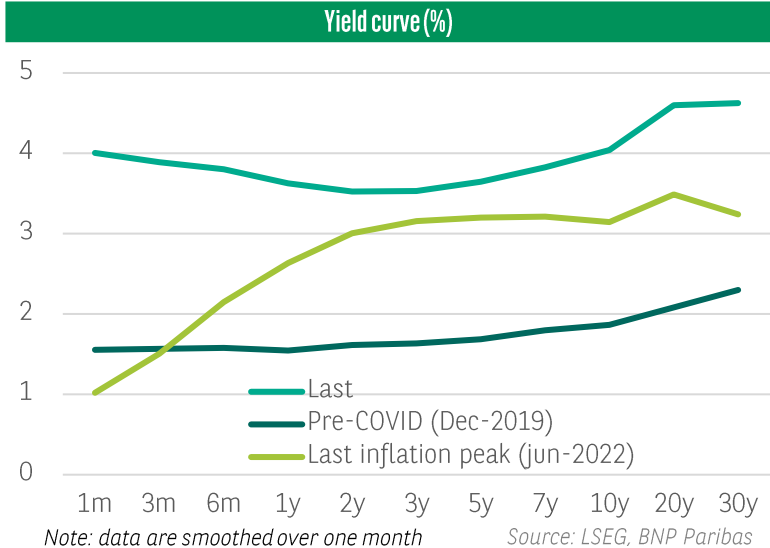


The increase in the public debt-to-GDP ratio is expected to continue but will be limited by continued high nominal growth. The real interest rate is the main cause of the increase in public debt due to its impact on interest charges, even though this effect remains lower in absolute terms than that exerted by real growth. As these effects increasingly neutralise each other over time, it is the level of the primary deficit that is expected to lead to a moderate increase in public debt.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

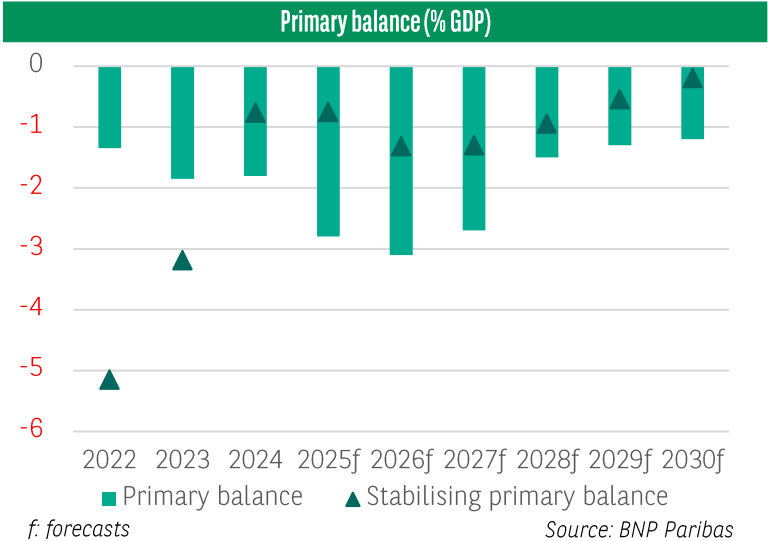
Alternative scenarios could lead to a more pronounced increase in US public debt (relative to GDP). An interest rate shock would be damaging given the already growing and predominant share of debt servicing in the baseline outlook. The same argument also applies to the alternative scenario of lower growth, which would leave growth below the apparent interest rate. With the US economy close to full employment, a larger fiscal stimulus, leading to a widening of the primary deficit, would not stimulate growth enough to stem the rise in public debt.



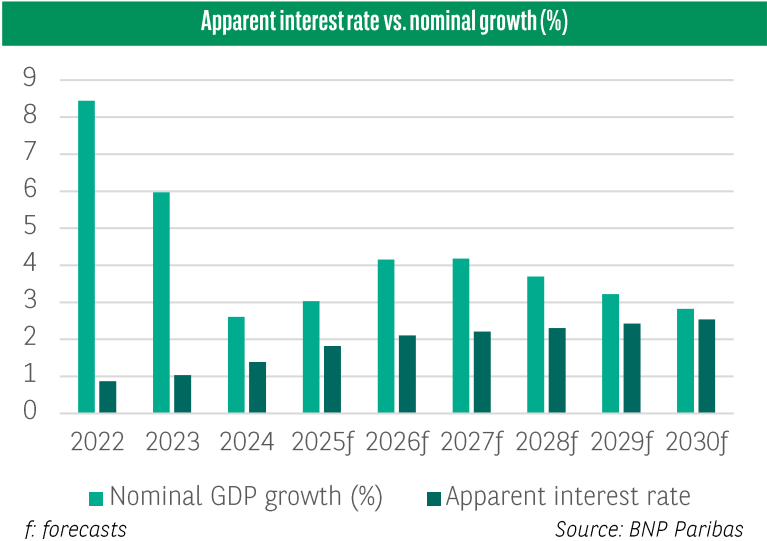
Interest rates have risen significantly in recent years for several reasons: post-pandemic inflation, deteriorating public finances and monetary tightening. The relative steepening of the current yield curve on longer maturities reflects new or greater concerns about the sustainability of US debt. For the time being, the large budget deficit and the lack of reduction are keeping debt at a high level, which fuels its sensitivity to a possible interest rate shock on short maturities.



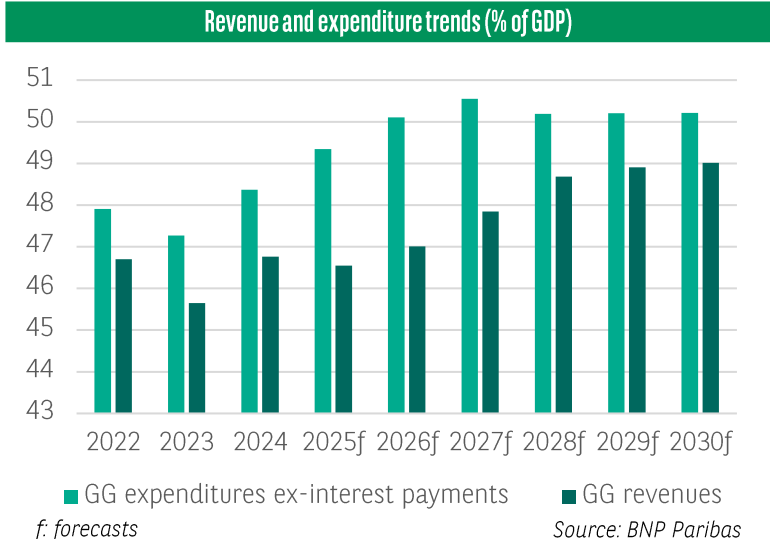
GERMANY: Moving towards a controlled increase in public debt (1)



Germany's primary deficit is expected to widen over the next two years as a result of the new fiscal strategy, before gradually narrowing between now and 2030. The primary deficit has recently exceeded the debt-stabilising balance, and this gap is expected to widen in the coming years. Consolidation measures are expected to slow the growth of public debt, but not to stem it entirely. Given the rise in the average interest rate on debt at the end of the period, stabilising debt will require a stronger improvement in the primary balance than is currently expected.



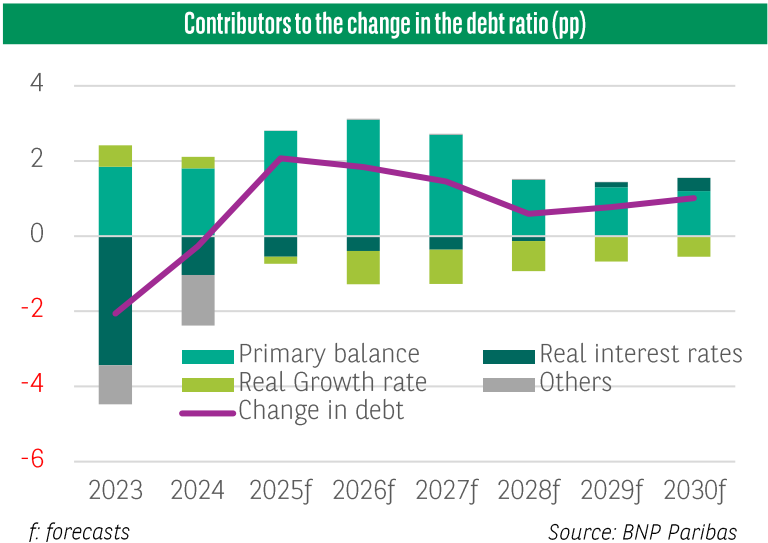
Germany should continue to benefit from relatively low interest rates. The apparent interest rate should remain well below nominal growth, even if the interest burden is set to increase as the rise in long-term rates is passed on to the apparent rate. Nominal growth should recover as a result of a sharp rebound in real growth (+0.3% in 2025 and +1.4% in 2026, according to our estimates), thanks to the massive investment plans implemented in the country. Therefore, the differential between nominal growth and the apparent interest rate would remain favourable, even if it narrows towards the end of the decade.



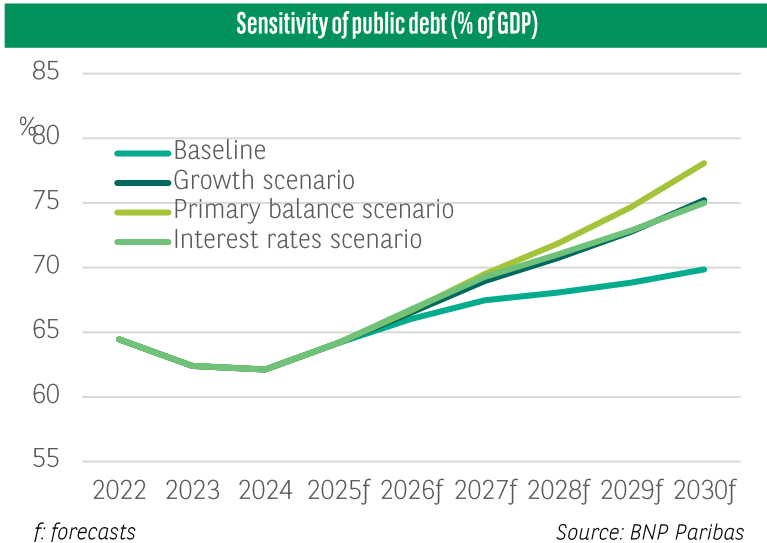
Germany has obtained the European Union's approval for its new fiscal policy, while the constitutional debt brake rule continues to apply to the federal budget but includes more exceptions (special funds for infrastructure and defence spending above 1% of GDP). Higher public spending is expected to be the main cause of the increase in the public deficit. In the medium term, with the rebound in growth, an upturn in public revenue is likely. Fiscal consolidation is also likely. It will undoubtedly focus on both expenditure (excluding interest charges) and revenue – unless there is a lasting reform of the debt brake, which is unlikely given the balance of power in parliament and the requirement for a qualified majority.



GERMANY: Moving towards a controlled increase in public debt (2)

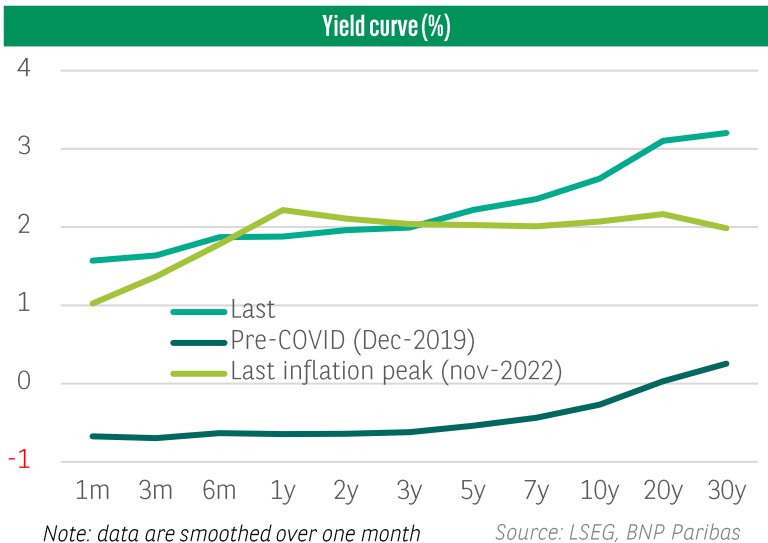


A measured increase in public debt is likely. German public debt is expected to continue to rise, exceeding 69% of GDP at the end of the forecast period (2030), compared with 62.1% in 2024. This increase is mainly due to the new fiscal stance and the resulting widening of the primary deficit. The real interest rate would cease to have a downward effect on the debt ratio; however, the rebound in real growth from 2026 onwards would limit the increase in the public debt ratio.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

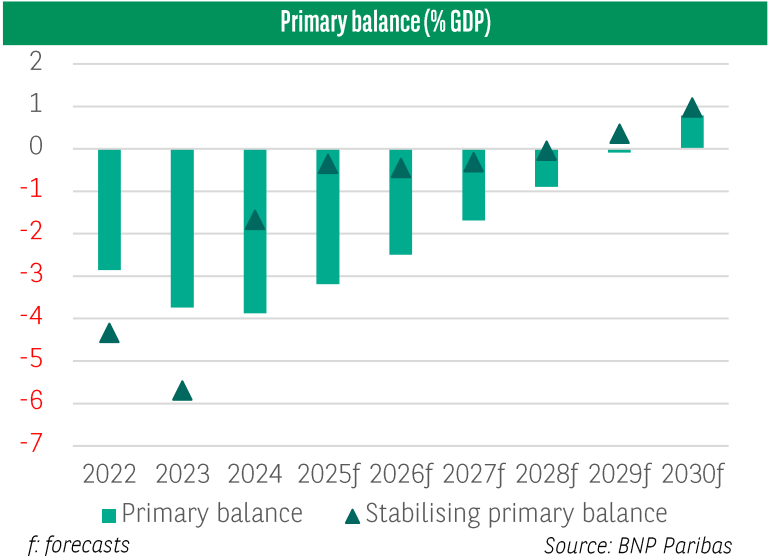
Fiscal consolidation is the most decisive factor in the trajectory of public debt. In the alternative scenarios, debt dynamics deteriorate systematically. A larger primary deficit is unlikely in the short term, due to the debt brake rule. However, without consolidation (which we anticipate from 2027-28 onwards), the public debt-to-GDP ratio would rise more sharply. Lower growth or a more pronounced rise in interest rates would, by comparison, have a more moderate impact. This sensitivity to the public balance reinforces the need for and likelihood of rapid fiscal consolidation, in line with our central scenario.



The steepening of the yield curve is likely to lead to an increase in the interest burden. The prospect of rising debt has already pushed up long-term rates, and this trend is likely to continue with the increase in bond issuance expected between now and the end of 2027. Ultimately, fiscal consolidation would exert a moderating pressure, but the expected easing of long-term rates would remain limited – and with it the easing that other eurozone member countries could benefit from.

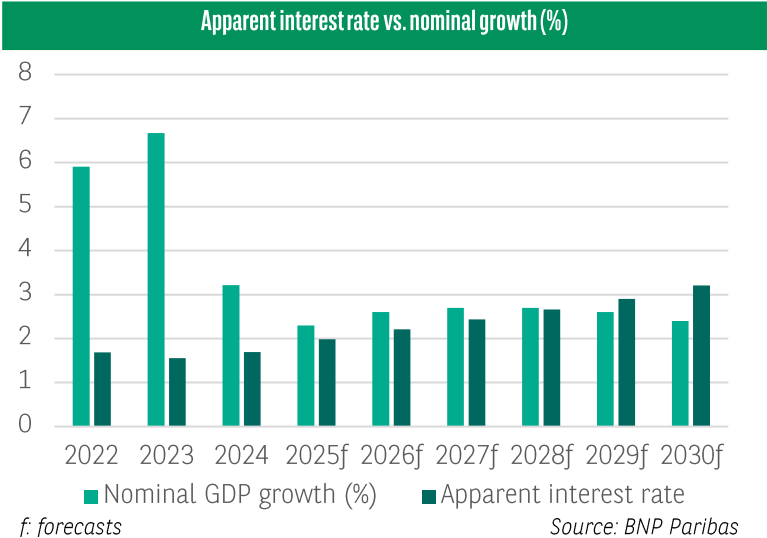


FRANCE: Public debt will continue to rise before stabilising at the end of the decade (1)



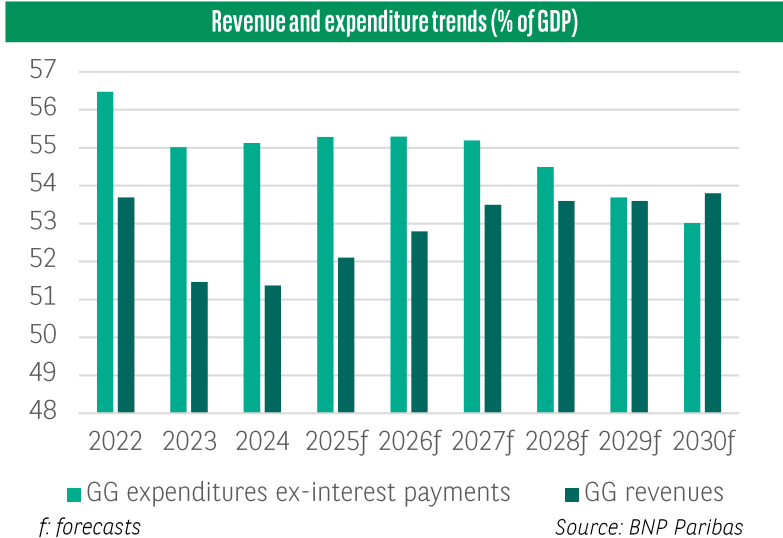
France's primary budget balance deteriorated until 2024. According to the High Council of Public Finances (HCFP), it improved in 2025. However, the deficit remains too high to allow public debt to stabilise.

Despite consolidation, which is set to continue from 2026 until the end of the decade, the primary deficit will remain worse than the stabilising balance (public debt will therefore increase).



Real growth is expected to rebound in 2026 (1.1%) and 2027 (1.3%) and therefore no longer penalise public finances. At the same time, the increase in the apparent interest rate reflects the rise in interest rates since 2022.

After 2027, the return of GDP growth to its potential (1.1%) and moderation in inflation would erode nominal growth. The rise in the apparent interest rate would push it above nominal GDP growth from 2029 onwards.

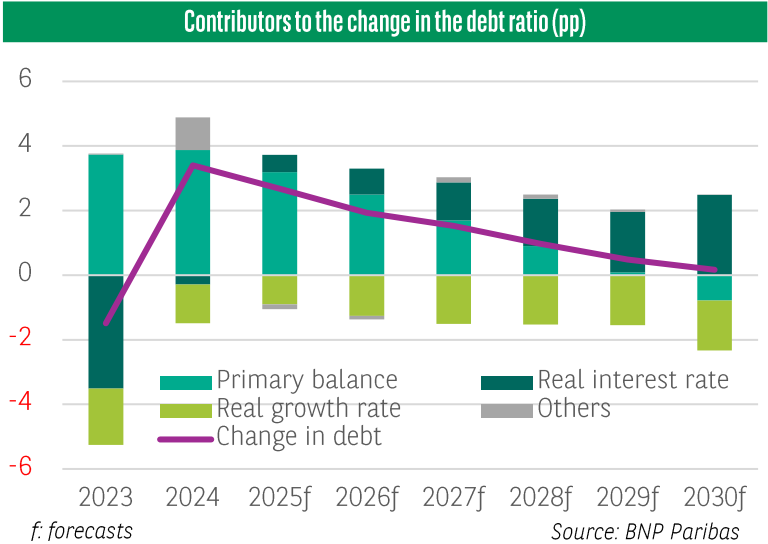


In 2025, fiscal consolidation would be based entirely on increased revenue, according to the latest opinion of the HCFP. The indexation of social spending and the increase in key expenditure (defence, police and justice) would have offset the slowdown in central- and local-government expenditure.

In 2026 and 2027, the adjustment would once again come through increased revenue, while expenditure would follow the same trend (new defence spending, increased contribution to the EU budget, and indexation of social benefits). Therefore, revenue would ultimately return to its share of GDP observed until 2022.

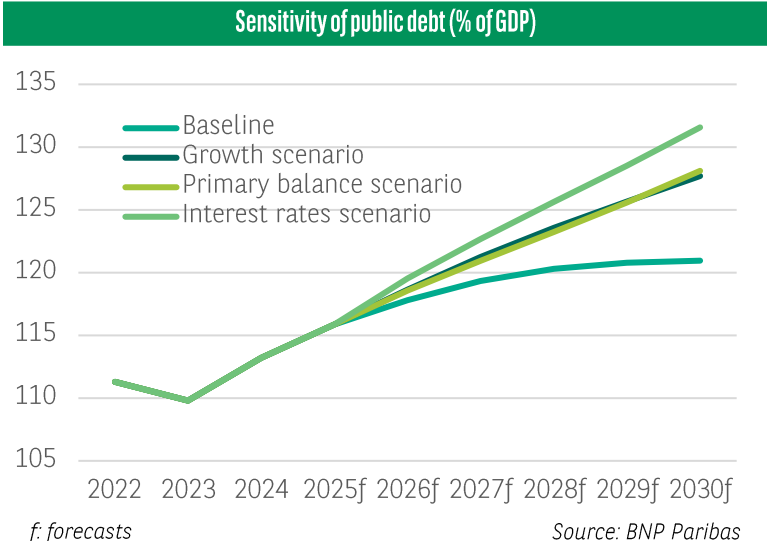


FRANCE: Public debt will continue to rise before stabilising at the end of the decade (2)



The persistence of a high primary deficit led to a rebound in the public debt ratio in 2024, especially as the decline in inflation enabled a sharp rebound in the apparent real interest rate (previously strongly negative). The decline in real growth was also a negative factor. From 2025 onwards, the real interest rate contributed to the rise in the debt ratio, while consolidation remained too moderate to reverse this trend.

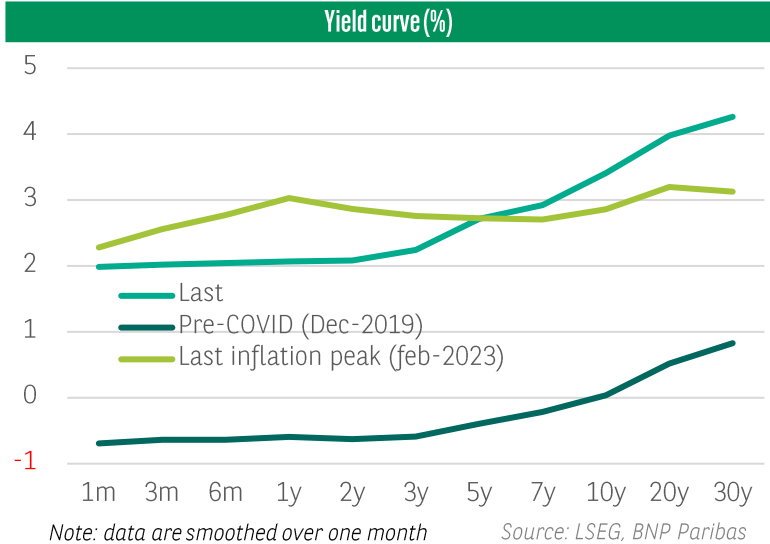
Thereafter, continued consolidation and a rebound in real growth would help to curb the rise in the debt ratio. It would stabilise in 2030, provided that the improvement in the primary balance offsets the gradual rise in the real effective interest rate.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

In our central scenario, the public debt ratio would stabilise in 2030 at around 120% of GDP (113% in 2024) with the public deficit returning to 3% of GDP. Given the sharp increase in interest expenditure, this stabilisation would require a primary surplus of around 0.8 percentage points of GDP in 2030 (a surplus that France last achieved between 1998 and 2001).

The risk scenario that would have the greatest impact relates to interest rates. However, this is also the least likely scenario, as French interest rates depend in part on European conditions (particularly German rates).

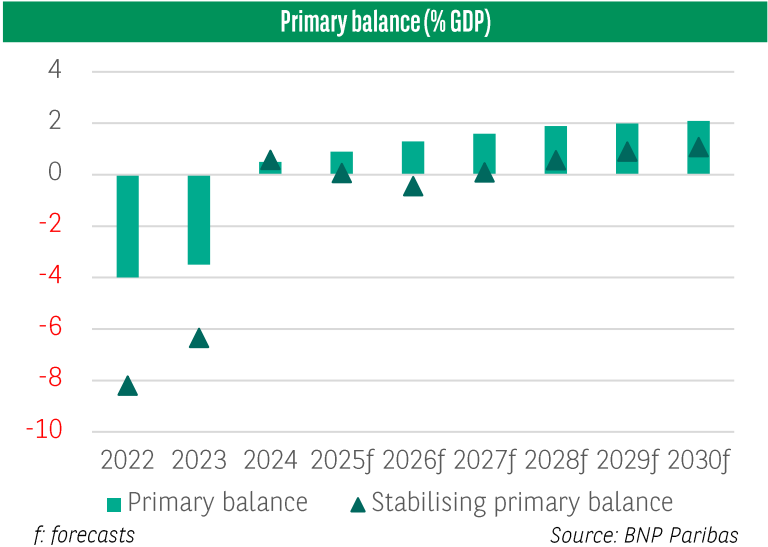


The rise in interest rates is evident after COVID. Its relatively recent nature has limited the impact on interest expenditure. However, the relative steepening of the yield curve should eventually have an impact on the latter, as the average maturity of public debt is relatively high (8.5 years).

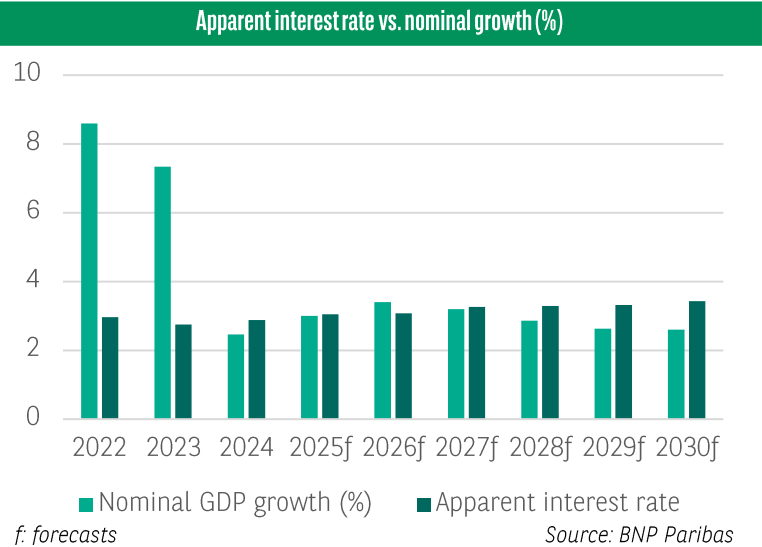
While short maturities have benefited from the ECB's rate cuts, long-term rates have continued to rise, penalised by political uncertainty, the increase in public debt and the rise in German rates.



ITALY: Public debt ratio to remain high despite a relative decline (1)

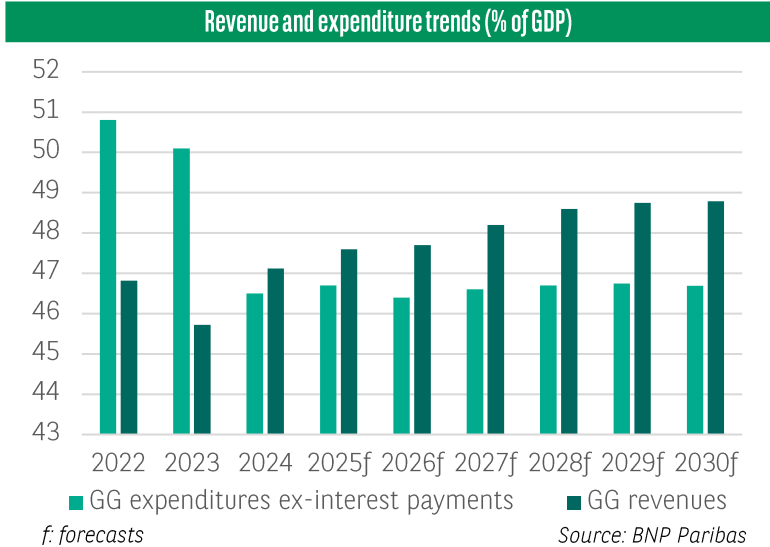


The primary surplus is expected to increase until 2030. The primary balance went from a deficit of 4% of GDP in 2022 to a surplus of 0.5% in 2024, thanks to the removal of support measures put in place after the pandemic, the citizen's income and the "superbonus". The primary surplus is expected to increase over the next few years, reaching 2.1% in 2030.



Until 2027, nominal growth (3.2% on average) is expected to remain higher than the apparent interest rate (3.1%) due to an acceleration in real growth (0.9%), which will enable a reduction in public debt during this period. Inflation is expected to gradually slow down, reaching 1.8% in 2030.

However, from 2028 onwards, debt is expected to decline at a more moderate pace, as the apparent interest rate (3.3%) is expected to rise above nominal growth (2.7%), which is expected to weaken at the end of the period to return close to its potential (0.8%).

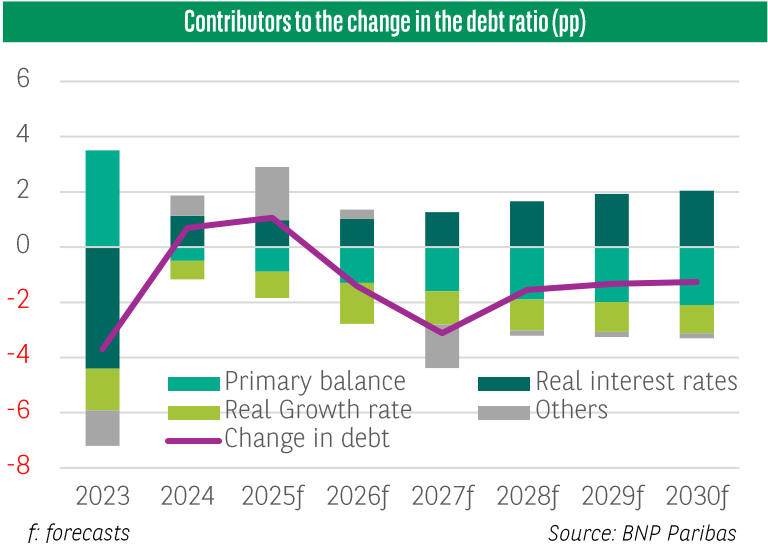


Public expenditure (excluding interest expenditure) is expected to increase gradually towards the end of the decade, mainly due to higher defence expenditure.

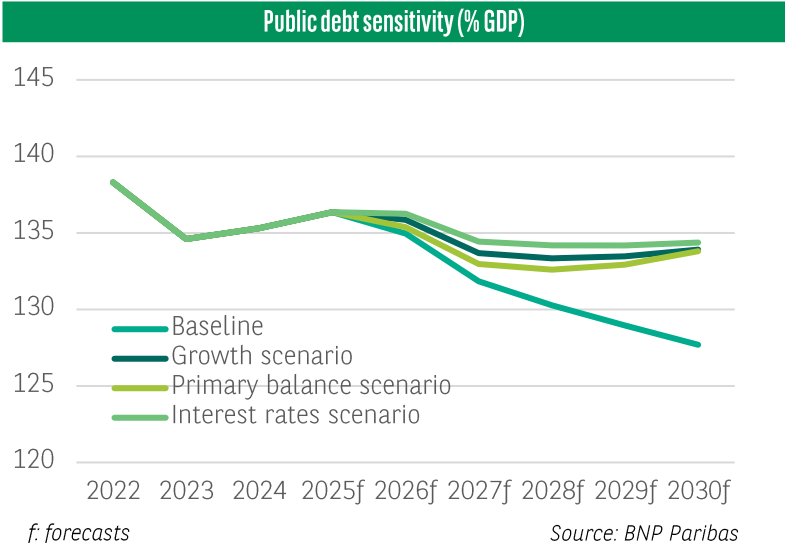
Public revenue will remain higher than expenditure, even in 2026, when a reduction in income tax for the middle classes is expected to take effect. This will enable an increase in the primary surplus.



ITALY: Public debt ratio to remain high despite a relative decline (2)



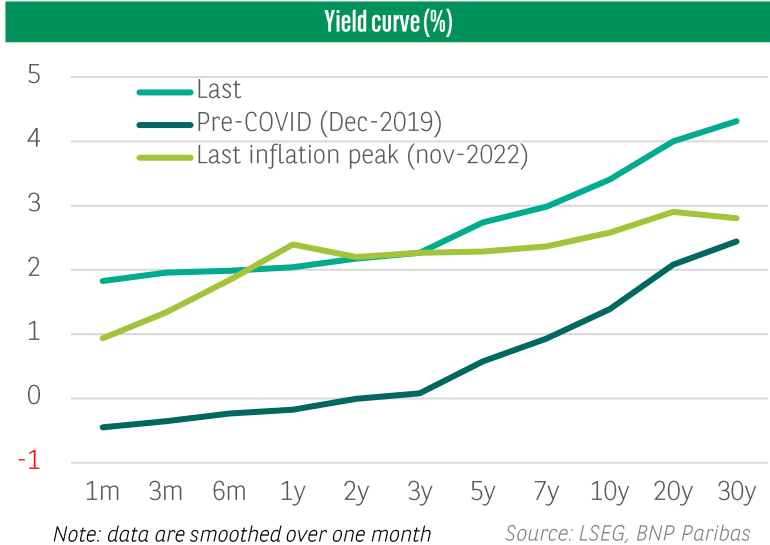
In 2025, public debt is expected to increase (136.4% of GDP) due to European rules on accounting for the superbonus. According to our forecasts, debt should then decrease (131.8% by 2027), thanks to continued strong growth above the real interest rate and an increasingly large primary surplus. From 2028 onwards, debt reduction is expected to be more limited. Although primary surpluses are expected to increase, the real interest rate is expected to rise as inflation falls, putting slightly more pressure on public debt dynamics.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

Although it is expected to decline between now and 2030, Italy's public debt is likely to remain among the highest in Europe.

The reduction in Italy's public debt ratio appears to be fairly sensitive to changes in growth, the primary balance and interest rates. Such shocks would prevent a reduction in public debt from 2028 onwards (and limit it before then). Ultimately, it would remain fairly high (close to 135% of GDP) if growth were to disappoint, if the government decided not to increase the primary surplus, or if interest rates were to rise (with a relatively similar impact on the public debt ratio).

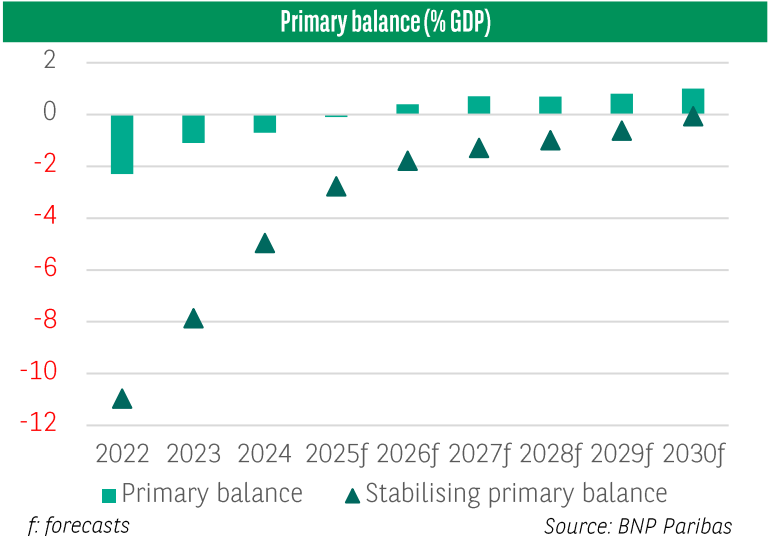


Steepening of the yield curve. While the inflationary peak in November 2022 caused the yield curve to flatten, it has now returned to a slope close to that observed in the pre-COVID period but significantly shifted upwards.

Long-term interest rates have risen, but more moderately than in other countries. At around 3.4% for 10-year bonds and 4.3% for 30-year bonds, they are close to the levels seen in France. However, as Italy's debt was already high before the COVID pandemic, interest rates were already significant on long maturities: therefore, the increase is less dramatic than in several European countries (France and Germany, in particular), where 10-year rates were negative.

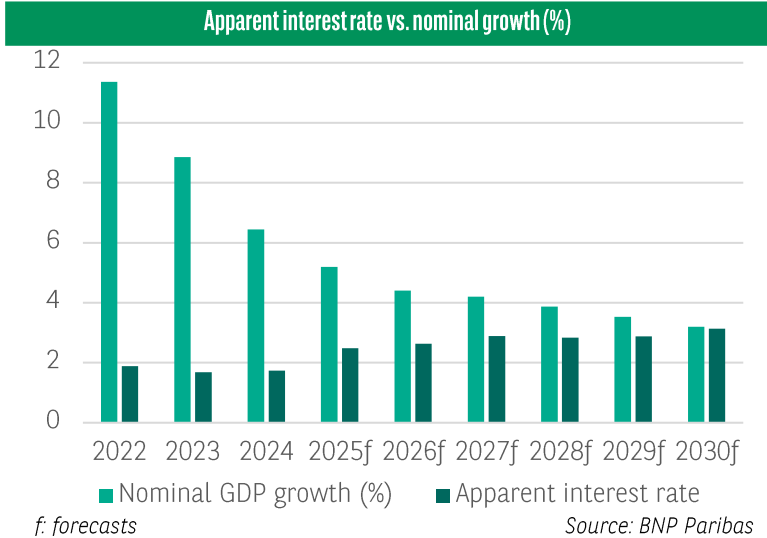


SPAIN: Moving towards a reduction in public debt amid strong growth (1)



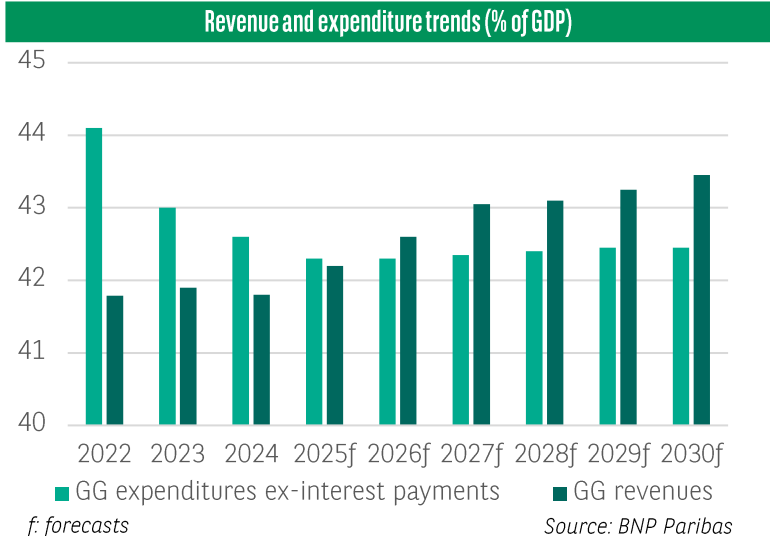
Spain is expected to generate primary surpluses from 2026 onwards. The primary deficit fell from 2.3% of GDP in 2022 to 0.7% in 2024, thanks to the removal of support measures put in place after the pandemic and the renewal of state budgets since 2023. The deficit is expected to narrow to 0.1% in 2025, and then turn into a surplus, which will increase until 2030 (+1.0%).

The stabilising primary balance would remain below the primary balance, enabling a reduction in public debt. From 2028 onwards, however, the gap between the two balances would narrow, implying a smaller reduction in debt in the medium term.



Until the end of the decade, nominal growth (4.1% on average) is expected to remain higher than the apparent interest rate (2.7%), due to continued dynamic real growth (2.0%) and inflation close to 2%. This will enable a reduction in public debt during this period.

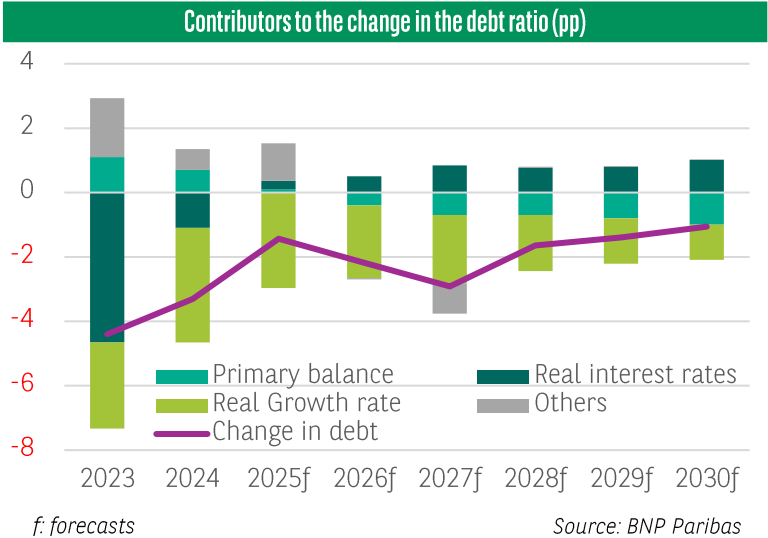
Nevertheless, the debt ratio is expected to gradually stabilise at around 90% by 2030, with the apparent interest rate (3.1%) becoming very close to nominal growth (3.2%).



Public expenditure (excluding interest expenditure) is expected to remain fairly stable (as a percentage of GDP) until 2030. This is because the renewal of the 2023 budget for a third consecutive year is almost certain and could continue as long as the government remains in a minority in Parliament; moreover, the government has decided not to increase its defence spending to meet the threshold required by NATO.

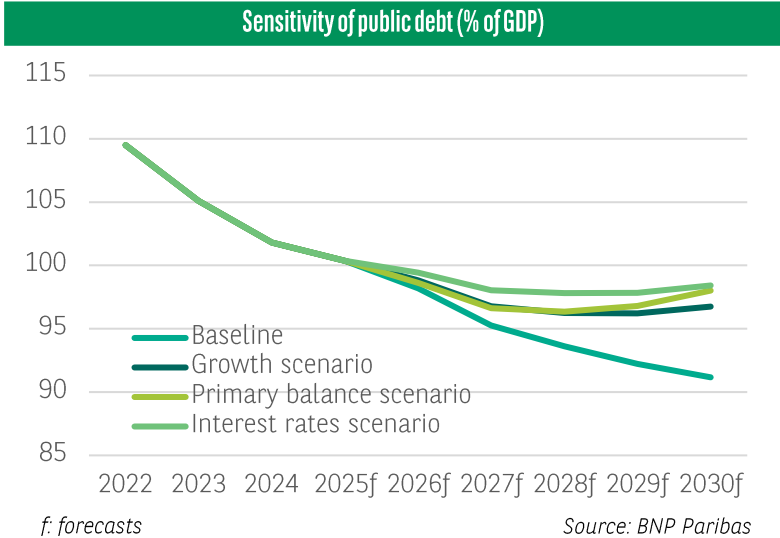
From 2026 onwards, public revenue as a share of GDP will exceed expenditure. Such strong public-revenue growth, driven by robust domestic consumption and a healthy labour market, will lead to the emergence of a primary surplus, which will then increase.

SPAIN: Moving towards a reduction in public debt amid strong growth (2)



Public debt is expected to continue falling until the end of the decade. It will be driven down by high real growth, which will clearly predominate in a climate where real interest rates are only expected to have a moderate impact from 2026 onwards.

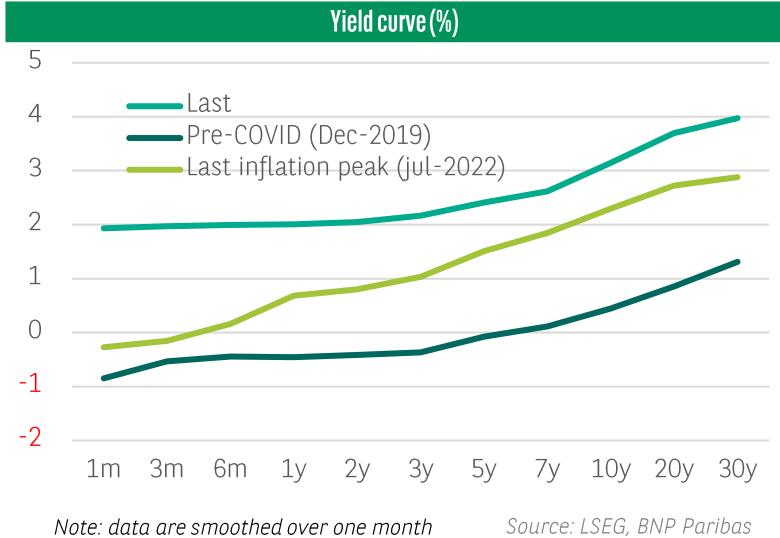
From 2027 onwards, the debt ratio is expected to decline less sharply. The economy is expected to approach full employment by that time, which would affect real growth.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

Public debt would fall below 100% of GDP by 2026 (101.8% in 2024) and reach 91.2% in 2030, according to our central scenario.

The three adverse scenarios would prevent public debt from falling below 95% of GDP (particularly if the government decided not to generate a primary surplus). In these situations, public debt would stabilise before rising slightly at the end of the decade.

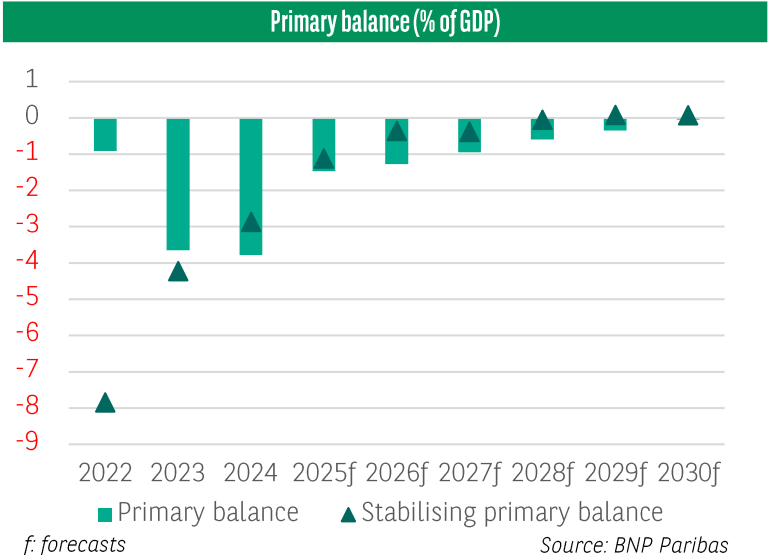


Moderate steepening of the yield curve. In contrast to what is observed in Italy, the inflationary peak of 2022 led to a steepening of the yield curve in Spain.

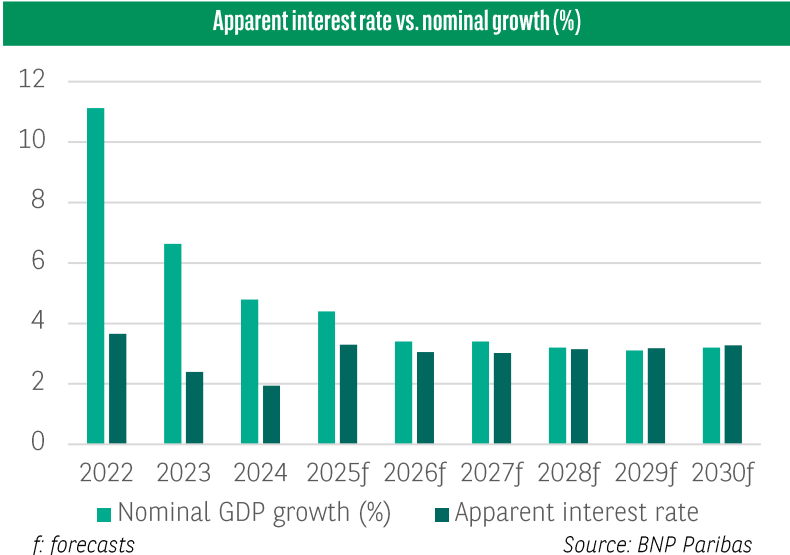
Since then, the yield curve has flattened for short and medium maturities. Only longer maturities have seen rates rise (3.1% for 10-year bonds and 4% for 30-year bonds). However, they remain low compared with France and Italy.



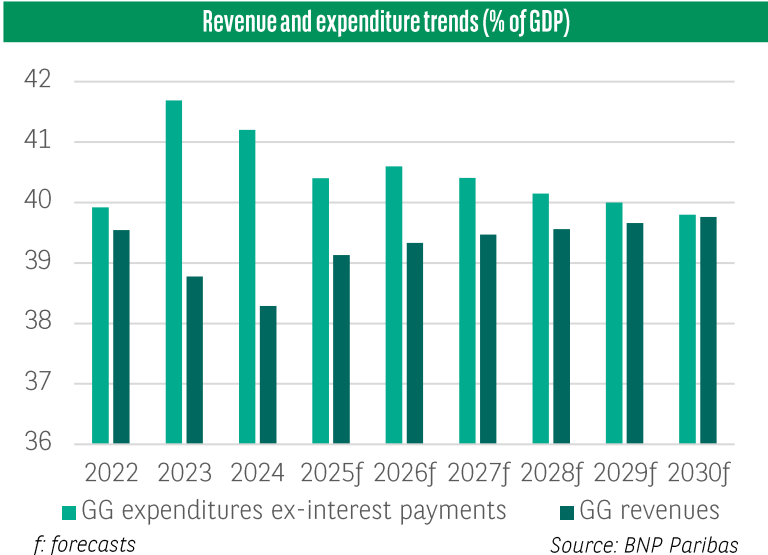
UNITED KINGDOM: Debt trajectory under control but significant upside risks (1)



The primary budget balance has gradually recovered post-COVID, mainly supported by improved growth, but remains high compared to the rest of Europe. Nevertheless, structural adjustments were significant in 2025, particularly on the revenue side. This momentum is expected to continue in 2026 (the outlines of the 2026 budget will be unveiled on 26 November during Rachel Reeves' autumn speech). **Assuming that consolidation continues (guided by compliance with fiscal rules), the primary balance would return to equilibrium by 2030**, improving the sustainability of public finances. This is because the primary balance would then reach a level that would enable public debt to stabilise by that date.



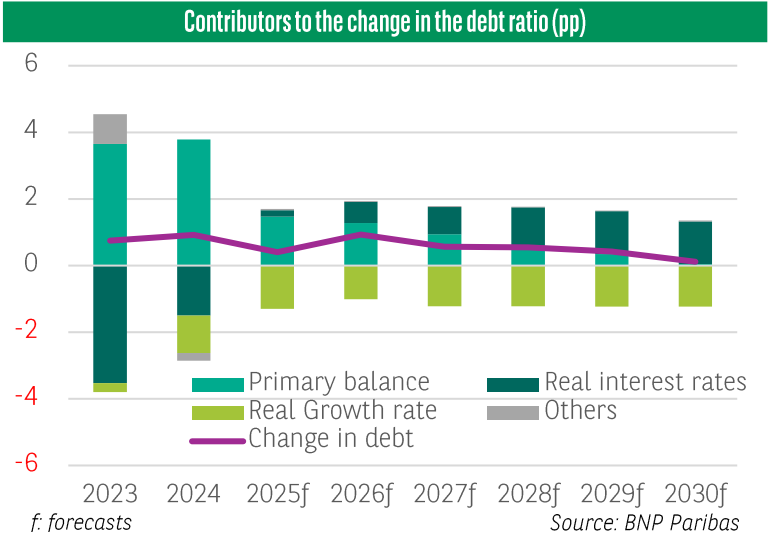
The gradual decline in inflation towards the 2% target (by 2028), as well as the fairly limited pace of economic growth, will reduce the dampening effect on debt dynamics. Real GDP growth would strengthen slightly to 1.3% in 2025, followed by a slowdown to 1.0% in 2026. Growth would then stabilise at its potential rate (1.2%). The apparent interest rate will stabilise between 3.0% and 3.2% over the projection horizon (the effect of the rise in fixed interest rates will be offset by the decline in inflation, with 24% of the debt being indexed to it).



By 2027, we anticipate that the bulk of the fiscal adjustment will come from revenues, particularly with the continued increase in certain taxes. Subsequently, the balance of the fiscal adjustment between revenues and expenditures will be better distributed in order to not overly burden activity in the run-up to the 2029 general election. Therefore, revenue as a share of GDP would increase by 1.2 percentage points between 2024 and 2027, then by 0.3 percentage points at the end of the decade. Public expenditure (excluding interest expenditure) would decline as a share of GDP to a lesser extent in 2024-2027 (-0.8 pp), before falling a further 0.6 pp by 2030.

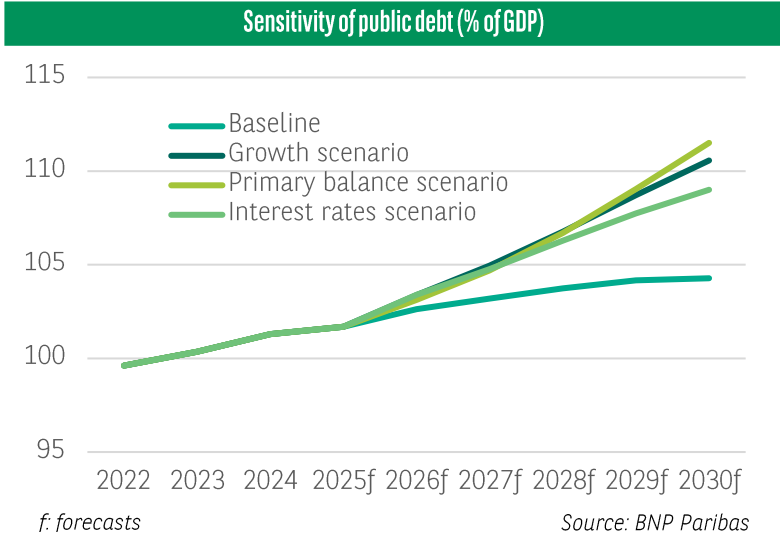


UNITED KINGDOM: Debt trajectory under control but significant upside risks (2)



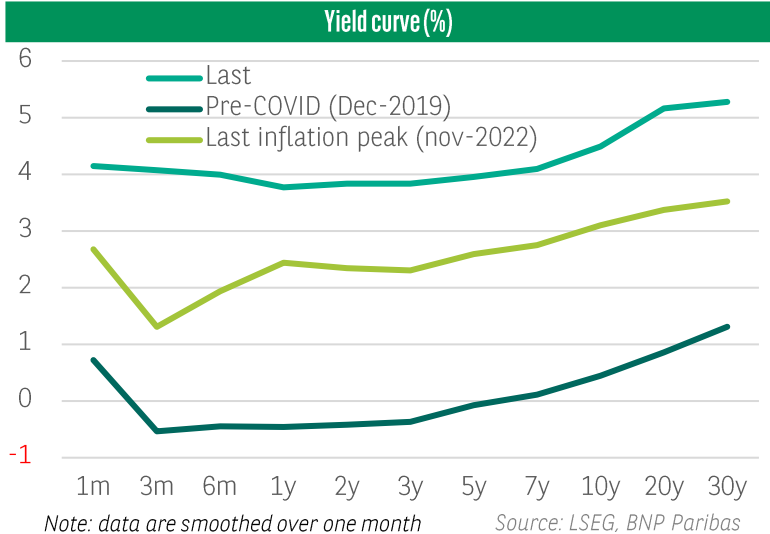
The sharp decline in the primary deficit due to structural adjustment efforts will be the main contributor to the slowdown in the rise of the debt ratio. It will more than offset the increased pressure from real interest rates, which will be the main unfavourable factor from 2028 onwards. However, the rise in real interest rates will be moderated between now and 2027 by the impact of lower inflation on the apparent rate of indexed debt.

The real growth rate is expected to decline at a relatively stable rate over the next five years.



Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

In our central scenario, the debt ratio would stabilise below 105% of GDP by the end of the decade. However, a more pronounced growth or deficit shock would significantly reverse this trend and cause the debt ratio to rise above 110% of GDP. The scenario of rising interest rates appears less damaging in the medium term, as the average residual maturity of the debt (14 years) is relatively high, and the proportion of inflation-indexed bonds (24%), whose yield will be mitigated by the slowdown in inflation, is significant.

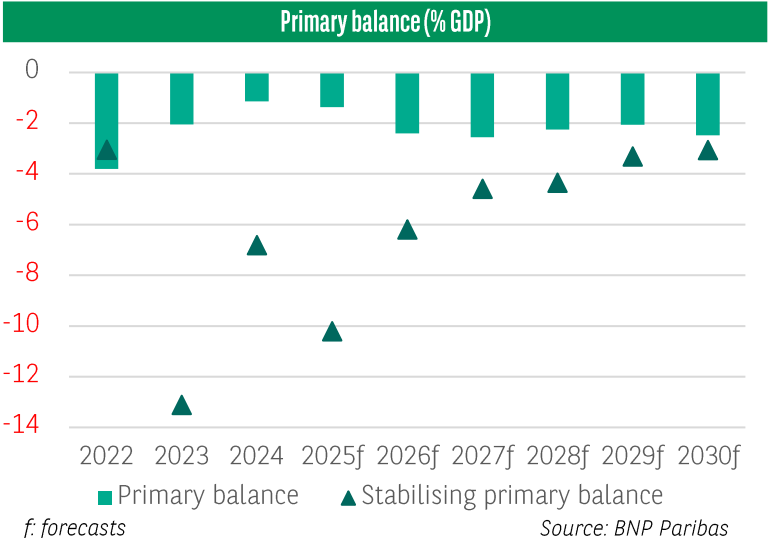


The yield curve has shifted significantly upwards compared to pre-COVID levels and the last peak in inflation.

The curve remains high but not very steep, as still high key policy rates by the BoE is limiting the decline in short-term rates. Moreover, they are only expected to fall moderately, given the limited number of rate cuts expected from the BoE (two more according to our forecasts), leading to a high terminal rate (3.5%). Long-term rates have fallen since September 2025, but expectations of persistent inflation and the prospect of a further increase in public debt by the end of the decade are limiting this decline.

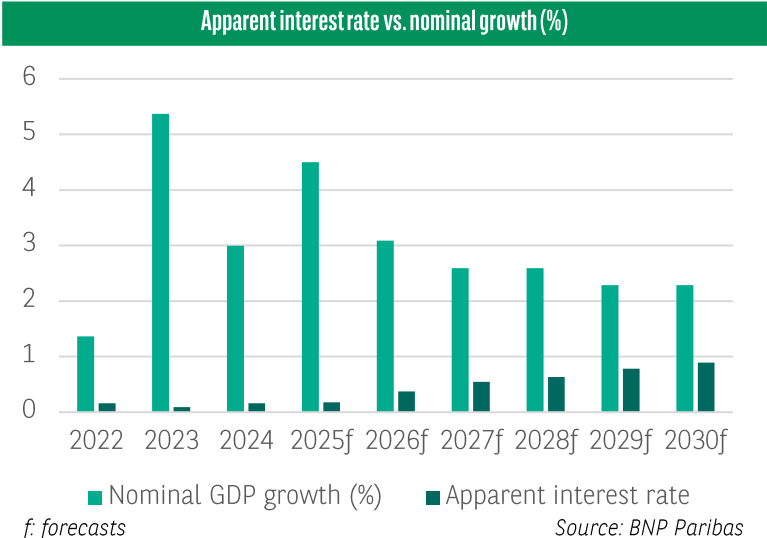


JAPAN: Decline in debt ratio based on fragile foundations (1)

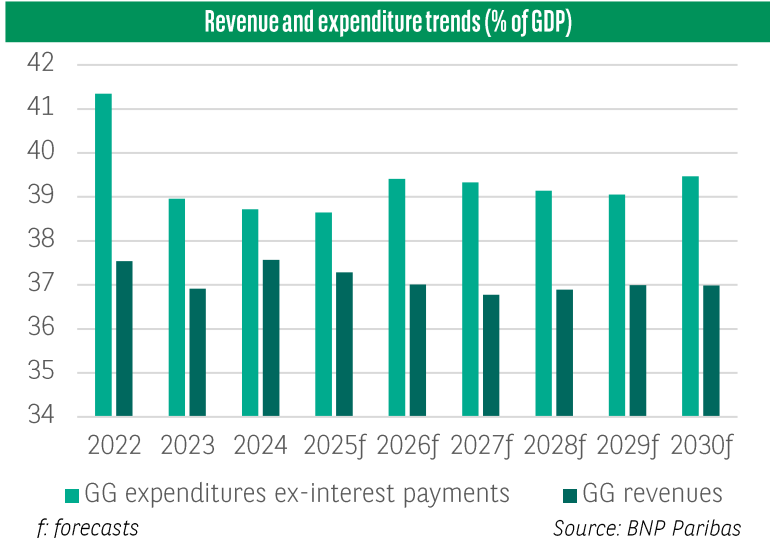


Japan's primary deficit is expected to narrow in 2025 but is likely to increase again to around 2% of GDP in the coming years due to upward pressure on public spending.

These deficit levels would not prevent, at least in the short term, a reduction in public debt enabled by higher inflation, which will not be offset by higher interest rates in the short term.



The gap between nominal growth and the apparent interest rate is expected to narrow but remain significant. This is the main consequence of the new inflation regime (above 2% y/y since April 2022, compared with an average of 0.1% between 2000 and 2021) and an economy growing at around its potential level (estimated at 0.6% annual). The effect of the recent rise in bond yields will gradually feed through to the apparent rate. Thus, the gap with nominal growth should remain favourable, enabling public debt to decline despite the continued primary deficit.

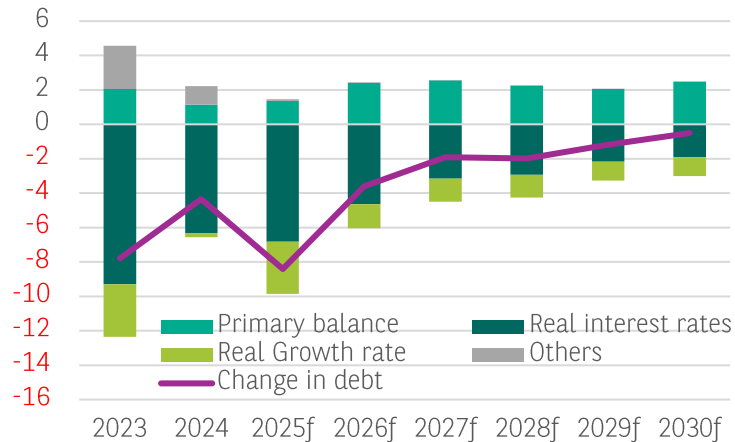


Japan's primary public expenditure is expected to remain significantly high (above 39% of GDP) compared to its pre-pandemic level (36.5% in 2019), due to the needs associated with an ageing population and defence requirements. It should be supported by the regular passing of supplementary budgets aimed at supporting households against inflation. On the revenue side, we expect revenues to remain stable after the sharp post-pandemic increase driven by higher repatriated profits.



JAPAN: Decline in debt ratio based on fragile foundations (2)

Contributors to the change in the debt ratio (pp)

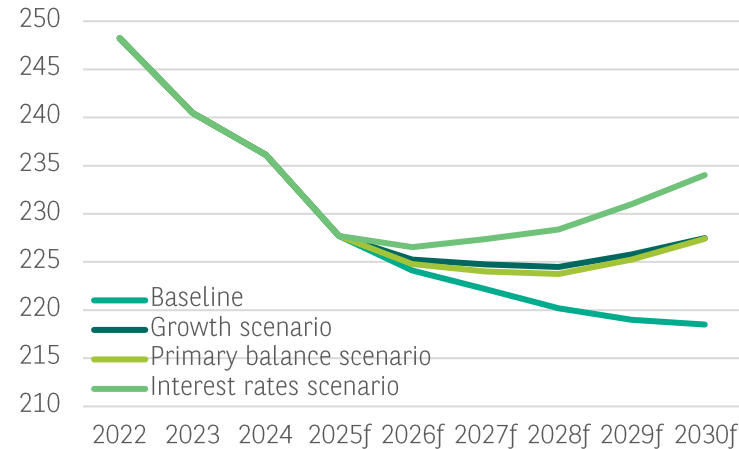


f: forecasts

Source: BNP Paribas

The decline in the public debt-to-GDP ratio is expected to slow, with public debt stabilising at the end of the decade. Initially, the nominal effect linked to inflation (negative real interest rates) will continue, supporting the sustainability of primary deficits. As this effect dissipates, against a backdrop of debt rollover at higher rates coupled with limited growth prospects, the primary deficit will gradually gain more weight in the dynamics of public debt.

Sensitivity of public debt (% of GDP)



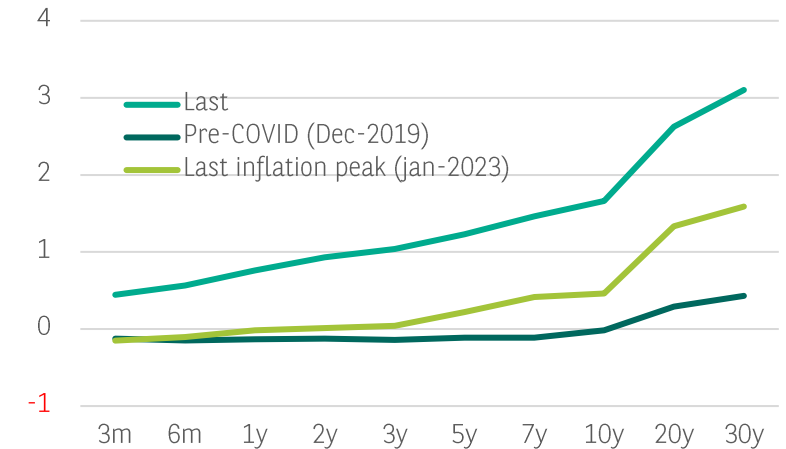
f: forecasts

Source: BNP Paribas

Please note: the "growth" and "primary balance" scenarios incorporate a negative shock to growth and to the deficit of 0.5 pp of GDP per year compared to the central scenario, respectively; the "interest rate" scenario incorporates a 1 pp increase in the apparent interest rate.

The alternative scenarios highlight the fragility of Japan's situation, despite the significant decline in the public debt-to-GDP ratio that we anticipate in our central scenario. A more significant interest rate shock would cause the public debt ratio to rebound sharply from 2028 onwards. A more marked deterioration in the primary balance or a deterioration in growth would have a similar impact, preventing any further reduction in public debt beyond 2026.

Yield curve (%)



Note: data are smoothed over one month

Source: LSEG, BNP Paribas

Japan now has to contend with significantly higher interest rates. These have risen sharply in recent years due to a combination of factors: post-pandemic inflation, deteriorating public finances and a reduction in the pace of purchases by the Bank of Japan (BoJ). The steepening of the current yield curve on longer maturities reflects growing concerns about the sustainability of Japan's public debt, despite its recent decline.



BNP PARIBAS

The bank for a changing world

- **Net public debt:** gross public debt minus deposits, negotiable debt securities and loans held by public administrations on other actors.
- **Primary balance:** budget balance excluding interest expenditure. It measures the difference between public revenue and public expenditure, excluding interest expenditure from public expenditure.
- **Stabilising primary balance:** primary budget balance that would stabilise the public debt-to-GDP ratio in year N at the same level as in year N-1.
- **Apparent interest rate:** ratio between the interest expense of general government in year N and public debt in year N-1. The apparent interest rate can therefore be interpreted as the average effective interest rate on public debt.



Isabelle Mateos y Lago Group Chief Economist	+33 1 87 74 01 97	isabelle.mateosylago@bnpparibas.com
Hélène Baudchon Deputy Chief Economist, Head of Global Macroeconomic Research	+33 1 58 16 03 63	helene.baudchon@bnpparibas.com
Stéphane Alby Maghreb, Middle East	+33 1 42 98 02 04	stephane.alby@bnpparibas.com
Lucie Barette Europe, Southern Europe	+33 1 87 74 02 08	lucie.barette@bnpparibas.com
Anis Bensaidani United States, Japan	+33 1 87 74 01 51	anis.bensaidani@bnpparibas.com
Céline Choulet Banking Economics	+33 1 43 16 95 54	celine.choulet@bnpparibas.com
Stéphane Colliac Head of Advanced economies – France	+33 1 42 98 26 77	stephane.colliac@bnpparibas.com
Guillaume Derrien Europe, Eurozone, United Kingdom – World Trade	+33 1 55 77 71 89	guillaume.a.derrien@bnpparibas.com
Pascal Devaux Middle East, Western Balkans – Energy	+33 1 43 16 95 51	pascaL.devaux@bnpparibas.com
Hélène Drouot Latin America	+33 1 42 98 33 00	helene.drouot@bnpparibas.com
François Faure Head of Country Risk – Türkiye	+33 1 42 98 79 82	francois.faure@bnpparibas.com
Salim Hammad Head of Data & Analytics – Brazil	+33 1 42 98 74 26	salim.hammad@bnpparibas.com
Thomas Humblot Banking Economics	+33 1 40 14 30 77	thomas.humblot@bnpparibas.com
Cynthia Kalasopatan Antoinette Central Europe, Ukraine	+33 1 53 31 59 32	cynthia.kalasopatanantoine@bnpparibas.com
Johanna Melka Asia	+33 1 58 16 05 84	johanna.melka@bnpparibas.com
Marianne Mueller Europe, Germany, Netherlands	+33 1 40 14 48 11	marianne.mueller@bnpparibas.com
Christine Peltier Head of Emerging economies – Asia	+33 1 42 98 56 27	christine.peltier@bnpparibas.com
Lucas Plé Sub-saharan Africa, Colombia, Central America	+33 1 40 14 50 18	lucas.ple@bnpparibas.com
Jean-Luc Proutat Head of Economic Projections	+33 1 58 16 73 32	jean-luc.proutat@bnpparibas.com
Laurent Quignon Head of Banking Economics	+33 1 42 98 56 54	laurent.quignon@bnpparibas.com
Tarik Rharrab Data scientist	+33 1 43 16 95 56	tarik.rharrab@bnpparibas.com
Mickaëlle Fils Marie-Luce Media contact	+33 1 42 98 48 59	mickaëlle.filsmarie-luce@bnpparibas.com

The information and opinions contained in this document have been obtained from, or are based on, public sources believed to be reliable, but there is no guarantee of accuracy, completeness or fitness for any particular purpose of such information and such information may not have been independently verified by BNPP or by any person. None of BNPP, any of its subsidiary undertakings or affiliates or its members, directors, officers, agents or employees accepts any responsibility or liability whatsoever or makes any representation or warranty, express or implied, as to the accuracy and completeness of the information or any opinions based thereon and contained in this document, and it should not be relied upon as such. This document does not constitute research, as defined under MIFID II, or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on, in connection with any contract or investment decision. Information and opinions contained in this document are published for the information of recipients but are not to be relied upon as authoritative or taken in substitution for the exercise of judgment by any recipient, are subject to change without notice. In providing this document, BNPP does not offer investment, financial, legal, tax or any other type of advice to, nor has any fiduciary duties towards, recipients. Any reference to past performance is not indicative of future performance, which may be better or worse than prior results. Any hypothetical, past performance simulations are the result of estimates made by BNPP, as of a given moment, on the basis of parameters, market conditions, and historical data selected by BNPP, and should not be used as guidance, in any way, of future performance. To the fullest extent permitted by law, no BNPP group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this document even when advised of the possibility of such losses. All estimates and opinions included in this document are made as of the date of this document. Unless otherwise indicated in this document there is no intention to update this document. BNPP may make a market in, or may, as principal or agent, buy or sell securities of any issuer or person mentioned in this document or derivatives thereon. Prices, yields and other similar information included in this document are included for information purposes however numerous factors will affect market pricing at any particular time, such information may be subject to rapid change and there is no certainty that transactions could be executed at any specified price. BNPP may have a financial interest in any issuer or person mentioned in this document, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon, or vice versa. BNPP, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this document. BNPP may, from time to time, solicit, perform, or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any person referred to in this document. BNPP may be a party to an agreement with any person relating to the production of this document. BNPP may to the extent permitted by law, have acted upon or used the information contained herein or in the document, or the analysis on which it was based, before the document was published. BNPP may receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this document. Any person mentioned in this document may have been provided with relevant sections of this document prior to its publication in order to verify its factual accuracy.

This document was produced by a BNPP group company. This document is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNPP. By accepting or accessing this document you agree to this.

BNP Paribas is a société anonyme incorporated in France, licensed and supervised as a credit institution by the European Central Bank (ECB) and as an investment services provider by the Autorité de contrôle prudentiel et de résolution (ACPR) and Autorité des marchés financiers (AMF), and having its registered office at 16, boulevard des Italiens, 75009 Paris, France.

Some or all of the information contained in this document may already have been published on <https://globalmarkets.bnpparibas.com>.

For country-specific disclaimers (United States, Canada, United Kingdom, Germany, Belgium, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Brazil, Turkey, Israel, Bahrain, South Africa, Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Singapore, South Korea, Taiwan, Thailand, Vietnam) please type the following URL to access the applicable legal notices: https://globalmarkets.bnpparibas.com/gm/home/Markets_360_Country_Specific_Notices.pdf

© BNP Paribas (2023). All rights reserved.

