Source:iStockphoto.com/niphon

Gradually, then suddenly: public debt sustainability in developed economies

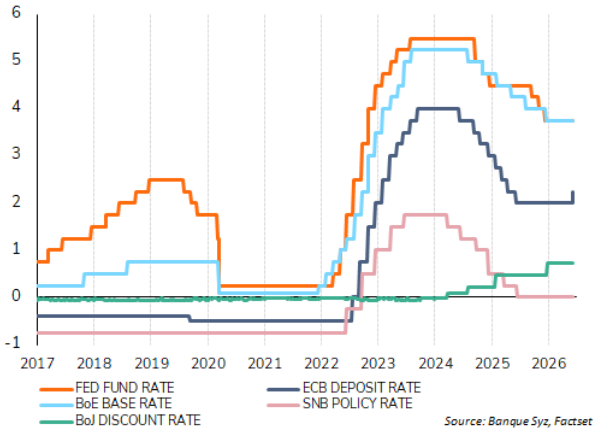
Adrien Pichoud
Head of Fixed Income
adrien.pichoud@syzgroup.com

Syz PRIVATE BANKING

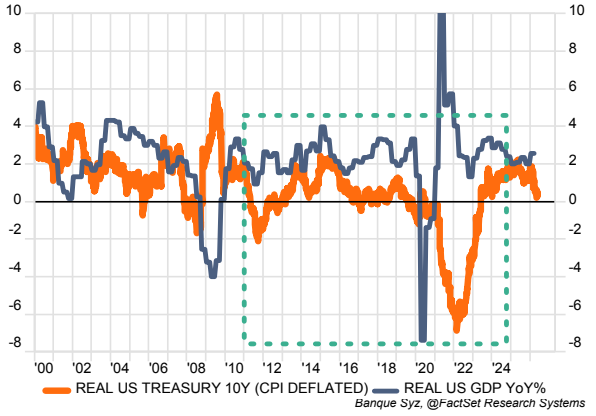
"How did you go bankrupt?" "Two ways. Gradually, then suddenly." Hemingway's famous exchange captures a recuring and growing concern surrounding the sustainability of sovereign debt. After a decade in which government borrowing appeared to carry no fiscal cost, the post-2022 interest rate shock has rewritten the arithmetic of public debt sustainability. The numbers are no longer abstract: G7 average debt now exceeds 100% of GDP, the United States stands at roughly 125%, Japan above 250%, and US federal interest costs have crossed the symbolic threshold of one trillion dollars per year. The IMF counts some fifty states at high risk of debt distress. Yet bond markets, for the time being, remain remarkably serene.

A new fiscal era

What changed? Four things, in rapid succession. First, the rate shock: policy rates rose 400–500 basis points across the advanced world in 2022–23, and every bond that matures must now be refinanced at a multiple of its original coupon.



This created a stock-to-flow problem that compounds year after year. Second, the relationship between interest rates and growth reversed. For a decade, real rates sat below real growth in virtually all advanced economies, making debt dynamics self-correcting. In recent years, real interest rates have risen toward real growth rates in the United States, the United Kingdom and most of Europe, creating a less favourable environment for debt sustainability.



Third, the burden has become visible in budgets: US net interest payments have reached roughly 16% of federal revenue, the highest since the 1990s. Fourth, and most troubling, the fiscal response across democracies has been close to zero. Primary deficits remain large, and consolidation plans lack credibility.

The sustainability maths: r minus g

The analytical core of debt sustainability is disarmingly simple. Public debt is deemed sustainable over the long run when the primary surplus (the budget balance excluding interest payments) is at least equal to the gap between the real interest rate (r) and real GDP growth (g), multiplied by the debt ratio. The intuition dates back to Evsey Domar's 1944 condition: public finances are stable so long as nominal interest rates remain below nominal GDP growth, because the economy, and hence government revenue, outgrows the debt service.

The Domar condition (1944)

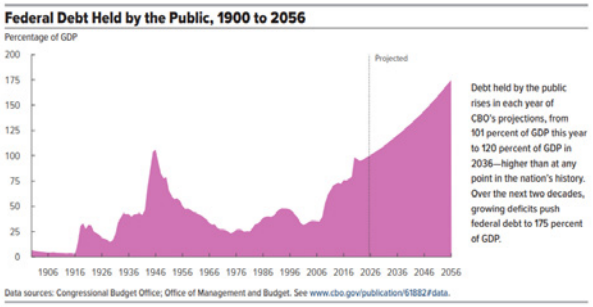
Fiscal stability when: Nominal interest rate < Nominal GPD growth

➢ Debt is sustainable when: primary surplus ≥ (r – g) × debt/GDP

where r = real interest rate, g = real GDP growth, debt/GDP = current debt ratio

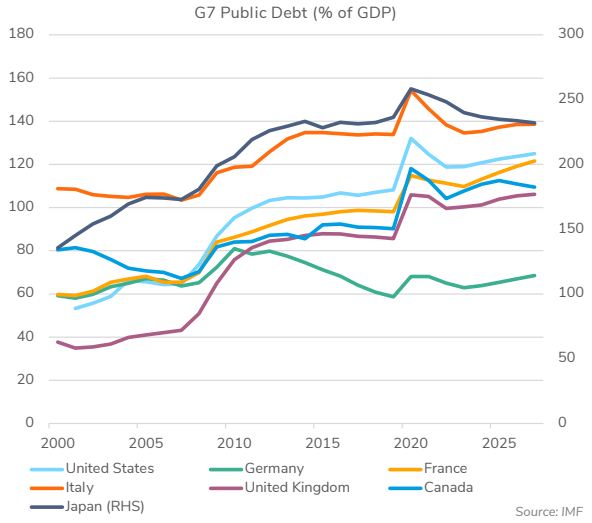
From 2010 to 2021, this condition was comfortably satisfied. With r below g almost everywhere, even governments running modest primary deficits saw their debt ratios fall. Central banks reinforced the dynamic by absorbing vast quantities of government bonds. French macroeconomist Olivier Blanchard's 2019 presidential address to the American Economic Association captured the zeitgeist: when r < g, debt accumulation may carry no fiscal cost. Politicians took the hint, and borrowed.

Since 2022, the regime has shifted. With r now close to g in the US, the UK and much of the eurozone, a 1% primary deficit adds roughly 1.2–1.5 percentage points to the debt ratio each year. Interest costs on new issuance run three to five times pre-2022 levels, and there is no quantitative easing backstop: markets must clear at market rates. The implications are stark. The United States would need a primary surplus of around 3% of GDP to stabilise its debt; it is running a deficit of roughly 4%. The Congressional Budget Office's projections leave little to the imagination: the deficit reaches $1.9 trillion in fiscal 2026, rising to $3.1 trillion by 2036, with debt held by the public climbing from 101% of GDP to 120% by 2036 and to 175% over two decades. Rising net interest costs, not primary spending, drive most of that deterioration.

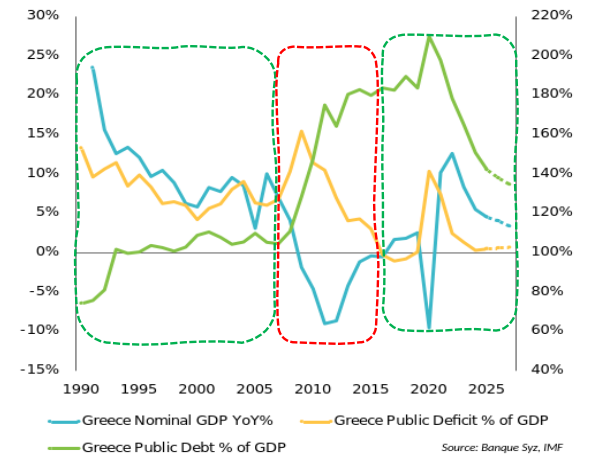


The nominal illusion

If the maths is so unforgiving, why have debt ratios not yet exploded? The answer lies in what might be called the nominal illusion. Nominal public debt is rising rapidly in every major developed economy, but as long as nominal GDP growth remains strong, the debt-to-GDP ratio can hold steady or even decline. The post-pandemic inflation burst, paradoxically, flattered the ratios even though absolute debt levels were exploding: strong nominal GDP growth initially absorbed the ongoing very large deficits.

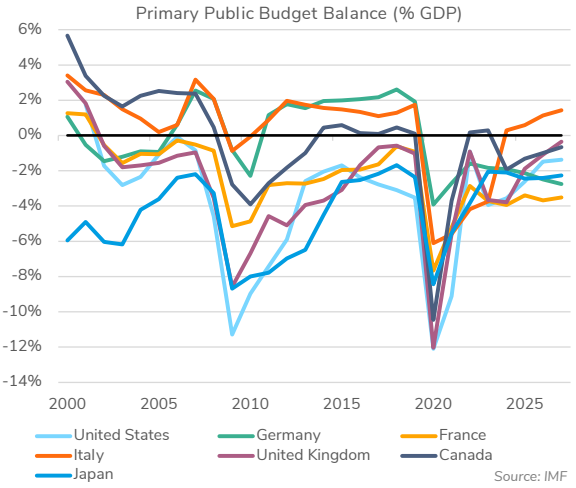


The illusion is comfortable, until it breaks. Greece offers the textbook case. For over a decade before 2008, Greek debt appeared under control because robust nominal growth offset persistent deficits. When the global financial crisis hit, nominal growth collapsed, deficits widened, and the debt ratio soared in a classic sudden stop.



The United States is not Greece. The dollar's reserve status is a powerful stabiliser. But US nominal growth, while still robust, is already normalising while deficits are not. The uncomfortable question is how long the dollar privilege can keep the bond market patient.

Italy, meanwhile, is the outlier that proves the rule. Italy has run primary surpluses for much of the past thirty years, forced into fiscal discipline by public debt already at the boundaries of sustainability. Yet its debt remains above 140% of GDP because of persistently high interest costs.



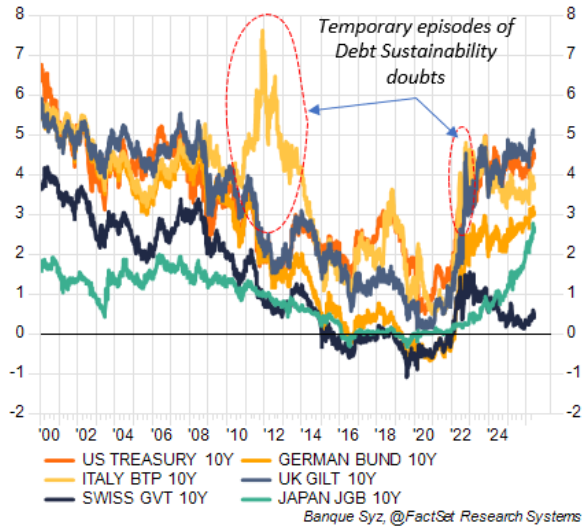
The rest of the G7 has not adjusted at all: the US, UK, France and Japan continue to run primary deficits of 3–5% of GDP, shielded from market pressure by reserve-currency privilege, the ECB backstop, or the perpetual promise of medium-term consolidation. History suggests that meaningful fiscal adjustment in developed markets comes only under market duress, as in 1990s Italy or the European periphery in 2010–12 , when financing pressures forced rapid consolidation. Without that forcing function, the path of least resistance is drift.

The political economy: why democracies underprice fiscal risk

Economics identifies the required adjustment; politics determines whether it happens. The IMF estimates that most G7 countries need a fiscal adjustment of 3–4% of GDP over the coming decade to stabilise debt. This would require an effort without peacetime precedent among the large modern democracies. The obstacles are structural rather than cyclical.

Ageing demographics push pension and healthcare costs relentlessly upward; these items account for 40–60% of primary spending in most G7 countries and are politically untouchable. Defence spending is resurgent, with NATO's 2% of GDP target now a floor and Europe adding a further half to one percentage point of GDP in largely non-discretionary, multi-year commitments. Climate investment adds another claim on public resources, with the IEA estimating that more than $4 trillion per year in clean-energy investment is required globally. On the revenue side, tax-to-GDP ratios are near historical highs in a number of economies, and further increases face limits from base erosion, capital mobility and electoral resistance. Layered on top is political fragmentation: coalition governments and short electoral cycles compress fiscal planning horizons. Italy has had fourteen governments since 2000, and France lost its parliamentary majority in 2024.

The intellectual climate compounded the problem. Blanchard's "no fiscal cost" framework, and the broader fashion for Modern Monetary Theory, provided cover for a decade of fiscal expansion. With r now close to or above g, that cover has been withdrawn, but fiscal frameworks have not caught up. When market discipline does arrive, it tends to do so abruptly and violently. The eurozone crisis of 2011–12 forced a sharp and painful adjustment in the periphery through widening spreads and forced fiscal consolidation, while the UK gilt crisis in September 2022 escalated within days from a political announcement into a near-systemic event, before the Bank of England intervened.



Not all debt is equal: country differentiation

Aggregate debt ratios conceal more than they reveal. Five distinct stories deserve separate treatment.

The United States is concerning but privileged. The dollar's reserve status confers the famous "exorbitant privilege," allowing deficits that would sink any other sovereign. But the CBO's 175%-of-GDP trajectory, political paralysis on consolidation, and significant foreign ownership of Treasuries (roughly 35% non-resident) means that rather than being carefully preserved, this privilege is increasingly being tested.

Japan is unique. The Bank of Japan holds more than half of the JGB market, and around 90% of the debt is domestically held, which effectively eliminates sudden-stop risk. The key near-term vulnerability is the BoJ's exit from yield-curve control; the long-term one is demographics, which make structural deficits all but inevitable.

The eurozone is a study in contrasts. The ECB's Transmission Protection Instrument provides an implicit backstop, though its conditionality remains untested. Italy carries interest costs above 10% of GDP and no longer runs a primary surplus; France combines a deficit above 5% of GDP with political fragmentation; Germany, remarkably, may be embarking on a fiscal expansion of its own.

The United Kingdom is arguably the most vulnerable developed economy to a public debt crisis. The September 2022 LDI crisis, so-called "Liz Truss moment", demonstrated how quickly the gilt market can seize up. The UK no longer can rely on the GBP as a reserve currency, it runs external deficits, faces structural pressures from the NHS, defence and pensions, and depends on foreign investors for roughly 30% of gilt holdings. The Office for Budget Responsibility's debt-stabilisation scenarios rest on assumptions most observers consider heroic.

Emerging markets, finally, are differentiated rather than uniformly fragile. Many enjoy better r-minus-g dynamics than developed markets, and commodity exporters have rebuilt fiscal buffers. But local-currency debt carries FX risk for investors, and frontier markets face acute rollover risk.

What markets are pricing, and what they aren't

Strikingly, bond markets currently reflect almost none of this. Nominal government bond yields across the major economies are evolving broadly in line with nominal GDP growth, signalling no fundamental sustainability concern for the time being. But the historical record (euro sovereign crisis, UK "Liz Truss moment") shows that the market's verdict can change abruptly and without much warning.

Five tail risks warrant monitoring.

- Rollover risk is the most mechanical: large volumes of G7 debt mature in 2025–27, with the US alone needing to refinance roughly $9 trillion over twenty-four months; each percentage point of higher refinancing cost adds about $90 billion per year to the interest bill.
- Fiscal dominance is a tail risk but a rising one: if markets demand higher term premia and central banks respond by resuming bond purchases to cap yields, monetary policy becomes subordinate to fiscal needs, and inflation becomes the release valve.
- The bank–sovereign nexus remains live in Europe, where banks hold large sovereign portfolios at book value; a spread blow-out can trigger capital concerns and a self-reinforcing doom loop, as 2011–12 demonstrated in the Eurozone.
- Sudden stop risk applies to countries reliant on foreign financing, the UK foremost among developed markets.
- And EM contagion looms should a strong-dollar episode coincides with the roughly $900 billion of EM external debt maturing in 2025–26, with frontier markets such as Ghana, Pakistan and Egypt most exposed.

The endgame: default or inflation?

How does this resolve? The old adage holds: a sovereign defaults when it cannot print what it owes. For developed economies borrowing in their own currencies, outright default is therefore the least likely path. Three routes present themselves.

The first is fiscal adjustment. This is the hard way. Sustaining a primary surplus of 3–4% of GDP for a decade or more has been achieved before (Canada in the 1990s, the eurozone periphery after 2010), but virtually always under market pressure or external conditionality. And at a significant economic and social cost. It is most credible in smaller, open economies with an external anchor, and least credible in large democracies facing no immediate market constraint.

The second is inflation and financial repression. This is the easy way. Debt is eroded through sustained nominal GDP growth while real rates are held below real growth, by regulation, central bank cooperation, or both. Central banks' cooperation could imply government debt purchases such as Quantitative Easing programmes in the vein of past interventions by the Fed, the ECB or the BoJ. It could also imply interest rate caps and Yield Curve Control similar to what was implemented in the US from 1942 to 1951.

This precedent is powerful: the US and UK worked off debt burdens exceeding 100% of GDP after the Second World War largely through this channel. The approach works until inflation expectations become unanchored, at which point the cure becomes the disease.

The third is restructuring or default. This is the catastrophic way. It remains primarily an emerging- and frontier-market potential risk, though "soft" restructuring through maturity extension cannot be entirely excluded in the developed world, and a failure of the ECB backstop under political stress remains the tail risk for Italy and Eurozone countries.

Conclusion

Public debt sustainability is not, today, a solvency problem; it is a credibility problem with a long fuse. The mathematics have turned hostile: r is no longer reliably below g, interest bills are compounding, and the primary balances needed to stabilise debt are far from current policy. The politics are worse: structural spending pressures from ageing, defence and climate collide with revenue ceilings and fragmented legislatures, and the historical record offers no example of major peacetime consolidation undertaken voluntarily. What stands between the maths and a crisis is the bond market's patience. It seems sustained, for now, by the nominal illusion of strong nominal growth, by the dollar's privilege, by the ECB's backstop, and by the assumption that the inflationary escape route remains available.

That patience is an asset that is not be endless. The most probable resolution for developed markets is not default but a prolonged period of financial repression and above-target inflation, namely the post-WW2 playbook dusted off. Such scenario could be supported by an increase in g, as productivity gains drive a sustained increase in trend growth. From that angle, the ongoing AI revolution can be seen as a positive development for debt sustainability prospects, even if its impact is hard to quantify at this stage.

For investors, the implications are threefold. First, differentiate ruthlessly between sovereigns rather than treating "government bonds" as a single asset class. Second, monitor the tail risks (rollover walls, fiscal dominance, the bank–sovereign nexus, sudden stops and EM contagion) that could compress a gradual process into a sudden one. Third, treat duration in the most exposed markets, the UK and the long end of the US curve in particular, with respect. The lesson from Greece and Hemingway is the same: the gradual phase can last far longer than the pessimists expect. But at a certain point in time, the sudden phase arrives faster than most can imagine.

Welcome to Syzerland®

For further information

Banque Syz SA
Quai des Bergues 1
CH-1201 Geneva
T. +41 58 799 10 00
syzgroup.com

Adrien Pichoud
Head of Fixed Income
adrien.pichoud@syzgroup.com