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Independent Thinking

Recession Watch: what if Japan releases the brakes?

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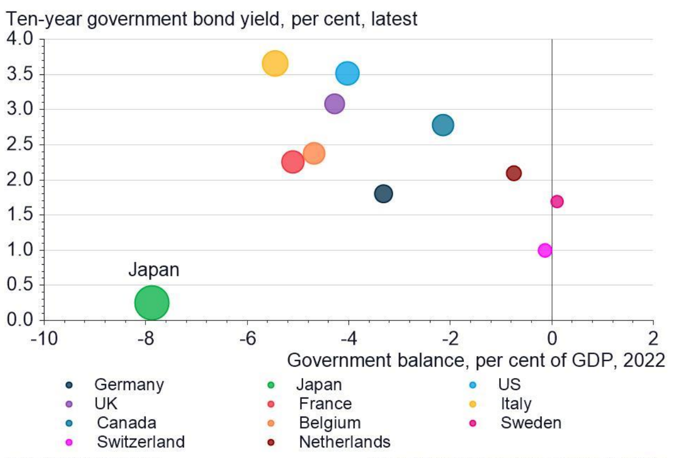
Headlines

- Japan's economy contracted in Q3; but given rising inflation, a weak currency and some signs of sustainably higher wage growth, the BoJ's next step will likely be a tightening
- Monetary tightening would have obvious consequences for a government with the highest sovereign debt burden in the world, and where the central bank is the main creditor. Fathom's Financial Vulnerability Indicator (FVI) identifies rising risk of a sovereign crisis in Japan, partly driven by rising bond yields and widening budget deficits
- We foresee borrowing costs rising materially if the BoJ curtails its long-held policy of yield-curve control. If real yields rise by the level seen this year in the UK and Germany, that would take new borrowing costs above trend growth, meaning the Japanese government would probably need to run primary surpluses to stabilise the debt level. It hasn't done that since the early '90s
- Recent developments in the UK are a reminder of how quickly market sentiment can sour, and the damage this creates

At 263% of GDP — or 1.4 quadrillion yen, if you can count that high — Japan has by far the largest sovereign debt burden in the world. Half of the government bonds in that debt mountain belong to the Bank of Japan. What would happen if the market regained control of Japanese yields? We expect borrowing costs would rise, and potentially by enough to exceed growth, meaning that primary surpluses would be needed to stabilise the debt level. That's something we have not seen for many a Japanese moon. The IMF forecasts that Japan will have the highest growth rate of the G7 next year. The economy contracted in Q3, though; and in this Recession Watch note, we consider the risk of the current slump being deepened by a fiscal crisis.

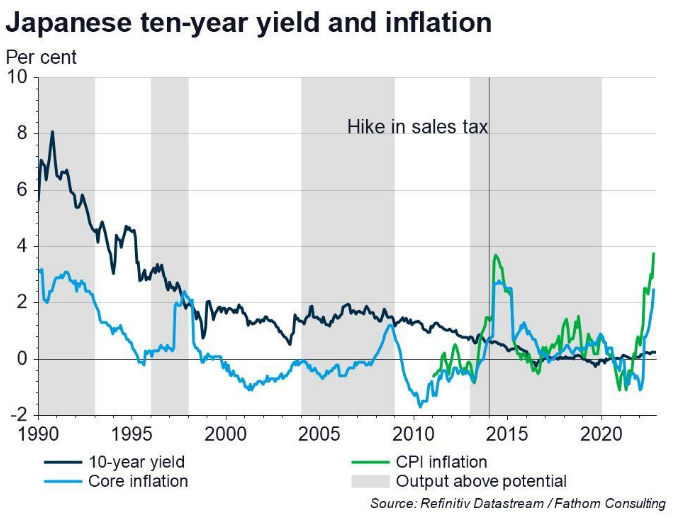
Government debt, deficit and rates



Source: Refinitiv Datastream / Fathom Consulting

Japanese monetary policy and fiscal policy have been highly accommodative for two decades, in an attempt to break free of the low-growth, low-inflation environment that followed the financial crisis of the early 1990s. The Bank of Japan's (BoJ's) grip on government bond yields became much tighter with the advent of Abenomics in 2012. The central bank first ramped up targeted bond purchases and then, in September 2016, employed a policy called yield-curve control (YCC), which sees it conduct sufficient bond purchases to keep the ten-year yield around 0% and below 0.25%.[1] With the ten-year yield repeatedly testing that level in recent months, it has acquired almost the entire issue of each bond with that remaining maturity.

Like in the euro area, there was little sign of a structural break higher in inflation arriving before the pandemic. Economic re-opening from COVID has occurred later in Japan than other advanced economies, but we have seen some of the same patterns repeat: consumption has been boosted by re-opening effects, supply-side constraints have eased, and inflation has increased due to higher energy and food prices. The Japanese economy unexpectedly contracted by 0.3% in Q3 as consumers and businesses faced higher import prices, but the IMF expects that the continuing effects of a delayed re-opening and considerably looser monetary policy than peers will deliver a growth outperformance in 2023.



October's inflation release showed both headline and core inflation at their highest levels since the early 1990s, excluding the aftermath of the sales-tax hike in 2014. Even so, core inflation has only just passed 2%. As in Europe, energy has been a key factor in the uptick in headline inflation, with Japan having the third lowest self-sufficiency ratio for energy in the OECD. Perhaps more significantly for the BoJ, inflation expectations are rising, and wage growth is nearing the 3% level seen by the central bank as necessary for sustainble achievement of its inflation target. Next March's 'Shunto' wage negotiation between unions and employers will be a key barometer for wage growth. BoJ Governor Kuroda insists that inflation will "decelerate gradually" without policy tightening — now, we've heard that one before.

1. The BoJ's still targets a yield of 0%, but since March 2021 has allowed the ten-year yield to move in a range of +/- 25 bps from this level. The range had earlier been set at +/-10 bps.

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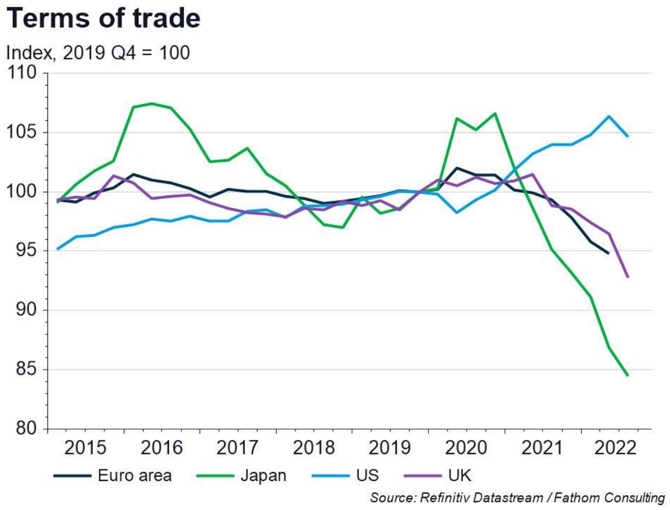

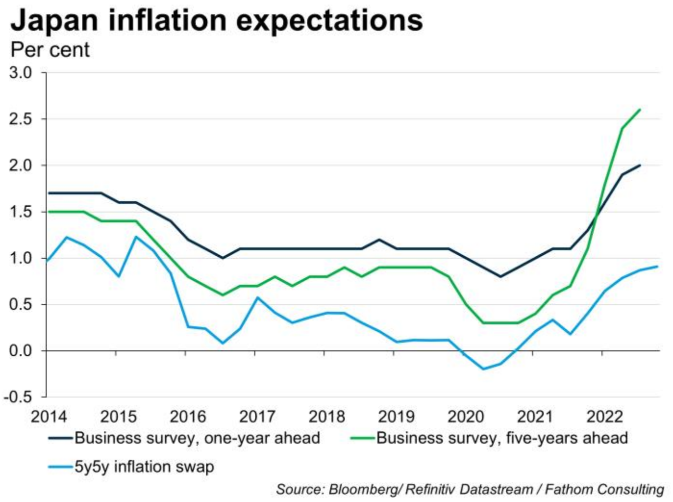

With the central bank manipulating the yield curve, the release valve for the economy has been the yen, which has fallen almost 20% against the dollar and 10% against a broad basket of currencies this year. The BoJ has even stepped in here, announcing interventions to support the yen in September and October; and the yen has rallied recently on signs of inflation having peaked in the US. The yen's decline this year does not necessarily mean that Japanese bond yields would surge if BoJ purchases ended — Japan's debt is predominantly domestically owned, and Japanese households continue to accumulate ever higher net wealth relative to GDP.[2] However, it is a signal of foreign investor sentiment towards Japan; and weakness in the currency has added to inflationary pressures, raising inflation expectations, which may ultimately be the trigger for the Bank of Japan to tighten policy.

2. The net wealth of Japanese households was 3 times the size of GDP in 2022 Q2, up from 2.5 times GDP a decade earlier.

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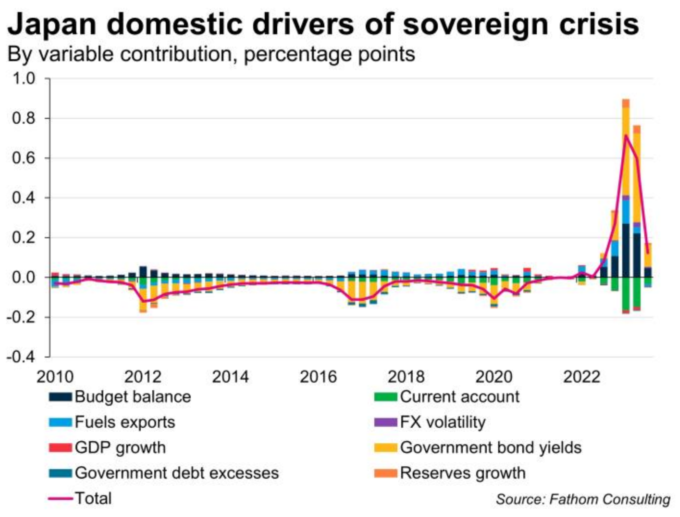
Despite the BoJ's rhetoric, almost all economists polled by Reuters in November expected the central bank's next move to be a tightening of policy. In anticipation of that tightening, the two-year OIS is up by 17 basis points this year and the ten-year yield has moved to its capped level of 25 bps. At the very long end, 30-year yields are up 80 bps this year. Indeed, those bonds with maturities just outside the ten-year range yield more than 0.25%, creating a kink in the curve. Yield-curve control continues to work, but only just. With Governor Kuroda's second and final term set to end in April, new leadership may usher in a new policy era.

Fathom is concerned that the ultra-loose fiscal and monetary policy of the past decade has created vulnerabilities that could then come to the fore. For at least a decade, investors have known that there is a ready buyer for copious amounts of Japanese government bonds (JGBs), and that since 2016, that buyer has a public minimum price. That is not how markets work, and the aftermath of any change could leave Japan exposed to fiscal risks.

These vulnerabilities are evident in Fathom's Financial Vulnerability Indicator (FVI), which shows rising risk of a sovereign crisis in Japan over the next year. Of course, the FVI identifies a similar pattern in other G7 economies, as a result of global growth patterns. In the case of Japan, however, domestic factors — such as rising bond yields, a widening budget deficit and declining FX reserves — are equally as important in explaining the increased risk of a sovereign event. The FVI also identifies the risk of contagion from higher bond yields elsewhere. The question is whether Japan can be the exception to the global trend of monetary policy tightening.



Japanese debt and BoJ holdings				
Sector	2015 Q4	Latest	2027 (no QT)	2027 (with QT)
BoJ holdings	¥282 tn	¥536 tn	¥536 tn	¥358 tn
BoJ holdings, as per cent of GDP	53	96	91	61

Source: Fathom Consulting

Using a model similar to *Tokuoka (2010)*, we estimate that over the period 2000-2015 a 1 percentage point rise in Japan's debt-to-GDP ratio was associated with a 1 basis point rise in ten-year JGB yields, while a 1 percentage point increase in the BoJ's holdings had the opposite effect.[3] Since 2016, Japan's debt-to-GDP ratio has risen by 36 percentage points and the BoJ's holdings as a fraction of GDP have jumped to almost 100% of GDP from half that level. Were the BoJ to stop yield-curve control and keep its nominal level of JGBs constant, our best guess is that ten-year yields would rise by 40–50 basis points. Were it to stop yield-curve control and reduce JGB holdings by a third over the next 5 years, we believe the impact would be double that — and likely more, given higher expected policy rates.

What would rising yields mean for Japan's debt sustainablity? As outlined in a recent Viewpoint (see the Further reading section at the end of this note), the gap between a country's cost of borrowing and its growth rate is critical to determining whether debt is on a sustainable path. With real growth above real borrowing costs, a government can run a primary deficit indefinitely. Low Japanese growth has exceeded even lower borrowing costs for most of the past decade, partly due to the BoJ's actions.

Forward-looking, market-based measures of Japanese ten-year real rates are already only slightly negative (-0.6%), and that is with the BoJ surpressing upward moves in nominal rates. With Japanese trend growth running at between 0.5 and 1%, a rise in in real yields of more than 1 percentage point could thus create adverse debt dynamics. To put that possibility in context, UK and German real yields have risen by 2.5 and 1.4 percentage points so far this year. This scenario would put Japanese debt on an explosive path, without fiscal consolidation. Given that Japan has not run a primary surplus since the early 1990s, that should give pause for thought. Indeed, it is likely that the BoJ has already given this prospect plenty of thought, when considering its exit from yield-curve control. As Japan has the second longest average debt maturity in the G7, at just above ten years, though, the impact of rising market yields on its effective interest rate[4] will be gradual.

3. Ten-year yields were modelled between 2000 Q1 and 2015 Q4, with debt-to-GDP, BoJ holdings as a share of GDP, and foreign holdings of JGBs, as explanatory variables. Estimating the model again since 2016 suggests these relationships no longer hold under yield-curve control.
4. The effective interest rate is the average interest rate paid on outstanding debt.

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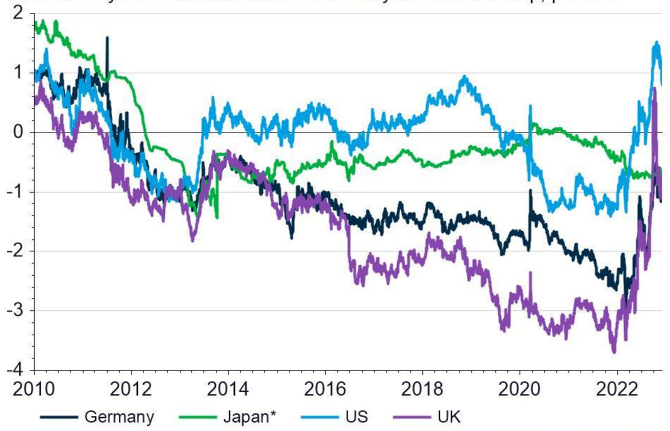
10-year real rates of interest

Yield on 10-year benchmark bond minus 10-year inflation swap, per cent



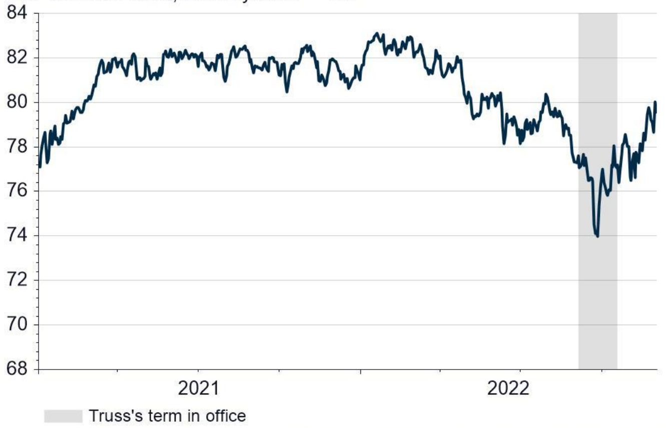
*The nominal yield minus the inflation breakeven used in place of the inflation swap

Source: Refinitiv Datastream / Fathom Consulting

Events in the UK this year should act as a wake-up call to others: being an advanced-economy currency issuer does not prohibit the possibility of a fiscal crisis. The unfunded tax cuts in Kwasi Kwarteng's ill-fated mini-budget alarmed markets, but that didn't deter the Japanese government from announcing another spending package worth 5% of GDP this month, and largely funding it with additional debt. In the UK's case, investors dumped the currency and the government's debt. The yen's sharp decline this year could be a precursor to falling bond prices if the BoJ weakens its control of the yield curve and investors foresee debt sustainability challenges. Given its size and traditional safe-haven role, the economic and financial consequences of a run on Japanese debt would make the Liz Truss era look positively serene.

Sterling nominal effective exchange rate

GBP effective index, January 2005 = 100



Source: Refinitiv Datastream / Bank of England / Fathom Consulting

Further reading

- Viewpoint: the UK loses its magic money tree https://www.fathom-consulting.com/research-notes/the-uk-loses-its-magic-money-tree/

- Recession Watch: was the UK fiscal wobble a sign of things to come? https://www.fathom-consulting.com/research-notes/recession-watch-was-the-uk-fiscal-wobble-a-sign-of-things-to-come/
- Has Japanese inflation woken? https://www.fathom-consulting.com/research-notes/has-japanese-inflation-woken/
- Why is the yen falling? https://www.fathom-consulting.com/research-notes/why-is-the-yen-falling/

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