

Individual government challenges and the Covid-19 debt surge

Considering the rise in government debt in key developed markets

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Key points

- The re-emergence of coronavirus across Europe threatens the pace of global recovery and will stretch government purses further. This paper focuses on individual countries and shows that each faces its own limits.
- Germany has the lowest debt to GDP ratio of its peers and amongst the highest debt limits. Italy has amongst the highest debt in Europe, but a new government and the ECB have helped keep rates low. Spain and France face different political challenges to their debt outlooks.
- Japan has the highest recorded debt, but it is held largely domestically, where there is a large appetite to save.
- The US requires a medium-term adjustment to address its debt outlook, but this may follow after the upcoming election. Otherwise the growth and rate outlook should be favourable to lowering debt in the long-term.

Deterioration of the UK growth outlook after Brexit and with adverse demographics poses additional challenges to reducing the UK debt profile.

Virus re-emergence means the debt focus will only increase

As cases of coronavirus appear to be on a rising trend again in the US and have picked up sharply across Europe, negative risks to the economic outlook are materialising. At the same time, governments in many countries are extending fiscal support packages to acknowledge the prolonged risks to the economy and the effect of restrictions to curb the spread of the virus. Both will put more strain on the public purse and look set to extend already-stretched outlooks for government indebtedness — and before any period of consolidation can begin or economies can truly embed a recovery.

In our last paper¹, we looked at the government debt outlook in abstract terms and considered how to assess fiscal sustainability and determine limits to indebtedness. We also reviewed the tools that governments could use to lower debt over the longer term. We concluded that low interest rates allowed governments to continue providing fiscal support to ensure economies recovered quickly from the current recessions. In any case, we argued, the impact of premature fiscal tightening would likely prove counterproductive to any effort to reduce debt levels. While economies are still struggling with the virus or are in early recovery phases, and while private spending is

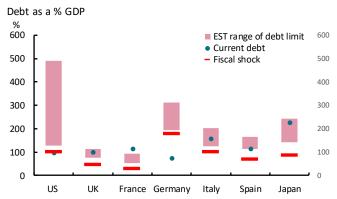
¹ Page, D., "How governments can respond to the Covid-19 debt surge", AXA IM Research, 7 October 2020.

subdued, fiscal multipliers likely remain high meaning that any fiscal consolidation would weigh heavily on output.

In what follows we take a more detailed look at individual countries. In this paper we focus on the key developed economies of the US, Germany, France, Italy, Spain, the UK and Japan. We look at each in turn considering assessments of debt limits, looking at a decomposition of changes in government debt over recent decades and presenting key summary statistics for each economy. We discuss each economy in turn, looking at the idiosyncratic features that shape individual country assessments.

Each country faces its own limits

Exhibit 1: Levels and limits



Source: CBO, METI, Eurostat, OBR, AXA IM Research, Oct. 2020

Exhibit 1 summarises the current debt positions for different economies. It shows a range of estimated debt limits, as defined in our previous paper. The upper end of the range is determined by an estimate of the point of 'fiscal fatigue' and the combination of long-term average economic growth and interest rates before the financial crisis in 2008/2009. The lower end of the range considers the same but allowing for averages to 2019 – characterised by lower interest rates – plus allowing for a sharp, two standard deviation increase in the interest rate, with no corresponding rise in growth. We then consider the scale of plausible future fiscal shock, to suggest any desirable fiscal buffer for future manoeuvrability. These indicate a range in which markets might consider government finances could become unsustainable.

Five of seven economies lie within this range and one lies above the upper limit, but with no sign of fiscal crisis. This illustrates that interest rates have moved materially lower over the last decade, and specifically over the last year, making current elevated debt levels affordable. However, these limits estimate the potential vulnerability of current levels of indebtedness to a rise in interest rates.

It is noteworthy that of these assessments only two countries lie below what we consider a lower-bound fiscal limit, illustrated by the additional fiscal space to allow for future manoeuvrability. The US is one and the recent deterioration in its debt outlook leaves it very close to this lower limit. The other is Germany.

Germany has the lowest debt level of the listed countries at an estimated 76%. It has a history of prudent management of public debt, running primary surpluses in excess of 2% in 9 of the last 13 years. Combined with low levels of interest and relatively small deteriorations in debt after the financial crisis and estimated during the pandemic, its required fiscal buffer is lower than other countries. Of all the economies considered here, we are least concerned about Germany. We expect it to return to its own fiscal rules as the economy recovers from the pandemic and Germany could well see debt return to the 60%-of-GDP Maastricht limit by the end of this decade.

Japan is at the other end of the spectrum. Japan's debt is currently 229% of GDP, the highest of the selected countries. Japan's debt level is close to its estimated upper limit for indebtedness, the level at which Japan's finances would be unsustainable if growth and interest rates returned to pre-2009 rates. However, Japan's debt markets remain calm. In part this reflects low interest rates as elsewhere. However, it is also a function of Japanese government debt being held mainly domestically (foreign holdings of government debt account for just 7.6% of the total, Exhibit 2). Japanese debt markets benefit from the country's structurally high saving rate and, more than that, the counterpart to this high private saving rate must be a high government deficit (and/or current account surplus). This does not guarantee debt sustainability forever, but it provides a solid foundation in that government debt is a debt that Japan owes largely to itself.

Exhibit 2: Foreign holdings of debt

Foreign holdings
%
60
50
40
30
20
10
UK US Japan France Italy Germany Spain
Source: BIS, DMO, UST, Oct. 2020

We also note that the Bank of Japan (BoJ) has been at the forefront of government debt purchases, developing quantitative easing in the early 2000s. This has lowered government yields. As we have argued, central bank policies are symptomatic of structural factors that have lowered natural rates of interest and the BoJ would find it difficult to offset a rise in global demand for capital that put upward pressure on international real rates. However, former US Federal Reserve (Fed) Chair Ben Bernanke explained how the BoJ could effectively monetise Japanese debt – by creating a 0% perpetual bond. This is not current policy, nor do we expect it. However, with the BoJ a pioneer in terms of policy development, markets may consider the BoJ to be closest to such operations *in extremis*.

Central banks have played a role in facilitating government fiscal space by mitigating short-term financing risks. This was obvious on a global scale in short-term liquidity operations conducted in March and April. However, in Europe this has gone further with the European Central Bank (ECB) moving from its rigid, rules-bound Asset Purchase Programme to the Pandemic Emergency Purchase Programme (PEPP). The increased flexibility under the PEPP allowed the ECB to focus monetary firepower where it was needed. This has had a material impact on the Italian government bond spread (over German Bunds). At the start of the crisis, the BTP spread rose to 280bps, close to levels reached in 2018 sparked by a loosening in Italian fiscal policy, which had the near-Ricardian² effect of prompting a short recession. This year, helped by the ECB's more flexible PEPP, Italian spreads are currently at their lowest levels since early 2018. This has reduced risks of a near-term financing shock in Italy and across the Eurozone.

Italy has benefited from two other features. Eurozone fiscal authorities have embarked on a policy of mutual fiscal support, benefitting all Eurozone economies (with spillovers to trade partners). The Eurozone's SURE³ scheme, which contributes to domestic employment support schemes, and the Next Generation EU (NGEU) scheme's Recovery and Resilience Fund, both help shift the burden of fiscal support from individual countries. This will help governments provide optimal fiscal support, reducing the risk of the most economically vulnerable countries becoming trapped in longterm, low-growth equilibria. We acknowledge that the planned disbursement from these programmes is slow – the Recovery and Resilience Fund likely sees peak grant issuance only in 2023 and 2024 – and we are somewhat sceptical about some European countries' planned reliance on early disbursement (Spain). However, the project is a significant step forward for the Eurozone and should help ensure a more optimal fiscal response to the recession.

Italy also benefits from an improved political backdrop after the political crisis in 2019, with a centrist government now in place headed by Giuseppe Conte. This has ensured political choices that should support longer-term growth and reform following the previous populist government that sparked concern in financial markets. This stable political background is not shared across Europe. In Spain a politically fragmented Parliament and weak government may struggle to enact longer-term structural reforms or, ultimately, long-term fiscal consolidation. This could prove a risk to Spain's long-term debt outlook, particularly for pension reform.

France faces some similar risks. The government is solid, with the 2022 elections likely to fall before any material fiscal tightening is expected. However, Emmanuel Macron's government has had familiar troubles in passing long-term

reforms in the face of populist street protests, this time led by the *gilet jaune* movement. The Macron government has succeeded in passing controversial labour market reforms but has had to shelve more difficult pension reforms for now. The relatively low debt limits estimated for France are a product of the French economy not having generated primary surpluses much above 1% of GDP over recent decades. French popular protests in the face of further fiscal consolidation could prove a risk to future debt reduction.

Growth outlook will be paramount

In each country the growth outlook is key in providing the most painless opportunity for debt reduction. The Eurozone's Recovery and Resilience Fund's channelling of spending towards long-term trend-growth improving areas is an additional and important boost from the scheme.

In the US, while growth has slowed in recent decades and the economy's position at the limits of the technology frontier suggests future productivity growth should be limited to improvements in research and innovation, we still see potential upsides. The US has largely emerged from the labour supply headwinds posed by the ageing of the post-baby-boom generation and future demographic shifts should be more modest. We consider the possibility of reducing inequality and competition enhancement as possible drivers of long-term growth improvement in the US – particularly if Presidential hopeful Joe Biden is elected and enabled to enact aspects of his progressive manifesto.

The UK's outlook is a cause for concern. The UK faces two challenges to potential growth over the coming decade. The first is the increase in trade barriers likely to follow from its decision to leave the EU – regardless of the precise framework of future trade deals that may emerge. The UK's Treasury estimated a cost of 6.2% of GDP over 15 years if the UK moved from EU trading conditions to a full free trade agreement replacement with the EU. The UK also faces its own demographic challenge, exacerbated by the passing of its (later) post-war baby boom. We estimate this alone could reduce potential growth by around 0.5ppt per annum. In total, UK potential growth could be reduced by close to 1ppt per annum by the end of the decade, reducing debt reduction by around 0.5% per annum and requiring a relatively higher primary surplus.

In short, while each developed economy operates by common rules governing levels of sustainable government debt, each has a host of different and idiosyncratic features that will affect its path over the coming years. In what follows, we address each of these in turn.

² Ricardian equivalence theory suggests consumers expect future tax rises when government spending/debt increases. They thus adjust saving (and spending) accordingly, reducing the demand boost that increased government spending was designed to deliver.

³ Support to mitigate Unemployment Risks in an Emergency

United States

Exhibit 3: US debt approaches estimated limits

US historic debt and estimated debt limits

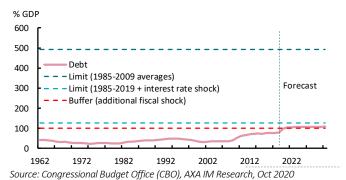


Exhibit 4: Breakdown of rise in US debt

US decomposition of change in debt:GDP ratio

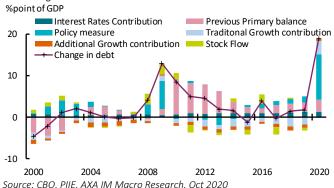


Exhibit 5: Overview of US debt metrics

Summary Statistics	- US		
Current fiscal position (%	GDP)		
Debt (est 2020)	98.2	Spending (2019 actual)	21.0
Deficit (est 2020)	-16.0	(relative to 20 yr avg)	0.6
Steady State est	67.7	Receipts (2019 actual)	16.3
Limit est (historic rates	492.0	(relative to 20 yr avg)	-0.5
LR GDP outlook		Debt portfolio	
Frontier	At the frontier	Portfolio maturity (yrs)	5.7
Demographic outlook	Stable	Domestic currency issuance (%)	100.0
Other	Digitally advanced,	Inflation linked issuance (%)	10.6
	political and trade	Foreign holdings (%)	29.0
	uncertainty	Central bank holdings (%)	20.0
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	-2.2		
FDI (2019)	1.0		
Net IIP (2019)	-49.7		

Source: CBO, Bank of International Settlements (BIS), US Treasury Dept, Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), Penn World, AXA IM Macro Research, Oct 2020 The outlook for US government debt was not good before the pandemic. In January this year, the Congressional Budget Office (CBO) estimated a deficit of 4.6% of GDP for 2020, with debt forecast rise to 81% of GDP – its highest since 1949 – and to reach 180% over the next 30 years, above the 1945 all-time high of 113%. The pandemic worsened that outlook. In September 2020, the CBO forecast a deficit of 16%, with debt rising to 98% of GDP in 2020 and 195% by 2050. Debt is projected close to limits based on historic rates (Exhibit 3). However, with the US unlikely to lose its reserve currency status in the coming decades, such a deterioration in interest rates relative to growth should prove an extreme scenario.

The CBO's long-term estimates assume unchanged government policy and are thus illustrative. With the Presidential election weeks away, policy could change sharply. Still consistent with our analysis in July⁴, we expect Joe Biden to win the Presidency and – on current polling – squeak a united Congress. Yet the tightness of any Senate majority would still likely require policy passed through reconciliation – requiring fiscally neutrality over 10 years. Biden aims to raise \$4tn in taxes to fund expenditure plans.

The US is unusual among developed economies for having low proportions of government spending and taxation, suggesting scope for increases in both. Cross-country comparisons are difficult as different societies have different tolerances for taxation, but current taxation is low even by US standards (currently 0.5% lower than the 20-year average). This provides scope for increased taxation to raise the primary balance, contrary to repeated attempts to reduce the debt by lowering taxes. But fiscal consolidation needs to be timed with the economic cycle, providing stimulus when multipliers are high, tightening when low.

Persistent long-term growth will be a key driver of debt reduction. Economic growth has eroded the US debt stock and since 1991, every 1% increase in growth has reduced the debt stock by just over 1% – raising growth and boosting the primary balance (Exhibit 4). The US economy operates at the global technological frontier, limiting additional potential growth gains to progress in research and innovation. Yet other factors could prove more positive. The demographic bust of the last decade should stabilise. The US is ranked top, or close, in measures of economic digitalisation⁵. The US may also have scope to boost growth by lowering inequality and raising competition.

A period of fiscal stimulus, followed by balanced budget increases and fiscal consolidation over the cycle, coupled with favourable long-term growth conditions should gradually reduce debt from the current outlook.

⁴ Page, D. and Kerr, A., "<u>US Presidential Election Preview: You're Fired?</u>", AXA IM Research, 28 July 2020

⁵ Cisco Global Digital Readiness Index 2019, IMD World Digital Competitiveness Ranking 2019.

Germany

Exhibit 6: Germany has plenty of fiscal room

Germany historic debt and estimated debt limits

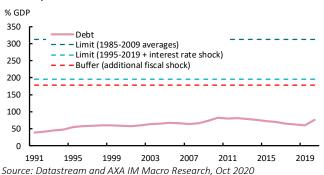
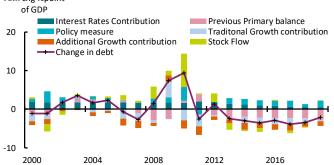


Exhibit 7: A consistent policy of debt reduction

Germany decomposition of change in debt:GDP ratio Annichg %point



Source: Datastream, PIIE and AXA IM Macro Research, Oct 2020

Exhibit 8: Overview of German metrics

Summary Statistics	s - Germany		
Current fiscal position (% GDP)		
Debt (est 2020)	75.6	Spending (2019 actual)	45.4
Deficit (est 2020)	-7.0	(relative to 20 yr avg)	-0.6
Steady State est	63.8	Receipts (2019 actual)	46.8
Limit est (historic rates)	312.3	(relative to 20 yr avg)	2.0
LR GDP outlook		Debt portfolio	
Frontier	Close to the frontier	Portfolio maturity (yrs)	6.6
Demographic outlook	Declining	Domestic currency issuance (%)	159.0
Other	Trade uncertainty,	Inflation linked issuance (%)	3.9
	Impending energy	Foreign holdings (%)	54.0
	transition	Central bank holdings (%)	22.0
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	7.1		-
FDI (2019)	1.9		
Net IIP (2019)	71.7		

Source: Datastream, JPM, Penn World and AXA IM Macro Research, Oct 2020

Germany's fiscal performance has been strong over the past few years. The country has maintained a considerable budget surplus (1.4% of GDP on average over 2016-2019) and pushed public debt below the 60% threshold in 2019. Solid growth, upside surprises in tax revenues (supporting the primary balance surplus) and rapidly declining interest payments in the low interest rate environment have been the key drivers (Exhibit 7). The sacrosanct respect of the fiscal rules, in particular the debt brake rule (which caps federal structural borrowing at 0.35% of GDP) have also helped.

The large fiscal space, with German debt well below the estimated debt limit (Exhibit 6), enabled a prompt and frankly massive response to the Covid-19 shock. The German government adopted two supplementary budgets in 2020. The first came as early as March (€156bn or 4.9% of GDP) mostly including emergency measures such as expanded access to short-time working schemes, grants for smaller businesses and investment in the health sector. Another followed in June (€130bn or 4% of GDP) focusing this time on stimulating the recovery (a temporary VAT cut, income support to families, financial support to municipalities, incentives for digital and green investments). Overall, these measures constitute c. 4.5% of fiscal stimulus for this year and next and will push the deficit and debt to 7% and to 75% of GDP, respectively.

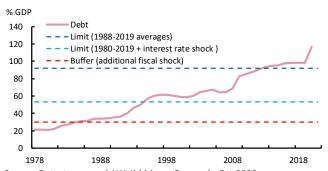
In 2021, the estimated growth rebound (+4%) will help to reduce the deficit by lowering automatic stabilisers and we expect the deficit to settle at c.4% before moving below the 3% threshold in 2022. The 2021 draft budget foresees an aggressive decline in net borrowing, from €217.8bn (6.6% of GDP) to €96.2bn (2.7% of GDP) in 2021 and €10.5bn in 2022 (0.3% of GDP), signalling that the "black zero" rule (balanced budget) is not dead. As per the debt brake rule, there is still uncertainty on whether it will start to bite again in 2022, but we expect the beginnings of a fiscal adjustment from 2023 onwards. Indeed, the government, in line with the constitutional debt brake rule (articles 109 and 115 of the Basic Law), has committed to repay the part of the structural borrowing which exceeds the 0.35%-of-GDP cap over 20 years starting in 2023. The 2021 draft budget estimates it to be €204.9bn for both 2020 and 2021 (5.9% of GDP), which would suggest a one-off fiscal adjustment of c.0.3% of 2019 GDP from 2023 onwards.

Low borrowing costs, a solid underlying fiscal position and rebounding GDP should push Germany's debt ratio below 70% of GDP by 2024. Despite unfavourable demographics, long-term fiscal sustainability risks remain a very remote issue for Germany.

France

Exhibit 9: Debt to reach record high

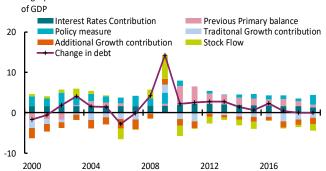
France historic debt and estimated debt limits



Source: Datastream and AXA IM Macro Research, Oct 2020

Exhibit 10: France public debt has failed to decline

France decomposition of change in debt:GDP ratio Ann chg %point



Source: Datastream, PIEE and AXA IM Macro Research, Oct 2020

Exhibit 11: Overview of France debt metrics

Summary Statistics	- France		
Current fiscal position (%	6 GDP)		
Debt (est 2020)	117.5	Spending (2019 actual)	55.6
Deficit (est 2020)	-10.2	(relative to 20 yr avg)	0.8
Steady State est	40.5	Receipts (2019 actual)	52.6
Limit est (historic rates)	92.0	(relative to 20 yr avg)	1.4
LR GDP outlook		Debt portfolio	
Frontier	Not so close	Portfolio maturity (yrs)	7.8
Demographic outlook	Unfavourable	Domestic currency issuance (%)	246.0
Other F		Inflation linked issuance (%)	7.0
	Potential resistance to reform	Foreign holdings (%)	53.0
	to reform	Central bank holdings (%)	16.0
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	-0.7		
FDI (2019)	1.9		
Net IIP (2019)	-22.9		

Source: Datastream, JPM, Penn World and AXA IM Macro Research, Oct 2020

France's public finances had failed to significantly improve before the pandemic. Despite solid growth, structural deficit adjustment had been minimal and public debt had remained slightly on the rise (Exhibit 10) approaching the 100%-of-GDP threshold.

Historical records will be broken in 2020. Debt is expected to balloon to 118% of GDP and the deficit to reach an unprecedented 10% of GDP. Three budget amendments between March and July, including mainly emergency measures, increased the budget envelope to €135bn (plus €327bn of public guarantees). Since then the government has presented a €100bn (4% of GDP) recovery package for 2020-2022. It focuses on the supply side (around two-thirds of the measures), with €30bn allocated to the ecological transition, €34bn to boost firms' competitiveness and €36bn to support the labour market and the health sector. Of the total, c.€40bn will be financed through the EU RRF grants, while €42bn will be made available in 2021. The government estimates that it will boost GDP growth by 1.5ppt in 2021, while the deficit should shrink to 6.7% of GDP and debt should inch down to 116.2% (Exhibit 9). We would not exclude the possibility of a larger actual deficit and debt in 2021, as we see the government's growth projection as too optimistic (+8% vs our GDP forecast of +5%).

We are even more concerned about the medium-term prospects. The government expects public debt to hover around 117% of GDP in the coming years while the general government's deficit should narrow to 4.9% of GDP in 2022, 4.0% in 2023, 3.4% in 2024 and fall below the 3% Maastricht requirement only in 2025. This improvement would not only be driven by better growth but also by a 0.5ppt effect per year from fiscal consolidation over 2022-25, relying exclusively on expenditure control. This gradual consolidation would mean debt would still be above 100% of GDP (106%) by the end of the decade.

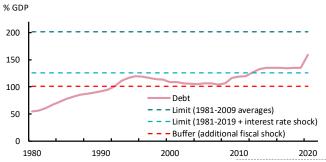
We argue that even this depressing outlook is actually optimistic. The main reason is that it is based on a very modest growth in public expenditure (0.3%yoy on average), which seems very challenging by comparison to history (over the past 30 years public spending has increased by less than 0.4%yoy only once). Despite being one of Emmanuel Macron's campaign promises back in 2017, reining in expenditure has proven more difficult than expected (impeded by social unrest with the gilets jaunes movement). We believe this would remain the case given the political and social context.

If we assume a more realistic pace of increases in public expenditure (1% on average per year, equivalent to the average over the 2012-2019 period), then the French public debt would reach 125% of GDP in 2030. Negative primary balances have been one of the main drags on debt reduction over the last decade, despite solid growth, and we fear this will be true in the coming years.

Italy

Exhibit 12: A historically high public debt

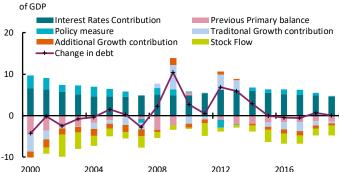
Italy historic debt and estimated debt limits



Source: Datastream and AXA IM Macro Research, Oct 2020

Exhibit 13: A heavy interest rate burden

Italy decomposition of change in debt:GDP ratio Annichg %point



Source: Datastream, PIEE and AXA IM Macro Research, Oct 2020

Exhibit 14: Overview of Italy debt metrics

Summary Statistics	- Italy		
Current fiscal position (%	GDP)		
Debt (est 2020)	158.9	Spending (2019 actual)	48.7
Deficit (est 2020)	-10.8	(relative to 20 yr avg)	0.2
Steady State est	123.3	Receipts (2019 actual)	47.1
Limit est (historic rates)	201.3	(relative to 20 yr avg)	1.4
LR GDP outlook		Debt portfolio	
Frontier	Not so close	Portfolio maturity (yrs)	7.3
Demographic outlook	Unfavourable	Domestic currency issuance (%)	246.0
Other	Low potential growth	Inflation linked issuance (%)	8.4
		Foreign holdings (%)	23.0
		Central bank holdings (%)	24.0
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	3.0		
FDI (2019)	1.6		
Net IIP (2019)	-1.5		

Source: Datastream, Penn World, JPM and AXA IM Macro Research, Oct 2020

While Italian public debt has been broadly stable at c.135% of GDP since 2014, fiscal data surprised to the upside just before the pandemic. The public deficit recorded a historical low of 1.6% of GDP in 2019 (versus a government target of 2.2%), thanks to better revenue collection, under-execution of some social measures (the Quota 100 early retirement rule and the citizenship income program) and a lower interest bill.

The Covid-19 crisis has flipped this picture, with the Italian government now expecting a record high deficit of 10.8% in 2020 and a sizeable jump of public debt to 158% of GDP (Exhibit 13). The deficit deterioration is almost equally driven by lower automatic stabilisers (due to unprecedented economic contraction) and a discretionary impulse: the three budget amendments passed by the government is conferring a total fiscal stimulus of c.5% of GDP in 2020.

The fiscal push is here to stay, helped by the renewed suspension of the EU fiscal rules in 2021 and the support of the EU Recovery and Resilience Fund (RRF). In the Update of the Economic and Financial Document, the government is planning discretionary fiscal spending of €33bn in 2021 (c.2% of GDP), with €14bn financed through the EU (€10bn from RRF grants and €4bn from React-EU). This is consistent with only a moderate deficit and debt reduction in 2021 (to 7% and to 155.6% of GDP respectively, Exhibit 12), mainly thanks to the growth rebound. The fiscal stance is due to tighten gradually from 2022 onwards (the deficit should be back to 3% in 2023), but debt should remain above 150% in the coming years.

In the near term, sovereign risks should be kept at bay. Political stability should help to cap interest rates, while EU support through the RRF (€54.5bn in loans and grants in 2021-22, or 3% of GDP), the €27bn of the SURE⁶ mechanism, and the European Central Bank (ECB) Pandemic Emergency Purchase Programme (PEPP) should help absorb funding needs.

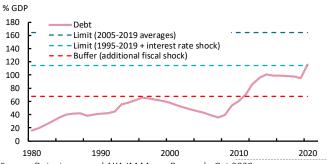
The debt profile, however, remains vulnerable to shocks, and concerns could resurface as early as 2022. In our baseline scenario, the traditional Asset Purchase Program of the ECB will pick up the baton of the PEPP in 2022, but any sign of hesitating or receding ECB support could have an impact on funding costs and thus on debt sustainability and inter-related sovereign ratings. Discussion over European fiscal rules (which should theoretically start to be binding again in 2022) could add a bit of pressure towards fiscal consolidation and create tensions within the ruling 5SM-PD coalition, although we believe the European Commission will be mindful of the national political agenda (Italian Presidential election in February 2022, French Presidential and Parliamentary elections in Spring 2022, Italian general elections no later than May 2023) and won't opt for overly stringent requirements. Finally, a slow absorption of the RRF funds could limit the upside to growth and complicate the debt equation further.

⁶ European Commission's temporary **S**upport to mitigate **U**nemployement **R**isks in an **E**mergency

Spain

Exhibit 15: Spanish debt to reach estimated limit

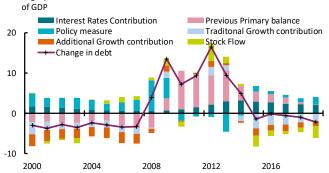
Spain historic debt and estimated debt limits



Source: Datastream and AXA IM Macro Research, Oct 2020

Exhibit 16: Only a modest debt decline despite strong growth

Spain decomposition of change in debt:GDP ratio Ann chg %point



Source: Datastream, PIEE and AXA IM Macro Research, Oct 2020

Exhibit 17: Overview of Spain debt metrics

Summary Statistics	- Spain		
Current fiscal position (%	GDP)		
Debt (est 2020)	118.8	Spending (2019 actual)	41.9
Deficit (est 2020)	-11.3	(relative to 20 yr avg)	0.0
Steady State est	64.8	Receipts (2019 actual)	39.1
Limit est (historic rates)	164.4	(relative to 20 yr avg)	0.8
LR GDP outlook		Debt portfolio	
Frontier	Not so close	Portfolio maturity (yrs)	7.6
Demographic outlook	Unfavourable	Domestic currency issuance (%)	112.0
Other	High structural unemployment	Inflation linked issuance (%)	5.2
		Foreign holdings (%)	44.0
		Central bank holdings (%)	26.0
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	2.1		
FDI (2019)	1.0	1	
Net IIP (2019)	-73.9	1	

Source: Datastream, JPM, Penn World and AXA IM Macro Research, Oct 2020

Despite robust economic gains, progress in lowering public debt has been limited over the past five years: debt fell by just 5ppt to 95% of GDP in 2019 (Exhibit 15). Strong growth and a lower interest bill had helped to reduce fiscal deficits (from 10.7% in 2012 to 2.8% of GDP in 2019), but structural adjustment has been scarce (Exhibit 16). Spain did not enter the Covid-19 crisis on a strong fiscal footing.

Concerns about perceived debt sustainability likely in part explain why the initial response to the pandemic was hesitant. But following reassuring signals from the ECB (PEPP) and the EU (suspension of the fiscal rules; Next Generation EU package), Spain implemented roughly the same mix of emergency measures as its peers (job income support, a boost to health spending, support to corporates) at c.4% of GDP. Large deficits (the government sees it at 11.3% of GDP) and an unprecedented growth contraction mean public debt is expected to jump to 118.8% of GDP in 2020.

The draft 2021 budget foresees a deficit of 7.7% and debt at 117.4% of GDP in 2021. We fear both will be larger. First, we expect a much milder rebound in growth in 2021 due to longer lasting and more pervasive effects of the pandemic on key sectors of the Spanish economy and labour market. We forecast GDP growth of 4.2%yoy versus the government's 7.2% estimate. Second, in order to increase political support for passing the budget the government has maximised the budget ceiling by including €27.4bn from EU programmes (c.2.7% of GDP, with €25bn from the Recovery and Resilience Facility and €2.4bn from React-EU). In practice though, the government only expects an actual disbursement of €7bn. so either it will have to fund the remaining €20bn in 2021 with increased issuance, or the fiscal stance will need to be adjusted lower. The truth will probably be somewhere in the middle, but this will have negative consequences on the deficit and growth. Another caveat is that Spain has been one of the worst performers in absorbing EU funds. Only about 40% of their European structural and investment funds have been used over the 2014-2020 period, casting doubt on the country's ability to quickly find projects that match European Commission criteria (20% of expenditure related to digital, 37% for climate change), while political divisions and the weakness of the minority government add another layer of complexity.

Over the medium-term, fiscal policy will have to address not only the legacy of the pandemic but also the substantial challenge of ageing. In the next 25 years, the dependency ratio (the population aged 65 and over against the population aged between 15-64) will increase by over 25ppt to 56.1%. Proper implementation of the 2013 pension reform (of which some parts have been put on hold and others reversed) is needed to limit the increase in pension expenditure and the subsequent negative impact on debt. On the revenue front, Spain has room for improvement as well, given its low tax-to-GDP ratio (34.7% in 2018 versus 40.6% in the Eurozone). But political fragmentation once again complicates the picture.

Japan

Exhibit 18: Japan debt approaches estimated limits Japan historic debt and estimated Steady State

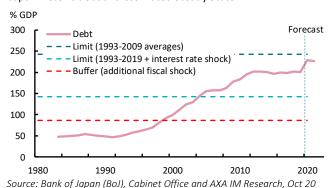
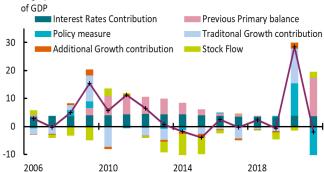


Exhibit 19: Breakdown of rise in Japan debt

Japan decomposition of change in debt:GDP ratio Ann chg %point



Source: Peterson Institute for International Economics (PIIE), BoJ, Cabinet Office and AXA IM Research, Oct 20

Exhibit 20: Overview of Japan debt metrics

Summary Statistics - Japan

GDP)		
229.0	Spending (2018 actual)	39.0
-16.0	(relative to 20 year avg)	0.3
208.0	Receipts (2019 actual)	19.4
242.0	(relative to 20 year average)	1.9
	Debt Portfolio	
Just below the frontier limit	Portfolio maturity (yrs)	9.3
Negative	Domestic currency issuance (%)	100
(SugAbe)nomics will	Inflation linked issuance (%)	5.2
persist, focusing on	Foreign holdings (%)	7.6
administrative reforms,	Central bank holdings (%)	46.8
digitalisation and SMEs	Reserve currency	Υ
P)		
3.6		
0.7		
2.4		
	Just below the frontier limit Negative (SugAbe)nomics will persist, focusing on administrative reforms, digitalisation and SMEs) 3.6 0.7	229.0 Spending (2018 actual) -16.0 (relative to 20 year avg) 208.0 Receipts (2019 actual) 242.0 (relative to 20 year average) Debt Portfolio Just below the frontier limit Negative (SugAbe)nomics will persist, focusing on administrative reforms, digitalisation and SMEs) 3.6 0.7

Source: BoJ, BIS, Ministry of Finance and AXA IM Research, Oct 20 $\,$

In Japan, government debt has not always been as high as it is now. It accelerated at the end of the 1990s at the core of what has been called the "lost decade" and just after the banking and Asian financial crises. Then the 2008 financial crisis and 2011 Fukushima earthquake occurred. Each time, public debt breached new records, but without placing any tension on interest rates, due to abundant domestic savings and the fact that public debt is held domestically. The Bank of Japan (BoJ) also undertook very accommodative policy in 2001 and has been a pioneer of quantitative easing. During this period, both the erosion of tax revenues amid a sluggish economy and a wave of stimulus plans worsened public debt. In total, from 1998 to 2011, debt as a percentage of GDP rose by 126 points to 195%. In 2012, Prime Minister Abe launched 'Abenomics' – a set of policies aiming at reflation, rationalisation of government spending and a growth strategy to jolt the economy out of stagnation. Abenomics was based upon three 'arrows': Fiscal stimulus, alleviated by monetary easing and structural reform. Until the pandemic, debt had stabilised at around 200%, thanks to the return of growth, successive primary balance efforts and most importantly the large decline of debt interest costs.

Since then, the pandemic has shattered the fragile fiscal balance. The government promoted different measures to support the economy and for 2020 alone, we estimate the deficit is likely to reach 16%. According to our estimates, the debt-to-GDP ratio has already breached the steady state, rising to be around 208%. Exhibit 18 illustrates that this would be close to the fiscal limit, based on a primary balance around its highest sustained level (+2.4%) and interest and growth rates consistent with those seen between 1993 and 2009. However, higher interest rates would lower this limit (we illustrate a two standard deviation increase in the natural interest rate, +1.6%), as would a further fiscal shock. This highlights the challenge faced by Japan to control the sustainability of its debt without inflation and with low potential growth.

The government has implemented important supports on the supply and demand sides, worth 43% of GDP of which 12 points are fiscal spending. Once restrictions are relaxed, new PM Suga is expected to announce further stimulus to boost consumption. He also pledged to continue Abenomics, suggesting a focus on structural reform. These moves should help raise productivity and potential growth, particularly as the country is already facing a declining population. On the fiscal side, Suga has rejected any sales tax cut. This could temporarily revive consumption, but he knows how much time it took to increase it from 8% to 10%. Finally, in this uncertain context, the "narrow relationship" with the BoJ is likely to be preserved as low refinancing costs are necessary to ensure debt sustainability (Exhibit 19).

United Kingdom

Exhibit 21: Debt to reach 60-year high UK historic debt and estimated debt limits

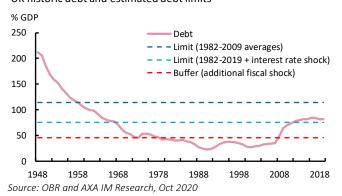
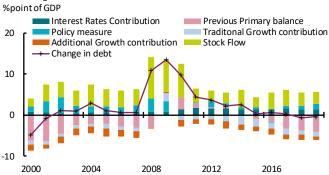


Exhibit 22: Debt stock had been reduced

Decomposition of debt change dynamics - UK



Source: OBR, National Statistics, AXA IM Research, Oct 2020

Exhibit 23: Overview of UK debt metrics

Summary Statistics	- UK		
Current fiscal position (%	GDP)		
Debt (est 2020)	101.0	Spending (2019 actual)	40.6
Deficit (est 2020)	14.0	(relative to 20 yr avg)	-0.7
Steady State est	39.3	Receipts (2019 actual)	36.7
Limit est (historic rates)	103.5	(relative to 20 yr avg)	0.6
LR GDP outlook		Debt portfolio	
Frontier	Someway below	Portfolio maturity (yrs)	15.0
Demographic outlook	Set to slow	Domestic currency issuance	100.0
Other	Digitally advanced,	Inflation linked issuance (%)	25.3
	Brexit to lower	Foreign holdings (%)	30.1
	GDP	Central bank holdings (%)	23.8
External balance (% GDP)		Reserve currency	Υ
Current account (2019)	-4.3		
FDI (2019)	3.1		
Net IIP (2019)	-84.4		

Source: OBR, DMO, National Statistics, BIS, Oct 2020

UK public finances had improved before the pandemic. Last November, the Office for Budget Responsibility (OBR) forecast the 2021-21 deficit to fall to 1.8% of GDP^7 , taking debt to 79% of GDP, down from a peak of 83% three years earlier. By August 2020, however, the deficit had reached £175bn (8% of GDP) with the OBR estimating a full-year total of £322bn. Additional fiscal support deployed since looks set to push this higher still.

With borrowing now seen more than £250bn higher than a year ago, nominal debt will rise. Accompanied by a likely 10%+ fall in GDP, this would push the debt *ratio* above 100% of GDP for the first time since 1960-61. Based on 1985-2009 average interest and growth rates, debt would be close to an estimated upper limit (Exhibit 21). Yet interest rates fell to just 1.9% in 2019, from 8.3% over 1985-2009 and interest payments have fallen to 1.6% of GDP from a 2.6% average, even as debt trebled. A return to 2019 growth and interest rates would reduce debt by around 2ppt per annum. Yet Richard Hughes, Head of the OBR, warned the "big question" was how long low rates would last. Exhibit 22 shows how an interest rate shock (without a rise in growth) could leave debt unsustainably high, as could another fiscal shock.

The gilt portfolio is better insulated from financial shocks, with an unusually long maturity leaving it less vulnerable to short-term spikes in yields. We estimate a yield shock would see debt interest costs rise by 0.7% of GDP over five years, compared to a range of 1.1-3.4% in other developed markets, although QE is shortening that maturity. However, this offers no protection from a long-term rise in global interest rates.

Growth is critical for the UK. It is one of the more digitally advanced economies⁸, which should help it weather the pandemic and provide a base for future growth. It also has some scope to raise its capital stock, suggesting scope for catch-up. However, Brexit will weigh on potential growth and is estimated to cost around 0.4-0.5% per annum over the coming decade⁹. Moreover, labour force growth looks set to slow by 0.5% per annum over the same period. The combined impact of a 1ppt reduction in trend growth will slow the erosion of government debt by around 0.5% per annum, requiring an offsetting rise in the primary balance.

The OBR's long-term forecasts¹⁰ include demographic developments and envisage a rise in public debt to around 220% by 2050 – assuming policy is unchanged. In keeping with our broader prognoses, current low rates provide scope for the UK to provide fiscal stimulus to ensure a full recovery from the current recession. However, the combined demographic and Brexit-related impact on permanent growth will make longer-term repair of the public finances all the more important as the economy improves.

⁷ This was updated in March 2020 to 2.4%

 $^{^8}$ The UK ranked 13th out of 141 countries in the Cisco Global Digital Readiness Index 2019

⁹ "EU Exit: Long-term analysis", HM Treasury, November 2018.

¹⁰ "Fiscal Sustainability Report", OBR, July 2020



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