

Coronavirus – 28 days later

Updating our outlook

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Macro Research – Core Investments

Key points

- Despite available evidence suggesting China has gained some control over the spread of Covid-19, the virus appears to be spreading across the rest of the world.
- The broader spread of the virus increases the expected economic impact. We lower our global growth forecast for 2020 to 2.7% from 3.2%. We reduce growth forecasts for the US, China and Europe, expecting recession in Japan and the Eurozone, but not the US.
- Growth risks are two-sided but skewed to the downside. The virus could spread more aggressively and the shock could prompt cyclical reversal in other economies.
- The US Federal Reserve (Fed) delivered an emergency rate cut on 3 March, lowering its benchmark interest rates by 50 basis points to between 1.0-1.25%. We expect a 0.25% Bank of England rate cut to follow, as well as a loosening from the Bank of Japan later in the month. We expect a more limited response from the European Central Bank via targeted liquidity measures.
- Asian economies including China, Hong Kong and Singapore are loosening fiscal policy. We expect other regional economies to follow, including South Korea. We forecast a significant fiscal easing in the UK. More modest loosening is likely in the Eurozone, but we expect a limited response in the US.

Covid-19 spread raises global threat

On 5 February we published our first tentative assessment of what Covid-19 might mean for the global economy¹. At that time, there were 24,500 cases reported globally, of which 220 were reported outside of China². 28 days later, mainland China's reported cases increased to exceed 80,000, although Hubei – the epicentre of the disease – reported just 114 new cases in the most recent day. The rest of China saw just 11 more cases – its smallest daily rise since 23 January. China's decisive response to the virus – praised by the World Health Organisation (WHO) – appears to have managed to tame the spread within China. However, it remains to be seen:

- whether this containment continues as Chinese workers begin to return to work.
- what the economic impact is of the measures imposed to contain the spread.
- if the improvement is statistically robust, or an artefact of the testing procedures.

At least for now, China appears to be a beacon of hope in dealing with the spread.

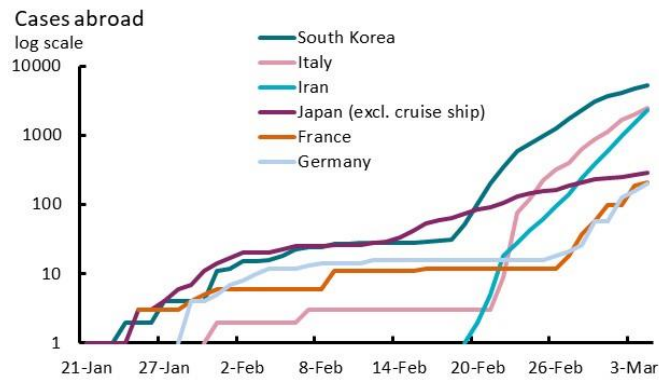
The news beyond China is far less encouraging. Total reported cases outside China have soared to 11,000 from 220. South Korea accounts for nearly 5,000 of these, Italy for 2,000 and Iran for 1,500. A total of over 60 countries now have confirmed cases. Exhibit 1 shows the growth rates of the virus in some of the countries reporting a larger number of cases. This chart illustrates that growth rates of the number of cases appear alarmingly similar in different countries.

¹ Yao, A., " [Coronavirus: First thoughts on the potential economic impact on China](#)", AXA IM Research, 4 February 2020

² We refer to World Health Organisation confirmed cases. However, we recognise significant risks in placing too much faith in these figures,

recognising the heterogeneity and limits of individual countries' testing practices and the difficulties of monitoring this spread in real time.

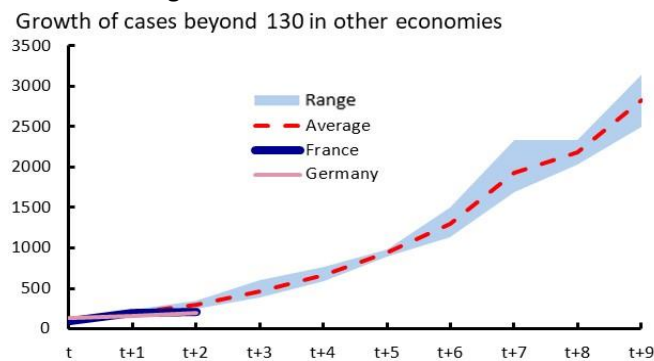
Exhibit 1: Growth rates of Covid-19 ex China



Source: WHO and AXA IM Research, 4 March 2020

Exhibit 2 illustrates the potential speed with which the virus can spread. Germany and France both recorded 130 confirmed cases on 2 March. The experience of other countries that have passed the 130 mark can only tell us so much – China seeing a fast increase, Japan maintaining relative stability (currently at 293, although we note that in part this is likely due to differences in testing procedures). However, Italy, South Korea and Iran seem to have followed similar growth patterns and suggest that within 10-days of reporting 130 cases, the total number of cases could reach 4,000.

Exhibit 2: Progression of cases in excess of 130



Source: WHO and AXA IM Research, 4 March 2020

With a fast spread of the virus around the world and fading hopes of containing it to one region, the expected economic impact of Covid-19 is rising. In this note, we publish our revised growth outlook for the global economy (Exhibit 2). We also consider the likely monetary and fiscal responses to follow, before turning to an assessment of the market outlook.

Growth outlook worsens

In our first global note³, we discussed three scenarios for economic activity, which included an optimistic outlook – a SARS-like containment event – a more protracted, but broadly China-only event and the risk of a full-fledged pandemic. We argued that the global impact was likely to be more than seen in 2003, suggesting a 0.5 percentage point

³ AXA IM Macro Research team, “Coronavirus: tracking the path, anticipating the impact”, 10 February 2020

(ppt) reduction in GDP, but suggested that a broader pandemic could reduce global growth by 4-5ppt.

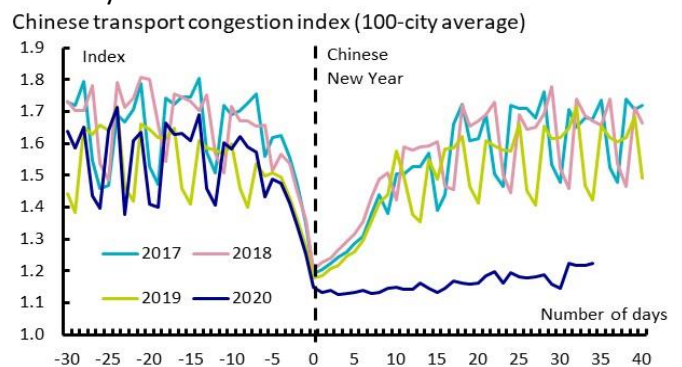
Exhibit 3: We lower our ‘base case’ global outlook

Real GDP growth (%)	2020			
	AXA IM		Consensus	
	Feb 20	Jan 20	Feb 20	Jan 20
World	2.7	3.2		
Advanced economies	1.0	1.3		
US	1.4	1.6	1.9	1.8
Euro area	0.2	0.7	1.0	1.0
Germany	0.1	0.4	0.9	0.7
France	0.6	1.1	1.2	1.2
Italy	-0.5	0.4	0.4	0.5
Spain	0.9	1.5	1.6	1.7
Japan	-0.4	0.1	0.4	0.3
UK	0.7	1.1	1.1	1.1
Switzerland	1.1	1.1	1.3	1.2
Emerging economies	3.7	4.4		
Asia	4.7	5.2		
China	5.3	5.8	5.8	5.9
South Korea	1.5	1.7	2.2	2.2
Rest of EM Asia	4.0	5.3		
LatAm	1.3	1.7		
Brazil	1.5	1.8	2.2	2.0
Mexico	0.5	0.9	1.1	1.2
EM Europe	3.6	3.7		
Russia	1.5	1.5	1.8	1.6
Poland	2.5	3.5	3.4	3.4
Turkey	2.2	2.3	3.0	2.3
Other EMs	2.3	2.5		

Source: Consensus forecasts, AXA IM Research, 4 March 2020

The outlook remains unclear for now. As discussed, China appears to have been successful at limiting the spread of the virus, but at significant economic cost. Micro, real-time series suggests that Chinese activity still remains below seasonal norms (Exhibit 4). Moreover, the preliminary PMI releases for February suggest a material drop in activity in Q1 (Exhibit 5).

Exhibit 4: Real-time activity measures suggest slow recovery in China

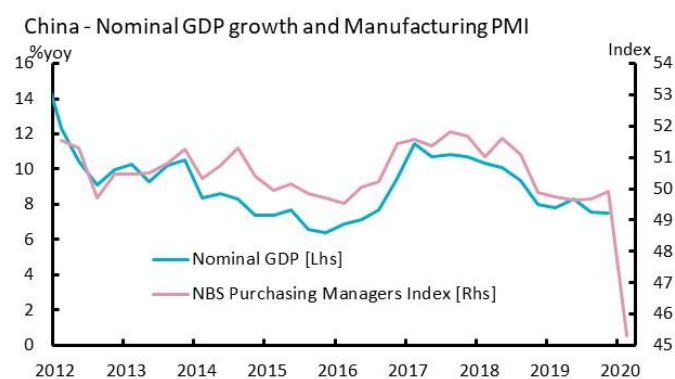


Source: CEIC and AXA IM Research, 4 March 2020

As we await clearer evidence of the scale of impact and its rebound potential, we continue to expect an outright contraction in GDP in Q1 2020, and the risk is for much larger decline than our previous forecast of -0.5% quarter-on-quarter (qoq). However, we do expect China’s economy will get back to

more normal production in the next couple of quarters, while stimulus-inspired boosts to the economy (new measures or front-loading of previous fiscal plans, along with monetary support) should create expansion in excess of the previous trend, resulting in some catch up. We forecast GDP growth in China to be reduced by 0.5ppt on the year to 5.3% from 5.8% (consensus 5.5%⁴). However, as we monitor the as-yet slow recovery in activity rates as China cautiously loosens its grip on labour mobility, we recognise risks of a slower rebound in activity rates that could depress annual growth rates in 2020, but lift growth in 2021 – which we currently forecast at 5.6%.

Exhibit 5: PMI points to material output loss in Q1



Source: Datastream and AXA IM Research, 4 March 2020

The broader impact on South East Asia is also affected by the impact on China. As we wrote in February⁵, the weakening of activity in China and the risk of the virus spreading was expected to impact China’s immediate neighbours. We consider tourism, trade, domestic demand and financial markets to be the key transmission mechanisms of economic shock to these economies. However, to date, and despite some initial warning signs, the spread of the virus itself across the Asian region appears to have been relatively muted beyond South Korea. This might limit the impact on these economies to spillover effects from China, while the anticipated Chinese stimulus that has seen Chinese stocks rebound 8% from the lows might have mitigated some of the impact of tighter financial conditions on Asian economies.

In total, we have reduced our Asian economy GDP forecasts, lowering the virus-affected South Korea by 0.5ppt to 1.5%, but other close neighbours including Indonesia, Singapore, Taiwan and the Philippines by a smaller 0.2ppt on average for now. We consider Thailand and Malaysia as likely to be more impacted given the scale of tourism and trade respectively to these economies.

We have also lowered our outlook for Japan. Following the increase in consumption tax and typhoon in Q4, the onset of coronavirus impacts an enfeebled economy and looks likely to scupper an expected rebound in growth following Q4’s 1.6% (qoq) contraction. Japan appears to have shown the

most effective containment of the virus. Having recorded over 100 cases 10 days ago, it is still only recording 293 cases at the time of writing. Prime Minister Shinzo Abe has recently introduced additional measures to control the spread of the virus, including cancellations of major events and mass gatherings for the next two weeks and shutting schools for four weeks. We reduce our Japanese GDP forecast to -0.4% from +0.1% and now expect the economy to fall back into recession for the first time since 2015.

We have lowered our 2020 GDP growth forecast for the Eurozone to just 0.2% from 0.7% at the start of the year. In part this reflects the anticipated spillover effect from the China slowdown having a visible impact on European activity because of its implications for global trade and supply-chains. This is particularly visible in a projected worsening of German growth to 0.1% from 0.4% and Italian growth to -0.5% from 0.4%. Additionally, we reduce our Eurozone growth outlook because of the spread of the disease in the region. As we suggest, the growth rate of Eurozone cases is a cause for concern and a simple extrapolation of current trends could see cases rise sharply over the coming weeks. So far, Italy has introduced measures significantly limiting movement, with many Italian schools closed for a second week. The French government has suspended some public and private gatherings. We pencil in contraction in Q1 and Q2 resulting in the first Eurozone recession since 2011-13.

The UK will suffer a similar degree of slowdown to continental Europe, reflecting the weakening in global trade and Eurozone domestic demand specifically – quite apart from the high risk of a more material spread of the virus across the UK. However, we forecast a modestly smaller reduction in the growth outlook in the UK to 0.7% from 1.1% at the start of the year as the UK looks set to introduce a significant fiscal easing later this month.

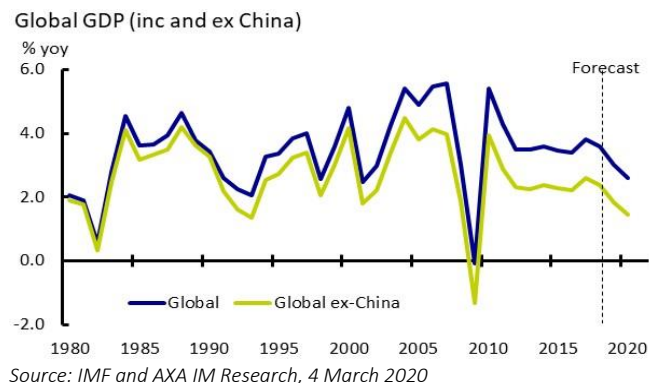
The outlook for the US is also reduced, although, of all of the large economic regions, its downgrade is amongst the smallest. We forecast US GDP growth forecast to slow to 1.4% for 2020 from 1.6% at the start of the year. Our expectation for a relatively modest impact on the US economy reflects a number of factors. First, the positive start the US economy had made to 2020, including a lagged reaction to previous Fed easing and loosening of financial conditions. Second, the relatively smaller exposure of US activity to global trade. Third, as-yet relatively few domestic cases reported in the US, increasing the chances of US infection falling more into the warmer Spring season. Finally, supportive monetary policy, with the relatively prompt reaction by the Federal Reserve (Fed) in reducing the Fed Funds Rate by 50 basis points (bps) to 1.00-1.25% yesterday and an expectation of further easing to come that should help to bolster US growth prospects before year-end.

⁴ Bloomberg consensus, taken at 2 March 2020

⁵ Shen, S., “Coronavirus: impact on Asia”, AXA IM Research, 13 Feb. 2020

In total, the adjustments to our base case would result in global growth slowing to 2.7% for 2020, from a forecast 3.2% at the start of this year. This would be the weakest year of global growth since the financial crisis in 2009 (Exhibit 6). The 0.5ppt impact on global growth is consistent with the OECD’s recently estimated base case (reduced to 2.4% from 2.9%).

Exhibit 6: Global GDP growth (inc and ex China)



The OECD also identified a downside scenario that could see growth slow to 1.5% (a 1.4ppt downgrade). We consider that downside growth risks derive from two (non-exclusive) risks. First, the possibility of a broader spread of the virus across Europe and the world that sees only a limited slowdown as the Northern hemisphere emerges from winter. This would prompt additional measures to contain the virus, introduce supply constraints – including from workers falling ill – and could increase the likelihood of more adverse changes in consumer and business behaviour. Second, we consider the risk that this shock – as any shock – could push other economies into contraction. Given that we already forecast recession in the Eurozone and Japan, we consider the US as the next biggest concern.

These risks are exacerbated by the limited room for policy response in major economies, either monetary (Eurozone and Japan) or fiscal (US).

Central banks return to the front line

After the outbreak of Covid-19 central banks were initially cautious in their outlook. The Fed’s emergency 50bps rate cut was a decisive full-stop to that narrative.

At the end of February, European Central Bank (ECB) President Christine Lagarde stated that Covid-19 was not yet at the stage where it would have a lasting impact on inflation and therefore require a monetary policy response. This followed comments from ECB Chief Economist Philip Lane on 21 February that the ECB’s base case was for a “V-shaped” recovery. As recently as last week, similar sentiments were expressed by several Fed speakers, including Fed Vice Chair Richard Clarida who stated that “policy was likely to stay

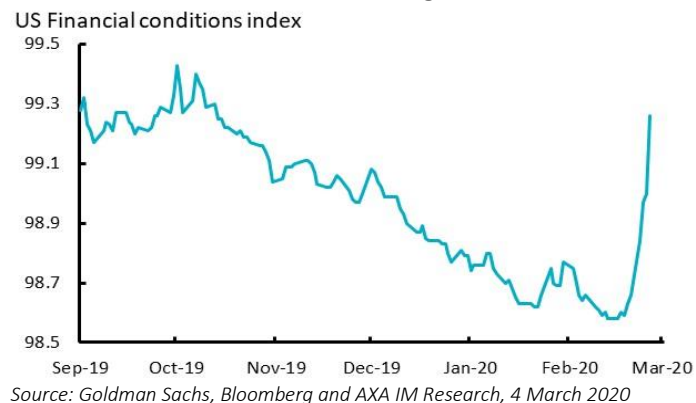
appropriate if the outlook was undimmed”, referring to a “meeting-by-meeting” approach to policy setting.

This restraint from central bankers to some extent reflected an assessment that the initial impact from Covid-19 was likely to be a supply shock – something that monetary policy would not alleviate. We have questioned this. Many attempts to model the impact of a pandemic⁶ suggest that the predominant impact will be demand-based, including spending on travel and tourism, other consumer services and business investment. As such, central banks clearly have a role to play in creating conditions for replacement demand growth over the coming quarters to make up for the immediate lost spending.

More specifically, the widening spread of Covid-19 awoke markets to the likelihood of a more significant impact. This resulted in a material tightening in financial conditions across the last week of February, including an 11.5% drop in the US S&P 500 index. This tightening in financial conditions risks exacerbating the initial shock from the virus, undermining consumer spending via effects on sentiment and wealth, and reducing businesses desire and ability to invest. Exhibit 7 illustrates the tightening in financial conditions in the US in recent weeks. Unaddressed, this poses an additional risk to US activity. Central banks can address this risk by loosening policy and providing an offset to tighter financial conditions.

Indeed, there has been a more recent shift in central bank assessments. On Friday 28 February, Federal Reserve (Fed) Chair Powell issued a statement saying “coronavirus poses evolving risks to economic activity”. This was swiftly followed by statements from the Bank of Japan (BoJ) that it would “ensure stability in financial markets through appropriate market operations and asset purchases”, while the Bank of England (BoE) pledged to take “all necessary steps”. Even Lagarde suggested the ECB was ready to take “appropriate and targeted measures”.

Exhibit 7: US financial conditions tighten



On Tuesday 3 March, G7 finance ministers and central bankers held a meeting. A short statement merely committed

⁶ Two good examples include Verikios, G., Sullivan, M., Sojanovski, P., Giesecke, J., and Woo, G. “The Global Economic Effects of Pandemic Influenza”, June 2011 and

Jonung, L., and Roeger, W., “The macroeconomic effects of a pandemic in Europe. A model-based assessment”, European Commission.

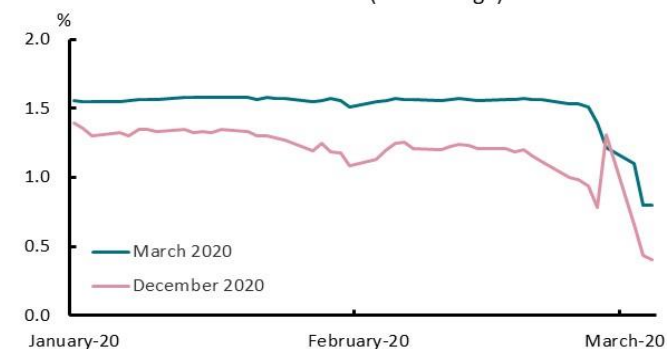
polymakers to “use all appropriate tools”. However, within a couple of hours the Fed surprised markets with an intermeeting 50bp reduction in its key policy rates – the largest move since 2009 and the first intermeeting rate cut since the financial crisis in 2008. Fed Chair Powell described “evolving risks” presenting a “material change” to the US outlook. He added that Fed was still “closely monitoring” the virus and would “use our tools to act appropriately”.

We had expected the Fed to cut the funds rate by 50bps at its next scheduled meeting on 18 March. The outlook for this meeting is now uncertain. Much will depend on coronavirus developments. If the virus continues to spread globally and in the US, it would present additional downside risks to the US economic outlook and create incentives to ease policy further. Risks here are skewed to the downside. Much will also depend on market reaction. If financial conditions tighten further, the Fed may also be encouraged to ease further.

The Fed’s decision to move intermeeting likely reflected a desire to get ‘ahead of the curve’, with markets already pricing at least a 50bp easing at the March meeting and two subsequent cuts thereafter prior to the surprise cut (Exhibit 8). This suggests that the Fed might have ‘cleared the decks’. However, there seems little point to the Fed moving swiftly now, to then sit on its hands for nearly two months until the following meeting at the end of April. The experience of previous intermeeting cuts, particularly in 2008 was that it was a complement, not substitute to easing at scheduled meetings. For now, we pencil in a 0.25% rate reduction at the Fed’s scheduled meetings on 18 March and 29 April taking the Fed funds rate to 0.5-0.75%. We expect this to boost GDP growth relative to our prior forecasts by year-end.

Exhibit 8: Market expectation

Median forecast for Fed Funds Rate (lower range)



Source: Bloomberg and AXA IM Research, 4 March 2020

The Fed is not the first central bank to ease policy in reaction to Covid-19. Indeed, from the start of the year 22 emerging market central banks have eased monetary policy, most starting in late January/early February. The Reserve Bank of Australia cut its policy rate by 25bps on 3 March. We now also expect to see additional monetary policy easing from the BoE, pencilling in a 0.25ppt rate cut to 0.5% on 26 March. We forecast additional easing in several emerging Asian economies, including Korea, Taiwan, Thailand, Malaysia and

India. We also expect to see further easing in monetary policy from the People’s Bank of China across the course of 2020.

We also expect to see a modest loosening by the BoJ at its next meeting on 19 March. However, we remain of the view that the BoJ will leave its overnight call rate unchanged at -0.1%, wary of the negative effects of reducing this policy rate further into negative territory. Rather, we expect the BoJ to make increasing use of its balance sheet again, increasing exchange-traded fund (ETF) purchases to underpin its commitment to support markets.

The ECB, meanwhile, has looked likely to provide additional monetary policy only cautiously. Financial markets are pricing in the prospect of a further 10bps easing in the deposit (depo) rate at March’s meeting next week, but we remain of the view that enough Governing Council members are unconvinced of the merits of lowering the depo rate further. The ECB’s overall quantitative easing programme remains constrained by its rules on specific bond and issuer limits, rather than the overall size of the balance sheet. This leaves the ECB only limited monetary policy space. We do expect to see the ECB increase its corporate bond purchases in Q2. We may also see more technical adjustments including additional targeted long-term refinancing operations (TLTROs) potentially announced as early as next week or a rise in the “tiering” multiplier. However, we still see the prospect of a significant ECB monetary policy loosening as limited. This is part of why the euro has rebounded by 3.3% to the dollar in the past ten days.

Fiscal policy to underpin rebound

Fiscal stimulus has been deployed materially in China and neighbouring countries since the outbreak of Covid-19. China’s authorities have announced a slew of measures either providing additional stimulus or front-loading previously announced measures. We estimate that about RMB11tn of measures (11% of GDP) have been promised by local authorities. While this may take time to arrive it suggests a material boost to the economy down the line.

Fiscal easing has also been announced in Singapore and Malaysia – to date with fiscal loosening at or above 1% of GDP. We expect further easing in Korea, given the scale of the Covid-19 outbreak there. The government has suggested future stimulus surrounding a consumption tax cut, vouchers, tax exemptions and credit subsidies and any stimulus is likely to be detailed in a budget over the coming weeks. We also expect to see additional stimulus in Thailand and India.

In the Eurozone, despite an expected relative paucity of monetary policy stimulus, we still do not envisage a swift and coordinated reaction at the European level. At the national level though, some targeted measures have already been announced. Italy has announced a series of small fiscal packages (€0.9bn at the end of February and €3.6bn at the start of March), but together these account for around 0.2% GDP. Italy has also suggested it will seek approval from

Brussels to raise its 2020 deficit limit. In Germany, despite the announcement of a potential suspension of the debt brake rule, the reality is that this would not be new stimulus per se. There have been more and more calls for government support, in particular via corporate taxes cuts. But internal party politics, with Germany's Christian Democratic Union (CDU) leadership election in April, risks further delaying stimulus. We expect only modest easing in H2 2020.

In the UK by contrast, the government has been preparing for a meaningful fiscal stimulus since its recent election. On top of spending increases that already exceed 0.5% of GDP, expectations are now for an additional 1% of GDP/year boost to investment spending. The arrival of new Chancellor Rishi Sunak has also prompted expectations that a balancing of the UK's current budget could be pushed into the next Parliament. Sunak is now discussing additional spending measures to specifically address the expected spread of Covid-19. The UK Budget will be announced on 11 March.

The US is also discussing new fiscal measures – a \$1.25tn emergency funding request, as well as reallocating a similar amount internally – mainly in the form of additional funding to front-line services for the prevention of Covid-19 spread in the US. However, the Congressional Budget Office projects the US government deficit to remain at 4.6% in 2020 and rise to average 5.0% in the second half of the decade, based on a benign outlook where growth does not slow below trend. This produces a debt forecast increase to 98% of GDP by the end of the decade from 79% at present. This suggests reduced scope for additional discretionary fiscal stimulus. We also suggest that large-scale discretionary easing could be further limited by the political dynamic of an election year.

Market reaction

The growing realisation of a wider spread of Covid-19 and a more severe economic reaction has brought a significant financial market reaction. Equity market fall-out was the most eye-catching with the Eurozone's Eurostoxx 50 recording a 12.5% retracement last week and the US S&P 500 index dropping by 11.5%. Comforting statements from the G7 and individual central banks had seen markets pare losses. We are mindful that US stocks, for example, have exhibited a broadly 15% retracement on several occasions within the context of the last decade's ongoing expansion⁷. Should markets begin to consider a worse-case scenario developing for global and US growth prospects, this could result in a more material weakening in global equity markets.

Government bonds, however, have continued to make gains as risk assets retraced. US government 10-year yields have fallen by around 80bps to 0.95% since mid-January (reaching intra-day lows of 0.90%) and clearly spurred on by the recent Fed easing. This is a clear outperformance versus German Bunds, where

yields have fallen by around 45bps to -0.63%, UK gilt yields, down 45bps to 0.35%, and Japanese JGB yields, which have fallen by 13bps to -0.13%. Government bonds have continued to exhibit a significant negative correlation with risk assets during this risk-off phase, something that continues to provide benefits of diversification to portfolios constructed to include duration. However, we also note that, in extremis, bond yield performance to date appears to be anchored around expectations of central bank lower bounds. This suggests that in a worse-case environment, US Treasury bonds should outperform those of other major advanced economies.

Credit markets also underwent a notable repricing last week, although trading conditions were not dominated by panic. The move in spreads was the sharpest on a weekly basis since 2010-11, especially in relative terms given that spread levels were exceptionally tight. For the same reason the relative spread move looks substantial compared to recent risk-off episodes, but in absolute terms, the widening appears more limited. Spreads are still well below their 2018 Q4 spread peak, aside from USD high yield (HY) which is closer to recent highs, having reached 500bp vs a peak then of 550bp.

HY spreads have widened much more in absolute terms as usual. In beta-adjusted terms, HY underperformed in USD and GBP but outperformed in EUR, with the ECB Corporate Sector Purchase Programme a plausible culprit for that effect. In investment grade (IG), the widening in spreads has been offset by the fall in interest rates (more so in USD where the credit yield was actually lower over the week). The drawdown in total returns has been modest so far, especially in IG which has been shielded by falling rates. Given the high uncertainty around Covid-19, it is difficult to see the potential bounds of this correction. But most certainly, if a worse-case downside scenario was to play out, we would expect IG spreads to trade with over 200bps (in the low 100bps currently) and HY spreads over 750bps (400-500bps currently).

Emerging markets did not fare any better, EM equities lost more than 5% in US dollar terms in February, outperforming developed markets peers, thanks to a stabilisation in Chinese markets after a sharp drop in January. Still, this is the worst start to a year since 2009. EM currencies have weakened in a context of monetary easing in EM while global growth took a significant hit as the coronavirus spread. FX has borne most of the EM local currency debt market correction. In the hard currency space, the Emerging Market Bond Index Global (EMBIG) index spreads are 70bps wider year-to-date, still below early January 2019 levels but only thanks to index composition changes (ex-Venezuela, the index is now 13bps wider). HY credit has underperformed IG, even beta-adjusted. Were the markets to start considering a worst-case scenario, EM assets would need to adjust further as growth outlooks and corporate earnings expectations would incur further downward adjustments.

⁷ 2010, 2011 and 2015-16

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