

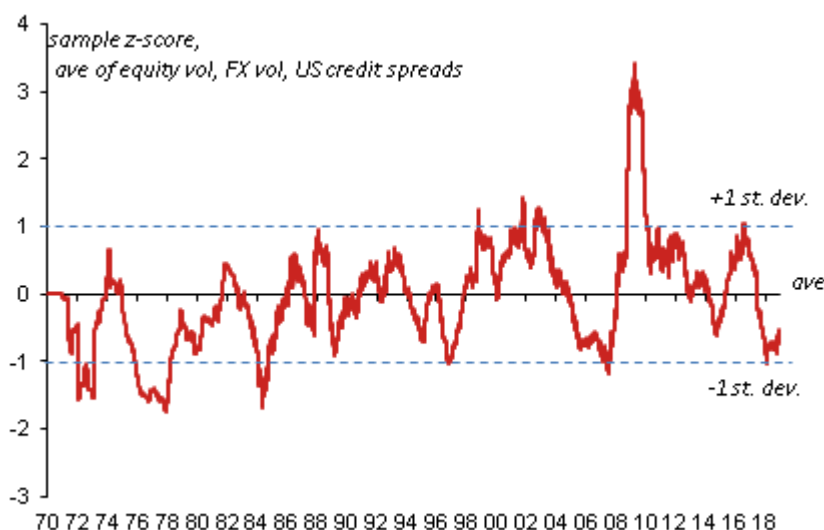
9 Grey Swans for 2019

Black swan events are ones that are out of the realms of possibilities at least as envisaged by market participants. For 2018, perhaps the only black swan event was the US-North Korean peace summit in June. As far as I could tell – no one was remotely thinking that was possible at the end of 2017. As for the other outsized moves of 2017, such as the EM FX sell-offs, VIX spike and equity sell-offs, these were grey swans – they were risks that many had highlighted, but turned out to materialise in a much more extreme fashion than expected.

So what grey swans are possible in 2019? This year, we try to provide some “positive” grey swans as well to provide some balance against the pessimistic ones. None of these are our base case, and instead are more an exercise in forcing us to think outside our usual base scenario-risk modes of thinking. **We’ve identified nine in all:**

- Shock 1: **End of populism**
- Shock 2: **Oil price plunges to \$20/bbl**
- Shock 3: **The big market quake**
- Shock 4: **Italian renaissance**
- Shock 5: **EM deflation**
- Shock 6: **CNY comeback**
- Shock 7: **Global growth takes off**
- Shock 8: **Deflating euro area**
- Shock 9: **Inflation sonic boom**

Fig. 1: Global risk at lows



Source: Bloomberg, Nomura

Global Markets Research

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1: End of populism

The rise of populism in many ways can be traced back to China. Its economic rise, especially since the financial crisis, has brought unease to many developed countries. Globalisation rather than just producing cheap goods for rich countries, has now allowed countries such as China to take middle-class jobs from developed countries. Moreover, unlike the previous ideological rival the USSR, China's rise has shown that liberal democracy is not the natural end-stage of political-economic evolution.

President Xi's ascension to lead China has further crystallised these ideas. He has focused on ridding the system of corruption by elites (tigers not just flies), has embarked on a centralisation of power and taken a more harsh stance on the media. This template appears to have been adopted elsewhere around the world, and populism of this sort is on the rise.

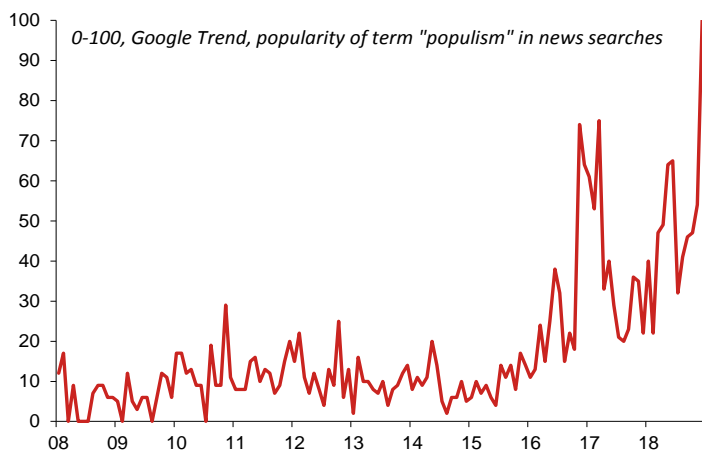
The specific characters in the populism story are well known from US President Trump to Brexit forces to Salvini in Italy in developed countries and President Erdogan of Turkey, President Putin of Russia and Premier Xi in China in developing countries. Much has also been written on the causes of this rise from widening inequality, the fall-out from globalisation and the financial crisis and social media. But at the macro level, without the example of China, this rise may not have been so widespread.

From this it follows that if China's model falters, then it could provide a leading indicator of populism declining elsewhere. And it is certainly the case that China's model is under pressure. Economic growth has fallen, thanks in part to an active policy-led deleveraging programme, but also due to growing tensions with the US. Some of this tension has been exacerbated by the overconfident tone of the Chinese administration, whether it was its One Belt Initiative or its 2025 agenda. Moreover, an overbearing state on the private sector has created a backlash with stock market weakness a notable reflection.

All of this shows how populism could be eroded elsewhere – populists failing to deliver growth, a backlash from the private sector and hubristic errors on the international stage. Already we are seeing signs of this. The Republicans have lost control of the House in the US midterms, and stock market weakness appears to have influenced President Trump's trade policy to become more conciliatory. In Europe, Brexit forces have splintered and the UK could be heading for a referendum to return the UK to the EU, Germany's AfD has lost ground to the Green Party and even Italy has seen one half of the populist coalition, the 5 Star movement, steadily lose support. Also, as we have seen with President Macron reversal of tax hikes in response to the "yellow vest" protests, mainstream parties can adopt core "populist" policies such as anti-austerity.

Finally perhaps the best guide to reaching "peak populism" is the sheer number of articles and books on the topic. According to Google, recent years have seen a surge in new articles referencing populism (Figure 2). And not a day goes by without another book that looks at some aspect of populism.

Fig. 2: Popularity of term "populism" in news searches



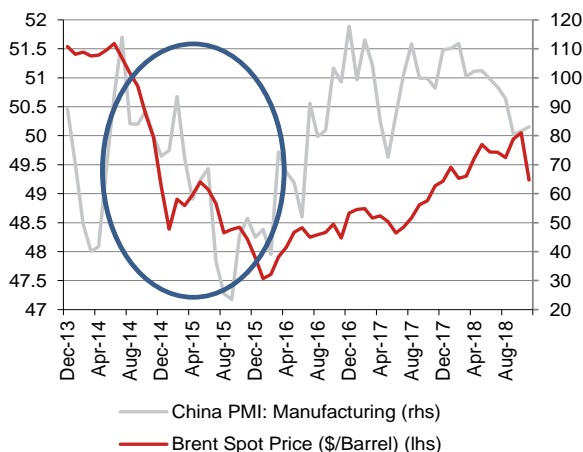
Source: Nomura, Google

2: Oil prices slump to \$20/bbl

Oil prices fell to a 13-year low of around \$26/bbl on 20 January 2016. Six months before that, prices had been \$60/bbl. A year earlier, in June 2014, they had been \$100/bbl. In other words oil prices have a recent history of moving from boom to bust and in ways that oil analysts have not expected. Could a similar slump in oil prices unfold in 2019? While it admittedly carries a low probability, we think the scenario is certainly plausible. Here's why:

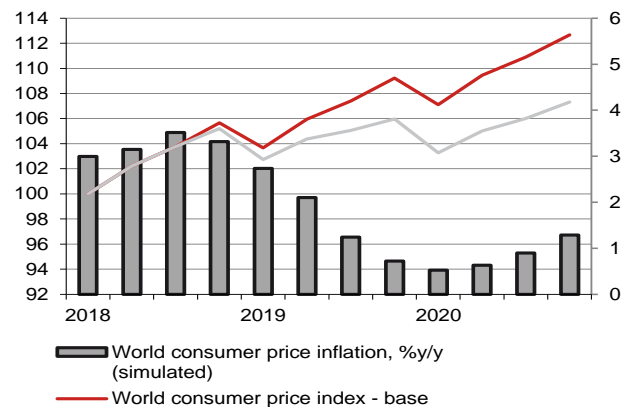
- Emerging economies in Asia are now the key driver of oil demand gyrations, particularly China, and to a lesser extent India. That sharp decline in oil prices in early 2016, for example, was wrapped up in financial and economic instability in China and this generated unexpected weakness in oil demand (Figure 3). It's worth highlighting then that our economists expect China's growth rate to probably be weaker than expected in the immediate months ahead as trade fragility combines with further debt deleveraging. Insofar as this generates ripple effects for financial conditions and world trade it could also instigate a far weaker picture for oil demand than the market is expecting. The restraint that heightened protectionism for world trade could apply a brake as we head through 2019.
- Currently, there is arguably a big glut in the oil market, partly thanks to rising oil production in the US. The EIA estimates that US crude oil production is presently close to record levels. And less production restraint from Iran of late, combined with lingering tensions between OPEC and Russia supply responses could leave that oil glut larger for longer in the period ahead.
- An added consideration here on the demand side of this equation is the policy response to weaker oil prices. If oil prices were, for example, to now fall sharply global inflation levels would also decline and move much closer to deflation territory once again (Figure 4). That could lift real interest rates, complicate efforts of central banks with headline inflation mandates to further normalise monetary policy and further derail oil demand.
- In the background to these shorter-term considerations there are a number of longer-term structural considerations that are probably pressuring oil prices to the downside. These include shifting consumer preferences from diesel to electric cars and the growth of autonomous vehicles. They include a reduced need to use cars (and other oil-intensive transportation methods) thanks to increasingly sophisticated mobile technology. They include the growing impact of new technologies such as 3D printing, and robotics. These are reducing the energy intensity of manufacturing by reducing waste and at the same time re-incentivising some onshoring of manufacturing activity and structurally reducing transportation needs. Finally, environmental considerations are shifting government policy toward more efficient energy technologies that will reduce oil demand (versus other energy sources).

Fig. 3: China manufacturing PMI versus oil prices



Source: Bloomberg, Haver, Nomura

Fig. 4: Simulated impact on global CPI of a \$20/bbl oil price



Source: Oxford Economics, Nomura. This chart shows the base and simulated levels of world CPI and the simulated level of world CPI inflation from a model simulation in which (Brent) oil prices steadily drop from current levels to \$20/bbl by the end of 2019 and then remain at those levels through 2020.f

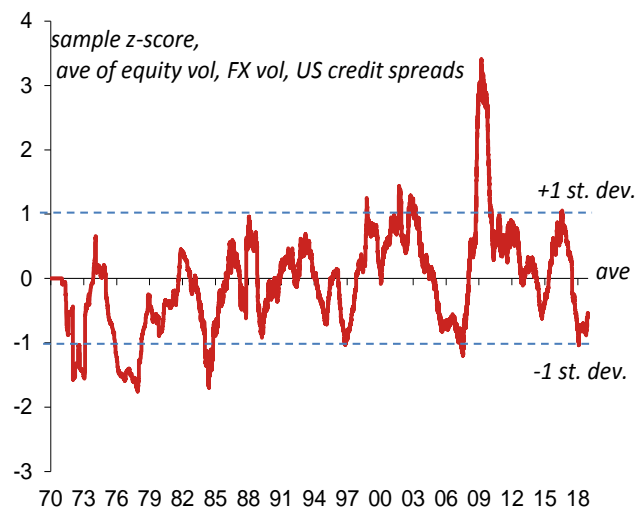
3: The big market quake

It's easy to paint a picture of a market crisis in 2019, market liquidity conditions worsening with lingering effects of Fed hikes and continued balance reduction, the ECB and BOJ scaling back their QE measures and China continuing its deleveraging policies. Meanwhile, the US joins slowing Europe and China as US fiscal stimulus effects fade. Then there were the mini-quakes in 2018 from the VIX sell-off, the EM FX collapse, trade wars, the Italian blow-out, Brexit and US stock correction. These could be precursors for the big one.

The more challenging issue is to determine the scale and location of the big market quake. On scale, it's worth noting that one measure of market risk shows it is close to its decade lows even after the 2018 bouts of risk aversion (Figure 5). This suggests that any market adjustment could see a very significant increase in volatility and spreads.

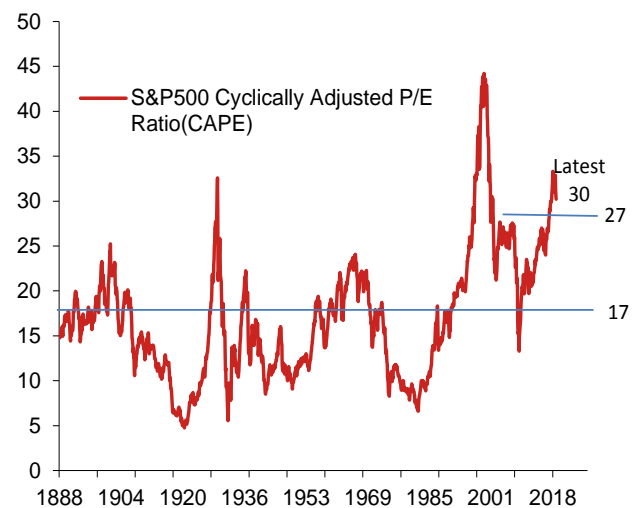
As for location, the three sources of imbalance are US stock valuations, Italian sovereign risk and China's mountain of private debt (see Figures 6-8). So collapsing stock prices, a contagious sovereign crisis in Europe and Chinese defaults would be the obvious manifestation of a market quake. In such an environment, cash would likely be king, risk markets would underperform and safe-haven currencies such as the yen would do well (on repatriation flows).

Fig. 5: Global risk at lows



Source: Nomura, Bloomberg

Fig. 6: US stock valuations at highs



Source: Nomura, Bloomberg

Fig. 7: China private debt at highs



Source: Nomura, Bloomberg

Fig. 8: Italy spreads widest since 2012



Source: Nomura, Bloomberg

4: Italian renaissance

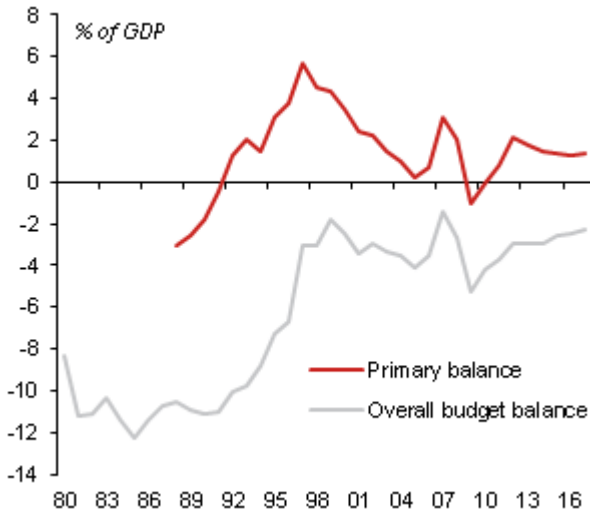
Italian government net debt is over 100% of GDP, the country has a populist government that is at logger-heads with the EU over fiscal slippage and growth has been weak. There's not much to like about Italy fixed income. But while it is tempting to extrapolate 2018's bearish trend, the market may suddenly realise how overly pessimistic it has become.

After all, if we exclude interest payments the Italian government has been running a budget surplus since the early 1990s (Figure 9). So overall budget deficits since then reflect high interest payments for past sins rather than enduring bad behaviour.

Moreover, since the European recession of 2012, Italy has been running a current account surplus (Figure 10). This means the country is a net lender to the rest of the world. If we sum the budget and current account balances, we find that Italian spreads are trading at the upper bound of where they would be based on their pre-single currency relationship (Figure 11). But of course, we do have a single currency, so if anything it should be trading in the lower bound.

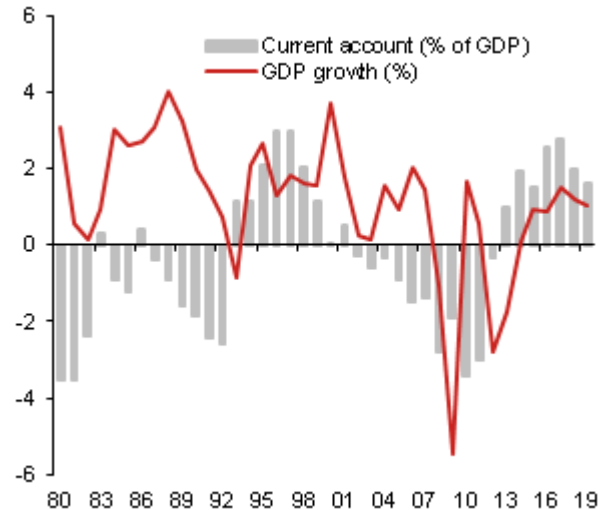
Finally, should Italy push through its fiscal plans, it would enjoy a fiscal impulse similar to what the US enjoyed in 2018 (Figure 12). And just as investors under-estimated US growth, they could make the same mistake with Italy. A major rally in Italian bonds could be the surprise of 2019.

Fig. 9: Overall budget deficit, primary surplus since 1992



Source: Nomura, IMF

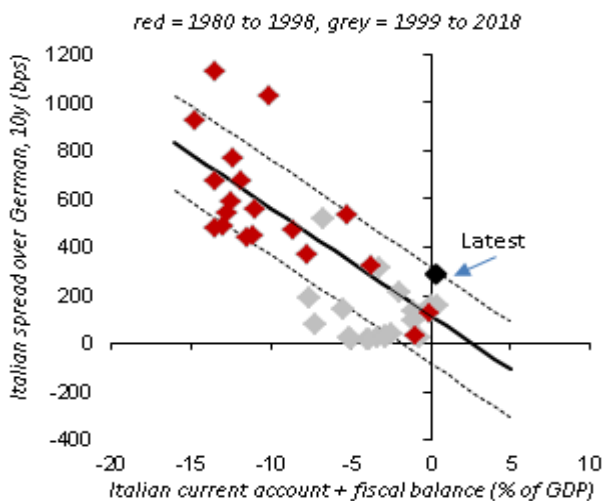
Fig. 10: Italy has a current account surplus



Source: Nomura, IMF

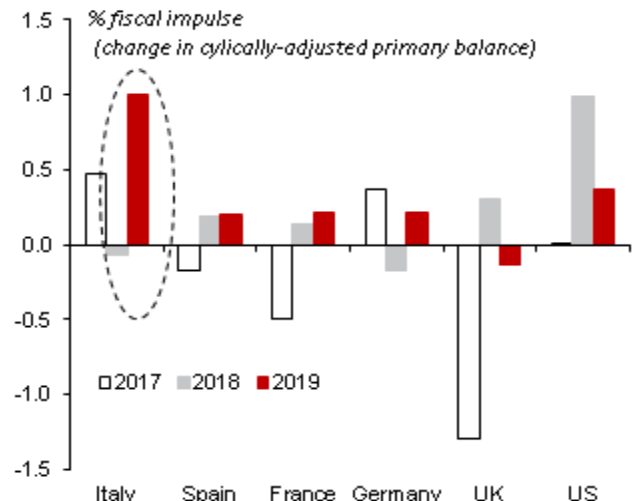
Fig. 11: Italian spreads trading too high to twin balances

Trend line+ standard error based on that period.



Source: Nomura, Bloomberg, IMF

Fig. 12: Italy could see large positive fiscal impulse in 2019



Source: Nomura, IMF

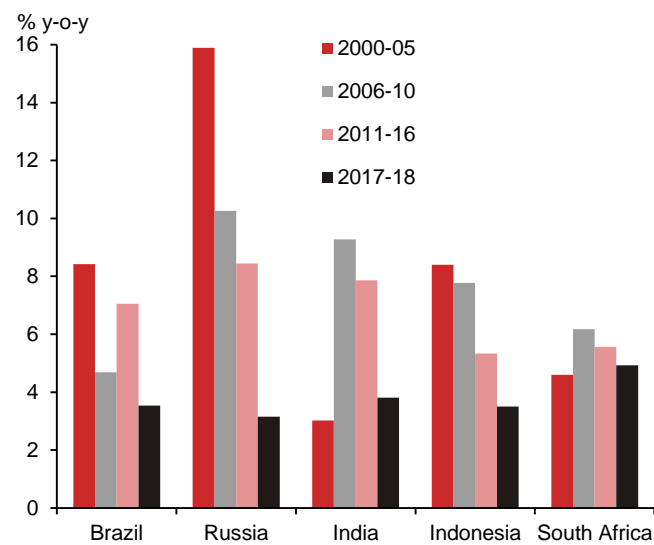
5: EM deflation

There are glaring exceptions such as Argentina and Turkey, but generally CPI inflation in 2018 has fallen to historical lows in large EM economies such as Brazil (3.6% y-o-y), India (4.3%), Indonesia (3.2%), Russia (2.6%) and South Africa (4.6%). If we extend the period back to 2017-18, these five EMs have still averaged low inflation (Figure 13). It's unusual for so many large EMs to have a lengthy period of low inflation, considering several have had a chequered past with bouts of high or hyperinflation, and it suggests something structural could be going on. Large EM economies experiencing deflation in the next few years may have sounded bananas five years ago, but now it seems plausible.

We would start with the basic observation that these EMs already have low single-digit inflation, so it would not take much to move to deflation – but perhaps because of their record of being inflation prone, nobody's forecasting deflation. Yet there are a number of reasons why you should not rule out deflation in some big EMs. First, most are entering 2019 with growth below trend (i.e. negative output gaps). Second, compared with DMs the CPI basket of the big EMs is weighted towards commodities, and with US shale producers ramping up their production and China's growth slowdown set to accelerate in the spring of 2019, commodity prices could tumble further. Third, the currencies of some of these EMs depreciated to weak levels in 2018, and with Bilal Hafeez bearish on USD in 2019, EM currency appreciation could be another disinflationary force.

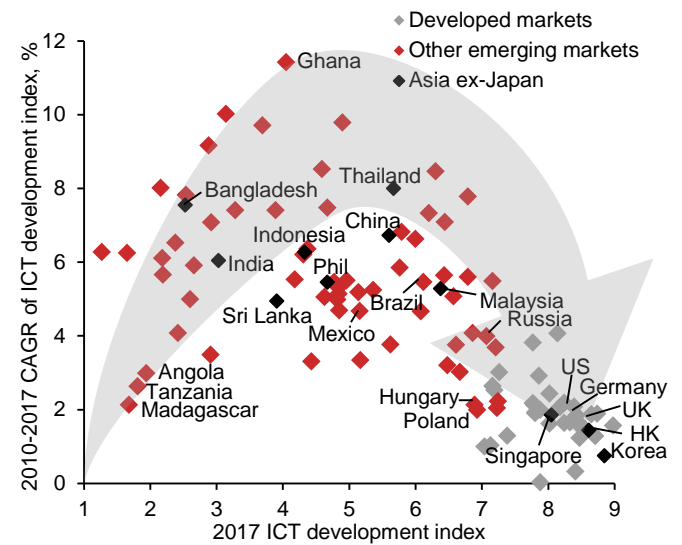
The final and most important reason to be prepared for EM deflation – and of a good variety – is the digital technology revolution. In our opinion it has been a powerful disinflationary force in DM, helping explain why, in a strong growth-low unemployment world, inflation has remained quiescent. As they start to grapple with privacy and security issues the digital age is maturing in DM, while in EM it is still in its infancy (Figure 14, diamonds are grey for DM, black for Asia ex-Japan and red for the rest for EM). In 2019-20, the digital wave should penetrate EM faster than it did in DM, as younger EM populations are quicker to embrace the digital age and leapfrog to the latest smartphones models and the next era of 5G. The digital wave should also be a more powerful disinflationary force in EM than DM because of the faster speed of penetration, empowering the consumer with more choice and pricing knowledge than ever before and cutting out the all-too-big rent-seeking middle man in EM's archaic retail distribution systems. And while DM statisticians are playing catch-up in revamping their methodologies to update the CPI basket more frequently and better reflect increased product quality, EM statisticians lag even further behind – and these methodological changes are lowering measured CPI inflation.

Fig. 13: Average CPI inflation in large EMs



Note: For India's CPI inflation before 2010 we use a weighted average of CPI (industrial workers) and CPI (agricultural labourers). Source: CEIC and Nomura.

Fig. 14: The path to a highly digitalised economy



Source: International Telecommunications Union, and Nomura.

6: CNY comeback

Bloomberg consensus forecasts RMB to depreciate in H1 2019 with USD/CNY just under the 7-figure. Our current baseline is a break of 7.0 in Q2 2019. But the grey swan is if the broad market is wrong and RMB appreciates rapidly against USD. Even though we believe this as an unlikely scenario – especially with China growth set to slow significantly from around March to until end-Q2, there is still a possibility that several factors align and surprise the market.

Globally, RMB would see support if the US Fed gives much more dovish signals (possibly at the December FOMC meeting), leading to a further reduction in market pricing for a hike in 2019 and leads to cuts being priced for 2020. This scenario could also add to substantial downward pressure on USD. Politically, the G20 President Trump and Xi meeting has helped to de-escalate trade protectionism. The surprise would be if there is substantial near-term progress before the 90-day deadline. Both sides are engaged and the key is the US and China sides look to be aligned on goals.

Locally, China could surprise by being much more forceful and pre-emptive on fiscal stimulus (our baseline is this happens only around May 2019). Stable to stronger China growth and reduced default concerns would likely result in a further slowdown in net capital outflows from locals. Indeed, we believe it could lead to the local corporate sector/exporters increasing their foreign currency remittances after hoarding in recent months. Indeed, if RMB sentiment improves markedly, we even see the potential for locals to remit foreign currency earnings that we believe are held offshore. The other potential positive development is increased global demand for RMB and the likelihood that foreigners, whom have held back from investing in local bonds and equities in recent months, will return.

Overall, even though it is not our base case, the potential for China's BoP to improve notably over coming months is not negligible. Combined with the fact that even if USD/CNY falls back to 6.40 and almost on an idiosyncratic basis, this only means that the competitiveness that China gained on a basket basis since the accelerated depreciation in June 2018 will be lost. But even with that, our overall FX valuation analysis would still show RMB is only slightly overvalued.

7: Global growth takes off

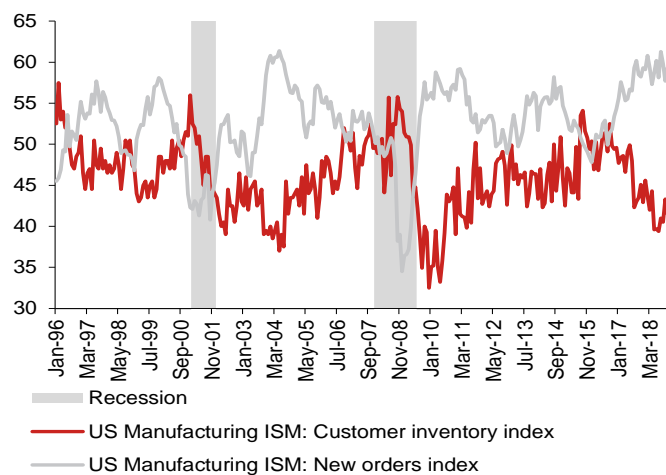
In our base case Nomura’s economics team expects the world economy to slow in 2019 and to potentially disappoint consensus expectations. That’s driven by factors such as less accommodative fiscal policy, more restrictive monetary and financial market conditions, a slowing Chinese economy, together with uncertainties about the impact from trade wars, Brexit and Italian politics.

However, it’s not too difficult to envisage an alternative more positive scenario in which global growth picks up pace in the period immediately ahead. Consider the following:

- **Some leading indicators of global growth have turned up in recent weeks.** These include some of the regional manufacturing surveys from the US (e.g. the Empire State index) and important forward-looking sub-components of those surveys that concern capex plans. Still-high levels of new orders and low inventories in national surveys (e.g. the ISM) additionally point to healthy growth in the period immediately ahead (Figure 15). Several forward-looking indicators of activity in the meantime have either stabilised or staged some (modest) recovery (e.g. German factory orders, EU business sentiment, China and Japan’s composite PMIs).
- **Most mainstream estimates of output gaps suggest there is still spare capacity in the world economy** (Figure 16). There is still room in other words for the world economy to continue expanding without running into bottlenecks. More importantly there is little need for the world’s major central banks to lift interest rates beyond neutral in order to slow the world economy.
- **The deceleration in some economies in recent months (e.g. the eurozone) partly reflects the impact of higher oil prices on consumers’ real incomes.** This will unwind in coming months if oil prices remain close to (or below) current levels. We note as an aside that activity in the auto sector will also rebound in Germany as this autumn’s transitory weakness fades.
- **While the impact of heightened protectionism has in our view been significant, so far there are offsets that ought to limit the damage.** One of these is the sensitivity of policymakers, and US President Trump in particular, to the financial and economic instability that trade policies have – to some degree – already been instigated. The recent agreement between Presidents Trump and Xi to delay further tariff increases and to initiate high level negotiations on issues that had previously been subject to some dispute is a good example of this.

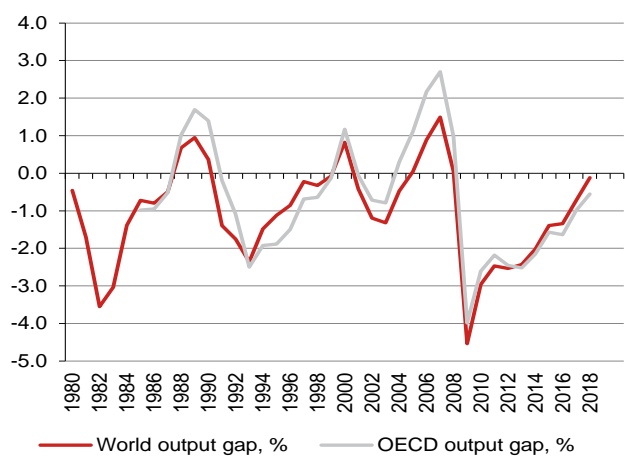
In recent weeks weaker equity markets, wider credit spreads, flattening yield curves and a still-strong US dollar suggest investors have priced in a much weaker outlook for growth and profitability. If – against our expectations – global growth does now re-accelerate, many of these trends would clearly reverse.

Fig. 15: Still-high new orders and low inventories suggest US manufacturing could re-accelerate



Source: ISM, Haver, Nomura

Fig. 16: There could still be some spare capacity in the world economy



Source: OECD, Oxford Economics, Nomura

8: Deflating euro area

Low inflation has been a prominent feature of the post-GFC landscape. Our measures of the output gap in developed economies are now firmly in positive territory. But inflation is much lower than it has normally been at this stage in the cycle. This is particularly apparent in the euro area, where core inflation tracks around 1% (Figure 17).

Subdued price pressures could be one reason for being optimistic about a further prolonging of this business cycle. Central bankers are less likely to tighten policy and kill growth; indeed, monetary policy remains exceptionally loose. Moreover, low inflation means stronger real wage growth for any given nominal wage rate. But there is another side to the low inflation coin. **Low inflation rates at this advanced stage of the cycle mean that when growth does roll over, deflation risks increase far quicker than they would normally.**

This is very concerning for central bankers. Negative inflation means higher real interest rates. This kills growth and drives further deflation; the notorious deflation spiral. Adding to this, policy rates in Europe and Japan are still at the effective lower bound. Central bankers do not have much in the way of ammunition to deal with deflation.

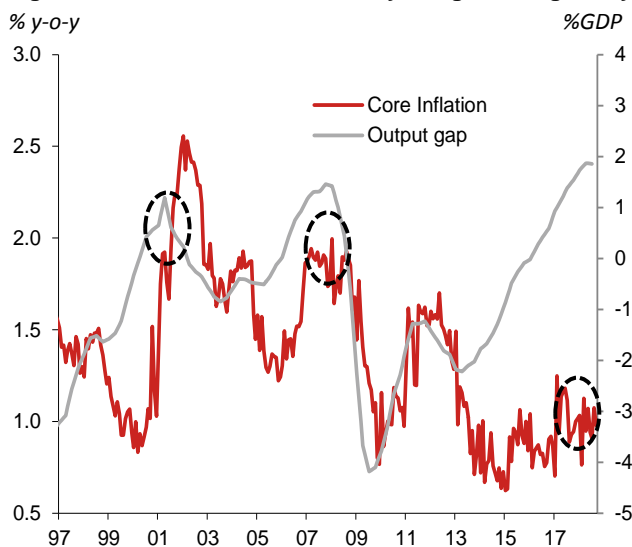
The euro area business cycle faces multiple downside risks, any of which could plausibly come to the fore in 2019. While monetary policy remains accommodative, Europe is highly exposed to China's structural slowdown. Italy's debt and competitiveness problems pose systemic risks to the euro area economy. Should the euro area face a cyclical downturn, the risk of deflation should rise. We likely see the market price risks towards 2015 levels. Currently, deflation protection is very cheap (Figure 18).

Deflation in Europe would have important ramifications for markets. Japan faced these challenges in the last downturn. As a result of the BOJ's efforts to fend off deflation, 10yr rates in Japan are the lowest in the G4. With policy rates already negative, the ECB would likely be forced into further rounds of QE. This, alongside falling inflation expectations would flatten the yield curve. If the ECB is unable to lower real yields, equities and credit markets are likely to price growth risks even lower.

Deflation would also be extremely challenging for European sovereigns attempting to manage their large debt burdens. Borrowers are hurt by deflation – nominal debt burdens increase in real terms. A deflation spiral would raise further questions about debt sustainability in the euro area periphery.

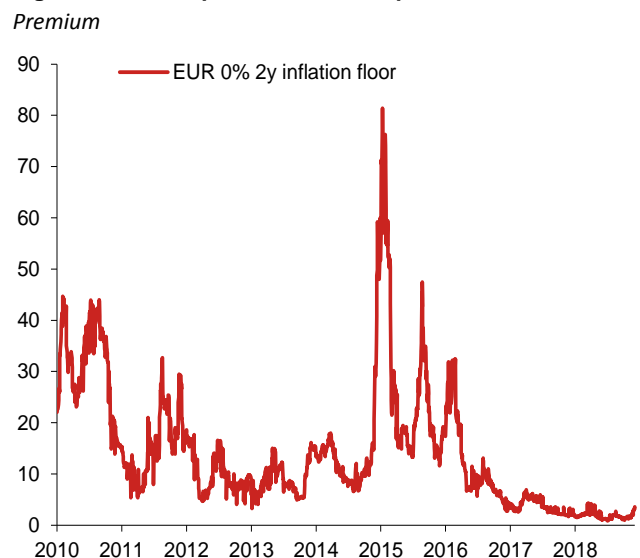
Finally, workers are normally unwilling to accept lower nominal wages. This means deflation could see real wages increase. This labour market inefficiency would likely lead to higher levels of unemployment than would be normally expected given the downturn. This could fuel populist and eurosceptic agendas.

Fig. 17: Euro area core inflation very low given stage in cycle



Source: Nomura, Macrobond. Note: NY Fed quarterly output gap estimate.

Fig. 18: Deflation protection is cheap



Source: Nomura, Bloomberg.

9: Inflation sonic boom in late 2019

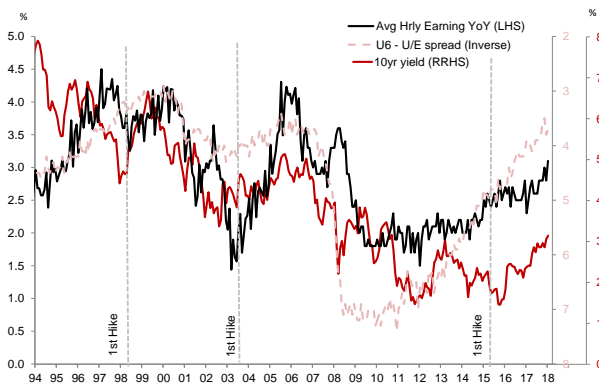
Deflation, demographics and debt have been the three infamous Ds haunting markets and central banks for the better part of a decade. Although inflation has been fleeting and sporadic, what if it has just been pent up and is waiting to be unleashed? The US economy could be one of the first to confront higher inflation at full employment.

Although our base case for the US includes a mild retreat on the inflation front, it could already be more than priced in given the fourth quarter collapse in inflation expectations. Even if inflation is lackluster in Q1 2019, there is a risk that inflation perks up later in the year.

So if the recovery continues for longer than most expect and the federal fiscal largess does not abate, just like a plane that eventually breaks the sound barrier, US economic conditions may become ripe for an inflation sonic boom to hit later in 2019.

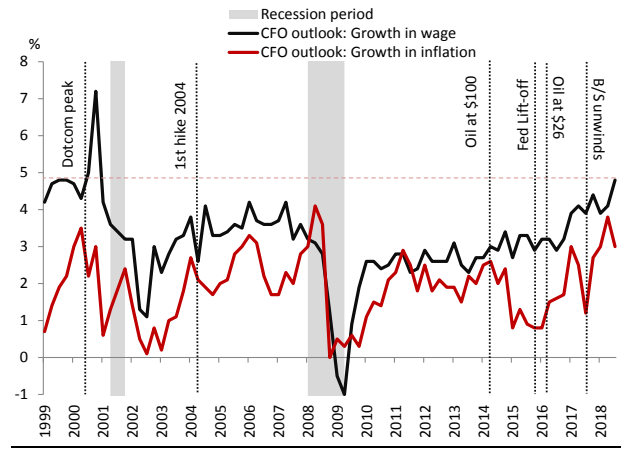
- Wage pressures exist even as we throttle back: As Figure 19 shows, the spread between the unemployment rate (U/R) and the marginally attached/part-time worker ratio has had a good visual correlation with year-over-year average hourly earnings. Excluding the recent sharp rates rally from mid-November through early December, 10yr USTs have also been tracking wage-based indices. Also, difficulty in finding qualified labor in the US is resulting in CFOs (Figure 20) expecting wages to rise to levels last seen right before the dotcom peak.
- An inflation impulse is just waiting in the wings: In Figure 21, we show the NY Fed's underlying inflation gauge (UIG) and compare it with the year-over-year core CPI rate. The UIG seems to be leading core CPI inflation by roughly 18 months.
- Commodities haven't improved much from GFC lows: The ongoing US recovery has yet to produce a lasting move in commodities (Figure 22). If, in 2019, global growth improves, OPEC cuts result in higher oil prices and copper stays on a higher path, commodities could add to the 2019 inflation boom.

Fig. 19: Wage growth operating with a lag, but still present



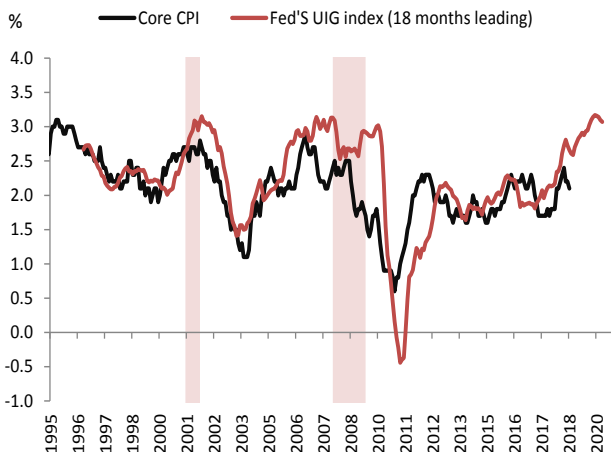
Source: BLS, Bloomberg, Nomura

Fig. 20: Wage growth expected to continue by US CFOs



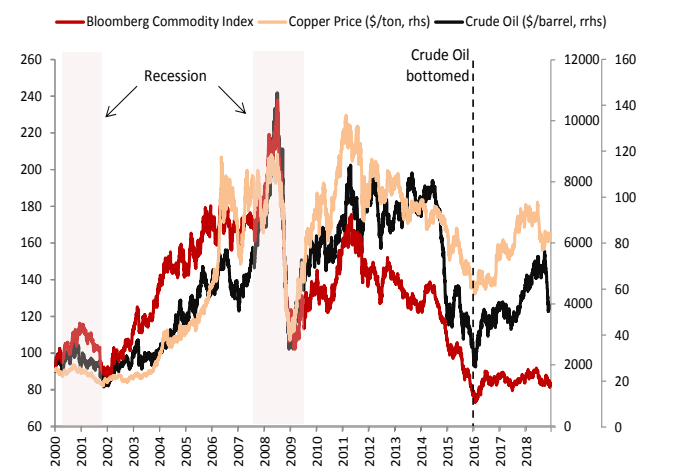
Source: Haver, Nomura

Fig. 21: Fed's UIG index could be leading core CPI upwards



Source: Federal Reserve, Bloomberg, Nomura

Fig. 22: Commodities haven't improved much from GFC lows



Source: Bloomberg, Nomura

Appendix A-1

Analyst Certification

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