INSIGHT

QUARTERLY MARKET REVIEW

Q2 2019

HIGHLIGHTED IN THIS PUBLICATION:

GLOBAL STRATEGIC ASSET ALLOCATION

GLOBAL SECURITY SELECTION

REGIONAL ASSET ALLOCATION

REGIONAL PORTFOLIO CONSTRUCTION

Dependence on China

OVERVIEW

Global growth supported by China

US

Full employment and stable inflation

LATIN AMERICA

Freeing up Brazil

SPECIAL FOCUS

Innovation in action

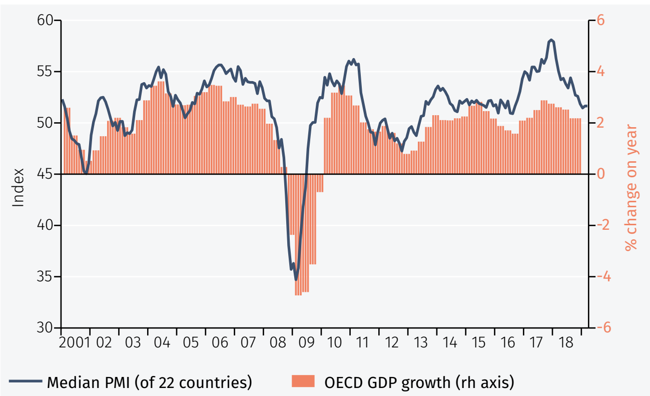
OVERVIEW

Early 2019 has seen signs of a softening of global growth. Coupled with continued low inflation, there has been a change in expectations of central bank policy and a fall in bond yields, helping emerging markets.

Softer survey and real economy data

Indications of weakening global growth started to be seen in late 2018 and continued in early 2019. Those signs were, initially, in soft survey data but have recently been corroborated by weakness in hard actual data. We use the median reading from 22 different countries' manufacturing sector Purchasing Managers' Indices (PMIs) as an indicator of global growth (see Figure 1).[1] While weakening, that indicator still remains above 50 – consistent with continued global growth.

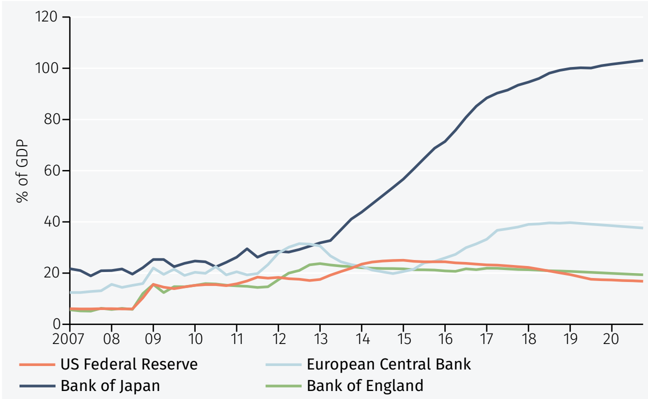
1. PMIs and world growth



Source: Refinitiv. Data as at 1 April 2019.

Indeed, there has been no significant change to our view that global growth in 2019 and, indeed, 2020 will be only marginally lower than in 2018. The broad story remains one of continued expansion. Even so, expectations for (particularly US) interest rates have changed quite quickly. Market expectations are that, after nine 25 basis point increases since December 2015, there will be no further increases for some time; and maybe the next move could be a cut. Other central banks seem likely to keep their rates at their current low levels (see Figure 2) for some time. Furthermore, the US Federal Reserve (Fed) has committed to ending the reduction in the size of its balance sheet in September. That means it will steadily decline in size relative to the overall economy, as indeed will the holdings of the Bank of England and European Central Bank (see Figure 3).

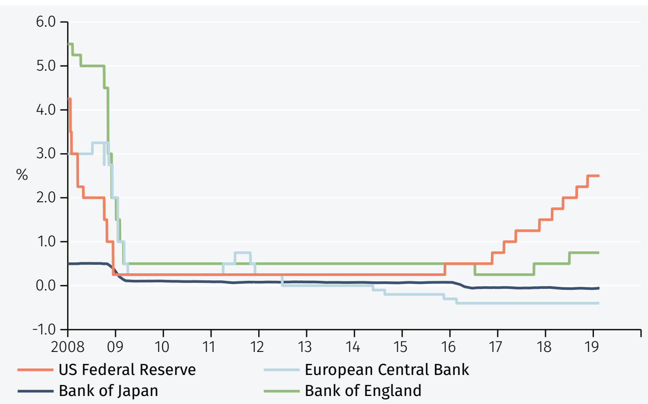
3. Central bank assets



Source: Refinitiv. Data as at 1 April 2019.

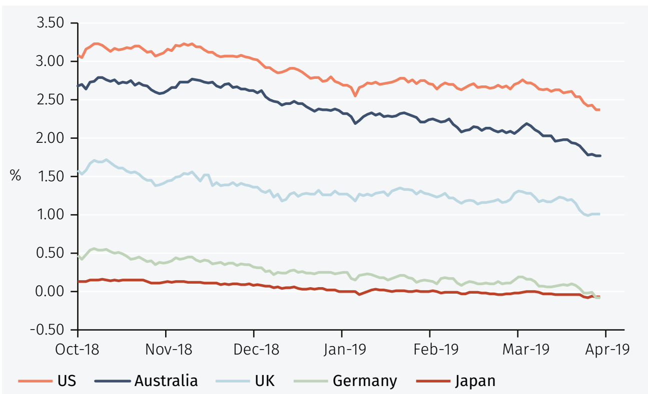
The Bank of Japan's balance sheet is now larger than the overall economy, but given that inflation remains persistently below its 2% target, it is set to continue its asset purchases. An end to the reduction in the Fed's holdings of US Treasuries – indeed the move to net purchases after September, when it will reinvest the proceeds of maturing mortgage bonds into government bonds – coupled with changed interest rate expectations and softer real growth expectations have had a big impact on government bond yields (see Figure 4). There has been a downtrend in all major markets, with Japanese and German 10-year yields turning negative. In turn, these developments have helped sentiment towards emerging economies improve markedly in 2019. Such markets typically

2. Central bank policy rates



Source: Refinitiv. Data as at 1 April 2019.

4. 10-year government bond yields



Source: Refinitiv. Data as at 1 April 2019.

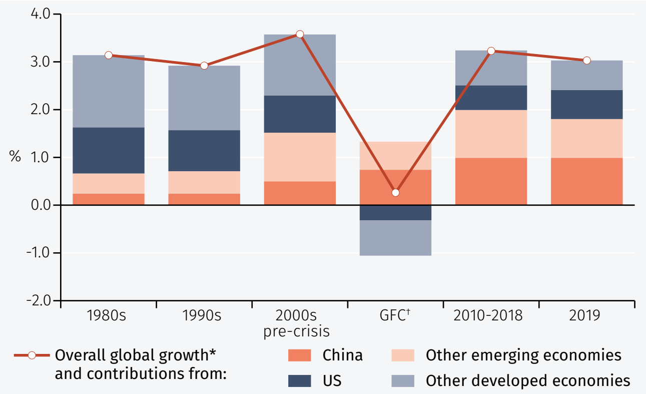
[1] See EFG *Infocus*, 'Global PMIs and global economic growth' (February 2018).

come under pressure when US interest rates are rising and the US dollar is strengthening (as was the case in 2018); so, with developments this year being something of a mirror image of that, there has been welcome relief. It is, however, inappropriate to regard emerging and developing economies as primarily dependent on the vagaries of changing expectations in the western world.

Reliance on China and emerging economies for global growth

Rather, in recent years, global real economic growth has become increasingly dependent on the emerging and developing economies (see Figure 5). In the 1980s and 1990s, China and other emerging markets contributed a relatively small amount to global economic growth. Their importance grew in the 2000s before the global financial crisis; and during that crisis emerging markets prevented the global economy entering recession. This year, China is expected to contribute a full one percentage point of the world's 3 percent expected growth; and other emerging markets will add almost as much.

5. Contributions to world growth



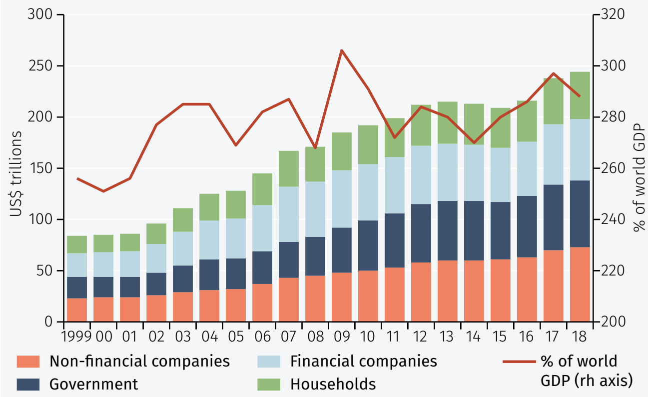
*Based on market exchange rates. †Global Financial Crisis. Source: IMF. Data as at 1 April 2019.

Emerging economies have, in many cases, truly emerged. Certainly, in the more prosperous regions of such economies, living standards have risen rapidly. Median household incomes in Shanghai, for example, which were just 5% of the US level twenty years ago, are now almost a quarter of those in America.[2] One of the direct effects on the rest of the world of China's income growth is via spending abroad. In 1990, Chinese visitors to foreign countries (mainly on state-related business) spent around US$500 million. By last year that had risen 500 times, to US$250 billion. Given that only 5% of Chinese citizens have passports, the future trend seems clear.[3]

Debt concerns

Of course, emerging and developing economies never progress along a smooth trajectory to higher living standards. Many enter a 'middle income trap' when their growth stalls. Sometimes this is because of a problem in transitioning to a new economic structure based on domestic rather than export-led growth; at other times it is triggered by the deleveraging following too-rapid an accumulation of debt.

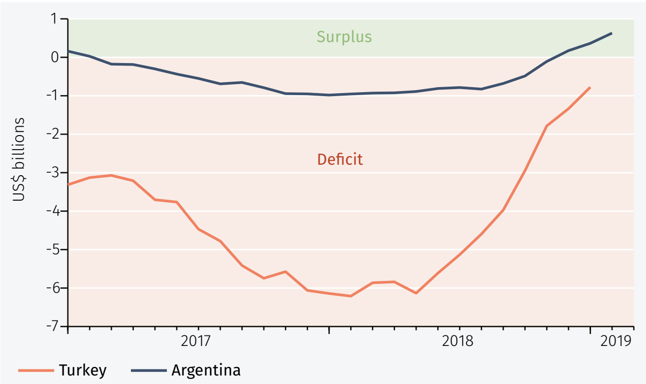
6. Global debt outstanding



Source: IIF/Bloomberg. Data as at 1 April 2019.

High debt levels are still widely cited as a source of vulnerability both for the global economy and particular individual countries and sectors. Globally, total private and public debt in US dollars is now higher than ten years ago; but it remains a similar size relative to global GDP (see Figure 6). We do not think it poses a global systemic problem, in contrast to the situation before the global financial crisis. In certain sectors, however, there are concerns. Rapid foreign currency debt accumulation preceded the 2018 currency and economic crises in Turkey and Argentina, for example. Encouragingly, however, the massive currency depreciations in those two economies and the sharp rise in their domestic interest rates, have led to a swift correction in their external trade deficits (see Figure 7).

7. Trade balance: Turkey and Argentina



Source: Refinitiv. Data as at 1 April 2019.

Small (can be) beautiful

Indeed, globally, we are encouraged that smaller, and often more flexible economies, are now showing signs of stronger economic activity. In Europe, the peripheral eurozone economies are now growing more strongly, after suffering much more severely in the downturn. On balance, despite the focus on the developed world's problems in the first few months of 2019, we still see global growth, with low inflation and interest rates, continuing.

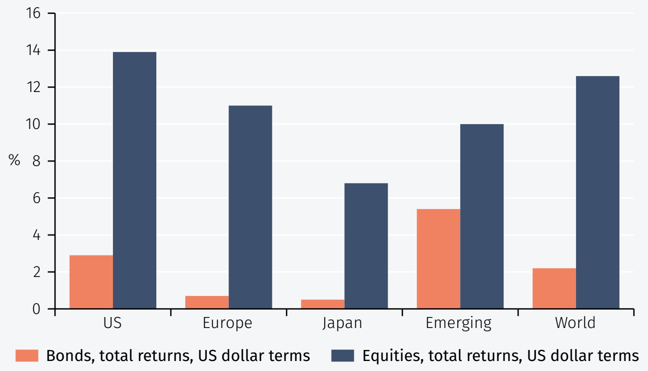
[2] Refinitiv and IMF. Comparisons are at current exchange rates; Purchasing Power Parity exchange rates make China's relative position stronger.
[3] *The New Silk Roads*, Peter Frankopan, Bloomsbury 2018.

Both equity and bond markets got off to a good start in the first quarter of the year. Partly, this represented a recovery after the weak and volatile final quarter of 2018.

Asset market performance

World equity markets produced positive returns of 12.6% in US$ terms in the first quarter of 2019 (see Figure 8) on the basis of the MSCI World Index. This came after a weak final quarter of 2018. Global bond market returns were also positive, up by 2.2% on the basis of the Bloomberg Barclays Global Aggregate Index.[4] This reflected lower government bond yields, pushing up government bond prices, and improved conditions in corporate, high yield and emerging markets. The US dollar strengthened on the basis of its broad trade-weighted index. This reflected an appreciation against the euro, yen and Swiss franc offset by a weakening against sterling and the Australian, Canadian and New Zealand dollars. Emerging market equities and bonds generally produced better returns than developed markets.

8. Asset market performance

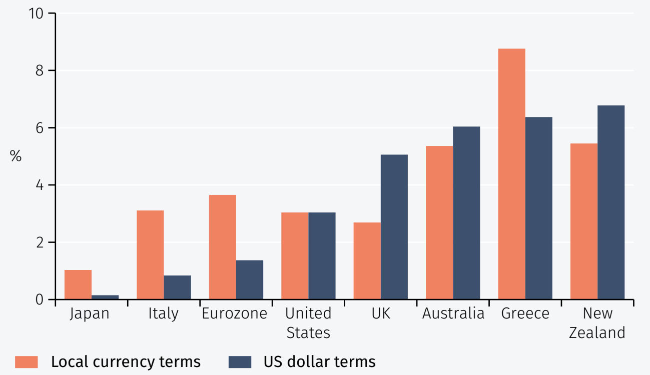


Sources: Refinitiv. 10-year benchmark bond total returns. Data for three months to 31 March 2019.
Past performance is not necessarily a guide to the future.

Bond markets

Ten-year maturity US government bonds produced total returns of 3.0% in the first quarter, as capital gains (resulting from a decline in yields) added to coupon income. Local currency returns from the eurozone market were higher, at 3.6%, but with the euro weakening against the US dollar this translated into a US$-terms return of 1.4%. Within the eurozone, there were strong returns from the Greek bond market as the government returned to the new issue market after an upgrade to its credit rating. A fall in Australian and New Zealand 10-year bond yields translated into total returns in excess of 5% in both markets, which were further amplified in US$ terms by currency appreciation. Japanese 10-year bond yields turned negative by the end of the quarter, producing returns of 1% in yen terms, but this was undermined in US dollar terms by modest yen weakening.

9. Bond market returns



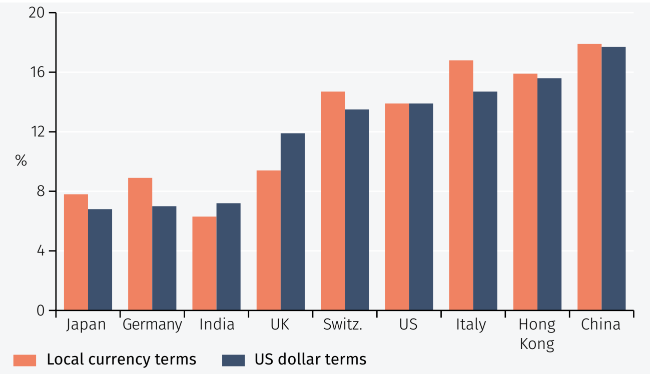
Source: Refinitiv. 10-year benchmark bond total returns. Data for three months to 31 March 2019.
Past performance is not necessarily a guide to the future.

Equity markets

The US equity market (on the basis of the MSCI US index, shown in Figure 10) produced total returns of 13.9% in the first quarter of the year. Hong Kong and China produced some of the strongest global returns, in large part as a result of a recovery from the weakness of 2018. Almost all developed and emerging equity markets produced positive returns in the first quarter in both local currency and US dollar terms, with Argentina and Turkey the two notable exceptions.

The UK equity market produced total returns of 9.4% in sterling terms and, with sterling appreciating against the US dollar, 11.9% in US dollar terms. The move reflected the generally improved sentiment in global equity markets and a view that a softer form of Brexit was increasingly likely.

10. Equity market returns



Source: MSCI. Data for three months to 31 March 2019.
Past performance is not necessarily a guide to the future.

[4] The Bloomberg Barclays Global Aggregate Bond Index is a benchmark of government and investment grade corporate debt from developed and emerging markets issuers in 24 countries.

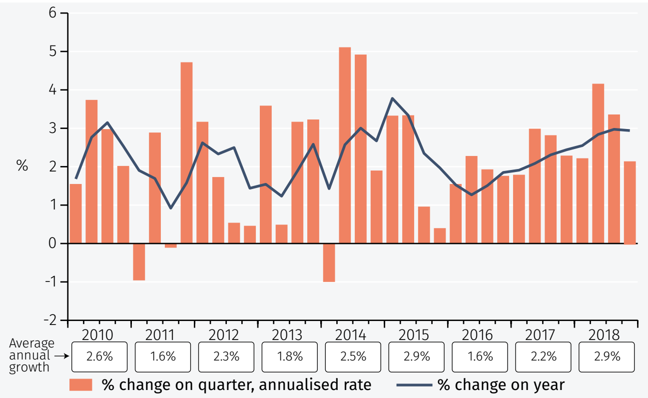
With real GDP growth almost 3% in 2018, full employment and plenty of job openings, President Trump should, later this year, be able to claim the longest expansion in the US economy's history.

Almost 3% GDP growth in 2018

US overall real gross domestic product (GDP) growth almost reached 3% in 2018 (see Figure 11). At 2.9% for the full year, the rate was the highest since 2015 (also 2.9%). Almost certainly the growth rate will drop in the first quarter of 2019. Partly that is a result of normal seasonal factors[5] but the partial government shutdown also detracted from growth. For 2019, however, we think that President Trump will go "all out for growth" and it will continue (probably at around 2.5%). Fiscal policy will be helpful both as a result of tax rebates received in the first part of the year (reflecting tax cuts in 2018) and additional government sending. Probably more important, the change in short-term interest rate expectations and government bond yields has led to a sharp fall in typical 30-year mortgage rates.

It is almost certain that, by the second half of the year, data will show that the current expansion is the longest on record – exceeding 10 years, the length of the expansion in 1991-2001.

11. US GDP growth

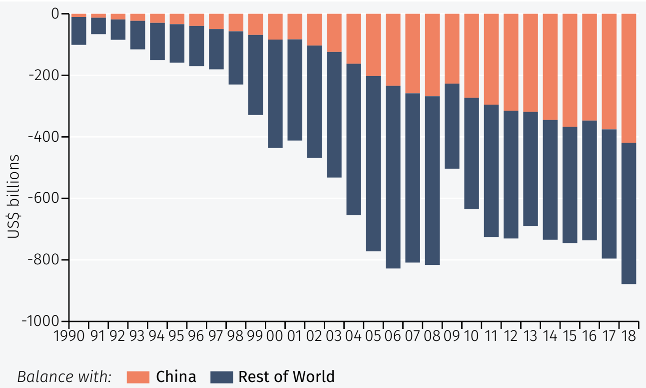


Source: Refinitiv. Data as at 1 April 2019.

US trade deficit widens

On one issue, however, President Trump's objectives have not been achieved. The trade deficit with China was wider in 2018 than in 2017, not narrower (see Figure 12). That was despite hopes that Chinese imports would be curbed by the imposition of US tariffs at the same time as China responded to US demand to buy more US products. We have argued for some time that such tariffs were most unlikely to work. The US external deficit is a function of the US domestic investment-savings gap. With the US economy remaining strong, that gap widened in 2018: the current account, in that case, also had to grow.

12. US trade balance



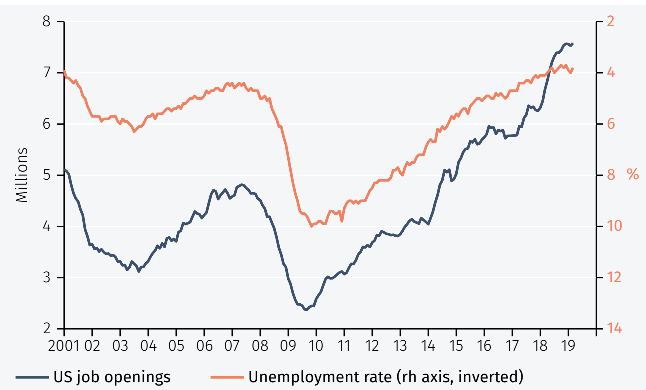
Source: Refinitiv. Data as at 1 April 2019.

Many jobs available

Although the persistence of the trade deficit may be a concern for President Trump, the strong labour market is, for most people, a far more important factor. We think it will be the key support for President Trump's claims to have boosted economic growth: jobs matter; a bilateral trade deficit is not so much of an issue for most voters. The unemployment rate has fallen to just 3.8%. Non-farm payrolls increased by an average of 190,000 a month in the six months to February. Jobs are plentiful, with a record high of over 7 million job openings (see Figure 13). There is a downside to this, of course. The large number of job openings partly reflects skills shortages: there are simply not enough skilled workers in certain industries. In turn, that constrains the ability of companies to meet orders and of the economy to grow.

But with inflation close to target, full employment and strong growth, it is clear that President Trump will be able to claim success in economic management as the presidential election campaigning starts later in 2019.

13. US labour market



Source: Refinitiv. Data as at 1 April 2019.

[5] Which are not taken into account in the 'normal' seasonal adjustment.

Given the seemingly never-ending uncertainty about the future relationship between the UK and the EU, the UK economy continues to do well. Sterling and the equity market can do well if an exit deal is agreed.

Path to Brexit
At the time of writing, the path ahead for relations between the UK and the EU remains uncertain. And whatever the near-term resolution, the UK still faces a protracted period before the future relationship with the EU settles into a new equilibrium.

Labour market
In the uncertain political environment, the economy continues to do well. The unemployment rate has fallen to just 3.9% (see Figure 14); there is a large number of unfilled jobs; and wage growth is picking up in both nominal and real (post-inflation) terms. The UK minimum wage was recently raised by almost 5%, for example, well above the latest 1.9% consumer price inflation rate.

14. UK unemployment rate lowest for over 40 years

Source: Refinitiv. Data as at 1 April 2019.

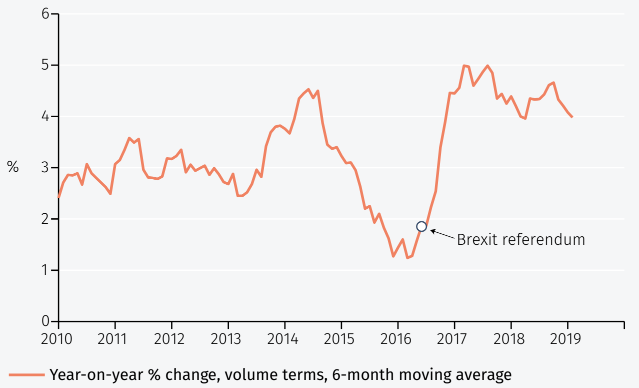
Retail spending
This strong labour market, coupled with a further decline in the savings rate and an increase in unsecured credit, has meant that retail sales growth (see Figure 15) has recently been around 4% year-on-year in real terms. Reflecting this economic performance and the effects of continued austerity, the public sector finances have been restored to a healthy position. The overall budget deficit in the financial year ending on 5 April 2019 probably amounted to little more than 1% of GDP (it was 10% of GDP in 2009/10); and the public sector debt level - which is not dangerously high, at around 80% of GDP - has started to fall.

Sterling – euro exchange rate
Sterling's value against the US dollar and the euro has been depressed for much of the time since the vote to leave the EU in June 2016 and has in many ways been a barometer of the likelihood of a 'soft' versus a 'hard' Brexit. As the chances of a softer Brexit (the retention of closer trade ties with the EU) increased in 2019, sterling has generally appreciated. We use two measures of sterling's fair value to establish a range in which it should reasonably trade.

First, a simple measure of relative Purchasing Power Parity (PPP) between the UK and the eurozone; and, second, a measure of the equilibrium exchange rate (which takes into account, as well as PPP considerations, the size of the UK's current account deficit, its financing and the requirement to maintain domestic economic activity at close to its full employment and potential output levels).

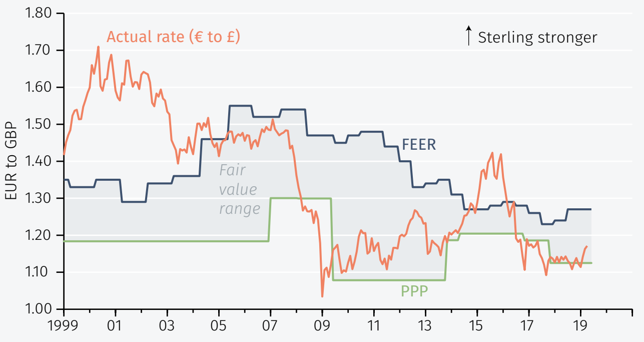
So, with sterling towards the low end of the range suggested by these two measures both against the euro (as shown in Figure 16) and the US dollar, on fundamental grounds sterling could appreciate further. Furthermore, global investors have been underweight UK assets since the Brexit vote and may well be inclined to reassess their exposure once there is more clarity on the way ahead.

15. UK retail sales



Source: Refinitiv. Data as at 1 April 2019.

16. Sterling vs. euro



PPP: Purchasing Power Parity rate. FEER: Fundamental Equilibrium Exchange rate

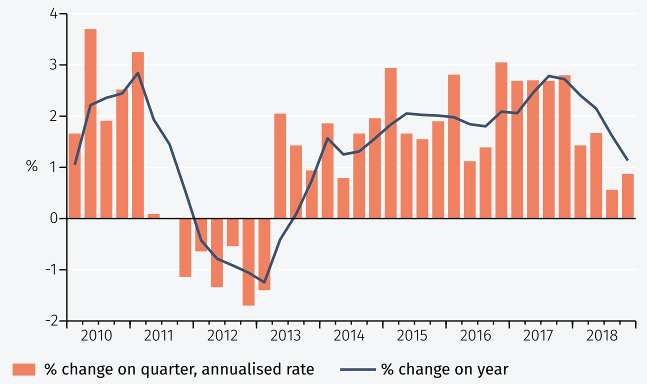
Sources: *The Economist* Big Mac Index (PPP); Peterson Institute for International Economics (FEER); Refinitiv. Data as at 1 April 2019.

Eurozone economic growth slowed in late 2018. As that was partly because of a number of special factors, growth should recover as 2019 progresses. The smaller economies are making an encouraging recovery.

A soft patch for growth

The overall eurozone showed softer real GDP growth towards the end of 2018 (see Figure 17). This continued into early 2019. However, a number of special factors depressed growth: the move to new vehicle emission testing procedures, which restricted car production in (particularly) Germany; and the unusually low water levels in the Rhine which impeded the flow of cargo. A rebound from these temporary effects should be seen as 2019 progresses. For now, we are inclined to consider the slowdown as a relatively normal one, rather than one which indicates the onset of recession.[6]

17. Eurozone GDP growth



Source: Refinitiv. Data as at 1 April 2019.

Inflation trends

Inflation trends, on one of the most closely watched indicators, have also softened. The five-year average inflation rate, five years forward, has declined sharply (see Figure 18). This has always been one of the inflation indicators most closely watched by the European Central Bank (ECB). Although President Draghi has explained this as a somewhat technical development within the inflation-linked market, it is noteworthy that such a decline has not been seen in other inflation-linked markets, notably the US.

18. Expected inflation rates

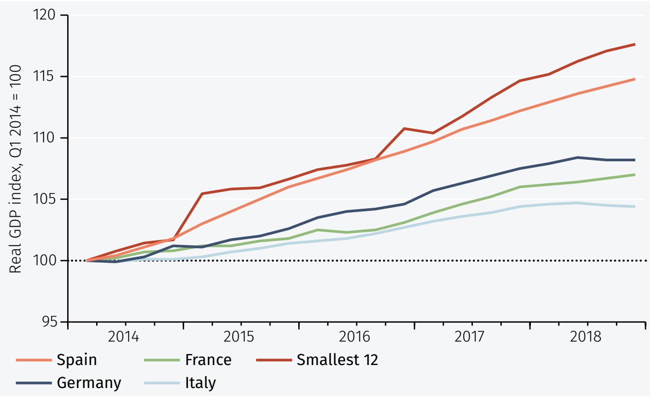
Source: Refinitiv. Data as at 1 April 2019.

In combination, however, trends in real growth and inflation indicate the ECB will retain an accommodative monetary policy for some time. In particular, it is unlikely that the main policy interest rates will be raised before 2020; and the terms of the recently-announced (third) Longer-Term Refinancing Operation (LTRO3) may well be eased from the initial indicative terms.

Spain and the smaller economies

Although commentary on eurozone developments is often focused on the three largest economies (Germany, France and Italy) it is noteworthy that the economic expansion in Spain and the smallest economies has been much stronger since 2014 (see Figure 19). The twelve smallest eurozone economies have seen overall GDP expand by as much as 18% since then; the Spanish economy by 15%.

19. Eurozone recovery: Small countries and Spain lead



Source: Refinitiv. Data as at 1 April 2019.

Part of that is explained by the fact that those economies showed the largest drop in output during the eurozone's two recessions (from the second quarter of 2008 to the second quarter of 2009 and from the fourth quarter of 2011 to the first quarter of 2013).[7] But Spain and the smaller economies have two characteristics which will help continued growth. First, they tend to be more flexible and dynamic than the largest economies. Second, they have more fiscal space. Spain is expected this year to have a budget deficit of 2.1% of GDP; the smallest 12 countries are expected to be in surplus. Whether they will use this flexibility depends, to a large extent on whether Germany sets an example in doing so itself. It is expected to have a surplus of 1.2% of GDP in 2019. It may, reluctantly, allow some easing.

[6] See EFG *Infocus*, 'Is the eurozone slipping into recession?' (February 2019).
[7] See EFG *Infocus*, 'The core and periphery of the eurozone' (February 2019).

While a change in Swiss monetary policy is unlikely in 2019, it could still come sooner than markets expect. The Swiss franc remains competitive despite its stronger nominal exchange rate.

SNB policy

On 21 March, the Swiss National Bank (SNB) left its interest rates unchanged. In light of weaker growth, low inflation and volatile financial markets, the decision was largely expected.

From high levels, GDP growth slowed from mid-2018 (see Figure 20) to a rate in line with potential. Moreover, downside risks have intensified due to the global economic slowdown, lower international trade, and geopolitical risks linked to the US-China trade war and Brexit.

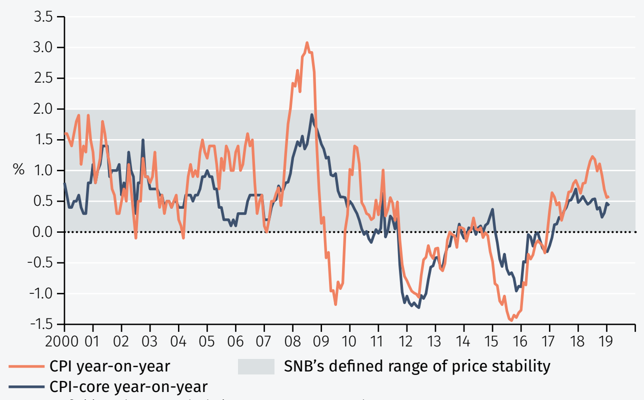
20. Downside risks on GDP growth intensified

Source: Refinitiv and EFGAM calculations. Data as at 18 March 2019.

One supportive factor, however, remains the solid jobs market. The unemployment rate fell to 2.4% in February and unfilled job openings continued to rise, indicating that labour demand is strong. Surprisingly, this has not yet translated into a significant increase in wages.

This will limit upward pressure on consumer prices in the short-run. Although inflation is within the 0-2% range used by the SNB to define price stability (see Figure 21), it has fallen

21. Swiss CPI inflation



Source: Refinitiv and EFGAM calculations. Data as at 18 March 2019.

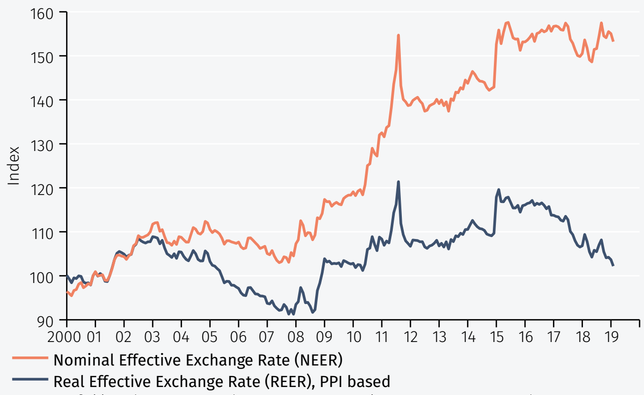
in recent months reflecting lower oil prices. Despite a slight acceleration in March, core inflation and domestic inflation are both close to 0.5% year-on-year.

The SNB links its expansionary policy stance to the exchange rate. This raises the question of whether the franc is too strong.

Exchange rate

The trade-weighted index of the Swiss franc (NEER in Figure 22) has risen sharply over the past 20 years, particularly after the financial crisis of 2008 and after the abandonment of the exchange rate cap in January 2015. However, since mid-2015 it has remained practically stable at levels close to historic highs.

22. Swiss franc exchange rate indices



Sources: Refinitiv and SNB. Data are shown as 4-quarter moving averages, as at 18 March 2019.

The picture changes when the real exchange rate, based on relative producer prices (REER in the chart below) is considered. In February, it declined to its lowest level since mid-2010 and now stands at the same level as in 2001. This reflected the improvement in the competitiveness of Swiss exports due to the moderation of relative prices.

It is therefore difficult to argue that the appreciation of the franc nominal exchange rate has been excessive.

Market expectations have shifted forward the timing of the first rate increase in Switzerland to early 2021, about three months after the first expected rate increase by the ECB.

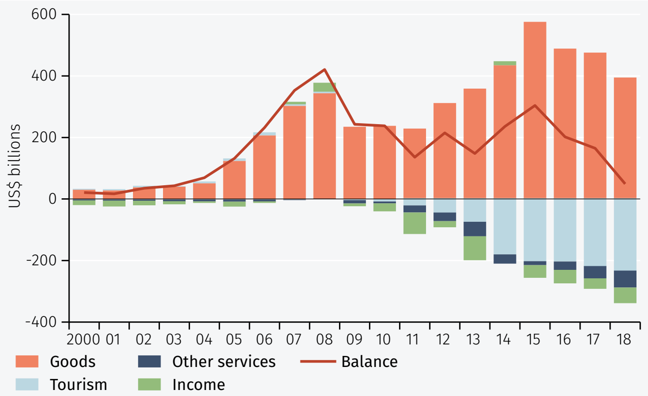
However, as the SNB projections show an increase in inflation to over 1% during 2021, it is reasonable to expect tighter policy to be implemented about six months earlier than markets expect. Nevertheless, even in Switzerland, interest rates will remain very low for an extended period of time.

China's trade negotiations with the US remain a key focus of international policy. Increasingly, they are impacting other economies, notably those in the Asian and global manufacturing supply chains.

China's current account position

It is ironic that as China-US trade negotiations continue, China's overall current account surplus has evaporated. The broad picture (see Figure 23) in 2018 was one in which China's overall trade in goods remained in surplus (around US$400bn) but was offset by spending of Chinese tourists abroad (a net amount of US$240bn). Trade in other services and net income paid abroad (predominantly repatriated profits to foreign-owned companies operating in China) reduced the overall current account balance to just 0.4% of GDP.

23. China current account: back to balance

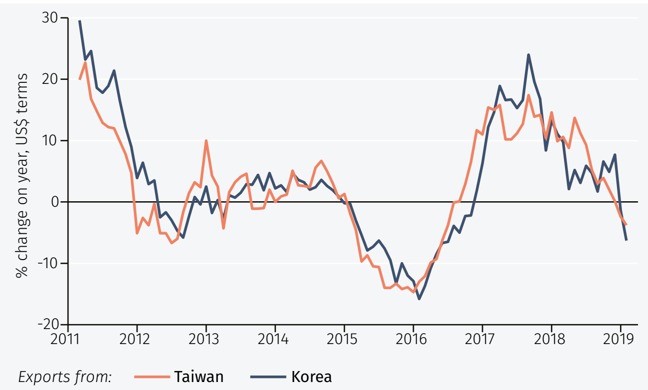


Source: SAFE/Refinitiv. Data as at 1 April 2019.

Asian trade

Other countries in Asia have much larger surpluses than China: in Singapore and Taiwan around 15% of GDP in 2019 and, in South Korea and Thailand, over 5% of GDP.[8] Many Asian economies are deeply integrated into global manufacturing supply chains and China-US trade tensions are clearly adversely affecting them. The weakness in exports from South Korea and Taiwan (see Figure 24), often taken as timely indicators of world trade, testifies to such tensions.

24. Exports from Taiwan and Korea



Source: SAFE/Refinitiv. Data as at 1 April 2019.

Japan

More subtly, Japan provides an example of an economy which is highly dependent on intra-Asian and global trade for the profitability of its companies. Earnings of Japanese-listed companies come predominantly from overseas rather than the domestic economy. So, although domestic economic expansion has been relatively muted in recent years (see Figure 25) corporate earnings are five times their level of 2010.

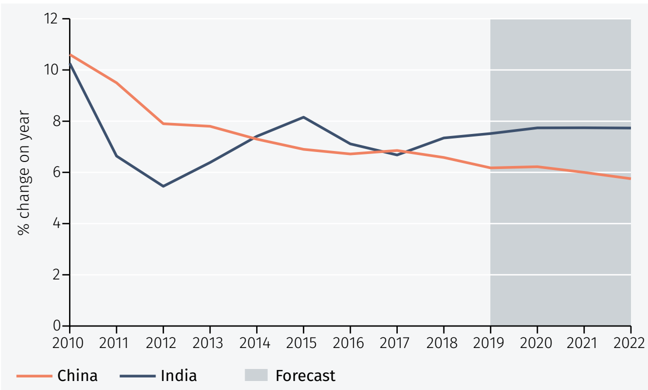
25. Japan: GDP and corporate earnings

Source: Refinitiv. Data as at 1 April 2019.

India

India's more domestically-orientated economy has provided it with a form of shelter, both in terms of real economic growth (which has surpassed the rate in China, see Figure 25) and corporate earnings. However, India is still in a period of economic reform which is set to continue if Prime Minister Modi is re-elected later in 2019. The introduction of a nationwide goods and services tax and a clampdown on corruption (notably through 2016's demonetisation) have been welcomed by many; but reforms of state banks, labour laws and planning laws still need to go much further.

26. India vs China: real GDP growth



Source: IMF World Economic Outlook database. Data as at 1 April 2019.

[8] Source: *The Economist*; 30 March 2019.

Jair Bolsonaro, the new president of Brazil, is intent on freeing up Brazil's economy and resetting relations with the United States. Much needs to be done. So far, the equity market has responded favourably.

Freeing up Brazil

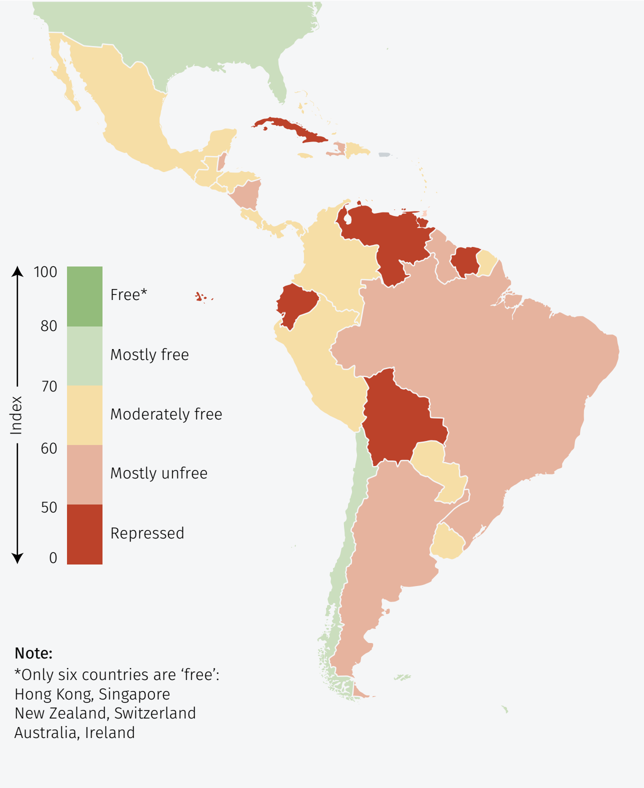
"Our goal is clear: we want Brazil to be among the world's most free economies" tweeted recently-inaugurated President Jair Bolsonaro of Brazil. That was ahead of bilateral talks with President Trump, at which they pledged to 'reset trade relations' between the two countries.

How realistic are these objectives?

Economic freedom, although seemingly a nebulous concept, is actually measured by a number of organisations. The Heritage Foundation, for example, measures quantitative and qualitative factors of economic freedom in four categories: the rule of law; the size of the government; the efficiency of regulation; and the openness of markets.

On their assessment, there are just six countries in the world which are free. In descending order: Hong Kong, Singapore, New Zealand, Switzerland, Australia and Ireland. The UK just misses the top-rank, being regarded as 'mostly free' as is the US. Brazil is ranked 'mostly unfree' (see Figure 27) coming just below Argentina and Ukraine and marginally ahead of Niger and Afghanistan in the global rankings. In Latin America, Chile (placed between Luxembourg and Sweden) has the highest ranking. Clearly, therefore, much work needs to be done for Brazil to join the ranks of the free.

27. Latin America: Freedom Index



Note:
*Only six countries are 'free':
Hong Kong, Singapore
New Zealand, Switzerland
Australia, Ireland

Source: 2019 Index of Economic Freedom: https://www.heritage.org

Of the four measures of economic freedom, the two where Brazil lags most notably behind other Latin American countries are the size of the government and the openness of markets.

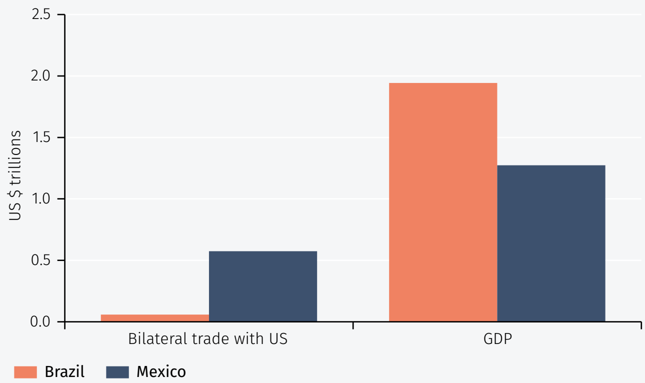
Size of government

On the first issue, Brazil's government spending amounts to 37% of GDP, for example, in line with the average of major advanced economies but much higher than in Chile (25%) and Colombia (28%). Paulo Guedes, who has been appointed Brazil's 'super minister' for economics, is pushing far-reaching social welfare reform, particularly focused on Brazil's pension system. If successful, this will reduce the involvement of government. But the approval of reforms by Brazil's Congress, home to some 30 political parties (the party of President Bolsonaro holds less than 10% of the seats), can be expected to be difficult.

Trade

Bilateral trade between Brazil and the US is less than US$100bn a year, a sixth of US-Mexico trade, even though Brazil's economy is almost twice as large as Mexico's (see Figure 28). There is clearly plenty of scope for increasing trade. Whether that happens, however, depends on other measures to free up the economy. For example, many foreign companies have found trading with Brazil very difficult, not least because of complex regulations.

28. Brazil & Mexico: trade with the US and GDP



Source: Refinitiv. Data as at 1 April 2019.

For now, the markets have applauded the direction in which policy is heading. Brazil's BOVESPA index moved briefly above 100,000 in mid-March on an intra-day basis, a 20% rise since Bolsonaro won the first round of October's presidential elections. It remains to be seen whether policy delivery matches the optimistic expectations.

Innovation has long been considered the key to individual company as well as national economic success. But how can successful innovation be identified and measured? Which countries lead? And how important are business clusters?

Innovation: the key to growth

Ever since the work of Michael Porter on the competitive advantage of nations, innovation has been seen as a key to corporate and national success. Porter wrote in the introduction to his seminal work, that "A nation's competitiveness depends on the capacity of its industry to innovate and upgrade."[9] That capacity for innovation has been a main feature of market commentary in recent years. Companies involved in new technology have captured the imagination, delivered strong earnings growth and stock market performance and have often transformed the regional and national economies in which they operate. The key to fostering successful innovation, in Porter's view, lies in four broad attributes of a nation:

First, factor conditions – the nation's position in factors of production, such as skilled labour or infrastructure, necessary to compete in a given industry.

Second, demand conditions – the nature of home-market demand for the industry's product or service.

Third, related and supporting industries – the presence or absence in the nation of supplier industries and other related industries that are internationally competitive.

Fourth, firm strategy, structure and rivalry – the conditions in the nation governing how companies are created, organised and managed as well as the nature of domestic rivalry.

Which countries perform best?

Those attributes find a present-day manifestation in measures of national innovation, notably the Global Innovation Index (see Figure 29). That index considers standard measures of a country's innovative capacity – such as the number of researchers, research and development spending, the number of patents and scientific and technical publications. On each of those four measures, the three leading economies are the US, China and the UK. Many smaller economies do well, also, but typically they are the smaller European economies which arguably benefit from access to the much larger single market of the European Union. The 25 best-ranking economies shown in Figure 29 are identified as "innovation leaders": those where the degree of innovation is more than 10% higher than economies with a similar level of income. All, apart from China, are high income economies.

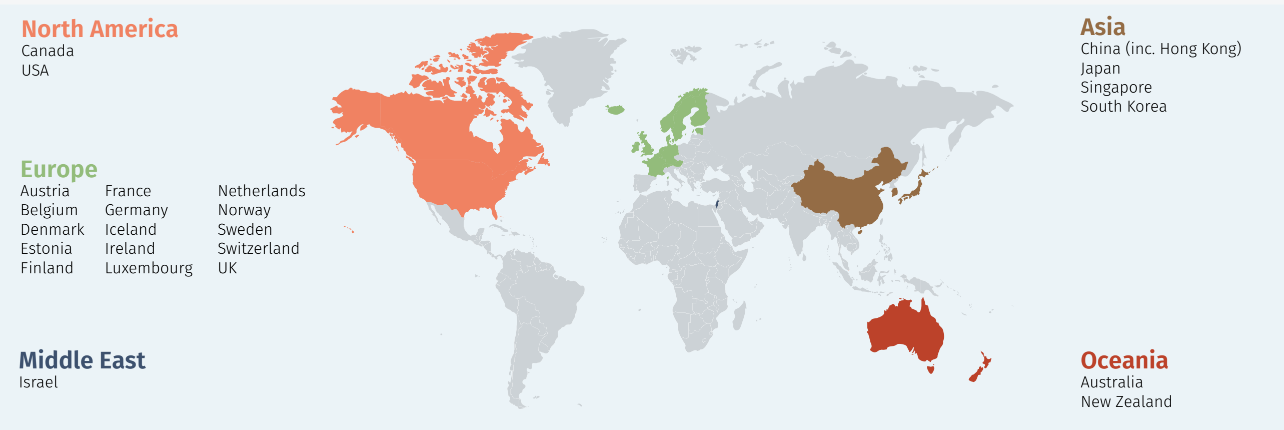
Clusters

Within those successful countries, clusters of industries (reflecting the importance of Porter's third condition) often have high importance. Hong Kong/Shenzhen and Silicon Valley in California are the leading examples: industrial groupings, typically linked to innovative universities, which are able to draw on a strong talent pool and sources of financing.

Innovation and EFG

Innovative ability is a cornerstone of our identification of future leaders. The Future Leaders Panel, comprising industry and academic experts, helps EFG develop a proprietary framework that enables EFG Asset Management (EFGAM) to enhance its research process by better identifying visionary leaders in company management teams, especially those with the capacity to innovate.[10]

29. Innovation leaders: the 25 best-performing economies



Source: The Global Innovation Index 2018. https://www.globalinnovationindex.org/Home. Data as at 1 April 2019.

[9] 'The Competitive Advantage of Nations', Michael Porter, *Harvard Business Review* March-April 1990. https://hbr.org/1990/03/the-competitive-advantage-of-nations

[10] See http://efgfutureleaderspanel.com

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