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Key Themes

Business cycle expansion temporarily overshadowed by political issues

Through most of the years since the global financial crisis of 2008-09 the key issues have been economic in nature - the deleveraging of household and corporate balance sheets after a period of excessive indebtedness, gradual economic recovery and more recently the start of the restoration of normality to monetary policy in the US. In the UK, quantitative easing (QE) is over but monetary policy normalisation keeps being postponed due to economic weakness, while in the Eurozone, QE is still in operation but winding down and scheduled to end in December; interest rate hikes are not likely to begin until September 2019. Meanwhile in Japan "QQE" (quantitative and qualitative easing) continues along with yield curve control and there is, as yet, no talk of an exit strategy by the Bank of Japan (BoJ).

However, since the start of 2018 economic and monetary issues have been taking second place to political events. First there has been President Trump's intensifying trade war with China, but also with NAFTA (North America Free Trade Agreement) partners Mexico and Canada, and with the EU. In addition, the EU has been grappling with Spanish separatism, the Italian crisis following the March election which resulted in two populist parties forming a coalition, and a European-wide debate over immigration which threatened to become critical for German Chancellor Merkel. In the background, the Brexit negotiations have continued at a halting pace.

While it is possible that some of these political issues could derail the upswing in some countries, it remains my view that the business cycle is the ultimate and dominant driver of asset prices over any extended period. Given the state of the current US business cycle expansion - already 108 months and counting - this implies that once the normalisation of interest rates is accomplished, equity and real estate markets should have further gains ahead of them.

President Trump's trade wars

The Trump administration's opening gambit in its campaign to address the perceived injustices in international trade was the imposition, in January 2018, of tariffs on imported solar panels and washing machines. Intended to protect domestic manufacturers who had appealed last year to the US International Trade Commission (ITC) for protection under Section 201 "safeguard" rules against sales by foreign competitors that "are a substantial cause of serious injury to domestic manufacturers", the measures will mostly affect models manufactured in China and Korea.

In March 2018 the US government imposed tariffs on imported steel (25%) and aluminium (10%). This was designed to address the claims of the US steel industry that global producers (especially China) were flooding the market with below cost steel and aluminium. Initially the EU, Japan, Canada, Mexico and other US allies were exempt, but in June the tariffs were extended to these countries also.

Following the Section 301 ITC examination of China's intellectual property (IP) and technology-transfer policies, US investigators found that China routinely appropriates IP and forces technology transfers worth up to US\$50 billion annually from US firms through regulatory and other coercive measures. Tariffs on US\$50 billion of Chinese exports to the US were proposed in retaliation. Products within the scope of the proposed duty include engines, agricultural and textile machinery, semiconductors, batteries, tyres, medical products, and instruments used in aeronautical and space navigation - mostly industrial products that would not directly impact US consumers.

In response China unveiled a retaliatory list of US goods worth US\$50 billion that could be subject to an additional 25% tariff. China's list of 106 products includes soybeans, airplanes, automobiles, beef, and chemicals. As of 6 July, US tariffs on US\$34 billion of Chinese exports became effective, with a further US\$16 billion targeted for August. So far China's response has been restrained, reiterating its commitment to reform and opening up its markets, and improving the protection of intellectual property. Importantly, it promised to develop a good business environment for foreign firms operating in China.

The US authorities have also been considering the imposition of tighter controls on foreign investment in the US. In March, President Trump directed Treasury Secretary Steven Mnuchin to devise a system that would limit Chinese investment “in industries or technologies deemed important to the United States.” These proposals directly challenge the Chinese government’s “Made in China 2025” plan through which the Chinese government hopes to become dominant in industries of the future such as artificial intelligence, robotics and quantum computing. In May the White House said that specifics of its plan, as well as stronger export controls, that would stop US firms shipping certain technologies to China would be officially announced by 30 June. Details are still awaited.

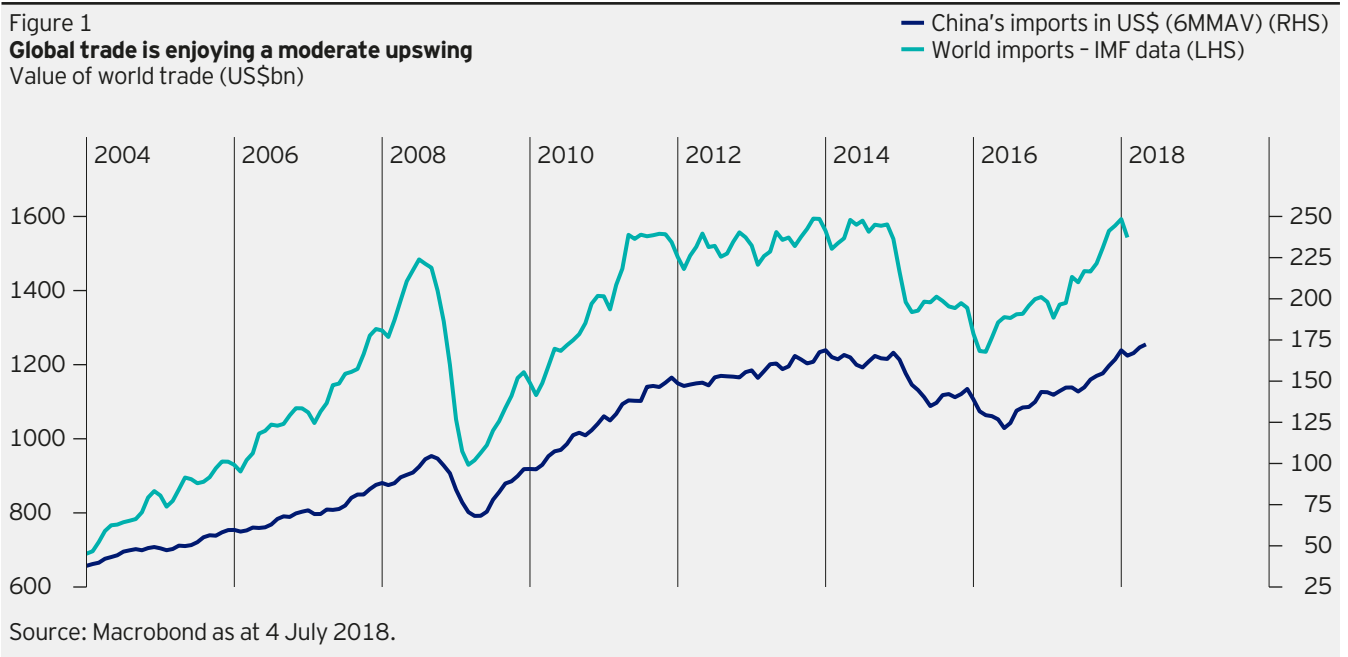
Inflation returning to target, not yet a threat to expansion

After about eight years during which US inflation was persistently below the 2% target, inflation, as measured by the index of core personal consumption expenditures (PCE) finally returned to the 2.0% level in May 2018. This was largely driven by the increase in energy prices (which also show up in other non-energy components of the index) and the earlier weak dollar, not by any fundamental upward shift in the inflation rate. However, this also implies - and is supported by continued low rates of money and credit growth - that inflation will not surge beyond its current levels. In turn this means there will not be any need for the US Federal Reserve (Fed) to continue raising interest rates once they reach “neutral” levels. For the business cycle this is good news because the central bank will not need to curb excess credit or money growth. This means that the business cycle expansion can continue to expand for several more years beyond 2019.

In other key economies such as the Eurozone and Japan, inflation rates are still well below the 2.0% target figure and consequently there is no risk of policy being tightened in an abrupt or destabilising manner. The same holds true for economies such as Canada, Australia, New Zealand and Sweden. For the advanced economies overall this means that there will be at least two years, perhaps three or four, during which the global business cycle can expand without hitting the traditional inflationary roadblock. In short, the benefit of low inflation is that the business cycle expansion can be extended for longer.

Global trade on the upswing

These broad economic trends - modest real GDP growth, low inflation and an extended business cycle expansion - are translating into a moderate upswing in global trade which benefits developed and emerging economies alike (Figure 1). Whereas the upswing in 2010-11 was largely driven by excessive expansions among emerging market economies, led by China’s extraordinary fiscal stimulus, and therefore ended abruptly with the euro debt crisis of 2011-12 and the “taper tantrum” of 2013, the current upswing appears more moderate because it is spread across more economies, but nonetheless vulnerable. The improvement in economic activity in the US and Europe has helped to underwrite the gradual upturn in China’s trade as well as the upturn in the exports of the smaller East Asian economies, but President Trump’s truculent trade war could undermine the pace of the upswing, especially if it escalates to several rounds.



The on-going stock market correction

Following the strong rally driven by US tax-cuts in December and January, global equity markets have faced a series of setbacks since February 2018. Currently few markets are at all-time highs and most have fallen back to levels seen late last year. Concurrently, in the bond markets the bearish trend of rising yields has been interrupted since February by a helpful "risk off" period during which yields have remained broadly flat, although volatile. Looking forward, the rise in medium- and long-term bond yields must be presumed to continue as the Fed continues its policy of interest rate hikes at the short end of the market. This is likely to pose a challenge to capital values in both equity and real estate markets, but it is unlikely to spell the end of the bull market.

Analytically, we can decompose capital values into a multiple times a discounted earnings stream. For example, in equities capital values can always be viewed as a PE ratio times a discounted future stream of corporate earnings. Similarly, in the property market capital values can be viewed as a capitalisation rate ("cap rate") times a discounted future stream of rental payments. Since multiples are primarily impacted by interest rates, there is scope for rising rates to cause falling PE ratios. However, since the earnings stream is driven mainly by the GDP growth rate, it follows that - if my business cycle expectations are broadly correct - the continued prospect of earnings growth as the business cycle is extended can offset the mild decline in PE ratios that investors are currently witnessing.

Figure 2
Consensus Economics

(%)

Economies	2017 Actual		2018 Consensus forecasts (Invesco forecast)			
	Real GDP	CPI inflation	Real GDP		CPI inflation	
US	2.3	2.1	2.9	(2.5)	2.5	(2.6)
Eurozone	2.6	1.5	2.2	(2.1)	1.6	(1.3)
UK	1.8	2.7	1.3	(1.4)	2.5	(2.4)
Japan	1.7	0.5	1.1	(0.9)	1.0	(1.5)
Australia	2.2	1.9	2.8	(2.8)	2.2	(2.1)
Canada	3.0	1.6	2.0	(2.0)	2.3	(2.0)
China	6.9	1.6	6.6	(6.7)	2.2	(1.6)
India	6.7	3.6	7.4	(6.7)	4.8	(4.0)

Source: Consensus Economics, Survey Date: 11 June 2018.

United States

US real GDP growth slowed to 2.0% in Q1 2018 from 2.9% annualised in Q4 2017, mainly due to softer personal consumption expenditures which declined sharply to 0.9% from 4.0% in the previous quarter. However, numerous reports of stronger economic data since then suggest that the first quarter slowdown was almost certainly transitory. For example, retail sales were up by 0.8% month-on-month in May and up by 5.9% compared with the year before. Similarly, orders for durable goods were up by 11.6% year-on-year in April and 10.3% in May - both historically high figures. Together with other strong data points these reports have led the Atlanta Fed's "nowcasting" model to project a robust 4.1% real GDP growth in the second quarter (as of 2 July). Many analysts expect the Trump tax cuts at the end of 2017 to contribute strongly to US GDP growth over the next year, but my view is that the fiscal stimulus has been significantly offset by slow growth of money and credit, implying that while it may lead to some "crowding out", i.e. higher interest rates, its growth and inflationary impact is likely to be limited.

On the inflation front the key indicators have now returned to the 2% target area. The headline CPI reached 2.8% year-on-year in May, while the core CPI increased to 2.2%. These increases follow the increase in energy prices since mid-2017 as well as the elimination of some one-off declines in prices (such as mobile data charges) in the early part of 2017 which have now dropped out of the year-to-year comparisons. Meanwhile the PCE deflator increased to 2.3% year-on-year in May while the Fed's preferred core PCE measure, which excludes volatile food and energy prices, increased to 2.0% - the first time it had reached this rate of

increase since April 2012. Among the components of the broad inflation indices owners' equivalent rent has been rising (from 3.1% year-on-year in February to 3.4% in May) reflecting a stronger housing market, and continuing wage increases in the 2.6-2.8% range since the start of the year are beginning to feed into business costs. Combined with some potential price increases for imports in the second half of the year as a result of President Trump's tariff measures, the stage is set for slightly firmer inflation figures than in the past nine years since the global crisis.

The Fed, now under the leadership of Jerome (Jay) Powell, has responded to the evidence of a buoyant economy by steadily raising its target for the Federal funds rate and by implementing its planned balance sheet reduction programme. In 2017 the funds rate was raised three times by 0.25% on each occasion by the FOMC, and it now appears that, assuming their projections for the economy are broadly correct, the Fed intends to raise interest rates four times in 2018 and three times in 2019. This would take the upper end of the Fed funds target range from 2.0% currently to 2.5% in December 2018 and 3.25% in December 2019. Given the framework that Fed officials are using, which includes a Phillips curve or output gap view of inflation and a positive appraisal of the impact of fiscal stimulus, a rising trajectory for interest rates is almost unavoidable.

However, taking a monetarist perspective, it needs to be acknowledged that broad money (M2 or M3) is only growing at just over 4% year-on-year, restrained in large part by the slow growth of bank lending which is only expanding at 5% (Figure 3). Given that inflation is ultimately a

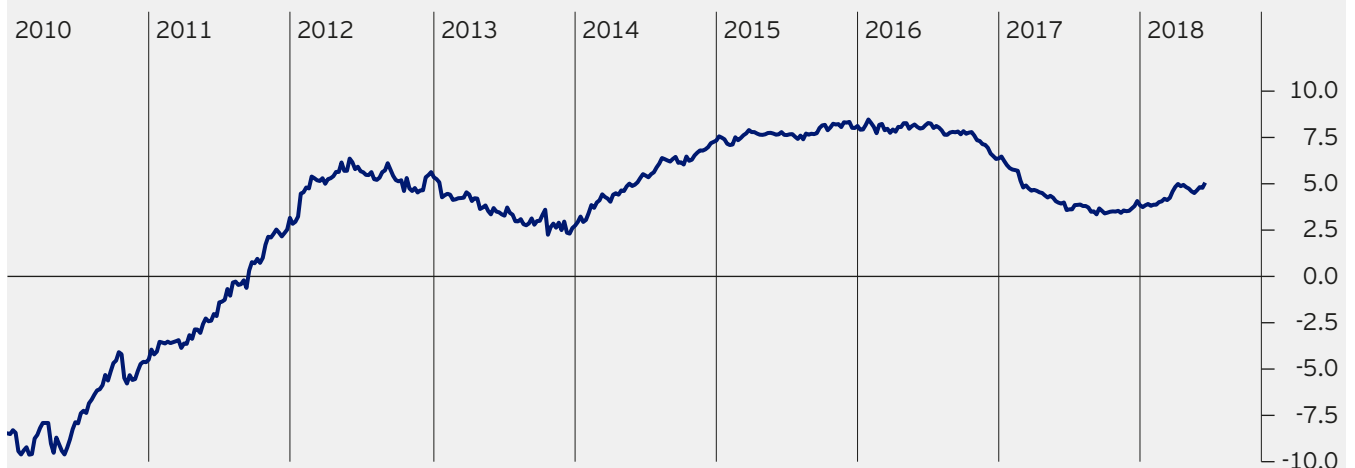
monetary phenomenon, these moderate rates of money and credit growth will limit any upside risks from inflation and, as a consequence, put a ceiling on market interest rates and bond yields.

I forecast real GDP growth to be 2.5% in 2018 and consumer price inflation to average 2.6%.

Figure 3

US: Commercial bank lending slowed from 2016, now only growing at 5%

US commercial banks' loans & leases



Source: Macrobond and Invesco calculations, as at 4 July 2018.

The Eurozone

The first half of 2018 has been marked by a notable slowdown in economic activity in the euro-area, exacerbated by political developments that have threatened to destabilise the euro once again.

Real GDP growth slowed from 0.7% quarter-on-quarter in Q4 2017 (2.8% year-on-year) to 0.4% (2.5% year-on-year) in Q1 2018, while production activity softened considerably with the euro area purchasing managers' index falling to a 15-month low of 55.5 in May. Similarly, the IFO, a key survey measure of Germany's business climate, has fallen from a November high of 105.2 to 101.8 in June, while its counterpart for expectations has fallen from 103.6 to 98.6. The ZEW expectations measure for Germany has fallen from 20.4 in February to -16.1 in June, while its Eurozone equivalent has fallen from 29.3 in February to -12.6 in June. Looking ahead, economic activity will probably soften further through the summer as trade disputes with the US, sluggish credit growth and persistent problems in the banking system continue to undermine the economic upswing.

European financial markets were also disturbed by political events during the quarter. In Italy the uncertainties and dramas ahead of the eventual accession of a populist coalition of the 5-Star Movement on the left and the Northern League on the right caused Italian sovereign yields to rise sharply, with the 10-year BTP yield rising to just over 3.0%, or 250 basis points over German Bund yields in early June. Spain, where the separatist discontent in Catalonia is by no means resolved, saw a smaller upward spike in 10-year yields to 1.5% (115 basis points over Bunds). Finally,

the entire continent has been grappling with the problem of how to control immigration, although in fact the numbers of migrants have already fallen steeply. Even so the continuing political fall-out has caused problems for Chancellor Merkel in Germany, and has led to some of the central European states (Hungary, Poland and Slovakia) as well as Italy demanding stronger controls and/or fairer burden sharing at the European level.

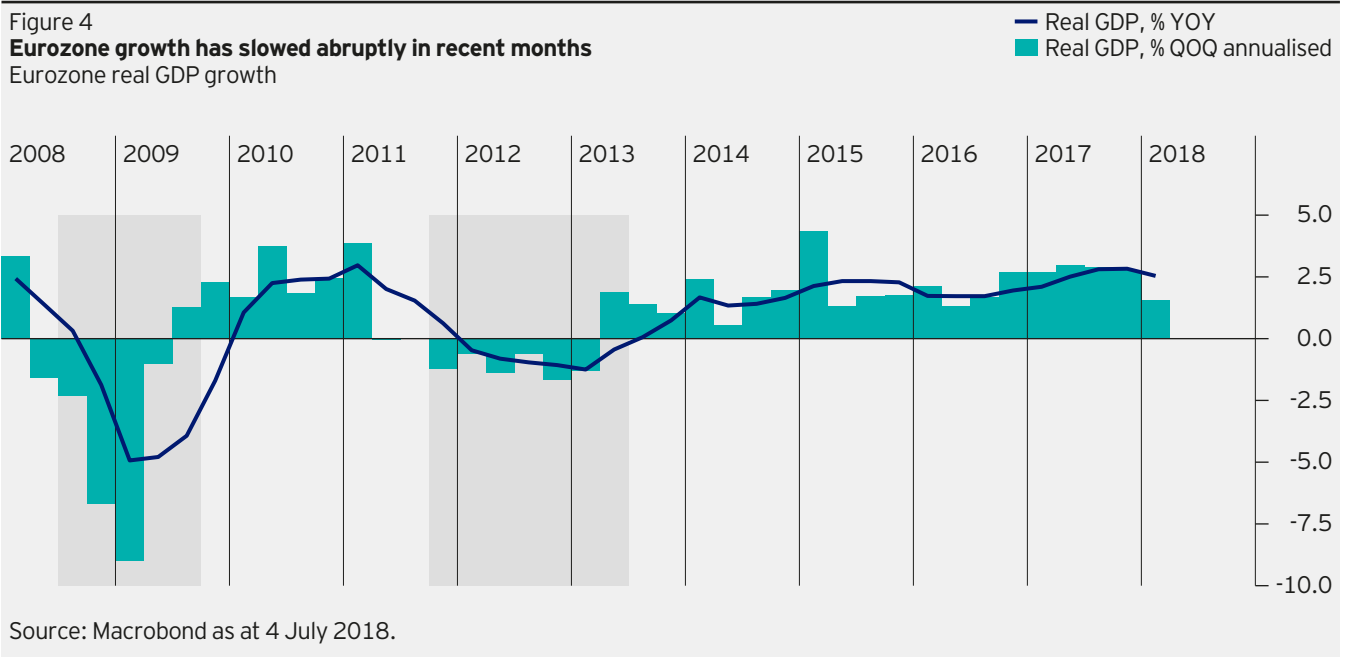
On the inflation front the headline rate reached 1.9% year-on-year in May, well above April's 1.3%. This reflected both rising oil prices (which caused the energy component of the CPI to increase from 2.6% to 6.1%) and higher core inflation (which increased from 0.8% to 1.1%). Although labour markets in the Eurozone are gradually tightening - as reflected in reports of shortages of skilled workers in some areas - they are a long way from creating serious cost pressures for firms, and therefore any setback in oil and energy prices is likely to see inflation weaken again. Moreover, the current softening of eurozone economic activity is also likely to weaken demand pressures, easing inflation further. More fundamentally, the European Central Bank's (ECB) monetary policies are not yet sufficiently expansionary to create inflationary pressures in the region.

Against this background of moderating yet still solid growth the ECB announced in mid-June its plan to taper its monthly asset purchases (or QE) from the current €30 billion per month to €15 billion per month during the fourth quarter, before terminating such purchases entirely at yearend. The level of the ECB's asset purchases would be maintained by reinvesting the proceeds of maturing

securities "for an extended period of time after the end of asset purchases". In addition, ECB President Mario Draghi gave guidance that the key ECB interest rates would be kept unchanged at present levels "at least through the summer of 2019". These decisions were all conditional on incoming data confirming a sustained convergence of inflation to the ECB's target of "below, but close to, 2%" in the medium term.

The problem for the central bank remains as spelled out here previously. Given high bad debt ratios and inadequate levels of capital across the euro-area banking system, credit growth in the single currency area remains weak. This in turn implies that when the ECB ceases to conduct asset purchases in December it is likely that deposit, and hence M3 growth across the region, will relapse to a lower rate. Unavoidably, economic growth could be adversely affected and inflation could fall back towards 1% or less.

For the Eurozone as a whole I forecast real GDP growth in 2018 of 2.1%, and headline consumer price inflation of 1.3%, still below the 2% target due mainly to inadequate M3 growth.



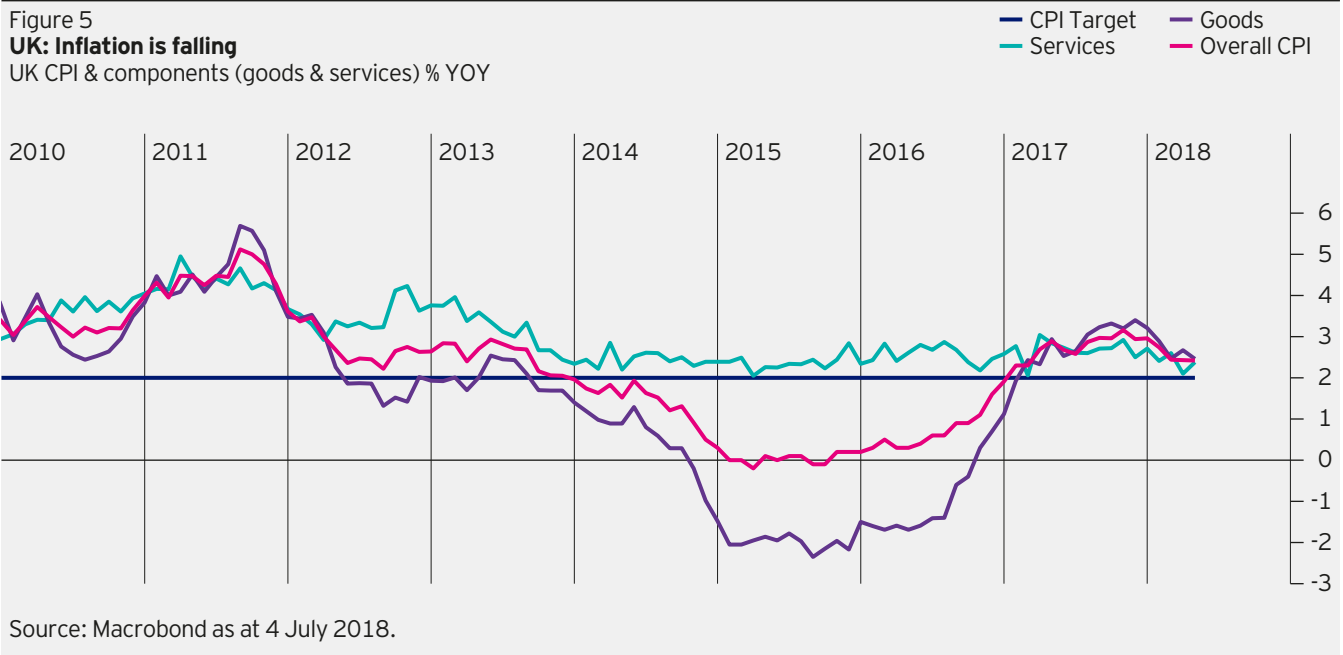
United Kingdom

Like many economies in Europe and North America, the UK economy was severely impacted by the unusually cold weather in the first quarter of 2018. This came on top of the slower trend growth that has taken hold since mid-2017, one year after the Brexit referendum of June 2016. Real GDP grew 0.2% quarter-on-quarter in Q1 2018 and I expect growth for the full year to be 1.4%. Following the referendum the economy had begun to reorient towards being less consumption-led and more reliant on net-exports and export-related investment to provide economic growth, but in recent quarters that trend has faded as uncertainties over post-Brexit trading arrangements cause companies to delay investment.

As tedious as it is, Brexit still dominates UK politics and economic sentiment. The political establishment continues to engage in a tug of war between free market, pro-consumer Brexiteers who favour a clean break with the protectionist EU and those who pursue a pro-producer approach that amounts to "Brexit in Name Only" (BRINO), maintaining close alignment with the EU. In combination, the weakness in real wages, delays to corporate investment plans due to continued uncertainty over the terms governing Brexit, plus slow money and lending growth mean that UK growth will likely continue to underperform both the US and the eurozone in the near term.

Private consumption is still suffering from negative real wage growth, caused by the period of above target inflation from February 2017. In fact the post-referendum high for the CPI was 3.2% in November 2017. This episode of inflation was generated primarily by the depreciation of sterling following the Brexit vote, together with a temporary period of rapid broad money (M4x) growth. However, the pound has now recovered to around US\$ 1.32, only 9% less than its pre-referendum value compared with a maximum depreciation of 18% in late 2016 and early 2017. Most of the imported inflation pass-through from the initial post-referendum depreciation to consumer prices has already occurred. Given this and the fact that M4x growth slowed to 4.2% in May (from as high as 7.6% in October 2016), it is natural that CPI inflation has slowed to 2.4% in June 2018, and is likely to decline further during the remainder of the year. At the same time, the labour market remains buoyant, with unemployment at a record low rate of 4.2% in May.

For the 2018 as a whole I forecast 1.4% real GDP growth and 2.4% consumer price inflation.



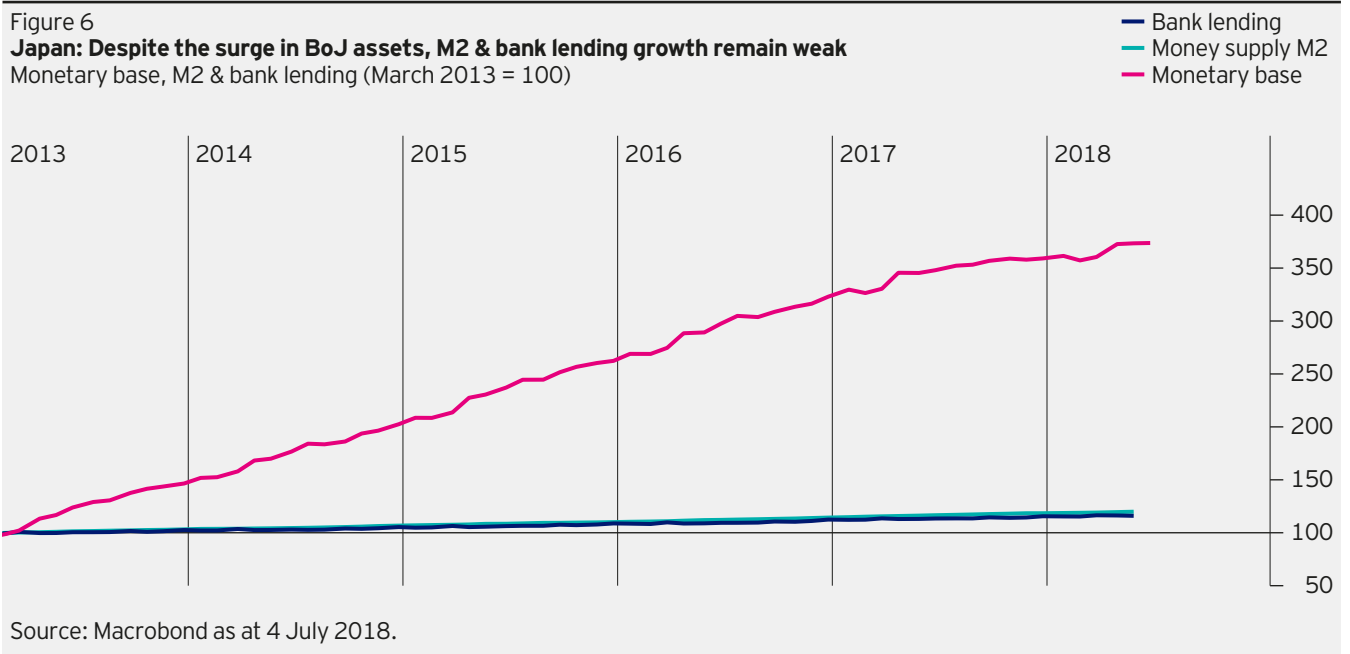
Japan

Real GDP declined by 0.2% (-0.6% annualised) in the first quarter of 2018. This rather surprising decline was due mainly to a fall in PCE (-0.3% quarter-on-quarter annualised) and a simultaneous drop in residential investment of -7.2% (following -10.3% in Q4 2017). Private non-residential investment was up by 1.3% in the first quarter. In year-on-year terms the economy advanced just 1.1% compared with 1.7% in 2017 as a whole, a mediocre performance that reflects the lack of growth in the labour force associated with the aging of the population and a chronic lack of domestic demand. On the external side exports expanded by 2.6% annualised while imports increased by 1.2%, meaning that net exports contributed positively to real GDP growth.

Data going into the second quarter continues to be weak. Overall household spending declined by -1.3% year-on-year in April and -3.9% in May due to lower spending on utilities and cars, whilst the services PMI slowed to 51.0 in May and 51.4 in June. Japan's cabinet office claimed that much of the weakness was due to cold weather, and therefore remained optimistic about the outlook for the remainder of the year. While it is true that the labour market remains tight with unemployment at just 2.3% in May - one of the lowest rates in the industrialised world - and the jobs-to-applicants ratio at a high of 1.6 (the highest since the boom of 1973), the chronic weakness of domestic demand is not being solved by the BoJ's current monetary strategy.

As I have argued here before, Japan's broad money growth (M2) is not yet rapid enough to generate sustained price inflation. In May M2 growth was just 3.1% year-on-year, a figure that is mostly absorbed by 1.0-1.5% real GDP growth and an average 2% decline in velocity (which is equivalent to a 2% annual increase in money holdings). This means inflation, on average, will continue to fall well below the BoJ's 2% target, and will be accompanied by low nominal GDP growth, subpar wage growth, and disappointing consumer spending.

Overall, the result is that inflation remains below 1%. In May the national CPI increased by just 0.7% year-on-year while the core measure (ex food and energy) increased by only 0.1% year-on-year. In other words, due to the way that the BoJ conducts its asset purchases - buying largely from banks instead of from non-banks - five years of QE or QQE by the BoJ have simply failed to boost inflation adequately. I forecast real GDP growth to be 0.9% in the full year 2018 and headline CPI inflation to average 1.5%.



China and Emerging Asia

Developments in the Chinese economy are best understood by recognising that the key macro-economic decision, made a year and a half ago, was to reduce leverage in the corporate sector, a decision that required a slower rate of growth of credit after several years of excessive debt accumulation in the local government, corporate and non-bank financial sectors. By mid-2017 credit growth outside the banking system, particularly in the shadow banking arena, was starting to come under control as macro-prudential measures limiting credit for the housing sector became effective. Because China's capital markets are at a relatively early stage of development, and bank lending is the dominant source of credit, slower growth has been accompanied by slower money growth. M2 has decelerated from 14.0% in January 2016 to only 8.8% in June 2018 - the lowest growth rate since the Four Modernisations plan initiated by Deng Xiao-ping in 1978.

The result has been a gradual slowing in domestic demand over the past year. Fixed asset investment, infrastructure and construction spending, and housing have all slowed. However, manufacturing investment in the higher value-added sectors and in the service sector has remained solid, while retail spending by consumers has also held up, implying that China's domestic demand has moderated only slightly in the first half of the year. Although the People's Bank of China, the nation's central bank, cut reserve requirements by 1% on 25 April, this was not so much an injection of new credit as a replacement for the maturing Medium-term Lending Facility (MLF) created earlier.

The Chinese housing market cooled further in recent months. Property prices in first tier cities have been broadly flat year-to-date while house price increases in second and third tier cities have continued to weaken.

Among the macro-prudential measures driving the market, increased down-payment requirements and restrictions on home purchases and sales have all played a part. Moreover, the 2018 Government Work Report makes it clear that the authorities plan to increase land supply and encourage shared ownership properties and rental housing - all measures which should help keep prices subdued in line with limited money and credit growth.

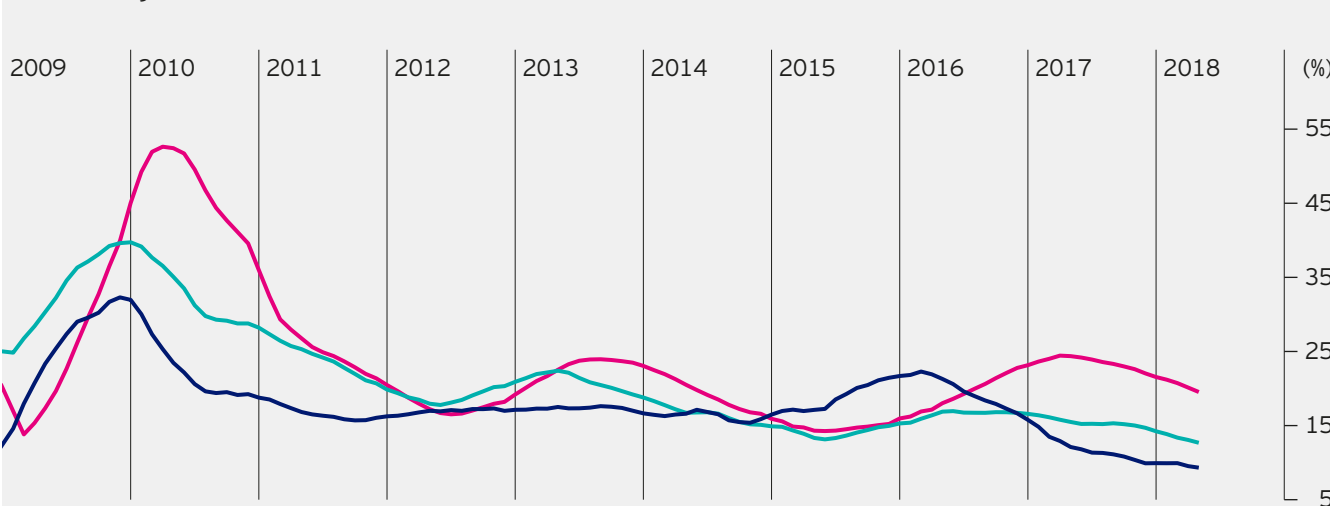
On the external side there are two contradictory forces at work. On the one hand China's exports have been enjoying a moderate recovery after a period of relative stagnation in 2014-16, while on the other hand the adverse effects of the Trump administration's import tariffs - targeted at many of China's most advanced sectors - are coming into effect as this report is being written. It is too soon to say definitively how the Trump trade war will evolve but two scenarios seem plausible. Following implementation of the first round of US tariffs on US\$34 billion of Chinese exports to the US on 6 July (and the intended tariffs on another US\$16 billion in August) and China's retaliation, we know that the US is preparing a further list of Chinese exports worth US\$200 billion that will face tariffs. However, this may be just a threat to force China to the negotiating table. Under this first scenario the US and China resume negotiations and China offers concessions during the next four months ahead of the US mid-term elections in November. However, if China fully matches the US tariffs with equivalent counter-measures, the Trump administration will likely prepare a list of a further \$200 billion of Chinese exports to be targeted. In this second case the trade war would continue for an indefinite period and the damage to world trade and Sino-US relations could become meaningful.

In contrast to most previous episodes of instability during the Modernisation period since 1976 China's current problems are mostly due to an external factor - Trump's trade war. It is true that tighter credit has seen two significant credit defaults in the corporate bond market while the Chinese yuan has weakened by 6% against the US dollar since the start of the year (implying modest capital outflows), but for the rest it is mostly all quiet on the domestic front. President Xi Jinping is firmly in command with an indefinite mandate to rule, and inflation is under control; in May consumer prices increased by just 1.8% year-on-year.

For 2018 I expect China's official real GDP growth figure to be 6.7% and, with slower money growth but a weaker yuan, consumer price inflation to average 1.6%.

Turning to the smaller, manufacturing economies of East Asia which are heavily involved in regional supply chains that include China, the outlook for their exports will depend primarily on the continuation of business cycle upswings in the US and Europe and to a degree on the collateral impact of President Trump's trade measures against China. On the domestic side these economies are growing satisfactorily, and none are showing signs of overheating or inflation. In 2018 Korea, Taiwan and Hong Kong are expected to see real GDP growth rates of close to 3%, while the ASEAN economies are expected to grow at 5.1%. Although these growth rates are generally below past trends, nevertheless the smaller, manufacturing and export-oriented Asian economies have seen both their stock markets and their currencies hold up well compared to other emerging markets that have been hard hit by the combined pressures of a strong dollar and rising US interest rates.

Figure 7
The top priority for China monetary policy is slower credit growth
 China credit growth (% YOY, 3MMAV)



Source: Macrobond as at 4 July 2018.

Commodities

The softening of economic indicators, such as PMIs, in the first half of 2018 has corresponded with a broadly unchanged performance of broad commodity price indices. For example, the CRB Index is up 1.6% since January 2018. The two commodities that have seen the biggest market moves are oil and copper.

Both Brent crude and WTI are up 12% since the start of the year, with a barrel of WTI trading at US\$69 at the time of writing. The first half of 2018 has seen some serious supply disruptions. The first was due to Venezuela's continued economic and political crisis which has resulted in a drop in their output of 700,000 barrels per day (bpd) over the past 12 months. This has meant that OPEC's output has fallen more than intended. Second, Iran, OPEC's third biggest producer, now faces the re-imposition of US sanctions following the US withdrawal from the Iran nuclear deal, although how much this will impact the country's oil exports remains to be seen. Finally, in Libya an escalation of fighting recently knocked out 400,000 bpd of production.

Industry experts warn that there could be a further 1.5m to 2.3m bpd drop by the end of 2018 from these three countries alone. By May 2018, OPEC was cutting about 600,000 bpd more than intended. In response to this larger than expected fall in supply, OPEC agreed on 22 June to increase output in order to bring oil supply back in line with their target set in November 2016.

However, there has been increased production of US shale oil over the year; in June US crude oil production was growing at 16% year-on-year. The US rig count is increasing but at a subdued pace. As

a result, the number of rigs operating is just over half of the numbers in operation prior to the oil price collapse in 2014. The Permian basin in Texas, the most productive oil field for shale, is starting to encounter pipeline constraints, impacting the flow of oil to market. That should see supply growth slow until more lines can be opened in 2019. Overall we still expect oil prices to trade sideways over the rest of the year in a fairly limited range around US\$70 per barrel.

The copper market has been experiencing both supply side and demand side difficulties. In early June 2018 the copper price hit a four year high of US\$ 7,348 per tonne, about 30% higher than in June 2017. Prices were boosted by the weaker US dollar (until March), the closure of a big Indian smelter and fears that the Escondida mine in Chile, the world's largest, could be disrupted by industrial action. In recent weeks, however, copper has fallen back almost 14% in price to US\$6,303. Since China accounts for about 40% of global demand for the metal, copper has been caught up in the recent broader risk-off trade that has accompanied the steady ratcheting up of trade war rhetoric. However, the latest price weakness is also reflecting some recovery in production, thanks to the fact that expected supply disruption in Chile has not been as severe as once thought. Looking ahead, copper prices could continue to weaken further if the trade dispute between the US and China intensifies. A strong US dollar and weaker data from China could also continue to weigh on prices.

A longer term consequence of lower commodity prices is a decline in investment in the commodity sector. This is especially true of the oil industry.

Driven by investor pressure and a need to rein in costs after the oil price halved in 2014, the industry has largely abandoned new investment in the type of mega-projects - from Arctic exploration to Canadian oil sands - which were once its forte. Persistent cost-cutting in the sector and mounting global climate concerns may induce the industry into making a miscalculation by turning its back on many big oil and gas projects before efficiency gains, renewables, electric cars and efforts to conserve fossil fuels are able to cap consumption. The result could be supply shortfalls and price rises, storing up problems for the global economy.

Figure 8

Commodities: Supply constraints pushing up oil and copper prices

WTI crude oil & copper prices



Source: Macrobond as at 4 July 2018.

Conclusion

Periods of rising US interest rates - always challenging to navigate - generally come in two types: either as mid-course corrections (or normalisations) during business cycle expansions or as end-of cycle increases designed to curtail rising inflation. The first type of interest rate adjustment, though temporarily disturbing to financial markets, is usually benign. In essence, US interest rates are being raised to forestall excess money growth and economic overheating, enabling the business cycle expansion to continue for several years longer. This in turn means that the ultimate peaks in equity and real estate markets for the cycle could occur several years after the series of current interest rate increases is completed. In my view the US and much of the developed world is at this stage in the current business cycle expansion.

The second type of interest rate adjustment - in response to excess money and credit growth, overheating and rising inflation - almost always spells the end of the economic upswing and results in recession. For this reason, this type of

rate increase is fundamentally different from the first type, causing bear markets in equities and real estate, an economic slowdown or a recession, and a painful period of higher unemployment while inflation is brought down.

The current interest rate increases in the US are of the first type, comparable to the rate increases of 1994-95 and 2004-05. They do not resemble rate increases of the second type in any substantive way. However, although the current series of rate increases may be benign in the longer run, it is nevertheless the case that in the short run global financial markets are being impacted by additional uncertainties - due to Mr Trump's trade war, a strengthening US dollar, Brexit and the slow-burn financial and political problems of the Eurozone. However, none of these additional issues are sufficient on their own, in my view, to derail the fundamental factors driving the global business cycle upswing.

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6 July 2018.

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