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John Greenwood
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Despite the turmoil, the global economy will continue to grow with low inflation in 2019

2018 has been a year of turmoil for financial markets with weakness in the bond markets and two significant sell-offs in equity markets. However, 2019 promises to be much calmer.

After a very strong start in equity markets between November 2017 and the end of January 2018, there was a big sell-off from January to April, and another beginning in October and continuing through to December. In between there was a series of disturbances in emerging markets (EM) featuring crises in Venezuela, Argentina and Turkey. In addition to the long-running saga of the Brexit negotiations, the year featured a strong rise in the price of oil followed by a sudden collapse from early October, and disruptions created by President Trump's repeated trade measures - targeted first at steel and aluminium, then at Europe and NAFTA (North America Free Trade Agreement), and ultimately focusing primarily on China. With numerous other geopolitical events adding to investors' anxieties - such as wars and unrest in the Middle East, continuing immigration pressures in Europe and the US, the victory of populists over the establishment in Italy and the consequent budget disputes with the EU Commission in Brussels - there was plenty of reason for investors to pull back from risk-markets such as equities.

However, the fundamental backdrop to all this was the US Federal Reserve's (Fed) policy of normalising US interest rates, raising them from 1.25% in early December 2017 to 2.25% a year later, and shrinking its balance sheet. Rising US rates always create a challenging environment for investors. After nearly a decade of virtually zero interest rates, the upturn in rates has put steadily increasing pressure on equity and other risk asset classes. Although some of these geopolitical events may prove to be temporarily damaging, it is my view that they will prove to be no more than waves on the surface of the tide which is the record-breaking expansion of the US business cycle.

Figure 1
Consensus & Invesco Forecasts for 2018 & 2019

(%)

Consensus Economies	2018 Estimate		2019 Consensus Forecast (Invesco forecast)			
	Real GDP	CPI inflation	Real GDP		CPI inflation	
US	2.9	2.5	2.7	(2.7)	2.3	(2.0)
Eurozone	2.0	1.8	1.7	(1.5)	1.7	(1.3)
UK	1.3	2.5	1.5	(1.6)	2.2	(2.2)
Japan	1.0	1.0	1.1	(0.9)	1.1	(0.8)
Australia	3.2	2.0	2.8	(2.8)	2.2	(2.1)
Canada	2.1	2.3	2.0	(2.3)	2.1	(1.8)
China	6.6	2.2	6.3	(6.6)	2.4	(1.1)
India	7.4	4.5	7.5	(6.3)	4.8	(4.3)

Source: Consensus Economics, Survey Date: 12 November 2018.

United States

US monetary policy is becoming less accommodative, but the Fed is not “tightening”, only “normalising” policy. The current “normalisation” phase is analogous to the mid-course corrections in interest rates that occurred in 1994-95 and 2004-05. The important point about those episodes was that the business cycle continued to expand for several years after the completion of normalisation, and the equity and real estate markets also peaked considerably after these rate hikes were completed.

At its meeting on 7-8 November the Federal Open Market Committee (FOMC) of the Fed kept the federal funds rate at 2.0-2.25%, having removed in September the wording in their previous statements that had asserted the “stance of monetary policy remains accommodative”. The median projection of FOMC members for the federal funds rate remained at 3.1% for 2019 (suggesting four rate hikes of 0.25% during 2019) and 3.4% for 2020, but with the recent sell-off on Wall Street and the plunge in the price of WTI oil to \$51 the FOMC may defer raising rates at their meeting on 18-19 December.

Although financial commentators tend to focus primarily on the level and direction of interest rates, it is equally important for policymakers to ensure that the rates of growth of money and credit remain consistent with stable growth of spending (or nominal GDP). Since the start of 2016, M2 (a measure of the money supply) growth has averaged 5.5% while our proxy for the discontinued M3 has averaged 4.9% p.a. Over the same period, nominal GDP has averaged 3.9% p.a., just below these two aggregates - a typical spread that allows for the annual increase in money balances relative to

income. Importantly, with M2 and proxy M3 growth currently at only 3.7% and 3.9% respectively in the year to the end of October, and commercial banks’ loans and leases growing at a similar 4.5%, there are no grounds for expecting a sudden upside break-out of stronger spending, significantly higher inflation or an abrupt upward shift in long-term interest rates. On the contrary, if these trends persist, lower inflation and a very flat yield curve are likely to dominate over the year ahead.

In my opinion there is a strong probability that the Fed will be successful in positioning the US economy for several more years of expansion after 2019 or 2020 when the fed funds rate is expected to reach the “neutral” level - i.e. the rate that is neither expansionary nor contractionary, but consistent with steady-state expansion. This could mean that by next July the current expansion will exceed the longest recorded expansion in US financial history - the 10-year expansion of March 1991-March 2001.

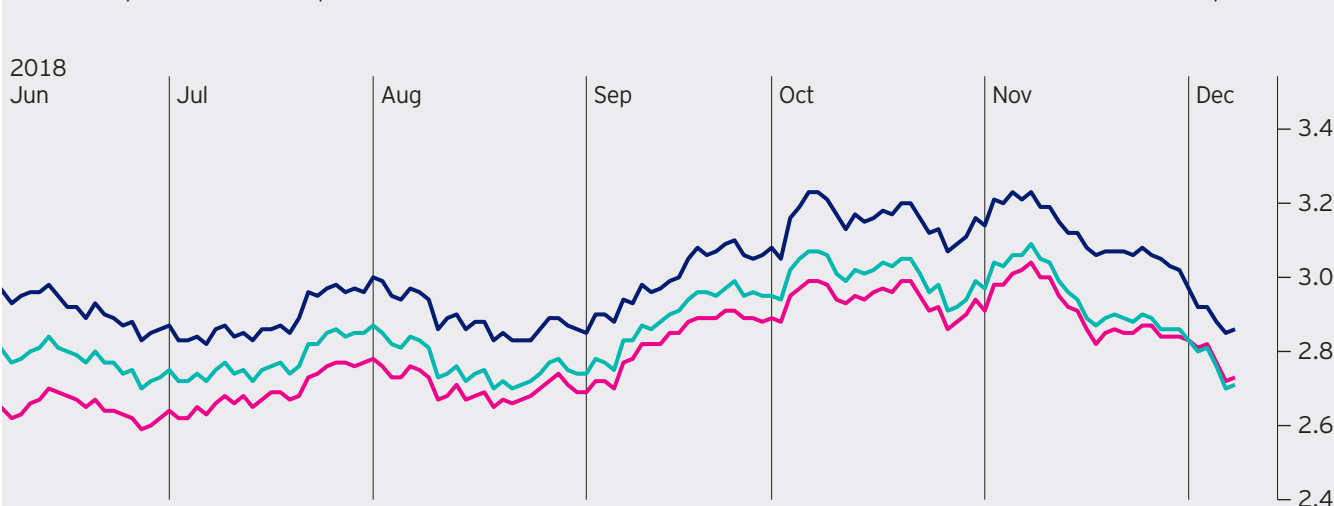
One topic occupying investors’ minds currently is the recent slight inversion of the US yield curve (see Figure 2) which occurred when the yield on the 5-year Treasury bond fell below the yield on the 3-year bond. Most investors have learned the mantra that an inverted yield curve almost always precedes a recession. However, the mantra is often misleading. When the Fed deliberately squeezes money and credit - for example, in order to curtail inflation - this raises short rates above long, inverting the yield curve. If the squeeze is maintained, the economy will slow and a recession will follow. But it was the tightening of money and credit that caused the recession; the yield curve inversion was merely a symptom of the squeeze. So

an inversion without a squeeze does not necessarily lead to recession.

To see this, consider that there have been numerous inversions with no recession (e.g. in the US in July-October 1966 and October 1998; in Australia July 2000-March 2001, March 2005-June 2007 and August 2011-November 2012), and numerous recessions with no inversion (e.g. in Japan and Germany). The reason is that the yield curve is simply a reflection of supply and demand conditions in the credit markets, not the true cause of the economic downturn. In the current circumstances with the Fed raising rates at the short end of the curve, the long end distorted by years of QE and inflation expectations pushing rates lower at the long end (due to lower oil prices, slower economic growth etc.) the yield curve is flat or inverted, but not signalling a squeeze by the Fed.

There are two additional broad strands of thinking in the financial markets that contradict my view and imply, contrary to recent concerns about the yield curve, the US economy is on the cusp of overheating and a resurgence of inflation. The first theory points to tightness in the labour market - as indicated by the low rate of unemployment (currently 3.7% according to the November payroll report). These analysts rely on the “Phillips curve” to argue that when in the past the unemployment rate has fallen below the “natural” rate of unemployment, wages have generally risen, and in turn inflation.

Figure 2
US Treasury yield curve becomes marginally inverted but does not signal recession
 US Treasury benchmark bond yields (%)



Source: Thomson Reuters Datastream as at 11 December 2018.

United States (Continued)

The problem with this theory is that while it has worked sometimes in the past, it has not worked during the last three business cycles. In the words of Bill Dudley, the recently retired President of the Federal Reserve Bank of New York, "the Phillips curve is as flat as the plains of Kansas". The theory only worked when money growth was rapid, giving rise to overheating and inflation. In recent years money growth has been low and stable, with the result that the economy is not overheating. Indeed, if we look at Germany, Japan or Israel the unemployment rate is also at record lows and yet these economies are not seeing wage or price inflation in any significant degree.

The second theory claims that a big increase in the budget deficit due to an expansionary fiscal policy should also lead to inflation. In the current environment where President Trump has cut taxes and proposes to increase military and infrastructure spending this sounds a plausible argument. There can be no doubt that the tax cuts and the temporary 100% depreciation on business assets have boosted consumption and investment spending in the short run. However, in the medium term monetary policy tends to dominate over fiscal expansion, which means there should be no assurance that there will be overheating and inflation.

In summary, despite the low level of unemployment and Mr Trump's fiscal stimulus, the course of the US economy will remain broadly consistent with the Fed's mandate to achieve full employment with 2% inflation. This in turn should limit the upside risk for interest rates and inflation. By the same token, it should limit the downside risk for the stock market and the bond market.

Finally it is necessary to comment on President Trump's trade policies. As of early December, imports of steel and aluminium into the US remain subject to additional tariffs with only a few exceptions; NAFTA has been revised to become the USMCA (US-Mexico-Canada Agreement); and three sets of tariffs have become effective on US\$235 billion

of annual imports from China (in July, August and September). Further, at the G20 meeting in Buenos Aires on 1-2 December this year, Presidents Trump and Xi agreed on a temporary truce to extend their negotiations for 90 days, with Mr Trump postponing the imposition of 25% tariffs on Chinese imports into the US - which had been due to come into effect on 1 January 2019. While the existing tariffs are somewhat damaging to trade volumes and will raise the cost of imports for US businesses and consumers, the important thing to remember is that as long as domestic spending on consumption and investment is maintained, there are two reasons why, in my opinion, the damage from these trade measures should be minor, amounting only to a few tenths of a percentage point in relation to the growth rate of US GDP, and only a little more in the case of China.

The first reason is that trade enters the GDP growth calculation mainly from the change in the trade balance and the pass-through to domestic prices. As yet the trade measures have not shown up in volume terms as Chinese and other exporters rushed to fulfil orders ahead of the previously intended increase in tariffs, and the contribution of a change in import prices is small compared with the volume and price contributions of the key components of GDP: consumption, investment, and government spending. Second, the effects of the notorious Smoot-Hawley tariffs of 1930 have been exaggerated by historians and commentators who wrongly blamed the tariffs for the Great Depression. By coincidence the Smoot-Hawley tariffs were imposed just at a time when domestic demand was starting to collapse due to mistakes of monetary policy, specifically the 30% decline in the stock of money and bank credit. The Great Depression was therefore the result of the squeeze from money and credit, not due to the tariffs themselves. The lesson is that provided central banks today ensure that money and credit continue to grow, there is no reason to fear a 1930s-style outcome.

The Eurozone

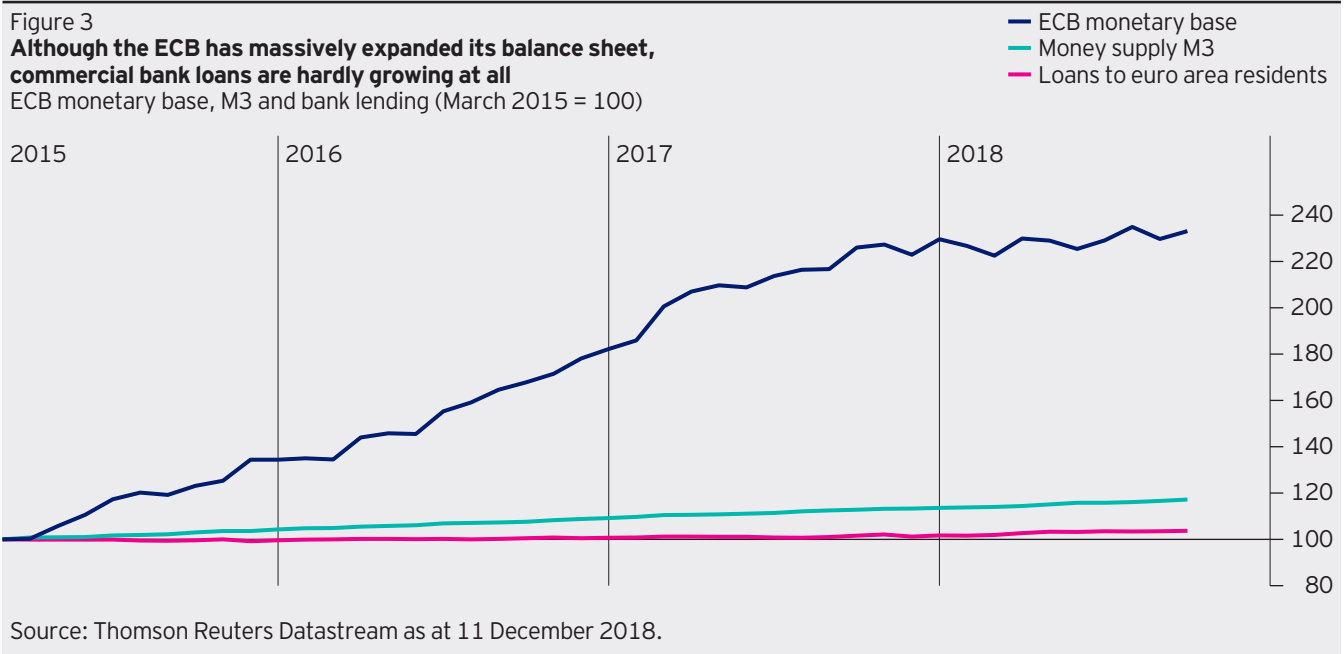
Over the past nine months real GDP growth in the Euro-area slowed from the 2.6-3.0% annualised rates seen in 2017 initially to 1.5-1.6% quarter-on-quarter annualised rates in 2018 Q1 and Q2, and then to an anaemic 0.2% quarter-on-quarter and 1.7% year-on-year in 2018 Q3. This was partly because the upswing in 2016-17 was from abnormally low growth rates which had enabled the economy to catch up on some of its growth potential showing unusually high growth rates in 2017, and it partly reflects a convergence towards a lower potential growth rate of 1.1% in the future (as projected by the European Commission¹ to 2023). In addition, the imposition of new WLTP² regulations for testing diesel cars in the EU from September 2018 caused a widespread fall in auto sales across Europe, which directly affected real GDP growth in Q3. The consensus of forecasters assembled by Consensus Economics expects growth for the euro-area to slow to 1.7% in 2019.

Given that fiscal policies in the Euro-area will remain restrictive, monetary policy will be the only source of macro-economic policy change. In this area the key feature has been the European Central Bank's (ECB) tapering of its asset purchases - due to end in December³ - and the associated forward guidance on interest rates next year. ECB President Draghi has said that interest rates are unlikely to increase before the summer 2019. However, it is worthwhile to remember that while QE may describe monetary policy as it affects the central bank's balance sheet, and market participants obsess about interest rates, what matters much more is the growth of money in the hands of the public - specifically the growth of Eurozone M3 (see Figure 3). In this respect, far from

creating larger amounts of new liquidity, since November 2017 the ECB's declining asset purchases have allowed the growth of M3 to slow from 5.1% to 3.9% in October 2018, while a wider monetary total (M3 plus money market funds plus repos) has slowed to below 3%.

In principle the key consideration for ending asset purchases or QE should be whether commercial banks are creating sufficient loans or credit that bank deposits (on the other side of their balance sheets) or money growth can continue to grow adequately, independent of ECB asset purchases. Here there is a problem because many euro-area banks are still nursing portfolios of non-performing loans while trying to build up capital, and consequently loan growth has been well below money growth, growing at 3% at best - well below the 6% that is appropriate for the Eurozone as a whole. Terminating the ECB's asset purchase policy while European banks remain in a fragile condition means that the region will be vulnerable to another slowdown in nominal spending and poses the risk of inflation falling back below target. Meantime, the flash estimate for Euro-area CPI fell to 2.0% in November, while the flash estimate for core inflation (ex-energy, food, alcohol and tobacco) slowed to 1.0%, well below target.

For the euro-area I expect 1.5% real GDP growth and 1.3% CPI inflation in 2019.



United Kingdom

In the UK public debate has been dominated by the details of the negotiations for the UK's withdrawal from the EU. The question of what happens has infiltrated everything from the implementation of monetary policy by the Bank of England (BoE) to the political party conferences, TV and radio talk shows and board rooms up and down the country. Although on the surface consumer spending seems quite normal, there has been a slowdown of investment pending the emergence of a clear agreement on the post-Brexit trading environment. House prices in the London area have been static since the start of 2018. Car sales have plunged with new registrations down 20.5% year-to-year in September, easing to -3.0% in November, although much of September's fall was due to the slump in diesel sales following the imposition of new EU emissions tests after the VW scandal.⁴ Nevertheless one of Jaguar Land Rover's factories in the West Midlands has announced that 2,000 staff will move to a three-day week, suggesting that Brexit could lead to a considerable drop in corporate investment.

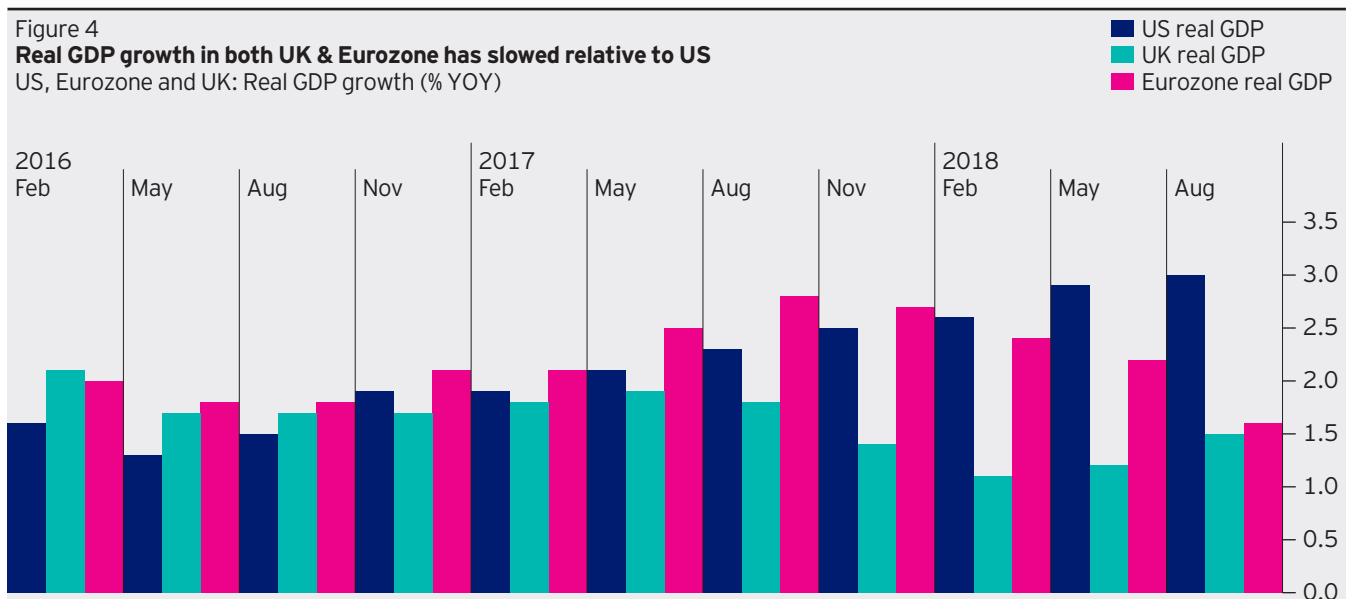
In mid-November the EU and the UK government finalised a 585-page draft agreement on the UK's withdrawal from the EU, accompanied by a 26-page declaration on future EU-UK relations. Whether Prime Minister May can get the draft agreement approved by the UK parliament is moot, and if she fails, the outcomes are highly uncertain. Just as in the early 1980s during the Sino-British negotiations over the future of Hong Kong after 1997, most of the stress showed up in the fluctuations of the Hong Kong dollar, so it is with sterling in the whole saga of the negotiations with the EU. In the event of a "no deal" outcome, sterling can be expected to fall sharply, at least in the short term.

Meanwhile economic growth as measured by real GDP has slowed from an average of 2.1% in 2015-16 to an average of 1.5% in the six quarters since the start of 2017, with most of the slowdown concentrated in business investment. Until business leaders obtain a clear framework for the environment in which they will operate after March 2019, their capital expenditure and hiring plans will remain at least partially on hold.

The same hesitancy has applied in the implementation of monetary policy. Having given clear signs earlier in the year that interest rates would be rising, the BoE's Governor, Mark Carney, and his Monetary Policy Committee voted not to raise Base rate in February and May, but finally raised it by 0.25% to 0.75% in August. However, money and credit growth were already slowing in the background: between August 2016 and August 2018 the growth of bank lending to companies slipped from 4% to 2%, while lending to households decelerated to 3%. M4x, or money held by households and businesses, slowed from 7.4% year-on-year in August 2016 to just 2.6% in October 2018, while bank lending has grown at 3.4%.

Almost irrespective of what happens in the Brexit saga, I believe that these very low growth rates of money and credit will put a ceiling on the possible upside of inflation if sterling should weaken sharply again. For 2019 as a whole I forecast 1.6% growth and 2.2% inflation.

Figure 4
Real GDP growth in both UK & Eurozone has slowed relative to US
 US, Eurozone and UK: Real GDP growth (% YOY)



Source: Thomson Reuters Datastream as at 11 December 2018.

Japan

The Japanese economy continues to experience sub-par growth and sub-target inflation. After a decline of 0.3% quarter-on-quarter in Q1 2018, the economy bounced back in Q2 expanding by 0.8%, only to fall back again in Q3, contracting by 0.3% in the three months to September 2018. A number of natural disasters (typhoons, floods, etc.) weighed on key components of GDP such as personal consumption, investments and exports. On a trend basis the economy continues to grow at a modest pace of 1.0-1.5%, due largely to the aging of the population which has also meant that the workforce has been declining.

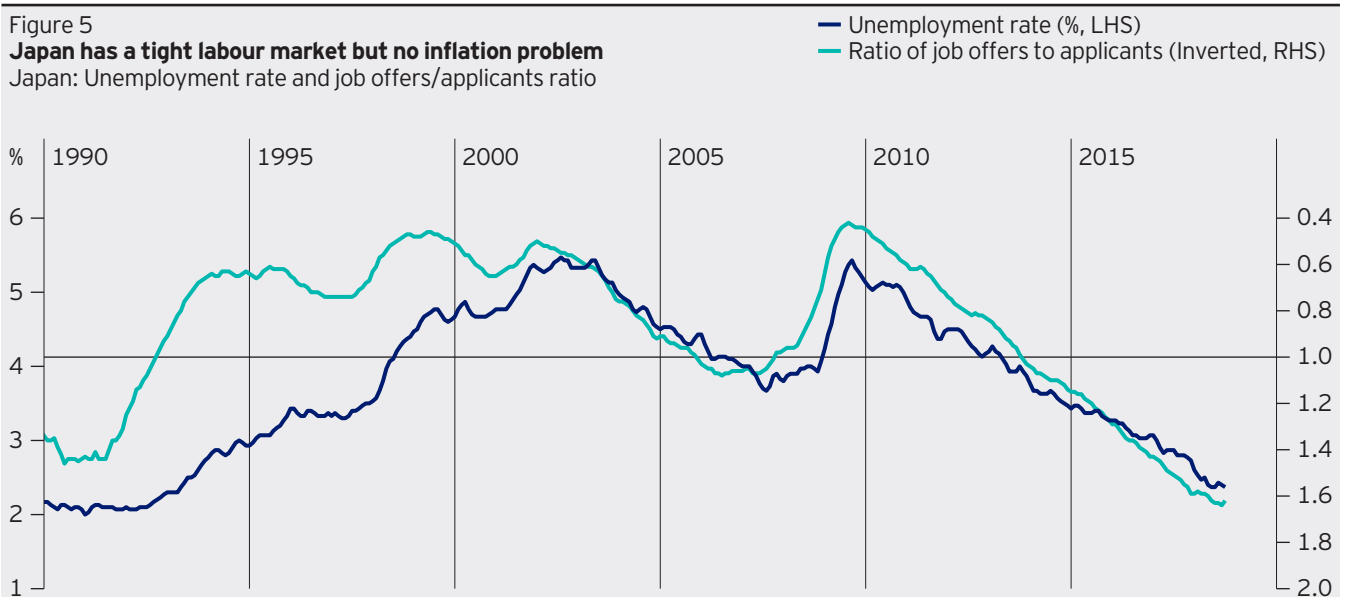
Despite the weak underlying growth rate, the labour market remains buoyant with very low levels of unemployment and high participation ratios for the working age population. The unemployment rate - 2.4% in October - is almost as low as it was during the boom of the 1980s and before the economy slumped in the early 1990s. This is paralleled by the record high ratio of job offers to applicants (1.62 times in October), shown in Figure 5 on the inverted scale at the right. Yet despite the tight labour market, wage growth remains torpid while inflation remains far below target. Japan, in short, is an economy which proves that the Phillips curve is not a good guide to either wage inflation or price inflation.

Despite five years of aggressive "QQE" (Quantitative and Qualitative Easing) by the Bank of Japan (BoJ), little progress has been made in restoring real GDP growth and particularly inflation to normality. The problem is that due to design faults, while QQE has enabled the balance sheet of the BoJ to grow rapidly, it has made very little impact on the growth of banks' balance sheets and hence on the growth of money in the hands of the public or credit growth. There is no respected theory in economics that explains inflation in terms of the size or growth of the central bank's balance sheet. Consequently, with M2 growth remaining in the 2-3% range for most of the past decade, inflation has remained well below the BoJ 2.0% target. Despite the recent acceleration of M2 to 4.0% in October, I expect little change in economic performance in 2019 with both real GDP growth and CPI inflation likely to be close to 1.0% over the year.

Figure 5

Japan has a tight labour market but no inflation problem

Japan: Unemployment rate and job offers/applicants ratio



Source: Macrobond as at 11 December 2018.

China & Smaller East Asian Economies

China's macroeconomic policymakers are faced with an acute dilemma. On the one hand they urgently need to reduce the leverage in the economy that has built up over the past decade as a result of successive episodes of credit expansion - first in the banking system in response to the global financial crisis and subsequently in the shadow banking system. On the other hand, like policymakers elsewhere, they are anxious to maintain growth by intermittent easing of monetary policy - for example by cutting reserve requirement ratios, relaxing macro-prudential controls on mortgage lending, and easing some money market interest rates. These moves to ease policy are best seen as a modest counter to the key policy priority of reducing leverage. The dominance of the deleveraging strategy is evident in the slowdown of total social financing to 9.7% year-on-year in October this year, and a parallel deceleration of M2 to 8.6% in the same month - the lowest growth rates of these aggregates ever recorded.

Meantime real GDP has slowed and is likely to slow further in 2019, although the official data will not provide much colour. Although some basic industries have recovered from their slump in 2014-16, housing has slowed with house prices flat over the past year in Tier 1 cities, while nominal fixed asset investment, which averaged 24% p.a. between 2008 and 2015, has slowed to an average of only 6.3% in 2018. In my view, none of this activity is likely to pick up significantly in 2019 unless the State Council's policy of deleveraging is revised.

Slow money and credit growth inevitably point to low rates of domestic inflation. Over the calendar year the consumer price inflation rate has remained in the range

1.5%-3.0%, recording 2.5% in October. Despite the weakening of the yuan from 6.28 per US\$ in April to 6.95 at the end of November - a depreciation of 9.6% - inflation is likely to remain very subdued in the year ahead.

On the external side, there are two major topics to include in any analysis. First, China's current account surplus has virtually disappeared. After running current account surpluses of 5-10% of GDP in 2005-09, rising wage costs in US\$ terms have eroded China's international competitiveness, reducing the current account surplus to 1.3% in 2017 and to just \$6.6 billion in the first two quarters of 2018. At the same time the capital account surpluses that prevailed in the past have also disappeared, with the result that China's overall balance of payments is regularly in deficit, requiring the central bank to sell down some of the country's huge stockpile of foreign exchange reserves to keep the yuan stable.

Second, the impact of President Trump's tariffs have so far had only a minor impact as exporters have rushed to complete shipments ahead of tariffs being imposed or raised to 25%. The result is that exports grew 12.7% in US\$ terms in the year to November, a reasonable recovery following their declines in 2016 and 2017. With the postponement of the imposition of 25% tariffs by Trump at the G20 meeting, I have now revised up my previous projection of low single-digit growth of exports in US\$ terms in 2019 to growth in the range 5-10%.

Elsewhere in East Asia domestic spending has been subdued while export growth has slowed from the mid-teens in 2017 to high single-digit growth rates in 2018.

Looking forward, some smaller, low-cost economies such as Thailand and Vietnam, may benefit from some re-allocation of Chinese manufacturing but the overall outlook will be subject to heightened trade tensions and the "downside risks to global growth" predicted by the International Monetary Fund at their October conference in Bali.

Figure 6

China has record low growth of M2 and shadow bank funding

China: M2 money supply and total social financing (% YOY)



Source: Macrobond as at 11 December 2018.

Commodities

Against this backdrop of low nominal GDP growth across so many economies it is not feasible for commodity prices to rally as a result of demand-side forces in any significant or sustained manner. However, it is possible for idiosyncratic factors on the supply side to lead to meaningful price changes. For example, in the oil market the sanctions against Iran imposed by the Trump administration led to fears about a global oil shortage, driving up the price of oil over the first nine months of the year, but when exemptions were granted to several countries to continue to acquire Iranian imports, the price plunged. Between the start of October and the end of November, Brent oil prices fell from US\$85 per barrel to US\$55. Broadly, I would expect lower oil prices to persist through 2019 unless specific supply shortages arise again.

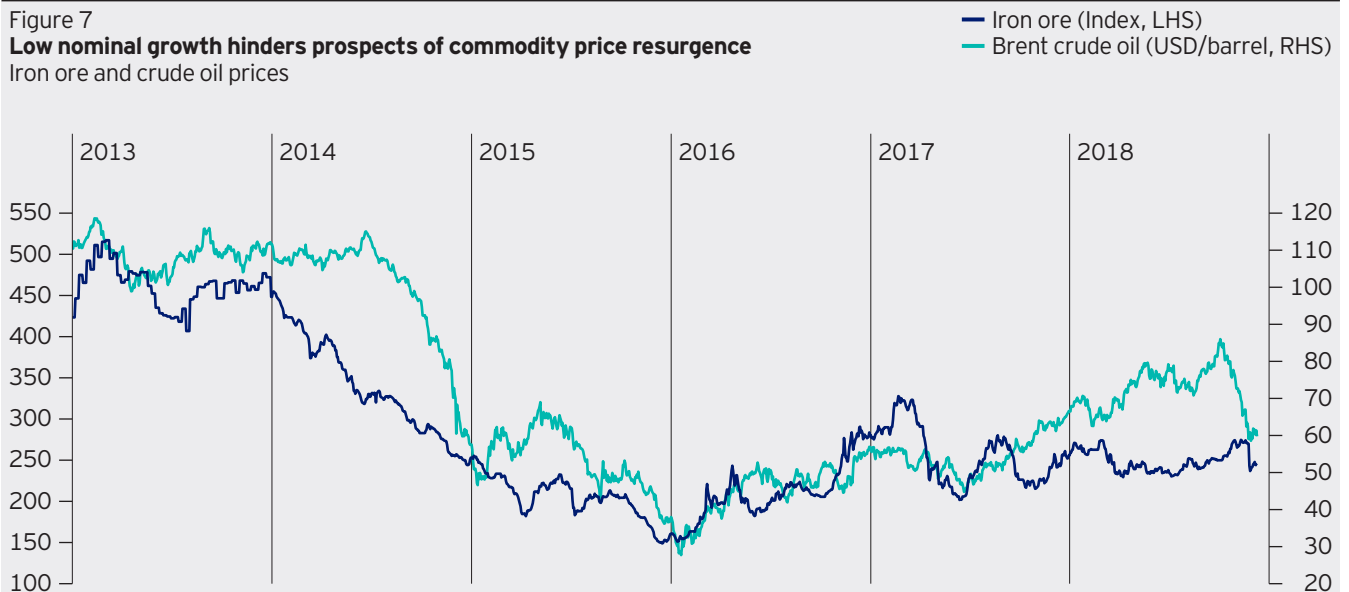
Food prices, too, have been notably calm despite natural disasters in many countries. In India, for example, persistently low food prices have been used by government officials to explain low overall consumer price inflation. This is a classic case of misrepresentation. The true cause of low inflation in India - as elsewhere - is slow growth of money and credit. Nevertheless, the Reserve Bank of India (RBI) and other official bodies are so wedded to the idea that food prices are determined in the short run by whether the monsoon was favourable or unfavourable, that official expectations and policy decisions by the RBI are dominated by considerations about the weather, rather than a more rational, broad-based explanation of inflation.

Similarly in the metals markets, the main driver has been softening demand from Chinese sources, particularly the housing sector. Iron ore prices remain 30% below their levels in February 2017; coking coal prices are down 12% over the same period, and steel rebar prices have fallen nearly 20% since mid-October 2018.

Figure 7

Low nominal growth hinders prospects of commodity price resurgence

Iron ore and crude oil prices



Source: Macrobond as at 11 December 2018.

Conclusion - inflation to remain benign

Inflation continues to surprise most analysts on the low side. Aside from the upsurge of inflation in those EM economies such as Venezuela, Argentina or Turkey that have been victims of their own mismanagement, inflation in most economies - developed or emerging - remains low. In the words of the Bank for International Settlements just over a year ago, "With [economic] slack diminishing or vanishing, and not just in some of the major economies, it is only natural to ask whether an inflation flare-up might force central banks to tighten and thus smother the expansion." But the flare-up continues to be elusive, even as the US, Japan, the UK and Germany experience record low rates of unemployment. The reason, in my view, is that such analysis relies excessively on output gap or Phillips curve theories of inflation which fail to capture the fact that inflation is ultimately a monetary phenomenon, and hence they fail to explore the consequences of money and credit growth remaining generally low and stable since the crisis of 2008-09. This is ultimately the reason why wages and inflation currently continue to be benign in so many economies.

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¹ <https://www.oecd.org/daf/fin/Klaas-Knot-OECD-roundtable-June-2015.pdf>

² Worldwide Harmonised Light Vehicle Test Procedure.

³ From maximum purchases of euro 80 billion per month in 2016-17 the ECB has slowed the pace of its purchases to euro 15 billion per month over the period October-December 2018.

⁴ The slump was replicated on the continent of Europe: German car sales fell by an even greater 30.5% in September.

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