

Quarterly economic outlook for fourth quarter 2015



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Introduction

- The decision by the US monetary authorities in September to leave the federal funds rate unchanged on account of “recent global economic and financial developments” confirmed the bias that most major central banks have maintained in favor of accommodative monetary policies while the recovery remains fragile.
- The UK is faced with a similar situation to that in the US – reasonably buoyant economic activity accompanied by inflation well below target, implying a delay in previous plans to raise interest rates.
- Japan and the eurozone, on the other hand, are still in the midst of extended programs of quantitative easing (QE) designed to boost the rates of growth of money and credit, and hence the economy as a whole. These regions are therefore at least a year if not more from hiking rates.
- When the Federal Reserve (the Fed) finally starts raising interest rates – now widely expected in December or March – the Bank of England (BOE) will likely follow the Fed, most likely in February or May. By contrast, the European Central Bank (ECB) and the Bank of Japan (BOJ) will continue with their QE programs and near-zero policy rates until well into 2016.
- In the short term these divergent central bank policies could continue to create volatility in the currency, fixed income and equity markets. In the longer term they should help to underwrite both equities and bonds into 2016.
- The upswings in both the eurozone and Japan have slowed somewhat in recent weeks, demonstrating that the underlying recoveries in the US and the UK are inherently more sustainable than the – as yet – fragile upturns in the eurozone and Japan.
- In the emerging economies, the slowdowns in China, Brazil and Russia are continuing to impact commodity markets, numerous basic industries, and global trade volumes. Beyond that, the struggle among emerging market (EM) producers more generally to regain competitiveness threatens several EM currencies with the need for further depreciation.

Table 1 – Inflation and growth forecasts

	2015 consensus forecast (Invesco forecast)		2016 consensus forecast (Invesco forecast)	
	Real GDP	CPI inflation	Real GDP	CPI inflation
US	2.5% (2.6%)	0.2% (0.4%)	2.7% (2.6%)	1.9% (1.6%)
Eurozone	1.4% (1.8%)	0.2% (0.1%)	1.7% (1.2%)	1.2% (1.0%)
UK	2.6% (2.6%)	0.1% (0.4%)	2.5% (2.5%)	1.4% (1.6%)
Japan	0.7% (0.7%)	0.7% (0.9%)	1.5% (1.5%)	0.8% (1.2%)
Australia	2.3% (2.3%)	1.7% (2.4%)	2.7% (2.7%)	2.6% (2.4%)
Canada	1.1% (1.1%)	1.2% (1.3%)	2.0% (2.0%)	2.0% (1.6%)
China	6.8% (6.9%)	1.5% (1.4%)	6.6% (6.6%)	2.0% (1.6%)
India	7.6% (6.9%)	5.2% (5.0%)	7.9% (7.3%)	5.4% (5.0%)

Source: Consensus Economics, Sept. 7, 2015.

- Following the temporary recovery in the price of oil between March and May 2015 to \$60-\$65 per barrel, commodity prices had another setback in the third quarter of 2015, and inflation rates have continued to remain very low in most developed economies. The widespread inflation undershoot reflects not only the direct effect of weak commodity prices but also the persistent background of slow money and credit growth that has characterized the post-crisis period. Only in the US have money and credit growth rates returned to normal rates.
- In spite of these short- to medium-term setbacks in the recovery process, my long-standing view has been that the current global business cycle expansion would be an extended one. The main reason is that sub-par growth and low inflation would avoid the need for the kind of tightening policies that would bring an early end to the expansion.
- It is also the case that recessions or growth weakness in the EM economies are unlikely to derail the modest-paced recovery in the developed economies. While some companies or sectors cannot avoid being affected by the problems of the EM, the transmission of key fundamental forces – like monetary policy and balance sheet repair – still goes primarily from developed markets (DM) to EM, not vice versa.
- In addition, the recovery in the US, although already five years old, is only now starting to take on the typical characteristics of a normal recovery: banks are now providing credit instead of the Fed, business investment is recovering, and consumer spending is regaining its normal momentum.

US

Between 2010 and 2013, the US consumer was still deleveraging, and the job market was still relatively weak. As a consequence, consumer spending was distinctly sluggish, with real consumer spending growth averaging just 2% per year. Now that the deleveraging process is mostly complete, and wages and employment have improved, consumer spending is recovering. Thus, since 2014 US real consumer spending growth has averaged a respectable 3%, and is on track to increase at a stronger pace in the second half of 2015.

While the monthly increase in non-farm payrolls was again weaker in September at 142,000 jobs, the August figure of 173,000 was revised down to 136,000. Unemployment remained unchanged at 5.1%. Average hourly earnings were also unchanged at 2.2%, but with headline inflation at 0.2%, real spending power in the hands of consumers is starting to grow. Reflecting these modest improvements, retail sales increased 0.6% in July followed by a further 0.5% in August. These are all indicative of slowly growing momentum in consumer spending.

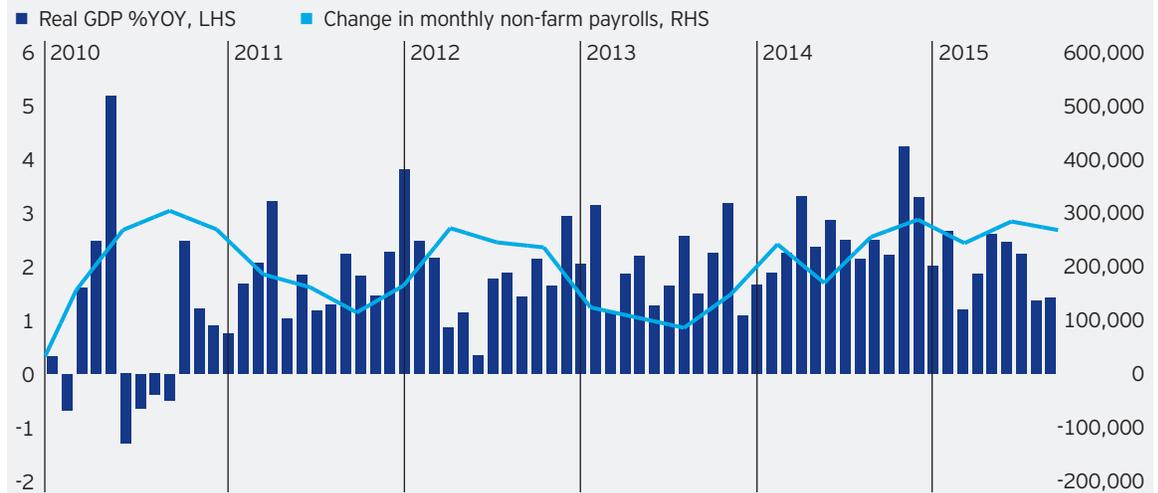
However, following the gyrations in financial markets in August and September and the continued strength of the US currency, there are some signs that the corporate sector may be losing momentum. For example, the ISM manufacturing index was at a two-year low of 51.1 in August, largely reflecting the impact of the strong US dollar on US exports. At the same time, surveys of manufacturing have indicated a downturn in orders and employment, while orders for durable goods have been generally softer over the summer months. Core capital goods shipments in July were up by just 0.6%.

In contrast, the ISM non-manufacturing survey, which tracks the all-important service sector, remained close to its 10-year high of 59 in August. These figures come in the wake of a strong upward revision of GDP growth in the second quarter from 2.3% to 3.7% at an annualized rate. For the year as a whole, I now expect real GDP growth to be 2.5%.

In response to these healthy developments in the US economy it is probable that the Federal Open Market Committee (FOMC) would most likely have raised interest rates in September, but two factors held back the decision to start the process of interest rate normalization. First, in a change from its normal focus on domestic developments, the committee expressed concern about “international developments,” especially financial instability in China’s stock market and currency (following the Aug. 11 yuan mini-devaluation) and its economic slowdown.

Second, as a result of the renewed fall in the price of oil and other commodities, headline inflation rates for the consumer price index are (CPI) well below the Fed’s target of 2%, and there is also some spill-over to core rates. The fundamental backdrop to the decline in inflation is the sustained low growth of money and credit in the US, the availability of spare capacity in key industrial products such as steel in China, and by the steep decline in commodity prices, especially energy prices since mid-2014. All these factors are feeding into the current headline CPI of 0.2% and core CPI of 1.8% in August. Against this background I have long been forecasting lower-than-consensus rates of inflation. For the year as a whole, I am forecasting 0.4% headline CPI inflation in the US.

Figure 1 – Softer US growth and weakness abroad delay rate hikes
US real GDP & payroll employment growth



Source: Macrobond, Oct. 2, 2015.

Together, economic weakness abroad and below-target inflation prompted the FOMC to delay a rate hike on Sept.17, and to justify the postponement with the opinion that “Recent global economic and financial developments may restrain economic activity somewhat and are likely to put further downward pressure on inflation in the near term.” The committee noted that it was “monitoring developments abroad” and would continue to assess “international developments.” My current view is that the long period of extraordinary monetary accommodation will nevertheless end in December – unless there is another crisis in China. However, as long as money and credit growth continue to grow in the 6% to 8% range as at present, the hiking of rates should not be interpreted as a monetary tightening.

The eurozone

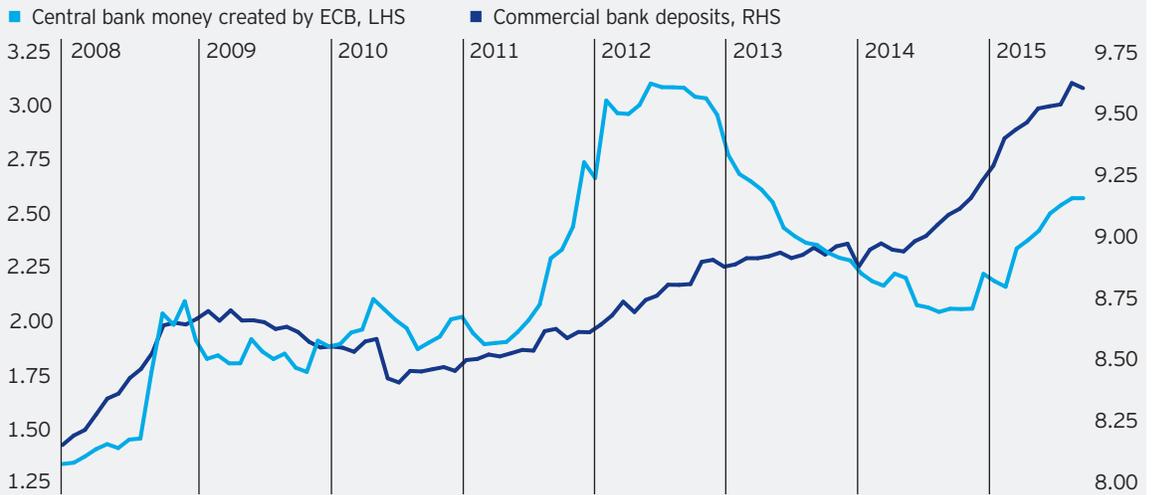
In the euro-area the ECB has been implementing QE for six months (since March). The initial effects of its EUR 60 billion per month purchases have been modest, but broadly in the right direction. The euro, which fell steeply ahead of the announcement of QE, has remained mostly in the US\$1.06 to \$1.15 range to the US dollar since March, and bond yields and short-term money market rates have stayed low. Although bank lending has remained weak, growing at just 1.8% year-on-year in August, broad monetary growth (M3) has picked up to around 6% and economic activity has strengthened. This is exactly what should happen under QE. However, the ECB’s poor design of QE is partially responsible for the modest results; if the central bank were to purchase all the securities in its QE plan from non-banks it would ensure a greater response.

Domestic spending in the euro-area has failed to gain further momentum. Data for real GDP growth in the second quarter confirmed that the pace of growth slowed to 0.4% quarter-on-quarter (after 0.5% in the first quarter), mainly due to a slight deceleration in household spending and a fall in business investment. In September, confirming the prognosis of sub-par growth, the ECB Governing Council revised down its growth forecasts for 2015 to 1.4%, for 2016 to 1.7% and for 2017 to 1.8%. ECB President Mario Draghi said the slower growth was “primarily due to lower external demand owing to weaker growth in emerging markets.”

The eurozone PMI for manufacturing in September inched down to 52.0 (two points above the “no growth” line of 50), and the services PMI was at 54.0, giving a composite of 53.9, which was up two and a half percentage points since the end of 2014. The European Commission’s economic sentiment indicator has increased substantially since its low of 84.6 at the time of the euro-debt crisis in September 2012, but between January and September it has increased from 101.6 to just 105.6, showing relatively little progress in recent months. Moreover, DZ Bank’s leading index for the eurozone shows only a modest upturn, implying little prospect of much strengthening in coming months. All in all the economic indicators are not much better than tepid for the eurozone as a whole, even though activity in Spain and Ireland has improved markedly. I expect a continuation of the modest recovery in real GDP, reaching 1.8% real GDP growth for the year as a whole.

Figure 2 – ECB's QE is starting to gain traction

Eurosystem: money created by ECB and commercial banks (trillion euros)



Source: Macrobond, Oct. 2, 2015

One of the factors weakening the PMI indicators was the increase in deflationary pressures; input costs fell 5.5 points to 44.1 against the background of renewed weakness in global commodity prices. In the same vein, Eurostat's overall CPI for the eurozone fell by 0.1% year-on-year in September, reverting to deflation. While this cannot be used as a criticism of the ECB's QE because it takes two years for monetary policy to impact inflation, the return to deflation is in part a reflection of very weak commodity prices, but more fundamentally a consequence of inadequate rates of growth of money and credit over the past two or three years.

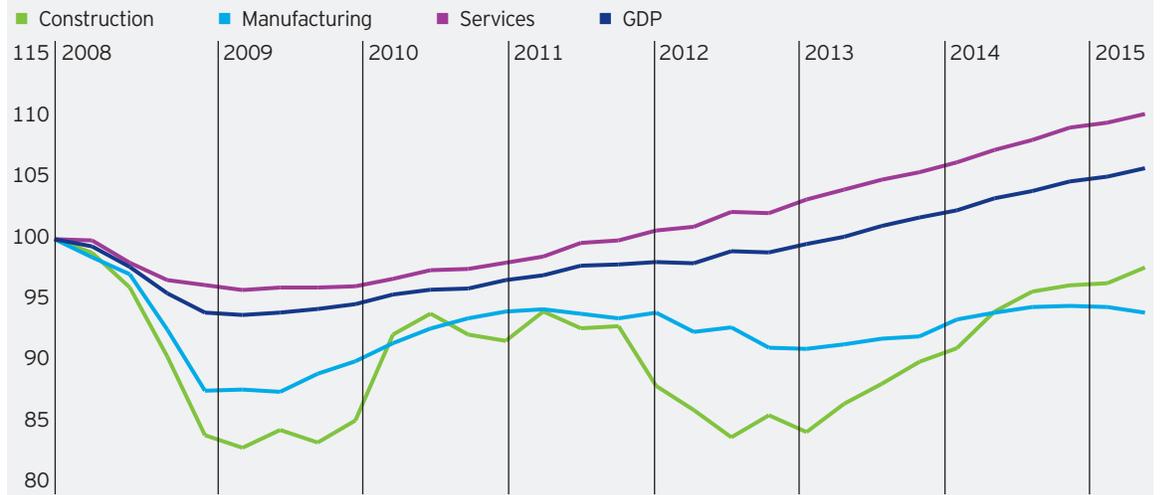
Fortunately for the eurozone, the situation in Greece during the quarter was relatively calm thanks to the conclusion of the third bail-out agreement in early July and the calling of a general election in Greece on Sunday, Sept. 20. With the victory of Alexis Tsipras of Syriza and his return to power in coalition with the right wing independents (ANEL), the Greek government should now be devoting its attention to implementing the structural and other reforms required under the bail-out agreement. There are few commentators or analysts who believe that the Greek debt problems are finally resolved, but the bail-out by the eurozone and the election have at least bought a few months of respite from the continuing euro-area debt crisis.

UK

The British economy continued to grow at a healthy rate, recording 2.4% year-on-year (0.7% quarter-on-quarter) real GDP growth in the second quarter of 2015, but it is clearly growing at a slightly lower rate than earlier in the upswing. Moving into the third quarter, the September manufacturing PMI declined marginally to 51.5, after recording an upwardly revised 51.6 in August. The overall headline manufacturing index was uninspiring in part because sterling has remained so strong against a basket of foreign currencies, eroding export competitiveness, but also because most of the growth has been concentrated in the service sector. Indeed, the manufacturing sector will probably continue to display weakness in the months ahead.

The service sector, on the other hand, has been much more buoyant, leading the economy ever since the recession. In the GDP data, service sector activity increased by a firm 0.6% in the second quarter, after 0.4% in the first quarter (see Figure 3), while the PMI for services remained in the 55 to 57 range, down from its peaks in 2013 and 2014, but nevertheless showing a healthy rate of expansion. Construction increased by an impressive 1.4% in the second quarter (after only 0.2% in the first quarter), but production industries, which include mining, quarrying, oil-production and manufacturing, increased by 0.7% quarter-on-quarter in the second quarter after 0.3% in the first quarter. Since June the PMI surveys suggest there has been some fading of this strength.

Figure 3: GDP recovery led by services
UK: Real GDP value added (2008 Q1=100)



Source: Macrobond, Oct. 2, 2015

Similarly, the labor market has remained reasonably firm, but is no longer strengthening consistently. Employment continued to increase, rising by 42,000 in the three months May to July, and by 413,000 over the year to July, reaching 31.09 million in employment. Jobs are still growing more rapidly than the size of the workforce with most of the new openings now concentrated in full-time work. With job growth outpacing workforce growth, the unemployment rate continues to fall steadily, declining to 5.5% in the three months ending in July from 6.1% a year earlier. Vacancies are up by 82,000 from a year earlier, and at 734,000 in the three months to May are close to their highest levels since 2001.

Reflecting the gradual tightening of the labor market, both regular pay and total pay have been steadily accelerating, especially since the start of 2015. Average earnings (both including and excluding bonuses) increased by 2.9% year-on-year in July, up considerably from 1.6% in January. This is the strongest growth of wages since the onset of the crisis in 2008-09. Allowing for the 0.1% increase in the CPI inflation rate in May, this means that real wages (at +2.8%) are starting to show meaningful increases.

In the new Conservative government's budget of July 8, there were numerous changes to taxes and spending, but the overall strategy of reducing the deficit over the life of the current parliament – with the aim of reaching a budget surplus in 2019-20, a year later than previously planned – remained the centerpiece. Consequently, borrowing is set to fall from £69.5bn this year to £43.1 billion, £24.3 billion and £6.4 billion before reaching a £10 billion surplus in 2019-20. This is an ambitious schedule. Debt as a share of GDP is planned to fall from 80.3% this year to 68.5% by 2020. The squeeze on the public sector will be maintained with the limit of 1% on public sector pay rises continuing for next four years.

On the monetary policy front, the BOE continues to keep rates at 0.5%, and will almost certainly delay any rate hike until after the Fed has made its first move. With CPI inflation in August back down to 0% change over August 2014 – a full 2% below target – it is likely that the Monetary Policy Committee (MPC) will continue to keep interest rates unchanged at 0.5% in the near term. Growth of money in the hands of households and firms but excluding that held by intermediate financial institutions (known as M4x) remains anemic at 3.9% year-on-year (in August), slightly weaker than its growth rate of the past three years. This is the fundamental explanation for the abnormally low inflation rate in the UK, and implies no imminent upside threat to the 2% inflation target. All this suggests the MPC will likely delay any rate increase until next February or May.

Under these conditions there is minimal risk of any surge in credit or GDP growth, or any inflationary outburst. On the contrary, the risks are currently tilted toward slower growth and near-deflationary conditions. For this calendar year, I now expect 2.6% real GDP growth and 0.4% CPI inflation.

Japan

Japan's real GDP declined by a revised 0.3% quarter-on-quarter in the second quarter of 2015 (or -1.2% annualized compared with a preliminary -1.6% annualized). Capital expenditure fell 0.9% from the previous quarter, more than the initially estimated 0.1% drop. The BOJ has been arguing that the April-June weakness was temporary, but the data on exports and industrial production suggest that a bounce-back in the third quarter is unlikely. Analysts expect any rebound in July-September growth to be feeble as factory output unexpectedly fell in July and August, and China's slowdown has dampened prospects for a solid recovery in exports.

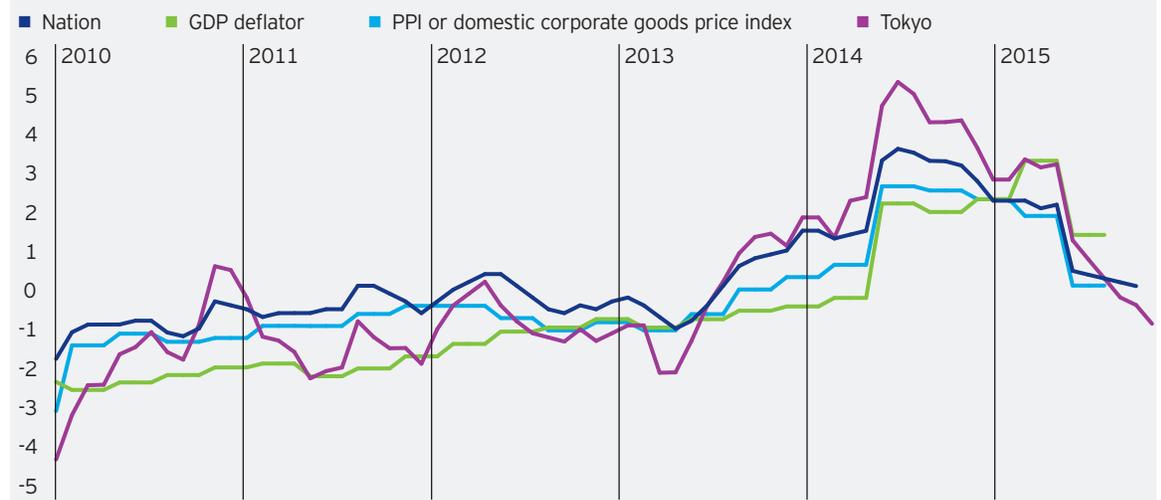
Aware of the shortfall in his "Abenomics" program, the prime minister announced three "new arrows" on Sept. 24, but they did little to pierce the gloom. The first, a promise to lift nominal GDP by 22% to 600 trillion yen had little impact as it gave no time scale, nor any detail about how to reach the target. The second arrow was aimed at boosting financial support for families to raise Japan's low birth rate and prevent the population and workforce falling further. The third arrow was aimed at providing extra nursing care for the elderly. These measures are not even weak substitutes for the more fundamental reforms that Mr Abe had previously proposed – such as reducing the entrenched privileges of doctors, pharmacists and farmers – which he has not had the courage or political strength to implement.

Further disappointing news for Abenomics came in the BOJ's Tankan survey of business sentiment in September. The Tankan, which surveys thousands of Japanese companies, reported stagnating business conditions and confirmed the downturn in the economy. Corporate expectations for the next three months were lower across the board, implying China's slowdown has hurt sentiment badly, even though the headline Tankan index for current conditions inched up from a reading of 7 to 8 (compared with a potential maximum of 100 and minimum of -100). Amidst a diverse report, the index for large manufacturers (which includes many exporters) fell from 15 to 12 as these key producers lowered their profit growth forecasts by three percentage points to 3.8%. In a contrasting sign of some improvement in the domestic economy, however, the index for large service companies rose from 23 to 25.

The divergence between manufacturers and the service sector poses a challenge for the authorities, specifically the BOJ and the cabinet office. Governor Haruhiko Kuroda of the central bank claims his massive stimulus is working, but commercial bank balance sheets are not expanding any faster than previously, and recent inflation figures have abruptly reversed (see Figure 4), ending any near-term possibility of achieving the BOJ's 2% target (originally set for the CPI excluding fresh foods by April 2015). Japan-watchers will know that the depreciation of the yen together with the 3% rise in the consumption tax in April 2014 caused sudden jumps in the price indices, giving the impression that underlying inflation was picking up. A year later, however, with the yen stabilizing and the tax hike dropping out of the indices, inflation has collapsed to rates experienced before the start of Abenomics.

Figure 4 – Tumbling inflation poses questions for Abenomics

Japan: Inflation data



Source: Macrobond, Oct. 2, 2015

The other set of challenges for Abenomics concerns the difficulties of implementing the structural changes intended to raise the underlying growth rate of the economy. Progress in this area remains slight at best. Currently, therefore, weak consumption, slow wage growth and the shock from China's slowdown are threatening to thwart the achievement of the overall goals of Abenomics. For the year as a whole I expect 0.7% real GDP growth and 0.9% CPI inflation.

China and non-Japan Asia

Much of the turmoil in global financial markets in August and September was triggered by events in China: the continuing shake-out in Chinese stock markets, the 2.1% devaluation of the yuan on Aug. 11, and the subsequent capital outflows from China. Behind these immediate and glaring problems are two more basic and intractable issues.

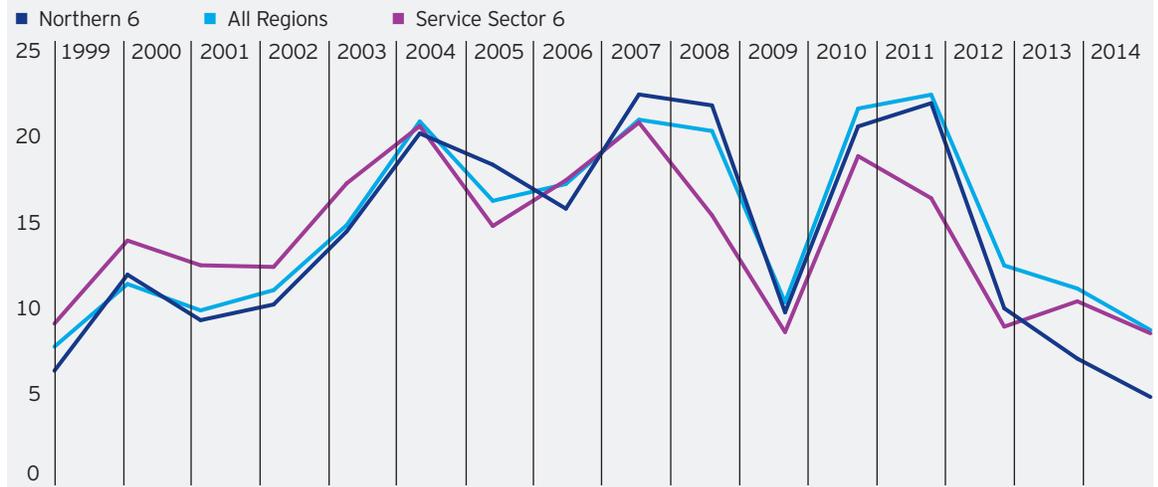
China is making the transition from a rapid-growth, largely state-owned economy focused on exports and massive capital investment programmes to a slower-growth, slightly more liberalized and consumption-driven economy. The transition has been made more challenging by two sets of vulnerabilities. The first arises from the rapid build-up of debt since the Lehman crisis; the second springs from the divergence of regional and industrial performance between the provinces of the largely state-owned enterprises (SOEs) of the northeastern "rust belt" and the more service-oriented, private-sector-dominated economy of the central and southern coastal zones.

The debt problem is on a scale comparable with the subprime crisis in the US. The ratio of credit to GDP in China, triggered initially by the immense stimulus program of 2009-10, has more than doubled since 2008, to 195%, and nonperforming loan rates at banks are now starting to rise. On the positive side of the ledger, the debt is mostly in the corporate sector, which should mean that it is easier to resolve than high levels of household indebtedness. But on the negative side, the fact that it is mainly concentrated in SOEs and local government financing vehicles, which are inherently politically directed organizations, means that there will be huge resistance to any major restructuring proposals. For example, the excess capacity in state-owned steel, aluminium or chemical plants would normally be addressed in a market economy by layoffs, investment cutbacks, and capital injections.

But in China's unreformed economy, layoffs in the SOE sector will be hampered by the hukou (household registration) system that effectively prevents workers from looking for jobs in other regions, and by the lack of safety nets such as a well-developed system of unemployment benefits. Also, unless China engages in large-scale privatization – firmly resisted by the current administration – any new capital will depend ultimately on more state borrowing – i.e., more debt. As China increasingly exports its surplus production of steel and other products, it will run into intense political problems abroad, such as in Europe and the UK where layoffs in the steel industry are already starting to bite.

China's second major challenge is the divergence of regional and industrial performance (see Figure 5). The downturn in the SOE-dominated, heavy industrial metals and mining behemoths of China's northeast is now as serious as the downturn in 2008-09. Industrial value-added, which normally exceeds nominal GDP by a significant margin, is growing at only 6%, and profits in the industrial sector are headed for a full-year decline. Overcoming the problems of these sectors that have been tied to China's housing boom of recent years will be no easy task, and will take several years to accomplish.

Figure 5 – China slowdown concentrated in northeast and heavy industry
China nominal GDP %YOY by groups of provinces



Source: Macrobond, Oct. 2, 2015

By contrast, China’s “new economy” sectors, including services like Internet-based distribution and entertainment, are growing more strongly, but the companies are mostly located in the southern and eastern regions of China, far from the embattled rust-belt. Consequently there can be no easy transfer of employment from the rust-belt to the new economy. In addition, the companies in this sector are mostly domestically oriented, private-sector entities, with much better balance sheets than their SOE counterparts.

The overlay of the sectoral and regional adjustment challenge is most evident in six provinces in northern China (Hebei, Heilongjiang, Inner Mongolia, Liaoning, Jilin and Shanxi) that are heavily dependent on metals and mining and are clearly in recession. In contrast, six provinces or city regions with the biggest service sectors (Tianjin, Zhejiang, Guangdong, Hainan, Beijing and Shanghai) have also slowed, but not as much. One should not extrapolate from the recession-hit northeast to the rest of China, but no one can deny that a major adjustment is under way.

Real GDP growth in the second quarter of 2015 was reported at 7.0% year-on-year (identical with 7.0% in the first quarter), but private sector estimates – based on economic data series that have correlated well with GDP in the past – suggest substantially slower growth. I forecast China’s (official) real GDP to be 6.9% for the year as a whole, with inflation of 1.4%.

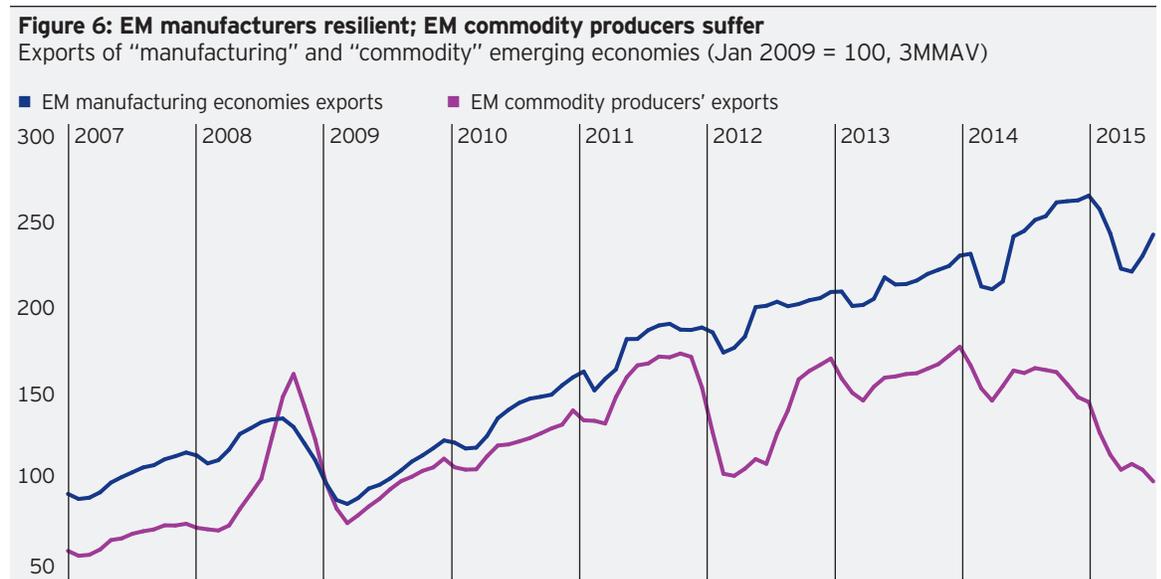
Given this background of an extended adjustment going on in China, the problem for other smaller Asian economies is twofold: First, their high dependence on exports to China, and second, the continuing sub-par growth rates in the US, Europe and Japan, where the remainder of their key export markets are located. In effect, the need for a structural switch from exports and export-related investment spending to domestic investment and consumption-led growth is affecting many of them. Korea is the economy that has felt China’s slowdown most keenly, but Taiwan, Singapore and Thailand have also been hurt. In addition, commodity exporters such as Malaysia and Indonesia have also been hit by the commodity price slide and the reduction of orders from China and elsewhere.

Commodities

One way to view the problems in the commodity complex is to look at the impact on two of the world’s most advanced commodity producers: Australia and Canada. Over the past three decades or more Australia and Canada have benefited from China’s growth, but both have reversed their previous diversification away from commodities, resulting in more exposure to China. In both economies, the credit and housing markets benefitted from the renewed upswing in commodity prices, enjoying enhanced employment growth and extended upswings in their housing markets. Following a prolonged period of low mortgage interest rates, both economies now have among the highest rates of household debt-to-income in the developed world. As China slowed and commodity prices weakened, both economies have allowed their floating currencies to depreciate, but unemployment has risen and their housing bubbles are close to bursting. To make matters worse, they both risk a housing downturn in an environment where consumers are highly leveraged and interest rates may be rising.

In Australia's case, one-third of total exports go to China. Over half of this is iron ore, and Australia has become the world's largest producer on the back of Chinese demand. Inevitably growth in Australia has slowed – to 0.2% quarter-on-quarter in the second quarter – and key export industries, like mining, are cutting production. Unemployment rose to 6.2% in August and could rise further given the high proportion of workers (13.3%) employed in the mining, commodity and construction industries – sectors that are most exposed to the China slowdown and to the risks in the domestic housing market.

If some of the commodity-rich developed economies are heavily dependent on China for their prosperity, it is also true that commodity-endowed EMs such as Brazil, Venezuela, Colombia and South Africa are also very dependent on China. But so too are a number of EM manufacturing exporters. However, there is a key difference: Whereas for commodity-producers the final market is China, for manufacturing EMs their trade with China is largely the shipment of components for final processing in China and onward shipment of finished goods to other countries in the Americas, Europe, or Africa and the Middle East. The result is that commodity-based EMs have seen a substantial weakening in their exports, but manufacturing EMs have seen far less of a slowdown (see Figure 6).



Source: Macrobond, Oct. 2, 2015

The global economy is still experiencing a shortfall of spending power, less than full employment and excess capacity in a number of basic industries. These conditions are symptomatic of the sub-par recoveries in the US, UK, Europe and Japan, but have been exacerbated recently by the slowdown in China. Although central banks have been trying to increase overall spending by promoting faster credit and money growth with near-zero interest rates and asset purchases, balance sheet repair has prevented any significant recovery in the demand for credit, and this has kept broad money and credit growth constrained within narrow limits. This in turn means that there has been insufficient demand to fuel strong end-user or speculative demand for commodities.

Conclusion

The disruptions to financial markets and the declines in a wide range of commodity markets over the past two months spell the end of the idea that emerging economies could lead the global economy out of the sub-par growth that has prevailed since the crisis of 2008-09. Several leading EM economies such as China, Brazil, India and Turkey had countered the Great Recession with highly stimulatory monetary and fiscal policies. However, instead of driving a global recovery, these policies mainly resulted in a short-lived recovery in the EM economies, followed by overheating, deteriorating current accounts, property bubbles, inflation and currency depreciation. The spill-overs to developed economies have been minimal, except in the case of those economies like Australia and Canada that are heavily dependent on commodities.

The lesson is that although EM economies may claim to be large and important on a flow basis (i.e. in terms of income growth), they cannot yet take the place of the locomotive economies of the developed world such as the US, Europe and Japan. These locomotives derive their status from their substantially higher income level and their greater stock or endowment of human, physical and other

forms of capital. This means that when the developed world's growth is sub-normal due to the need to repair balance sheets and carry out financial reform, EM economies must moderate their expansion to be compatible with growth in the developed economies.

While the US and the UK are approaching the end of the period of extraordinary monetary accommodation and may start the process of interest rate normalization during the next six months, the eurozone and Japan are lagging considerably behind and will probably still be engaged in QE and QQE (quantitative and qualitative easing in Japan) for another year or two. This means that the return of the global economy to normal or "trend" growth will be delayed at least until then. In turn the EM economies will be compelled to adjust to levels of demand and spending that will require them to expand more prudently than they did in from 2009 to 2014.

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