

Global PMI

Global economy enjoys best quarter for three years, inflationary pressures hit 6¹/₂-year high

October 10th 2017

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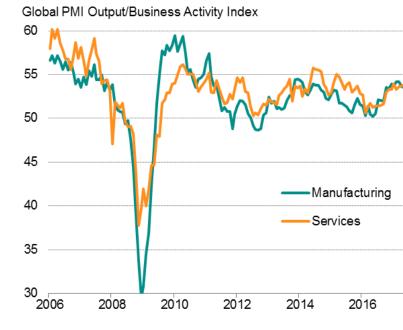


Global economy enjoys best quarter for three years

- Global economic growth continued to run at a solid pace in September, according to PMI data. The headline JPMorgan PMI, compiled by IHS Markit, was unchanged from August at 54.0. The robust performance rounded off the best quarter since Q3 2014. Historical comparisons suggest that the latest PMI indicates that global GDP (at market prices) is rising at a solid annual rate of around 2.5%.
- Unlike many previous spells of stronger economic expansion, global growth is also well-balanced, with similar rates of
 expansion seen in manufacturing and services in recent months. While manufacturing and trade lagged behind robust
 services expansions in 2014 and 2015, rising goods trade has accompanied a broader services upturn over the past year,
 the latter indicative of rising domestic demand in key developed markets such as the eurozone, Japan and the US.



Global PMI* & economic growth



Global manufacturing and services

Source: IHS Markit. * PMI shown above is a GDP weighted average of the survey output indices.

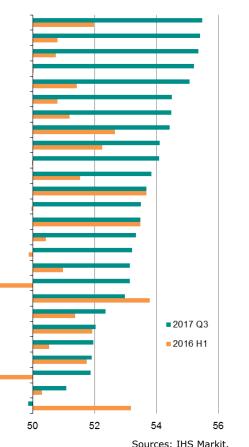


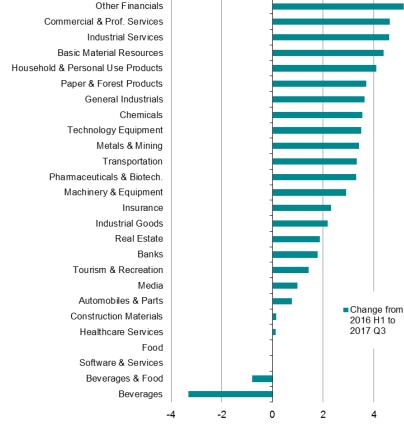
Technology equipment producers see strongest output growth

Charts below compare average PMI Output Index readings during 2017 Q3 and the first half of 2016, when the global economy was barely expanding. Tech equipment manufacturers have risen to the top of the growth rankings. Notably, since 2016 H1 'defensive' sectors such as food, drink and healthcare have seen the worst change in performance. Rising stock markets have meanwhile meant non-banking financial services have shown the greatest change since the first half of 2016, alongside other more cyclical sectors.

Global sector PMI output in 2017 Q3... ... and change since 2016 H1

Technology Equipment Industrial Services Commercial & Prof. Services Other Financials General Industrials Paper & Forest Products Pharmaceuticals & Biotech. Banks Real Estate Household & Personal Use Products Insurance Food Chemicals Software & Services Machinery & Equipment Transportation Industrial Goods Basic Material Resources Beverages & Food Media Healthcare Services Tourism & Recreation Construction Materials Metals & Mining Automobiles & Parts Beverages 48





Source: IHS Markit.

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Developed world growth buoyed by decade-high job creation in Q3

- The developed world composite PMI covering both manufacturing and services continued to run above that of the emerging markets, suggesting the latter once again lost share of rising global demand in September. The developed world PMI is broadly consistent with rich-world GDP rising at an annual rate of 2% while the emerging market PMI points to a relatively lacklustre 5%.
- A strong divergence was also seen in employment trends. Although developed world jobs growth eased in September, it continues to run at one of the fastest rates seen over the past decade, suggesting improving labour markets are helping push domestic demand higher. Emerging market employment, although lagging behind, nevertheless edged higher, representing a welcome change from the net job losses seen throughout much of past two-and-a-half years.

Developed v emerging market output*



Developed v emerging market employment*



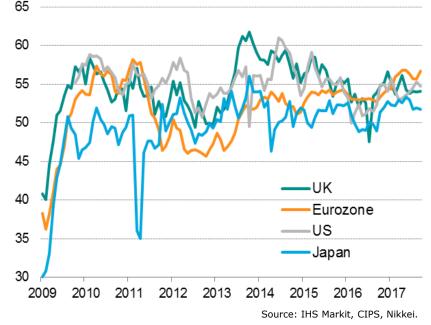
Sources: IHS Markit. * PMI shown above is a GDP weighted average of the survey indices.

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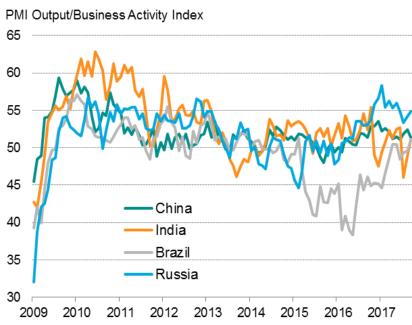
Eurozone sustains its lead in developed world upturn

- The developed markets once again saw a broad-based upturn among the major economies, with the eurozone leading the pack for the eighth straight month. Resilient robust growth was seen in the US, pointing to only modest disruption from the hurricanes, with the UK also enjoying steady, albeit sluggish growth amid rising Brexit uncertainty. A relatively weaker, though still solid, PMI was seen in Japan.
- Of the four BRIC nations, Russia reported the strongest improvement in business conditions for the eleventh successive month. Encouragingly, Brazil and India both showed signs of returning to growth, indicating that all four major emerging markets expanded in September.



Major developed markets*

PMI Output/Business Activity Index



Major emerging markets*

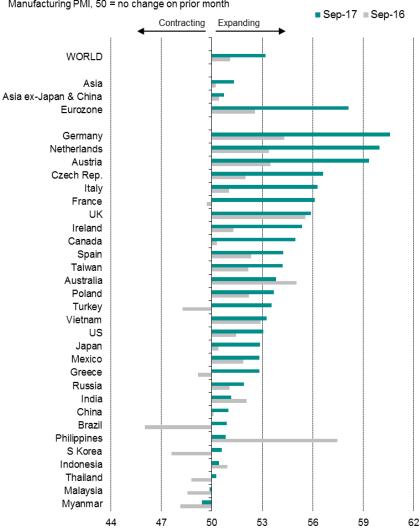
Sources: IHS Markit, Caixin, Nikkei. * PMI shown above is a GDP weighted average of the survey output indices.



Germany heads up global manufacturing PMI rankings

- The headline JPMorgan Manufacturing PMI, compiled by IHS Markit, was unchanged on August's 75-month high, reflecting robust global factory production, trade and employment trends.
- Eurozone nations continued to lead the rankings, headed • by Germany. All top eight countries were EU members. Canada, in ninth place, saw the fastest growing manufacturing sector outside of Europe.
- Six of the worst performing manufacturing economies • were all located in Asia.





Manufacturing PMI, 50 = no change on prior month

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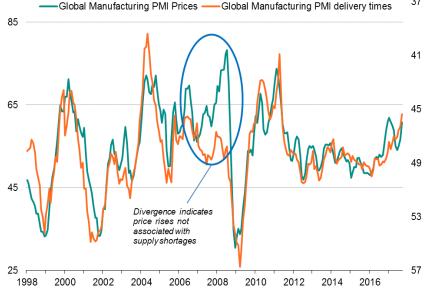
PMI Input Prices Index

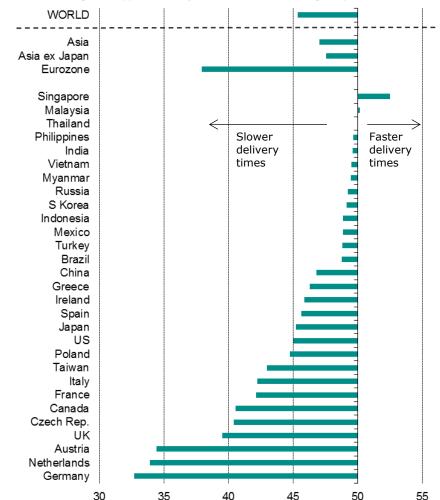
Rising capacity constraints point to higher prices

- Not only did European countries report the fastest manufacturing growth, but they also suffered the highest incidence of supply chain delays. Such delays are commonly associated with higher prices as a sellers' market develops when demand exceeds supply.
- The recent lengthening of delivery times therefore suggests that inflationary pressures are building, notably
 - but by no means exclusively in Europe.

Global manufacturing price pressures

PMI Delivery Times Index (inverted)



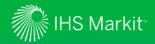


Manufacturing PMI Suppliers' Delivery Times Index, 50 = no change on prior month

Sources: IHS Markit, JPMorgan, ISO, CIPS, NEVI, Nikkei, BME, Bank Austria, Investec, AERCE, Caixin, HPI, Thomson Reuters Datastream.

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Global price pressures at 6¹/₂ year high

- The latest PMI surveys clearly illustrated how the tightening of global demand conditions was being accompanied by rising prices. Measured across both manufacturing and services, average input costs rose at the steepest rate since January, registering one of the sharpest rises in over six years. Companies reported a combination of higher energy prices, upward wage pressures and suppliers pushing price hikes through supply chains.
- Average prices charged for goods and services rose worldwide at the steepest rate since February 2011 as higher costs • were passed on to customers, with faster rates of inflation seen in both manufacturing and services. Prices charged for goods showed the largest monthly rise since May 2011 while service sector inflation closed-in on the post-crisis high seen in April 2014.

45

2010

2011

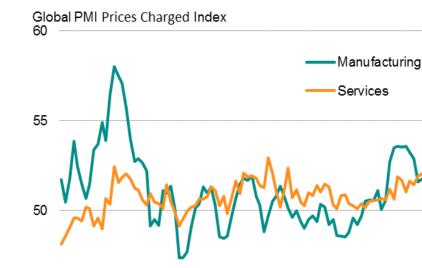
2012

2013

2014

Global PMI (composite of manufacturing and services) 75 60 Input costs (left axis) 70 Prices charged (right axis) 56 65 60 52 55 50 48 45 40 '09 '10 '11 '07 '08 '12 '13 '14 '15 '16 '17 '06 Sources: IHS Markit, JPMorgan.

Global PMI price indices



Global PMI selling prices/charges

2015 Sources: IHS Markit, JPMorgan.

2016

2017

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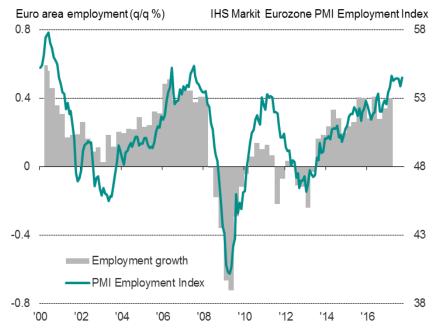


Eurozone PMI signals strong 0.7% Q3 GDP growth

- The September <u>IHS Markit Eurozone PMI</u> revived close to recent highs seen earlier in the year. The upturn rounds off an impressive Q3 for which the surveys point to GDP rising 0.7%. The economy enters Q4 with business energized by inflows of new orders growing at the fastest rate for over six years and expectations of future growth reviving after a summer lull. Manufacturing production rose at the quickest pace since April 2011. The rate of expansion in services business activity improved to a four-month high and was one of the best seen over the past six years.
- The survey showed growth is also becoming increasingly broad-based in terms of geographical spread, which should help make the upturn more sustainable as corporate profits, labour markets and demand improve across the region.
 Employment growth also re-accelerated to one of the fastest seen over the past decade.



Eurozone employment



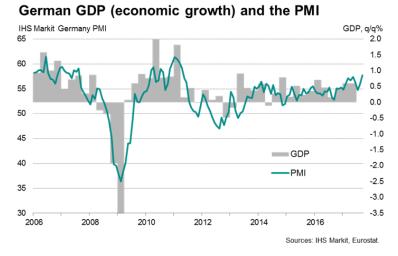
Sources: IHS Markit, Eurostat.

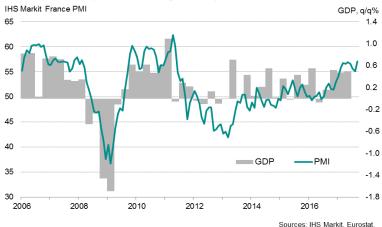
* PMI shown above is a GDP weighted average of the survey output indices.



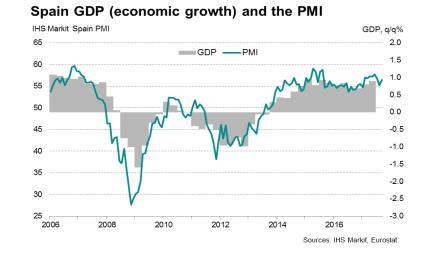
Broad-based eurozone upturn

Key to the eurozone upturn in September was faster growth in France and Germany, which saw the highest PMI readings since May 2011 and April 2011 respectively. The data are consistent with Q3 GDP growth of 0.6% in France and 0.7% in Germany. A solid PMI reading for Spain signals 0.8% Q3 GDP while Italy lags behind with 0.4% growth indicated by the PMI.

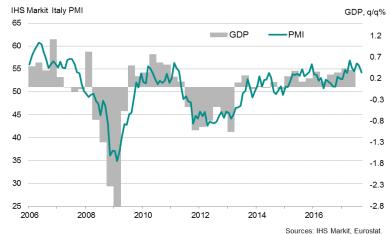








Italy GDP (economic growth) and the PMI



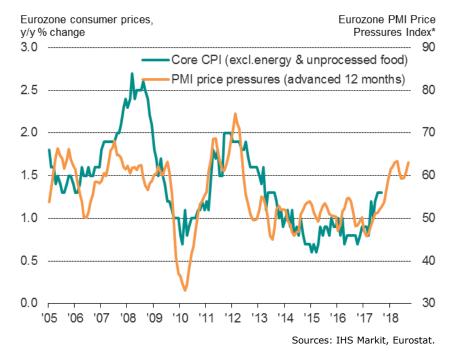
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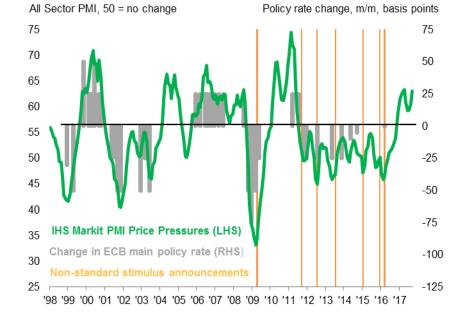
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ECB seen as more hawkish as price pressures march higher

- The eurozone upturn was accompanied by rising price pressures, with rates of inflation in input prices and output charges both hitting five-month highs. Higher prices often reflected the development of a sellers' market for many goods and services as demand outstripped supply.
- Supplier delivery delays, a key indicator of price pressures, were the most widespread for over six years. As such, the survey suggests that deflationary forces have abated, fueling confidence that reflationary pressures are becoming more engrained in the economy.
- Both the degree to which output is rising and the extent to which price pressures have intensified are consistent with the European Central Bank starting to rein-in its stimulus.





ECB policy & Eurozone PMI Prices*

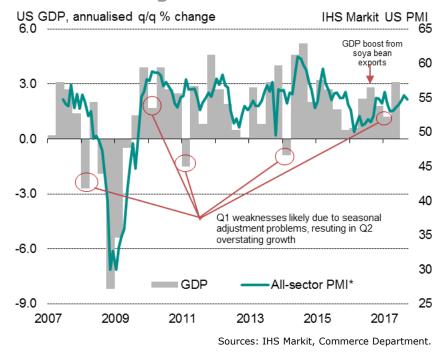
Sources: IHS Markit, ECB. * A composite index of input costs and supplier delivery times

PMI prices and inflation



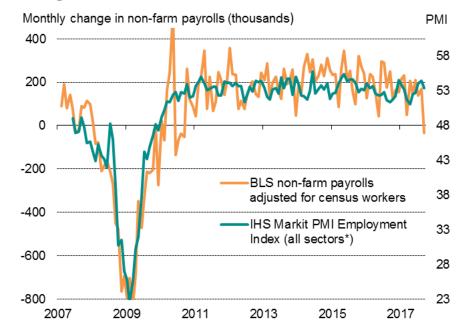
US economy showing resilience in face of hurricanes

- The latest <u>IHS Markit PMI survey data</u> indicate that the US economy showed encouraging resilience in a month of hurricane disruption. At 54.8 in September, the PMI was down slightly from 55.3 in August but still well above the 50.0 no-change level. Although the dip in the PMI indicated a slight moderation in growth of business activity, the overall rate of expansion remained robust. The Q3 average was in fact the highest since the closing quarter of 2015. Historical comparisons of the PMI with GDP indicate that the surveys point to the economy growing at an annualised rate of just over 2% in Q3.
- Similarly, the overall rate of job creation remained solid, with the survey's index running at a level historically consistent with non-farm payrolls rising by 180,000 in September, suggesting the official payroll drop of 33,000 will prove a hurricanerelated anomaly.



US economic growth and the PMI*

US jobs*



Sources: IHS Markit, Bureau of Labor Statistics.

* PMI shown above is a GDP weighted average of the manufacturing and services indices.

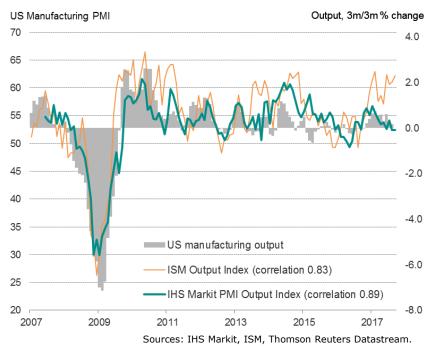


US reliant on services as manufacturing loses momentum

- Any impact of Hurricane Harvey was most evident in manufacturing supply chains, where resultant supply shortages were a key driver of higher prices. Supply delays were the most widespread in two and a half years, while input price inflation rose to the highest since 2012.
- The manufacturing sector, which was already struggling in August, consequently acted as an increasing drag on the economy, leaving services as the main growth driver. The average service PMI for Q3 (55.2) was the highest since the third quarter of 2015. By comparison, the flash manufacturing output index was unchanged at 52.4, rounding off the worst quarter since the second quarter of 2016. The latest survey is consistent with a slight deterioration in comparable official manufacturing output and good orders data.

IHS Markit US PMI Output/Business Activity Index 65 Manufacturing Services 60 55 50 2010 2011 2012 2013 2014 2015 2016 2017 Source: IHS Markit.

US manufacturing & services

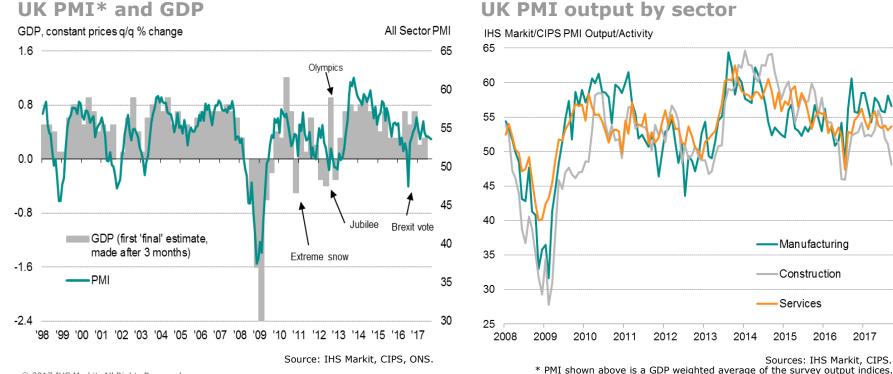


US manufacturing surveys



UK PMI signals further sluggish expansion in Q3

- The 'all-sector' UK PMI slipped further from April's recent high, down to 53.6 in September. The current reading matched February's recent low to therefore signal the joint-weakest expansion of output since August of last year. The survey data put the economy on course for another subdued 0.3% expansion in Q3, matching the performance seen in the first half of the year, albeit with momentum being gradually lost over the course of the quarter. The slow erosion of growth may continue in coming months, as new business expanded at the weakest pace for just over a year in September.
- Slower manufacturing output growth and the first drop in construction activity for 13 months (which saw a notable drop in commercial building), were accompanied by on-going weak service sector growth in September.

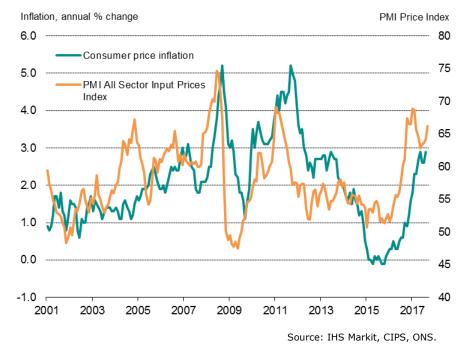


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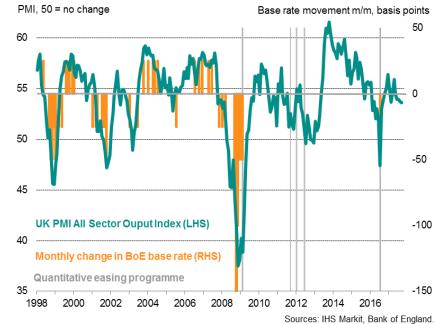


Rising UK price pressures add to policymakers' dilemma

- UK firms reported the steepest rise in input costs since February, commonly linked to more expensive imports and the weak pound. Higher costs were often passed on to customers, leading to the largest monthly rise in prices charged for goods and services since April and suggesting consumer price inflation could rise above 3% in coming months.
- The rise in price pressures will pour further fuel on expectations that the Bank of England will soon follow-up on its
 increasingly hawkish rhetoric and hike interest rates. However, the decision is likely to be a difficult one, as the waning of
 the all-sector PMI in September pushes the surveys slightly further into territory that would normally be associated with
 the central bank loosening rather than tightening policy.



UK PMI prices and inflation



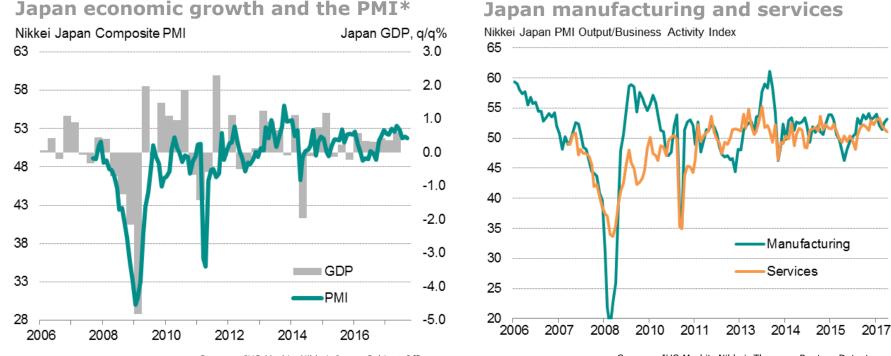
UK PMI* and Bank of England policy

* PMI shown above is a GDP weighted average of the survey output indices.



Japan sees sustained solid Q3 growth and rising prices

- The Nikkei Japan Composite PMI Output Index slipped to 51.7 in September from 51.9 in August, showing the slowest pace
 of growth for nearly a year. However, historical comparisons of the PMI with GDP suggest that the survey data indicate the
 economy grew at a solid quarterly rate of approximately 0.5% in Q3, down only slightly from 0.6% in Q2.
- The service sector, which had shown solid growth throughout much of the year, saw momentum wane somewhat in September, leaving manufacturing as the main growth driver, the latter buoyed by a steeper increase in export sales.
- Prices charged for Japanese goods and services meanwhile rose to the greatest extent in over two years, suggesting sustained growth is continuing to ward off deflationary pressures and underscoring an improvement in domestic demand.



Sources: IHS Markit, Nikkei, Japan Cabinet Office

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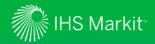
China PMI ends Q3 on softer note, but prices jump higher

- The Chinese economy ended Q3 on a softer note, with survey data showing a weaker pace of growth in September. The Caixin Composite PMI Output Index fell to 51.4, its lowest for three months and one of the weakest readings seen over the past year. Service sector activity grew at its slowest rate since December 2015, though manufacturing growth remained relatively elevated by recent standards, albeit still only modest.
- The September surveys were also marred by a lack of employment growth as manufacturing continued to shed workers. Meanwhile, cost pressures intensified considerably — notably in the manufacturing sector — pushing selling prices higher, which points towards higher consumer price inflation in coming months.



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* PMI shown above is a GDP weighted average of the survey output indices.



Russia leads BRICs but signs of stronger growth appear in India and Brazil

- <u>India's</u> economy returned to growth for the first time in three months in September, recovering from the hit to demand from the new sales tax, according to the Nikkei PMI surveys. In a sign of renewed confidence among businesses, firms added to their payrolls at the fastest rate since May 2010.
- While **Brazil's** first quarter jump in GDP may have proven a false dawn, being driven by the volatile agriculture sector, recent PMI data confirm that the economy has returned to growth. The September surveys signalled the fastest rate of expansion since February 2015 as the upturn spread from <u>manufacturing</u> to <u>services</u>.
- **Russia** led the emerging BRIC economies thanks to faster services growth and a sustained manufacturing upturn. The rise in the composite PMI to a three-month high suggests the economy should grow strongly again in Q3 after the 2.5% annual rise in Q2. New business inflows were the second-highest in four-and-a-half years.



Sources: IHS Markit, Nikkei, Datastream. * PMI shown above is a GDP weighted average of the survey output indices.



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