

Week Ahead Economic Preview

Flash PMIs, UK inflation, China Q3 GDP in the week ahead

Flash PMIs will offer early insights into economic conditions into the start of Q4 next week. The packed economic calendar also finds China's Q3 GDP update at the start of the week alongside industrial production and retail sales data. Meanwhile, the US reports industrial production while the UK September inflation report will be especially closely watched.

October flash PMI releases offer timely economic updates as supply constraints and the energy crisis dominate headlines. Manufacturers worldwide experienced near-record delays and increased price pressures in September, though there were some signs of production constraints easing in Asia. The October data will therefore be scrutinised for updates on whether the situation had further worsened. The key gauge amongst the manufacturing PMI sub-indices to offer clues on the supply situation will be the suppliers' delivery times index. In services, we'll be keen to watch out for signs that the fading Delta wave will help lift consumer activity in particular, notably in the US.

Meanwhile, in the UK, September inflation numbers look set to rise further according to elevated readings signalled by the IHS Markit/CIPS UK PMI data, but any worsening output trend alongside the price data could cause a policy rift at the Bank of England.

In APAC, Bank Indonesia meets to decide rates while China updates Loan Prime Rate figures. However, the attention is expected to be on China's Q3 GDP reading, which is expected to reflect a continued easing of growth momentum in the third quarter.

Chris Williamson

Chief Business Economist, IHS Markit

chris.williamson@ihsmarkit.com

Jingyi Pan

Economics Associate Director, IHS Markit

jingyi.pan@ihsmarkit.com

Get the Week Ahead Economic Preview direct via email:

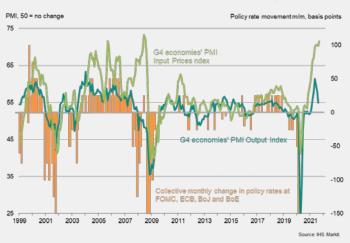
Email economics@ihsmarkit.com to join our distribution list.

Flash PMI surveys to help assess underlying inflation and growth trends in October

The flash PMI surveys will bring into focus the interplays of demand, supply and prices at the start of the fourth quarter.

With rising energy costs adding to supply chain price pressures, central banks are facing consumer price inflation that is increasingly-looking less transitory than thought earlier in the year, especially as many key supply shortages – notably relating to semiconductors and shipping capacity – show few signs of being resolved until well into next year. While such stubborn price pressures add to the heat on policymakers to remove some of the pandemic related stimulus, the concern is that the same shortages are having a bigger than expected detrimental impact on economic recoveries, which are showing some signs of running out of steam. Hence, while the September PMI surveys showed developed world input costs rising at the fastest rate for a decade, output growth slowed sharply.

Developed world PMI output, inflation and policy



Cooling demand would normally alleviate price pressures, but these are not normal times, and it is difficult to ascertain the underlying strength of demand given the disruptive impact of shortages on output. Auto production, for example, fell sharply in September, but the industry is also reporting unprecedented backlogs of orders.

October's flash PMIs will therefore help assess the stickiness of inflation, and the resilience of demand. This in turn will hopefully provide policymakers with clearer guidance on the appropriateness of any potential policy tapering.

Recap on the September flash PMI data here.



Key diary events

Monday 18 Oct

New Zealand CPI (Q3)

Singapore Non-Oil Exports (Sep)

China (Mainland) Industrial Output, Retail Sales, Urban Investment (Sep)

China (Mainland) GDP (Q3)

United States Industrial Production (Sep)

United States NAHB Housing Market Index (Oct)

Tuesday 19 Oct

Indonesia, Malaysia Market Holiday

Australia RBA Meeting Minutes (Oct)

Indonesia 7-Day Reverse Repo (Oct)

United States Building Permits (Sep)

Wednesday 20 Oct

Indonesia Market Holiday

Japan Trade Balance (Sep)

China (Mainland) Loan Prime Rate (Oct)

Germany Producer Prices (Sep)

United Kingdom Inflation (Sep)

Taiwan Export Orders (Sep)

Eurozone HICP (Sep, final)

Canada CPI BoC Core (Sep)

Thursday 21 Oct

United Kingdom CBI Trends (Oct)

United States Initial Jobless Claims

United States Existing Home Sales (Sep)

Eurozone Consumer Confidence (Oct, flash)

US Fed Beige Book

Friday 22 Oct

Thailand Market Holiday

Australia IHS Markit Flash PMI, Manufacturing & Services* Japan au Jibun Bank Flash Manufacturing PMI* UK CIPS/IHS Markit Flash PMI, Manufacturing & Services*

Germany IHS Markit Flash PMI, Manufacturing & Services* France IHS Markit Flash PMI, Manufacturing & Services*

Eurozone IHS Markit Flash PMI, Manufacturing & Services* US IHS Markit Flash PMI, Manufacturing & Services*

Japan CPI, Core Nationwide (Sep)

Thailand Customs-Based Trade Data (Sep)

Malaysia CPI (Sep)

Hong Kong CPI (Sep)

United Kingdom Retail Sales (Sep)

Taiwan Jobless Rate (Sep)

Canada Retail Sales (Aug)

* Press releases of indices produced by IHS Markit and relevant sponsors can be found <u>here</u>.

What to watch

IHS Markit October flash PMI releases

October's flash PMIs due next Friday include the US, UK and eurozone, along with Australia and Japan.

September's PMIs signalled that the global economic improved slightly. Although the effects of the Delta wave continued to linger, the magnitude of the impact have started to diminish. That said, the indirect impact through aggravating supply chain constraints have accumulated. Furthermore, there had been signs that this had fed through to services, adding to inflationary pressures. This will be one to watch, particularly for Western economies such as the US and UK where recent central bank hawkishness has ratcheted up.

For APAC economies, it will be of interest to see how the recent easing of COVID-19 case and mobility restrictions in countries such as Australia would be reflected through the flash PMI readings.

US industrial production

Official industrial production data for September will be released on Monday in the US. The latest IHS Markit US Manufacturing PMI showed that operating conditions continued to improve strongly, although the rate of growth was the slowest in five months as production was hampered by ongoing material and labour shortages issues. Refinitiv consensus likewise points to industrial production growth easing in September to 0.2%. Amid the delta variant impacts and supply shortages, IHS Markit recently downgraded US 2021 <a href="GDP from 5.7% to 5.4%.

UK September inflation data

September's UK inflation data will be in focus following the latest IHS Markit/CIPS UK Composite PMI, which suggested that output prices rose at the steepest rate since that survey gauge began in 1999. This indicated that we may continue to find elevated CPI and PPI readings, which will add to pressure on Bank of England policymakers to tighten policy.

China Q3 GDP and data barrage

China will report Q3 GDP on Monday alongside September industrial production and retail sales readings. Following a brief spike in COVID-19 cases in Q3, which brought along mobility restrictions in certain regions, growth is expected to have slowed, though recent survey data already point to the worst of this latest slowdown having passed.

Special report: APAC Electronics Industry Faces Protracted Supply Chain Disruptions

Rajiv Biswas | page 4



Recent PMI and economic analysis from IHS Markit

Global	Economic growth stalls in Sub-Saharan Africa amid renewed lockdowns	12-Oct	David Owen
	and supply chain disruption Monthly PMI Bulletin: October 2021	8-Oct	Chris Williamson
	Global auto makers suffer record underperformance amid supply chain delays	7-Oct	Chris Williamson
	Global manufacturing prices spike higher amid supply constraints, but demand pressures show signs of easing	4-Oct	Chris Williamson
	Global manufacturing subdued by supply constraints, but pressures from Delta wave show signs of easing	1-Oct	Chris Williamson
	Developed world economies hit by slower growth and rising prices	24-Sep	Chris Williamson
	<u>Understanding</u> headline PMI vs. subindices: how signals can be lost by focusing exclusively on the headline PMI	21-Sep	Chris Williamson
	Hints of stagflation cause fresh headaches for central banks	10-Sep	Chris Williamson
US	US equity investor sentiment lifts from lows in October but caution persists amid concerns over policy and politics	12-Oct	Chris Williamson
	US sector data show economic growth slowing across consumer, tech and financial sectors	5-Oct	Jingyi Pan
	US equity investor sentiment slides to lowest for a year amid COVID-19 and policy concerns	15-Sep	Chris Williamson
Europe	UK Flash PMI sends stagflation warning as growth wanes but prices rise at record rate	23-Sep	Chris Williamson
	Eurozone flash PMI at five-month low as economy hit by bottlenecks and soaring prices	23-Sep	Chris Williamson
	UK economy slows as demand rebound fades and supply constraints bite	13-Sep	Chris Williamson
APAC	Three key economic takeaways from September's Asia Sector PMI	8-Oct	Jingyi Pan
	<u>Vietnam economy slump persists into September amid worsening supply constraints</u>	1-Oct	Jingyi Pan
	Rising COVID-19 cases and supply chain disruptions overshadow Olympic Games boost	20-Sep	Usamah Bhatti
	Thailand: COVID-19 Delta Wave Disrupts Economic Recovery APAC Electronics Industry Hit by Escalating Supply Chain Disruptions	16-Sep 10-Sep	Rajiv Biswas Rajiv Biswas
Commodities	Weekly Pricing Pulse: Soaring energy prices send commodities higher	6-Oct	Michael Dall

For further information:

For more information on our products, including economic forecasting and industry research, please visit the Solutions section of www.ihsmarkit.com

For more information on our PMI business surveys, please visit www.ihsmarkit.com/products/PMI

Click here for more PMI and economic commentary

Follow our latest updates on twitter at @IHSMarkitPMI.

The intellectual property rights to the report are owned by or licensed to IHS Markit. Any unauthorised use, including but not limited to copying, distributing, transmitting or otherwise of any data appearing is not permitted without IHS Markit's prior consent. IHS Markit shall not have any liability, duty or obligation for or relating to the content or information ("data") contained herein, any errors, inaccuracies, omissions or delays in the data, or for any actions taken in reliance thereon. In no event shall IHS Markit be liable for any special, incidental, or consequential damages, arising out of the use of the data.

Purchasing Managers' Index® and PMI® are either registered trade marks of Markit Economics Limited or licensed to Markit Economics Limited. IHS Markit is a registered trademark of IHS Markit Ltd



Special Focus

APAC Electronics Industry Faces Protracted Supply Chain Disruptions

Rajiv Biswas

Asia Pacific Chief Economist, IHS Markit

Email: rajiv.biswas@ihsmarkit.com

The latest IHS Markit Global Electronics Purchasing Managers' Index (PMI) for September showed that global electronics manufacturers are continuing to face severe delays in receiving ordered inputs from suppliers. Indications that Apple will reduce its planned production of the iPhone 13 by 10 million units in the fourth quarter of 2021 highlights the severe supply chain difficulties facing electronics manufacturers.

The recovery of consumer demand in many of the world's largest economies combined with pandemic-driven demand for household electronics products has helped to boost global new orders for electronics throughout the first three quarters of 2021. However, supply chain disruptions have continued to exacerbate semiconductors shortages for some manufacturing industries. Severe delays to supplier delivery times have restricted production schedules in key sectors such as autos.

Global electronics sector shows rapid expansion

The strong rebound in world consumer markets in 2021, notably in the US, China and Western Europe, are continuing to drive the growth in demand for electronics. This is resulting in buoyant growth in household spending on electronics products as well as products that are intensive users of electronics, notably autos.

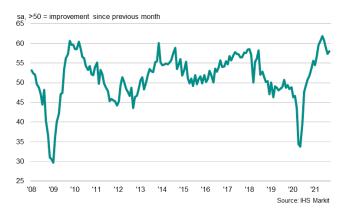
The headline seasonally adjusted IHS Markit Global Electronics PMI rose to 58.6 in September from a level of 58.1 in August, signalling continued buoyant expansionary operating conditions for global electronics manufacturers.

Global electronics manufacturers continued to record expansionary conditions for new orders in September, with rapid growth in new orders from the US, China, Western Europe and Japan. The IHS Markit Global Electronics PMI new orders index rose to 58.0 in September, strengthening further on the level of 57.2 recorded in August. This compares with a low of 35.0 in May 2020 when many of the world's largest consumer markets were in lockdown.

IHS Markit Global Electronics PMI



IHS Markit Global Electronics New Orders Index



Manufacturers of electronic goods expanded their purchases of inputs during September, as many firms boosted stockpiling in order to secure inputs in anticipation of higher prices. Shortages of materials have led to firms ramping up efforts to secure inventories of critical electronics items.

The electronics sector rebound has made an important contribution to the recovery of manufacturing exports and industrial production in many East Asian industrial economies. The electronics manufacturing industry is an important part of the manufacturing export sector for many Asian economies, including South Korea, China, Japan, Malaysia, Singapore, Philippines, Taiwan, Thailand and Vietnam. Furthermore, the electronics supply chain is highly integrated across different economies in East Asia.

Global electronics demand has risen strongly due to the global shift to remote working and online shopping. This has resulted in surging demand for consumer



electronics products such as laptops, mobile phones and wearables.

All four monitored sub-sectors of the global electronics industry continued to show expansion in September, according to the IHS Markit Global Electronics survey, with very strong growth in the industrial, computing and communications segments.

Global Electronics PMI, output by sector



Sharply rising electronics input pricing pressures

Strong global growth in electronics production and supply chain disruptions for inputs have resulted in a sharp upturn in raw materials input prices during 2021 year-to-date.

The IHS Markit Global Electronics Input Prices Index has continued to rise rapidly during the third quarter of 2021, reaching 76.0 in September, after 75.1 in August. Widespread increases in costs for materials were reported by firms amid supply shortages, as well as rising shipping fees.

Reflecting the sharp increases in input prices, electronics firms have been increasing output prices significantly during 2021. The IHS Markit Global Electronics Output Price Index continued to signal strong pricing pressures, at 61.2 in September. The industrial, communications and computing sectors recorded sharp increases in selling prices.

The near-term pricing outlook for the remainder of 2021 according to IHS Markit Pricing & Purchasing analysis for semiconductors and components generally is that supply shortages are likely to continue to translate into price escalation. Printed circuit board assemblies are the most severely affected, but semiconductors, bare printed circuit boards, resistors, capacitors, and connectors are all expected to see price pressures. Escalation generally over the second half of the year will

be greater than 10%. (See <u>"Prices: Pricing Analysis – Semiconductors"</u>, by IHS Markit Pricing & Purchasing, 1st July 2021.)

In 2022 and 2023, capacity expansion will bring supply and demand closer to balance and lead to stabilizing prices. According to IHS Markit Pricing & Purchasing, moderating demand for electronic components and improving semiconductors production is expected to bring supply and demand closer to balance and lead to some price relief. Specific categories will show some resilience in pricing given the changing demand landscape. For example, the expansion of electronics in light vehicles will keep pressure on certain commodity electronic components.

IHS Markit Global Electronics Input and Output Prices Index





Electronics supply chain disruptions

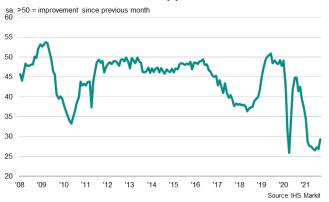
In the electronics industry, the strength of global electronics demand is continuing to exacerbate semiconductor shortages for some manufacturing industries, notably the global automotive sector. This has been compounded by supply chain disruptions to production of semiconductors as well as other electronics components. According to analysis by IHS Markit Pricing & Purchasing, sporadic electronics production outages because of COVID-19 continue, and while many or most facilities which are open are



operating at or near full capacity, the supply chain for electronic components is highly sensitive to disruptions.

Meanwhile, the latest IHS Markit Global Electronics PMI survey shows evidence of a further steep lengthening in average input lead times during September, as signalled by the Suppliers' Delivery Times Index posting well-below the neutral 50.0 mark. Shortages of inventories at vendors was a major restraint on shipment times, while strong demand for inputs exacerbated supply-side issues. This has resulted in a further deterioration in supplier performance.

Global Electronics PMI, supplier lead times



Global auto manufacturers as well as smartphone producers are among the industry segments that have been impacted by semiconductor shortages. According to IHS Markit Automotive research, vehicle manufacturers have faced continuing disruption to the supply of systems using semiconductors in the first three quarters of 2021. Many automakers worldwide have reported disruptions to production due to shortages of semiconductors, including Ford, Toyota, VW Group, GM, Honda and Mazda.

According to IHS Markit Automotive research, reports of disruption within the supply chain of semiconductors to the automotive sector began in late 2020 and have continued in the first three quarters of 2021, with further disruption expected to continue throughout the fourth quarter of 2021. IHS Markit Automotive expects that vehicle production disruption will spill over into the first half of 2022.

The disruptions of supply of important electronic components have resulted in significant disruption of global auto production during 2021. Across the full 2021 year, taking the estimates for Q3 and Q4 in addition to the losses already identified in the first half of the year, the risk associated with semiconductor shortages is estimated at between 9.5 million to 11.0 million units. (see IHS Markit Automotive, 12th October 2021, "Semiconductor Supply Issue: Light Vehicle Production

<u>Tracker</u>"). Japanese semiconductor manufacturer Rohm has warned that it is unlikely to clear its current order backlog during 2022.

Global semiconductor shortages have also been impacted by temporary supply disruptions to semiconductor production in Texas due to power outages in February as a result of severe weather, as well as production disruptions in Japan due to a fire in a Renesas Electronics semiconductors plant in mid-March. There are growing concerns that power shortages in China in the fourth quarter could also create some further disruptions to electronics manufacturing supply chains.

Impact of new Covid waves in Southeast Asia

Since April, a number of Southeast Asian economies with large electronics manufacturing industries have been hit by COVID-19 Delta waves, including Vietnam, Malaysia, Thailand and the Philippines. These new COVID-19 waves have triggered lockdowns and created significant disruption to economic activity. Widespread lockdown measures have disrupted industrial production and consumption spending, albeit the severity of the COVID-19 waves has been diminishing in some Southeast Asian nations in recent weeks. This has allowed a gradual easing of restrictive measures and some recovery in manufacturing output.

For the global auto industry, IHS Markit Automotive assess that the outlook remains dominated by the situation in Malaysia. Malaysia performs many "backend" operations i.e., packaging and testing of chips. As this is more labour-intensive than the wafer fabrication processes, activity is more easily affected by public health measures that impact workforce participation. However, the situation in Malaysia has been improving. The severe COVID-19 wave and associated lockdown measures that have disrupted Malaysian manufacturing have been easing in recent weeks, as rapid rollout of vaccines has resulted in a sharp decline in daily new COVID-19 cases.

However, the impact of pandemic-related factory closures in Vietnam, which is an important Asian electronics manufacturing hub for electronic goods such as smartphones and computers, became increasingly widespread during the third quarter of 2021, with Vietnam's third quarter GDP recording a contraction of 6.2% y/y.

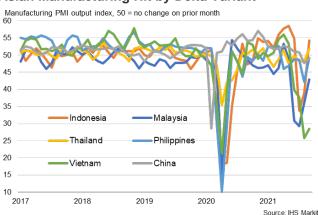
Samsung Electronics has reported that in Vietnam, which is a key electronics manufacturing hub for the firm,



there were production disruptions in certain places during the second quarter of 2021 due to lockdowns that affected operations. However, the firm managed to mitigate the disruptions by shifting production to other parts of their global manufacturing supply chain.

Toyota has announced an estimated 40% drop in global auto production in September due to the impact of global semiconductor shortages as well as disruption to supply chains in Southeast Asian manufacturing hubs, including Vietnam. Toyota temporarily halted several auto assembly lines in Japan for periods during July and August due to disruptions to supply of auto parts from Vietnam.

Asian Manufacturing Hit by Delta Variant



Meanwhile media reports indicate that Apple's production of the Apple iPhone 13 will be reduced by an estimated 10 million units in the fourth quarter of 2021 due to supply chain disruptions and delivery delays for various components from suppliers.

APAC electronics sector outlook

During the first three quarters of 2021, global electronics demand has shown a strong rebound from the lows of the first half of 2020, when lockdowns in many major economies disrupted production and consumer spending. With economic recovery continuing in the US and EU as COVID-19 vaccines are progressively rolled out, demand for electronics products is expected to remain strong during the remainder of 2021 and into early 2022.

The impact of the pandemic has accelerated the pace of digital transformation due to the global shift to working remotely, which has boosted demand for electronic devices such as computers, printers and mobile phones. The easing of lockdowns in many countries has also triggered a rebound in consumer spending, helping to boost demand for a wide range of consumer electronics. Spending on consumer electronics has also been

boosted by fiscal stimulus measures in many OECD countries that have provided significant pandemic relief payments to support households in many large economies, including the US, UK, Japan and Australia. Meanwhile global auto demand has also shown a rebound after slumping during the first half of 2020, which is boosting demand for auto electronics, albeit contributing to intensifying supply-side problems related to semiconductors shortages.

The medium-term economic outlook is also supportive for the electronics industry, with sustained strong world economic growth forecast over 2022-2024.

With shortages of semiconductors disrupting manufacturing supply chains in 2021, the importance of having domestic electronics production capacity for critical electronics components has become a national priority for major industrial nations, including the US, EU and China. For the US and EU, reducing reliance on Asian semiconductor production has become a key strategic priority over the next decade.

A key risk is excessive global vulnerability to semiconductor supply from South Korea and Taiwan, which are major electronics production hubs but also potential geopolitical flashpoints in the Asia-Pacific region. Military tensions in the Taiwan Strait and South China Sea have escalated during 2021, highlighting these vulnerabilities.

The outlook for electronics demand is also supported by major technological developments, including 5G rollout over the next five years, which will drive demand for 5G mobile phones. Demand for industrial electronics is also expected to grow rapidly over the medium term, helped by Industry 4.0, as industrial automation and the Internet of Things boosts rapidly growth in demand for industrial electronics.

Competition amongst leading technology nations in strategic electronics production has also intensified. Consequently, strategic global competition amongst the world's leading high-technology nations is also likely to play a greater role in reshaping the global electronics industry landscape over the next decade.