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J.P.Morgan Global Manufacturing PMI™

Global manufacturing upturn continues at end of 2021

Key findings

Manufacturing PMI unchanged at 54.2

Output, new orders and employment increase

Price and supply chain pressures remain elevated

The global manufacturing sector ended 2021 on a positive note. Rates of increase in output, new orders and employment all accelerated, while business optimism data indicated companies expect output to rise further over the coming year. Although the sector remained beset by price inflationary and supply chain pressures, there were at least tentative signs that these were also starting to ease.

The J.P.Morgan Global Manufacturing PMI™ – a composite index produced by J.P.Morgan and IHS Markit in association with ISM and IFPSM – continued to track sideways in December, posting 54.2 for the third successive month. PMI readings signalled growth for all three broad sub-sectors covered by the survey, with faster growth at investment goods producers offset by slightly weaker rates of expansion in the consumer and intermediate goods industries.

Business conditions improved in all except four of the nations covered by the survey in December. Europe generally remained a bright spot, with the seven top-ranked countries based on the latest Manufacturing PMI readings located in the region (Italy, Czechia, Greece, Netherlands, Austria, Ireland and the UK). The US was in eighth position overall, while China returned to growth. However, of the 26 nations signalling an expansion, just over half (14) also saw a slower pace of increase than in November. Brazil, Thailand, Mexico and Myanmar all saw contractions.

Global manufacturing production and new orders both rose for the eighteenth consecutive month in December, with rates of expansion accelerating slightly. Output growth strengthened at investment goods producers but slowed in both the consumer and intermediate goods industries. International trade flows also continued to improve, with new export business rising for the sixteenth straight month, albeit to a lesser extent than in November.

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J.P.Morgan Global Manufacturing PMI™

sa, >50 = improvement since previous month

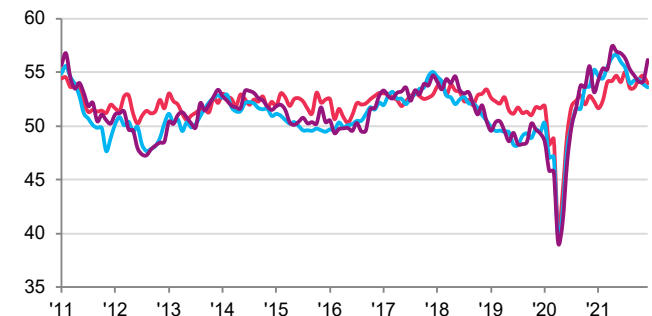


Sources: J.P.Morgan, IHS Markit.

PMI by goods sector

Consumer / Intermediate / Investment

sa, >50 = improvement since previous month

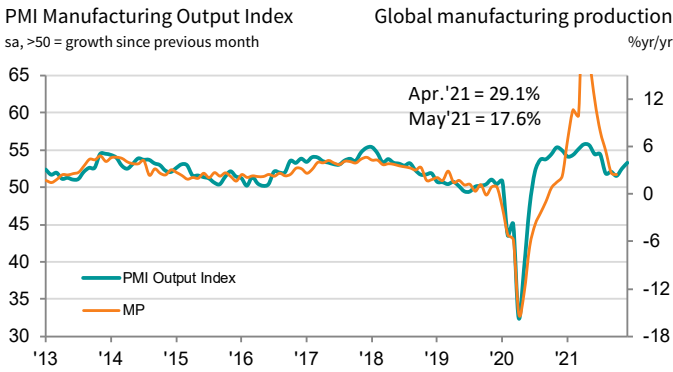


Sources: J.P.Morgan, IHS Markit.

Index summary

sa, 50 = no change over previous month. *50 = no change over next 12 months.

Index	Nov-21	Dec-21	Interpretation
PMI	54.2	54.2	Improvement, same rate
Output	52.5	53.3	Growth, faster rate
New Orders	53.2	53.4	Growth, faster rate
New Export Orders	51.3	51.2	Growth, slower rate
Future Output	64.3	63.7	Growth expected, weaker sentiment
Employment	51.3	51.6	Growth, faster rate
Input Prices	71.5	69.7	Inflation, slower rate
Output Prices	61.3	59.8	Inflation, slower rate



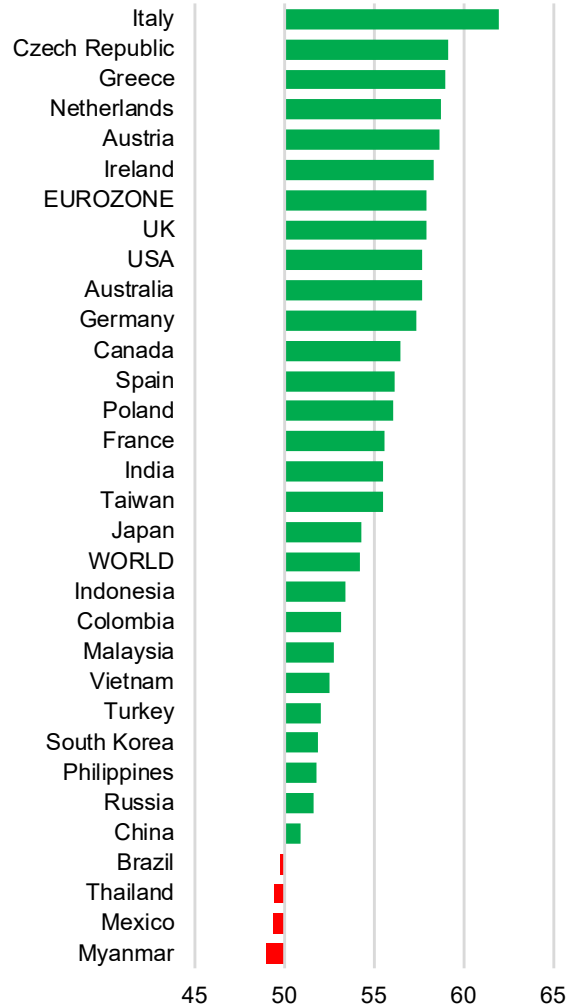
Sources: J.P.Morgan, IHS Markit.

The continued upturns in output and new orders, alongside rising backlogs of work, encouraged companies to increase staff headcounts in December. Employment rose for the fourteenth month in a row, with jobs growth signalled by almost all of the PMI surveys for which data were available (including the US, euro area and Japan). China and India were among the nations to register decreases. There were also a number of countries reporting staff and skill shortages.

Price inflationary pressures remained elevated in December. Input costs and output charges rose at above survey-average rates, albeit the weakest increases for eight months in both cases. Average vendor delivery times lengthened to one of the greatest extents in the survey history. Although supply chain disruptions therefore remained prominent, there was at least some sign of this constraint moving passed its peak (the extent of the increase was the weakest since March).

Companies responded to delivery delays and rising production requirements by expanding input buying volumes at the quickest pace for five months. This contributed to the steepest increase in stocks of purchases since the survey began in January 1998. In contrast, finished goods inventories decreased for the thirty-third month in a row.

Manufacturing PMI
sa, >50 = improvement since previous month
Dec '21



Sources: J.P.Morgan, IHS Markit, Unicredit Bank Austria, Caixin, Davivienda, BME, HPI, AIB, Jibun Bank, NEVI, AERCE, Istanbul Chamber of Industry, CIPS.

Comment

Olya Borichevska, Global Economist at J.P.Morgan, said:

“The global manufacturing sector showed strength at the end of 2021 with the output PMI increasing 0.8-pt to a solid 53.3 level. Although price inflation and supply chain pressures remain a constraint on growth, there was better news on these fronts with tentative signs that these headwinds were also passed their respective peaks.”

Methodology

The J.P.Morgan Global Manufacturing PMI™ is produced by IHS Markit in association with ISM and IFPSM.

Global manufacturing PMI indices are compiled by IHS Markit from responses to monthly questionnaires sent to purchasing managers in survey panels in over 40 countries (see table, right for full coverage), totalling around 13,500 companies. These countries account for 98% of global manufacturing value added*.

Survey responses are collected in the second half of each month and indicate the direction of change compared to the previous month. A diffusion index is calculated for each survey variable, at the country level. The index is the sum of the percentage of 'higher' responses and half the percentage of 'unchanged' responses. The indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease. The indices are then seasonally adjusted.

Indices are calculated for the following variables: output, new orders, new export orders, future output, backlogs of work, employment, quantity of purchases, suppliers' delivery times, stocks of purchases, stocks of finished goods, input prices and output prices.

Global manufacturing indices are calculated by weighting together the country indices. Country weights are calculated from annual manufacturing value added*.

The headline figure is the Global Manufacturing Purchasing Managers' Index™ (PMI). The PMI is a weighted average of the following five global indices: new orders (30%), output (25%), employment (20%), suppliers' delivery times (15%) and stocks of purchases (10%). For the PMI calculation the Suppliers' Delivery Times Index is inverted so that it moves in a comparable direction to the other indices.

Underlying survey data are not revised after publication, but seasonal adjustment factors may be revised from time to time as appropriate which will affect the seasonally adjusted data series.

For further information on the PMI survey methodology, please contact economics@ihsmarkit.com.

The J.P.Morgan Global Manufacturing PMI provides the first indication each month of world manufacturing business conditions. The data enable decision makers in the financial world and in government to make better judgements much earlier than would otherwise be the case. The wide coverage of the indices, together with their speed of production, accuracy and direct comparability, make them unmatched as economic indicators. They provide truly "must have" information for financial institutions of all kinds and for major corporations world-wide.

* Source: World Bank World Development Indicators.

Data sources

Region	Producer	In association with
Australia	IHS Markit	-
Austria	IHS Markit	Unicredit Bank Austria / OPWZ
Brazil	IHS Markit	-
Canada	IHS Markit	-
China (mainland)	IHS Markit	Caixin
Colombia	IHS Markit	Davivienda
Czech Republic	IHS Markit	-
Denmark	DILF	Kairoscommodities
Egypt*	IHS Markit	-
France	IHS Markit	-
Germany	IHS Markit	BME
Greece	IHS Markit	HPI
Hong Kong SAR ^{1*}	IHS Markit	-
Hungary	HALPIM	-
India	IHS Markit	-
Indonesia	IHS Markit	-
Ireland	IHS Markit	AIB
Israel	IPLMA	Bank Hapoalim Ltd
Italy	IHS Markit	-
Japan	IHS Markit	au Jibun Bank
Kazakhstan	IHS Markit	Tengri Partners
Kenya*	IHS Markit	Stanbic Bank
Lebanon*	IHS Markit	BLOMINVEST Bank
Malaysia	IHS Markit	-
Mexico	IHS Markit	-
Myanmar	IHS Markit	-
Netherlands (The)	IHS Markit	Nevi
New Zealand	Business NZ	Bank of New Zealand
Nigeria*	IHS Markit	Stanbic IBTC Bank
Philippines (The)	IHS Markit	-
Poland	IHS Markit	-
Russia	IHS Markit	-
Saudi Arabia*	IHS Markit	-
Singapore*	IHS Markit	-
South Africa*	IHS Markit	-
South Korea	IHS Markit	-
Spain	IHS Markit	AERCE
Switzerland	procure.ch	Credit Suisse
Taiwan	IHS Markit	-
Thailand	IHS Markit	-
Turkey	IHS Markit	Istanbul Chamber of Industry
UAE*	IHS Markit	-
United Kingdom	IHS Markit	CIPS
United States ²	IHS Markit / ISM	-
Vietnam	IHS Markit	-

*Indices calculated from manufacturing responses extracted from survey panels covering the entire private sector economy.

¹Hong Kong is a Special Administrative Region of China.

²US data compiled by ISM pre-February 2010 and by IHS Markit post-January 2010.

Contact

Olya Borichevska
Economic & Policy Research
J.P.Morgan Chase Bank
New York
olya.e.borichevska@jpmorgan.com

Rob Dobson
Director
IHS Markit
T: +44 1491 461 095
rob.dobson@ihsmarkit.com

Joanna Vickers
Corporate Communications
IHS Markit
T: +44 207 260 2234
joanna.vickers@ihsmarkit.com

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About IHS Markit

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions.

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About IFPSM

The International Federation of Purchasing and Supply Management (IFPSM) is the union of 48 National and Regional Purchasing Associations worldwide. Within this circle, about 250,000 Purchasing Professionals can be reached. IFPSM facilitates the development and distribution of knowledge to elevate and advance the procurement profession, thus favourably impacting the standard of living of citizens worldwide through improved business practices. The term procurement is taken to embrace purchasing, materials management, logistics, supply chain management and strategic sourcing. IFPSM is a non-political, independent and non-profit oriented International Organization. www.ifpsm.org

About ISM

Institute for Supply Management® (ISM®) serves supply management professionals in more than 90 countries. Its 50,000 members around the world manage about US\$1 trillion in corporate and government supply chain procurement annually. Founded in 1915 as the first supply management institute in the world, ISM is committed to advancing the practice of supply management to drive value and competitive advantage for its members, contributing to a prosperous and sustainable world. ISM leads the profession through the ISM Report On Business®, its highly regarded certification programs and the ISM Mastery Model®. www.instituteforsupplymanagement.org

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