

Embargoed until 1100 EDT (1500 UTC) 3 October 2022

# J.P.Morgan Global Manufacturing PMI™

## Global manufacturing downturn continues as output and new orders fall further

### Key findings

Global Manufacturing PMI edges below 50.0 no-change mark

Output falls in intermediate and investment goods sectors

Business optimism sinks to 28-month low

Global manufacturing production decreased for the second successive month in September, as intakes of new work deteriorated and international trade flows contracted.

The J.P.Morgan Global Manufacturing PMI™ – a composite index produced by J.P.Morgan and S&P Global in association with ISM and IFPSM – fell to 49.8 in September, down from 50.3 in August. This is the first time that the headline PMI has posted below the neutral 50.0 mark since June 2020.

*Please note that due to a later release date, data for South Korea were not available for inclusion in the September numbers.*

The rate of contraction in output accelerated to the fastest since April, when lockdowns in mainland China disrupted global production growth. Barring the pandemic lockdown months in the first half of 2020, the latest decline was the steepest since 2012.

Production decreased in two of the three sub-sectors covered by the survey (intermediate and investment goods). The steeper contraction was at intermediate goods producers, where output fell at the quickest pace in over two years. The decline in investment goods production was only marginal, while the consumer goods category saw a mild uptick.

Output rose in only ten of the 30 economies for which data are available, including the US, Brazil, India, Russia and Australia. Production losses were seen in the China, Japan, the euro area and the UK (among others)

New orders and new export business both fell at faster rates in September, the steepest downturns signalled by both demand measures since June 2020. Finished goods inventories continued to rise amid weaker than anticipated sales.

This combination of weaker new order inflows and inventory building led in turn to a deteriorating production outlook. This was shown by a sharp drop in future output expectations

J.P.Morgan Global Manufacturing PMI™

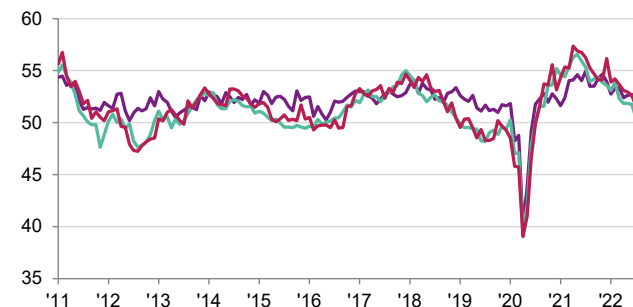
sa, >50 = improvement since previous month



Source: J.P.Morgan, S&P Global.

Consumer Goods PMI  
Intermediate Goods PMI  
Investment Goods PMI

sa, >50 = improvement since previous month

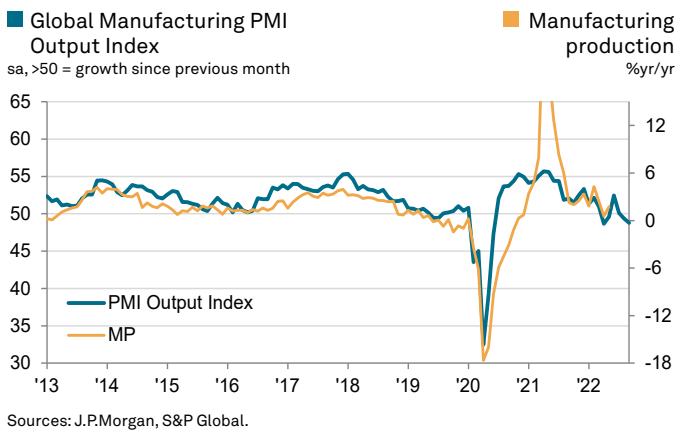


Source: J.P.Morgan, S&P Global.

### Index summary

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

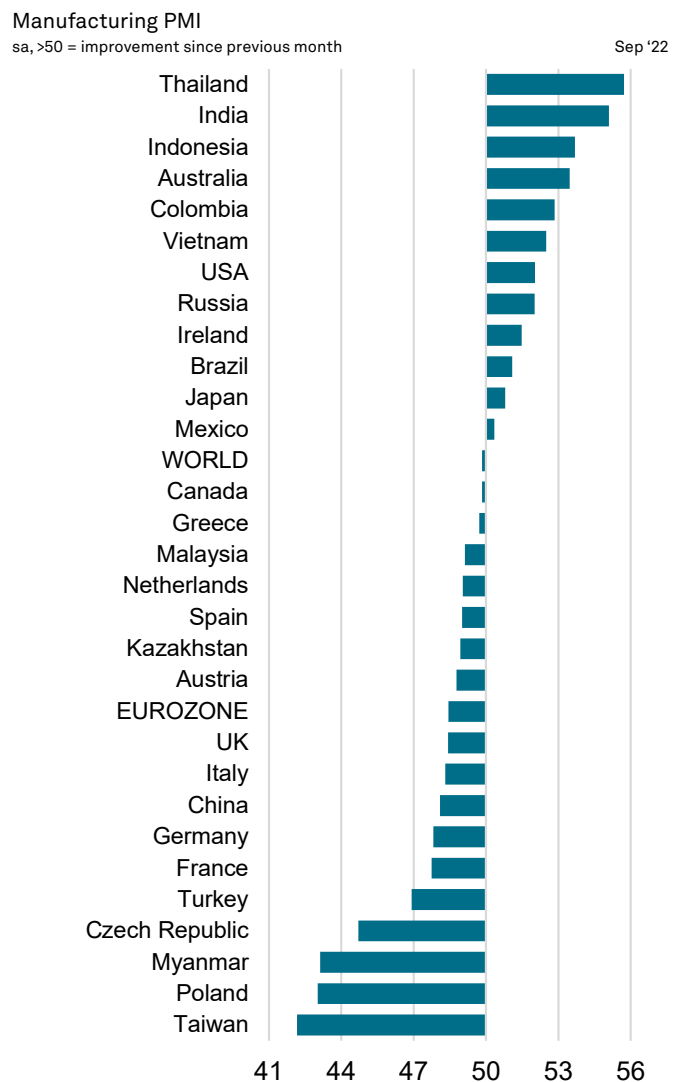
Index	Aug-22	Sep-22	Interpretation
PMI	50.3	49.8	Deterioration, from improving
Output	49.4	48.8	Decline, faster rate
New Orders	48.2	47.7	Decline, faster rate
New Export Orders	47.0	45.9	Decline, faster rate
Future Output	60.1	57.9	Growth expected, lesser sentiment
Employment	50.3	50.8	Growth, faster rate
Input Prices	61.1	61.2	Inflation, faster rate
Output Prices	56.7	56.6	Inflation, slower rate



among global manufacturers during September to the lowest level since May 2020. The new-orders-to-inventory ratio also signalled ongoing potential weakness in the production trend, dropping to a 28-month low.

Manufacturing employment rose for the twenty-third consecutive month in September, with job creation seen in the US, the euro area, Japan, the UK, India and Brazil. Several nations saw losses, however, including China. The latest increase in manufacturing workforce levels globally contributed to a further mild reduction in backlogs of work.

Average input cost inflation ticked higher in September, halting a four-month sequence of moderating cost increases. The rise in the Input Prices Index of 0.1pts was negligible, however. Output charge inflation continued to ease, hitting a 19-month low. There were further signs of supply chain pressures easing during the latest survey month. Although average supplier lead times continued to lengthen, the deterioration in vendor performance was the weakest since September 2020.



## Comment

Bennett Parrish, Global Economist at J.P.Morgan, said:

“The global manufacturing PMI saw output and new orders lose further ground in September, suggesting that global industrial production is slipping into recession. The orders-to-inventory ratio fell to another multi-year low last month as excess capacity continued to build at factories. The ongoing rise in stock-building is a worrying sign that demand is faltering and will weigh on activity deeper into 2H22. The September surveys offered a few silver linings, including signs of improving supply chain conditions and resilience in the labor market.”

## Contact

Bennett Parrish  
Economic & Policy Research  
J.P.Morgan Chase Bank  
New York  
[bennett.parrish@jpmchase.com](mailto:bennett.parrish@jpmchase.com)

Rob Dobson  
Director  
S&P Global Market Intelligence  
T: +44 1491 461 095  
[rob.dobson@spglobal.com](mailto:rob.dobson@spglobal.com)

Katherine Smith  
Corporate Communications  
S&P Global Market Intelligence  
T: +1 (781) 301-9311  
[katherine.smith@spglobal.com](mailto:katherine.smith@spglobal.com)

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**Survey methodology**

The J.P.Morgan Global Manufacturing PMI™ is produced by S&P Global in association ISM and IFPSM.

Global manufacturing PMI indices are compiled by S&P Global 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](mailto: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.

**About J.P.Morgan**

JPMorgan Chase & Co. (NYSE: JPM) is a leading global financial services firm with assets of \$2.3 trillion and operations in more than 60 countries. The firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management and private equity. A component of the Dow Jones Industrial Average, JPMorgan Chase & Co. serves millions of consumers in the United States and many of the world's most prominent corporate, institutional and government clients under its J.P. Morgan and Chase brands. [www.jpmorganchase.com](http://www.jpmorganchase.com).

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**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](http://www.instituteforsupplymanagement.org)

**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](http://www.ifpsm.org)

**About PMI**

Purchasing Managers' Index™ (PMI™) surveys are now available for over 40 countries and also for key regions including the eurozone. They are the most closely watched business surveys in the world, favoured by central banks, financial markets and business decision makers for their ability to provide up-to-date, accurate and often unique monthly indicators of economic trends. [ihsmarkit.com/products/pmi.html](https://ihsmarkit.com/products/pmi.html).

**Data sources**

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

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

<sup>1</sup>Hong Kong is a Special Administrative Region of China.

<sup>2</sup>US data compiled by ISM pre-February 2010 and by S&P Global post-January 2010.

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