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# J.P.Morgan Global Manufacturing PMI™

## Global manufacturing output contracts as demand weakens in September

### Key findings

Manufacturing PMI edges up to 49.1

Output declines in intermediate and investment goods sectors

Input cost and output price inflation both

Global manufacturing remained in the doldrums at the end of the third quarter, as output, new orders and employment all contracted. The eurozone, UK and Canada posted steep overall downturns, with global growth lead by China and Indonesia. The US posted higher output and jobs but lower new orders.

*Note: due to later-than-usual release dates, September data for India and South Korea were not available for inclusion in the global numbers.*

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 – posted 49.1 in September, up a pip from 49.0 in August, remaining below the neutral 50.0 mark for the thirteenth successive month.

All five of the sub-indices comprising the headline PMI (output, new orders, employment, stocks of purchases and suppliers' delivery times) were at levels indicative of a deterioration in overall performance.

Global manufacturing output declined for the fourth successive month in September, as further contractions in the intermediate and investment goods industries were only partly offset by growth at consumer goods producers. Output rose in only eight of the 29 nations for which data were available, including mainland China and the US. The euro area, Japan, UK, Canada and Brazil were among the economies to see production volumes scaled back.

A weaker intake of new orders was the main factor underlying lower output in September. Destocking also played a role, with inventories of both finished products and raw materials decreasing during the latest survey month.

Total new business and international trade volumes both decreased during September, albeit at slightly slower rates. Mainland China was one of only seven nations to register growth of total new orders, the others – with the exception of Greece – were also located (at least in part) in Asia. The

J.P.Morgan Global Manufacturing PMI™

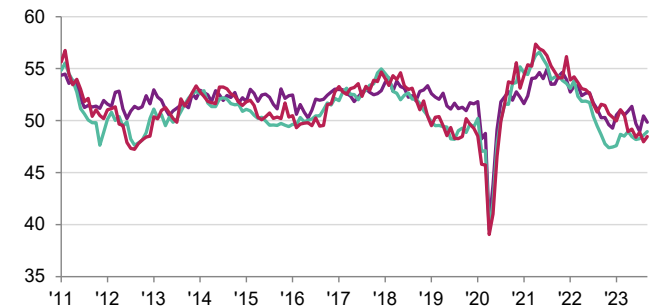
sa, >50 = improvement since previous month



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

Consumer Goods PMI  
Intermediate Goods PMI  
Investment Goods PMI

sa, >50 = improvement since previous month

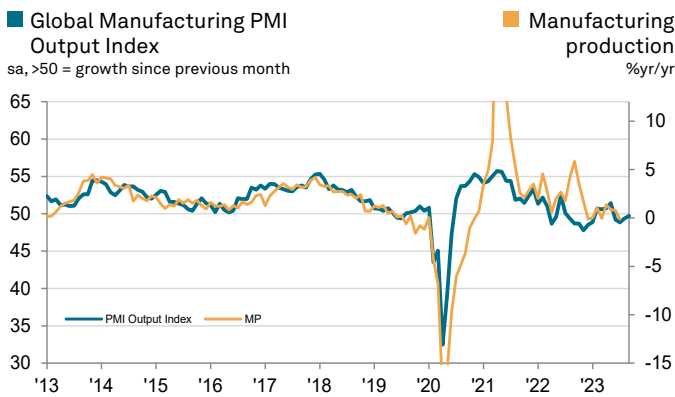


Source: J.P.Morgan, S&P Global PMI.

### Index summary

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

Index	Aug-23	Sep-23	Interpretation
PMI	49.0	49.1	Deterioration, slower rate
Output	49.4	49.7	Decline, slower rate
New Orders	48.1	48.4	Decline, slower rate
New Export Orders	47.0	47.7	Decline, slower rate
Future Output	59.7	60.7	Growth expected, better sentiment
Employment	50.6	49.6	Decline, from increasing
Input Prices	51.2	52.5	Inflation, faster rate
Output Prices	50.5	51.6	Inflation, faster rate



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

rates of decline seen in the euro area, Japan and the UK were all severe, whereas the contraction registered in the US was comparatively mild.

The downturns in output and new orders filtered through to the trend in employment in September. Manufacturing staffing levels were lowered for the first time in nine months, albeit only marginally, with cuts registered in mainland China, the euro area and the UK (among others). The US and Japan saw employment rise.

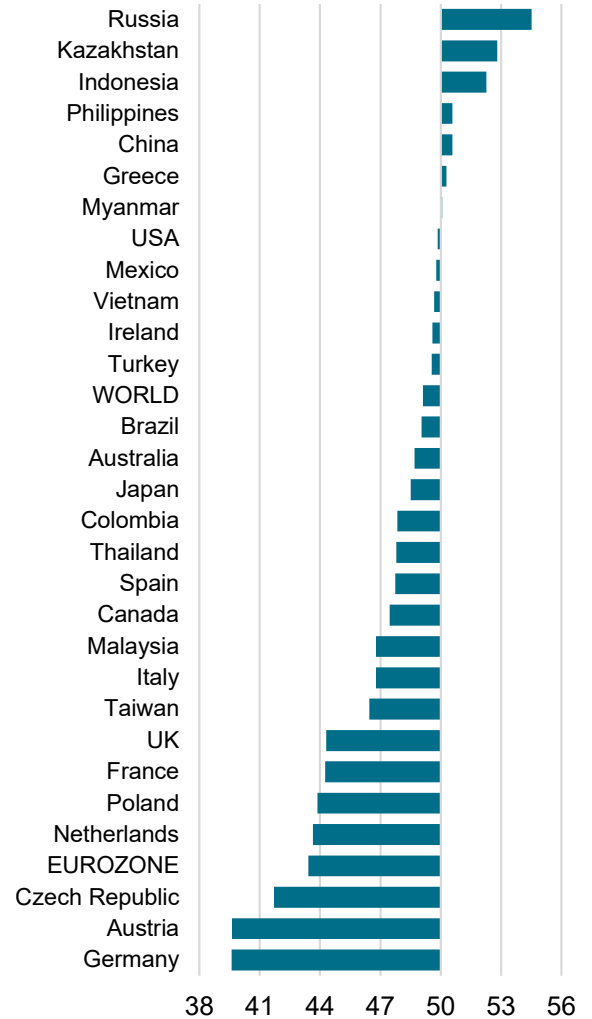
September data signalled an improvement in average vendor lead times for the eighth month in a row, as supply chains continued to recover following the stresses of recent years. Better supply also aided efforts among manufacturers to clear backlogs of work, as work-in-hand (but not yet completed) decreased at a solid pace.

There were further signs of price pressures building in September. Input costs and output charges both rose for the second consecutive months, with rates of inflation accelerating for both measures. That said, the increases remained moderate in comparison to the steep rates seen throughout 2021 and 2022.

Manufacturing PMI

sa, >50 = improvement since previous month

Sep '23



Sources: J.P.Morgan, S&P Global PMI, HCOB, Unicredit Bank Austria, Caixin, Davivienda, HPI, AIB, Jibun Bank, NEVI, Istanbul Chamber of Industry, CIPS.

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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@spglobal.com](mailto:economics@spglobal.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. [www.spglobal.com/marketintelligence/en/mi/products/pmi.html](http://www.spglobal.com/marketintelligence/en/mi/products/pmi.html)

**Data sources**

Region	Producer	In association with
Australia	S&P Global	Judo Bank
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	–
Egypt*	S&P Global	–
Eurozone	S&P Global	HCOB
France	S&P Global	HCOB
Germany	S&P Global	HCOB
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	HCOB
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	Riyad Bank
Singapore*	S&P Global	–
South Africa*	S&P Global	–
South Korea	S&P Global	–
Spain	S&P Global	HCOB
Switzerland	procure.ch	UBS
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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