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# J.P.Morgan Global Manufacturing PMI™

## Global manufacturing output rises as new order intakes show signs of stabilising and supply chain pressures ease

### Key findings

Manufacturing PMI falls to 49.6

Output rises for second successive month

Input cost and selling price inflation both ease further

The upturn in global manufacturing production was sustained at the end of the opening quarter. Output rose for the second successive month, as manufacturers benefited from a near-stabilisation of new order inflows and improving supply chain conditions.

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 49.6 in March, down from 49.9 in February, staying below the 50.0 no-change mark for the seventh successive month.

The PMI level was impacted by slower growth of output and employment alongside a further improvement in supplier delivery times. Although new orders and stocks of purchases both fell, rates of contraction eased closer to stabilisation.

Manufacturing production expanded for the second consecutive month in March, albeit to a fractionally less marked extent than in the prior survey month. Output growth eased in both the consumer and investment goods sub-industries. Although intermediate goods production fell for the ninth month running, the rate of decline was the joint-weakest during that sequence.

Among the largest industrial regions covered by the survey, the US and the euro area both eked out marginal expansions during March. Although mainland China outperformed both, its rate of expansion was also only marginal and much slower than in February. Downturns were registered in Japan, South Korea, the UK and Brazil. Thailand and India saw the quickest rates of expansion.

March saw new order intakes decrease for the ninth consecutive month. However, the rate of contraction was only mild and the weakest during that sequence. The US and Japan both saw new business intakes fall at slower rates, while the downturn (on average) across the euro area accelerated slightly. New work received rose for the second straight month in China, albeit at a reduced pace, and

J.P.Morgan Global Manufacturing PMI™

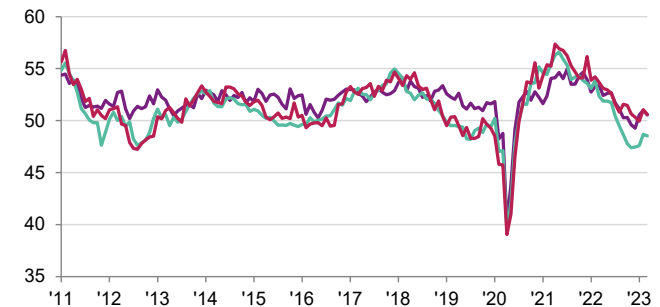
sa, >50 = improvement since previous month



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

Consumer Goods PMI  
Intermediate Goods PMI  
Investment Goods PMI

sa, >50 = improvement since previous month

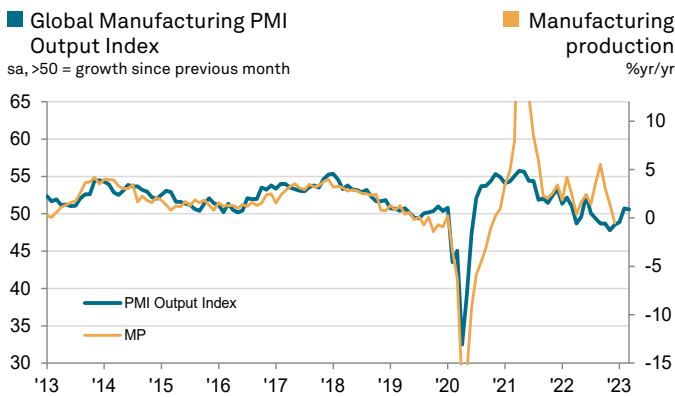


Source: J.P.Morgan, S&P Global.

### Index summary

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

Index	Feb-23	Mar-23	Interpretation
PMI	49.9	49.6	Deterioration, faster rate
Output	50.7	50.6	Growth, slower rate
New Orders	49.3	49.5	Decline, slower rate
New Export Orders	48.3	47.7	Decline, faster rate
Future Output	62.8	62.5	Growth expected, lower sentiment
Employment	51.1	50.3	Growth, slower rate
Input Prices	55.5	53.7	Inflation, slower rate
Output Prices	54.8	52.8	Inflation, slower rate

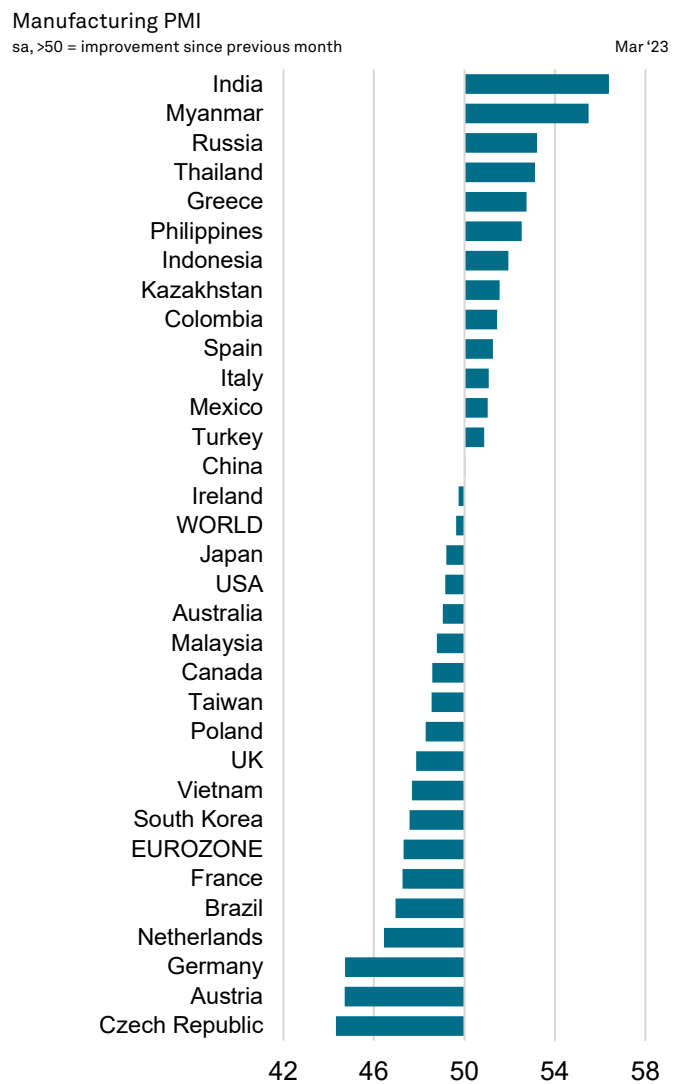


returned to (fractional) growth in the UK. Data suggested that any demand revival tended to be focused on 'domestic' new order intakes in certain nations, as international trade flows deteriorated at a faster rate.

Supply chains continued to recover from the immense pressure experienced through much of the past three-and-a-half years, as average vendor lead times shortened to the greatest extent since May 2009. Purchasing activity and stocks of both inputs and finished products all declined at slower rates during March.

Manufacturing employment increased for the second successive month in March. Jobs growth was registered in the US, the euro area and Japan (among others), offsetting losses in China, the UK, India and Brazil.

Price pressures eased further in March, as rates of increase in input costs and output charges slowed to 32- and 29-month lows respectively. For both price measures, rates of increase remained (on average) higher in developed nations compared to their emerging market counterparts.



## Comment

Bennett Parrish, Global Economist at J.P.Morgan, said:  
 “The March global manufacturing PMI suggests that output slipped slightly last month. That said, the PMI level remains consistent with soft global IP growth and hopes remain that the goods sector upturn that started early this year will be sustained as new order intakes stabilize and cost inflation and supply chain pressures ease further in coming months. Much will depend on whether the US and Euro area can maintain positive momentum, and if China can continue recovering once the initial boost from re-opening has abated. The signal from the bellwether Asian export economies was mixed In March.”

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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 [economic@ihsmarkit.com](mailto:economic@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.

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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	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	Daviyenda
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	Riyad Bank
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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