

Embargoed until 1100 EDT (1500 UTC) 1 June 2020

J.P.Morgan Global Manufacturing PMI™

Marked downturn in global manufacturing continues in May, although rate of contraction eases since April

Key findings

Output and new orders down sharply again

International trade flows suffer steep drop

Marked cutbacks in employment and purchasing

The global manufacturing downturn remained substantial during May, as the coronavirus disease 2019 (COVID-19) pandemic caused further disruption to industry and its supply chains. Although rates of contraction in output, new orders and employment all eased, they were still among the steepest registered during the 22-year survey history.

The J.P.Morgan Global Manufacturing PMI™ – a composite index produced by J.P.Morgan and IHS Markit in association with ISM and IFPSM – posted 42.4 in May, up from 39.6 in April. Rates of contraction for many of the survey variables, including output, new orders, new export business, quantity of purchases and future output remained at depths unseen outside of either the current pandemic or the global financial crisis of 08/09 (albeit less marked than April).

Please note that due to later release dates, final numbers for Indonesia, Ireland and the Netherlands were not available to include in the Global Manufacturing PMI calculation.

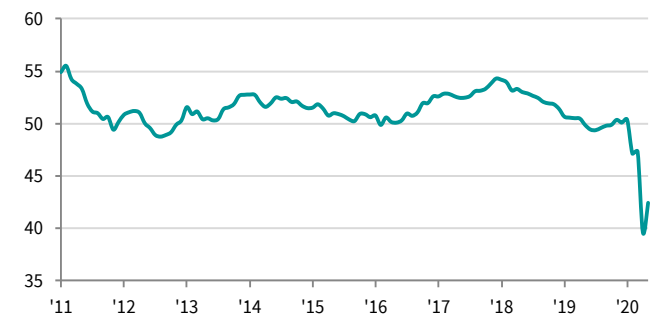
Global manufacturing production fell for the fourth straight month in May. The downturn remained widespread, with substantial decreases across the consumer, intermediate and investment goods sub-industries. Of the 28 nations for which May data were available, all except China (where growth was the highest since January 2011) saw manufacturing output contract. That said, only two (Japan and Australia) saw their rates of decline accelerate over the month.

Despite easing since April, the rate of contraction in new order intakes was the second-fastest since the 2008/09 global financial crisis. The decline was more widespread by nation than for output, however, with all 28 nations seeing reductions. Disruption to international trade flows also remained. New export business decreased to the third-greatest extent in the survey history, beaten only by the contractions in April 2020 (record drop) and December 2008.

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J.P.Morgan Global Manufacturing PMI™

sa, >50 = improvement since previous month

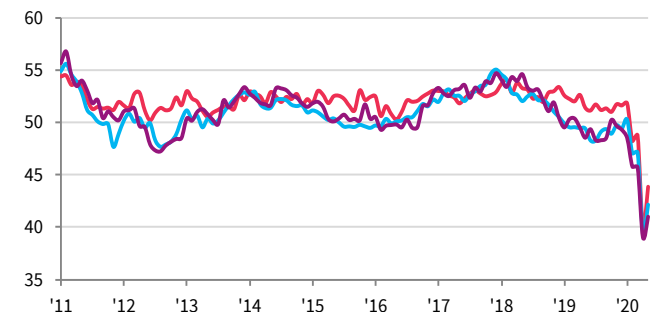


Sources: J.P.Morgan, IHS Markit.

PMI by goods sector

Consumer / Intermediate / Investment

sa, >50 = improvement since previous month

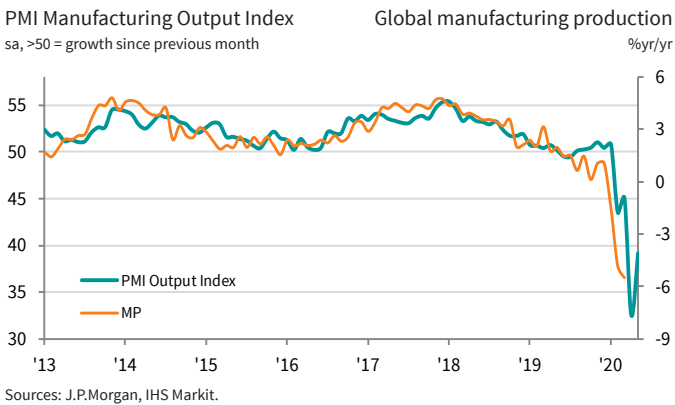


Sources: J.P.Morgan, IHS Markit.

Index summary

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

Index	Apr-20	May-20	Interpretation
PMI	39.6	42.4	Deterioration, slower rate
Output	32.5	39.2	Decline, slower rate
New Orders	31.5	36.3	Decline, slower rate
New Export Orders	27.1	32.2	Decline, slower rate
Future Output	47.1	52.1	Growth expected
Employment	41.5	43.2	Decline, slower rate
Input Prices	47.4	48.0	Decline, slower rate
Output Prices	46.8	47.9	Decline, slower rate

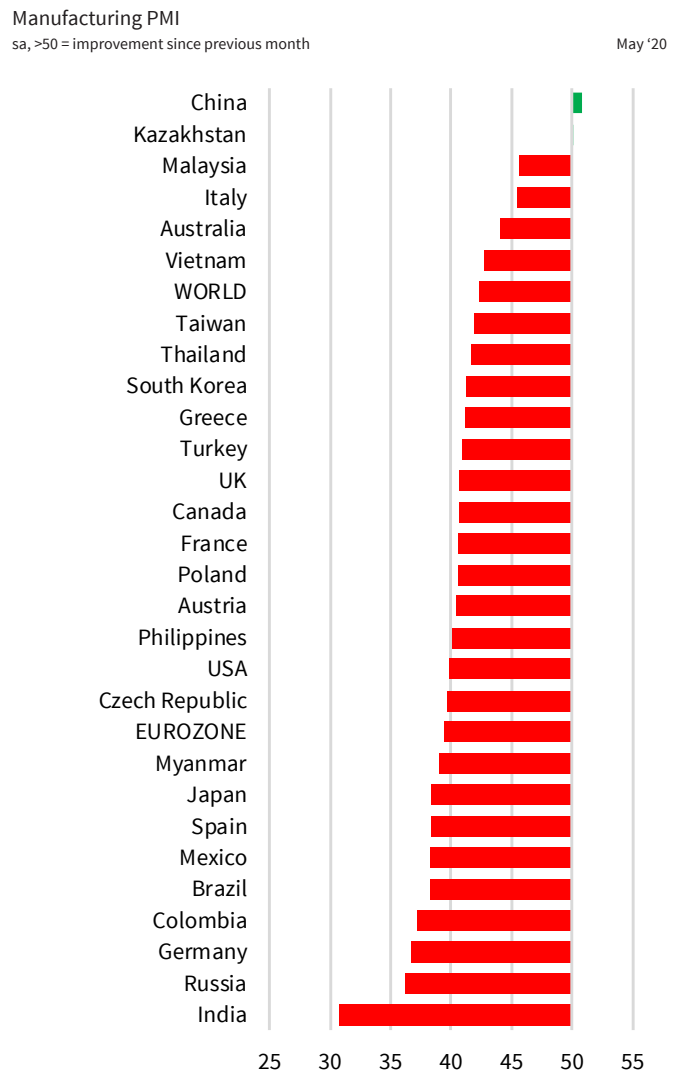


The ongoing marked downturn in global manufacturing activity led to sharp cutbacks in employment, purchasing and stock holdings during May. Supply chains also remained under severe stress, with average vendor lead times lengthening to one of the greatest extents in the survey history (albeit the weakest since February).

Employment fell at the second-quickest pace since mid-2009, with losses in almost all of the nations covered (no change in Kazakhstan being the exception). Among the world's major industrial regions, marked rates of reduction were seen in the US, the euro area, India, South Korea, Brazil and the UK. Japan and China only registered marginal job cuts.

Business sentiment remained subdued by the historical standards of the survey in May. Confidence was at its joint second-lowest level since trends in expected future activity were first tracked in July 2012. Companies anticipate a marginal increase in output over the next 12 months, a mild improvement on the contraction forecast in the April survey.

Input costs and output charges both decreased again during May. However, rates of decline were only moderate and weaker than those signalled in April.



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	Commonwealth Bank
Austria	IHS Markit	Unicredit Bank Austria / OPWZ
Brazil	IHS Markit	-
Canada	IHS Markit	-
China (mainland)	IHS Markit	Caixin
Colombia	IHS Markit	Daviyenda
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.

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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.

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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