

Embargoed until 1100 EST (1500 UTC) 1 April 2020

J.P.Morgan Global Manufacturing PMI™

Global manufacturing downturn continues in March

Key findings

Global Manufacturing PMI posts 47.6 in March

Downturn in manufacturing production deepens outside of China

Supplier lead times lengthen to greatest extent since June 2004

The outbreak of coronavirus disease 2019 (COVID-19) continued to cause disruption across the global manufacturing sector in March. Output fell sharply as intakes of new business contracted at the fastest pace since March 2009. The impact also reverberated through supply chains, with vendor lead times lengthening to a near-record extent, and in labour markets as companies cut staff headcounts. Business confidence slumped to a series-record low.

The J.P.Morgan Global Manufacturing PMI – a composite index produced by J.P.Morgan and IHS Markit in association with ISM and IFPSM – rose slightly to 47.6 in March, up from 47.1 in February. This was almost entirely due to a stabilisation of the China PMI (50.1, from 40.3 in February). The Global Excluding Mainland China PMI reading was 46.6 in March, its lowest level since May 2009.

Please note that due to a later release date, final numbers for the Mexico and India Manufacturing PMI surveys were not available to include in the Global PMI calculation.

Manufacturing production continued to fall at a substantial pace in March. Only China among the nations covered by the survey reported an increase in output, and even here this only represented a stabilization from a severe downturn in February. New order intakes contracted at the steepest pace since early-2009, with none of the nations covered seeing an increase. The trend in international trade flows was also substantially impaired, with new export business falling at the quickest pace in almost 11 years.

The downturn was widespread by sub-sector in March. Output, new orders and new export orders all contracted across the consumer, intermediate and investment goods

J.P.Morgan Global Manufacturing PMI™

sa, >50 = improvement since previous month

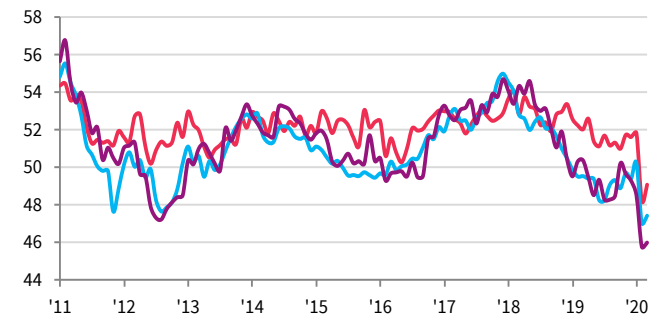


Sources: J.P.Morgan, IHS Markit.

PMI by goods sector

Consumer / Intermediate / Investment

sa, >50 = improvement since previous month



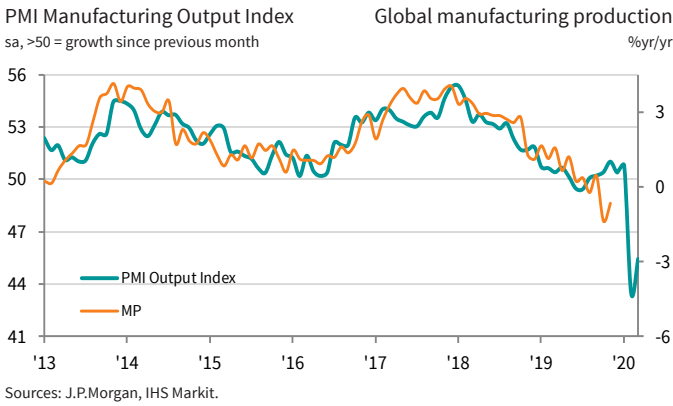
Sources: J.P.Morgan, IHS Markit.

Index summary

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

Index	Feb-20	Mar-20	Interpretation
PMI	47.1	47.6	Deterioration, slower rate
Output	43.5	45.4	Decline, slower rate
New Orders	45.2	43.8	Decline, faster rate
New Export Orders	44.9	43.3	Decline, faster rate
Future Output	60.8	52.3	Growth expected, lesser extent
Employment	47.2	47.5	Decline, slower rate
Input Prices	51.9	50.1	Inflation, slower rate
Output Prices	49.9	48.9	Decline, faster rate

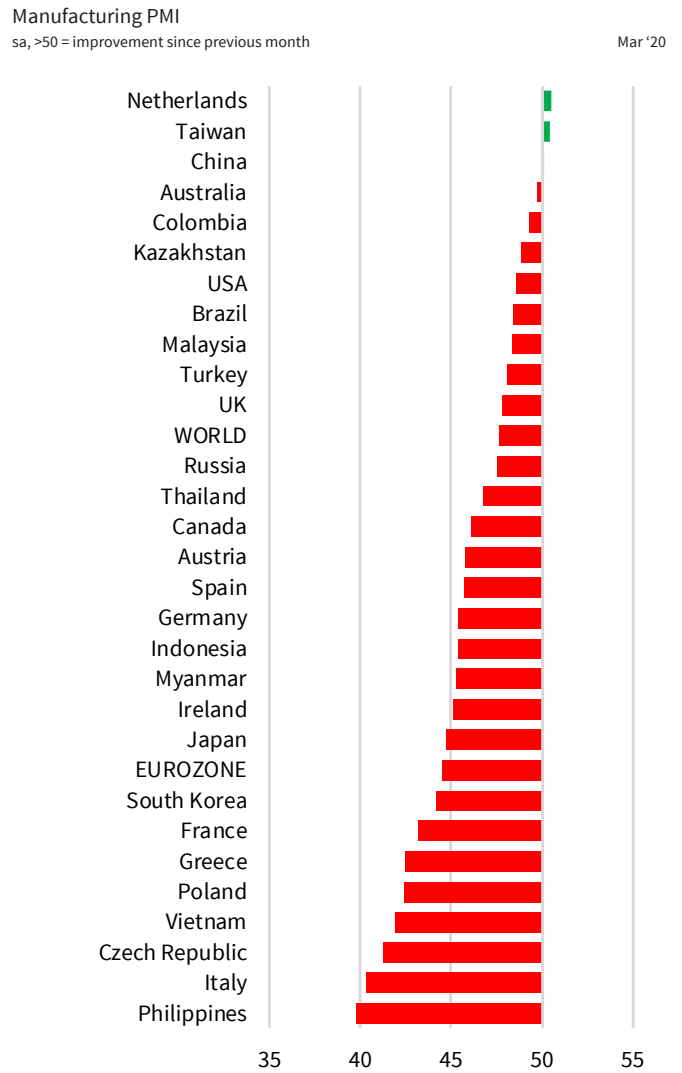
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industries. The steepest reductions in both production and new business intakes were registered at investment goods producers.

The downturn at global manufacturers led to further job losses. Employment fell for the fourth successive month, with the rate of decline staying close to February’s ten-and-a-half year record. Among the nations covered by the survey, only Taiwan, Turkey, Malaysia and Colombia reported increases in employment. Staffing levels were lowered across the consumer, intermediate and investment goods sectors.

The outbreak of COVID-19 put substantial stress on global supply chains during March. Transportation disruption, increased border restrictions and company closures all contributed to one of the steepest increases in average vendor lead times in the survey history. This was despite a decrease in the level of raw material purchasing undertaken by manufacturers. Stocks of both pre- and post-production inventories also fell during the latest survey month.



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

Methodology

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