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J.P.Morgan Global Manufacturing PMI™

Global manufacturing growth stays close to decade highs in December, but supply-chain pressures grow

Key findings

Manufacturing PMI at 53.8 in December

Output, new orders and new export business rise

Supply-chain stresses remain at near record levels

The end of 2020 saw rates of growth in global manufacturing production and new orders remain among the strongest seen over the past decade, as the sector continued to recover from the COVID-19 related downturn earlier in the year. However, world supply chains stayed severely stretched, leading to marked delays and disruption to raw material deliveries, production schedules and distribution timetables.

The J.P.Morgan Global Manufacturing PMI™ – a composite index produced by J.P.Morgan and IHS Markit in association with ISM and IFPSM – was unchanged from November's 33-month high of 53.8. The headline PMI has remained above the neutral 50.0 mark for six successive months.

Notes: Due to a later-than-usual release date, December 2020 data for Kazakhstan and Myanmar were not available for inclusion in the global figures.

December saw manufacturing production rise at a rate close to highs achieved over the past decade, despite easing slightly from the prior month. Germany, Brazil and India saw the strongest output growth, while expansions were also seen in most of the other large industrial regions including China, the US and the euro area (as a whole). Although Japan was a notable exception to the growth trend, it nonetheless saw output volumes stabilise following 23 months of decline.

Manufacturing new orders rose for the sixth successive month and at a solid pace in December. Signs of recovery and growth in most major domestic markets were accompanied by a fourth successive monthly increase in new export orders. The trend in employment remained subdued, however, with no change in staffing levels signalled. Job creation in the US and Japan (albeit only marginal in the latter case) were offset by slight drops in staff headcounts in China, the euro area and the UK.

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J.P.Morgan Global Manufacturing PMI™

sa, >50 = improvement since previous month

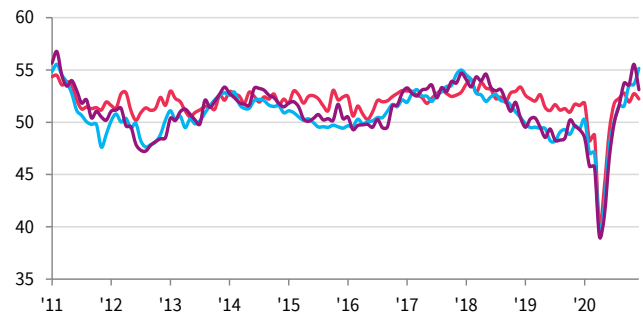


Sources: J.P.Morgan, IHS Markit.

PMI by goods sector

Consumer / Intermediate / Investment

sa, >50 = improvement since previous month

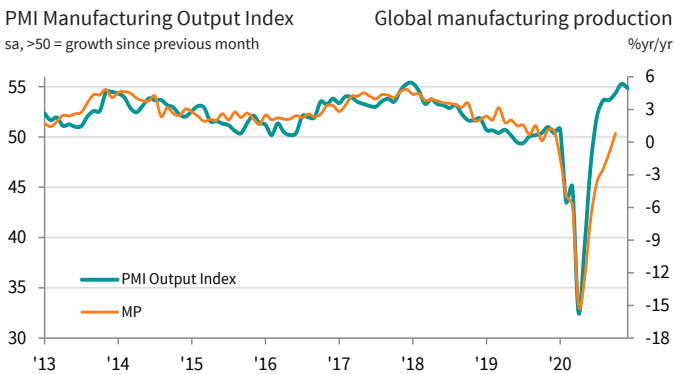


Sources: J.P.Morgan, IHS Markit.

Index summary

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

| Index | Nov-20 | Dec-20 | Interpretation |
|-------------------|--------|--------|-----------------------------------|
| PMI | 53.8 | 53.8 | Improvement, same rate |
| Output | 55.3 | 54.9 | Growth, slower rate |
| New Orders | 55.1 | 54.5 | Growth, slower rate |
| New Export Orders | 51.7 | 51.1 | Growth, slower rate |
| Future Output | 65.3 | 64.7 | Growth expected, weaker sentiment |
| Employment | 50.1 | 50.0 | No change, from rising |
| Input Prices | 57.5 | 60.9 | Inflation, faster rate |
| Output Prices | 53.2 | 54.5 | Inflation, faster rate |



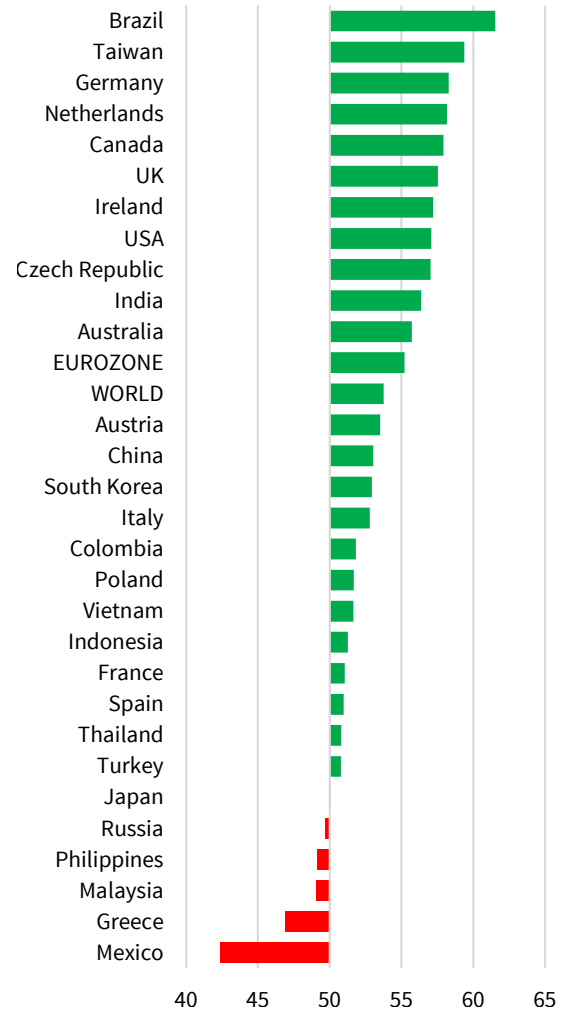
Supply chains were severely stretched in December, as they struggled to fully recover following the disruptions caused by the global pandemic. Average supplier lead times lengthened to the greatest degree since April and to one of the greatest extents in the survey history. Purchasing activity rose for the fifth successive month, while inventory holdings at manufacturers fell further.

Price inflationary pressures continued to build in December. Average input costs rose at the fastest pace since July 2018, a key factor underlying the steepest increase in selling prices for two-and-a-half years. Global manufacturers meanwhile maintained a positive outlook for their performance over the year ahead, although the degree of optimism dipped slightly from November's high.

Sector summary

Broad-based growth of output and new orders was registered across the consumer, intermediate and investment goods industries in December, although the consumer goods category tended to fare less well than the other sectors. Job creation at intermediate goods producers was offset by reduced headcounts in the consumer and investment goods industries. In all three cases, severe lengthening of supplier lead times was signalled.

Manufacturing PMI
sa, >50 = improvement since previous month
Dec '20



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

Comment

Olya Borichevska, Global Economist at J.P.Morgan, said:

“The global industrial sector finished 2020 with strong performance as the global output PMI inched down a touch to a solid level of 54.9 in December. This was a positive development in the face of virus spreading which has forced many countries to put back in place activity restrictions. The trend in employment stabilised, providing welcome respite to the jobs market.”

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 | - |
| 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 | 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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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.

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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