

PMI Quarterly on China Manufacturing

PMI 4Q24

Recovery in the manufacturing sector

Policy Outlook

China to ramp up policy support for the economy and announce specific policy details soon

1Q25 Forecasts

GDP growth to come in at 4.8% yoy while PMI to fluctuate around 50.0

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PMI points to a recovery in the manufacturing sector in 4Q24

Our observations

- Large and medium enterprises expand while small enterprises continue to contract but start to stabilize.
- Manufacturing output expands steadily.
- Overall market demand picks up.
- Manufacturers lower ex-factory prices of their products amid falling input prices.
- Employment in manufacturing sector slightly decreases.

Policy outlook

- Two important meetings in December 2024 have set the tone for China’s economic policy in 2025 as ‘more proactive and effective’.
- We expect the Chinese government to continue ramping up policy support for the economy and announce specific policy details in the coming weeks, which will help the Chinese economy navigate internal and external challenges.

Our forecasts for 1Q25

- We project a steady growth in manufacturing production.
- Headline PMI will fluctuate around 50.0 due to distortions caused by the Chinese New Year holiday.
- VAIO growth will reach 5.0%-5.5% yoy.
- Real GDP growth will come in at 4.8% yoy.
- Exports will register a low single-digit year-on-year rise.
- Year-on-year growth rates for the purchaser price index and the PPI will go up, due to a recent rebound in global commodity prices and a low comparison base in 1Q24.

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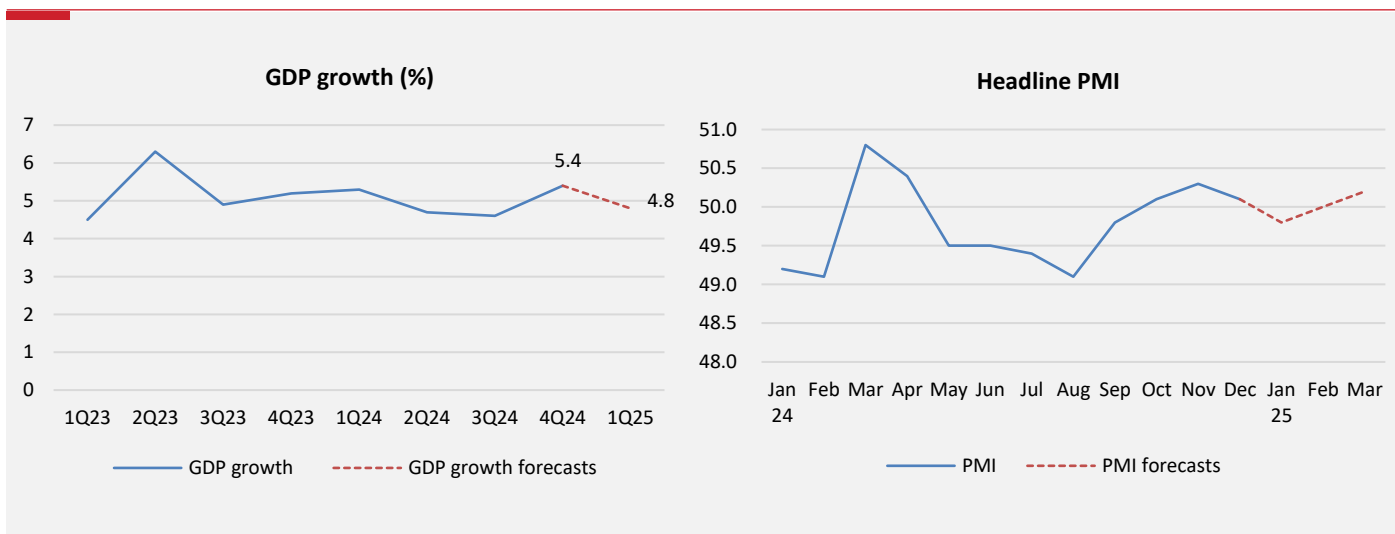
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1. PMI points to a recovery in the manufacturing sector in 4Q24

China's manufacturing sector in 4Q24

China's manufacturing PMI rose from 49.8 in September to 50.1 in October and further to 50.3 in November, before retreating to 50.1 in December. The headline PMI remained in the expansionary territory throughout the fourth quarter, indicating a recent recovery in China's manufacturing sector. (See exhibit 1)

Production activities continued to expand steadily during the quarter, with the output index staying above 52.0 from October to December. This expansion was supported by an improvement in overall market demand: The new orders index increased from 50.0 in October to 50.8 in November and 51.0 in December.

Prices of industrial products continued to decline, as the ex-factory prices index remained below the watershed level of 50 throughout the quarter. The drop in product prices was partly attributed to a decrease in material prices: The input prices index dipped into the contractionary territory in November and has remained there since.

Exhibit 2 shows the contributions of the sub-indices to the change in the headline PMI. The increase in the headline PMI in 4Q24 was mainly driven by the rise in the new orders index (which weighs 30% in the computation of the headline PMI) and the output index (which weighs 25%). Among the 12 sub-indices (i.e., excluding the suppliers' delivery time index), the indices of output, new orders, and business expectations have remained in the expansionary zone over the past three months. Meanwhile, the indices of new export orders, backlogs of orders, stocks of finished goods, stocks of major inputs, imports, ex-factory prices, and employment have remained in the contractionary zone throughout the quarter. (See exhibit 3)

Policy outlook

Two important meetings in December 2024 have set the tone for China's economic policy in 2025.

On 9 December, a meeting of the Political Bureau of the Communist Party of China Central Committee was held. The meeting proposed 'implementing a more proactive fiscal policy and a moderately loose monetary policy' and 'strengthening unconventional counter-cyclical adjustments'. These mark a significant departure from the longstanding policy mix of 'proactive fiscal policy and prudent monetary policy' that had been in place for over a decade, signalling a major shift in macro policy attitude and a more active policy approach.

We project that China's real GDP growth will register 4.8% yoy in 1Q25, as the latest stimulus package continues to boost business confidence and help the Chinese economy navigate challenges.

The Central Economic Work Conference took place on 11-12 December 2024. It set the tone for China's macro policies in 2025 as 'more proactive and effective' and provided guidance on specific policy details. Regarding the economic work this year, the meeting called for efforts to pursue progress while maintaining stability, and to consolidate stability through progress. The policy toolkit should be enriched and improved, and macro regulation should be more forward-looking, targeted and effective. The meeting reiterated that the Chinese government should implement a more proactive fiscal policy, with plans to raise the budget deficit and increase the issuance of ultra-long special treasury bonds. A moderately loose monetary policy should be adopted, including pledges to lower the required reserve ratio and interest rates at an appropriate time and to maintain ample liquidity.

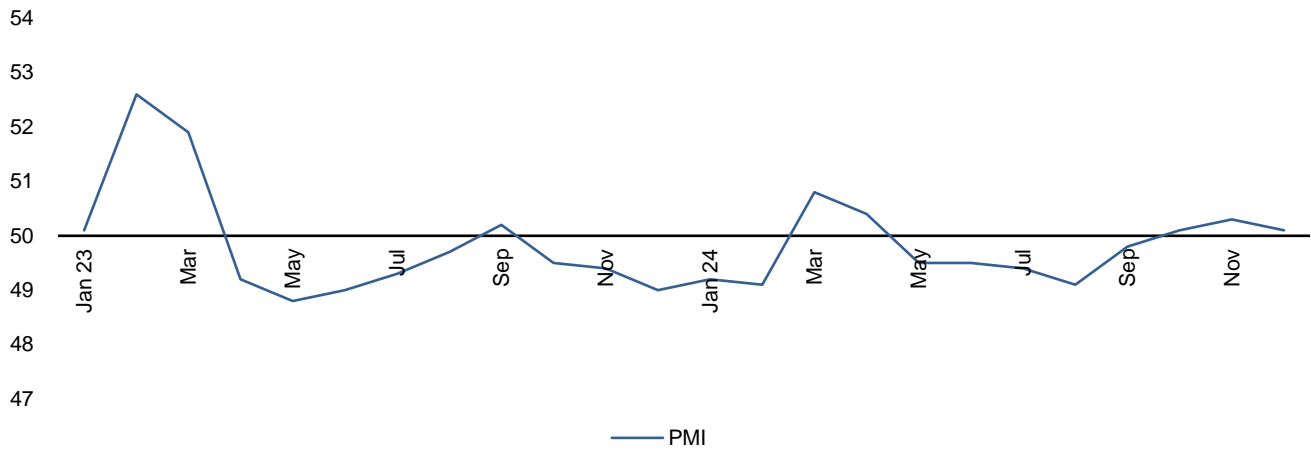
Looking ahead, we expect the Chinese government to continue ramping up policy support for the economy and announce specific policy details in the coming weeks, which will help the Chinese economy navigate internal and external challenges.

Forecasts for 1Q25

China's industrial production is expected to continue its steady growth in the near term, supported by the latest stimulus measures aimed at boosting the economy and a rise in the exports of manufactured goods. Overall, we predict that China's industrial production growth will reach 5.0%-5.5% yoy in 1Q25. Meanwhile, the headline PMI is likely to fluctuate around 50.0, due to distortions caused by the Chinese New Year holiday.

Exhibit 4 plots the quarterly real GDP growth rates versus the monthly PMIs since January 2020. We project that China's real GDP growth will come in at 4.8% yoy in 1Q25, as the latest stimulus package continues to bolster business confidence and help the Chinese economy pick up steam.

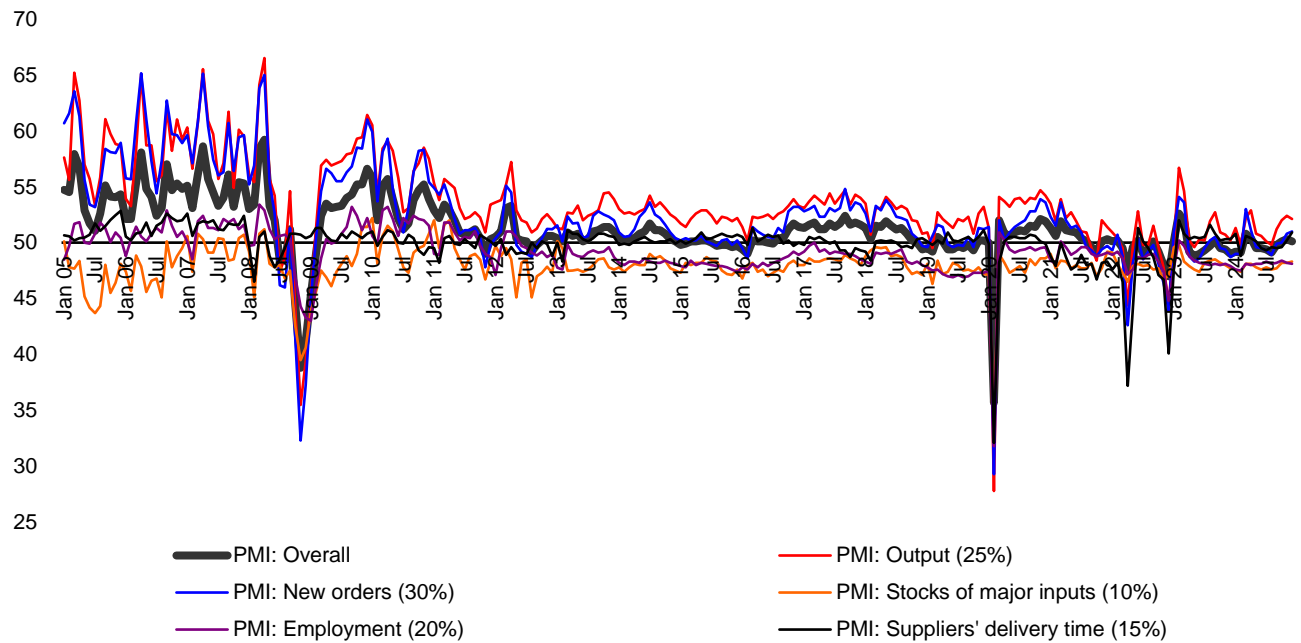
Exhibit 1: Headline PMI, January 2023 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

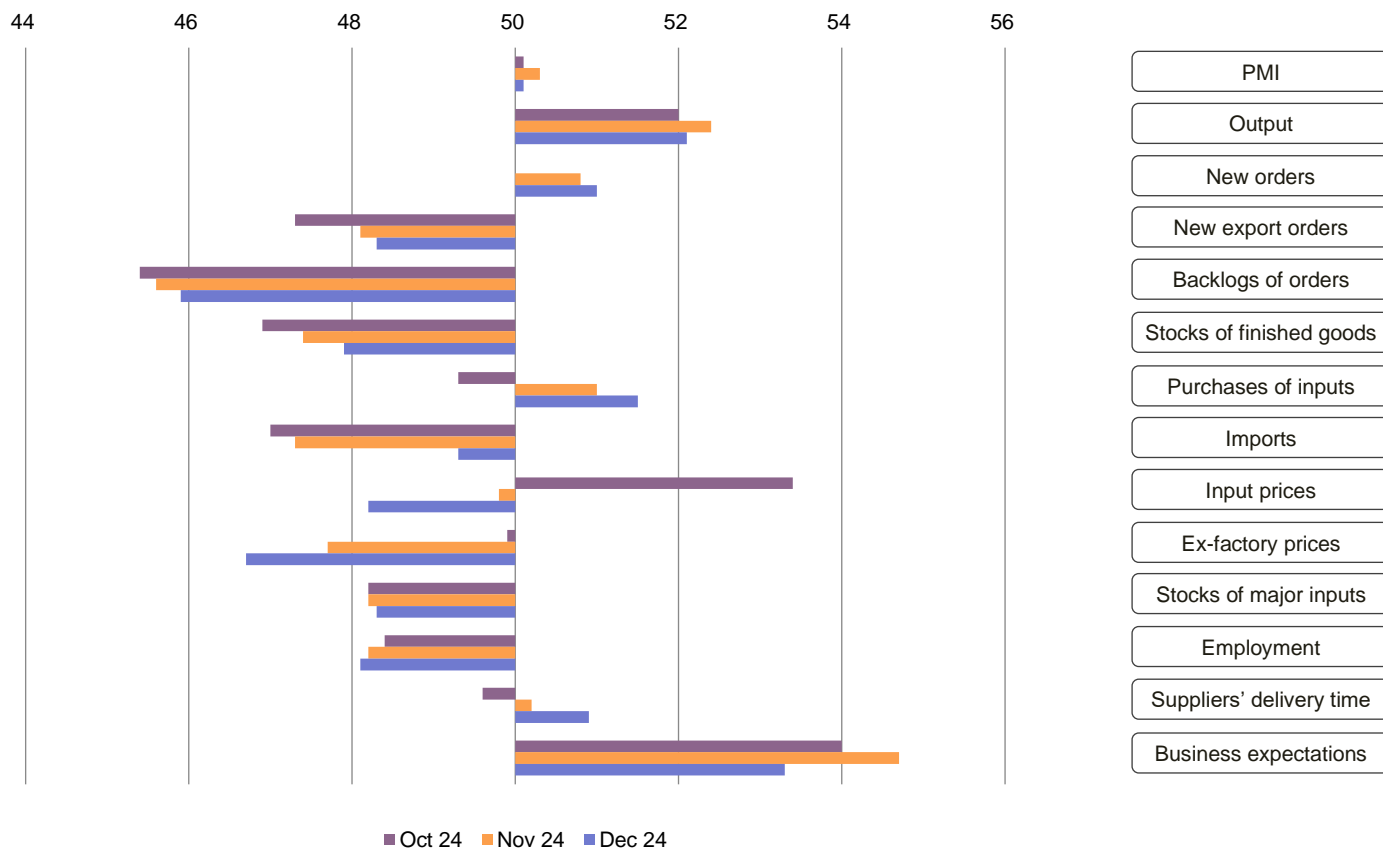
Exhibit 2: Headline PMI and sub-indices, January 2005 to December 2024

$$PMI = Output \times 25\% + New\ Orders \times 30\% + Stocks\ of\ Major\ Inputs \times 10\% + Employment \times 20\% + (100 - Suppliers'\ Delivery\ Time) \times 15\%$$



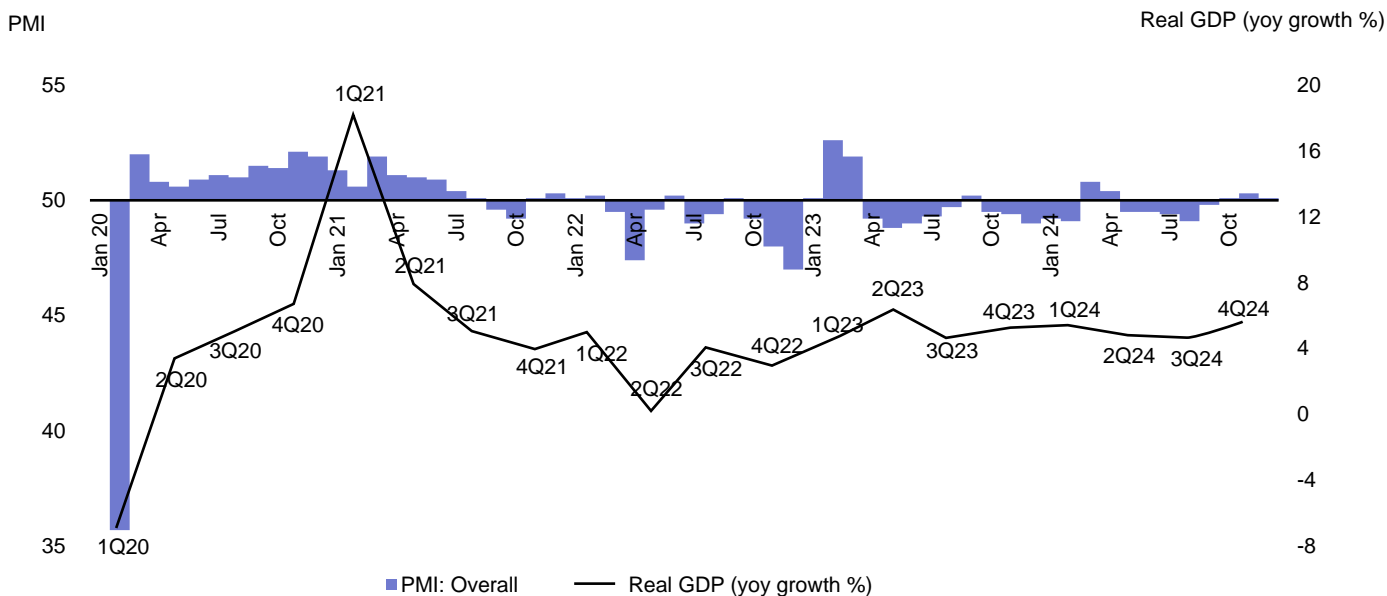
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 3: Headline PMI and all sub-indices, October to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 4: Headline PMI and real GDP growth, January 2020 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

2. What the PMI tells us about the performance of enterprises of different sizes

Large and medium enterprises expand

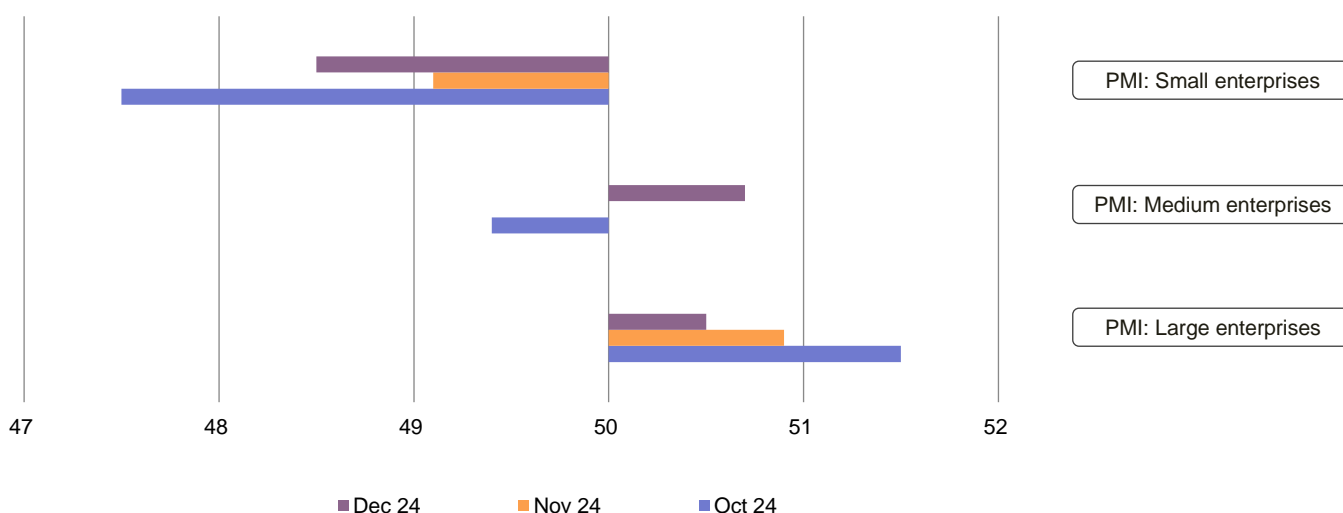
The PMI of 'large enterprises' fell from 51.5 in October to 50.9 in November and then to 50.5 in December. The index readings remained above the critical 50-mark but continued to decline throughout the quarter, indicating a slower but ongoing expansion of 'large enterprises'. Meanwhile, the PMI of 'medium enterprises' went up from 49.4 in October to 50.0 in November and then to 50.7 in December, suggesting that 'medium enterprises' have recently resumed expansion.

Although small enterprises have experienced sustained contraction, the improvement in recent months is a positive sign of stabilization.

Small enterprises contract at a slower pace

The PMI of 'small enterprises' rebounded from 47.5 in October to 49.1 in November, before retreating to 48.5 in December. The latest index reading is still in the contractionary territory but indicates some stabilization, as the extent of the contraction has eased compared with the period from May to October. (See exhibit 5)

Exhibit 5: PMIs of large enterprises, medium enterprises and small enterprises, October to December 2024



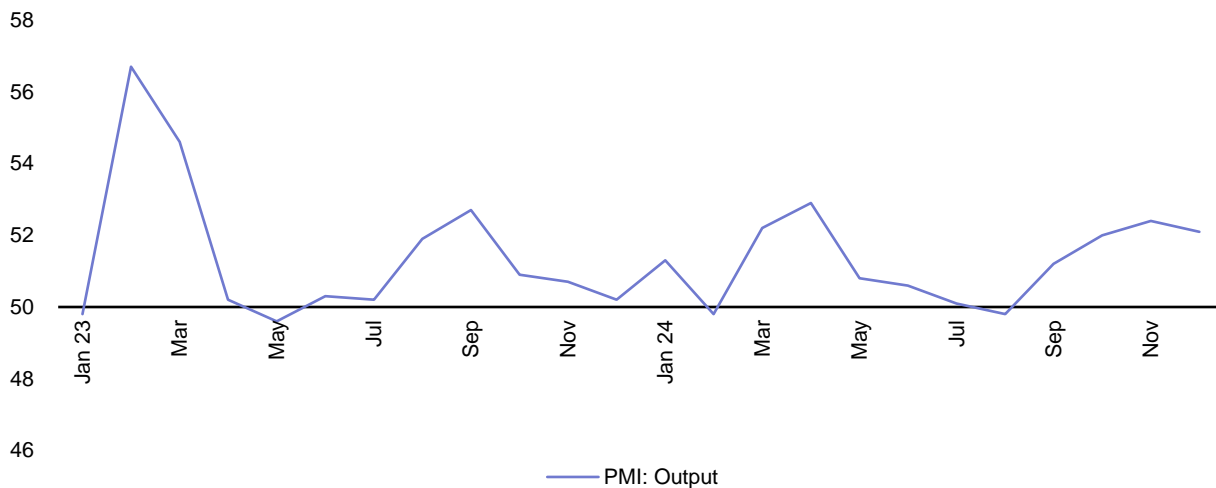
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

3. What the PMI tells us about manufacturing production

Manufacturing output expands steadily

The output index remained markedly above the neutral level of 50, fluctuating between 52.0 and 52.4 from October to December. These index readings indicate a steady expansion in manufacturing production in recent months. (See exhibit 6)

Exhibit 6: Output index, January 2023 to December 2024



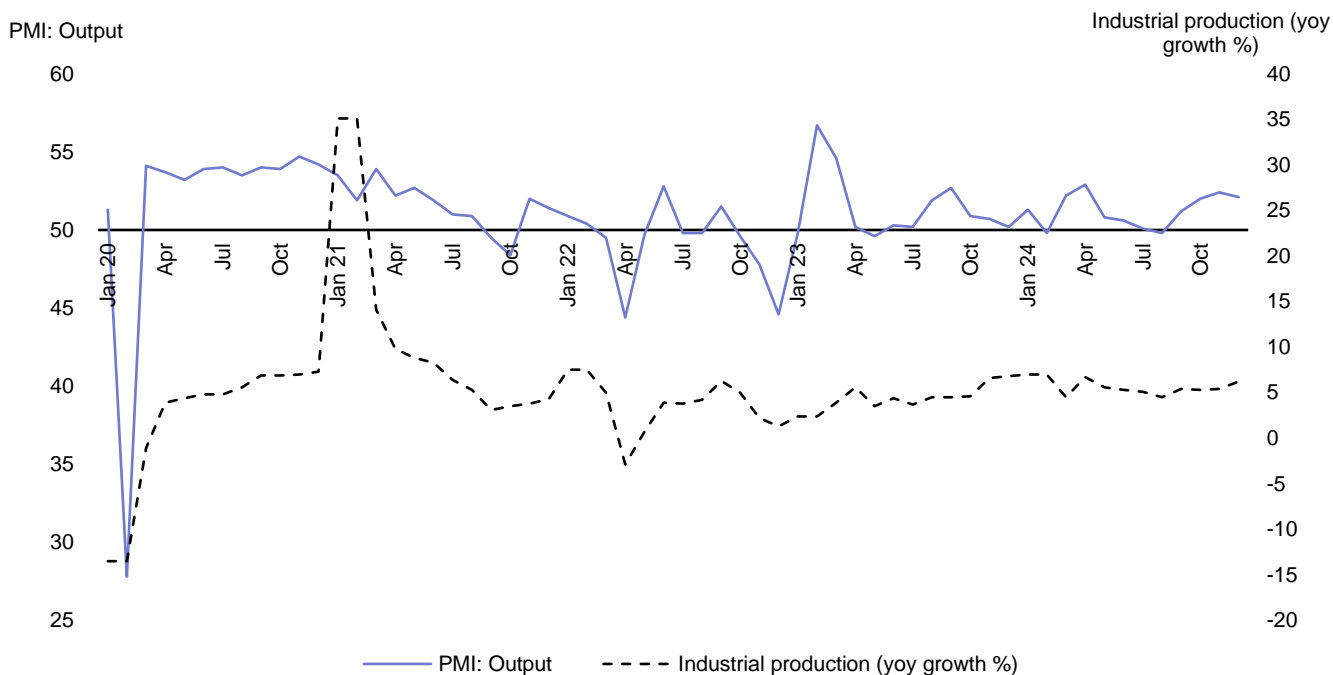
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Manufacturing production expected to maintain steady growth in 1Q25

Exhibit 7 illustrates the correlation (with some lags) between the output index and the year-on-year growth of value-added of industrial output (VAIO). Given the extensive stimulus measures to shore up economic growth and an increase in the exports of manufactured goods, we project that China’s VAIO will maintain a steady growth rate of 5.0%-5.5% yoy in 1Q25. Still, challenges facing Chinese manufacturers include a possible escalation in the China-US trade war, a sluggish growth in advanced economies, the government’s strong commitment to reducing industrial carbon emissions, and intense competition in the international market.

We project that China’s VAIO will maintain a steady growth rate of 5.0%-5.5% in 1Q25, given the extensive stimulus measures to shore up economic growth and an increase in the exports of manufactured goods.

Exhibit 7: Output index and industrial production growth, January 2020 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

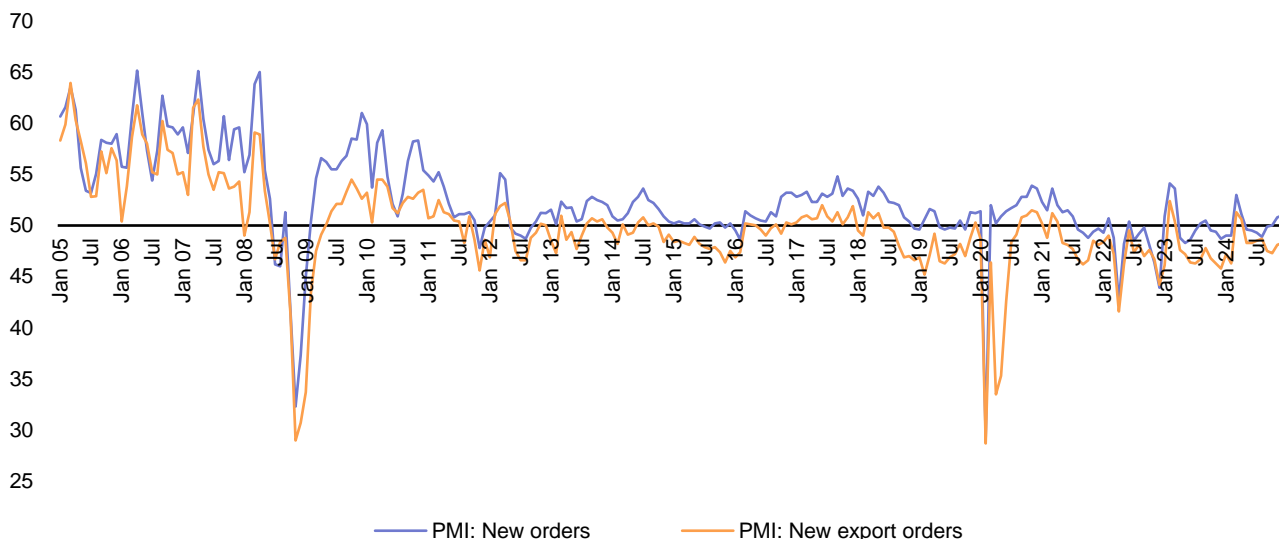
4. What the PMI tells us about overall market demand

Overall market demand picks up

The new orders index increased from 50.0 in October to 50.8 in November and 51.0 in December. The latest index readings have returned to the expansionary zone, indicating a steady pickup in overall market demand recently.

Meanwhile, the new export orders index rose from 47.3 in October to 48.1 in November and 48.3 in December, suggesting a continued but smaller decline in new export orders lately. (See exhibit 8)

Exhibit 8: New orders index and new export orders index, January 2005 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

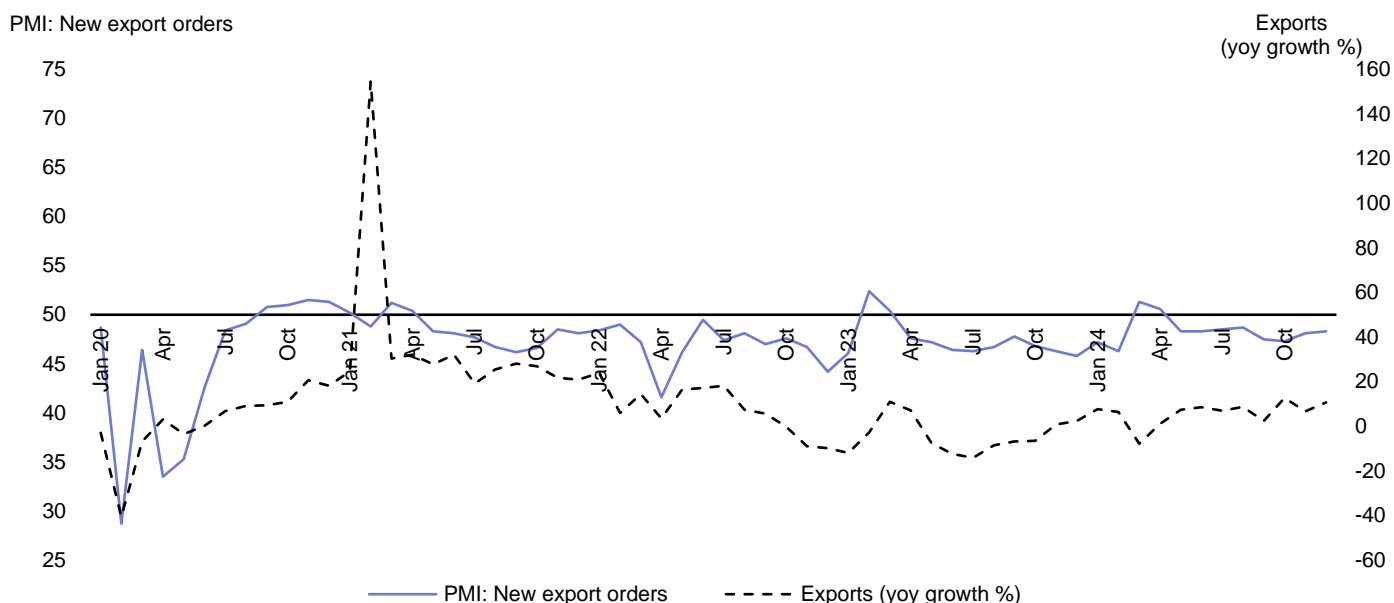
Sustained recovery in external demand bodes well for exports in 1Q25

Exhibit 9 plots the new export orders index against the year-on-year growth rates of China’s exports. From exhibit 10, we can see that the new export orders index has been strongly correlated to the external economies. The OECD’s G20 composite leading indicator¹ has continued to go up in recent months, suggesting a sustained recovery in external demand for China’s exports. Additionally, China’s exports are being boosted by a rush to ship goods to the US ahead of potential tariffs from the Trump administration. Overall, we forecast that China’s exports will register a low single-digit year-on-year increase in 1Q25.

We forecast that China’s exports will register a low single-digit year-on-year increase in 1Q25, amid an improving external demand and a rush to ship goods to the US ahead of potential tariffs from the Trump administration.

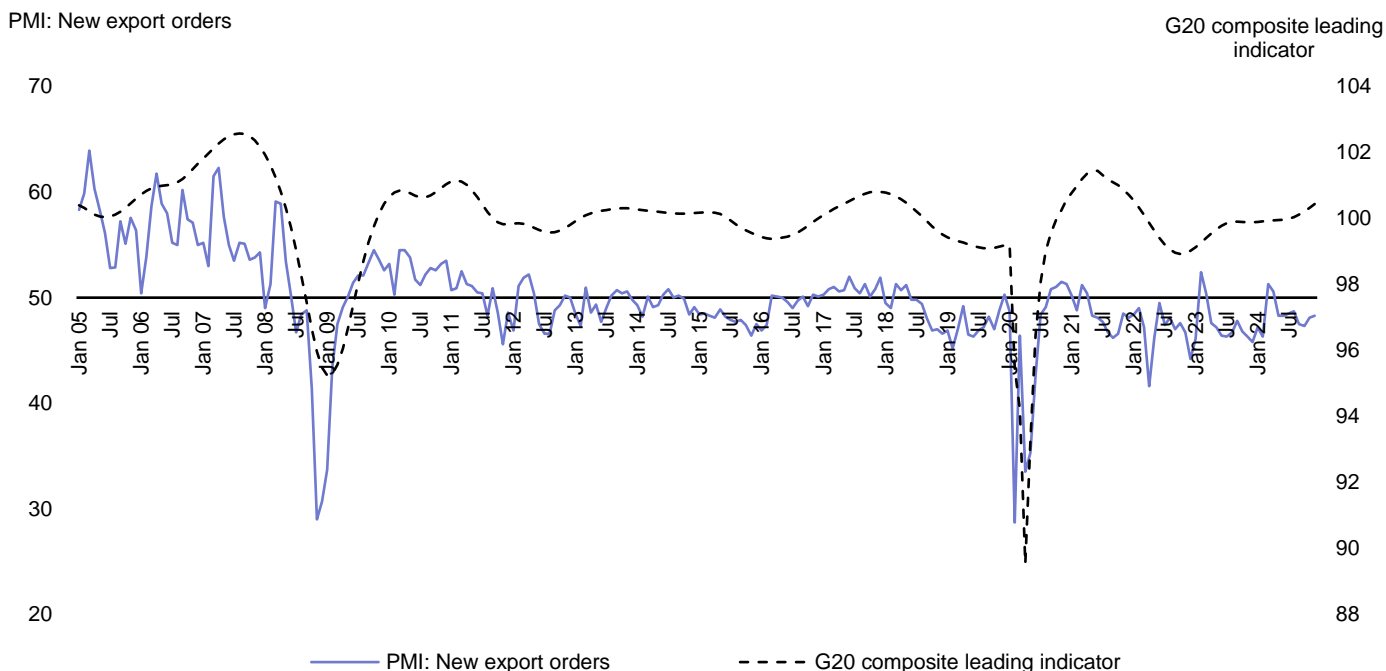
¹ The G20 composite leading indicator, compiled by the Organization for Economic Cooperation and Development (OECD), is designed to provide early signals of turning points (peaks and troughs) between expansions and slowdowns of economic activity, and covers Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, South Africa, Turkey, UK, and the US.

Exhibit 9: New export orders index and export growth, January 2020 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, China Customs

Exhibit 10: New export orders index and G20 composite leading indicator, January 2005 to December 2024



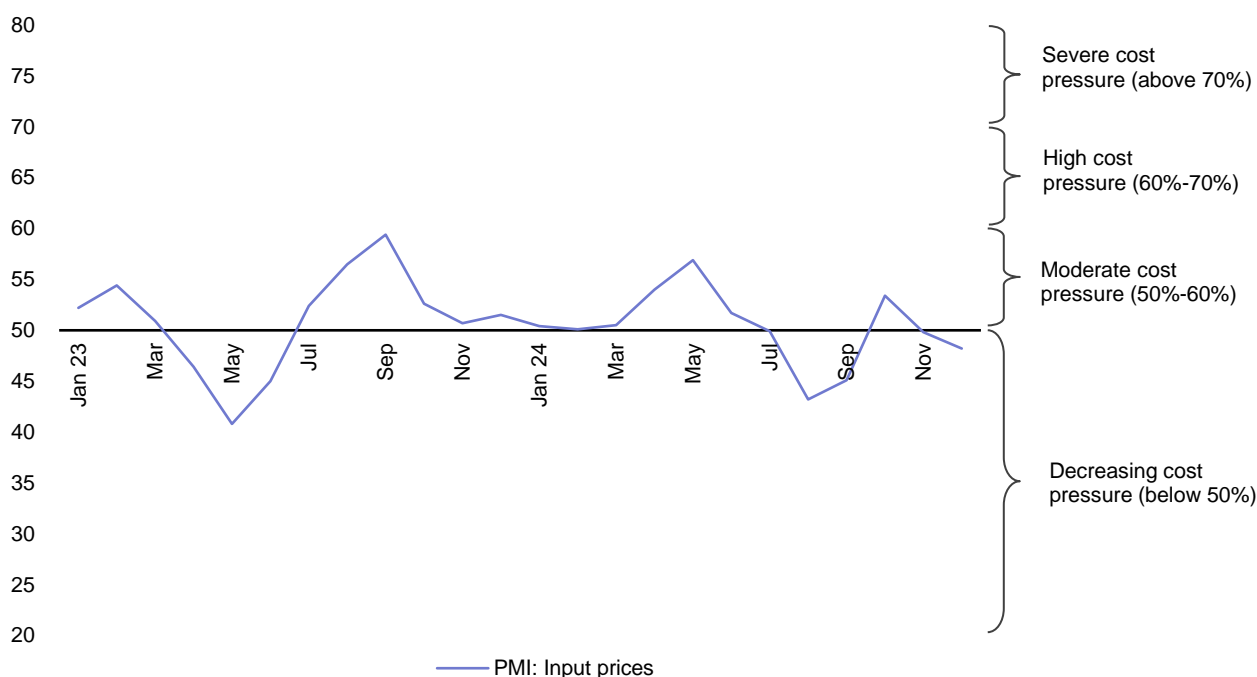
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Organization for Economic Cooperation and Development

5. What the PMI tells us about upstream and midstream prices

Cost pressure on Chinese manufacturers eases amid falling upstream prices

The input prices index decreased from 53.4 in October to 49.8 in November and further to 48.2 in December. The index readings have fallen below the neutral level of 50, indicating a decline in production input prices lately. Manufacturers continued to experience a drop in the costs of major inputs.

Exhibit 11: Input prices index, January 2023 to December 2024



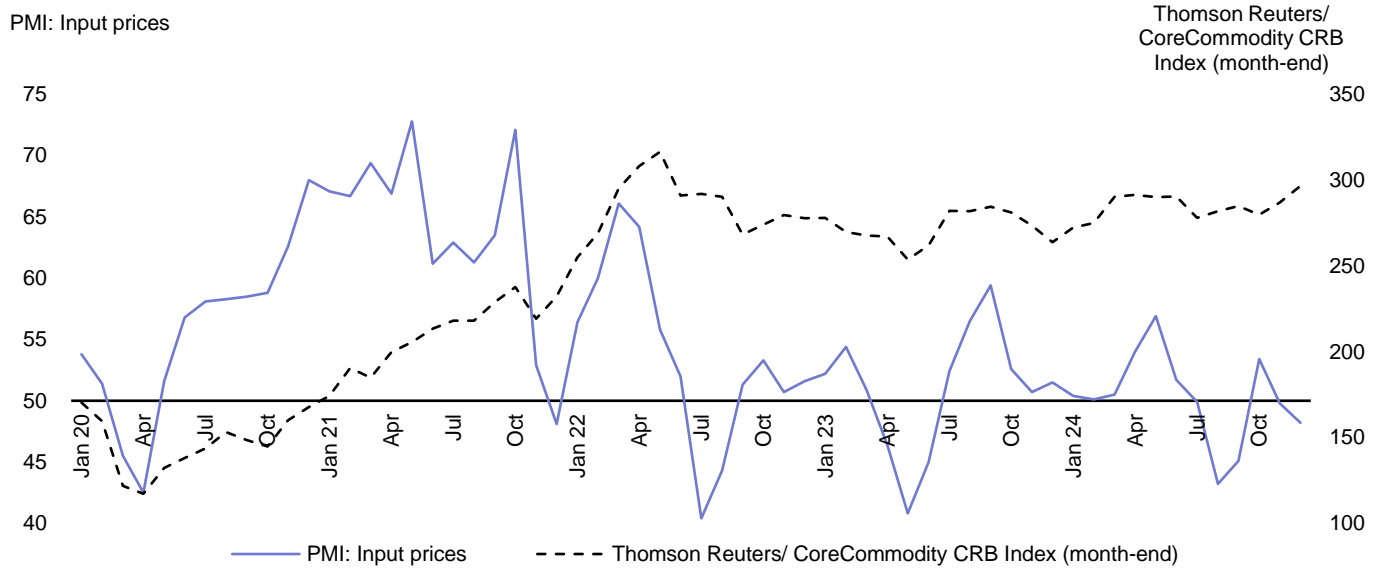
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

To see the extent to which input costs of Chinese manufacturers are affected by global commodity prices, exhibit 12 puts together the input prices index and the Thomson Reuters/ CoreCommodity CRB index.²

The decreasing input costs for Chinese manufacturers are primarily due to a retreat in the prices of crude oil and metals from October to December.

² The Thomson Reuters/ CoreCommodity CRB Index, which comprises 19 commodities such as crude oil, aluminum, corn, cotton, gold, natural gas, soybeans, etc, has served as one of the most recognized measures of global commodity prices.

Exhibit 12: Input prices index and Thomson Reuters/ CoreCommodity CRB Index, January 2020 to December 2024

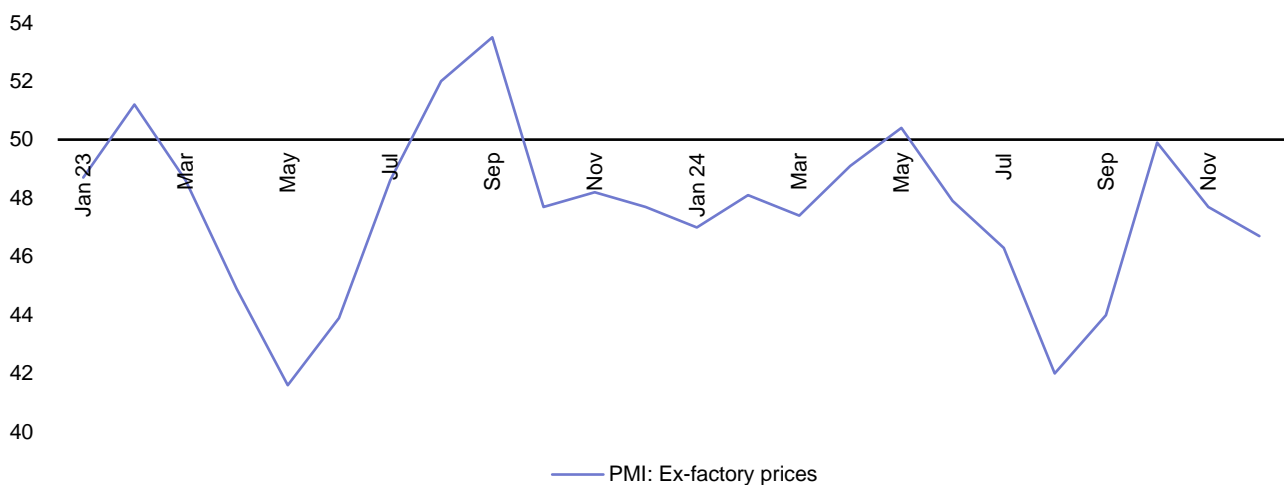


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Thomson Reuters

Manufacturers lower ex-factory prices of their products

The ex-factory prices index dropped from 49.9 in October to 47.7 in November and 46.7 in December. The index readings have remained in the contractionary territory since June, indicating that Chinese manufacturers have been continuously lowering the ex-factory prices of their finished products.³

Exhibit 13: Ex-factory prices index, January 2023 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

³ The ex-factory prices index has been released since January 2017.

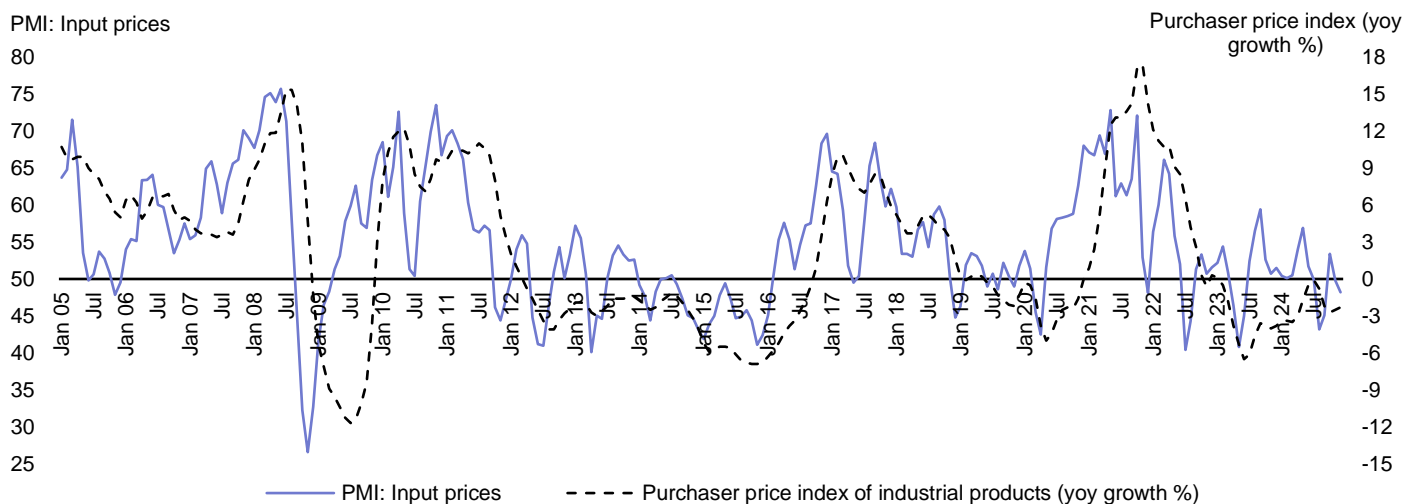
Growth in input prices and ex-factory prices expected to go up in 1Q25

Exhibit 14 shows that the input prices index serves as a useful leading indicator of upstream prices. To demonstrate the association between the input prices index and ‘midstream’ prices, we plot the input prices index against the year-on-year growth of the producer price index (PPI)⁴ in exhibit 15.

Looking ahead, we expect that the year-on-year growth rates for both the purchaser price index and the PPI will go up in 1Q25, due to a recent rebound in global commodity prices and a low comparison base in 1Q24.

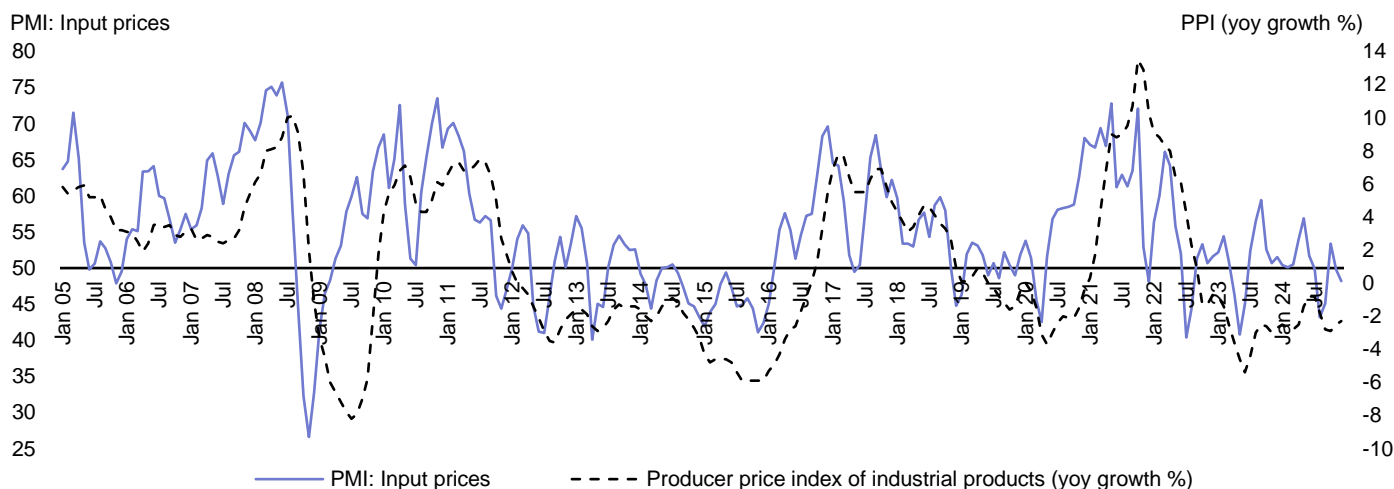
We expect that the year-on-year growth rates for both the purchaser price index and the PPI will go up in 1Q25, due to a recent rebound in global commodity prices and a low comparison base in 1Q24.

Exhibit 14: Input prices index and purchaser price index of industrial products, January 2005 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 15: Input prices index and producer price index, January 2005 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

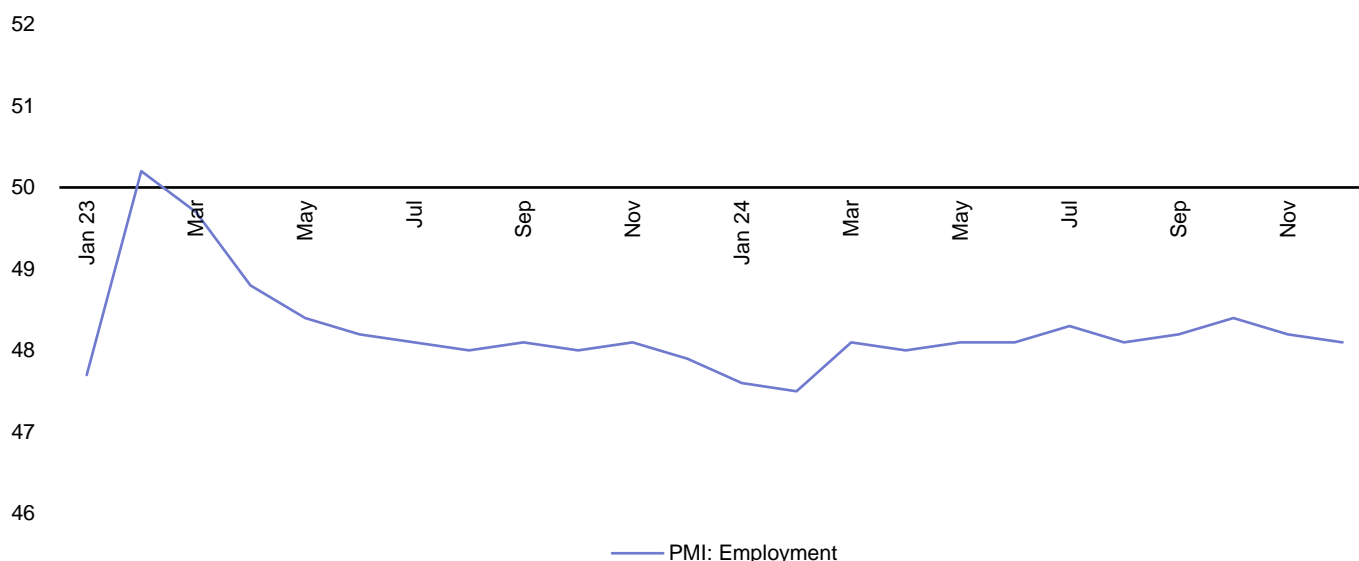
⁴ The producer price index of industrial goods (PPI), compiled by China National Bureau of Statistics, measures the prices of industrial products when they are sold for the first time after production.

6. What the PMI tells us about manufacturing employment

Employment in the manufacturing sector slightly decreases

The employment index has remained low, hovering between 48.0 to 48.4 in recent months. The index readings indicate that employment in the manufacturing sector has slightly decreased lately. (See exhibit 16)

Exhibit 16: Employment index, January 2023 to December 2024

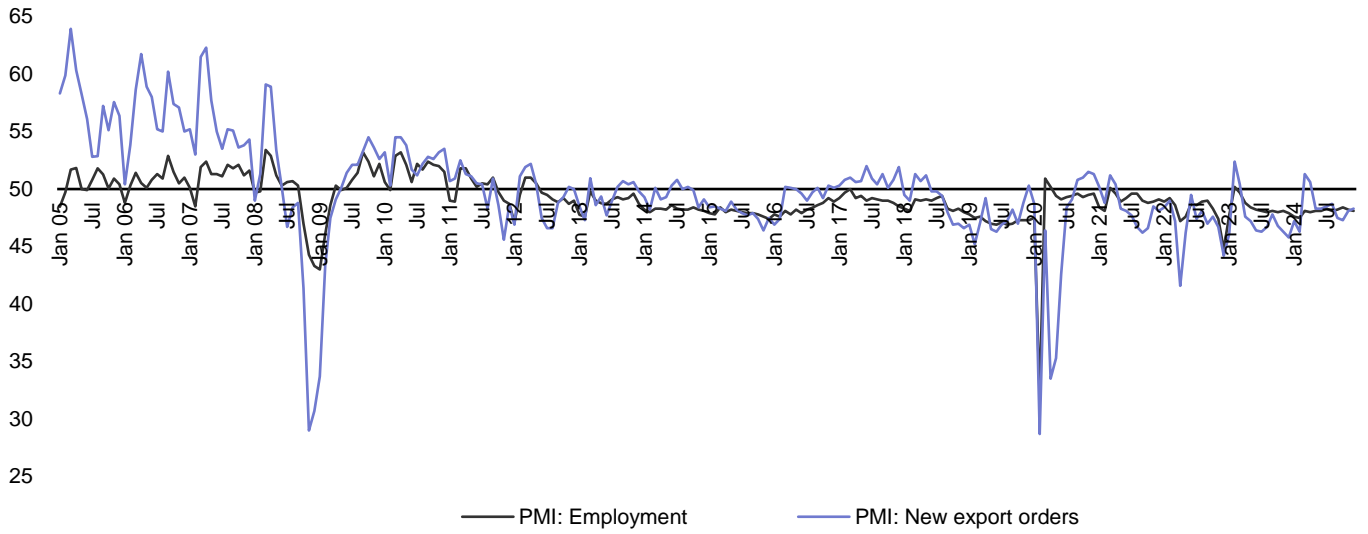


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 17 shows that the employment in China’s manufacturing sector heavily relies on the export sector. Exhibit 18 and 19 provide insights into how the employment situation improves or deteriorates in relation to the manufacturing sector and the overall economy. Given a steady growth in the export sector and the overall Chinese economy, we expect the employment situation in the manufacturing sector to stabilize in 1Q25.

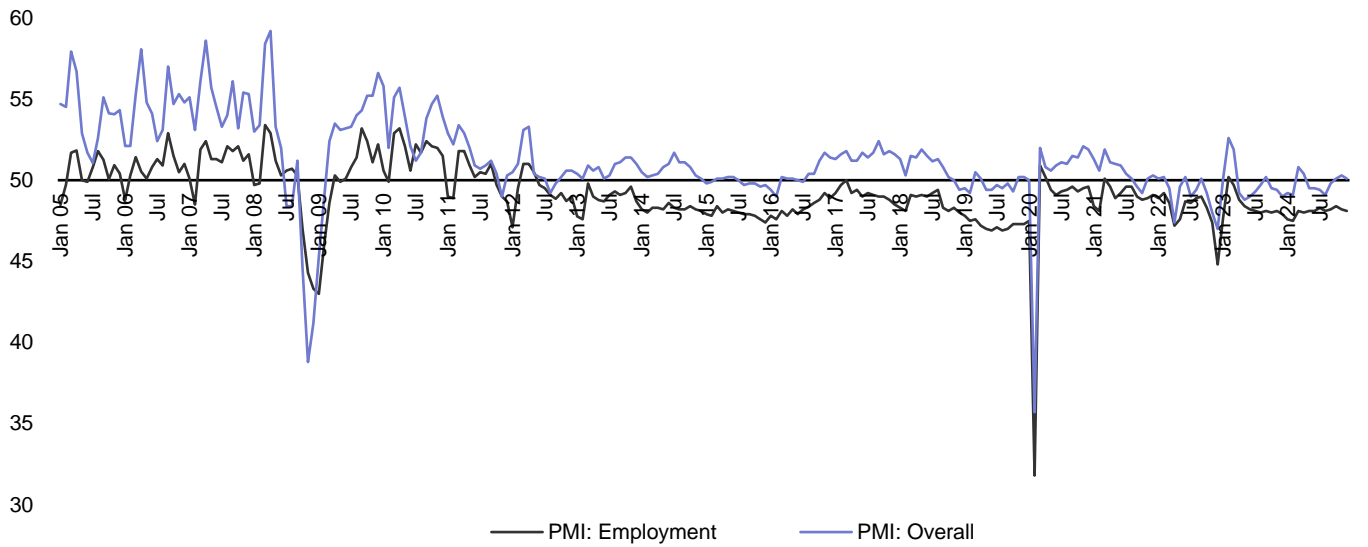
Given a steady growth in in the export sector and the overall Chinese economy, we expect the employment situation in the manufacturing sector to stabilize in 1Q25.

Exhibit 17: Employment and new export orders, January 2005 to December 2024



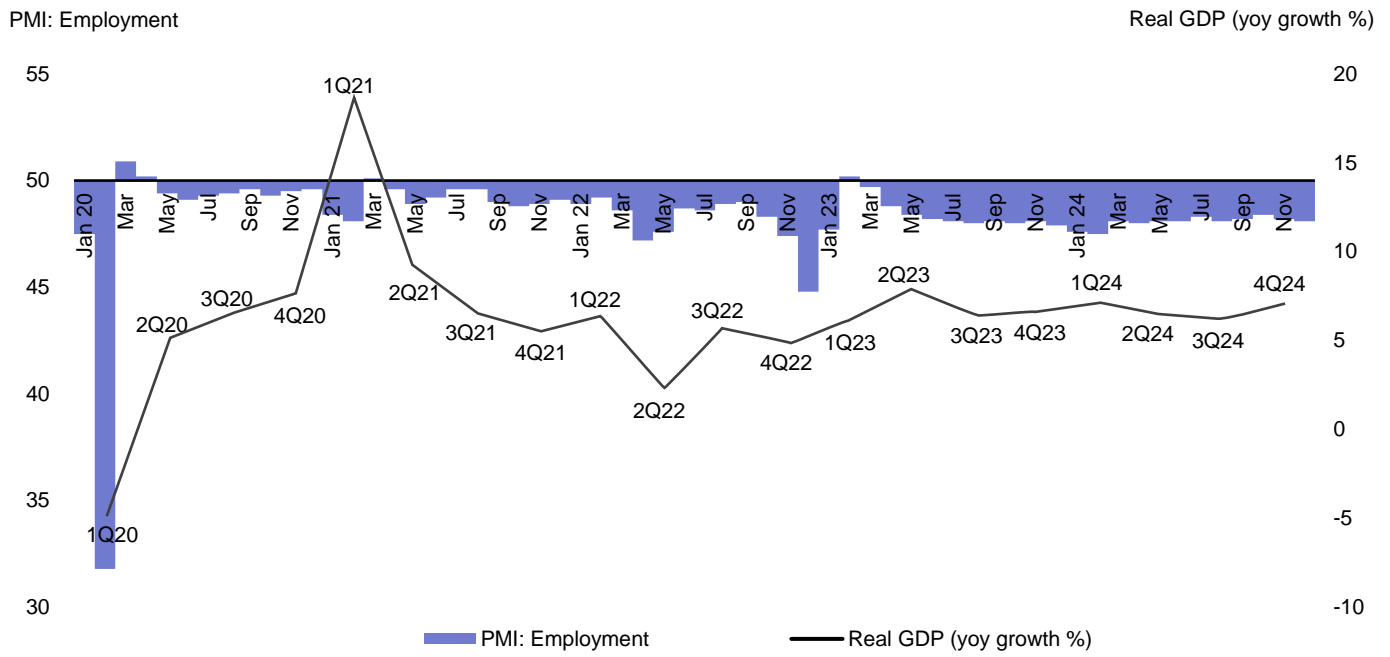
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 18: Employment index and headline PMI, January 2005 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 19: Employment index and real GDP growth, January 2020 to December 2024



Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

About China Manufacturing PMI:

China Manufacturing Purchasing Managers' Index (PMI) provides an early indication each month of economic activities in the Chinese manufacturing sector. It is jointly published by China Federation of Logistics & Purchasing (CFLP) and the National Bureau of Statistics (NBS). The HKUST Li & Fung Supply Chain Institute is responsible for drafting and disseminating the English PMI report.

Every month questionnaires are sent to 3,200 manufacturing enterprises all over China. The data presented herein is compiled from the enterprises' responses about their purchasing activities and supply situations. CFLP makes no representation regarding the data collection procedures, nor does it disclose any data of individual enterprises. The PMI should be compared to other economic data sources when used in decision-making.

3,200 manufacturing enterprises in 31 industries from Eastern, Northeastern, Central and Western China are surveyed. The sampling of the enterprises involves the use of Probability Proportional to Size Sampling (PPS), which means the selection of enterprises surveyed is largely based on each industry's contribution to GDP, and the representation of each geographical region.

There are 13 sub-indicators in the survey: Output, New Orders, New Export Orders, Backlogs of Orders, Stocks of Finished Goods, Purchases of Inputs, Imports, Input Prices, Stocks of Major Inputs, Ex-factory Prices, Employment, Suppliers' Delivery Time and Business Expectations. An index reading above 50 indicates an overall positive change in a sub-indicator; below 50, an overall negative change.

The PMI is a composite index based on the seasonally adjusted indices for five of the sub-indicators with varying weights: New Orders—30%; Output—25%; Employment—20%; Suppliers' Delivery Time—15%; and Stocks of Major Inputs—10%. A PMI reading above 50 indicates an overall expansion in the manufacturing sector; below 50, an overall contraction.

Currently there are more than twenty countries and regions conducting the PMI survey and compilation, based on an internationally standardized methodology.

About the Organizations:

China Federation of Logistics & Purchasing

China Federation of Logistics & Purchasing (CFLP) is the logistics and purchasing industry association approved by the State Council. CFLP's mission is to push forward the development of the logistics industry and the procurement businesses of both government and enterprises, as well as the circulation of factors of production in China. The government authorizes the CFLP to produce industry statistics and set industry standards. CFLP is also China's representative in the Asian-Pacific Logistics Federation (APLF) and the International Federation of Purchasing and Supply Management (IFPSM).

HKUST Li & Fung Supply Chain Institute

The HKUST Li & Fung Supply Chain Institute (Institute) accelerates the creation, global dissemination, and practical application of new knowledge for managing tomorrow's supply chains.

The Institute seeks to develop local and international talent in supply chain management through teaching, professional development, and exchanges at specialist conferences. It brings together leaders in industry, academia, and the public sector in a new collaboration for research, executive education and practice focused on innovation in business models, sustainable supply chain design, process re-engineering, and the rapid adoption of new technologies. These outcomes are vital in addressing the need for visionary, innovative supply chain management in the face of rapid technological advancements, disruption from geopolitical tensions, and concerns related to sustainability and climate.

Jointly established by HKUST and supply chain industry leader Li & Fung, the Institute brings together research excellence and industry expertise in supply chain management to drive real-world impact across the Greater Bay Area, Greater China, Asia, and globally, while contributing to Hong Kong's development as a multinational supply chain management center.

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