

PMI Quarterly on China Manufacturing

PMI 3Q22

Recovery in the manufacturing sector in September

Policy Outlook

China to step up policy support for economy

4Q22 Forecasts

Real GDP growth to rise to 4.5% yoy while PMI to fluctuate between 50.0 and 51.0

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PMI points to recovery in the manufacturing sector in September

Our observations

- Large enterprises continue to fare better than small and medium enterprises.
- Manufacturing production resumes expansion in September.
- Overall market demand deteriorates at a slower pace.
- Manufacturers lower ex-factory prices of their products.
- Manufacturing employment stabilizes.

Policy outlook

- The Chinese government will actively step up policy support for the economy.
- Macro policies should play an active role in expanding demand. Fiscal policies should effectively make up for the lack of social demand, while monetary policies should seek to ensure reasonably sufficient liquidity.

Our forecasts for 4Q22

- We project a further recovery in manufacturing production and economic activity in 4Q22.
- Headline PMI will fluctuate between 50.0 and 51.0.
- Real GDP growth will rise to 4.5% yoy.
- VAIO growth will go up to 5.0% yoy.
- Exports will register close-to-zero year-on-year growth.
- Year-on-year growth rates for the purchaser price index and the PPI will continue to fall and even turn negative in the coming couple of months, due to a recent retreat in global commodity prices and a high comparison base in 4Q21.

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GDP growth (%)



Headline PMI



IN THIS ISSUE:

PMI points to recovery in the manufacturing sector in September	4
What the PMI tells us about the performance of enterprises of different sizes	8
What the PMI tells us about manufacturing production	9
What the PMI tells us about the overall market demand	11
What the PMI tells us about upstream and midstream prices	13
What the PMI tells us about manufacturing employment	16

1. PMI points to recovery in the manufacturing sector in September

China's manufacturing sector in 3Q22

China's manufacturing PMI rebounded from 49.0 in July to 49.4 in August and 50.1 in September. The headline PMI reading has returned to the expansionary territory lately, indicating a recovery in China's manufacturing sector. (See exhibit 1)

Manufacturing output has resumed its expansion, as the output index rose above the critical 50-mark in September. Meanwhile, the overall market demand has contracted at a slower pace lately as the new orders index picked up from 48.5 in July to 49.8 in September.

Prices of industrial products have declined lately: The ex-factory prices index has remained below the neutral level of 50 since May. Meanwhile, the prices of materials have increased recently: The input prices index rose above the critical 50-mark to 51.3 in September.

Exhibit 2 shows the contributions of the sub-indices to the change in the headline PMI. The increase in the headline PMI in 3Q22 was due largely to the rise in the output index (which weighs 25% in the computation of the headline PMI) and the new orders index (which weighs 30%). Among the 12 sub-indices (i.e., excluding the suppliers' delivery time index), only the business expectations index has remained in the expansionary zone over the past three months. Meanwhile, the indices of new orders, new export orders, backlogs of orders, stocks of finished goods, stocks of major inputs, imports, ex-factory prices, and employment have stayed in the contractionary zone over the same period. (See exhibit 3)

Policy outlook

Looking ahead, we expect the Chinese government to actively step up policy support for the economy. A meeting of the Political Bureau of the Communist Party of China (CPC) Central Committee was held on 28 July to make arrangements for the economic work for the second half of the year. The meeting urged efforts to consolidate the upward trend of economic recovery, keep employment and prices stable, keep the economy running within an appropriate range, and strive for the best possible outcome. It stressed that macro policies should play an active role in expanding demand, and fiscal policies should effectively make up for the lack of social demand. Monetary policies should seek to ensure reasonably sufficient liquidity, credit to firms should be boosted, and new loans from policy banks and investment funds for infrastructure construction should be better leveraged, the meeting said.

These wordings could mean a relatively expansionary and loose macro policy in the second half of the year, which will help alleviate the downward pressure on the Chinese economy, in our view.

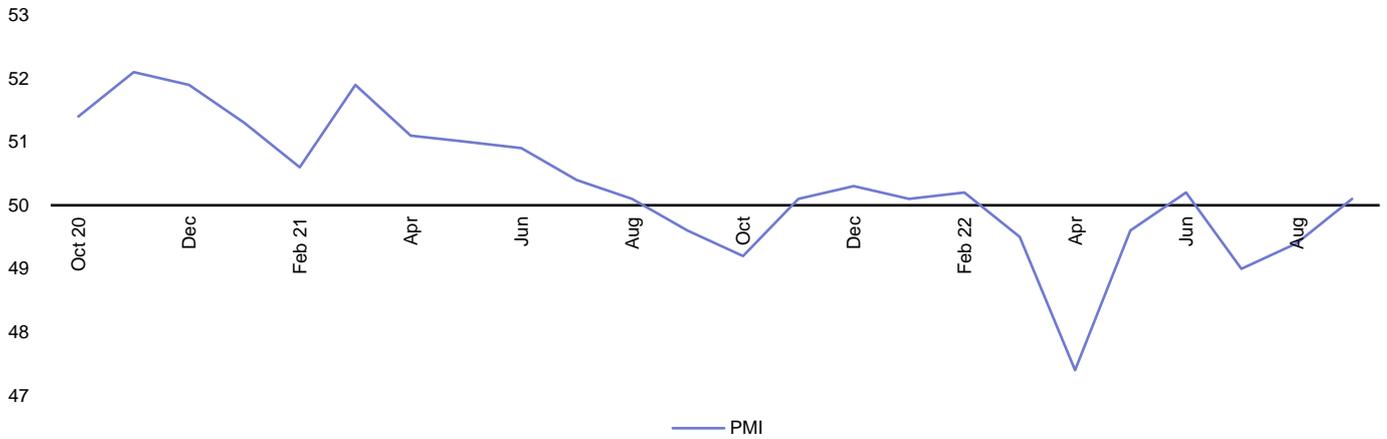
We project that China's real GDP growth will rise to 4.5% yoy in 4Q22 due to a further recovery in manufacturing production and consumer spending amid the expansionary macro policies.

Forecasts for 4Q22

The growth in China's industrial production is set to accelerate in the near term, amid an increase in infrastructure investment. Overall, we predict that the industrial production (VAIO) growth will rise to 5.0% yoy in 4Q22, and the headline PMI will fluctuate between 50.0 and 51.0.

Exhibit 4 plots the quarterly real GDP growth rates versus the monthly PMIs since October 2017. We project that China's real GDP growth will go up to 4.5% yoy in 4Q22 due to a further recovery in manufacturing production and consumer spending amid the expansionary macro policies.

Exhibit 1: Headline PMI, October 2020 to September 2022



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

Exhibit 2: Headline PMI and sub-indices, January 2005 to September 2022

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

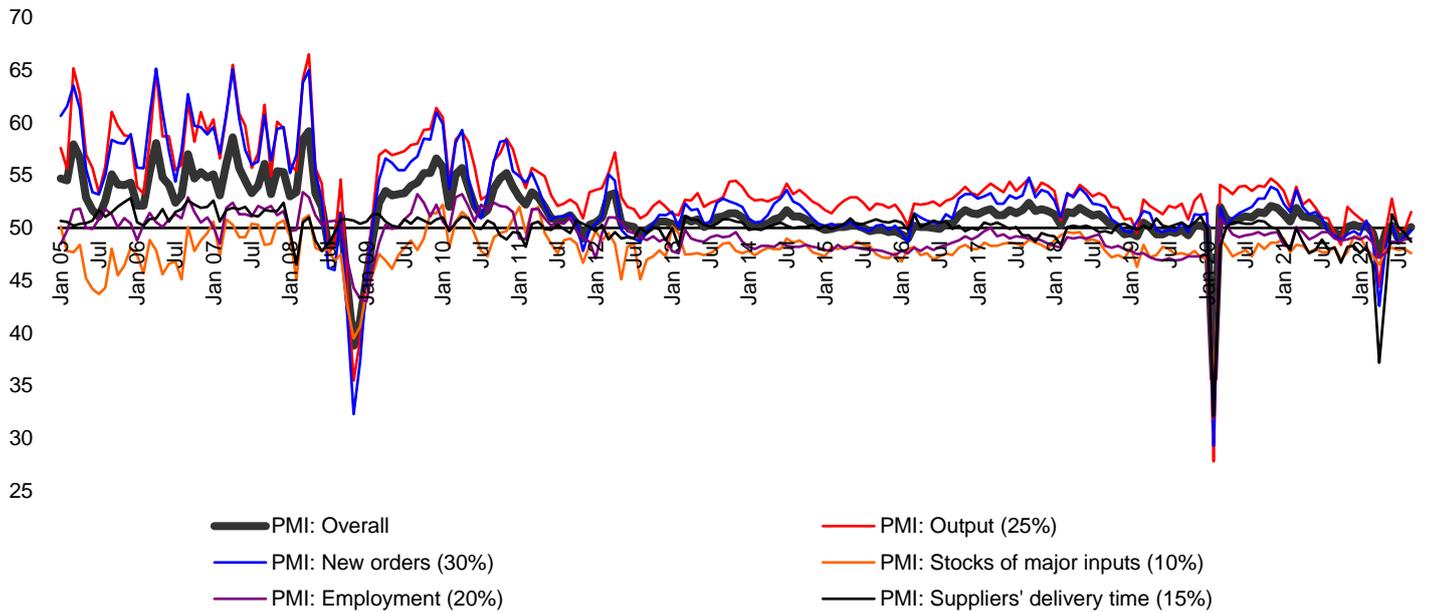
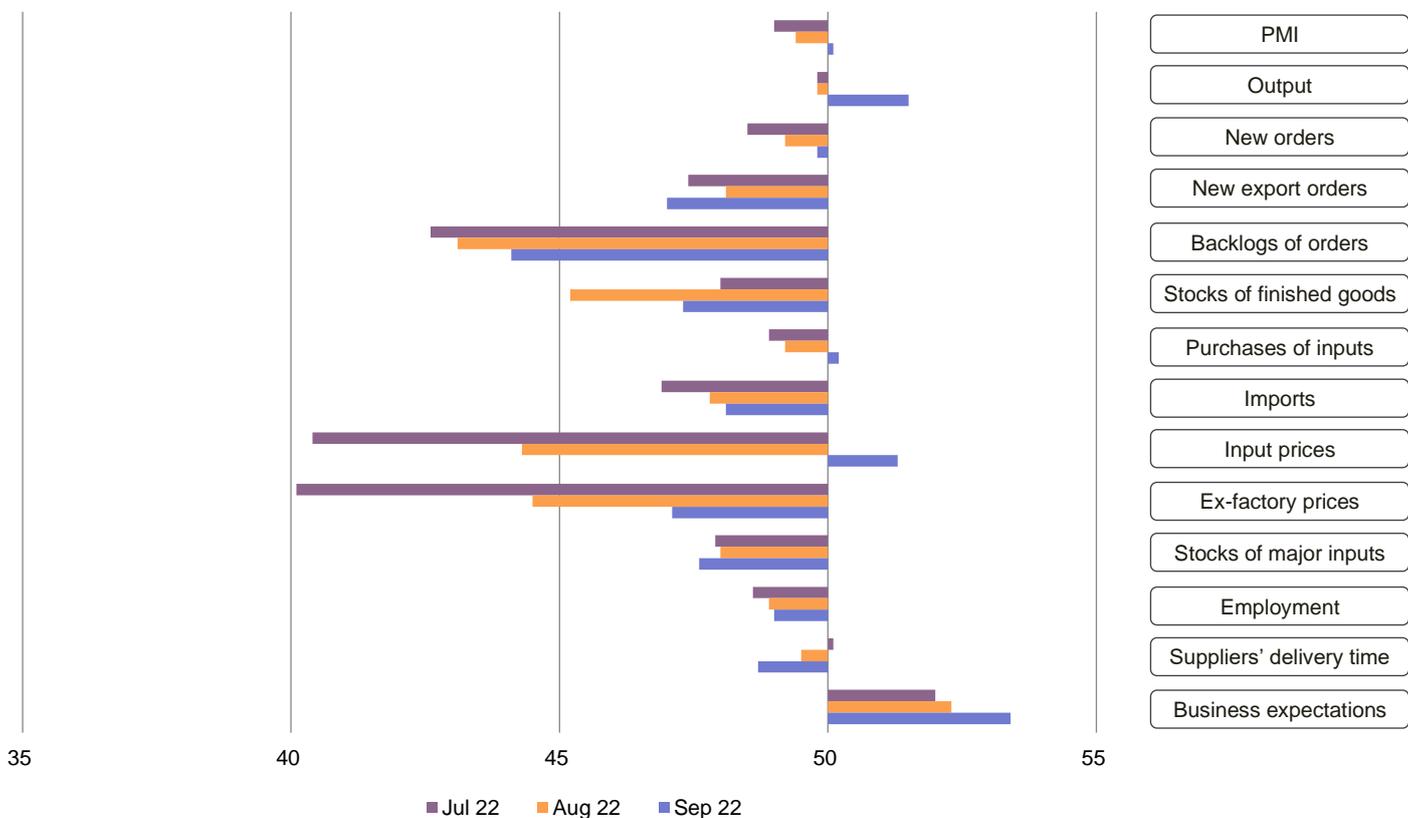
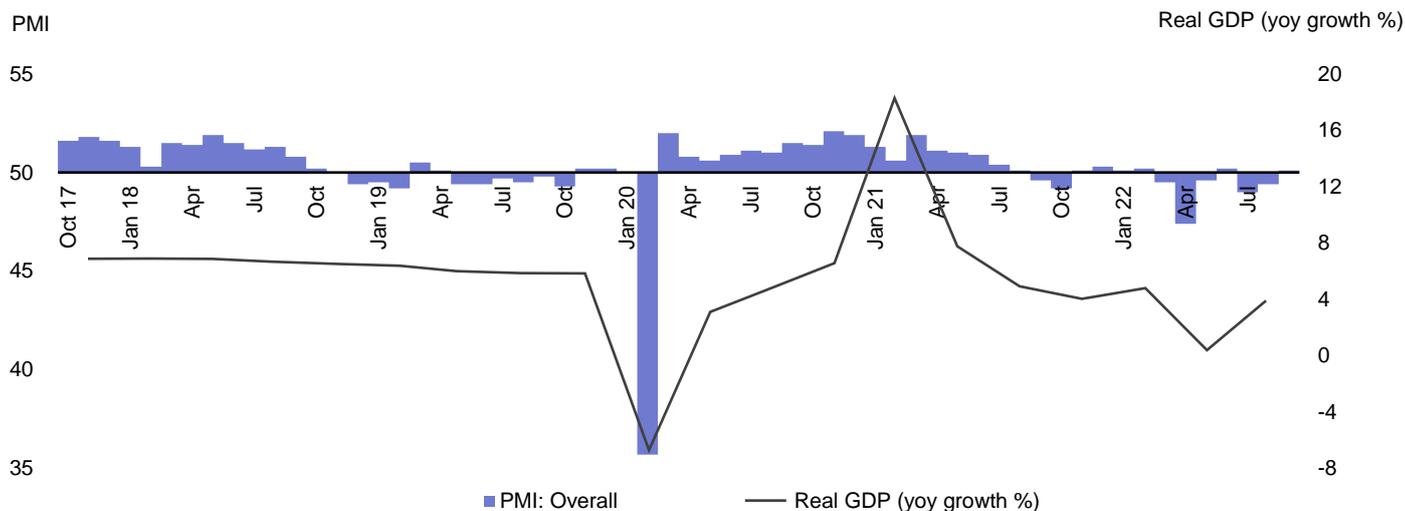


Exhibit 3: Headline PMI and all sub-indices, July to September 2022



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

Exhibit 4: Headline PMI and real GDP growth, October 2017 to September 2022



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 enterprises resume a steady expansion

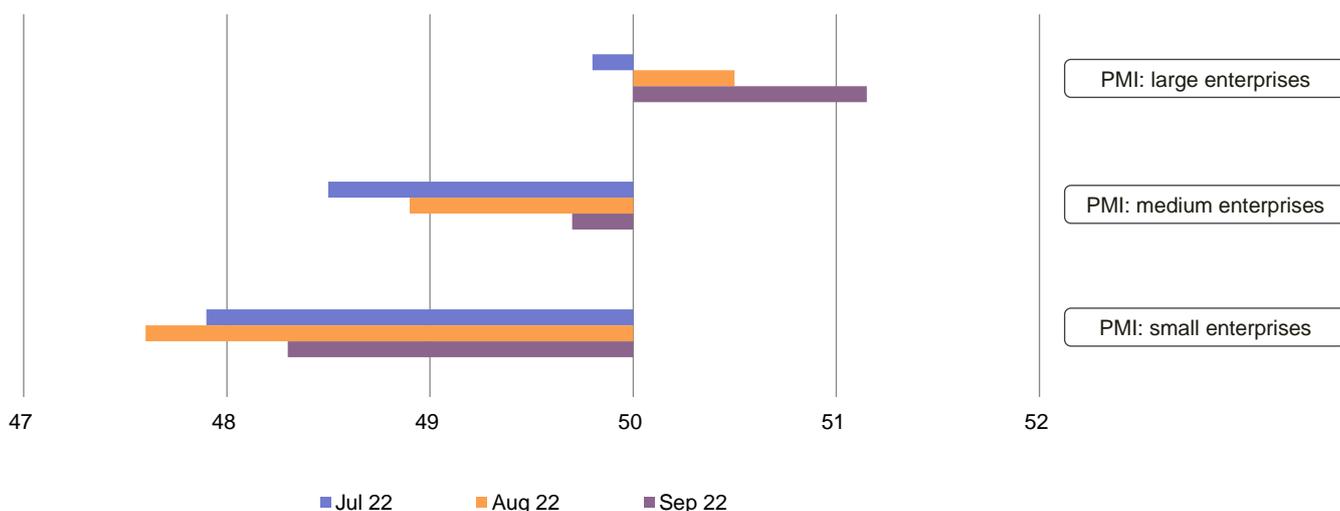
The PMI of 'large enterprises' rose from 49.8 in July to 50.5 in August and further to 51.2 in September. The index readings have stayed above the critical 50-mark lately, indicating a steady expansion of large enterprises.

Small and medium enterprises continue to contract

The PMI of 'medium enterprises' picked up from 48.5 in July to 48.9 in August and 49.7 in September. Meanwhile, the PMI of 'small enterprises' went down from 47.9 in July to 47.6 in August and then rebounded to 48.3 in September. The index readings of both 'small enterprises' and 'medium enterprises' have stayed below the watershed mark of 50 throughout the quarter, indicating that small and medium enterprises have been facing difficulties in production and operations lately. (See exhibit 5)

The recovery of small and medium enterprises has lagged behind that of large enterprises, a trend that started in the second half of 2020.

Exhibit 5: PMIs of large enterprises, medium enterprises and small enterprises, July to September 2022



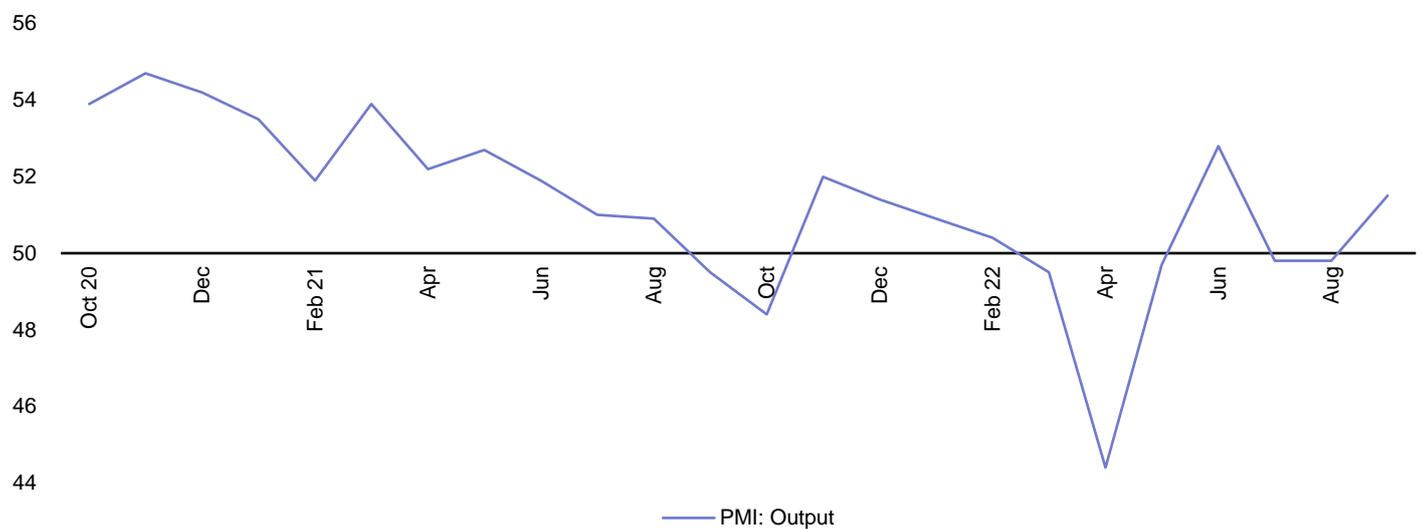
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

3. What the PMI tells us about manufacturing production

Manufacturing output resumes expansion in September

The output index rebounded from 49.8 in July and August to 51.5 in September, returning to the expansionary territory for the first time since June, indicating a recovery in manufacturing production. (See exhibit 6)

Exhibit 6: Output index, October 2020 to September 2022



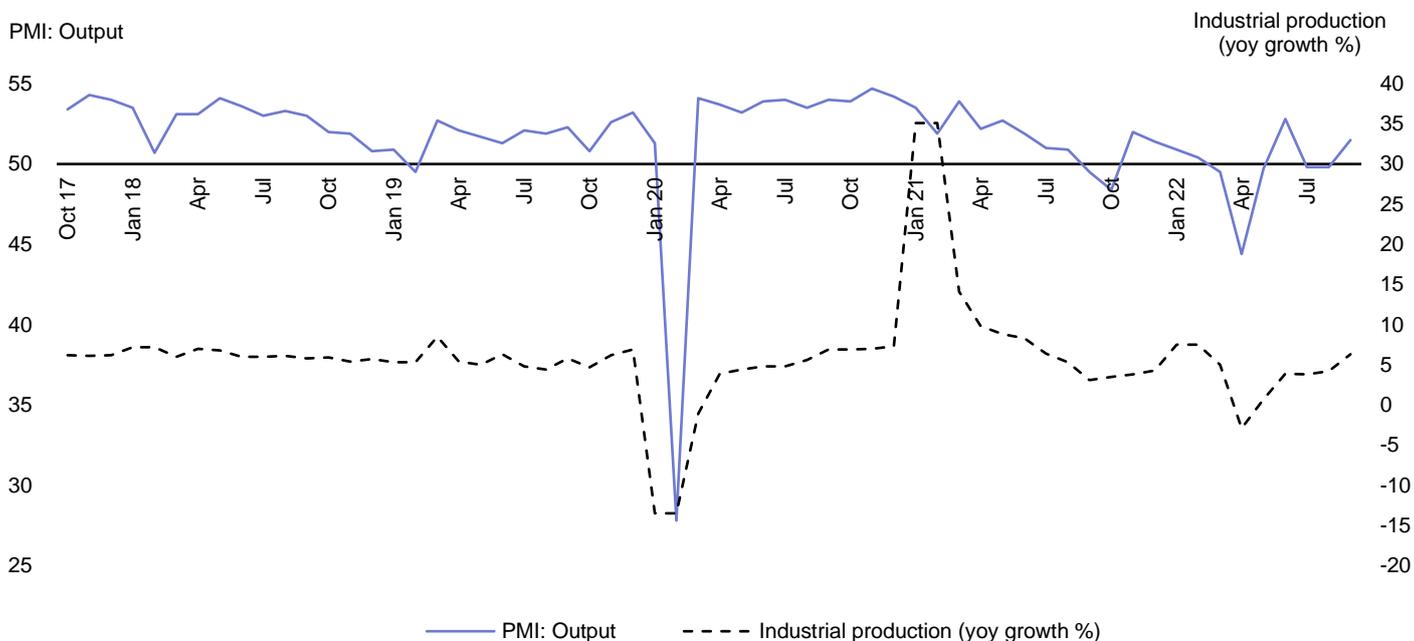
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Growth in manufacturing production to accelerate in 4Q22

Exhibit 7 demonstrates the correlation (with some lags) between the output index and the year-on-year growth of value-added of industrial output (VAIO). Looking ahead, we expect that China’s VAIO growth will rise to 5.0% yoy in 4Q22, boosted by an increase in infrastructure investment. Challenges facing Chinese manufacturers include the global economic downturn caused by the Russia–Ukraine conflict, ongoing trade frictions between China and the US, possible disruptions due to COVID-19 outbreaks and control measures, strong government’s determination to reduce industrial carbon emissions, and intense competition in the international market.

We expect the VAIO growth to rise to 5.0% yoy in 4Q22, boosted by the government’s efforts to increase infrastructure investment.

Exhibit 7: Output index and industrial production growth, October 2017 to September 2022



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

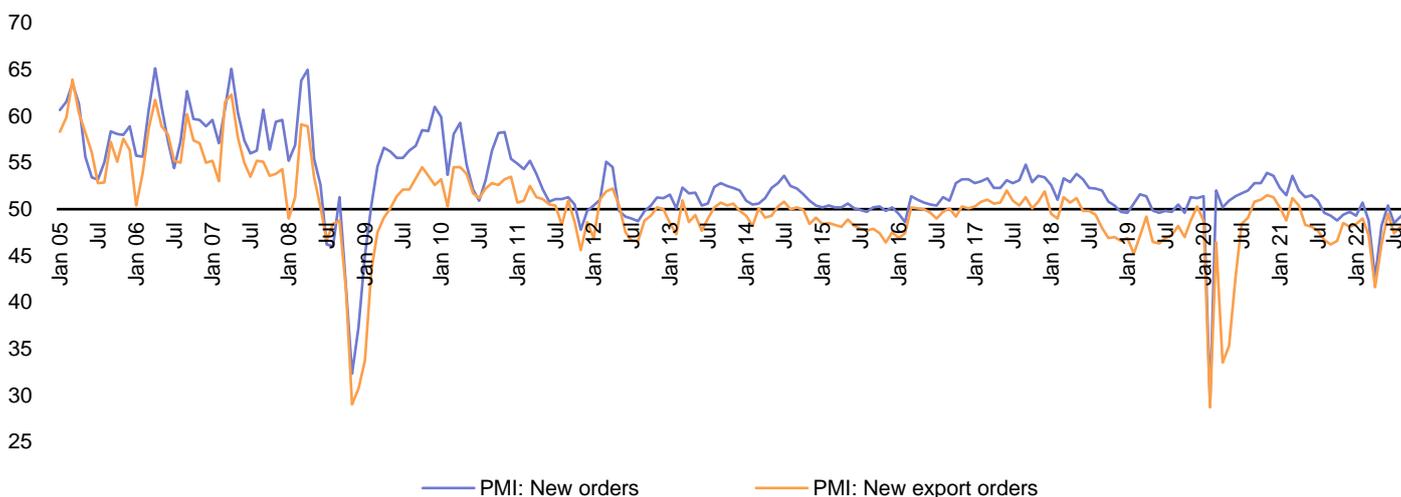
4. What the PMI tells us about the overall market demand

Overall market demand deteriorates at a slower pace

The new orders index picked up from 48.5 in July to 49.2 in August and further to 49.8 in September, indicating that new orders and the overall market demand has contracted at a slower pace lately.

Meanwhile, after rebounding from 47.4 in July to 48.1 in August, the new export orders fell again to 47.0 in September, pointing to persistent downward pressure on China's exports. (See exhibit 8)

Exhibit 8: New orders index and new export orders index, January 2005 to September 2022



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

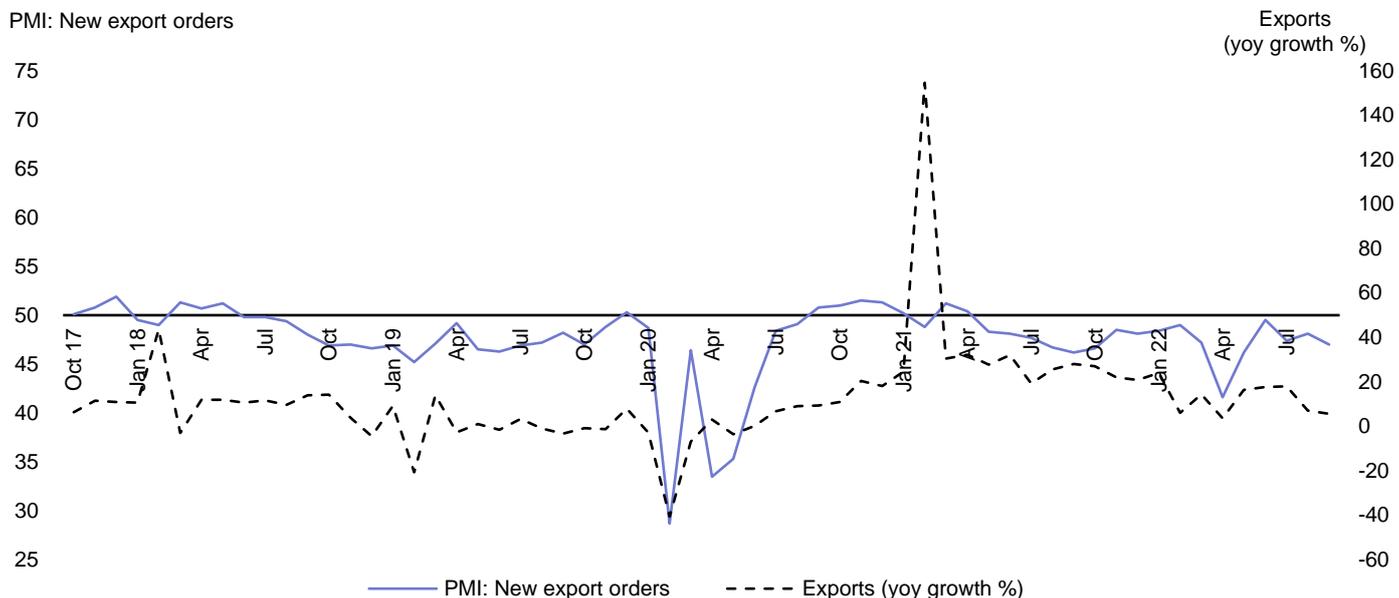
China's export growth to slow to zero amid slowdown in global economy

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, especially the developed economies. The OECD composite leading indicator¹ has been on a downward trend, suggesting a moderation in the growth of the global economy. The Russia-Ukraine conflict and the associated energy and food crises are also likely to continue to drag down global growth in the short term. All in all, we forecast that the growth in China's exports will slow to close to zero in 4Q22 compared with the same period last year.

With global growth slowing, we forecast that the growth in China's exports will slow to close to zero in 4Q22 compared with the same period last year.

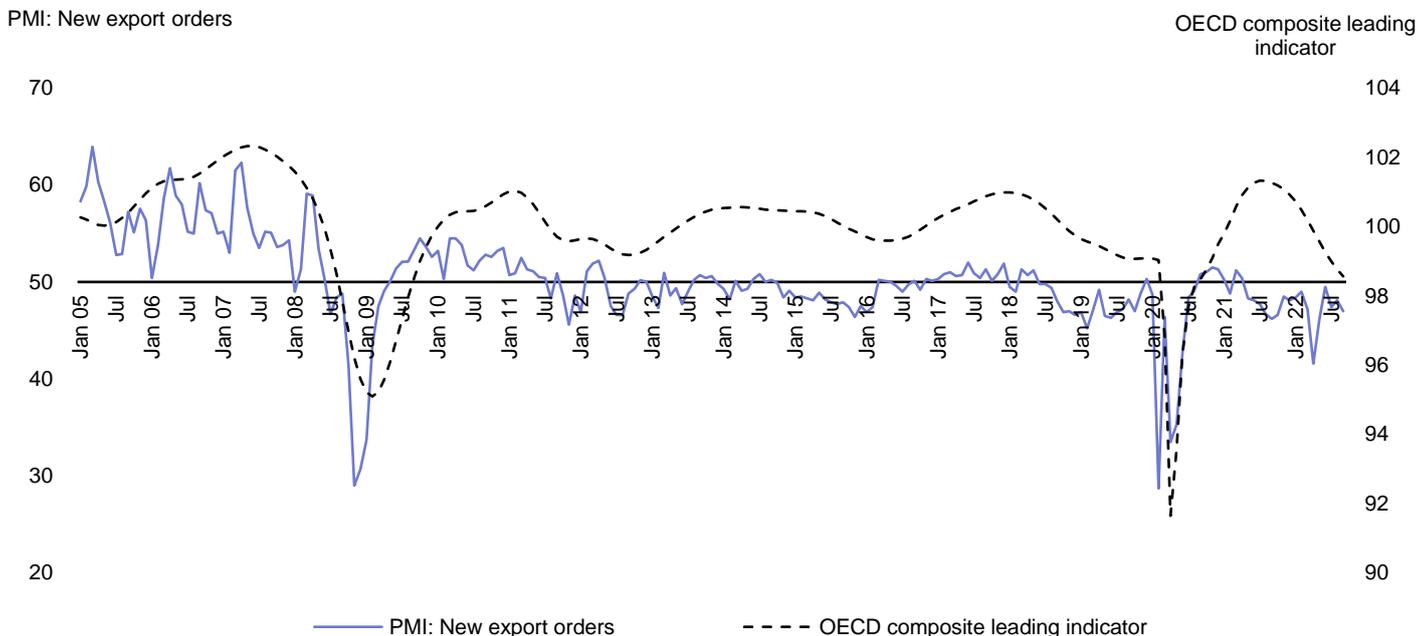
¹ The OECD composite leading indicator, compiled by the Organization for Economic Cooperation and Development, is designed to provide early signals of turning points (peaks and troughs) between expansions and slowdowns of economic activity, and covers Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

Exhibit 9: New export orders index and export growth, October 2017 to September 2022



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

Exhibit 10: New export orders index and OECD composite leading indicator, January 2005 to September 2022



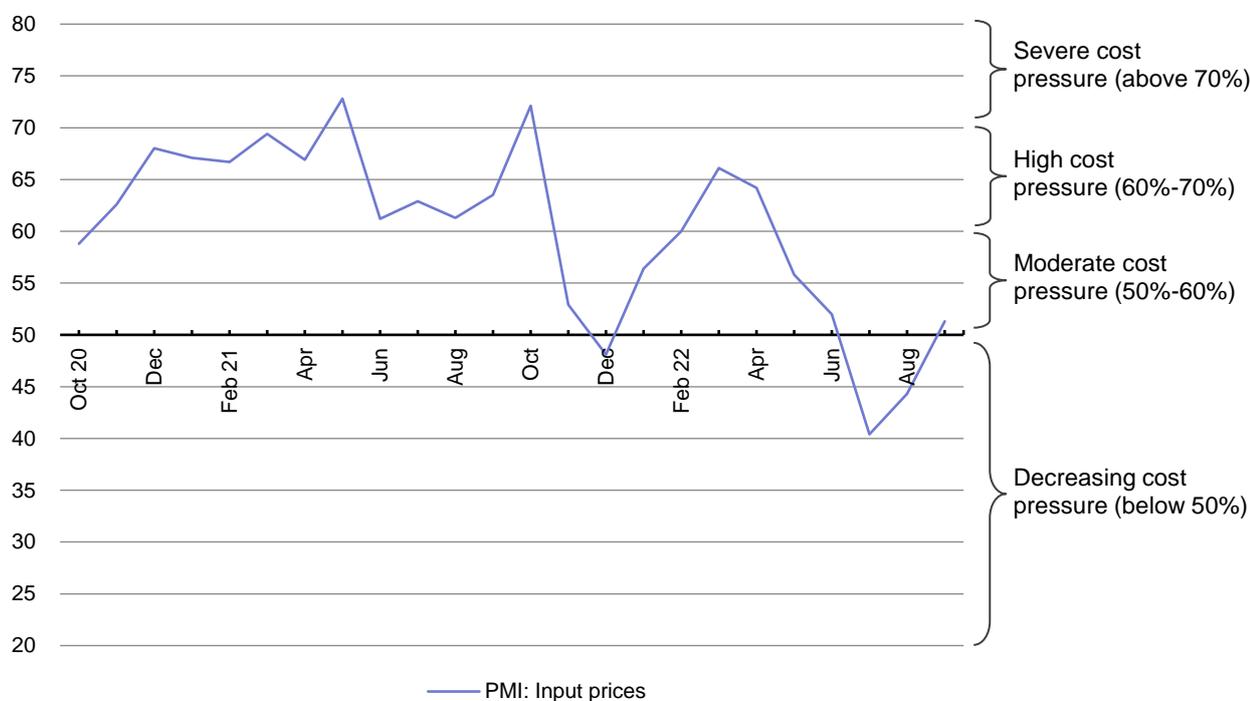
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Organization for Economic Cooperation and Development

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

Rising upstream prices exerts moderate cost pressure on manufacturers

The input prices index jumped from 40.4 in July to 44.3 in August and further to 51.3 in September. The latest index reading rose above the critical 50-mark, indicating an increase in the prices of production inputs recently, which would exert moderate cost pressure on Chinese manufacturers.

Exhibit 11: Input prices index, October 2020 to September 2022



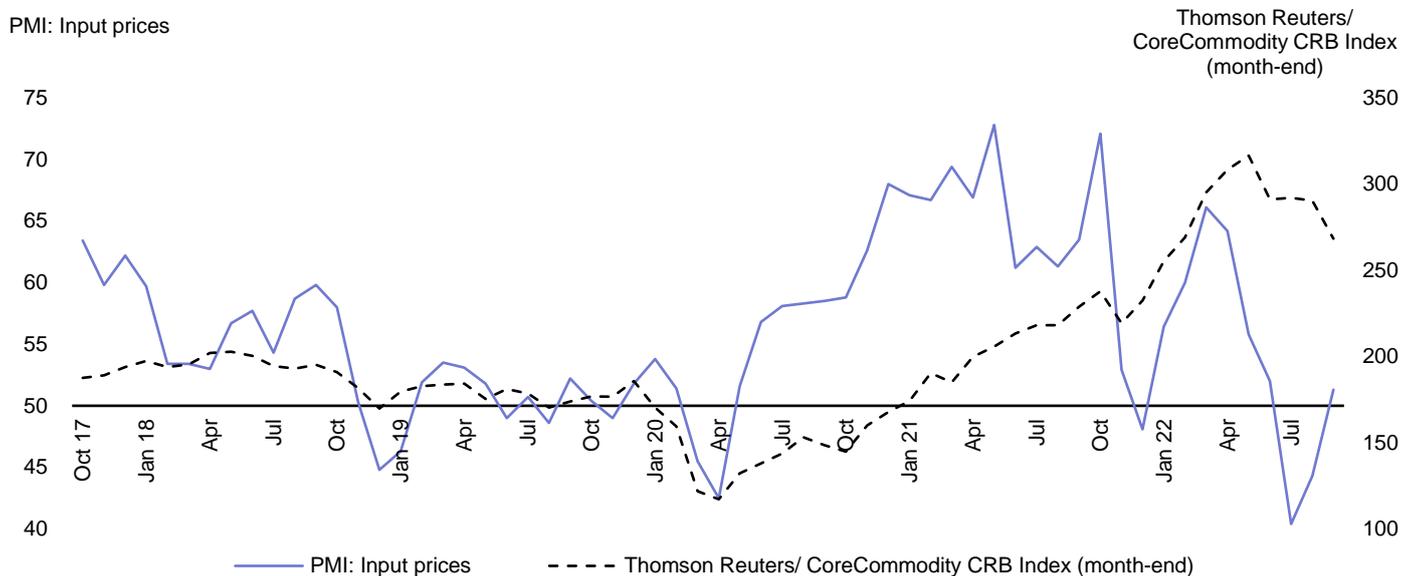
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

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 rising input costs facing Chinese manufacturers are attributable to high global commodity prices driven by high energy prices. The CRB index, despite a recent retreat, is still almost twice the levels two years ago.

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, October 2017 to September 2022

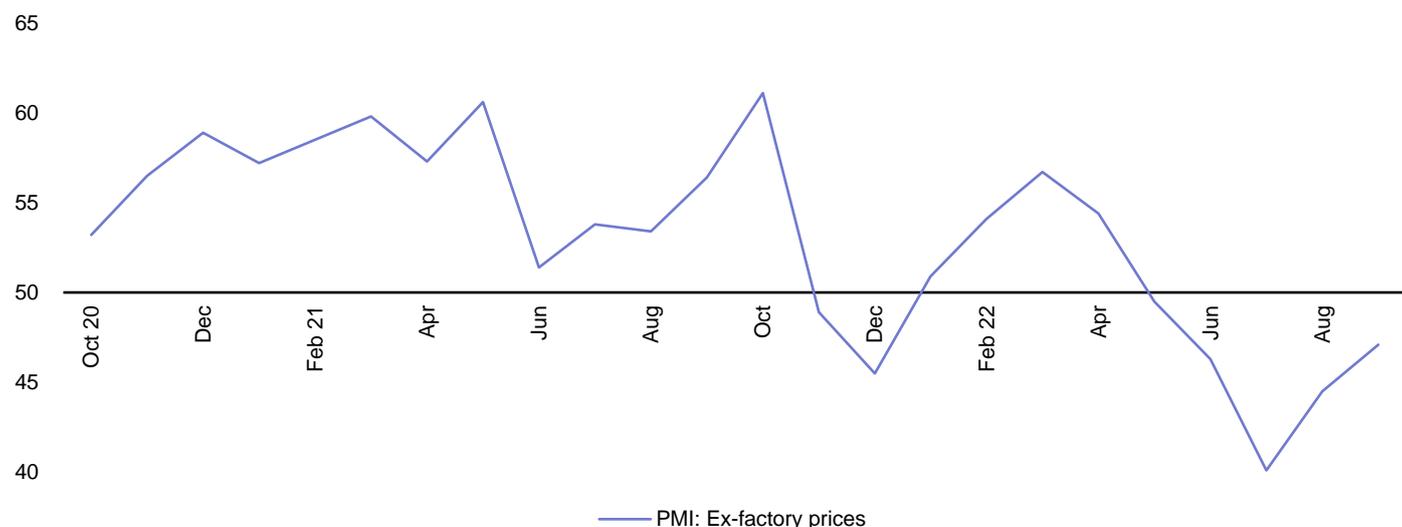


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Thomson Reuters

Manufacturers lower ex-factory prices of their products

The ex-factory prices index picked up from 40.1 in July to 44.5 in August and further to 47.1 in September. The index readings indicate that Chinese manufacturers have been lowering the ex-factory prices of their finished products lately. However, the recent rebound in the index could signal easing price-cut pressure on enterprises.³

Exhibit 13: Ex-factory prices index, October 2020 to September 2022



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

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

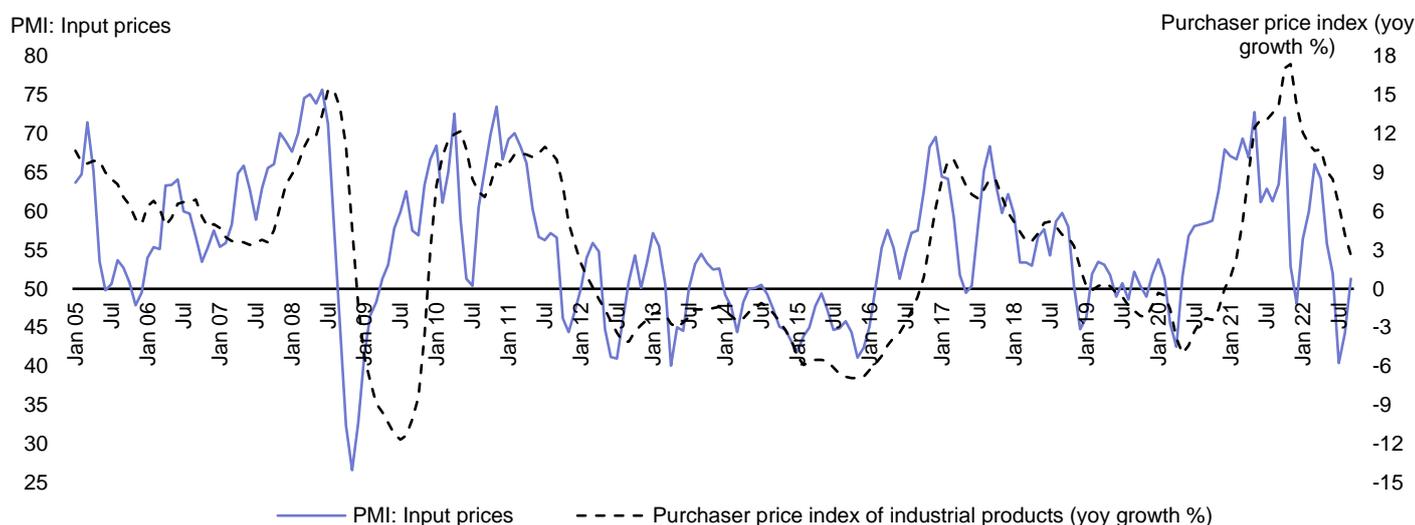
Growth in input prices and ex-factory prices to fall in 4Q22

Exhibit 14 shows that the input prices index is useful as a leading indicator of upstream prices. To show 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.

Going forward, we expect that the year-on-year growth rates for both the purchaser price index and the PPI will continue to fall and even turn negative in the coming couple of months, due to a recent retreat in global commodity prices and a high comparison base in 4Q21.

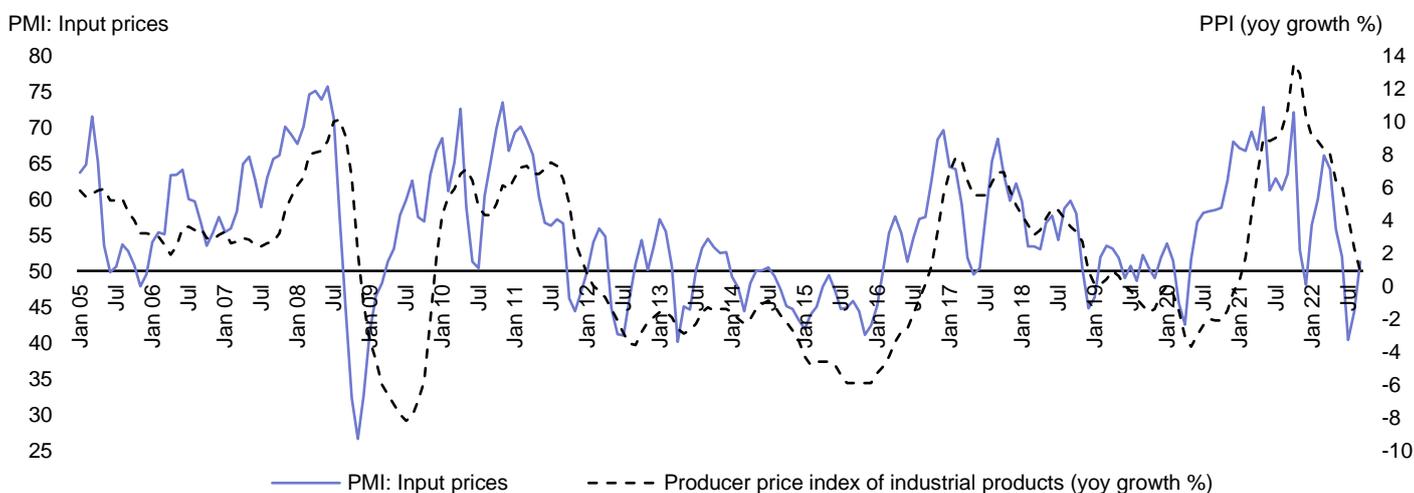
We expect that the year-on-year growth rates for both the purchaser price index and the PPI will continue to fall and even turn negative in 4Q22, due to a recent retreat in global commodity prices and a high comparison base in 4Q21.

Exhibit 14: Input prices index and purchaser price index of industrial products, January 2005 to September 2022



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

Exhibit 15: Input prices index and producer price index, January 2005 to September 2022



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

Manufacturing employment stabilizes

The employment index picked up from 48.6 in July to 48.9 in August and 49.0 in September, indicating that employment situation in the manufacturing sector has stabilized lately. (Exhibit 16)

Exhibit 16: Employment index, October 2020 to September 2022

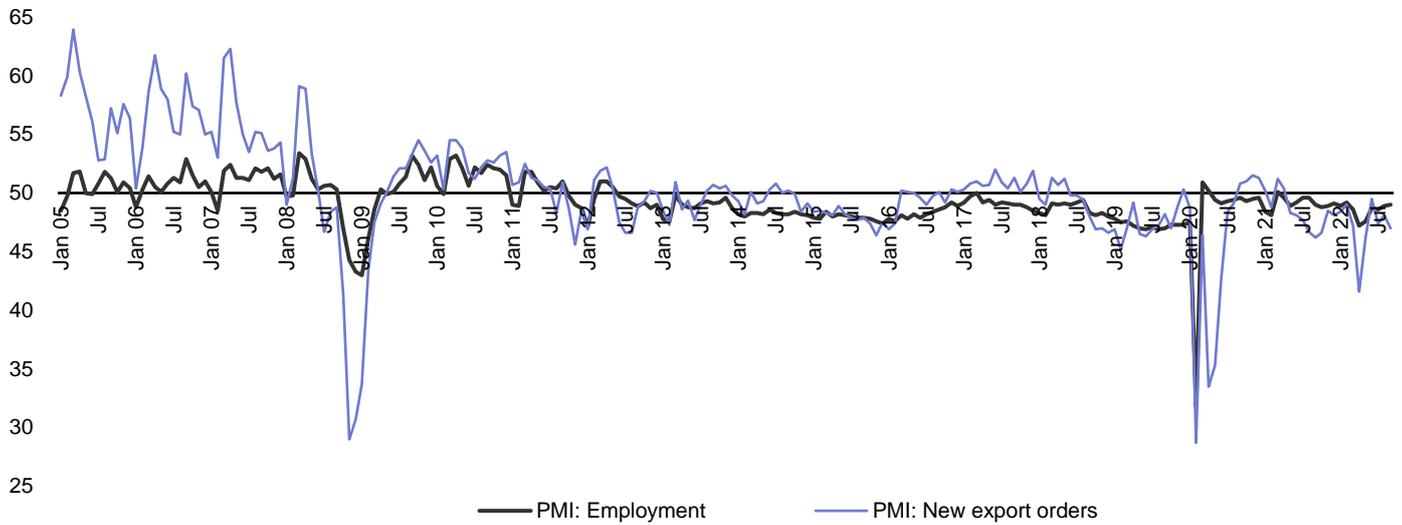


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 17 shows that the employment in China’s manufacturing sector has relied heavily on the export sector. Exhibit 18 and 19 give our readers some ideas about the extent to which the employment situation improves or deteriorates with the manufacturing sector and the overall economy. Given a recovery in the overall Chinese economy, we expect that the employment situation in the manufacturing sector will remain steady in 4Q22.

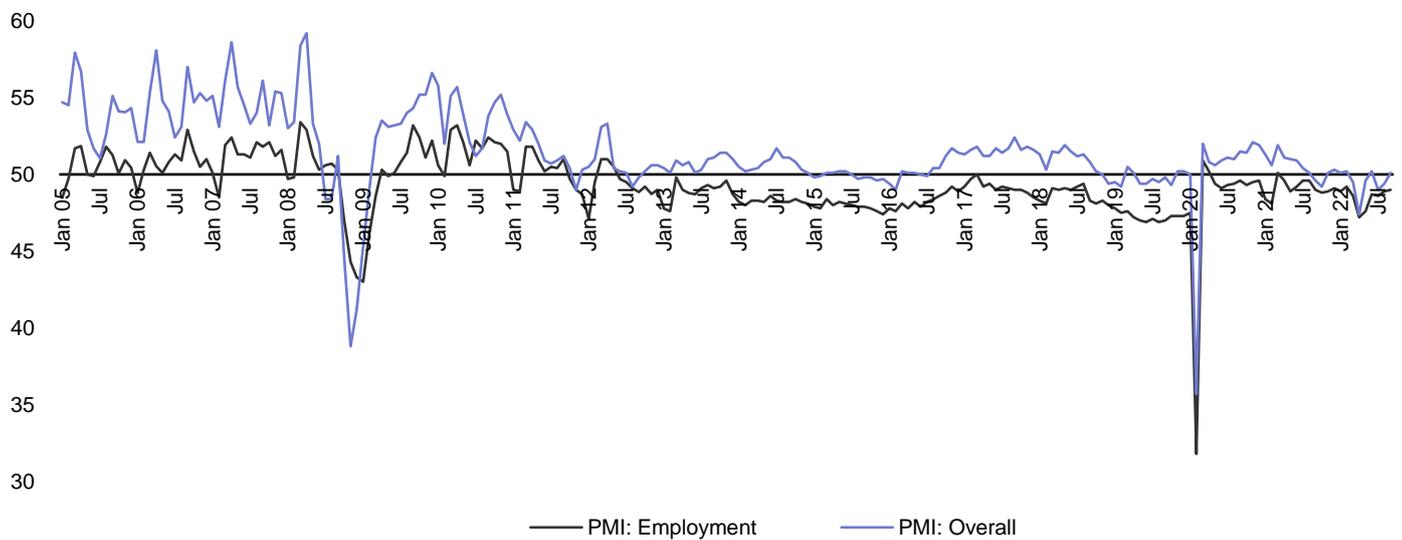
Given a recovery in the overall Chinese economy, we expect that the employment situation in the manufacturing sector will remain steady in 4Q22.

Exhibit 17: Employment and new export orders, January 2005 to September 2022



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

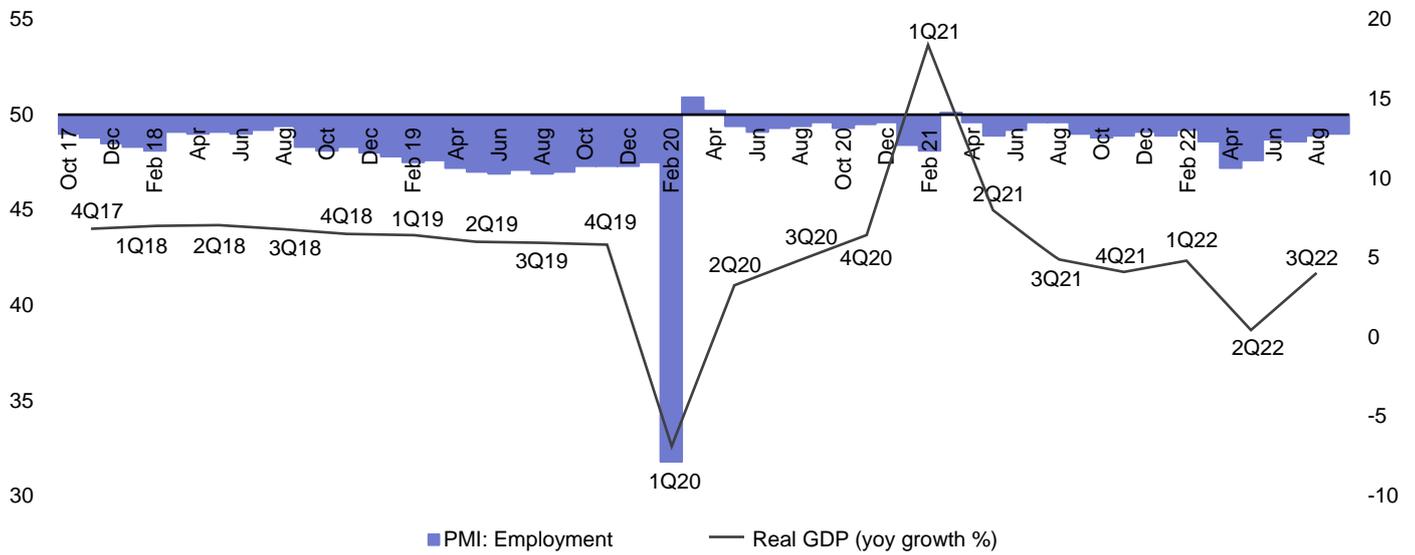
Exhibit 18: Employment index and headline PMI, January 2005 to September 2022



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

Exhibit 19: Employment index and real GDP growth, October 2017 to September 2022

PMI: Employment



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). Fung Business Intelligence is responsible for drafting and disseminating the English PMI report.

Every month questionnaires are sent to 3,000 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.

3,000 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).

Fung Business Intelligence

Fung Business Intelligence collects, analyses and interprets global market data on sourcing, supply chains, distribution, retail and technology.

Headquartered in Hong Kong, it leverages unique relationships and information networks to monitor, research and report on these global issues with a particular focus on business trends and developments in China. Fung Business Intelligence makes its data, impartial analysis and specialist knowledge available to businesses, scholars and governments through regular research reports and business publications.

As the knowledge bank and think tank for the Fung Group, a Hong Kong-based multinational corporation, Fung Business Intelligence also provides expertise, advice and consulting services to the Group and its business partners on issues related to doing business in China, ranging from market entry and company structure, to tax, licensing and other regulatory matters.

Fung Business Intelligence was established in the year 2000.

Fung Group

Fung Holdings (1937) Limited, a privately-held business entity headquartered in Hong Kong, is the major shareholder of the Fung Group of companies, whose core businesses operate across the entire global supply chain for consumer goods including trading, logistics, distribution and retail. The Fung Group comprises over 26,000 people working in more than 40 economies worldwide. We have a rich history and heritage in export trading and global supply chain management that dates back to 1906 and traces the story of how Hong Kong and the Pearl River Delta emerged as one of the world's foremost manufacturing and trading regions. We are focused on both creating the Supply Chain of the Future to help brands and retailers navigate the digital economy as well as creating new opportunities, product categories and market expansion for brands on a global scale.

Listed entities of the Group include Global Brands Group Holding Limited (SEHK: 00787) and Convenience Retail Asia Limited (SEHK: 00831). Privately-held entities include Li & Fung Limited, LH Pegasus, Branded Lifestyle Holdings Limited, Fung Kids (Holdings) Limited, Toys "R" Us (Asia) and Suhyang Networks.

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