

### PMI Quarterly on China Manufacturing



## PMI points to recovery in manufacturing production in 4Q21

#### Our observations

- Large and medium enterprises continue to fare better than small enterprises.
- · Manufacturing production resumes expansion.
- Overall market demand deteriorates at a slower pace.
- Manufacturers lower ex-factory prices of their products as input prices start to fall.
- · Manufacturing employment remains steady.

#### **Policy outlook**

- The Chinese government will actively step up policy support for the economy.
- The proactive fiscal policy should be more efficient, tailored and sustainable, while the
  prudent monetary policy should be flexible and appropriate to maintain liquidity at a
  reasonably adequate level.

#### Our forecasts for 1Q22

- · We project a further recovery in manufacturing production in 1Q22.
- The headline PMI will fluctuate between 49.0 and 51.0.
- Real GDP growth will recover to 4.8% yoy.
- VAIO growth will stay low at 3.5%-4.0%yoy.
- Exports will increase by 10% yoy.
- Year-on-year growth rates for the purchaser price index and the PPI will fall amid a high comparison base in 1Q21.

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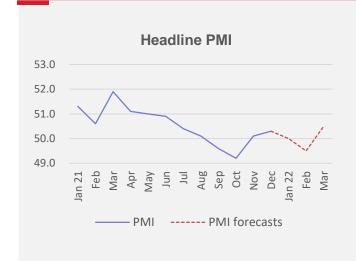
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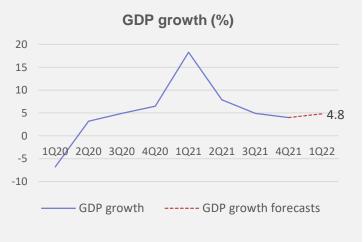
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## 1. PMI points to recovery in manufacturing production in 4Q21

#### China's manufacturing sector in 4Q21

China's manufacturing PMI rebounded from 49.2 in October to 50.1 in November and 50.3 in December. The headline PMI readings have returned to the expansionary zone lately, indicating a recovery in China's manufacturing sector from the earlier disruption caused by the 'energy dual controls' and power shortages. (See exhibit 1)

Manufacturing production has resumed its expansion, as the output index has remained above the critical 50-mark since November. Meanwhile, the overall market demand has contracted at a slower pace lately as the new orders index picked up from 48.8 in October to 49.7 in December.

Prices of industrial products have declined lately: The ex-factory prices index went down from 61.1 in October to 48.9 in November and further to 45.5 in December. The drop in product prices was due partly to the fall in the prices of materials: The input prices index plunged from 72.1 in October to 48.1 in December.

Exhibit 2 shows the contributions of the sub-indices to the change in the headline PMI. The rise in the headline PMI in 4Q21 was due largely to the increase 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, imports, stocks of major inputs 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. The Central Economic Work Conference, a meeting which sets the tone for the economic tasks this year, was held on 8-10 December last year. According to a statement released after the meeting, economic work this year would prioritize stability while pursuing progress, and the Chinese government would actively introduce policies that can help stabilize the economy. The meeting reiterated the policy stance of carrying out a proactive fiscal policy and a prudent monetary policy. The proactive fiscal policy must be more efficient, tailored and sustainable. Fiscal expenditure should be expedited, additional tax cuts and fee reductions should be adopted, and investment in infrastructure should be conducted ahead of the normal schedule. Meanwhile, the prudent monetary policy must be flexible and appropriate to maintain liquidity at a reasonably adequate level. The meeting also called for coordinated fiscal and monetary policies and integrated cross-cyclical and counter-cyclical policy adjustments.

These wordings of the meeting could mean a relatively expansionary and loose macro policy in 2022, which will help alleviate the downward pressure on the Chinese economy, in our view.

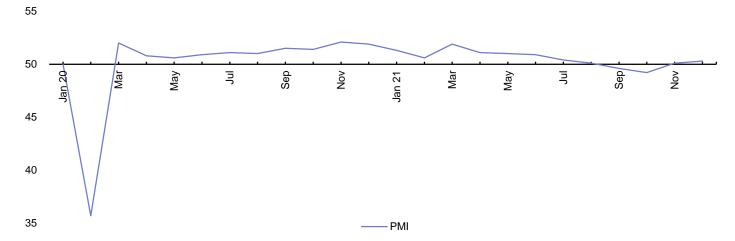
We project that China's real GDP growth will rebound to 4.8% yoy in 1Q22 due partly to an accelerated growth in fixed asset investment.

#### Forecasts for 1Q22

China's industrial production is set to further recover in the near term, boosted by an increase in infrastructure investment. However, a high comparison base last year will keep industrial production growth low at 3.5%-4.0% yoy in 1Q22. Meanwhile, the headline PMI is likely to stay weak in the first couple of months in 2022 as the Chinese New Year holidays suppress factory activity.

Exhibit 4 plots the quarterly real GDP growth rates versus the monthly PMIs since January 2017. We project that China's real GDP growth will rebound to 4.8% yoy in 1Q22 due partly to an accelerated recovery in fixed asset investment.

#### Exhibit 1: Headline PMI, January 2020 to December 2021



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

#### Exhibit 2: Headline PMI and sub-indices, January 2005 to December 2021

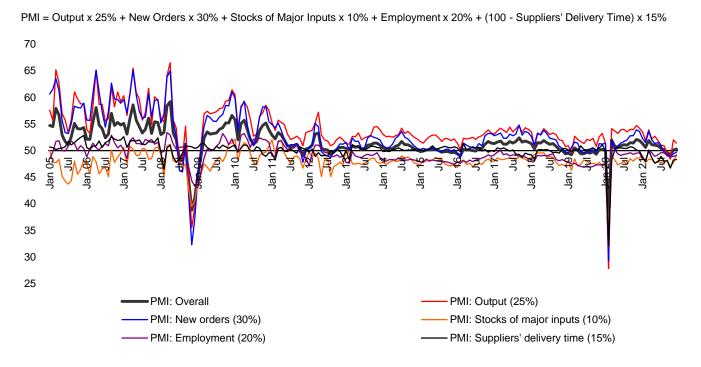
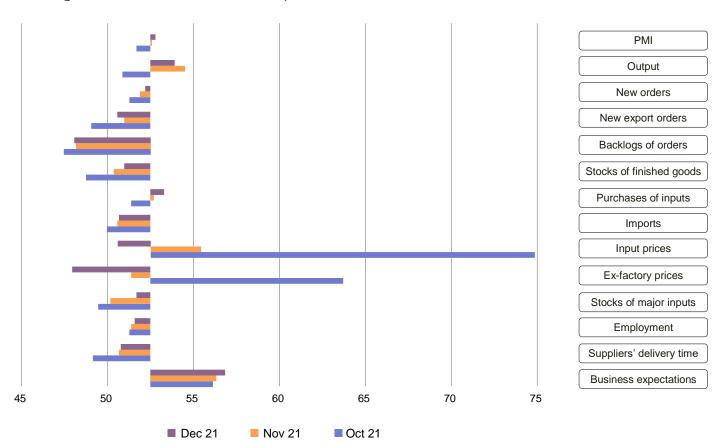
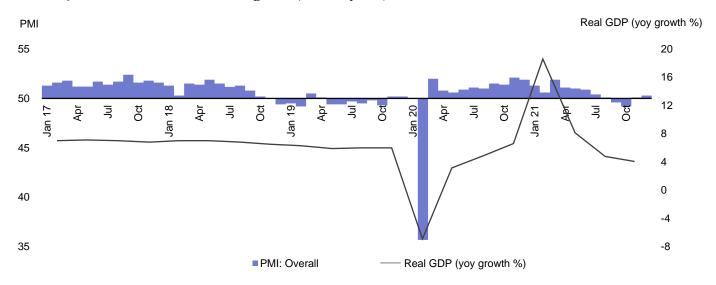


Exhibit 3: Headline PMI and all sub-indices, October to December 2021



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

Exhibit 4: Headline PMI and real GDP growth, January 2017 to December 2021



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

#### Expansion of large and medium enterprises accelerates

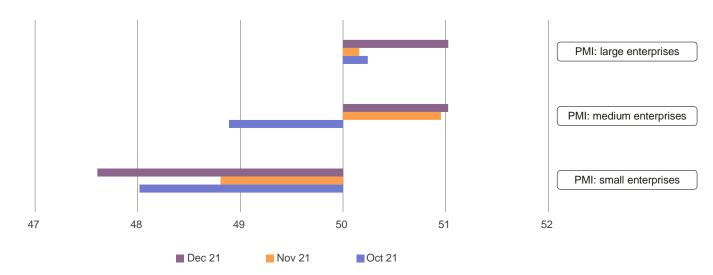
The PMI of 'large enterprises' stayed above the watershed mark of 50 throughout October to December and went up from 50.2 in November to 51.3 in December, showing an accelerated expansion of 'large enterprises'. The PMI of 'medium enterprises' rose above the critical 50-mark to 51.2 in November and 51.3 in December from 48.6 in October, indicating that 'medium enterprises' have resumed its expansion lately.

#### Contraction of small enterprises continues

The PMI of 'small enterprises' hovered below 50.0 throughout the three-month period, registering 47.5, 48.5 and 46.5 in October, November and December, respectively. The index readings indicate that small enterprises have been facing difficulties in production and operations lately. (See exhibit 5)

Large and medium enterprises have fared better than small enterprises since 2H2O. Boosting small enterprises will be key to sustaining the recovery in the manufacturing sector in 2O22.

#### Exhibit 5: PMIs of large enterprises, medium enterprises and small enterprises, October to December 2021

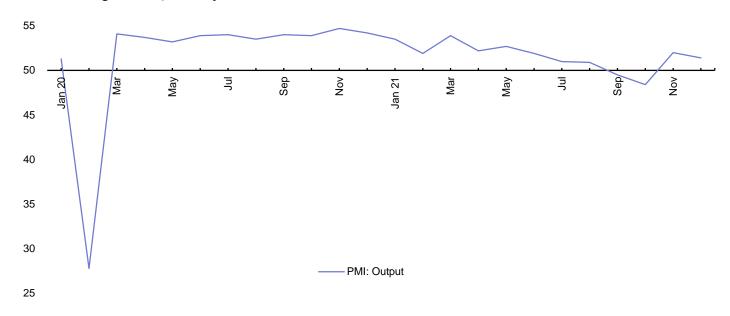


## 3. What the PMI tells us about manufacturing production

#### Manufacturing output resumes expansion

The output index rebounded from 48.4 in October (which was the second-lowest reading since January 2009) to 52.0 in November, before retreating to 51.4 in December. The index readings have returned to the expansionary zone, indicating a quick recovery in manufacturing production following the earlier disruption caused by the 'energy dual controls' and power shortages. (See exhibit 6)

#### Exhibit 6: Output index, January 2020 to December 2021

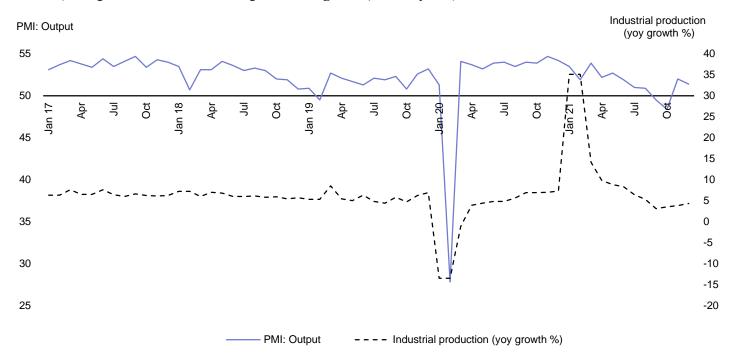


#### Growth in manufacturing production to stay low in 1Q22

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, China's industrial production is set to further recover in the near term, boosted by an increase in infrastructure investment. However, a high comparison base last year will keep industrial production growth low at 3.5%-4.0% yoy in 1Q22. Challenges facing Chinese manufacturers include ongoing trade frictions between China and the US, intense competition in the international market, and strong government's determination to reduce industrial carbon emissions.

We expect the VAIO growth to stay low at 3.5%-4.0% yoy in 1Q22, as a high comparison base last year will offset the positive impact of a jump in infrastructure investment.

#### Exhibit 7: Output index and industrial production growth, January 2017 to December 2021



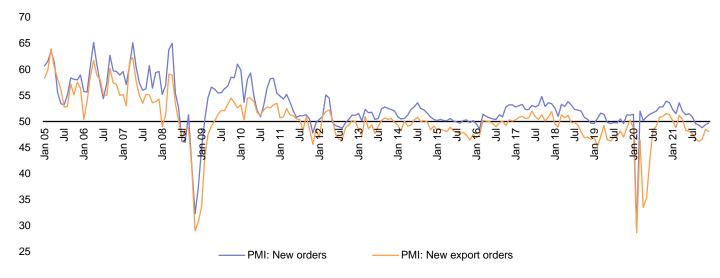
### 4. What the PMI tells us about the overall market demand

#### Overall market demand deteriorates at a slower pace

The new orders index picked up from 48.8 in October to 49.4 in November and further to 49.7 in December, indicating that new orders and the overall market demand has contracted at a slower pace lately.

Meanwhile, after rebounding from 46.6 in October to 48.5 in November, the new export orders fell again to 48.1 in December, 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 December 2021



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

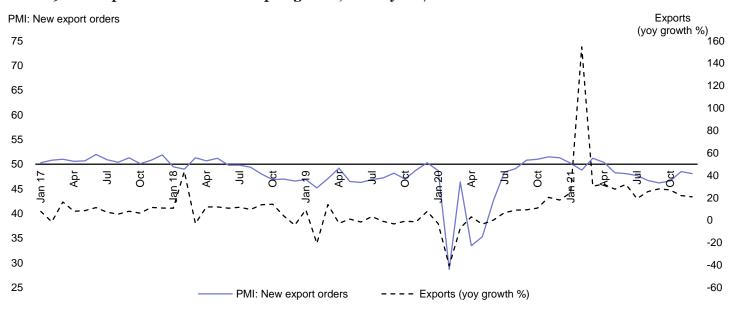
#### China's export growth to slow amid growth moderation in global economy

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 indicator<sup>1</sup> has been on a downward trend since July last year, suggesting a moderation in the growth in the global economy. All in all, we forecast that the growth in China's exports will ease to 10.0% yoy in 1Q22.

With global growth moderating, we forecast that the growth in China's exports will ease to 10.0% yoy in 1Q22.

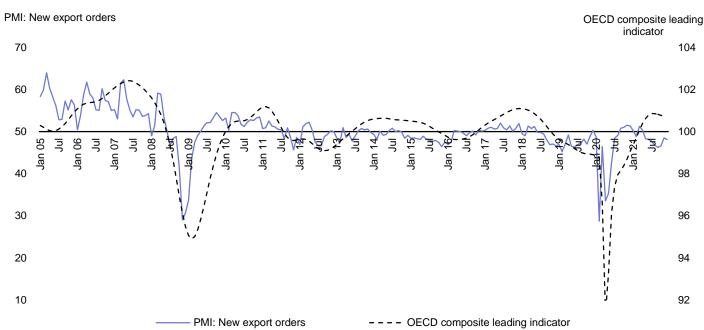
<sup>1</sup> The OECD composite leading indicator, compiled by the Organization for Economic Cooperation and Development, is designed to provide early signals of turning points (peaks and troughs) between expansions and slowdowns of economic activity, and covers Australia, Austria, Belgium, Canada, Czech 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

#### Exhibit 9: New export orders index and export growth, January 2017 to December 2021



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 December 2021



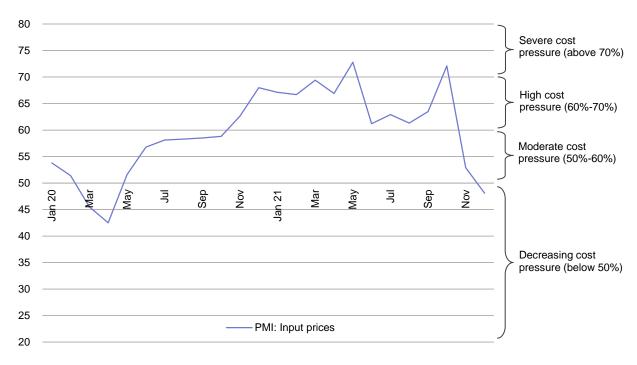
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Organization for Economic Cooperation and Development

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

#### Upstream prices start to fall, easing cost pressure on manufacturers

The input prices index plunged from 72.1 in October to 52.9 in November and 48.1 in December. The latest index reading has dipped below the critical 50-mark, indicating a fall in the prices of production inputs lately, which would alleviate the cost pressure on manufacturers. (Exhibit 11)

#### Exhibit 11: Input prices index, January 2020 to December 2021



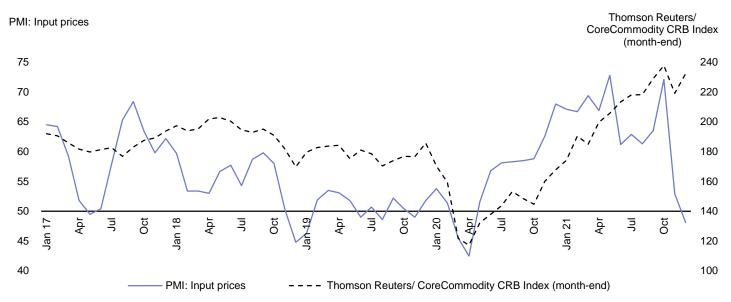
Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

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.<sup>2</sup>

Although the CRB index is still near its seven-year high, we expect global commodity prices to ease from their current levels in the coming months, which will alleviate the input cost pressure facing Chinese manufacturers.

<sup>2</sup> 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 2017 to December 2021

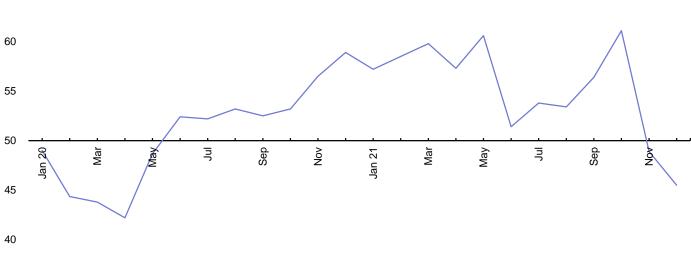


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, Thomson Reuters

#### Manufacturers lower ex-factory prices of their products

The ex-factory prices index went down from 61.1 in October to 48.9 in November and further to 45.5 in December. The index readings indicate that Chinese manufacturers have been lowering the ex-factory prices of their finished products lately.<sup>3</sup> (Exhibit 13)

#### Exhibit 13: Ex-factory prices index, January 2020 to December 2021



- PMI: Ex-factory prices

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

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<sup>3</sup> The ex-factory prices index has been released since January 2017.

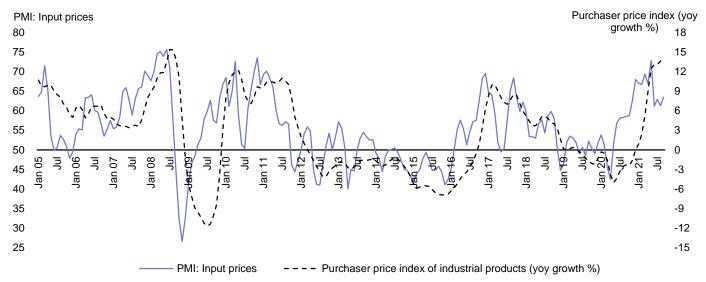
#### Growth in purchaser price index and PPI to decline in 1Q22

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)<sup>4</sup> in exhibit 15.

Going forward, we expect that the year-on-year growth rates for both the purchaser price index and the PPI will fall in 1Q22, due to a high comparison base in the same period last year.

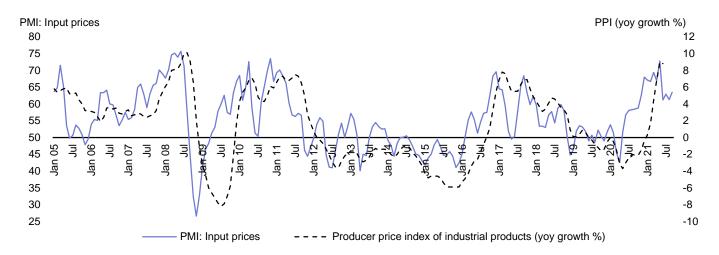
We expect that the yearon-year growth rates for both the purchaser price index and the PPI will fall in 1Q22 due to a high comparison base.

### Exhibit 14: Input prices index and purchaser price index of industrial products, January 2005 to December 2021



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

#### Exhibit 15: Input prices index and producer price index, January 2005 to December 2021



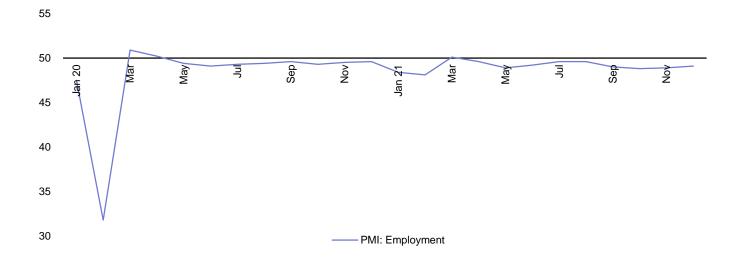
<sup>&</sup>lt;sup>4</sup> The producer price index of industrial goods (PPI), compiled by China National Bureau of Statistics, measures the prices of industrial products when they are sold for the first time after production.

## 6. What the PMI tells us about manufacturing employment

#### Stabilization of employment index indicates steady manufacturing employment

The employment index registered 48.8 in October, 48.9 in November, and 49.1 in December respectively. The index has stabilized around 49.0, indicating the steady employment situation in the manufacturing sector in the past few months. (Exhibit 16)

#### Exhibit 16: Employment index, January 2020 to December 2021

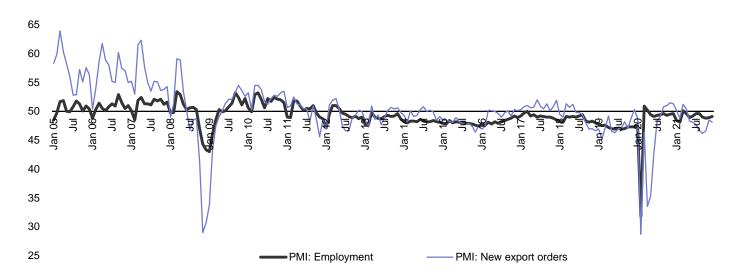


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 17 shows that the employment in China's manufacturing sector has relied heavily on the export sector. Exhibit 19 and 20 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 continued growth in the export sector and the overall economy, we expect that the employment situation in the manufacturing sector will remain steady in 1Q22.

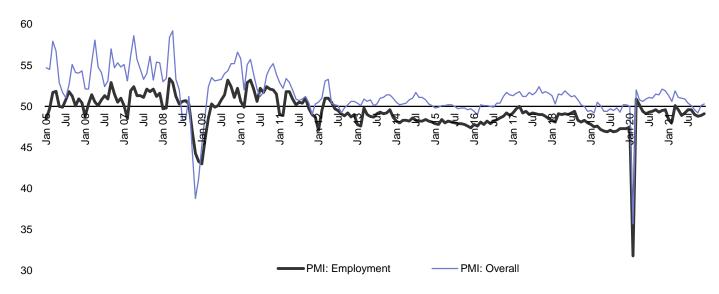
Given a continued growth in the export sector and the overall economy, we expect manufacturing employment to remain steady in 1Q22.

Exhibit 17: Employment and new export orders, January 2005 to December 2021

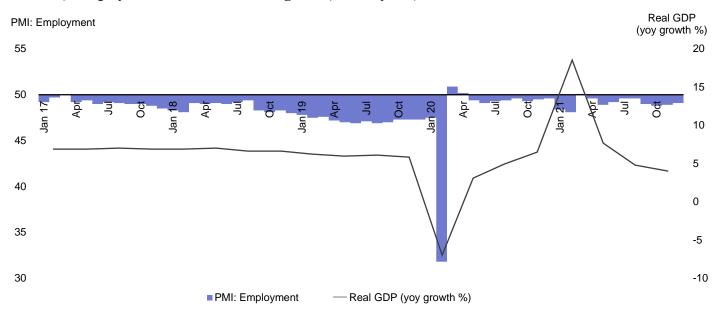


Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics

Exhibit 18: Employment index and headline PMI, January 2005 to December 2021



#### Exhibit 19: Employment index and real GDP growth, January 2017 to December 2021



### **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.

For more information, please visit <a href="http://www.funggroup.com">http://www.funggroup.com</a>.

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