PMI 2Q20
Continued recovery of industrial production and economic activity

Policy Outlook
China likely to introduce more policies to stabilize economic growth

3Q20 Forecasts
Real GDP growth to rebound to 5.5% yoy while PMI to fluctuate within 50.0 to 51.0
PMI indicates continued recovery of industrial production and economic activity in 2Q20

Our observations
• Output recovers at a robust pace as the overall demand improves.
• New export orders continue to drop, albeit at a slower pace, amid a global economic recession.
• Prices of production inputs go up, adding cost pressures on Chinese manufacturers.
• Manufacturers start to raise ex-factory prices of their products amid increasing cost pressures and improving sales environment.
• Manufacturing employment remains relatively steady.

Policy outlook
• We expect that the central government will introduce more policies to stabilize economic growth.
• China will step up macroeconomic policies to keep businesses and employment stable. The proactive fiscal policy will be made more effective, while the prudent monetary policy will be more flexible and accommodating.
• These policies will help alleviate the downward pressure on the Chinese economy and promote its continued recovery.

Our forecasts for 3Q20
• We project a strong recovery of industrial production and economic activity in 3Q20.
• The headline PMI will stay above 50 and fluctuate within 50.0 to 51.0.
• The real GDP growth will rebound to 5.5% yoy.
• The VAIO growth will pick up to 5.5% yoy.
• Exports and imports will stay flat year-on-year.
• The year-on-year growth rates for both the purchaser price index and the PPI will pick up further.
• The year-on-year CPI growth will ease below 2.0% by end-3Q.
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1. PMI indicates continued recovery of industrial production & economic activity

China’s manufacturing PMI fell from 50.8 in April to 50.6 in May, and then rose to 50.9 in June. The index readings in recent months show that the manufacturing sector and the economy in China have continued to recover from the COVID-induced slowdown. (See exhibit 1)

It is noteworthy to recognize the discrepancy by size of enterprises. The PMI of ‘large enterprises’ went up from 51.1 in April to 51.6 in May and further to 52.1 in June, indicating a robust recovery of ‘large enterprises’. Meanwhile, the PMI of ‘medium enterprises’ fell from 50.2 in April to 48.8 in May before picking up to 50.2 in June, and the PMI of ‘small enterprises’ dropped from 51.0 in April to 50.8 in May and 48.9 in June. These index readings show a rocky recovery of ‘medium enterprises’ and ‘small enterprises’. (See exhibit 2)

The headline PMI stayed above the critical 50-mark with minor fluctuations in the past three months, pointing to a stable recovery of the manufacturing sector and the economy. Production activities have recovered at a relatively fast pace in recent months, as indicated by the strong output index throughout April to June. This was supported by the relatively stable growth in overall new orders: The new orders index rose from 50.2 in April to 51.4 in June, indicating an improvement in the aggregate demand lately.

Prices of industrial products have started to rise: The ex-factory prices index went up above the critical 50-mark in June. The rise in product prices was partly attributed to the recent increase in the prices of materials: The input prices index returned to the expansionary zone in May, and further reached 56.8 in June.

Looking ahead, the Chinese economy is still under downward pressure amid the COVID-19 global pandemic and the resulting global economic recession. We expect that the central government will introduce more policies to stabilize economic growth. According to the Government Work Report released in late May, China will step up macroeconomic policies to keep businesses and employment stable. The proactive fiscal policy must be more effective, with steps to raise the budget deficit to at least 3.6% of the GDP and to issue special sovereign bonds worth 1 trillion yuan. The prudent monetary policy must be more flexible and accommodating to enable M2 money supply and aggregate financing to grow at notably higher rates than last year and guide interest rates to fall. To this end, the central bank will use a variety of tools such as required reserve ratio reductions, interest rate cuts, and re-lending. We believe that these policies will help alleviate the downward pressure on the Chinese economy and promote its continued recovery.
With the successful containment of the COVID-19 outbreak, China’s economic activity has basically returned to normal lately. Moreover, as the positive impact of China’s stimulus measures has started to unfold, China’s economic growth is set to rebound further in the near term. However, as the COVID-19 global pandemic has dented the global trade and economy badly, the economic recovery of China is likely to be constrained. Overall, we predict that the headline PMI will fluctuate within 50.0 to 51.0 and the real GDP growth will be around 5.5% yoy in 3Q20. Challenges facing Chinese manufacturers include weak external demand caused by the COVID-19 pandemic, ongoing trade frictions between China and the US, strong government’s determination to tackle the pollution problem, and intense competition in the international market. Overall, we expect that the industrial production (VAIO) growth will rebound to around 5.5% yoy in 3Q20.

Exhibit 3 shows the contributions of the sub-indices to the change in the headline PMI. The rise in the headline PMI in June 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), the indices of output, new orders, purchases of inputs 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, imports and stocks of major inputs have stayed in the contractionary zone over the same period. (See exhibit 4)

China’s manufacturing PMI has so far done a satisfactory job in predicting economic growth. Exhibit 5 plots the quarterly real GDP yoy growth rates versus the monthly PMIs since July 2015. It could be seen that the PMI demonstrates a fairly good track record of forecasting the growth trend of the economy at least over the next few months. Based on this chart we project that the real GDP growth will be around 5.5% in 3Q20.
Exhibit 1: Headline PMI, July 2018 to June 2020

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

Exhibit 2: PMIs of large enterprises, medium enterprises and small enterprises, April to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 3: Headline PMI and sub-indices, January 2005 to June 2020

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

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 4: PMIs of large enterprises, medium enterprises and small enterprises, April to June 2020

Exhibit 5: Headline PMI and real GDP growth, July 2015 to June 2020
2. Output recovers at a robust pace

The output index stayed high and fluctuated within a narrow range of 53.2 to 53.9 throughout April to June, indicating that production activities have recovered at a robust pace as the overall demand has continued to improve. (See exhibit 6)

Exhibit 7 shows that the output growth in June was mainly fuelled by new orders growth instead of restocking activities, as the stocks of finished goods index has stayed in the contractionary zone for 87 consecutive months. However, output may grow strongly later when manufacturers finally run out of their inventory or regain confidence to restock.

Exhibit 6: Output index, July 2018 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 8 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 the VAIO growth will rebound to around 5.5% yoy in 3Q20, as most manufacturers have resumed normal production. Moreover, the government’s stimulus measures are likely to partly offset the negative impact of the global economic slowdown on China’s industrial activities. Challenges facing Chinese manufacturers include weak external demand caused by the COVID-19 pandemic, ongoing trade frictions between China and the US, strong government’s determination to tackle pollution problem, and intense competition in the international market.

We expect the VAIO growth to rebound to around 5.5% yoy in 3Q20, as most manufacturers have resumed normal production.
Exhibit 8: Output index and industrial production growth, July 2015 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
3. New export orders drop at slower pace

The new orders index rose from 50.2 in April to 50.9 in May and further to 51.4 in June, indicating that the growth of new orders has accelerated recently.

Meanwhile, the new export orders picked up from 33.5 in April to 35.3 in May and 42.6 in June, having stayed in the contractionary zone for six consecutive months. On the bright side, the latest figures indicate that new export orders have decreased at a slower pace lately. In our view, the new export orders index will continue to improve in the coming months. (See exhibit 9)

Exhibit 9: New orders index and new export orders index, January 2005 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 10: New export orders index and export growth, July 2015 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics, China Customs
Exhibit 10 plots the new export orders index against the year-on-year growth rates of China’s exports. The correlation between the two indices is fairly high. As the new export orders index has continued to pick up lately, we are now taking a slightly more optimistic (or less pessimistic) view about the near-term prospects of China’s exports. Meanwhile, from exhibit 11 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\(^1\) collapsed to unprecedented levels in April and stayed low in May and June, suggesting that a global recession is underway amid the COVID-19 pandemic. All in all, we forecast that China’s exports will stay flat year-on-year in 3Q20.

We are now taking a slightly more optimistic view about the near-term prospects of China’s exports, and forecast that China’s exports will stay flat year-on-year in 3Q20.

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\(^1\) 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.
4. Backlogs of orders continue to fall

The backlogs of orders index picked up 43.6 in April to 44.1 in May and 44.8 in June. The index has been in the contractionary zone since April 2012, indicating that backlogs of orders have continued to drop. (See exhibit 12)

Looking ahead, we expect the index to go up in the coming months, as indicated by the apparently very high correlation between the sub-index and the headline PMI, and the strength in the headline PMI recently. (See exhibit 13)

Exhibit 12: Backlogs of orders index, July 2018 to June 2020

Exhibit 13: Backlogs of orders index and headline PMI, January 2005 to June 2020
5. Stocks of finished goods drop at faster pace

The stocks of finished goods index went down from 49.3 in April to 47.3 in May and 46.8 in June. The latest figures indicate that the stocks of finished goods held by manufacturers have decreased at a faster pace in recent months.

Meanwhile, the stocks of major inputs index fluctuated within a range of 47.3 to 48.2 throughout April to June. The index remained below the critical 50-mark in the past three months, indicating a continuous fall in the stocks of major inputs. (Exhibit 14)

Exhibit 14: Stocks of finished goods index and stocks of major inputs index, January 2005 to June 2020

6. Growth in purchasing activities accelerates

The purchases of inputs index declined from 52.0 in April to 50.8 in May, and then rebounded to 51.8 in June. The latest figure indicates an acceleration in the growth in purchasing activities. (Exhibit 15)

A number of factors affect the purchasing activities of manufacturers, among which the amount of new orders received by manufacturers has been the most important factor. Exhibit 16 plots the purchases of inputs index against the new orders index. The correlation between the two sub-indices is very strong. This is intuitively easy to explain – as manufacturers usually need to purchase extra inputs to cope with new orders. We expect to see a continuous increase in purchases if the rise in new orders persists. The purchasing activities also reflect business confidence. Exhibit 17 shows the association between the purchases of inputs index and the business expectations index. Finally, exhibit 18 shows that input prices, as well as the expected trend of input prices, are also important considerations when making purchasing decisions.
Exhibit 15: Purchases of inputs index, July 2018 to June 2020

Exhibit 16: Purchases of inputs and new orders, January 2005 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 17: Purchases of inputs and business expectations, January 2016 to June 2020

Exhibit 18: Purchases of inputs and prices of major inputs, January 2005 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
7. Prices of production inputs go up

The input prices index jumped from 42.5 in April to 51.6 in May and further to 56.8 in June. The index readings were above the critical 50-mark in May and June, indicating a rise in the prices of production inputs recently. This would increase the cost pressures on Chinese manufacturers. (Exhibit 19)

Exhibit 19: Input prices index, July 2018 to June 2020

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

Exhibit 20 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)\(^2\) in exhibit 21. Going forward, we expect that the month-on-month growth rates for both the purchaser price index and the PPI will stay positive in the near term, and the year-on-year growth rates for both the purchaser price index and the PPI will pick up further in 3Q20. Meanwhile, we forecast that the year-on-year CPI growth will ease in the coming months. Finally, to see the extent to which input costs of Chinese manufacturers are affected by global commodity prices, exhibit 22 puts together the input prices index and the Thomson Reuters/ CoreCommodity CRB index.\(^3\)

We expect that the mom growth rates for both the purchaser price index and the PPI will stay positive in the near term, and the yoy growth rates will pick up further in 3Q20.

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\(^2\) 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.

\(^3\) 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 commodities markets.
Exhibit 20: Input prices index and purchaser price index of industrial products, January 2005 to June 2020

PMI: Input prices

Purchaser price index (yoy growth %)

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

Exhibit 21: Input prices index and producer price index, January 2005 to June 2020

PMI: Input prices

PPI (yoy growth %)

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
Exhibit 22: Input prices index and Thomson Reuters/ CoreCommodity CRB Index, July 2015 to June 2020

Exhibit 22 tries to give a convenient way of assessing and analyzing the profitability of Chinese manufacturers. Since new orders represent source of new revenue and input prices represent production cost, if the former rises faster than the latter, profitability tends to improve, and vice versa. In recent months, input prices have risen faster than new orders do, which may imply deterioration in manufacturers’ profit margins in the near future.

Exhibit 23: Input prices and new orders, January 2005 to June 2020

Exhibit 23 tries to give a convenient way of assessing and analyzing the profitability of Chinese manufacturers. Since new orders represent source of new revenue and input prices represent production cost, if the former rises faster than the latter, profitability tends to improve, and vice versa. In recent months, input prices have risen faster than new orders do, which may imply deterioration in manufacturers’ profit margins in the near future.
8. Manufacturers start to raise ex-factory prices of their products

The ex-factory prices index went up from 42.2 in April to 48.7 in May and further to 52.4 in June. The index rose above the critical 50-mark in June, indicating that Chinese manufacturers have started to raise the ex-factory prices of their finished products lately amid rising cost pressures and improving sales environment. (Exhibit 24)

Exhibit 24: Ex-factory prices index, July 2018 to June 2020

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

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4 The ex-factory prices index has been published since January 2017.
9. Imports index continues to fall

The imports index rebounded from 43.9 in April to 45.3 in May and 47.0 in June. The latest index readings indicate a slower decline in the domestic demand for imported raw materials and parts used in manufacturing. (Exhibit 25)

Exhibit 25: Imports index, July 2018 to June 2020

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

Exhibit 26 shows that the imports index is highly correlated (with some lags) to the year-on-year growth rate in imports. We expect imports to stay flat year-on-year in 3Q20 as the domestic demand for imported goods continues to improve. Exhibit 27 illustrates the strong association between the imports index and the purchases of inputs index – as Chinese manufacturers purchase a large amount of production inputs and parts from overseas. Besides, China is a major importer of oil, iron ore and other raw materials. To see how heavily China’s imports of inputs are affected by world commodity prices, we plot the imports index against the Thomson Reuters/ CoreCommodity CRB index. It is found that the imports index has been positively related to global commodity prices. (Exhibit 28)
Exhibit 26: Imports index and import growth, July 2015 to June 2020

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

Exhibit 27: Imports and purchases of inputs, January 2005 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
The employment index registered 50.2 in April, 49.4 in May and 49.1 in June respectively. The index has stabilized above 49, indicating the relatively steady employment situations in the manufacturing sector in the past few months. (Exhibit 29)

10. Employment index stabilizes above 49

The employment index registered 50.2 in April, 49.4 in May and 49.1 in June respectively. The index has stabilized above 49, indicating the relatively steady employment situations in the manufacturing sector in the past few months. (Exhibit 29)
Exhibit 30 proves that the employment in China’s manufacturing sector has relied heavily on the export sector. Exhibit 31 and 32 give our readers some ideas about the extent to which the employment situation improves or deteriorates with the manufacturing sector and the overall economy.

Exhibit 30: Employment and new export orders, January 2005 to June 2020

Exhibit 31: Employment index and headline PMI, January 2005 to June 2020

Source: China Federation of Logistics & Purchasing, China National Bureau of Statistics
11. Suppliers’ delivery quickens

The suppliers’ delivery time index went up from 50.1 in April to 50.5 in May and June. The index readings in the past three months were above the critical 50-mark, indicating that suppliers’ delivery has quickened recently. (Exhibit 33)
The business expectations index rose from 54.0 in April to 57.9 in May and stayed high at 57.5 in June. The index has been well above the critical 50-mark in recent months, indicating that purchasing managers in China have been optimistic about the near-term outlook for their respective industries.5 (See exhibit 34)

### Exhibit 33: Suppliers’ delivery time index, July 2018 to June 2020

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

### 12. Purchasing managers are optimistic

The business expectations index rose from 54.0 in April to 57.9 in May and stayed high at 57.5 in June. The index has been well above the critical 50-mark in recent months, indicating that purchasing managers in China have been optimistic about the near-term outlook for their respective industries.5 (See exhibit 34)

### Exhibit 34: Business expectations index, July 2018 to June 2020

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

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5 Since January 2017, a new method of seasonal adjustment to the business expectations index has been adopted; and accordingly, the historical readings of the index have been revised.
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 Organisations:

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 sourcing, logistics, distribution and retail. The Fung Group comprises over 34,000 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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