

China Economic Quarterly Q2 2023

China's GDP increased by 6.3% in Q2 2023,
but the quarter-on-quarter growth was 0.8%,
shy of market expectation.

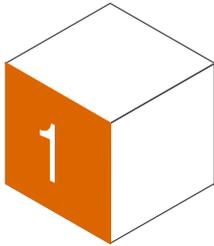
August 2023

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Major economic indicators

During the first half of 2023, China's GDP grew by 5.5% year-on-year to 59.30 trillion yuan. It is worth noting that the growth was partly attributable to a low base during the same period last year when GDP grew by only 2.5%.

Several indicators suggest the economy is not recovering as quickly as previously anticipated. For example, in second quarter, GDP grew by 0.8% quarter over quarter (Q/Q), which is slower than 2.2% Q/Q growth in the first quarter, suggesting a slowdown in recovery in the second quarter.

Moreover, businesses and households showed a lack of confidence in the economic recovery, as indicated by consumption and investment data. Besides, some are even concerned about the future sustainability of the Chinese economy. All these will directly affect the macroeconomic recovery in the second half of the year (H2). This negative sentiment is attributable to multiple reasons, including both domestic and external factors such as weak global economic growth and geopolitical instability.

Therefore, to restore China's overall economic growth to the pre-epidemic level, it is still necessary to introduce appropriate stimulus and support policies in the second half of the year. These may include promoting consumption, expanding investment, and stabilising the real estate markets,

so as to boost the confidence in economic growth among enterprises and residents.

With the implementation of relevant policy stimuli and adjustments, the consumption, investment and real estate markets are expected to continue to recover and be stabilised in the second half of the year. Despite the drag on imports and exports due to shrinking external demand, which would be difficult to address through domestic policies, China has ample policy tools to bring the macro economy back to 2019 levels. Although it may not be difficult to achieve the economic growth target of around 5% in 2023 according to the current development trend, it is imperative to enhance measures to deepen reform and opening up. These efforts are crucial to bolstering the confidence of enterprises and individuals for the sustainable development of China's economy.

In Q2, the employment situation remained relatively stable. Meanwhile, more college graduates will enter the labour market in the third quarter. The number of college graduates in 2023 is expected to reach 11.58 million, marking a new high with a year-on-year (YoY) increase of 820,000.

The average surveyed urban unemployment rate was 5.3% in Q2, decreasing by 0.2 percentage points from Q1. In June, the surveyed urban

unemployment rate was 5.2%, unchanged from last month. The surveyed unemployment rate for individuals aged 16 to 24 was 21.3%, compared to 19.6% in March.

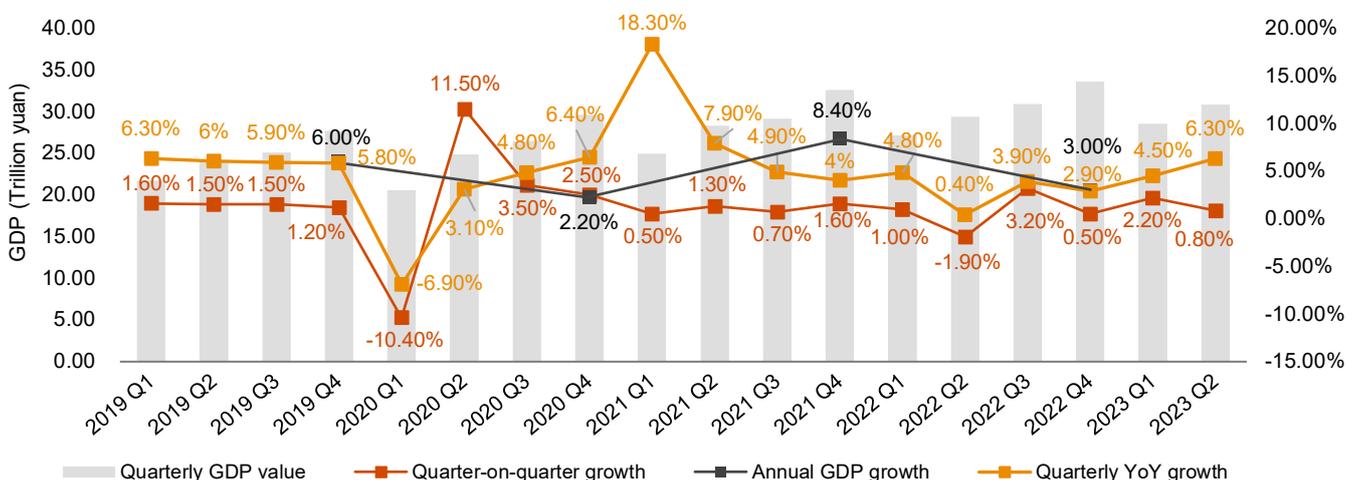
By the end of Q2, there were 187.05 million rural workers who migrated out of their hometowns to work in urban areas, compared to 181.95 million in Q1.

According to Civil Aviation Administration of China (CAAC), in the first half of the year (H1), a total transport turnover of 53.13 billion ton-kilometres, passenger transport volume of 284 million people, and cargo and mail transport volume of 3.276 million tons were completed. These figures represent a recovery rate of 84.6%, 88.2% and 93.1% respectively, compared to the same period of 2019, indicating that the economy has still not returned to the level of 2019.

On the brighter side, the International Monetary Fund (IMF) has recently raised its forecast for global economic growth in 2023 to 3%, up 0.2 percentage points from its earlier forecast in April.

While the economic recovery has been slower than expected, it is understandable given the severe disruptions over the past three years. As the domestic situations normalise, economic growth is on the right track to gradually return to 2019 levels, along with market optimism about the future.

Quarterly GDP values and quarterly and annual GDP growth rate



Source of data: Unless otherwise stated, economic data are from the National Bureau of Statistics, Wind and financial data from the People's Bank of China.

During the first half of the year, the outputs of the primary, secondary and tertiary industries were 3.04, 23.07 and 33.19 trillion yuan respectively, representing to YoY growth rates of 3.7%, 4.3% and 6.4%.

In H1, the added value of the primary, secondary and tertiary industries accounted for 5.13%, 38.9% and 55.97% of the GDP respectively. In Q2, these figures were 6.12%, 39.84% and 54.04% respectively.

Besides, the added value of the primary, secondary and tertiary industries contributed 3.7%, 30.1%, and 66.1% to economic growth in H1.

In H1, the final consumption expenditure contributed 77.2% to economic growth, which was a significantly higher contribution compared to the same period last year, boosting GDP by 4.2 percentage points.

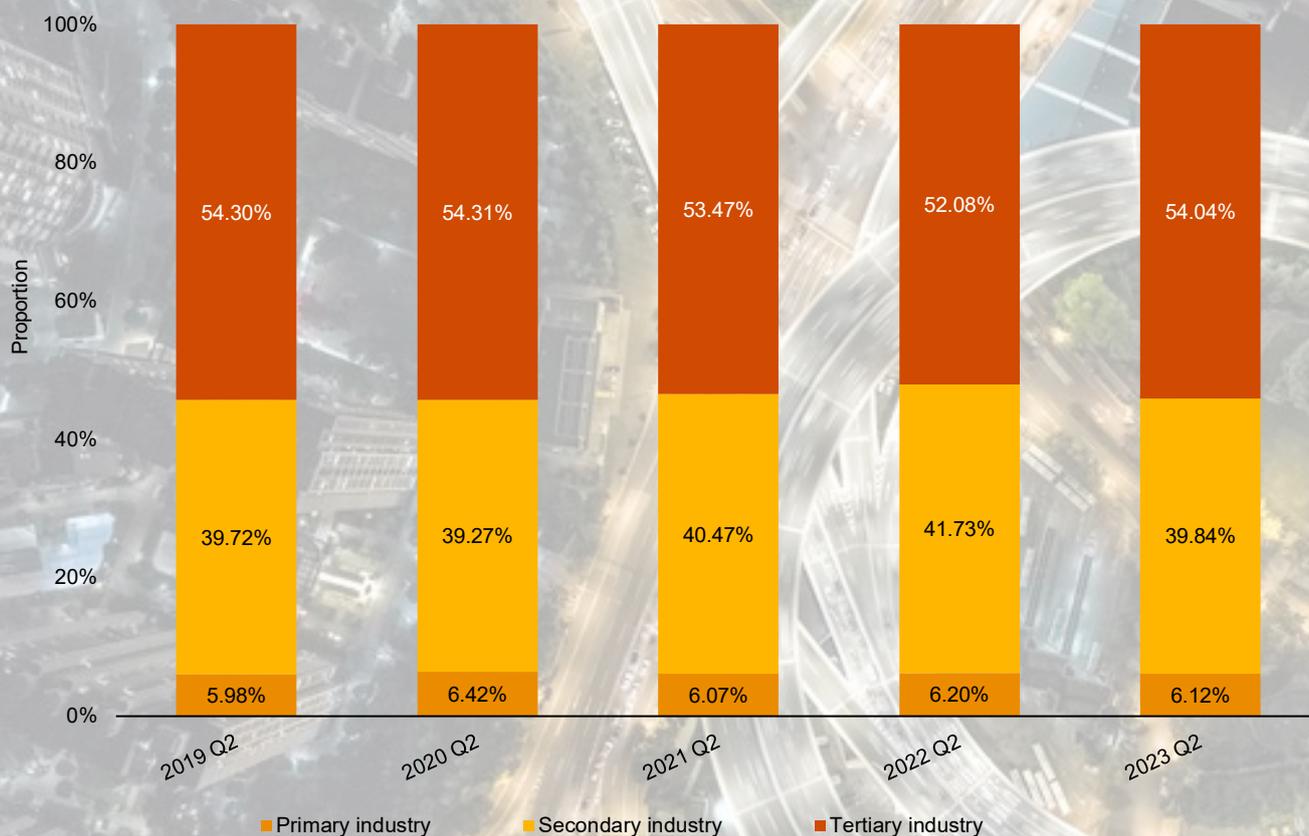
Furthermore, the added value of the service sector contributed 66.1% to economic growth in H1, higher than that of the secondary industry.

Accelerated construction of major projects in H1 indicated that policy-oriented financial instruments became more effective, and the scale of investment continued to expand, with gross capital formation contributing 1.8 percentage points to GDP growth.

Net exports of goods and services dragged down GDP by 0.5 percentage points in H1. Net exports of goods and services declined, while imports and exports of goods increased by 2.1% YoY.

Due to sluggish global economic growth and a high base last year, the growth of external demand has slowed down. The surplus of trade in goods has decreased compared to the previous year, while the deficit of trade in services has widened. Therefore, the pivotal role of net export of goods and services in driving economic growth has weakened. This situation is expected to persist in the second half year.

GDP composition



Total fixed asset investment reached 24.31 trillion yuan in H1, increasing 3.8% YoY. On a month-over-month (MoM) basis, investment in fixed assets grew 0.39%.

Breaking down **by ownership types**, private investment reached 12.86 trillion yuan in H1, reflecting a decrease of 0.2%. In contrast, state-owned investment rose by 8.1%.

More investment is urgently needed in the second half year. Investment by state-owned enterprises and local governments will continue to increase until private investment fully recovers. At the same time, reform measures are expected to be implemented to free up more space to create a conducive environment for private investment. These measures may include opening up private investment in less market-driven traditional sectors, or lowering entry barriers for these sectors.

For example, the central government has recently introduced policies to encourage private enterprises to engage in key core technology research and participate in major national science and technology projects, including industrial software, cloud computing, artificial intelligence, industrial Internet, gene and cell medical treatment, and new energy storage.

Furthermore, fixed asset investment from Hong Kong SAR-, Macao SAR- and Taiwan region-owned companies decreased by 3.4% in H1, meanwhile,

fixed investment from foreign-owned enterprises continued to rise by 3.4%.

By sector, fixed asset investment of the primary, secondary and tertiary industry increased by 0.1%, 8.9%, and 1.6% in H1 respectively.

By industry, within the secondary industry, the industrial sector went up 8.9%. In H1, investment in mining increased by 0.8%, while investment in the production and supply of electricity, gas and water rose by 27%.

Fixed asset investment in the manufacturing sector rose by 6%, boosting fixed asset investment by 1.4 percentage points. Investment in electrical machinery and equipment manufacturing grew by 38.9% in H1. Investment in instrument manufacturing increased by 24.1%, automotive manufacturing by 20%, and chemical raw materials and chemical products manufacturing by 13.9%.

Infrastructure investment increased by 7.2% YoY in H1, driving the growth of total fixed asset investment by 1.5 percentage points. Within this category, investment in railway transport increased by 20.5%, water management by 9.6%, and information transmission by 6.2%.

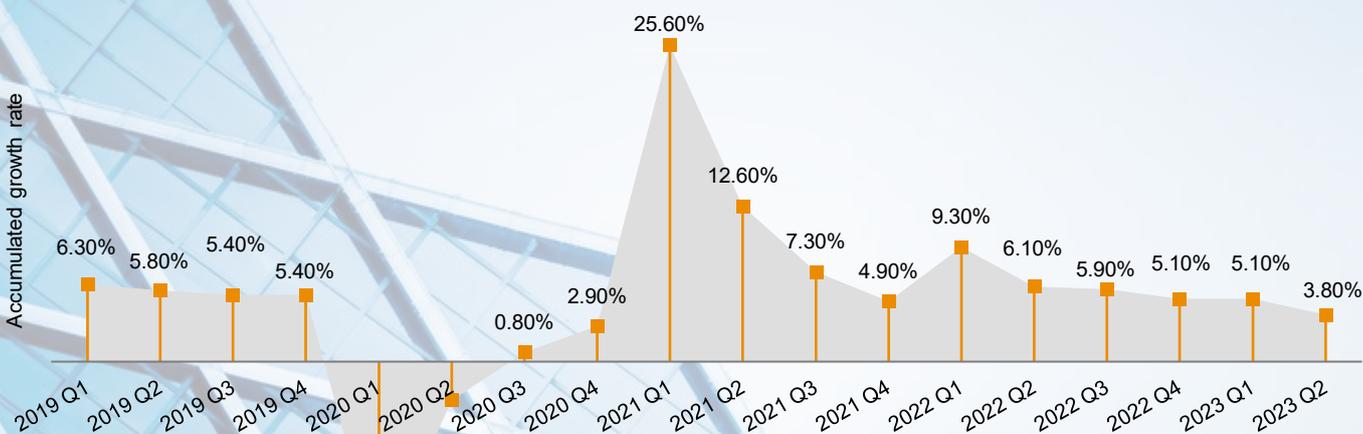
In H1, the investment in projects with a planned total investment of 100 million yuan and above, commonly known as "large projects", increased by 10.9% YoY, 7.1 percentage points higher than the total investment.

Although overall private investment barely grew, investment in projects grew rapidly. In H1, projects investment from private enterprises, excluding real estate development, grew by 9.4% YoY, 5.6 percentage points higher than the total investment. This is the result of government policy to stimulate the vitality of private capital investment and encourage and attract more private capital to participate in major national projects and key industrial chain and supply chain projects. Within this, private investment in manufacturing increased by 8.4% and infrastructure by 15.6%. Meanwhile, real estate investment contracted by 7.9% YoY.

Investment in high-tech industries increased by 12.6% YoY in H1, 8.7 percentage points higher than overall fixed asset investment. Notably, investment in high-tech manufacturing and high-tech services increased by 11.8% and 13.9% respectively.

Furthermore, in high-tech manufacturing, investment in medical equipment manufacturing went up by 16.8%, while electronic and communication equipment manufacturing rose by 14.2%. For high-tech service, investment in commercialisation of scientific and technological achievements increased by 46.3%, and e-commerce service up by 22.2%.

Fixed Asset Investment



Total real estate investment

contracted by 7.9% in H1, amounting to 5.86 trillion yuan. The total investment in residential buildings was 4.44 trillion yuan, down 7.3% in H1.

The slow rebound of real estate market, largely due to earlier macro control policy, remains a major obstacle to overall economic recovery.

Recently, both the central and local governments are expanding their policy “toolbox” to promote the stable and healthy development of the real estate market. The State Council stressed that “real estate policies should be adjusted and optimized. Policies and measures conducive to the stable and healthy development of the real estate market should be introduced according to the needs of different cities”. Besides, the People’s Bank of China held a work conference to support the stable and healthy development of the real estate market.

Therefore, China’s real estate market is expected to gradually recover in the second half of the year. By effectively unlocking the demand for high-quality, diversified housing to improve the livelihood of residents’, the real estate market can potentially restore its healthy and stable development.

China’s real estate market is expected to transform from the “golden period” over the past 20 years to a normal

development period. In addition to the basic demand for daily living, the release of demand for better, bigger, high-quality housing, as well as demand for housing in tourism, vacation, leisure, retirement, medical care, seasonal migration and other improved demand, can support the long-term stable development of the real estate market.

In H1, the total sales value of all properties reached 6.32 trillion yuan, an increase of 1.1% YoY. Among all properties, sales of residential properties increased by 3.7% YoY in H1, reaching 5.66 trillion yuan.

In addition, the sales area or floor space of all properties was 595 million square metres, down 5.3%.

In June, the prices of newly built properties in tier one cities, namely Beijing, Shanghai, Guangzhou and Shenzhen, increased by 1.3% YoY, while prices of resale residential properties decreased by 0.4%. In tier two cities, prices of newly built properties went up by 0.5% YoY, while prices of resale properties decreased by 2.4%. In tier three cities, prices of newly built and resale properties saw a decline of 1.4% and 3.4% respectively.

In H1, the funds for real estate development enterprises reached 6.88 trillion yuan, a YoY contraction of 9.8%. More specifically, self-raised funds contributed 2.06 trillion yuan, with a

decrease of 23.4%. Deposits and prepayments accounted for 2.43 trillion yuan, a decline of 0.9%. Personal mortgage loans and domestic bank loans contributed 1.24 and 0.89 trillion yuan to total funds, with an increase of 2.7% and a decrease of 11.1% respectively.

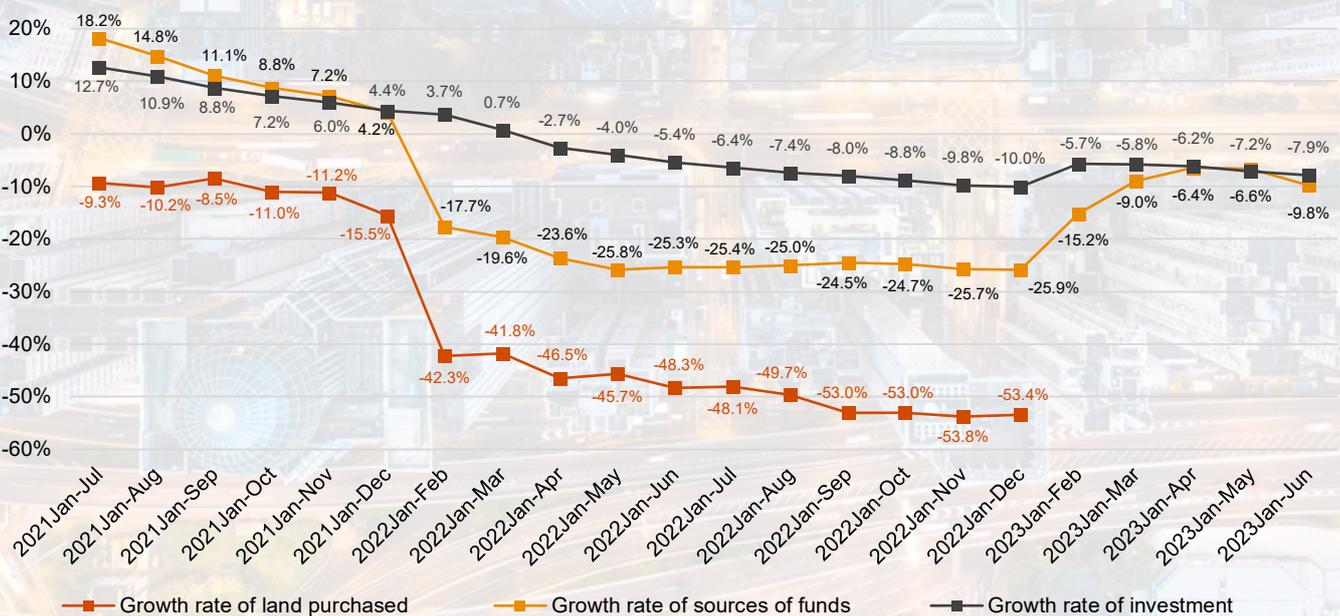
In addition, several other indicators declined in H1, including:

- Total value of land transactions (final amount in land use rights transactions by developers) shrank by 31.24% YoY to 903 billion yuan;
- Land acquisition area, also known as volume of land purchased, contracted by 29%, and reached 350 million square metres;
- Floor space of buildings, including residential and commercial buildings, at the start of construction decreased by 24.3% and reached 499 million square metres; residential space decreased by 24.9%.

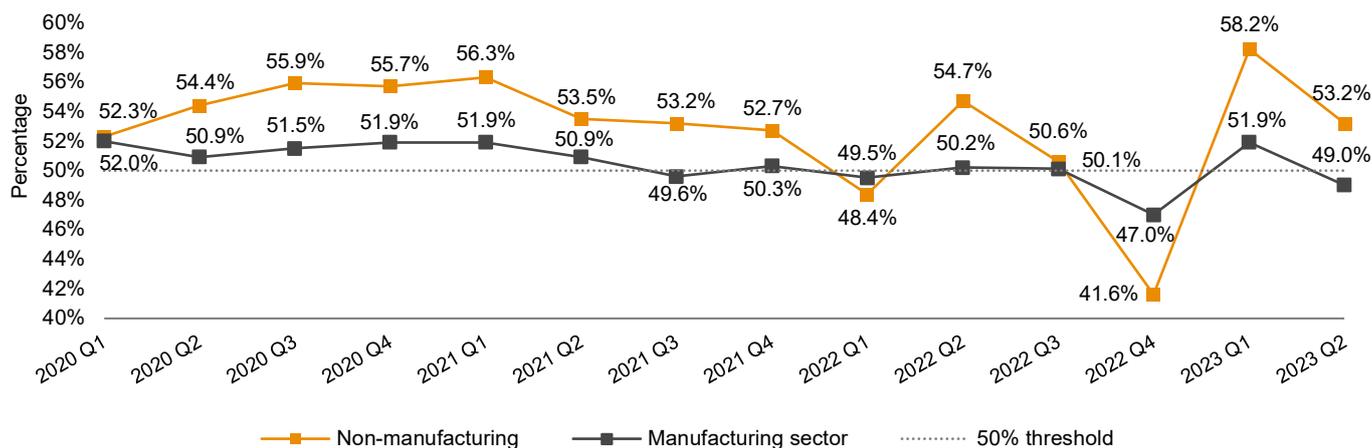
Additionally, in H1:

- Floor space of completed residential buildings increased by 19%, reaching 339 million square metres;
- Floor space under construction decreased by 6.6%, reaching 7,915 million square metres.

Growth rates in real estate



Purchasing Managers' Index



China's Purchasing Managers' Index (PMI) for the manufacturing sector fell below 50% in Q2, registering at 49.2%, 48.8% and 49% in April, May, and June respectively.

Although PMI rose 0.2 percentage points in June, it remained below the critical point of 50%, indicating a stalled recovery of the manufacturing sector.

Both the non-manufacturing business activity index and the composite PMI output index remained in the expansion range in June, standing at 53.2% and 52.3%, respectively, down 1.3 and 0.6 percentage points from the previous month.

In June, three out of the five sub-indices that constitute the manufacturing PMI were below the critical level of 50%, while the remaining two sub-indices remained slightly above this level:

- The production index increased to 50.3%, up from 49.6% in May, indicating manufacturing production recovered slowly;
- The new orders index remained low at 48.6%, indicating contracting demand for manufacturing;
- The raw materials inventory index dropped to 47.6% from 47.9% in April, indicating a low inventory level of major raw materials in the manufacturing sector;
- The employment index stood at 48.2%, a drop of 0.2 percentage point from May at 48.4%, indicating a slight deterioration in the employment situation of manufacturing companies;
- The supplier delivery time index has not changed much since the end of Q1, remaining at 50.4%. It indicated that delivery time for raw material suppliers remains stable.

The non-manufacturing business activity index decreased to 53.2% in June, down 1.3% MoM, indicating a slower recovery of the non-manufacturing sector.

Similarly, the composite PMI output index declined to 52.3% in June from 52.9% in May. The 0.6 percentage point decrease suggests a weak improvement in the overall production situation of companies.

Furthermore, among the eight related indices of manufacturing PMIs, only the index of production and business activity expectations remained above the critical point of 50% in June.

In terms of enterprise size, the PMIs of medium and small enterprises were below the critical point of 50% in June. The PMI of large enterprises was 50.3%, up 0.3% MoM, merely remained above the critical point of 50%.

The PMIs of medium and small enterprises were recorded at 48.9% and 46.4% respectively. The PMI for medium-sized enterprises rose 1.3 percentage points from the previous month, while the small business PMI fell 1.5 percentage points.

Although non-manufacturing PMI decreased in Q2, it continued to maintain the momentum of expansion. The business activity index (non-manufacturing PMI) was 56.4%, 54.5% and 53.2% for April, May, and June respectively.

Services have seen a slower recovery. The service business activity index was 52.8% in June, down 1.0 percentage points from the previous month, still in the expansion range.

In terms of industries, the business activity index of air transport, postal express delivery, telecommunications, radio, television and satellite

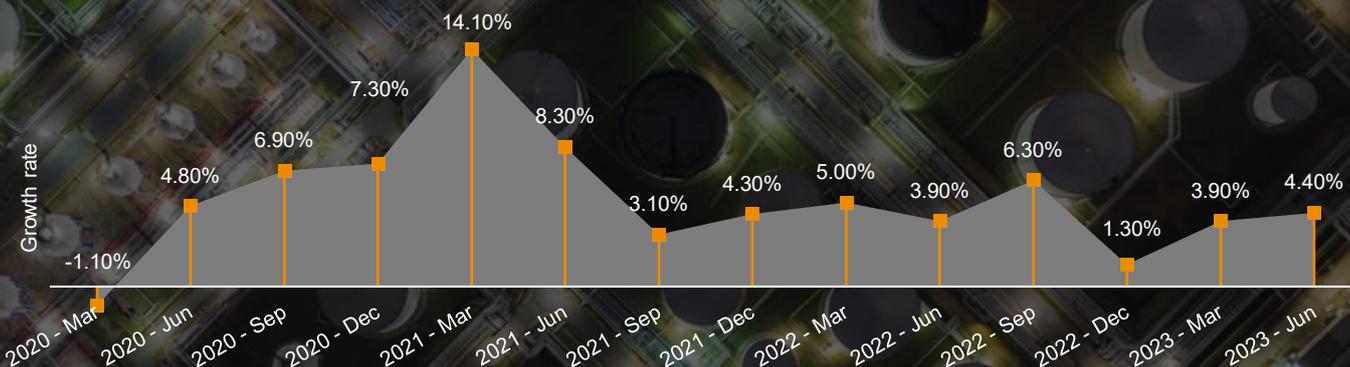
transmission services, monetary and financial services, insurance was in the high boom range of 60% and above, indicating rapid business growth in these sectors. Meanwhile, the business activity index of wholesale, real estate, and residential services was below the critical point of 50%.

From the perspective of service enterprises, the business activity expectation index was 60.3% in June, up 0.2 percentage points from the previous month, indicating increased market confidence.

Notably, the expectation index of business activities in railway transport, air transport, catering, telecommunications, radio and television and satellite transmission services exceeded 67%. Expansion of these industries is expected to continue.

The business activity index of construction industry was 55.7% in June, down 2.5 percentage points from the previous month. It still remained in a higher boom range, indicating sustained rapid growth in construction industry production. Possibly due to increased investment by government and SOEs, the business activity expectations index increased to 60.3% in June, pointing to stronger confidence of construction enterprises.

Industrial Added Values



In H1, the growth of **Industrial Added Values** for companies over a designated size rose by 3.8% YoY in real terms after deducting price factors. This growth rate was 0.2 and 0.8 percentage points faster than that in January-May and the first quarter, respectively. On a quarterly basis, the added value in the first and second quarters increased by 3% and 4.6% respectively. The cumulative monthly added value increased by 2.4%, 3.9%, 5.6%, 3.5%, 4.4% from February to June this year.

In Q2, China's **Utilisation Rate of National Industrial Capacity** stood at 74.5%, 0.6 percentage points lower YoY and 0.2 percentage points higher Q/Q. In H1, the rate was 74.4%, indicating a 1% YoY decrease.

In H1, the total profit of industrial enterprises above designated size was 3.39 trillion yuan, down 16.8% YoY. The decline was 2 percentage points narrower than that in January-May on a comparable basis. In June, the total profits of industrial enterprises above designated size reached 0.72 trillion yuan, down 8.3 percent YoY. Meanwhile, total revenue of these companies decreased by 0.4% in H1 YoY, reaching 62.62 trillion yuan.

Among the 41 industrial categories, the total profits of 12 industries increased YoY, in contrast to the decrease of 29 industries in H1.

Specifically, manufacturing profits fell by 20% YoY in H1, but the decline narrowed by 9.4 percentage points compared with the first quarter, leading to the decline in industrial profits narrowed by 7.4 percentage points compared with Q1.

In H1, major industries that showed relatively large profit growth included power and heat production and supply industry (46.5%), electrical machinery and equipment manufacturing (29.1%),

general equipment manufacturing (17.9%), automobile manufacturing (10.1%), special equipment manufacturing (3.9%).

The added value of 26 out of the 41 industrial categories grew in H1, with an overall increase of 63.4%. Among the 620 major industrial products included in the statistics, the output of 331 products increased.

Furthermore, the added value of the mining industry grew by 1.7% YoY, while that of the manufacturing industry increased by 4.2%. The production and supply of electricity, heat, gas and water grew 4.1%. In June, added value of these sectors (mining, manufacturing, production and supply of electricity and etc.) increased by 1.5%, 4.8%, and 4.9% YoY respectively.

In terms of proportion, in the first half of the year, the added value of the equipment manufacturing accounted for 32.3% of industries above designated size. The added value of the equipment manufacturing increased by 6.5% YoY, 2.7 percentage points higher than the industrial average, contributing 53.9% to industrial growth. Specifically, the added value of electrical machinery and automobile industries achieved double-digit growth, up 15.7% and 13.1% respectively. The production of railway, ships, instruments, and special equipment was up 8%, 6.5% and 5.5% respectively.

According to the China Association of Automobile Manufacturers (CAAM), car output and sales in the first six months of 2023 increased by 9.3% and 9.8% YoY, amounting to 13.25 million and 13.24 million units respectively. In June, the production and sales of automobiles stood at 2.56 million and 2.62 million respectively, up 2.5% and 4.8% YoY. On a month-on-month basis, the production and sales increased by 9.8% and 10.1%

Compared with 2022, the sales growth of the auto market in the first half of this year showed significant improvement. This can be attributed to the introduction of central and local government policies to promote consumption, the launch of a large number of new models, as well as a relatively low comparison base in the same period last year.

In H1, the export of automobiles was 2.14 million, an increase of 75.7% YoY. Among them, 1.78 million were passenger cars, an increase of 88.4%. New energy vehicles reached 534,000 units, up 1.6 times YoY.

CAAM expects the market will experience stable growth in the second half of the year, despite the persisting pressure.

By ownership, total profit for all industrial companies above a designated size decreased by 16.8% YoY in H1, indicating all types of enterprises faced declining profits:

- Profits of SOEs decreased by 21% to 1.2 trillion yuan;
- Profits of foreign-owned enterprises, including Hong Kong SAR-, Macau SAR- and Taiwan region-owned enterprises, decreased by 12.8% to 0.8 trillion yuan;
- Profits of joint-stock enterprises decreased by 18.1% to 2.49 trillion yuan;
- Profits of private companies decreased by 13.5% to 0.87 trillion yuan.

Lastly, by **industry**, a few major manufacturing sectors experiencing the biggest profit declines include computer, communications and other electronic equipment (-25.2%); ferrous metal smelting and rolling (-97.6%); other mining (-100%); chemical fibre (-55.5%); chemical raw materials and chemical products (-52.2%); textile (-23.8%), and food processing (-33.2%).

Retail Sales of Consumer Goods



Total retail sales of consumer goods increased by 8.2% YoY, reaching 22.76 trillion yuan in H1. This growth rate was 2.4 percentage points higher than that in the first quarter. Among them, the retail sales of consumer goods excluding automobiles reached 20.52 trillion yuan, up by 8.3%. The sales of automobiles amounted to 2.24 trillion yuan in H1.

On a quarterly basis, the total retail sales of consumer goods in the second quarter increased by 10.7% YoY, 4.9 percentage points higher than that in the first quarter.

Retail sales of consumer goods totalled 4 trillion yuan in June, up 3.1% YoY, compared with an increase of 18.4% and 12.7% YoY in April and May respectively.

The recovery of consumption in H1 seemed to be relatively obvious, with a YoY growth of over 8% in the total retail sales of consumer goods. However, this is based on the negative growth of 0.7% during the same period last year.

In response, China is expected to introduce policy measures to stimulate consumption in the second half of 2023.

The lower-than-expected rebound in consumption can be attributed to the lack of consumer confidence in economic growth. Households are uncertain about their future income growth and are more cautious in their spending. The expectation of future macroeconomic growth is a crucial factor for residents' consumption. If consumers are confident about the economy and their job prospects, their willingness to spend will increase, and vice versa.

Considering the types of consumption in H1, retail sales of goods reached 20.33 trillion yuan, up 6.8% YoY, while catering revenue reached 2.43 trillion yuan, up 21.4%, far surpassing all retail categories.

In June, retail sales of goods increased by 1.7% to 3.56 trillion yuan, while catering revenue increased by 16.1% to 437 billion yuan.

Out of the 16 retail categories, two recorded negative growth in H1, compared to four. In June. More specifically, the categories that recorded negative growth in June included daily necessities (-2.2%), cultural office supplies (-9.9%), automotive (-1.1%), and building and decoration materials (-6.8%).

Categories with a sales reduction in H1 included cultural office supplies (-3.9%) and building and decoration materials (-6.7%).

Furthermore, in H1, convenience store, specialty shop, exclusive shop and department store witnessed YoY sales growth of 8.2%, 5.4%, 4.6%, and 9.8% respectively. Meanwhile, supermarket sales reduced by 0.4%.

National online retail sales went up 13.1% to reach 7.16 trillion yuan in H1. Online retail sales of physical goods rose by 10.8% to 6.06 trillion yuan, accounting for 26.6% of total retail sales of goods. Within online retail sales of physical goods, the sale of food, clothing, and daily necessities increased by 8.9%, 13.3% and 10.3% respectively.

Per capita disposable nominal income rose to 19,672 yuan in H1, an increase of 6.5% YoY. After deducting price factors, the real growth rate was 5.8% YoY.

For the following data, nominal growth rates are represented on a YoY basis unless specified otherwise.

The average disposable income for urban residents rose by 5.4% to reach 26,357 yuan, while the average income of rural residents grew 7.8% to 10,551 yuan in H1.

By source of income, in H1,

- Per capita wage income increased by 6.8% to 11,300 yuan, accounting for 57.4% of disposable income.
- Per capita net operating income (net income obtained by a household or household member after deducting operating expenses, depreciation of fixed assets and production tax from the total operating income) rose by 7% to 3,041 yuan, accounting for 15.5% of disposable income.
- Per capita net property income (the income earned by households from deposits, securities, houses, land, etc.) increased by 4.7% to 1,743 yuan, accounting for 8.9% of disposable income.
- Net transfer income per capita (the payments to households by the state or social organisations including pensions, social relief and subsidies, policy-based living allowances, regular donations, etc.) grew by 6.1% to 3,588 yuan, accounting for 18.2% of disposable income.

Per capita consumption expenditure in H1 was 12,739 yuan, an increase of 8.4% YoY in nominal terms, and an increase of 7.6% in real terms after deducting price factors.

The three categories of consumption that increased by more than 10% are education, culture and entertainment (16.2%), health care (17.1%) and other supplies and services (14.5%).

With the continuous recovery of the economy, improvement of the employment situation, and growth of household income, it is anticipated that the recovery of consumption, particularly driven by service sector consumption, will accelerate in the second half year of 2023.

China's **total imports and exports** of goods increased by 2.1% YoY to 20.1 trillion yuan in H1. The figure stood at 10.34 trillion yuan in the second quarter, increased by 6% over the first quarter. The growth rates in May and June were both 1.2% MoM.

Overall, in the first half year, China's imports and exports experienced a slower growth. Due to the weak recovery of the world economy, the slowdown of global trade and investment, and the rising risks of protectionism and geopolitics, the direct impact of weakening external demand on China's foreign trade is expected to continue in the second half of the year, posing challenges to the sustained and stable growth of imports and exports.

More specifically, in H1, exports increased by 3.7% YoY to 11.46 trillion yuan, while imports decreased by 0.1% to 8.64 trillion yuan. As a result, China's trade surplus reached 2.82 trillion yuan.

The total value of imports and exports declined by 6% YoY in June. In Q2, imports reduced by 0.48% and exports went up by 1.4%.

Besides, in H1, China's import and export scale hit a record high of 20.1 trillion yuan, representing a breakthrough for the same period in history. Incrementally, the total value of China's foreign trade increased by more than 400 billion yuan in the first half of the year.

Furthermore, according to WTO data, China's export products saw a slight increase in the international market share in the first four months of 2023, highlighting China's strong competitiveness in foreign trade. In addition, the WTO expects global trade in goods to grow by 1.7% this year, significantly lower than the average level of 2.6% over the past 12 years.

The slowdown in trade growth is a common challenge for all economies, not just for China alone.

By product, in H1, the import and export of general trade with longer industrial chains and higher added value grew faster than the overall growth rate, accounting for 65.5% of the total import and export value.

The import and export of mechanical and electrical products increased by 6.3% to 6.66 trillion yuan, accounting for 58.2% of China's foreign trade, marking an increase of 1.4 percentage points year-on-year.

More specifically, the exports of electrical equipment, automobiles and spare parts, and general machinery and equipment reached 636 billion, 621 billion and 200 billion yuan respectively, up 27.7%, 58.5% and 12.2% YoY.

Exports of labour-intensive products stood at 1.97 trillion yuan, up 0.04%. Among these, exports of clothing, plastic products and footwear reached 517, 343 and 173 billion yuan respectively, up 0.7%, 3.2% and 0.4%.

In addition, imports of energy, mineral sands, grain and other commodities increased by 17.1% YoY. Among them, the import of crude oil, natural gas, coal and other energy products increased by 33.2%, while imports of iron, aluminium and other metal ore grew by 8.3%.

Imports of consumer goods reached 975 billion yuan, up 6.6%. Among them, meat and edible aquatic products increased by 9.5% and 30%, respectively.

By geography, according to the General Customs Administration, in H1, trade values with ASEAN, the EU, the US, Japan, and South Korea reached 3.08, 2.75, 2.25, 1.08, and 1.06 trillion yuan respectively.

Trade with ASEAN, the EU in H1 grew by 5.4%, and 1.9% respectively, while trade with the US, South Korea, and Japan reduced by 8.4%, 4.9% and 10.1% respectively.

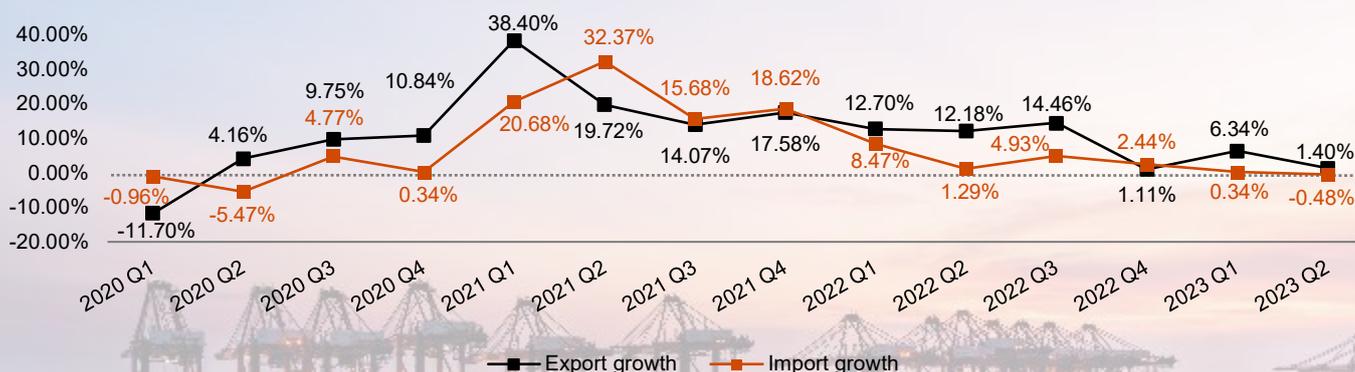
China's imports and exports with ASEAN accounted for 15.3% of the total value of trade in H1, while trade with the EU accounted for 13.7% and the US accounted for 11.2%.

During the same period, China's total trade with countries and regions along the Belt and Road reached 6.89 trillion yuan, up 9.8%, 7.7 percentage points higher than the overall growth rate of foreign trade. China's foreign trade with these countries and regions has seen a boost and accounted for 34.3% of the total value of imports and exports in H1.

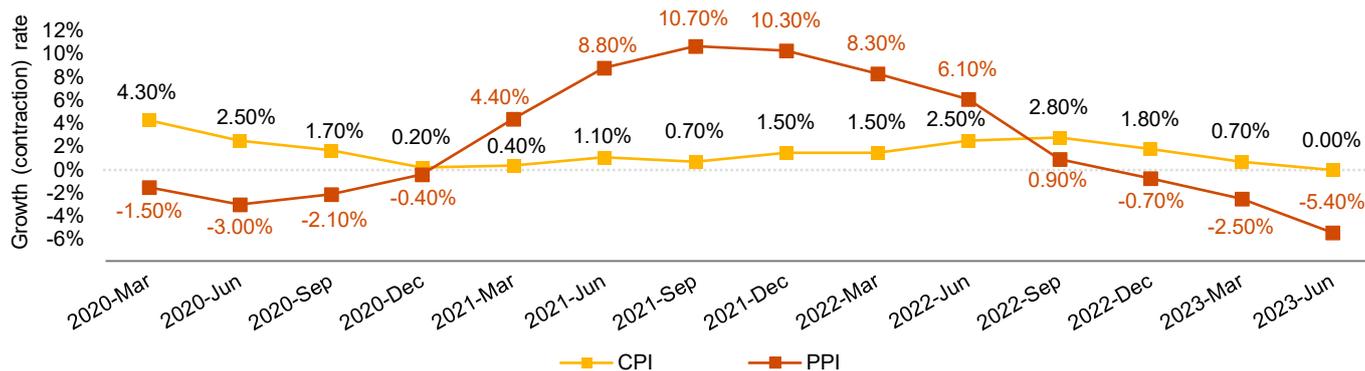
China's trade with 14 other RCEP member countries in H1 reached 6.1 trillion yuan, up 1.5%. The trade with RCEP countries contributed more than 20% to China's total foreign trade in H1. The import and export values with most of the RCEP members achieved positive growth, with Singapore, Laos, Australia, Myanmar witnessing an increase of 27%, 25.8%, 16.4% and 15.2%, respectively.

By ownership, in H1, import and export of private enterprises increased by 8.9% to reach 10.59 trillion yuan, accounting for 52.7% of China's total foreign trade, an YoY increase of 3.3 percentage points. The import and export of foreign-invested enterprises reached 6.16 trillion yuan, accounting for 30.7% of China's total foreign trade. Imports and exports of state-owned enterprises stood at 3.29 trillion yuan, accounting for 16.4% of the total.

Quarterly Balance of Trade



Producer Price Index and Consumer Price Index



The **Producer Price Index (PPI)** continued to decline in H1, dropping by 3.1% YoY off a high base.

The PPI fell by 1.6% in the first quarter, followed by a drop of 4.5% YoY in the second quarter. The rate of decline accelerated from 0.8% YoY in January to 5.4% in June, due to falling prices of commodities such as oil and coal, and weak market demand, as well as relatively high comparison base from the same period last year.

The month-on-month decline of PPI was more moderate in H1. In the first quarter, the figure initially fell 0.4% MoM in January, and remained flat in February and March. The decline accelerated MoM in the second quarter, with a drop of 0.5% in April, 0.9% in May, and 0.8% in June.

In H1, the price of means of production reduced by 6.8% and pulling the overall PPI level down by 5.26 percentage points. The price of means of living rose by 0.6%.

The prices of mining, raw material and processing industries decreased by 6.6%, 5% and 3.4% YoY respectively in H1. In June, producer prices for mining declined by 16.2%, raw materials down by 9.5% and processing industries declined by 4.7% YoY.

By industry, the international oil and non-ferrous metal prices fluctuated and fell, driving down the prices of relevant industries in H1. Specifically, the price of oil and natural gas reduced by 13.5%, the price of chemical raw materials and chemical products fell by 9.4%, the price of oil, coal and other fuel processing fell by 8.1%, and the price of non-ferrous metal smelting and rolling processing fell by 7%. The price of coal mining and washing fell by 7.4% YoY, which can be attributed to the sufficient supply of coal.

On a year-on-year basis, PPI fell by 5.4% in June. The decrease expanded

by 0.8 percentage points from the previous month, mainly affected by the continued drop in prices of oil and coal. The price of the means of production fell by 6.8%, while the price of means of living fell 0.5%. Prices fell in 25 out of the 40 surveyed industrial sectors. Among the major industries, the prices of oil and natural gas mining, petroleum coal and other fuel processing, chemical raw materials and chemical products, coal mining and washing fell between 14.9% and 25.6%.

On a month-on-month basis, the PPI fell 0.8% in June. The price of the means of production fell by 1.1%, while the cost of means of living fell 0.2%. The prices of petroleum, coal and other fuel processing, oil and natural gas mining, non-ferrous metal smelting and rolling processing fell by 2.6%, 1.6% and 0.8%, respectively. The prices of coal mining and washing, ferrous metal smelting and rolling processing fell by 6.4% and 2.2%, respectively.

Furthermore, the PPI for manufactured goods in the following sectors decreased by over 5% YoY in H1:

- Petroleum and natural gas extraction (-13.5%); Oil, coal and other fuel processing (-8.1%);
- Chemical raw materials and chemical (-9.4%);
- Non-metallic mineral (-6.1%);
- Ferrous metal mining (-9.6%);
- Ferrous metal smelting and rolling (-13.3%);
- Nonferrous metal smelting and rolling (-7.0%);
- Coal mining and washing (-7.4%).

In June, the PPI for means of living also decreased by 0.5% YoY. Food prices reduced by 0.6%, while clothing increased by 1% and general daily necessities increased by 0.3%. Consumer durables fell by 1.5%.

The **Consumer Price Index (CPI)** remained flat YoY in June and rose by 0.7% in H1. During the second quarter, CPI increased by merely 0.1% and 0.2% in April and May YoY. On a MoM basis, it reduced by 0.1%, 0.2% and 0.2% in April, May, and June respectively.

The soft rise in CPI during the first half of the year and the second quarter indicates a relatively weak recovery of consumption.

In H1, food prices rose 2.3% YoY. The price of fresh fruit rose by 7.9%. Pork prices in was up by 3.2%. Prices of eggs, poultry and meat, and edible oil rose 3.9%, 1.9% and 4.7% respectively. Meanwhile, the prices of fresh vegetables, beef and lamb fell by 2.7%, 1.1% and 2.8%.

In H1, non-food prices rose 0.3% YoY. Core CPI, which excludes food and energy prices, rose by 0.7%. Among them, demand for services continued to recover, leading to a 0.9% increase in service prices. The prices of air tickets, transportation, hotel accommodation and tourism increased by 20.2%, 5%, 8.6% and 7.1%, respectively, indicating a surge in residents' demand for travel.

Falling energy prices also contributed to a low reading of CPI. Affected by the downward impact of international energy prices, domestic energy prices continued to fall, at an average rate of 3.5% in the first half of the year, contributing to a 0.28 percentage point decline in CPI. Among them, gasoline and diesel prices fell by 7.3% and 8%, respectively. Liquefied petroleum gas prices fell 2.2%.

Finally, due to the low CPI growth in the first half of the year and the slow recovery of consumer demand in the second half, along with the decline in energy prices and other factors, it is anticipated that the CPI in the second half of the year will remain relatively low.

2 Policy updates

Growth of aggregate financing to the real economy increased by 9% in H1.

According to the People's Bank of China (PBOC), in H1, market liquidity was reasonable and abundant, the credit structure showed continuous improvement, the financing cost of the real economy steadily declined, and financial support for the economy remained strong. PBOC officials emphasised that it usually takes about a year for the economy to recover from the pandemic, and China's situation has been stable for only about half a year. The PBOC also lowered the reserve requirement ratio by 0.25 percentage points in H1 to release long-term liquidity and enhance the stability and sustainability of total credit growth.

In the second half of the year, the PBOC will continue to implement a prudent monetary policy, conduct cross-cyclical adjustments, give full play to the effectiveness of monetary and credit policies, and coordinate the efforts to further improve economic operation.

The total aggregate financing to the real economy (AFRE) increased by 21.55 trillion yuan in H1, up 0.48 trillion yuan YoY. By the end of H1, total AFRE reached 365.45 trillion yuan, up 9% YoY. In June, AFRE increased by 4.22 trillion yuan, up 2.67 trillion yuan compared with the previous month, but 986 billion yuan less than the same period last year.

M2 money supply, which includes cash, checking deposits, and easily convertible near money, and AFRE, increased by 11.3%, reaching 287.3 trillion yuan.

In terms of AFRE, the balance of RMB loans reached 228.86 trillion yuan, up 11.2%. Specifically, the total RMB loans to the real economy increased by 15.6 trillion yuan, 1.99 trillion yuan more than the previous year, accounting for 72.4% of AFRE in H1, up 7.8% YoY.

As part of the total RMB loans to the real economy, household loans increased by 2.8 trillion yuan, up 572 billion YoY in H1. Personal business loans increased by 2.3 trillion yuan, an increase of 759 billion yuan compared to last year. Personal short-term consumer loans increased by 301 billion yuan, an increase of 402 billion yuan YoY.

Loans to enterprises and public institutions increased by 12.81 trillion yuan in H1, an YoY increase of 1.42 trillion yuan, accounting for 81.5% of the total credit increase.

Furthermore, in H1, outstanding foreign currency loans to the real economy amounted to 1.89 trillion yuan, down 18.9% YoY. The balance of entrusted loans was 11.32 trillion yuan, up 4.1%. Outstanding trust loans fell by 5.1% to 3.77 trillion yuan. The balance of undiscounted bank acceptance bills was 2.75 trillion yuan, down 2.8%. Outstanding

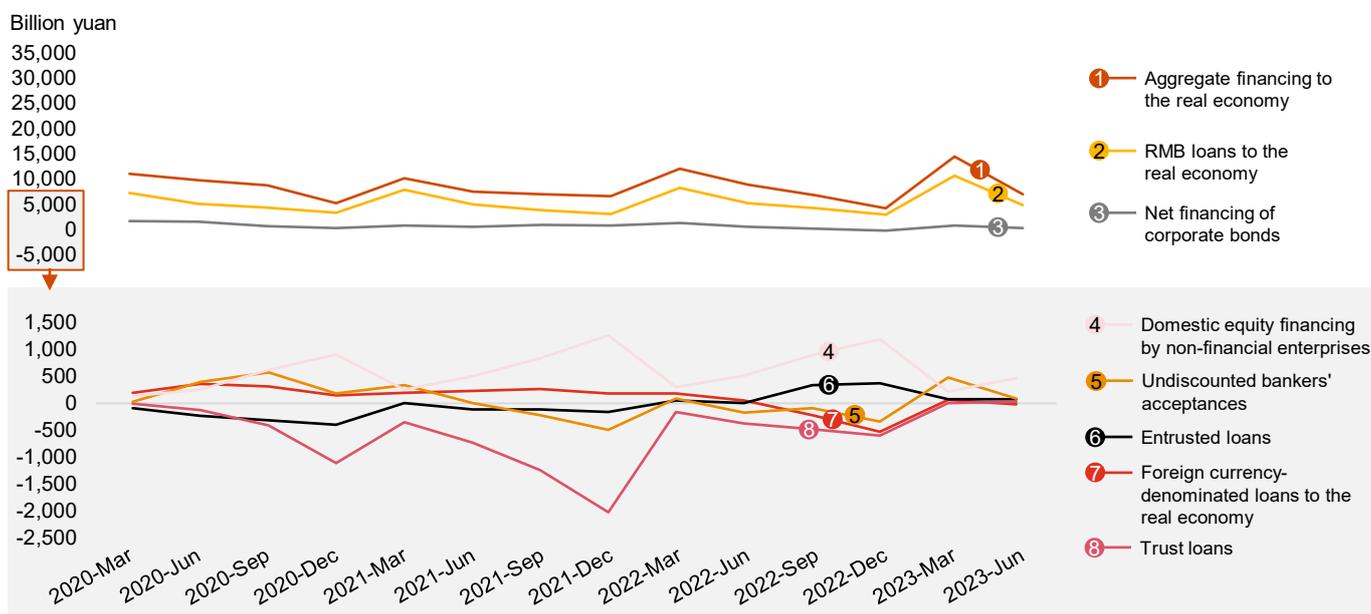
corporate bonds were 31.34 trillion yuan, down 0.4%. Outstanding government bonds reached 63.57 trillion yuan, up 10.1%. The outstanding stock of non-financial enterprises reached 11.1 trillion yuan, up 11.4% YoY.

From an industry perspective, medium- and long-term loans in manufacturing increased by 40.3% YoY in H1, while the same measure in the infrastructure sector grew by 15.8%.

The loan balance of "little giants" SMEs (those who specialise in niche sectors, command high market shares and boast strong innovative capacity) increased by 20.4%. The loan balance of small and micro loans increased by 26.1% YoY in H1.

To support housing sales, a total of 3.5 trillion yuan in personal housing loans were issued in H1, an increase of 510 billion compared to the same period last year. Besides, the balance of real estate loans was more than 50 trillion yuan by H1, with 40 trillion yuan being personal housing loans. The outstanding loans for real estate development were about 13 trillion yuan. Loans to developers were about 6-7 trillion yuan, with an increase in non-performing rate. However, this is only a small fraction of the total amount of bank loans.

Aggregate financing to the real economy (flows)



Source: Wind

Fiscal revenue increased by 13.3% while fiscal spending grew by 3.9%.

According to the Ministry of Finance, in H1, national fiscal revenue increased by 13.3% YoY to 11.92 trillion yuan, primarily driven by the recovery of economic growth, and the implementation of large-scale value-added tax rebate policies in April last year which dragged down the comparison base. In H1, the tax refund returned to normal, reaching 1.52 trillion yuan.

More specifically, central government revenue decreased by 13.1% to 5.39 trillion yuan while local government revenue increased by 13.5% to 6.53 trillion yuan. The income growth rates of the local governments in the eastern, central, western, and north-eastern regions were 12.8%, 10.7%, 17.5%, and 17.5% respectively. All 31 provinces registered positive year-on-year growth in income, of which 10 provinces increased by more than 20%, 15 provinces by 10-20%, and 6 provinces experienced single-digit growth.

National tax revenue went up by 16.5% YoY to 9.97 trillion yuan in H1. Non-tax revenue decreased by 0.6% and reached 1.95 trillion yuan.

Among the 13 major sources of tax revenue, nine categories decreased in H1. The top five sources of tax revenue include:

- **Value-added tax revenue:** up 96% to 3.75 trillion yuan, primarily driven by more tax rebates in the same period last year and the base was low;
- **Enterprise income tax revenue:** down 5.4% to 2.69 trillion yuan, mainly affected by the decline in corporate profits;
- **Domestic consumption tax revenue:** down 13.4% to 827 billion yuan;

- **Value-added tax and consumption tax revenues on imported goods:** down 9.5% to 923 billion yuan; customs duties totalled 125 billion yuan, down 13.6% YoY off a high base. In Q2, domestic consumption tax turned to positive growth, and the reduction in value-added tax and consumption tax on imported goods was also significantly narrowed;
- **Personal income tax:** down 0.6% to 780 billion yuan due to increasing tax rebates.

In H1, tax revenue from land ownership increased by 5.1% to 312 billion yuan, while land value-added tax revenue shrank by 18.2% to 312 billion yuan. Property tax revenues increased by 3.9% to 195 billion yuan. Urban land use tax decreased by 4.9% to 117 billion yuan. Farmland occupation tax revenue decreased by 20.4% to 69 billion yuan.

In the second half of the year, the recovery of China's economic growth is expected to provide important support for the growth of fiscal revenue. However, due to the potential impact of the increase in tax rebates in the second half of the year, the growth of fiscal revenue may be moderated accordingly.

On the other hand, the national public budget expenditure increased by 3.9% YoY to 13.39 trillion yuan in H1. The central government's expenditure increased by 6.6% to 1.67 trillion yuan, while local government expenditure grew 3.5% to 11.72 trillion yuan.

The government continued to strengthen the weak links and key areas of economic and social development. Expenditures for key areas such as people's basic livelihood, rural revitalisation, major regional strategies, education, and scientific and technological research were effectively guaranteed. Other major items included in fiscal expenditure are as follows:

- 2.18 trillion yuan on social security and employment (7.9% YoY increase);
- 2.02 trillion yuan on education (5% increase);
- 1.08 trillion yuan on agriculture, forestry and water conservancy (3.7% increase);
- 970 billion yuan on urban and rural communities, including administration, public facilities, planning, environmental sanitation (3.1% decrease);
- 1.2 trillion yuan on healthcare and sanitation (6.9% increase);
- 588 billion yuan on transportation (7.4% decrease).

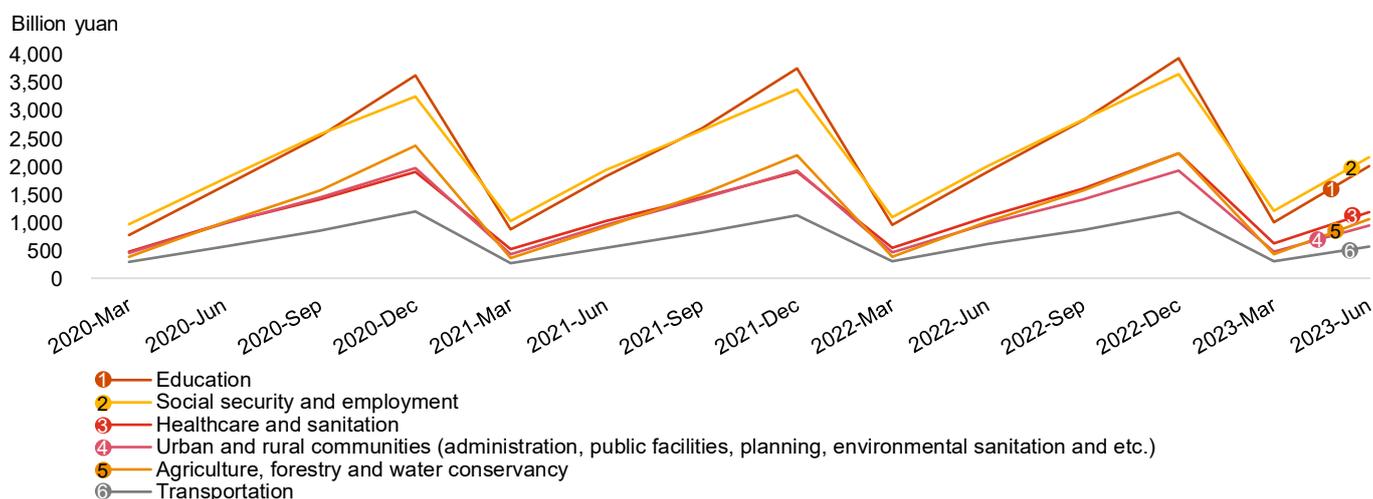
Expenses on debt interest payments increased by 5.5% to 592 billion yuan. Spending on science and technology increased by 2.5% to 445 billion yuan, while spending on energy conservation and environmental protection decreased by 1.9% to 243 billion yuan. Spending on culture, tourism, sports and media reached 164 billion yuan, down 1.3% YoY in H1.

In H1, income of government funds declined by 16% to reach 2.35 trillion yuan, while the spending of government funds decreased by 21.2% to 4.32 trillion yuan.

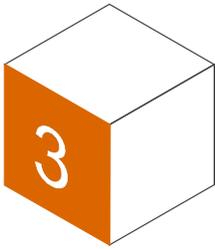
More specifically, the income of central government funds reached 191 billion yuan, a YoY increase of 0.8%, in contrast to that the income of local government funds which decreased by 17.2% to 2.16 trillion yuan.

The spending of central government funds reached 75 billion yuan, a YoY decrease of 63.3%. The spending of local government funds was 4.25 trillion yuan, a decrease of 19.5%.

General public budget expenditure



Source: Wind



China's industrial economy, the backbone of high-quality development

China's economy recovered at a slower pace than anticipated in the second quarter. The current challenge lies in the general lack of confidence among residents and businesses in the extent and scope of economic recovery, translating to insufficient demand, continued weak consumption, and slow investment recovery. Even more concerning is that some people have started to question China's future sustainable development and been worried about whether the country can

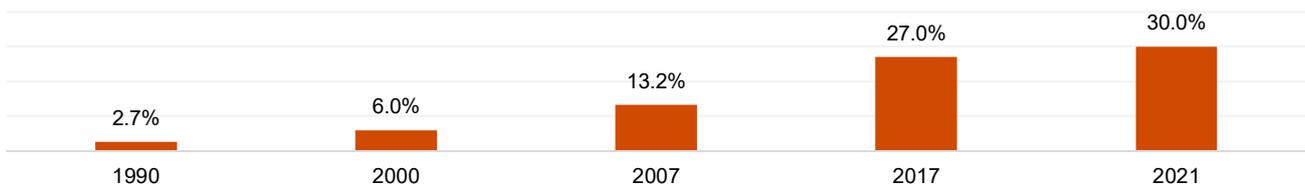
achieve its development goal for 2035, that is to reach the level of moderately developed countries in terms of per capita GDP.

It is a common phenomenon that when confronted with significant difficulties and setbacks, individuals as well as companies or countries tend to lose confidence in their future goals.

In this context, this article asserts that through the study and analysis of the development of China's industrial

economy, it can be reasonably concluded that China's economic development remains sustainable. For example, during the past three years, the stable operation of China's manufacturing industry has provided strong support to many countries in their fight against global challenges. During this period, the proportion of China's manufacturing industry in the world rose to 30%. Meanwhile, China's import and export of goods maintained steady growth.

China's share of global manufacturing



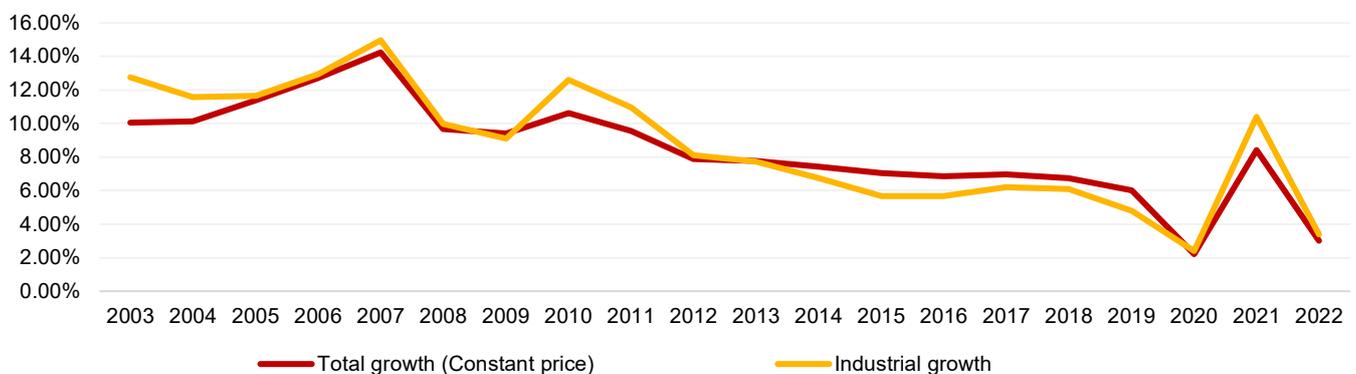
Source: World Bank, Ministry of Industry and Information Technology

Over the past decade, China's industrial economic growth has slowed down due to a deceleration in GDP growth. The share of industrial output in GDP has experienced a decline in recent years, attributable to the gradual improvement of the service sector. However, the

China's industrial sector has not reduced in size and not deviated from the overarching trend of transitioning and upgrading towards higher value-added industries and technology-driven innovation. Manufacturing, a huge part of the industrial economy, will continue

to be a key driving force for China's high-quality development for a considerable period of time. We will examine the development momentum of China's industrial economy through a case study on domestic offshore wind power.

GDP and industrial growth in the past 20 years



Source: Wind (National Bureau of Statistics)



■ The development of new energy, including offshore wind power, has seen rapid growth

The world's first 16-megawatt (MW) ultra-large capacity offshore wind turbine in Fujian offshore wind farm, China, has been successfully connected to the grid and started to generate power recently. According to Chinese state media, this gigantic offshore wind turbine stands at a height equivalent to 150 floors of a building.

When all three blades are assembled together, each with length up to 123 metres, the entire rotor's diameter reaches 252 meters. The rotating sweep area is equivalent to the size of seven football fields. Under standard running conditions, this wind turbine can generate 34.2 kilowatt-hours of electricity with each rotation. It is

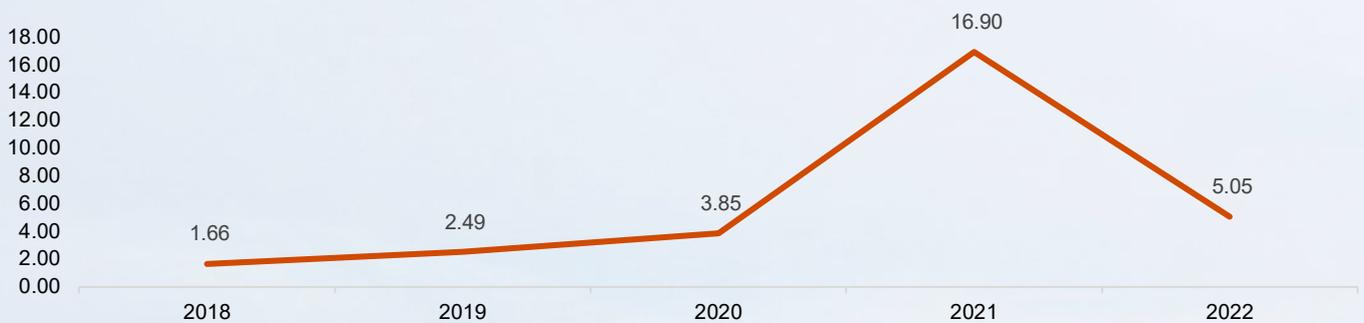
estimated to generate over 66 million kilowatt-hours of electricity annually, meeting the annual power needs of around 36,000 three-person households. Based on the current offer price of approximately 3,500 yuan per kilowatt for offshore wind, the estimated cost of this 16 MW wind turbine is between 50 and 60 million yuan.

The successful debut of the 16 MW ultra-large capacity offshore wind turbine signify that China is already at the forefront of global offshore wind power development. Meanwhile, as of 2022, the average individual unit power

capacity for offshore wind installations was 8.8 MW in Europe, 7.4 MW in China, and 7.6 MW globally. According to forecasts by the Global Wind Energy Council (GWEC), the average individual unit capacity for offshore wind power

will increase to 11.5 MW by 2025. As per the current trajectory of technology development, GWEC predicts that 2030 will see the introduction of offshore wind turbines with individual unit capacities of 20 MW.

New installed capacity of offshore wind power in China (Unit: million kilowatts)



Source: Wind (World Wind Energy Association)



In recent years, China's offshore wind power capacity has continued to grow, and the country has become the world's largest exporter of wind power equipment. In 2022, China's offshore wind power added around 5 million kilowatts of installed capacity, accounting for approximately 54% of the global total. By the end of 2022, the cumulative installed capacity of offshore wind power worldwide reached 57.6 gigawatts (GW), with China's cumulative installed capacity reaching 30.51 GW, accounting for 53% share in the global market. The trend towards larger offshore wind turbines is apparent. From 2011 to 2021, the average individual unit capacity of newly added offshore wind installations in China increased from 2.7 MW to 5.6 MW, and the average individual unit capacity of new offshore wind turbines that came into operation in 2022 has

reached 11.5 MW. Additionally, nearly 60% of wind power equipment in the global market was produced in China, with its cumulative wind power exports reaching 11.93 million kilowatts, covering 49 countries and regions.

Despite a relatively late entrance into the offshore wind power industry, China has rapidly grown into the world's largest offshore wind power market, thanks to robust policy support, technological innovation, and a well-established industrial chain. Offshore wind power has become a crucial support for China's energy transformation in the new era and a significant driving force for the development of the marine economy in coastal provinces. China's exploration of offshore wind power began in 2007, with the first offshore wind power project featuring a 1.5 MW wind turbine

completed on November 8 of that year. However, during the "Twelfth Five-Year Plan" period (2011-2015), the progress of offshore wind power in China was relatively sluggish. Installed capacity remained below one million kilowatts, falling short of the target of five million kilowatts set forth in the "Twelfth Five-Year Wind Power Development Plan". High cost was one of the major obstacles hindering the pace of offshore wind power development during this period. In the "Thirteenth Five-Year Plan" period (2016-2020), benefiting from previous technological reserves, improved industrial chains, and better investment and financing environments, China's offshore wind power entered a stage of rapid development, with nearshore offshore wind power embarking on a phase of large-scale development.

Installed capacity of offshore wind power generation of China (Unit: million kilowatts)



Source: Wind (World Wind Energy Association)



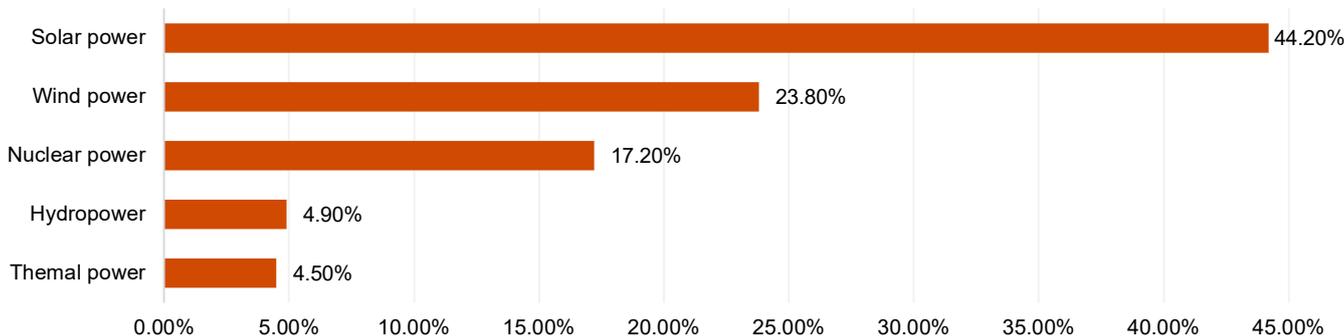
In recent years, China has experienced rapid advancement in the field of new energy, particularly in wind power. Electricity generation from renewable sources has significantly outpaced that from traditional sources. As of the end of 2021, electricity generation from renewable sources (wind power, solar power, nuclear, and others) had increased by 6.8 times compared to 2012, with an average annual growth rate of 25.7%. It accounted for 11.5% of

the total electricity generation, a 9 percentage point increase from 2012.

Specifically, nuclear power increased by 3.2 times with an average annual growth of 17.2%; wind power increased by 5.8 times with an average annual growth of 23.8%; and solar power increased from 251 billion kilowatt-hours in 2014 to 3,258 billion kilowatt-hours in 2021, 12 times increase with an average annual growth of 44.2%. Overall, by the end of 2021, the total

installed power capacity in China stood at 2.38 billion kilowatts, 1.1 times over the level in 2012, with an average annual growth of 8.4%. Electricity generation in 2021 reached 85 trillion kilowatt-hours, a 71.1% increase from 2012, with an average annual growth rate of 6.1%. During the same period, thermal power generation increased by 49.1% with an average annual growth of 4.5%, while hydropower generation also expanded by 53.5% with an average annual growth of 4.9%.

China's annual growth rate of energy by type (2012 - 2021)



Source: Wind (World Wind Energy Association)

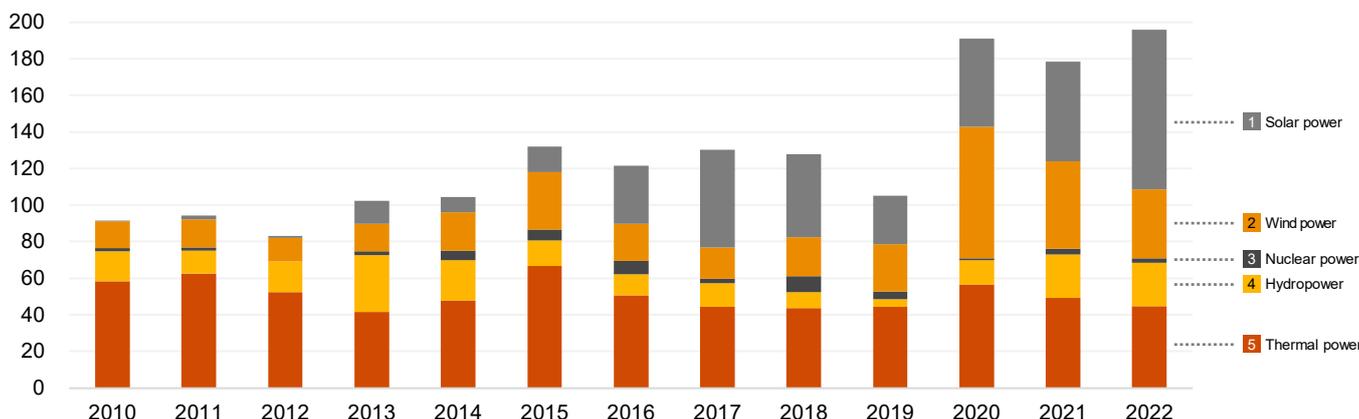
In 2021, China maintained its global leadership in hydropower, wind power, and solar power installations, with each category surpassing 300 million kilowatts for consecutive years. In pursuit of its “30·60” carbon goals, China’s energy production structure is undergoing a rapid transformation, with steady increase in its share of clean energy in the global market. The “30·60” goals encompass China’s efforts to combat climate change by primarily reducing greenhouse gas emissions, particularly

carbon dioxide. China aims to reach the peak of carbon dioxide emissions before 2030 and achieve carbon neutrality before 2060.

In 2021, China’s installed capacity of non-fossil energy-based power generation, including hydropower, wind power, and solar power, exceeded 1.12 billion kilowatts, accounting for 47% of the total installed capacity for power generation during the year. This marked the first time that non-fossil energy surpassed coal-based power generation

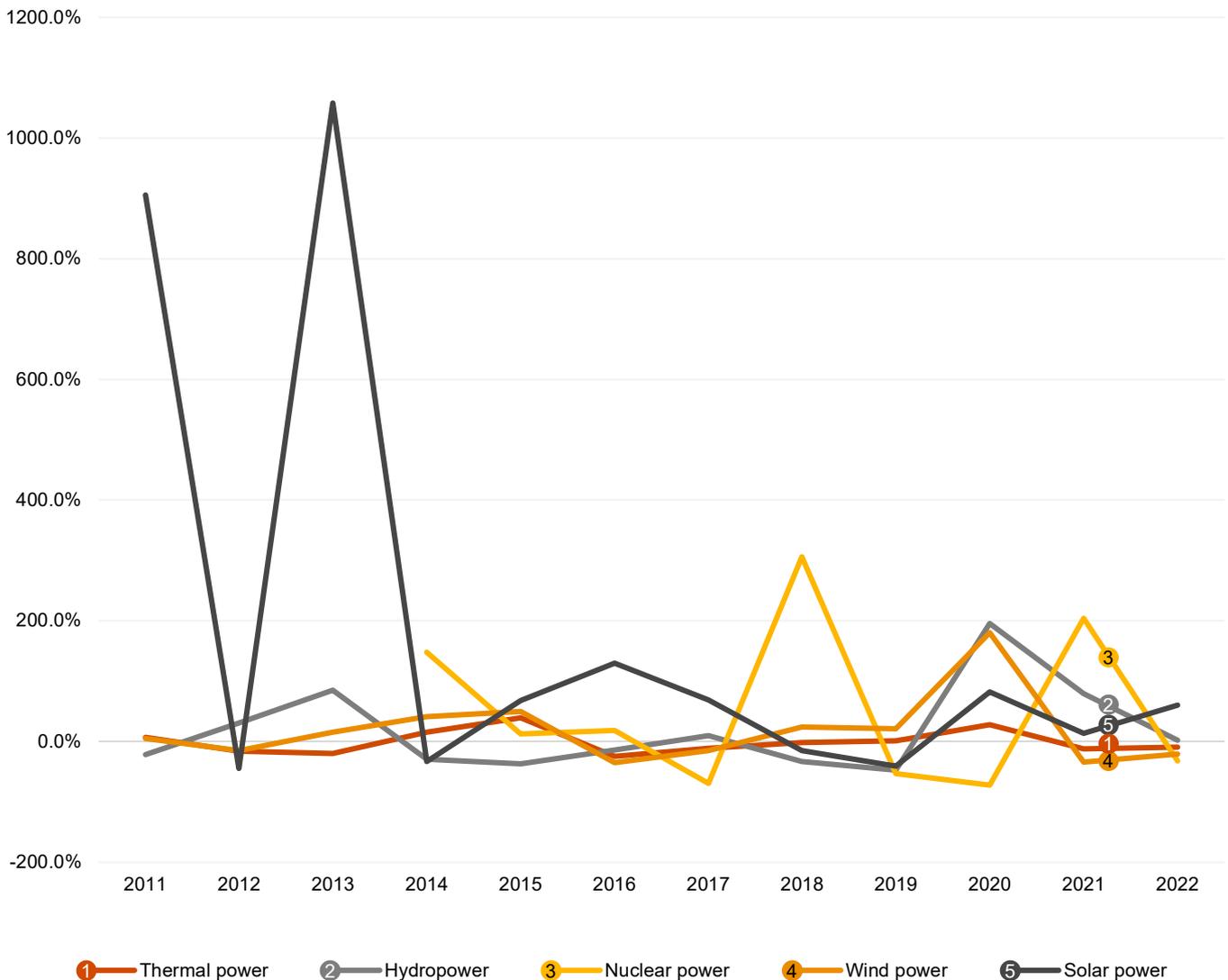
in terms of installed capacity in a year. The proportions of clean energy sources, such as natural gas, hydropower, nuclear power, within the country’s energy production structure have been steadily increasing. On the other hand, the share of coal-based power in the energy mix has decreased to 67%, equivalent to a decline of 9.2 percentage points from 2012. Additionally, the proportion of crude oil has also decreased to 6.6%, down by 1.9 percentage points.

Newly installed capacity for power generation from 2010 to 2022 (Unit: million kilowatts)



Source: China Electricity Council

YoY growth of newly installed capacity for power generation from 2011 to 2022



Source: China Electricity Council
*Calculated by PwC

These developments indicate a significant shift towards cleaner and more sustainable energy sources in China's energy mix. The country's commitments to increasing its share of the global clean energy market and reducing its dependence on fossil fuels are both crucial to achieving its ambitious climate goals as part of the global efforts in combating climate change.

Research conducted by the Global Energy Monitor (GEM) showed that China's installed solar power capacity has already surpassed the combined total of other regions worldwide. If China successfully constructs and operates all the planned power plants as scheduled, it is estimated that by 2025, China's installed solar and wind power capacities will reach 1,200 GW, allowing it to potentially achieve its 2030 clean energy targets five years ahead of schedule.

The significant increase in the proportion of clean energy in China has driven the rapid development of the entire clean energy industry. Wind power, solar power, nuclear power, and other related industries have subsequently attained global leadership as industry progress continues. As China progresses towards achieving its 2030 carbon peak target, there is still immense potential for further development in this area. This continuous progress will help the world transition faster towards carbon neutrality, while presenting abundant opportunities for China's clean energy industry.



The following sections will focus on the changes in China's industrial economy in recent years, with analyses from three dimensions: industrial value-added, showcasing the immense scale of China's industrial economy as the world's largest industrial powerhouse; goods import and export, underscoring China's importance as the world's largest trading economy; and the significant role of private enterprises, demonstrating great progress in bolstering private economy.

■ For 13 consecutive years, China has maintained its position as the world's largest industrial powerhouse

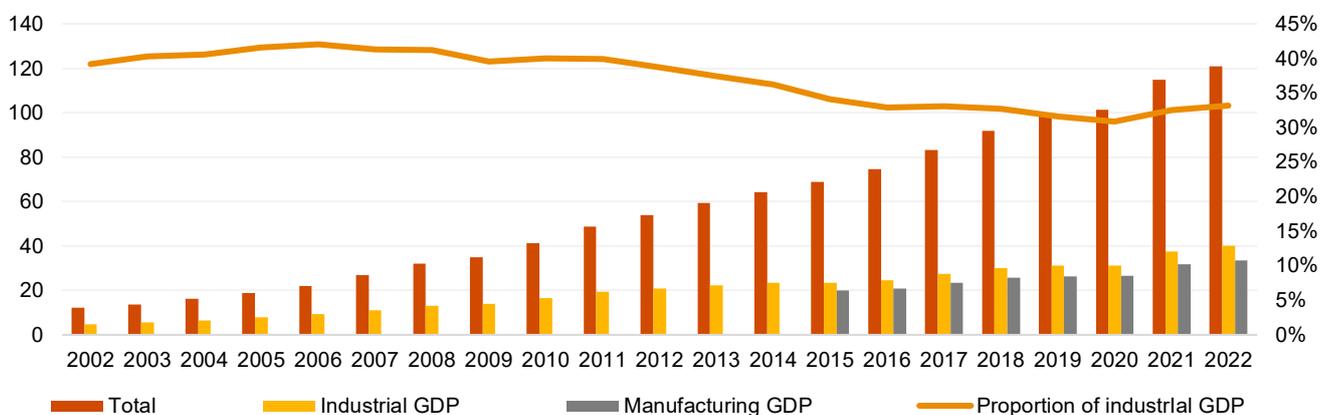
According to data from the National Bureau of Statistics, China's GDP reached 59.3 trillion yuan in the first half of the year, while the industrial value-added accounted for over 30% of the economy. By sectors, the value-added of the primary, secondary and tertiary industries were 3.04, 23.07, and 33.19 trillion yuan respectively. More specifically, the industrial value-added in the secondary industry was 19.46

trillion yuan, including 16.46 trillion yuan from the manufacturing industry, which accounts for a significant 32.8% of national GDP.

These figures demonstrate the vast scale of China's industrial sector and its vital role in the economy. The industrial sector serves as a foundation for the Chinese economy, contributing significantly to its economic growth and

employment. Manufacturing, as an integral part of the secondary industry, plays a crucial role in China's economic transformation and upgrading, driving innovation and sustainable development. China's consistent global leadership in industrial scale not only showcases the country's economic dynamism and competitiveness, but also has a degree of significance on the global economy.

Composition of GDP by industry in the past 20 years (Unit: RMB trillion)



Source: Wind (National Bureau of Statistics)

* Annual data of Industrial GDP and Manufacturing GDP refer to the cumulative figure for the December of each year.

In 2022, the scale of China's industrial value-added increased by 3.6% YoY, with the industrial sector contributing 36% to economic growth. The industrial sector contributed 1.1 percentage points to the overall economic growth, of which the manufacturing industry accounted for 0.8 percentage points. The value-added of the manufacturing industry accounted for 27.7% of GDP. China's total industrial value-added in 2022 reached 40.16 trillion yuan, representing

a 3.4% increase compared to the previous year. When adjusted for constant prices, this is equivalent to 1,171 times the value in 1952 (343 billion yuan).

Over the past decade, China's industrial economy has sustained rapid growth, providing robust support for the steady expansion of the national economy. From 2013 to 2021, the average annual growth rate of

industrial value-added was 6.1%. In 2021, the industrial value-added increased by 9.6% compared to the previous year, reaching 37.3 trillion yuan, accounting for 32.6% of the gross domestic product (GDP). It contributed 3.1 percentage points to economic growth, and its share of contribution to GDP growth reached 38.1%, making the industrial sector a vital supporting force for economic stability.

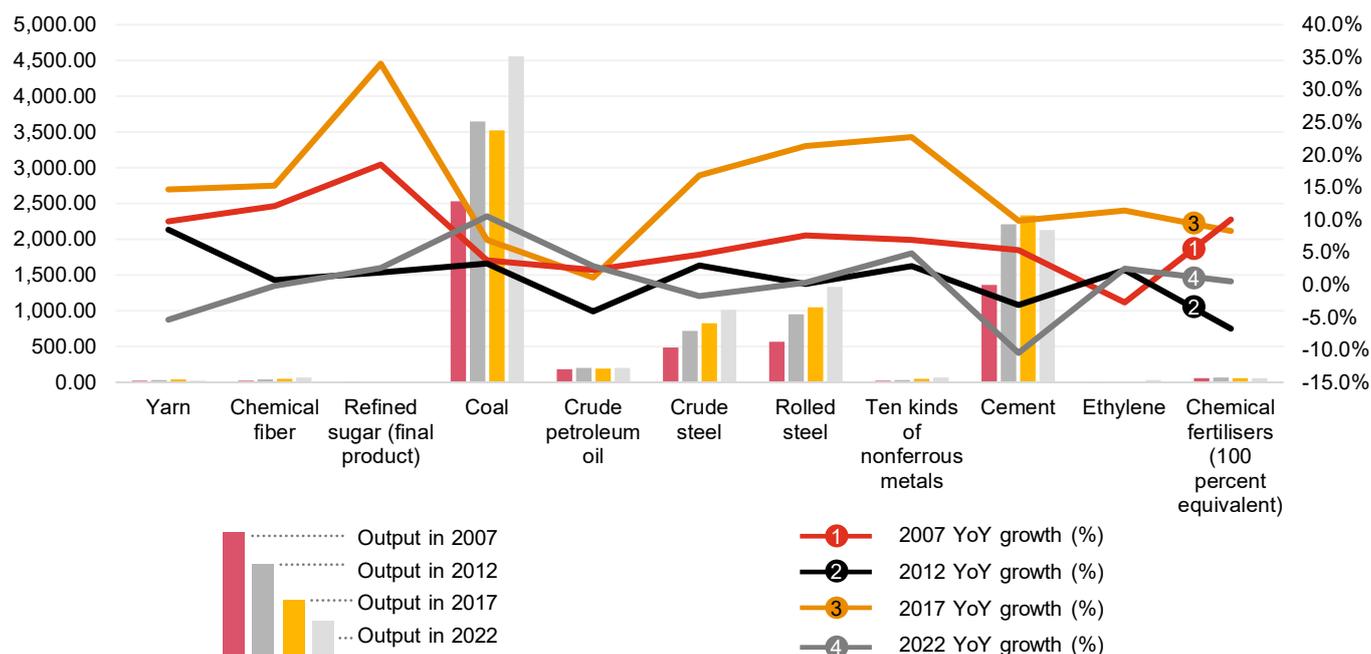
According to data from the World Bank, China's manufacturing value-added surpassed the United States for the first time in 2010 and has since then remained the world's largest for consecutive years.

According to data from the National Bureau of Statistics, in 2018, China's industrial value-added exceeded 30 trillion yuan for the first time. In 2020, China's manufacturing value-added

accounted for 28.5% of the global share, a 6.2 percentage point increase from 2012, further strengthening its importance as the fuel for global industrial economic growth. Among more than 500 major industrial products globally, China ranks first in output for over 220 of them. For example, the production of colour televisions and air conditioners exceeded 200 million units, refrigerators reached 78.76 million

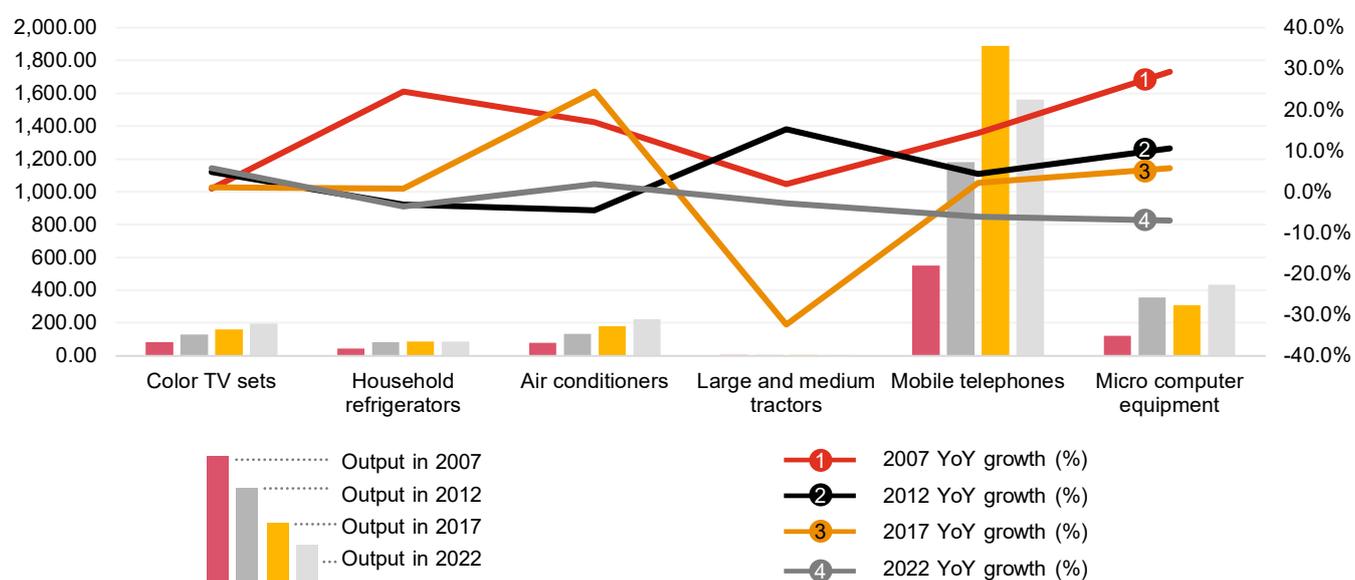
units, and washing machines reached 71.5 million units, accounting for over 50% of the global output. China's automobile production exceeded 27.8 million units, representing 30% of the global output. The production of new energy vehicles reached 1.27 million units, accounting for over 50% of the global output.

Output of major industrial products and growth rates (Unit: million tons)



Source: National Bureau of Statistics

Output of major industrial products and growth rates (Unit: million units)



Source: National Bureau of Statistics

In addition to maintaining its position as the world's largest industrial powerhouse, China has seen rapid growth in high-tech manufacturing industries with high value-added.

From 2013 to 2021, the value-added of equipment manufacturing and high-tech manufacturing industries expanded at an average annual rate of 9.2% and 11.6% respectively, surpassing the growth of the overall industrial sector by 2.4 and 4.8 percentage points. For example, the proportion of mechanical and electrical products and high-tech products in China's imports and exports points to a generally increasing trend year by year (more detail will be discussed in the next section).

Specifically, the aerospace equipment manufacturing industry grew at an average annual rate of 13.7%, the electronic and communication equipment manufacturing industry at 13.6%, the pharmaceutical manufacturing industry at 11.7%, and the medical instruments and apparatus manufacturing industry at 10.9%. In 2021, the value-added of equipment manufacturing and high-tech manufacturing industries accounted for 32.4% and 15.1% of the value-added of the overall industrial sector respectively, an increase of 4.2 and 5.7 percentage points compared to 2012.

In 2022, the value-added of the high-tech manufacturing industry increased by 7.4% YoY, outpacing the growth of the overall manufacturing industry by 4.4 percentage points. The production of new products maintained high-speed growth, with new energy vehicles leading the global market for eight consecutive years, with a YoY increase of 96.9% and 93.4% in production and sales, respectively. Significant breakthroughs in industrial technological innovation have been achieved, including the delivery of China's first indigenously developed C919 large passenger aircraft and the successful development and certification of domestically produced extracorporeal membrane oxygenation (ECMO) machines, which have been put into use.

China has established 45 national-level advanced manufacturing clusters and 100 SME (small medium enterprise) industry clusters. The Industrial Internet has been fully integrated into 45 major categories of the national economy, with over 240 influential Industrial Internet platforms, injecting new momentum into industrial upgrading. These 45 national-level advanced manufacturing clusters have a combined output value of 19 trillion yuan. They encompass manufacturing strengths in key areas, including 13 clusters related to the next-generation information technology, 13 related to high-end equipment, 7 related to new materials, 5 related to biopharmaceuticals and high-end medical equipment, 4 related to consumer goods, as well as 3 related to new energy and intelligent connected vehicles. These clusters have emerged as essential drivers for innovation and development in key industries and fields, embodying China's aspiration to strengthen its manufacturing capabilities.

These 45 national-level advanced manufacturing clusters are distributed across 19 provinces, autonomous regions, and municipalities across China. Among them, there are 30 clusters in the eastern region, 8 in the central region, 5 in the western region, and 2 in the northeastern region. Four key regional clusters, namely the Beijing-Tianjin-Hebei region, the Yangtze River Delta, the Pearl River Delta, and the Chengdu-Chongqing region, account for 30 national-level clusters, representing two-thirds of the total. These national-level clusters have become significant engines in driving regional economic development, while playing a crucial role in shaping and leading the growth of their respective regions.



■ China has maintained its position as the world's largest country in terms of merchandise trade for six consecutive years

The rapid development of China's industrial economy is evident in its share of global merchandise trade.

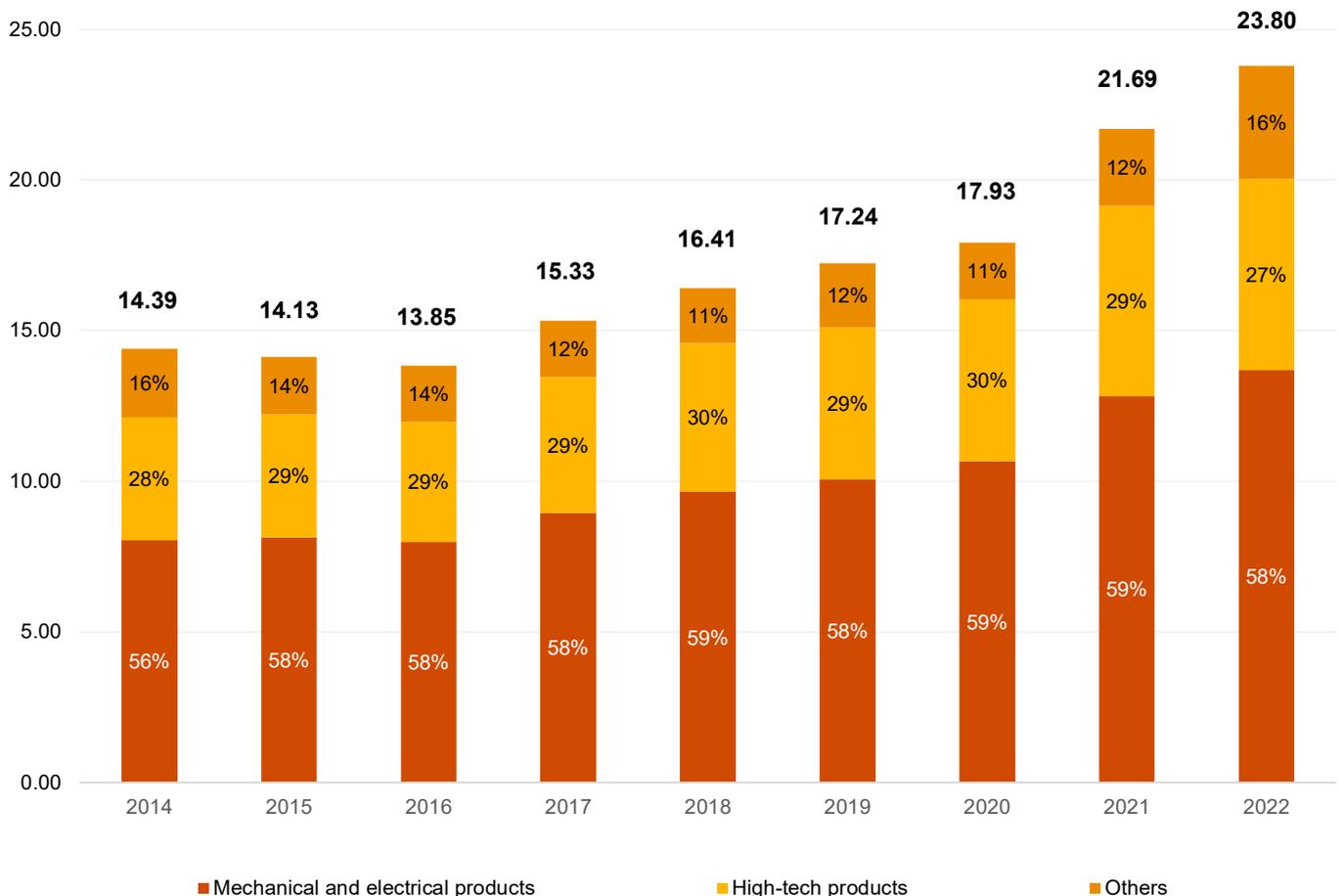
According to data provided by China Customs, in 2022, China's total foreign trade value exceeded 42 trillion yuan, solidifying its position as the world's largest country in merchandise trade for six consecutive years. The total import and export cargo volume reached 4.8 billion tons in 2022, involving 13 million units (ships, planes, trains, etc.) of transportation vehicles and 320 million cross-border postal and express items. A customs spokesperson illustrated that

if all the import and export goods of China in 2022 were loaded onto trains, they could encircle the Earth's equator 30 times. Furthermore, the containers from last year, if lined up, could stretch between the Earth and the Moon in two rows.

The scale of China's industry sector has experienced significant growth over the years, accompanied by a continuous increase in value-added of industrial products. For example, in 2002, China's total exports amounted to 2.70 trillion yuan (US\$ 325.6 billion),

with mechanical and electronic products accounting for 1.3 trillion yuan and high-tech products accounting for 562 billion yuan. By 2022, China's exports have surged to 23.97 trillion yuan (US\$3.6 trillion), an increase of over 10 times compared to 2002. Among them, mechanical and electronic products accounted for 13.7 trillion yuan, while high-tech products accounted for 6.34 trillion yuan, witnessing a tenfold increase within the span of 20 years.

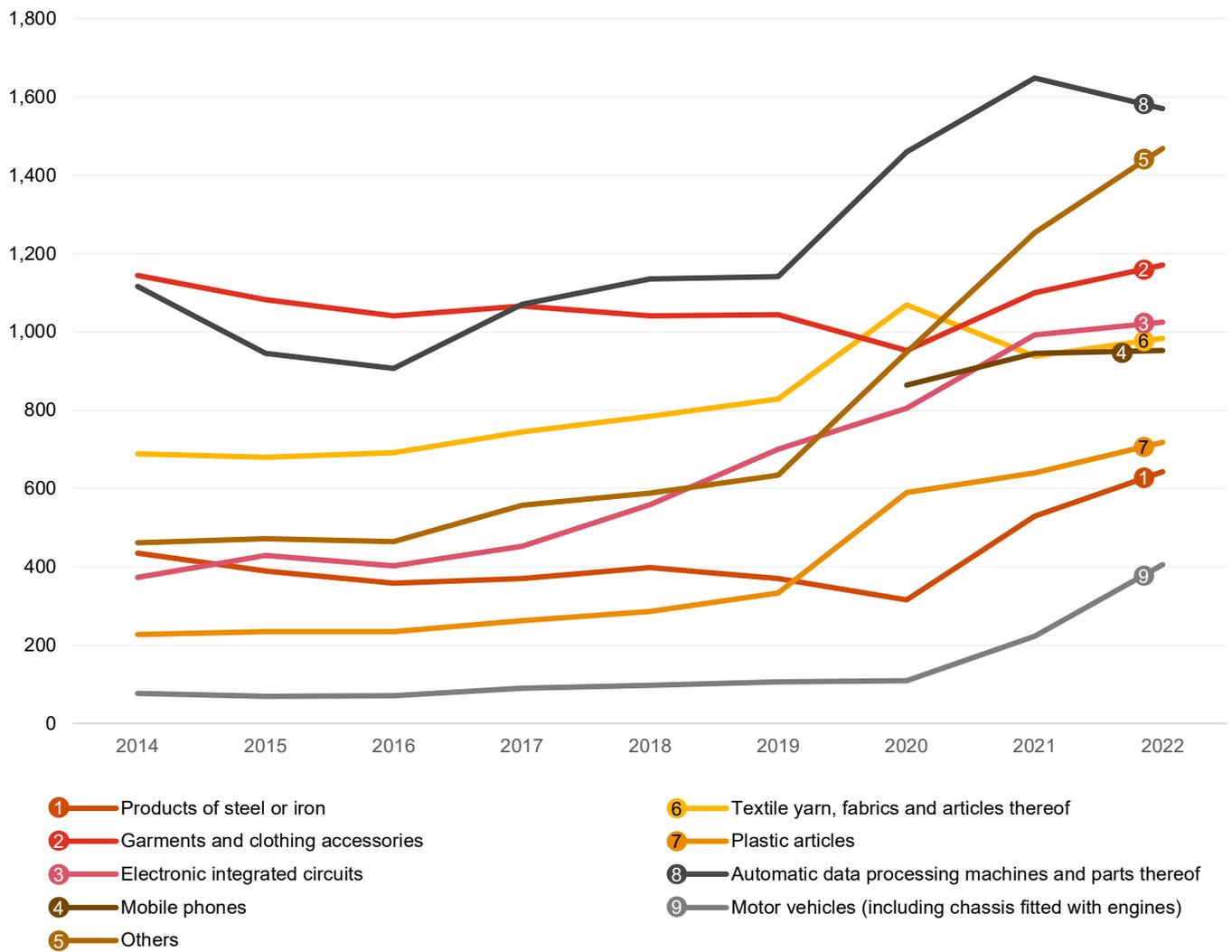
China's export, 2014 to 2022 (Unit: RMB trillion)



Source: Wind (General Administration of Customs of China)

* Annual data refers to the cumulative figure for the December of each year.

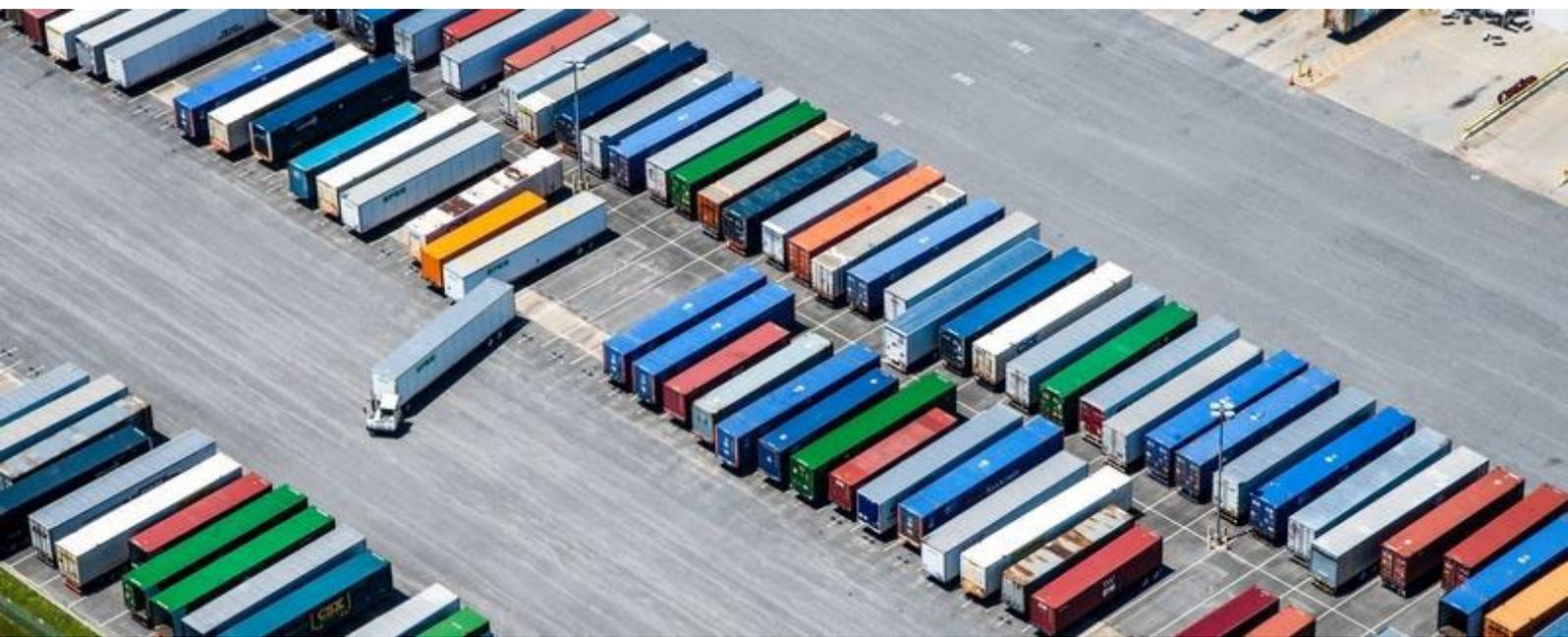
Main export commodities, 2014 to 2022 (Unit: RMB billion)



Source: Wind (General Administration of Customs of China)

* Others include footwear, furniture and parts thereof, leather suit-cases and similar containers, toys, containers, and LCD flat panel display modules.

** Annual data refers to the cumulative figure for the December of each year.



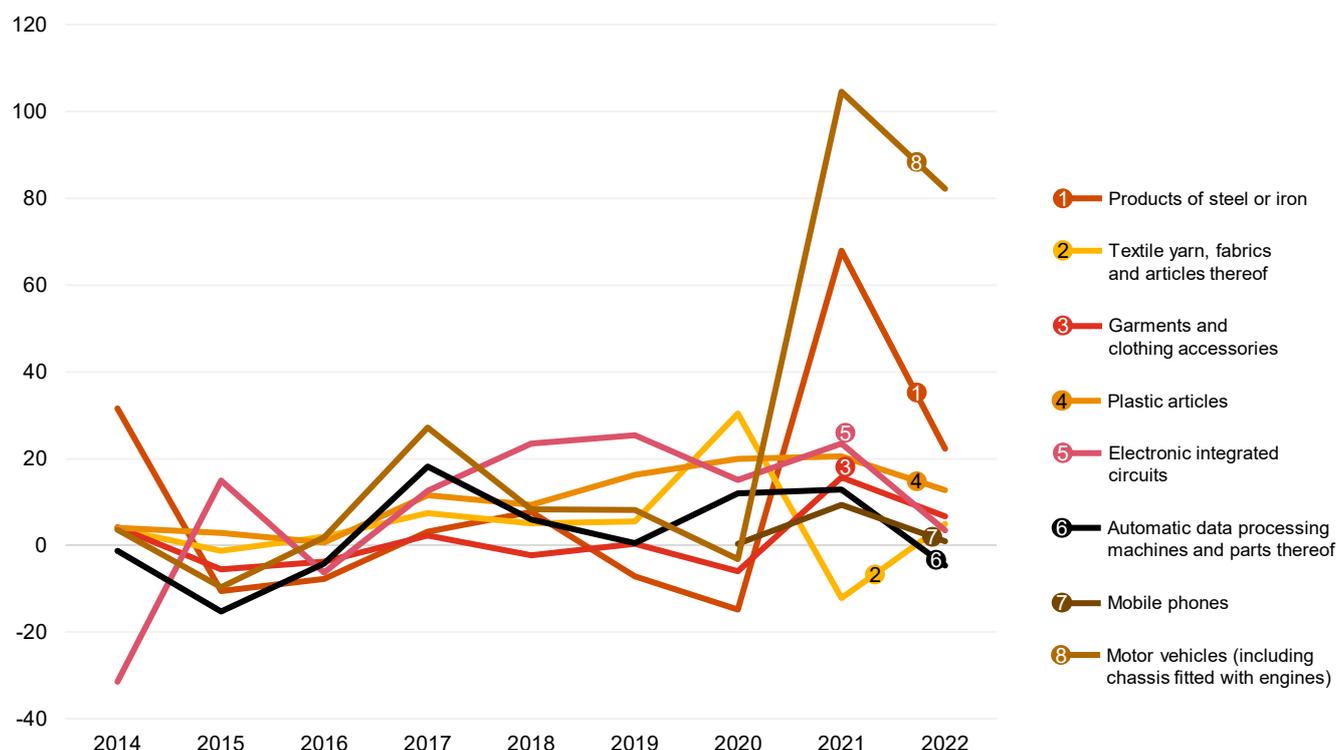
In terms of product categories, China's industrial goods exports grew by 9.9% in 2022, contributing 9.4 percentage points to the overall export growth. Exports of labour-intensive products continued to grow at a fast pace, with green and low-carbon

products such as solar cells, lithium batteries, and electric passenger vehicles experiencing export growth of over 60%. This trend highlights the rapid development of new export drivers. According to the latest data, China maintained its position as the

world's largest exporter for 14 consecutive years, with its share in world exports reaching 14.7% in 2022. Specifically, some of the major products exported by China in 2022 included:

 Integrated circuits (2,734 billion pieces) valued at 1,025.4 billion yuan.	 Textile yarn, fabrics and related products valued at 983.6 billion yuan.
 Automatic data processing equipment and components valued at 1,570.1 billion yuan.	 Clothing and clothing accessories valued at 1,171.3 billion yuan.
 Mobile phones (822.24 million units) valued at 952.7 billion yuan.	 Footwear valued at 384.4 billion yuan.
 LCD flat panel display modules valued at 180.7 billion yuan.	 Furniture and its components valued at 463.9 billion yuan.
 Automobiles (including chassis) (3.32 million units) valued at 405.4 billion yuan.	 Boxes, bags, and similar containers valued at 237.8 billion yuan.
 Steel (67.32 million tons) valued at 642.7 billion yuan.	 Toys valued at 322.9 billion yuan.
 Containers (3.21 million units) valued at 96.7 billion yuan.	 Plastic products valued at 718.8 billion yuan.

YoY growth for the main export commodities from 2014 to 2022 (Unit: %)



Source: Wind (General Administration of Customs of China)

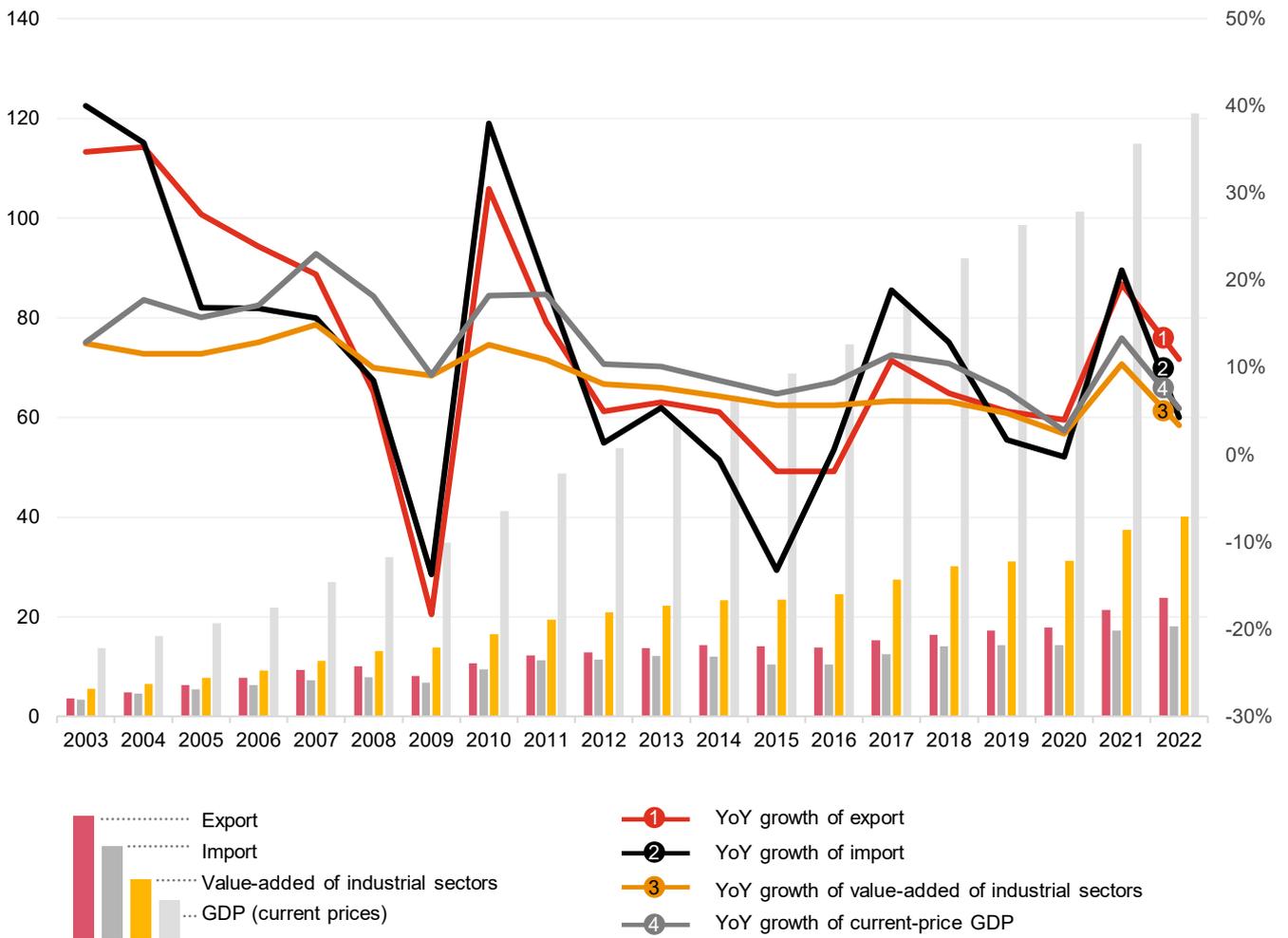
* Annual data refers to the cumulative figure for the December of each year.

Taking high value-added products such as automatic data processing equipment and components, mobile phones, automobiles, and LCD flat panel displays as examples, their export values have seen significant growth over the past decade. In 2012, the

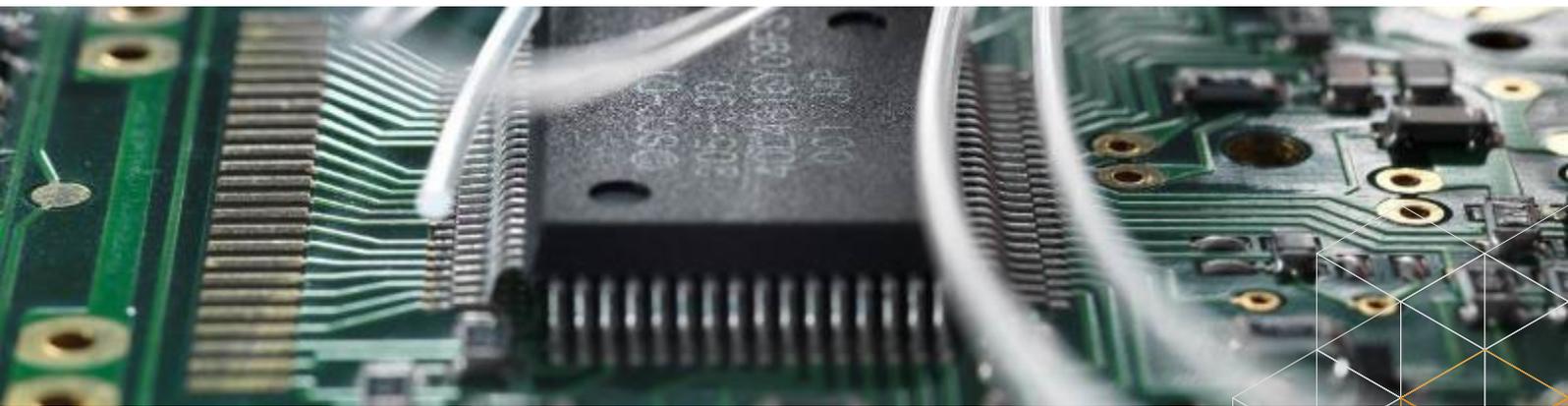
export values of these four product categories were 185.3 billion US dollars, 81 billion US dollars, 21 billion US dollars, and 36.3 billion US dollars, respectively. In the past ten years, these products experienced substantial growth in their export values, with

mobile phones and automobiles showing the largest increase. As for integrated circuits, their export value exceeded 1 trillion yuan in 2022, despite the absence of export data in 2012 and 2017 possibly due to insignificant value.

Imports and exports in the past 20 years (Unit: RMB trillion)



Source: Wind (National Bureau of Statistics, Wind)
 * YoY growth of current-price GDP is calculated by PwC.





■ Private enterprises account for over 50% of China's total merchandise trade volume

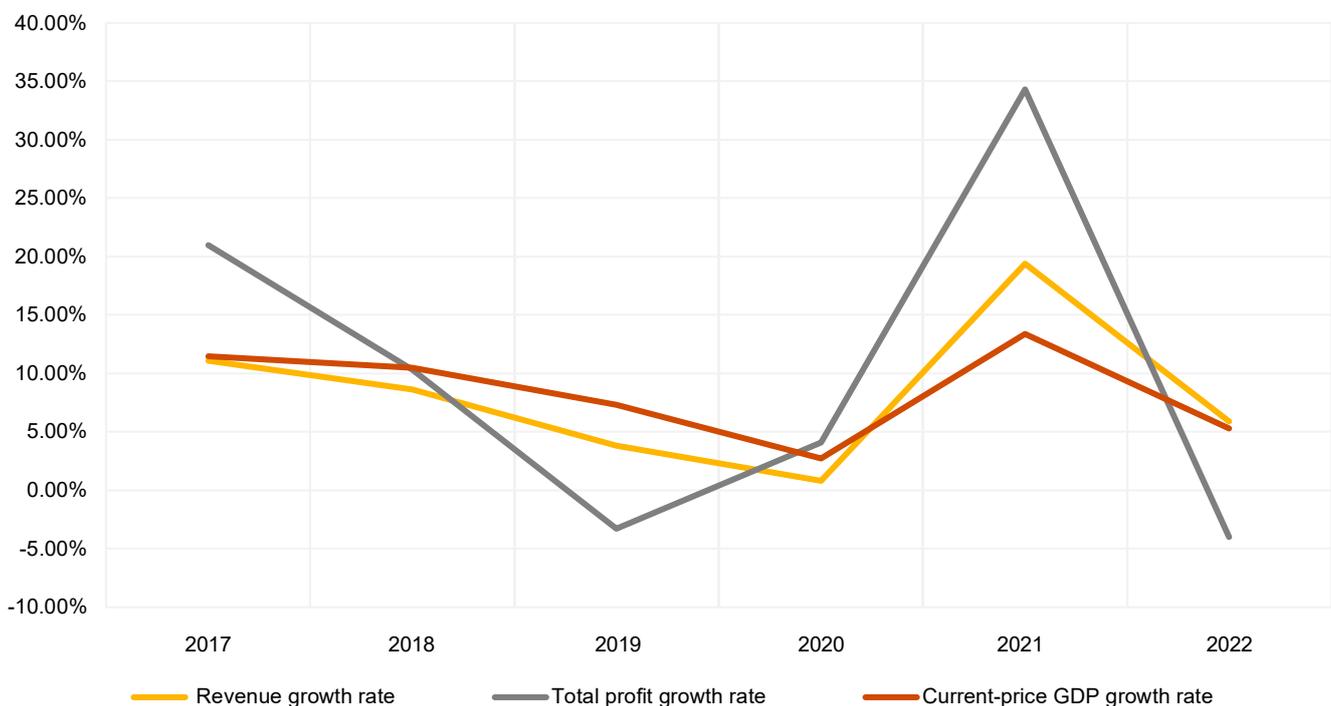
In recent years, the foreign trade volume of private enterprises has experienced rapid growth, making significant contribution to China's foreign trade. In 2022, there were 598,000 foreign trade enterprises in China that engaged in actual import and export activities, marking a 5.6% increase. Among these enterprises, 510,000 were private enterprises, showing a 7% increase. Their combined import and export value reached 21.4 trillion yuan, indicating a 12.9% growth. Private enterprises' import and export value accounted for 50.9% of the total,

an increase of 2.3 percentage points. During the same period, foreign-invested enterprises accounted for 13.82 trillion yuan in import and export value, while state-owned enterprises accounted for 6.77 trillion yuan, representing 32.9% and 16.1% of the total, respectively.

In 2022, private enterprises' import and export contributed 80.8% of China's foreign trade growth. During the same period, private enterprises witnessed double-digit growth in imports and exports with their three largest trading

partners: ASEAN (27.6% growth), the European Union (12.6% growth), and the United States (10.6% growth). The combined value of these three trading partners accounted for 43.9% of private enterprises' total import and export value. Additionally, private enterprises also experienced growth in imports and exports with other BRICS countries (22.1%), Latin America (14.5%), and the five Central Asian countries (55.1%).

YoY growth of the operation revenue and the total profit of industrial enterprises from 2017 to 2022



Source: Wind (National Bureau of Statistics, Wind)
 * Current-price GDP growth rate is calculated by PwC.

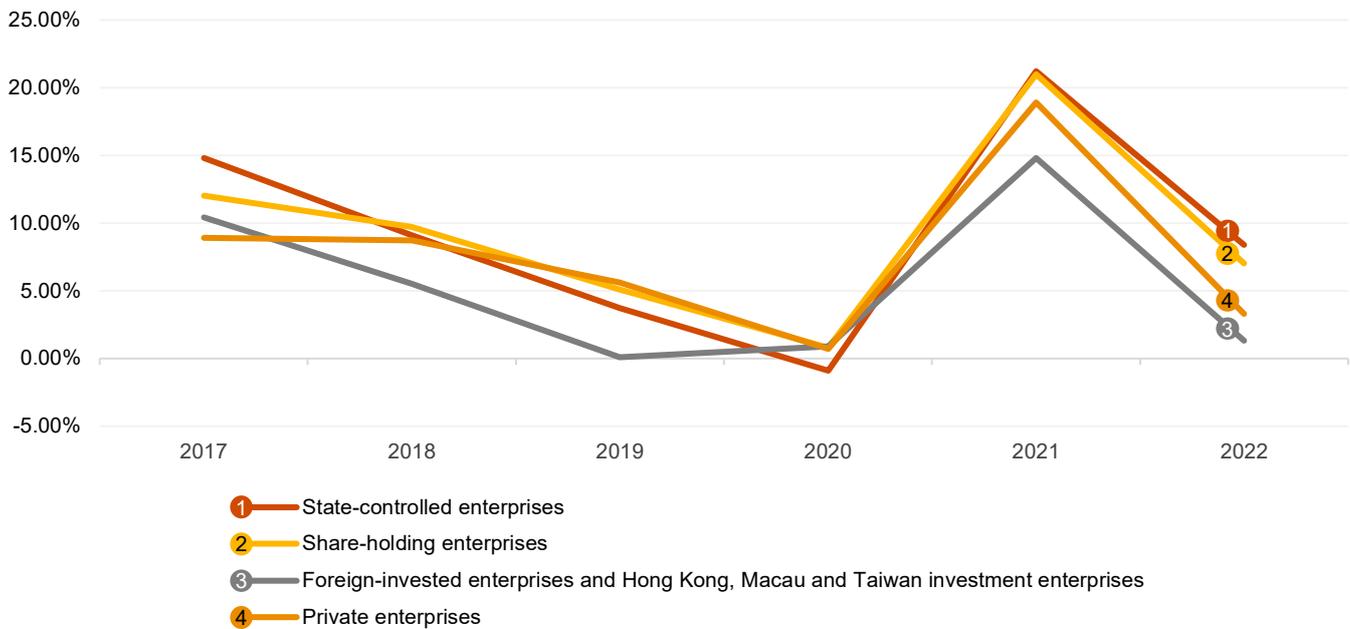
In addition to merchandise trade, changes in China's industrial economy can also be observed through the production scale of industrial enterprises. In 2022, large-scale

industrial enterprises posted a total revenue of 137.91 trillion yuan, a 5.9% increase compared to the previous year. Their total assets amounted to 156.12 trillion yuan, representing an 8.2%

increase year-on-year. However, owing to changes in the producer price index (PPI) and other factors, total profit declined to 8.4 trillion yuan, a decrease of 4% compared to the previous year.



Revenue growth of industrial enterprises with different ownerships from 2017 to 2022



Source: Wind (National Bureau of Statistics)

* Annual data refers to the cumulative figure for the December of each year.

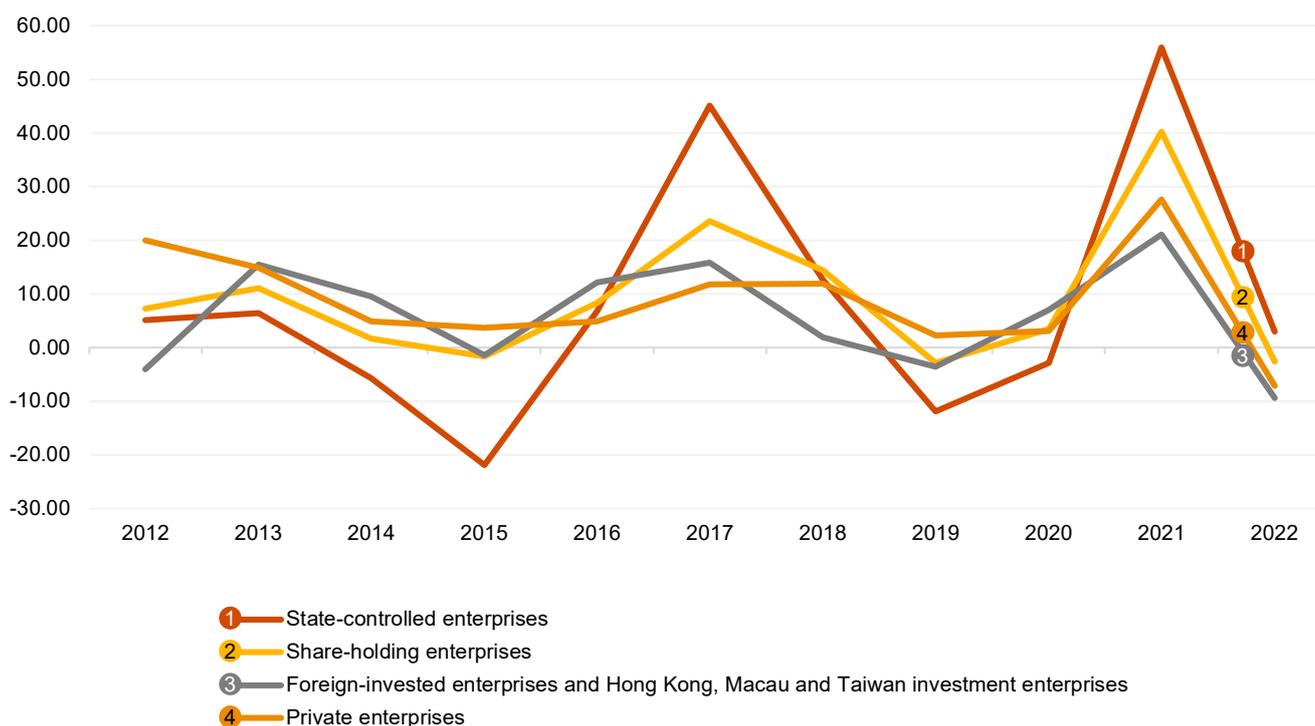
In terms of total profit, state-owned enterprises earned a total of 2.38 trillion yuan, an increase of 3% compared to the previous year. Limited companies (joint stock or sharing holding enterprise) made a total profit of 6.16 trillion yuan, a decrease of 2.7%. Total profit of foreign-invested enterprises and enterprises from Hong Kong SAR, Macau SAR, and Taiwan region saw a decrease of 9.5% to 2 trillion yuan.

Private enterprises made a total profit of 2.66 trillion yuan, a decrease of 7.2%.

In 2022, total revenue reached 137.91 trillion yuan. Among this, private and foreign-invested enterprises, as well as enterprises from Hong Kong SAR, Macau SAR, and Taiwan region accounted for 38.63% and 20.73% of large-scale industrial enterprises, with revenues reaching 53.27 trillion yuan

and 28.59 trillion yuan, respectively. State-owned enterprises accounted for 26.46%, of total revenue of 36.48 trillion yuan. Limited companies, which typically refer to both state-owned and private enterprises that have publicly issued stocks, achieved an operating revenue of 104.67 trillion yuan, representing 75.89% of the total.

Total profit growth of industrial enterprises with different ownerships from 2017 to 2022 (Unit: %)



Source: Wind (National Bureau of Statistics)

* Annual data refers to the cumulative figure for the December of each year.

In recent years, the private industrial economy has continued to grow rapidly, demonstrating significant improvements in profitability and job creation capacity. (Please note that the earliest available data is in 2021).

Between 2013 and 2021, the average annual growth rate of value-added in large-scale private industrial enterprises stood at 8%, which was 1.2 percentage points higher than the overall level of all large-scale industrial enterprises. In 2021, the total profit of large-scale private industrial enterprises grew 44.4% to 2.9 trillion yuan compared to 2012, with an average annual growth rate of 4.2%, which was 0.3 percentage points higher than the overall level of all large-scale industrial enterprises.

Additionally, in 2021, large-scale private industrial enterprises provided employment opportunities for 35.82 million people, representing a growth of 14.7% since 2012. The number of people employed by private industrial enterprises accounted for 48.1% of total employment in large-scale industrial enterprises, far exceeding enterprise of other ownership types.

The industrial economy, including the manufacturing industry, is of paramount importance as it serves as the cornerstone for China's sustained and high-quality economic development. Similarly, the increasing importance of the private economy to China's overall development cannot be overstated. The private economy contributes over 50% of the country's tax revenue, 60% of GDP and exports, 70% of technological innovation, 80% of urban employment, and 90% of total number of enterprises. Therefore, it can be affirmed that the trajectory of the private economy directly affect the strength of the industrial economy and its sustainable high-quality development in the future.

Multiple indicators suggest that China will place even greater emphasis on the development of the private economy in the future. The recent release of the "Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Development and Growth of the Private Economy" has

conveyed important messages. For instance, it shed lights on a significant measure in China's deepening of reform and expanding high-standard opening-up, signalling unprecedented opportunities for the development of the private economy and a major step towards establishing a market-oriented economic system. It also signifies that the central government will strictly require local authorities to fully implement these policies. As stated in the report of the 18th National Congress of the Communist Party of China in 2012, "we will unswervingly encourage, support, and guide the development of the non-public sector of the economy, ensure that all types of ownership can equally use production factors in accordance with the law, fairly participate in market competition, and enjoy equal legal protection".

It is evident that the industrial economy possesses a relatively high degree of marketisation, but some irrational phenomena still persist.

For example, in 2022, state-owned enterprises achieved a total profit of 238 billion yuan, marking a 3% increase compared to the previous year, meanwhile, other ownership enterprises experienced a varying degree of profit decline. The main reason behind that is state-owned enterprises dominate numerous upstream resources such as mining, energy (including petroleum, coal, electricity), communications, transportation, finance, etc. These sectors are less likely to be affected by economic fluctuations, and the monopoly over resources ensures higher profit margins.

It has been 30 years since Deng Xiaoping first proposed the establishment of a socialist market economy during his southern tour in 1992, and the 14th National Congress of the Communist Party of China officially put forward the goal of establishing a socialist market economy. During this time, the private economy has grown rapidly in China, but it still hasn't received completely

equal treatment in development. At the end of 2013, the Third Plenary Session of the 18th Central Committee of the Communist Party of China put forward the goal of "giving the market a decisive role in resource allocation", which significantly improved the business environment for private enterprises and opened up more opportunities for them. However, in this year, due to multiple domestic and international factors, many private enterprises lack confidence in the future sustainable development of China's economy.

The release of this document may indicate that the 20th Third Plenary Session to be held in 2024 will place a higher emphasis on accelerating the improvement of the socialist market economic system. China may also make institutional adjustments to promote the development of the private economy and create a favourable domestic environment for China's sustainable and stable development, helping it to achieve the goal of becoming a moderately developed country in terms of per capita GDP by 2035.





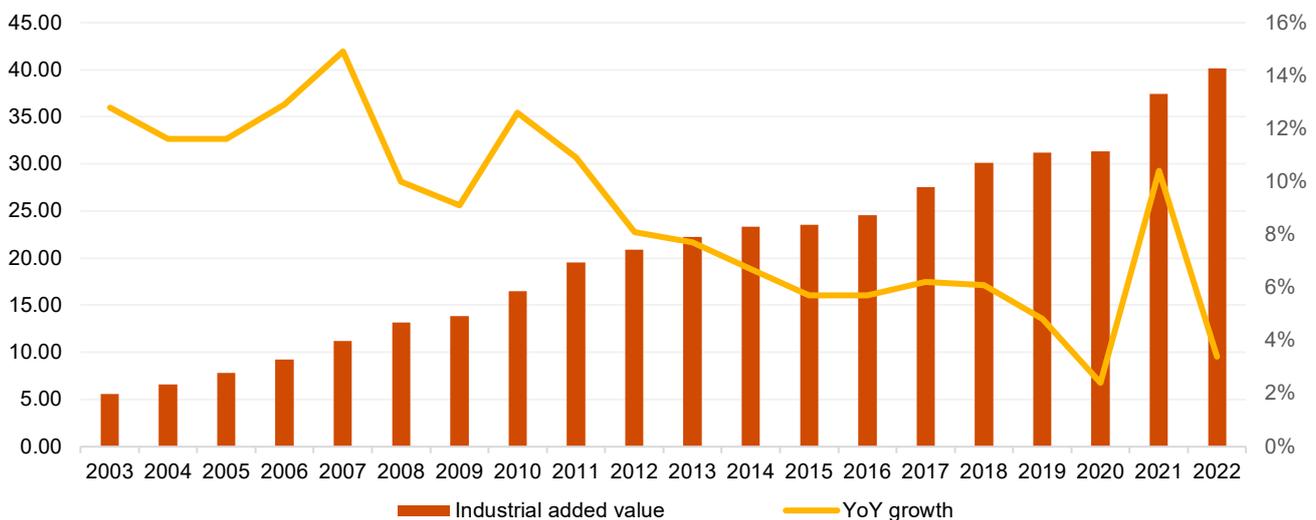
■ Conclusion: Technological innovation will drive China's industrial economy towards high-end, intelligent, and green development

After 45 years of reform and opening-up, especially since China's official entry into the WTO on December 11, 2001, the country's economic development has experienced rapid integration with the global economy. China has maintained the top position in industrial scale globally for 13 consecutive years, and it has been the world's largest

trading nation for goods for six consecutive years, earning recognition as the global manufacturing centre. China's industrial value-added has grown significantly, from just over 4 trillion yuan in 2002 to over 40 trillion yuan in 2022. During the early stages of the reform in 1978, China's industrial value-added was only a little over 160

billion yuan, and back in 1952, it was less than 12 billion yuan. Building upon a solid industrial foundation, China has established the world's largest high-speed rail network, highway network, and achieved significant advancement in infrastructure development, including airports, ports, water resources, energy, and information technology.

Total value-added of industry and its growth in the past 20 years (Unit: RMB trillion)



Source: Wind (National Bureau of Statistics)

In the years of continuously holding the world's top position in industrial scale, China's manufacturing has undergone a remarkable transformation from quantitative growth to qualitative improvement. Currently, China produces over 40% of the world's top 500 industrial products.

The country has shifted its focus from producing and exporting low value-added primary products to gradually producing and exporting higher value-added medium and high-end products.

Today, China is making strides towards world-leading levels in various industrial sectors, including manned spaceflight, lunar and planetary exploration, deep-sea and deep-earth exploration, supercomputers, satellite navigation,

quantum information, large aircraft manufacturing, and biopharmaceuticals, among others.

According to the national development plan, China's industrial economy is poised to advance towards high-end, intelligent, and green development in the future. The transition from "Made in China" to "Created in China" will accelerate, with technological innovation acting as the core driving force for high-quality development of China's industrial economy. This is the outcome of continuous investment in research and development (R&D) by enterprises.

The intensity of R&D expenditure in China's manufacturing industry, measured by the proportion of R&D expenditure to sales revenue, has

increased from 0.85% in 2012 to 1.54% in 2021. The specialised and innovative "Little Giant Enterprises" have achieved an average R&D intensity of 10.3%. In 2022, 762 Chinese industrial enterprises secured their positions in the list of the top 2500 global R&D spenders, based on the EU Industrial Research and Development Scoreboard 2022.

The development of strategic emerging industry clusters will be a key focus going forward. These industry clusters, including new generation information technology, artificial intelligence, biotechnology, new energy, new materials, high-end equipment, and green environmental protection, will act as new growth engines.

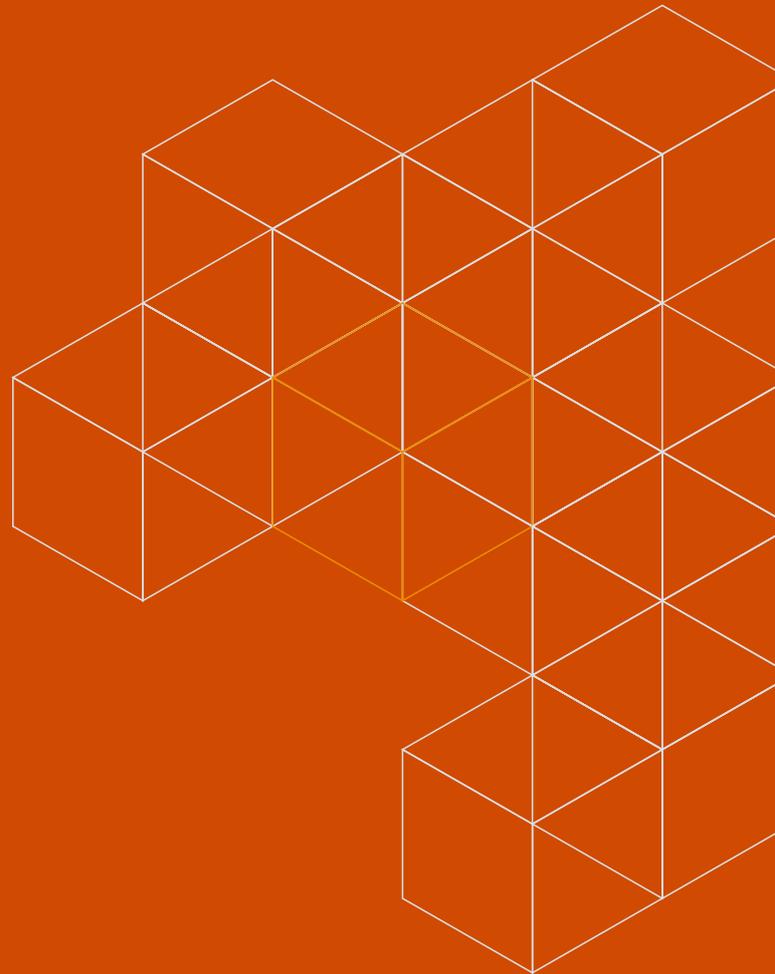


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