

China Economic Monitor



December 2019

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Executive Summary

China's economic growth slowed further in Q3 2019. The actual growth rate of GDP in Q3 was 6.0%, down 0.2 percentage points from Q2 and a record low since 1992.

- In terms of industrial structure, in the first three quarters, the service industry continued to lead other sectors with a 60.6% contribution to GDP growth; secondary industry, meanwhile, continued its quarterly decline, dropping to 5.2%. The slowdown in manufacturing and real estate was the main reason for diminished GDP growth; information technology, business services and other industries, on the other hand, maintained rapid growth.
- On the demand side, consumption remained the primary driver of economic growth. In the first three quarters, final consumption expenditure's contribution to GDP was 60.5%. Driving economic growth by 3.8 percentage points, it continued to play a dominant role. In September, retail sales of consumer goods rebounded slightly with a nominal growth rate of 7.8%, which was 0.3 percentage points higher than in August. However, if the impact of last year's low base is excluded, consumption was still relatively low. Auto purchases in September were -2.2% year-on-year. This was 5.9 percentage points narrower than the previous month's decline, helping to ease the drag on consumption.
- Growth in investment continued to drop, sliding to 5.4% in the first three quarters; growth in September, however, rebounded slightly to 4.7%. Of this, investment in manufacturing declined slightly, growth in real estate investment remained unchanged from the previous month, and investment in infrastructure rebounded slightly but remained low.
- Growth in exports continued to fall. The cumulative growth in the first three quarters remained almost unchanged year on year, down 10 percentage points from 2018. In the first three quarters, exports to the US fell by 10.7% the largest decline on record, except for 2009. The trade surplus in the third quarter rebounded to USD 118.9 billion due to an plummet in imports.
- In terms of production, the industrial growth rate in September temporarily rebounded to 5.8% yearon-year. However, due to sluggish production in

July and August, the overall industrial growth rate fell in Q3 compared with Q2. The industrial growth rate in the first three quarters was 5.6%, down 0.6 percentage points compared with the whole of 2018, indicating that domestic and foreign demand remained weak. From January to June, the added value of industrial strategic emerging industries and high-tech manufacturing industries was higher than industrial enterprises as a whole, indicating continued optimisation of the industrial structure.

On the international front, the global economy continued to slow and external demand was weak. The global manufacturing Purchasing Managers' Index (PMI) remained below the key level of 50 for the fifth consecutive month, and the manufacturing PMI of developed economies such as the US, Europe and Japan all hit new recent years' lows. The OECD Composite Leading Indicators continued their decline since 2018 and were at their lowest level since the 2008 global financial crisis.

On 2 August, the US announced it would impose tariffs on USD 300 billion of Chinese imports. Of this, tariffs on some goods came into force on 1 September, with the remainder due to become effective on 15 December. On 24 August, the US also announced that from 1 October, tariffs on USD 250 billion of Chinese imports would be raised from 25% to 30%, when tariffs on USD 300 billion of Chinese goods would also be raised from 10% to 15%. Against this backdrop, a new round of high-level Sino-US economic and trade talks was held in Washington from 10 to 11 October, and some progress was made. Following the talks, China agreed to increase imports of US agricultural products. The US rescinded its decision to raise tariffs on USD 250 billion of Chinese imports to 30% but retained a tariff of 15% on USD 300 billion of Chinese imports. Both sides are expected to begin drafting the results of the Phase 1 talks, with completion expected soon.

Faced with internal and external pressure from various quarters, China adopted a series of positive fiscal policies from the beginning of the year to strengthen counter-cyclical adjustment. Judging from the first three quarters of the year, the execution of these policies went well.

- The issuance of newly added local government debt was basically completed. As of September, new local debts of RMB 3.04 trillion had been issued, accounting for 99% of the total amount. The annual issuance quota was also filled two months earlier than last year. The accelerated issuance of local government special bonds is conducive to infrastructure investment and economic growth. On 4 September, the National General Meeting issued new special debt limits for 2020.
- As of September, national public fiscal expenditure had increased by 9.4% year-on-year, 0.7 percentage points higher than for the whole of last year. In September, the growth rate of fiscal expenditure turned from negative to positive, which is attributable to proactive financial policies. The national general public budget revenue rose 3.3% year-on-year, down 2.9 percentage points from the previous year. Of this, tax revenue decreased by 0.4% year-on-year, posting negative growth for the fifth consecutive month and indicating the large-scale tax and fee cuts are gradually taking effect.
- In response to the rollout of the tax and fee reduction policies, and to help alleviate local financial pressures, on 9 October, the State Council issued the Promotion Plan for the Reform of the Central and Local Income Division After the Implementation of Larger Tax Cuts and Fee Reductions to help strengthen local fiscal revenue and aid the implementation of tax reduction and fee reduction measures.

In terms of monetary policy, in August the People's Bank of China (PBOC) introduced loan prime rate (LPR) reforms that will see LPR used as the interest rate benchmark for new bank loans and help ease interest-rate transmission mechanisms. The slight reductions in LPR in August and September helped reduce the pressure on financing costs for the real economy. In September, the Central Bank lowered the deposit reserve ratio of financial institutions by 0.5 percentage points and released about RMB 800 billion in funds. It also cut the deposit reserve ratio by 1 percentage point and released RMB 100 billion in funds for urban commercial banks operating only in provincial administrative regions. This was the sixth reduction since 2018. Moderate relaxation of monetary policy and LPR reforms for the easing of interest rate transmission can help monetary policy play a more effective role.

At present, global liquidity has returned to easing, and major countries have already lowered their benchmark interest rates. The Fed has cut interest rates three times this year; most recently, on 30 October it was announced that the federal funds rate target range would be lowered by 25 basis points to 1.5%-1.75%. This global easing will help alleviate the downward pressure on the global economy, thereby mitigating the spillover effects of the global economic recession on the Chinese economy. The monetary policy in the next stage is expected to remain moderately relaxed on the basis of adhering to the principle of "not opening the flood gates" and maintaining a stable pace. The policies will be aimed at promoting the market-based reform of interest rates, while pre-adjusting and fine-tuning the policy tools such as general reserve requirement ratio (RRR) cuts and targeted RRR cuts. More funds will be used for inclusive finance, and financial support for the real economy - particularly with regard to small and micro enterprises - will be increased.

Case study: local government debt

After the tax-sharing reform of 1994, local government kept half of fiscal revenues, but undertook most fiscal expenditures, putting greater pressure on the finances of local governments. For example, in 2018, local general public spending expenditure accounted for 85.2% of the country's general public budget expenditure, but local budget revenue was just 53% of total national budget revenue.

Local government debt has taken shape and evolved over three stages: 1994 through 2008 saw a ban on local debt and the rise of local financing platform companies; between 2009 and 2014, the ban on local debt was lifted and municipal investment companies were gradually standardised; starting from 2015 to the present, the local government bond market entered a stage of comprehensive regulation. By source of debt repayment funds, local government bonds are divided into general bonds and special bonds. The biggest difference between the two is whether the corresponding public welfare projects can generate income. General debt is mainly used for projects without income. The source of debt repayment funds is general public budget income; special debts correspond to projects with an income stream, and the sources of debt repayment funds are

government funds or special income. In terms of their use, local government bonds can be divided into new bonds, replacement bonds and refinancing bonds. Following the end of the three-year replacement period for local government debt in August 2018, future local government bonds will be dominated by new bonds and refinancing bonds.

We believe infrastructure investment will take the following three directions in the future:

- 1. Promotion of regional integration-based construction: A succession of plans has been introduced for Beijing-Tianjin-Hebei, Guangdong-Hong Kong-Macao Greater Bay Area and Yangtze River Delta regional integration to promote the close coordination of these regions and their development. Under this impetus, the development of infrastructure pivotal to regional integration and city clusters including rail transit, highways, and municipal pipelines for water, sewage, natural gas etc.
- 2. Infrastructure investment to promote industrial upgrading: China has proposed the promotion of "new types of infrastructure" represented by 5G, artificial intelligence (AI), the industrial internet and Internet of Things. These "new types of infrastructure" are the basis for promoting industrial upgrading and play an important role in China's development into an innovative economy. They are also set to become the focus of future infrastructure investment.
- 3. Social security infrastructure areas related to people's livelihood: This includes the renovation of old "community infrastructure" and upgrading of supporting facilities, and renovation of community-related infrastructure such as roads, water supply and power supply. In the central and western regions and rural areas where there remain obvious shortages of infrastructure facilities the replacement and upgrading of traditional infrastructure, rural water supply projects, power grid renovation, and upgrading projects will also become investment priorities.

Economic trends

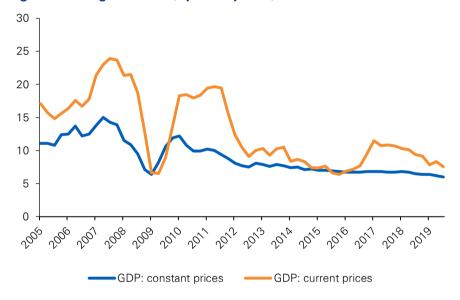
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Economic growth slowed further in Q3

In Q3 2019, China's real GDP grew by 6.0% year-on-year, 0.2 percentage points slower than the previous quarter, and the lowest growth rate since the publication of GDP quarterly data in 1992. Overall, GDP growth in Q1 was 6.4% but slowed by 0.2 percentage points in Q2 and Q3, exhibiting a gradual decline. In the first three quarters, it increased by 6.2% year-on-year, which was 0.3 percentage points lower than the annual growth rate of 2018 (6.6%). In Q3, nominal GDP increased by 7.6% year-on-year and the growth rate dropped by 0.7 percentage points compared with Q2.

Figure 1: GDP growth rate, quarterly YOY, %



Source: Wind, KPMG analysis

By sector, the growth rate of the service sector continued to lead the other sectors. In the first three quarters, the service sector grew by 7.0% year-on-year, which was same as that of Q2 and higher than GDP growth for the same period last year. Its contribution to GDP growth was 60.3%, a slight decrease of 0.2 percentage points over the same period last year. The growth rate of the secondary sector continued its quarterly decline, with a year-on-year increase of 5.6% in the third quarter, down 0.2 percentage points from Q2. The slowdown in manufacturing and real estate is the main reason for the slowdown in GDP growth; information technology, business services and other sectors, on the other hand, have maintained rapid growth.

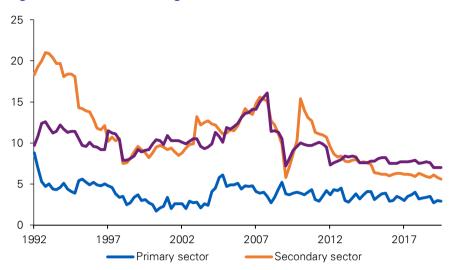


Figure 2: Cumulative YOY growth rate of the three sectors, %

On the demand side, consumption remained an important pillar of economic growth. From January to September, consumer consumption's contribution to GDP was 60.5%, driving economic growth by 3.75 percentage points. Although this was a slight decline from Q2, it still held top position. The contribution of capital formation (i.e. investment) to GDP increased by 0.6 percentage points to 19.8% compared with Q1, driving economic growth by 1.23 percentage points. Net exports' contribution to GDP fell by 11.1 percentage points to 19.6%, driving economic growth by 1.22 percentage points.

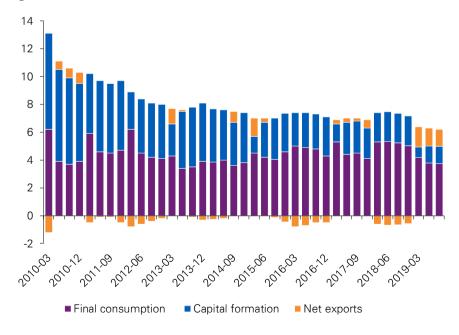


Figure 3: Growth of GDP in various sectors, cumulative value, %

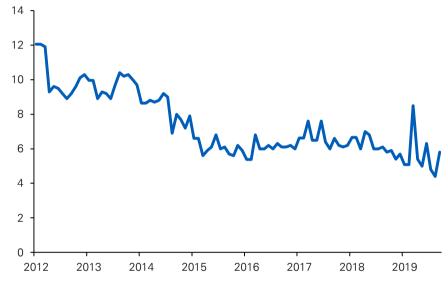
Source: Wind, KPMG analysis

Source: Wind, KPMG analysis



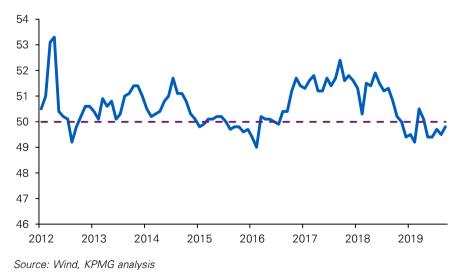
In terms of output, the growth rate of industrial added value for enterprises above designated size in Q3 was 5.6%, down from 6.4% for the same period last year and from 6.0% in Q2. In September, industry's year-on-year growth rate rebounded from 4.4% in the previous month to 5.8%, but manufacturing PMI dropped into the contraction zone for the second time since May. The PMI in September stood at 49.8, still below the key level of 50, indicating that industrial production will still face pressure in the future.

Figure 4: Added value of industrial enterprises above designated size, monthly YOY, %



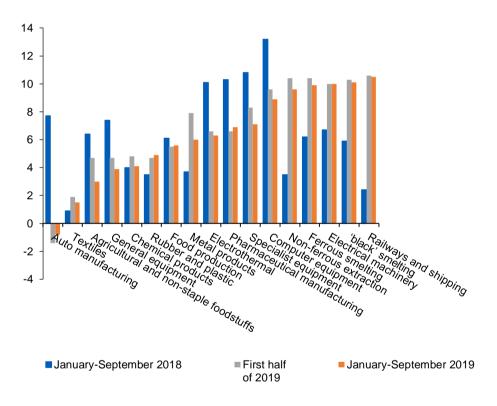
Source: Wind, KPMG analysis

Figure 5: China's manufacturing PMI, current monthly value, %



By sector, the auto manufacturing sector continued to drag on industrial production. Its growth rate between January and September was 0.8%, while in September it was 0.5%. Though this was a drop of 4.3% compared with August, it has maintained two months of consecutive growth. On the other hand, in most sectors — especially traditional sectors — the cumulative growth rate from January to September was lower than the previous period. This includes non-metallic minerals, "black" smelting, non-ferrous smelting, metal products, general equipment, special equipment, railways and shipping, and so on — which had all previously been relatively strong. The "pull" effect of construction projects on the middle and upper reaches of the industry chain has basically peaked.

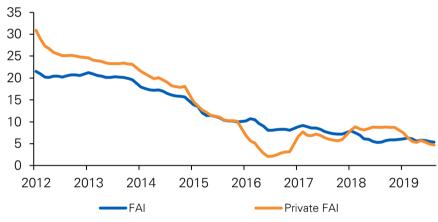




Fixed-asset investment continued to decline and infrastructure investment rebounded slightly

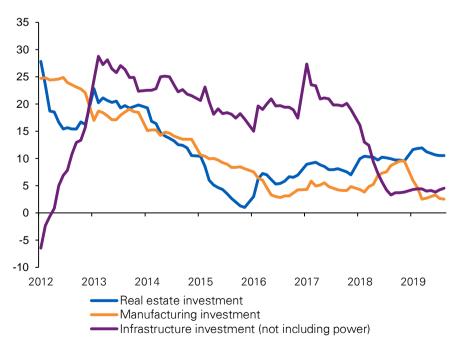
From January to September, the cumulative year-on-year growth rate of the total fixed-asset investment continued its drop to 5.4% – the third consecutive month of decline. However, looking at monthly growth rates, fixed-asset investment in September increased by 4.7% year-on-year, a slight increase of 0.6 percentage points from August. The cumulative year-on-year growth rate of private fixed-asset investment during January-September continued its decline to 4.7%, the lowest since February 2017. The decline in private investment growth shows that the endogenous power of Chinese investment remains weak.

Figure 7: Fixed-asset investment, cumulative YOY, %



Source: Wind, KPMG analysis





Source: Wind, KPMG analysis

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Manufacturing investment fell slightly, but investment in high-tech manufacturing was a bright spot

From January to September, manufacturing investment grew 2.5% year-onyear, down 0.5 percentage points from the first half of the year. It remained at a low level and was relatively sluggish overall. Although growth in many sectors experienced varying degrees of decline compared with the same period of last year, it improved compared with the first half of the year. From January to September, the growth rate of investment in the sectors of computers and digital equipment, transportation equipment, and automobiles rebounded significantly, growing from January to June by 3.1, 2.2 and 1.6 percentage points, respectively; the growth rate of textiles, agricultural and non-staple food, and chemical investment, meanwhile, declined significantly, down from January to June by 7.9, 3.4 and 1.7 percentage points, respectively. In addition, the growth rate of high-tech manufacturing investment in the first three guarters was 12.6%, which was higher than the 7.2 percentage points for all fixed-asset investment and significantly greater than the overall manufacturing investment growth rate. Of this, medical equipment and instrument manufacturing investment increased by 20.9%, electronic and communication equipment manufacturing investment by 15.0%, computer and office equipment manufacturing investment by 8.3%, and pharmaceutical manufacturing investment by 7.0%. These results indicate that although manufacturing investment remains low overall, the structure of investment is gradually being optimised.

Due to favourable tax reduction and fee reduction policies, the growth in total profits of industrial enterprises has bottomed out and started to rise again since the beginning of the year. Coupled with the continuous recovery of long-term enterprise loans since August, it is expected that manufacturing investment may have seen the worst of the slowdown. In addition, in the future, the stage is set to continue to increase investment in high-tech manufacturing industries, as well as increase financial, credit and industrial policy support, hedging against downward pressure on traditional manufacturing.

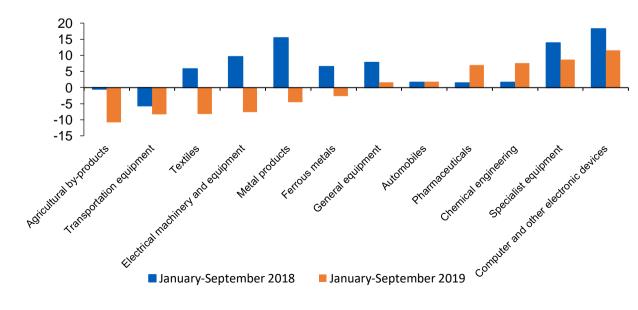


Figure 9: Investment growth rate of manufacturing subsectors, cumulative YOY, %

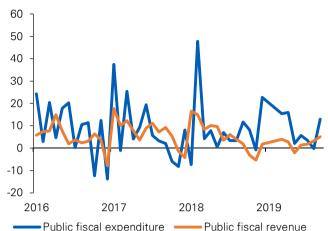
Source: Wind, KPMG analysis

Growth in infrastructure investment rebounded slightly, as fiscal policy contributed to its steady growth

From January to September, the cumulative growth rate of infrastructure investment (excluding electricity) was 4.5%, a slight rebound of 0.4 percentage points from the first half of the year. The rebound in infrastructure investment growth was due to the effects of proactive fiscal measures at the end of Q3. From January to September, national public finance expenditure totalled 9.4% year-on-year, an increase of 0.7 percentage points over the previous year. Of this, the growth rate in September was 12.9%, representing a turn from negative to positive, an increase of 13.1 percentage points from the previous month, and a new high since May this year. To a substantial degree, higher fiscal expenditure has ensured investment in key areas of infrastructure.

On the other hand, with the gradual introduction of large-scale reductions in taxes and fees, growth in local fiscal revenue has slowed. The growth in local government revenue from land sales has also slowed. From January to September, revenue from land sales increased by 5.8% year-on-year, which was 19.2 percentage points lower than that of the whole of 2018. In order to secure funds for infrastructure investment, on 4 September the National General Meeting decided to release some of the new special debt limits for 2020 in advance, to make sure their use will come into force early next year, and to expand the scope of use. On 9 October this year, the State Council issued the Promotion Plan for the Reform of the Central and Local Income Division After the Implementation of Larger Tax Cuts and Fee Reductions to help strengthen local fiscal revenue and aid the implementation of tax reduction and fee reduction measures (for more details, please refer to the case study on local government debt).





Source: Wind, KPMG analysis

Investment in real estate development stable and resilient overall

From January to September, cumulative investment in real estate grew by 10.5% year-on-year, which was the same as for January-August. Overall, it has been relatively stable. The area of land purchased during January-September dropped 20.2% year-on-year, up 7.3 percentage points from the first half of the year. Although it has still experienced significant negative growth, the decline has narrowed. From January to September, the value of land transactions decreased by 18.2% year-on-year, narrowing by 3.8 percentage points. With the growth in land acquisition fees continuing to decline from the high of 57% last year to 19.6% in the first three quarters, the gap between the nominal growth rate of real estate investment and the actual growth rate is also narrowing. In terms of real estate sales, the sales area of houses from January to September was the same as for the same period last year, and the growth rate rebounded by 1.7 percentage points from the first half of the year. In April 2019, the National Development and Reform Commission issued the Key Tasks for New Urbanization Construction in 2019, in which it cancelled or relaxed urban settlement restrictions based on the size of the city's population, furthering the goal of settling 100 million non-resident people in cities. Hebei, Yichang, Hainan and other locations subsequently introduced new household registration policies. Mega cities Beijing, Shanghai and Guangzhou have all adjusted and perfected their point-based residential policies, significantly increasing the scale of settlement. Benefitting from the relaxed restrictions on household registration, real estate sales have marginally improved, spurring a 7.1% increase in fund liquidity for real estate developers and a 0.5 percentage points acceleration in the growth rate. From January to September, the area of newly developed housing increased by 8.6% year-on-year; though this was down 1.5 percentage points from January to June, growth remained relatively rapid.

The Politburo meeting held on 30 July this year once again emphasised that "housing is used for living, not for speculation" and explicitly stated that "real estate is not to be used as a means of stimulating the economy in the short term". Real estate financing channels such as bank loans, trusts and overseas debts have recently been tightened, and growth in real estate investment is likely to fall.

Figure 11: Purchased land area vs land transaction price, cumulative YOY, %



Figure 12: New construction and sales area of real estate, cumulative YOY, %



Source: Wind, KPMG analysis



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Consumption continued to slump, dragged down by a drop in auto purchases

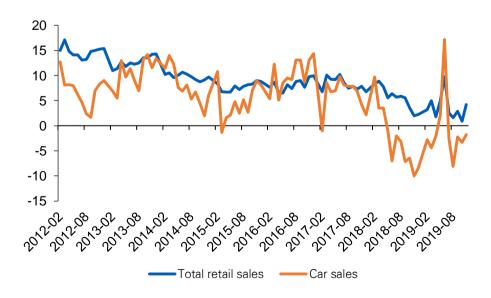
From January to September, the total retail sales of consumer goods grew 8.2% year-on-year, which was the same as for January-August, but an overall drop of 0.8 percentage points compared with the whole of 2018. Of this, the nominal growth rate and actual growth rate of the total retail sales of consumer goods in September were 7.8% and 5.8%, respectively, up 0.3 and 0.2 percentage points from the previous month. Car sales' drag on consumption was reduced. In September, car sales fell by 2.2% year-on-year, showing an improvement of 5.9 percentage points compared to the previous month.





Source: Wind, KPMG analysis



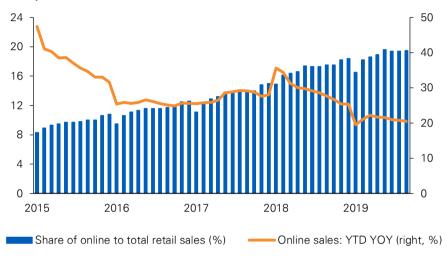


Source: Wind, KPMG analysis

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From January to September, the online retail sales of physical goods increased by 20.5%, down 1.1 percentage points from the first half of the year but still far higher than the overall growth rate of social retail sales. Its share of total consumer purchases has been steadily rising and reached 19.5% in September — making it the main driver of consumption growth.

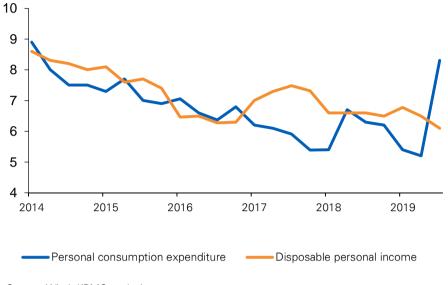
Figure 15: Online consumption purchases and share of total retail sales, %



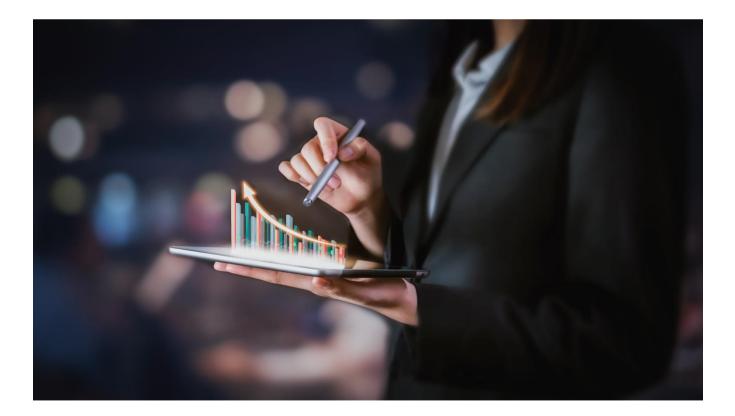
Source: Wind, KPMG analysis

In Q3, there was a clear differentiation in the growth rate of per capita disposable income and personal consumption. This year, the per capita disposable income showed a downward trend from quarter to quarter. The actual growth rate in the first three quarters was 6.1%, down 0.4 percentage points from the first half of the year. Growth in per capita consumption expenditure of residents was 8.3%, a sharp increase of 3.1 percentage points from the first half of the year. In terms of the structure of consumer spending, expenditure on education, culture and entertainment in Q3 increased significantly, which may be attributable to the summer vacation. In addition to the impact of disposable income, changes in consumer spending and the rise of consumer finance— which includes credit cards, consumer loans and Ant Credit Pay— have become an important means of household consumption.

In August 2019, the State Council issued the Opinions on Accelerating the Development of Circulation and Promoting Commercial Consumption to optimise the consumption environment and stimulate domestic consumption potential. In September 2019, the State Council issued the Development of Central and Local Revenue after Implementing Larger Tax Cuts and Reducing Fees to gradually transfer the consumption tax to the local level and guide local governments in improving the consumption environment. Both policies are aimed at boosting consumption. Figure 16: Per capita household disposable income vs per capita household consumption expenditure, actual cumulative YOY, %



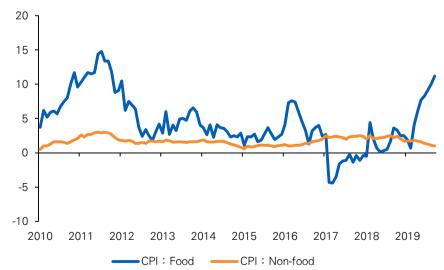
Source: Wind, KPMG analysis



Pork prices pushed consumer goods inflation up

From January to September 2019, CPI grew by 2.5% year-on-year, representing an increase of 0.1 percentage points from January to August. In September, CPI rose by 3% year-on-year, up 0.2 percentage points from the previous month and a new high for the last six years. It has now reached the warning level for the first time since 2014. In terms of food, prices rose by 11.2% in September — a further 1.2 percentage points higher than in August. Affected by supply-side factors such as environmental protection and African swine flu, pork prices rose by 69.3% year-on-year, a sharp increase of 22.6 percentage points from August that also spurred an increase in beef and mutton prices of 18.8% and 15.9%, respectively. In addition, a large number of seasonal fruits and vegetables went on sale in September, providing ample supply. The growth for fruit and vegetables prices were 7.7% and -11.8%, respectively, representing a sharp drop of 16.3 and 11.0 percentage points. Non-food prices rose by 1.0% in September, representing a further drop of 0.1 percentage points compared with August and the sixth consecutive month of decline. Clothing rose 1.6% year-on-year, which was unchanged from the previous month; traffic and communications were -2.9% year-on-year, representing a further price decline. Overall, inflation for food prices is increasing, and for non-food prices it is getting weaker.





Source: Wind, KPMG analysis

From January to September 2019, total producer price index (PPI) grew by 0.0% year-on-year, down 0.1 percentage points from January-August. In September, PPI was -1.2% year-on-year, a decrease of 0.4 percentage points from the previous month and a record low for the last three years. By sector, the prices of oil and gas exploration, coal and other fuel processing, ferrous metal smelting, and chemical raw materials and other sectors have widened, down by 4.3, 3.7, 2.7, and 0.9 percentage points from the previous month. The prices of sectors such as ferrous metal mining and coal washing and selection declined 6.0 and 0.7 percentage points, respectively, from the previous month, while agricultural and sideline food processing and non-ferrous metals industries increased by 1.2 and 2.0 percentage points, respectively. The prices of these PPI core industries were generally low, indicating that the current downward pressure on the economy remains relatively substantial. Affected by tensions in the Middle East, the price of international crude oil recently rebounded. Considering the low base effect in Q4 last year, it is expected that the PPI decline in Q4 of this year will gradually narrow.



Source: Wind, KPMG analysis

The growth rate of social financing rebounded, and liquidity was released for the second time this year

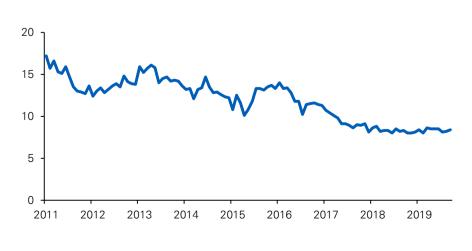
Total Social Financing (TSF) is a key indicator of the financial system's support for the real economy (i.e. non-financial companies and households). Since 2019, TSF stock has returned to double-digit growth. At the end of September, the TSF stock increased by 10.8% year-on-year, which was the same as in August. In September, M2 (broad money) increased by 8.4% year-on-year; this represented an increase of 0.2 percentage points from the previous month and was 0.1 percentage points more than the same period last year.





Source: Wind, KPMG analysis

Figure 20: Broader money supply (M2), monthly YOY, %



Source: Wind, KPMG analysis

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In the first three guarters of 2019, TSF increased by RMB 18.74 trillion, an uptick of RMB 3.28 trillion - or 21.2% - over the same period last year. In terms of specific financing structures, RMB loans increased by RMB 13.9 trillion in the first three guarters, which was RMB 1.1 trillion more than the same period last year. Impacted by financial supervision, non-standard financing (including entrusted loans, trust loans and undiscounted bills) continued to decline, RMB 1.28 trillion less than last year; the decline, however, did narrow. Newly added stock financing was RMB 230 billion, a decrease of RMB 75.7 billion over the same period last year. Newly added local government special bond financing was RMB 2.17 trillion, an increase of RMB 470.4 billion over the same period last year. It is worth noting that since September 2019, PBOC has included Exchange Enterprise Asset-backed Securities (referred to as "Enterprise ABS") in the Corporate Bonds statistics. After adjustment, new corporate bonds in September stood at RMB 161 billion, and the net financing of corporate bonds in the first three guarters was RMB 2.39 trillion, representing a year-on-year increase of RMB 695.5 billion. By proportion, the financing of corporate bonds in the first three guarters accounted for 12.8% of the social financing scale in the same period, 1.8 percentage points higher than the same period last year.

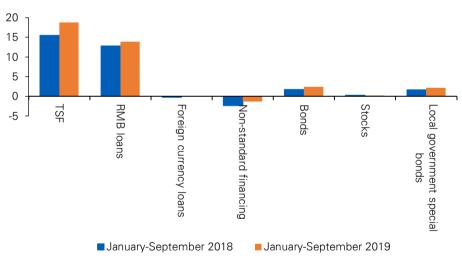


Figure 21: Composition of newly added financing, RMB trillion

Source: Wind, KPMG analysis

In terms of social financing structure, on-balance sheet loans, nonstandard financing and corporate bonds were the chief supports for growth in social welfare during the first three quarters. Due to the early pace of the issuance of special bonds this year, special debts in September increased slightly year-on-year, dragging down social financing. In terms of loan structure, the short-term loan amount for enterprises from January to September was RMB 1.47 trillion, which was double that of the same period last year and the main reason for the growth of RMB loans. From January to September, the amount of medium- and long-term loans to enterprises was RMB 4.93 trillion, representing a slight decrease of RMB 90 billion compared with the same period last year. This indicates that enterprises' willingness to invest long-term remains weak.

The tightening of real estate financing policies is crimping the recovery of non-standard financing; as a result, along with the absence of local special debts in Q4, TSF growth in Q4 is expected to be limited.

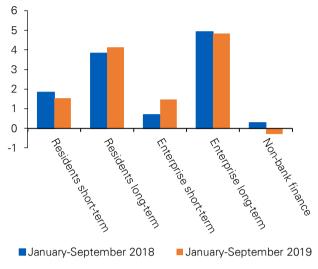
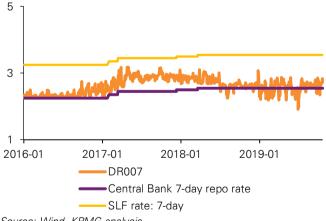


Figure 22: New RMB loan structure (unit: trillion)

Source: Wind, KPMG analysis

Interbank market interest rates in Q3 remained low. The interbank seven-day pledge repo rate (R007) representing the average market financing cost and the seven-day pledge reportate (DR007) of the deposit institution were far from the upper limit of the interest rate corridor (Standard Borrowing Facilitation [SLF]), and overall liquidity remained relatively abundant.

Figure 23: Interbank market interest rate, %



Source: Wind, KPMG analysis

On 16 August, the State Council proposed the reform and improvement of the LPR formation mechanism. After the quoting banks use the open market operating rate (based on medium term lending facility, MLF) plus point method to make a quotation, the National Interbank Funding Center calculates the loan market quotation interest rate based on the quotation and publishes it, providing pricing reference for bank loans. On 17 August, PBOC announced more details of reforms to LPR formation mechanisms.

The new LPR quotation method was officially introduced on 20 August. Banks mainly refer to LPR when setting prices for new loans and use it as the basis for pricing for floating interest-rate loans. At the same time, banks' application of loan market guotation rates and loan interest-rate competition behavior are included in the macro-prudential assessment.

On 4 September, the State Council executive meeting proposed to use counter-cyclical adjustment policy tools, deploy precise measures, and increase efforts regarding the "six stabilities". The meeting also stated it was necessary to adhere to the implementation of a prudent monetary policy; carry out pre-adjustments and fine-tuning at the appropriate time; accelerate the implementation of measures to reduce actual interest rate levels; and make timely use of policy instruments such as general RRR cuts and targeted RRR cuts to guide financial institutions in improving assessment and incentive mechanisms. More funds will be used for inclusive finance, and financial support for the real economy ---- particularly with regard to small and micro enterprises — will be increased. The meeting's statement on "use of policy instruments such as universal RRR reduction and targeted RRR reduction" signals a relaxation in policy.

On 16 September, PBOC cut the deposit reserve ratio of financial institutions by 0.5 percentage points (excluding financial companies, financial leasing companies and auto finance companies). In addition, to promote support for small and micro enterprises and private enterprises, the deposit reserve ratio will be reduced by one percentage point for commercial banks operating only at the provincial administrative level. This was carried out twice, on 15 October and 15 November, with an adjustment of 0.5 percentage points each time. The reduction of long-term funds released by the RRR is about RMB 900 billion, of which about RMB 800 billion will be released from the overall RRR cut, and about RMB 100 billion from the targeted reduction. The targeted reduction proposed by PBOC will be carried out in two parts, which will help to release funds in a stable and orderly manner — indicating that PBOC continues to emphasise "not opening the flood gates" and adhering to a stable monetary policy.

Since 2018, PBOC has altogether carried out six rounds of RRR cuts. Moderate relaxation of monetary policy and LPR reform to ease interest-rate transmission can help monetary policy play a more effective role, reducing the debt burden of enterprises and offering financial support for the real economy.

Growth in exports declined and will remain under pressure

In September, China's exports fell by 3.2% year-on-year, down 2.2 percentage points from August; in Q3, export growth slowed by 0.4%, down 0.5 percentage points from the first half of the year; from January to September, total exports shrank -0.1% year-on-year, down 10 percentage points from 2018. The continued decline in exports is attributable to the following:

- 1) Sluggish overall external demand: In September, the US, Europe and Japan manufacturing PMIs were below the 50 level, at 47.8, 45.7 and 48.9, respectively. The figure for the US was the lowest since July 2009, while that of Europe was the lowest since October 2012.
- 2) Re-escalation of Sino-US trade frictions in August: In particular, on 1 September, the additional US tariffs of 15% on part of USD 300 billion of Chinese exports officially came into effect, accelerating the drag on Chinese exports in Q3.

By country and region, the growth rate of Chinese exports to most economies except Russia and Australia fell in September compared with the previous month, with exports to the US showing the largest decline. In September, China's exports to the US declined by 21.9% — this was 5.9 percentage points less than August and the lowest figure since January 1996. Export growth rates to Hong Kong, Canada, India, South Korea, Japan and the EU were -12.6%, -9.5%, -7%, -5.1%, -5% and 0.1%, respectively, down 5.5, 13.7, 6.2, 7.1, 6.4 and 3.1 percentage points from the previous month. Export growth rates to Russia and Australia were 11.3% and 8.7%, respectively, up 6.5 and 25.7 percentage points from the previous month.

In terms of the main goods exported, smartphones recorded the largest decrease in export value — down USD 16 billion — from January to September compared with the same period last year. Clothing dropped by USD 5.6 billion, ships by USD 3.3 billion, steel by USD 4.3 billion, and automatic data processing equipment by USD 4.6 billion. The continued decline in smartphone exports was the leading drag on exports.

China's import growth rate in September recorded -8.5%, down 2.9 percentage points from August; from January to September, imports totalled -5%, down 20.8 percentage points from 2018. In terms of major imported goods, integrated circuits recorded the largest decrease year-on-year, having dropped by USD 15.8 billion. On the one hand, it was affected by localised substitution; on the other hand, the drop in smartphone exports also reduced demand for imported integrated circuits. This was followed by soybeans and copper, which dropped by USD 4.4 billion and USD 5.4 billion, respectively. Metal ores and energy registered the most significant increase in imported goods; in particular, the price of iron ore soared, with its value of imports increasing by USD 19.1 billion year-on-year.

From January to September this year, the cumulative trade surplus was USD 298.43 billion, an increase of USD 79.12 billion over the same period last year. The performance of the surplus continued to improve, supporting the RMB exchange rate.

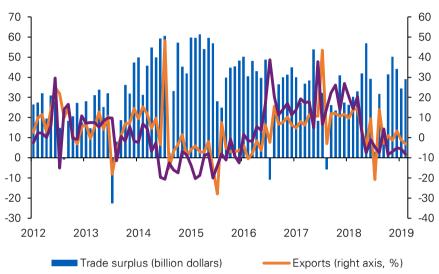


Figure 24: Import and export activities, current month value

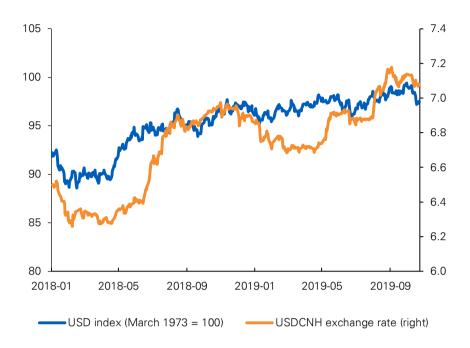
With regard to the trade friction between China and the US, on 2 August, the US threatened to increase tariffs and add an extra 10% on the remaining USD 300 billion of imported goods. Some of the new tariffs have been effective since September 1, and the rest are slated to come into force on 15 December. On 24 August, the US further announced that from 1 October, tariffs on USD 250 billion of Chinese imports would be raised from 25% to 30%, and that tariffs on USD 300 billion of Chinese imports would be raised from 10% to 15%.

From 10 to 11 October, China and the US held a new round of high-level economic and trade talks in Washington, at which some progress was made. China will import large amounts of US agricultural products. The US will suspend the increase from 25% to 30% on USD 250 billion of imported goods on 15 October but has yet to cancel the 15% on USD 156 billion of imported Chinese goods that were scheduled for 15 December. Both sides are expected to draft the results of the Phase 1 talks, which are expected to be completed soon.

The Federal Reserve has announced three rate cuts since 2019. The third round was announced at the Federal Open Market Committee (FOMO) meeting held on 29-30 October to cut the federal funds rate target range by 25 basis points to 1.50% to 1.75%. The US dollar index has seen a slight decline from late September, and the index is expected to continue to fall with the announcement of the new round of cut. The easing of the US-China trade friction, the downward trend of the US dollar index and the gradual expansion of the accumulated trade surplus are expected to support the stabilisation of the RMB exchange rate.

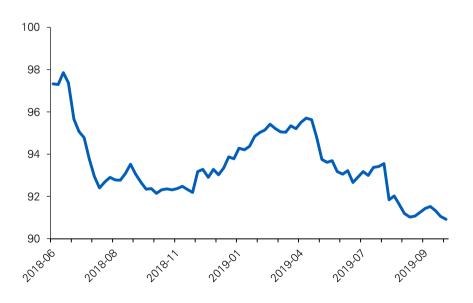
Source: Wind, KPMG analysis

Figure 25: USD index and RMB exchange rate



Source: Wind, KPMG analysis





2 Policy analysis



Health sector ushers in new opportunities

On 29 September 2019, the National Development and Reform Commission, the Ministry of Education, the National Health and Health Commission, the Medical Insurance Bureau, the National Administration of Traditional Chinese Medicine, and the National Medical Products Administration jointly formulated the Action Plan for Promoting the High-Quality Development of the Health Industry (2019-2022). The Action Plan will implement 10 major projects centred around major sectors and key stages (see below). A health sector structure will be set up by 2022:



Following developments in society and widespread improvements in people's quality of life, as well as changes in people's lifestyles, the overall demand for health products has increased significantly. With biotechnology and life sciences as the forerunners, the health sector — covering health services and functions such as healthcare, nutrition, fitness and leisure — has become a major 21st century industry, guiding global economic development and social progress.

The "health sector" refers to a group of production activities that provide products (goods and services) to the public that are directly or closely related to health based on healthcare, biotechnology and life sciences, with an aim to maintain, improve and promote health. According to the National Bureau of Statistics, China's health industry currently covers 13 major categories including medical and health services, pharmaceutical manufacturing, medical equipment, and equipment manufacturing.¹

In August 2016, the Politburo passed the Healthy China 2030 planning outline, which established improving people's health as the major target. The outline also institutionalised the protection of people's health and provided guidance on how to promote the health of Chinese people over the next 15 years. In addition, the State Council issued the Healthy China Action (2019-2030) document in June. The document was centered around two core areas — disease prevention and health promotion, and 15 proposed initiatives that are expected to shift the focus from treatment to wellness; striving to prevent people from falling ill and reduce the number of times they do fall ill. In addition, during the 13th Five-Year Plan period, associated departments have issued policies to support the development of the healthcare sector.

According to the Investigation on the Intensive Research and Investment Prospects of China's Healthcare Industry in 2019-2023 issued by the China Investment Industry Research Institute, following the country's support for the healthcare industry, the broadening of guidance policies, and the accelerated deployment of enterprises, recent years have seen rapid development in China's healthcare industry. In 2017, China's healthcare market was worth RMB 6.2 trillion, which was 2.4 times the figure for 2011 (RMB 2.6 trillion) and represented an average annual compound growth rate of 15.6%. The healthcare industry is estimated to reach RMB 7.01 trillion in 2018.²

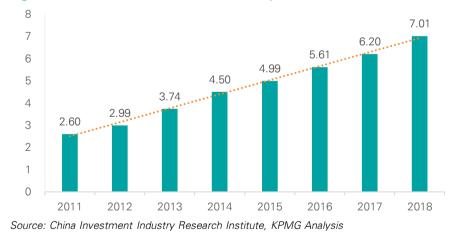


Figure 27: Scale of China's health industry, 2011-2018, in RMB trillion

According to the National Bureau of Statistics, as of the end of 2018, 249.49 million people in China were aged 60 and over, accounting for 17.9% of the country's total population. Of these, 166.58 million were aged 65 and over, accounting for 11.9% of the total. An ageing society is set to become a general trend in the future for China's population.

1 Health Industry Statistics Classification (2019), National Bureau of Statistics, April 2019, <u>http://www.stats.gov.cn/tjgz/tzgb/201904/t20190409_1658560.html</u> 2 "Overview of China's Healthcare Industry, Scale, and Projects in the Next Five Years", CIC Investment Advisory Network, October 2019, http://www.ocn.com.cn/touzi/chanye/201910/bgalg08112812.shtml

The provision of care for the elderly and treatment of their associated health issues will become a widespread concern, prompting a further expansion in terms of the size of the market, as well as expediting the maturity of the healthcare industry.

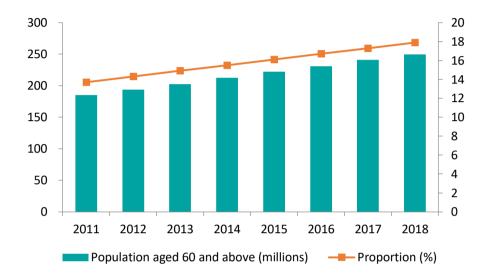


Figure 28: China's population aged 60 and above (2011-2018)

Source: National Bureau of Statistics, KPMG analysis

KPMG analysis

As a new category of the service sector, the health industry offers significant potential for growth. The Healthy China 2030 planning outline proposes that the total size of China's health industry will reach RMB 8 trillion by 2020 and RMB 16 trillion by 2030, a period of explosive growth. In addition, the integration of multiple disciplines such as biology and information technology will promote convergence in the health industry and its integrated cross-border development. The industry will become deeply integrated with the internet, modern agriculture, culture, tourism and other industries, while constantly spawning new industries, forms and models. In addition, technological development and upgrading will promote further upgrading and integration in the industry, with new technologies such as Internet+, the Internet of Things+ and Al bringing about major changes to the sector.

Release of Outline for Building China's Strength in Transportation

On 19 September 2019, the Central Committee of the Communist Party of China and the State Council issued the Outline for Building China's Strength in Transportation (hereinafter referred to as the "Outline"), which stated that from 2021 to the middle of this century, China will undergo two phases in becoming a major transport power. By 2035, it will have basically become a major player in transport, forming the "three transport networks" and "two transport circles". By the middle of this century, China will have become a major power in transport that meets the requirements of the people, enjoys strong support, and stands at the forefront of the world.

On 9 October, the Ministry of Transport held a video conference in which it introduced the Outline and announced pilot locations. For the transformation of China into a country with strong transportation network, the first batch of pilots include: the provinces of Guizhou, Liaoning, Jiangsu, Zhejiang, Shandong, Henan, Hubei, Hunan, Guangxi, Xinjiang, plus Xiong'an district of Hebei province, and the cities of Chongqing and Shenzhen.

According to the Outline, the "three transportation networks" are a mature high-speed network with highquality service and high-speed operation (mainly comprising high-speed trains, expressways and civil aviation), a fully formed trunk line network with highly efficient operations and strong service capabilities (mainly comprising general railways, ordinary national highways, waterway routes, and oil and gas pipelines), and an extensive basic network featuring large coverage and deep access (mainly comprising ordinary provincial roads, rural roads, feeder railways, feeder routes and general aviation). The "two traffic circles" refer to a high-speed service system built around domestic transport and global high-speed cargo flows. The first is the "national 123 travel traffic circle": one-hour commuting in the metropolitan area, two-hour access to urban agglomerations and threehour coverage for major cities across the country. The second is "global 123 fast cargo flow circle": one-day domestic service, two-day delivery for neighbouring countries and three-day delivery for major cities around the world.

National 123 travel transport circle: One-hour commuting in the metropolitan area, two-hour access to urban agglomerations, and three-hour coverage for major cities across the country Global 123 travel transport circle: oneday domestic service, two-day delivery for neighbouring countries, and threeday delivery for major cities around the world

Transport reforms have been constantly accelerating since the founding of the PRC in 1949. In particular, since the 18th National Party Congress in 2012, the construction of a modern integrated transportation system has entered a new stage. The national transportation industry has planned and promoted the infrastructure network layout, making up for shortcomings in railway, highway, water transportation, and civil aviation infrastructure. Comprehensive transport channels have been opened up, transportation service support capacity has been significantly improved, and the role of the major arteries of the national economy has become increasingly apparent. The data shows the following from 2018: ³

3 "Sixteenth Report of the Economic and Social Development Achievements of the 70th Anniversary of the Founding of New China", National Bureau of Statistics, August 2019, http://www.gov.cn/xinwen/2019-08/13/content 5420891.htm



- The total mileage of railway operations in the country reached 132,000 kilometers, a five-fold increase over 1949, with an average annual growth rate of 2.6%;
- The total mileage of high-speed railways in China was 30,000 kilometers, which was 44.5 times the figure for 2008 and represents an average annual growth rate of 46.2%. China was home to more than two-thirds of the world's high-speed rail track, ranking it first in the world.
- China had a total of 4.85 million kilometers of roads, which was 60 times the distance in 1949 and represented an average annual growth rate of 6.1%. China had 4.04 million kilometers of rural roads, with 99.6% of towns and 99.5% of villages connected. The total length of expressways was 143,000 kilometers, representing an average annual growth rate of 25.8% and ranking China first in the world.
- Civil aviation was also notable: the total number of scheduled flights had reached 4,945, which was 412.1 times the figure for 1950 and represented an average annual growth rate of 9.3%.

Table 1: Major indicators of comprehensive transportationdevelopment in the 13th Five-Year Plan

Indicator	2015	2018	2020
Railway mileage (10,000 kilometers)	12.1	13.1	15
High-speed railway operating mileage (10,000 kilometers)	1.9	2.9	3.0
Railway double line rate (%)	53	58	60
Railway electrification rate (%)	61	70	70
Highway mileage (10,000 kilometers)	458	484.65	500
Expressway built mileage (10,000 kilometers)	12.4	14.26	15
Inland river high-grade waterway mileage (10,000 kilometers)	1.36	1.35*	1.71
10,000-ton and above berths in coastal ports (a)	2,207	2,444	2,527
Number of civil transport airports	207	235	260
Number of general airports	300	202	500
Village connection (%)	94.5	99.47	99
Urban rail transit operating mileage (km)	3,300	5,295.1	6,000
Oil and gas pipeline network mileage (10,000 kilometers)	11.2	13.6	16.5

Source: "13th Five-Year Plan for the Development of Modern Integrated Transportation System", Ministry of Transport, KPMG Analysis; Note: * refers to the mileage of the inland river level III and above.

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Online education enters the fast lane

On 30 September 2019, 11 departments including the Ministry of Education issued Guiding Opinions on Promoting the Healthy Development of Online Education (hereinafter referred to as "Opinions"). The Opinions propose significant improvements to the infrastructure for online education by 2020. There will be wider use of modern information technologies such as the internet, big data and AI. Online education models will be improved, and resources and services will expand. The supply of high-quality online education resources will also be expanded; a policy system that supports the development of online education will be created, and a diversified online education management service structure will be formed.

The Opinions proposes three development strategies — expanding the supply of high-quality resources, building a support policy system and forming a multi-dimensional management service landscape.⁴

- Strategy 1: Expanding the supply of quality resources. In 2000, the Ministry of Education made the decision to implement the "School-to-School Communication" project in primary and secondary schools. In 2012, it implemented the "Three Links and Two Platforms" action plan, which provided robust hardware, software and financial support for the widescale development of digital education. In 2014, the China Central Educational Technology Center launched the "One Teacher, One Excellent Course, One Class One Teacher" scheme. In 2018, the Ministry of Education issued the "Education Informatization 2.0 Action Plan", the development goals of which were "Three Comprehensive, Two High and One Big". All these efforts have been aimed at alleviating the shortage of educational resources in China. Yet a severe shortage of quality resources persists. The Opinions explicitly state the need to diversify education, promote online and offline education, foster high-quality online education resources, promote the integrated development of industry, education and research, and strengthen the training of online education talent. It is expected that the focus on digitising education in the future will gradually lead to a supply of quality education content and services, starting from the construction of basic hardware facilities and software development.
- Strategy 2: Building a support policy system. This chiefly proposes the establishment of a standardised access system, improvements in infrastructure construction, the implementation of financial support policies, expansion of financial support channels, and strengthening of protection for intellectual property rights. Education is a "slow-moving" industry requiring intensive cultivation of the market over a long time period. Compared with other internet industries, online education lacks financing advantages and fiscal policy support; intellectual

^{4 &}quot;Three Strategies for Healthy Development of Online Education", China Education News, October 2019, http://paper.jvb.cn/zgiyb/html/2019-10/12/content 571101.htm?div=1

property also lacks effective protection. The input of social forces is also indispensable to the rapid growth of online education. The Opinions propose that various areas of society should seize the commercial opportunity presented by 5G to build infrastructure, and also call on associated departments to provide extensive support and protection for financing and intellectual property. This is likely to be a major benefit in ushering in a new round of growth in online education.

Strategy 3: Forming a multi-management service landscape. This is aimed at achieving full control of management and services for online education chiefly in terms of protecting consumer rights, supporting innovation in management services, strengthening departmental supervision, and enhancing industry self-discipline. Online education is easy to get into, has a low threshold, and is easy to operate. Since 2012, the scale of China's online education industry has grown significantly. Large enterprises and small workshops exist side-byside, resulting in uneven educational resources and a wide array of online education resources. A number of online education companies have repeatedly violated laws and regulations in pursuit of traffic, which has caused problems. From a series of documents such as the Notice on the Prohibition of Harmful App Access to Primary and Secondary Schools, which was released in December 2018, to the recently released Opinions, it is expected that government supervision of online education will continue to become stricter in the future. The market is becoming less volatile and more standardised, and the level of capitalisation has increased, prompting constant innovations in service models and a return to the original ideals of education.



past 12 months								
Release date	Name	Target	Main content					
2019.08.10	Opinions on Guiding and Standardizing the Orderly and Healthy Development of Educational Mobile Internet Applications (JJH (2019) No. 55)	Educational mobile internet applications and their providers	Implement a filing system for educational app providers; standardise apps' cooperation with schools; set requirements for the content of different types of educational apps.					
2019.07.12	Implementation Opinions on the Regulation of Off- campus Online Training (JJTH (2019) No. 8)	Discipline-based off-campus online training for primary and secondary school students, by means of internet technology	Implement a record review system for off-campus online training institutions, training personnel and content; establish a black and white list system.					
2018.12.25	Notice on the Prohibition of Harmful App Access to Primary and Secondary Schools (JJTH (2018) No. 102)	On-campus learning applications	Carry out the "Double Review" responsibility system for on-campus applications, and prohibit those that have not gone through filing use or recommendation of.					
2018.11.20	Notice on Perfecting Several Working Mechanisms for Special Governance and Reform of Off- campus Training Institutions (JJT (2018) No. 10)	Off-campus training institutions	The administrative department should keep on file the information of organisations involved in providing online education to primary and secondary school students.					
2018.08.06	Opinions on Regulating the Development of Off-Campus Training Institutions (GBF (2018) No. 80)	Non-degree education training for primary and middle school students delivered by off- campus training institutions	Departments including those related to internet information cooperate with educational departments to effectively supervise online education within their respective areas of responsibility.					

Table 2: Main regulations related to online education released in thepast 12 months

Source: Wyco, KPMG analysis

According to iResearch's 2018 China Online Education Industry white paper, China's online education market was worth RMB 251.76 billion in 2018, representing a year-on-year increase of 25.7%. Over the next three to five years, growth is expected to remain in the range of 16 to 24%; growth will continue to decrease but at a stable rate. The increasing acceptance of online education by users, heightened awareness of online payment and improvements in the online learning experience and its effectiveness are drivers of the continued growth of the online education market.



Figure 29: China's online education market (2015-2022)

KPMG analysis

Previously, off-campus training institutions were the main focus of supervision by educational departments. For example, for monitoring policies for online training organisations, 2018's No. 10 Document mostly stated "refer to offline implementation". Recently, however, policies aimed at online education have come thick and fast, reflecting the importance that educational departments place on "internet + education". Supervision has gradually expanded from offline to online. On-campus apps and online subject training have been extended to various subjects and categories of online education activities. Online education is entering a new era of supervision: The release of the Opinions heralds the further implementation of an online education filing system and the launch of investigations into violations in online education. At the same time, the Opinions goes further in promoting the healthy, robust development of online education in the areas of digitalisation and educational resources, reflecting the importance the government attaches to these sectors. The development of online education has entered the fast lane.

Source: iResearch, KPMG analysis

Shenzhen launches "pioneering demonstration zone" construction project

On 18 August 2019, China's central government released the Opinions of the Central Committee of the Communist Party of China and the State Council on Supporting Shenzhen in the Construction of a Pioneering Zone for Socialism with Chinese Characteristics (hereinafter referred to as "Opinions"), which provided further clarification on the development goals and "historical mission" of Shenzhen. The Opinions offer a clear direction and guidance for the role that Shenzhen plays in China's overall strategy.

In terms of strategic positioning, the Opinions state that Shenzhen is to become the demonstration zone for high-quality development, rule of law, urban civilisation, well-being of citizens, and the pioneer in sustainable development. The Opinions divide Shenzhen's development objectives into three steps: 1) to be a modern, international and innovative city by 2025; 2) to create a globally influential capital of innovation and creativity, and to be a model example of China's creation of a city belonging to a powerful modern, socialist country, by 2035; and 3) to be a city that sets the global standard for competitiveness, innovation and influence by the middle of this century.

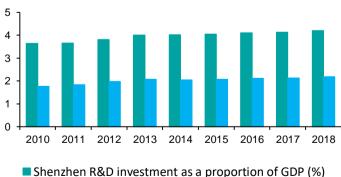
As the first special economic zone established by China, Shenzhen is a window of reform and opening up as well as an emerging city for young talents from around China. It shoulders an important mission in innovation. The central government has given Shenzhen the task of building a pioneering "demonstration zone" with Chinese characteristics. This is not only an endorsement of 40 years of reform and opening up in Shenzhen but also represents the government's confidence and expectation that the city will continue to be a national leader in reform and opening up. The release of the Opinions will accelerate the implementation of an innovation-driven development strategy, speed up the creation of a modern industrial system, promote the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, and improve the creation of the rule of law and system of environmental protection. KPMG believes that: 5

Innovation-driven growth

If China is to emerge victorious amid international competition, it must first secure advantages in technological innovation — and in this area, Shenzhen has clear strengths. During the construction of an innovation system over the last two years, a pattern of innovation-driven growth in Shenzhen has taken initial shape, in which the optimisation and upgrading of industrial structure and technological innovation have played a supporting role. Shenzhen is already a leader in China when it comes to interactivity and openness in innovation, and has gradually formed an intermediary technology system with international characteristics.

Shenzhen has considerable prowess in tech innovation and smart manufacturing. As a proportion of total GDP, its investment in R&D rose from 3.6% in 2010 to 4.2% in 2018 — a figure that is significantly higher than the national average. In addition, Shenzhen's international Patent Cooperation Treaty (PCT) applications rank first in the country, and it was one of the first cities in China to complete industrial upgrading. It has made knowledge- and innovationdriven economic growth a reality. At the same time, Shenzhen is also a major base in China for the export of high-tech products. In 2017, Shenzhen exported USD 11.42 billion of high-tech products, which was around 17% of the national total. This proportion is expected to increase in the future.

Figure 30: R&D investment as a proportion of total GDP, National/Shenzhen



Nationwide R&D investment as a proportion of GDP (%)

Source: National Bureau of Statistics, Shenzhen Municipal Government Work Report, KPMG Analysis

5 For more details, please see "Reform and Innovate Two-Wheel Drive, Shenzhen Takes Higher Momentum with Higher Starting Point", KPMG China, August 2019, https://home.komg/cn/en/home/insights/2019/08/shenzhen-policy-interpretation.html

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Shenzhen has a strong start-up culture and is home to over 2 million companies, including more than 14,000 high-tech enterprises. Tech companies Tencent, Huawei and DJI were all founded in Shenzhen. In addition, Shenzhen has attracted a large number of internationally renowned tech companies, with Apple, Google, Airbus, Microsoft, Qualcomm and Intel all setting up R&D centers or laboratories in the city.

Shenzhen is a major window to, and pilot area for, open innovation in China. It has not only shouldered the important task of developing original technology, innovation and transmission from within China but also serves as a hub for partnerships and cross-border exchanges in technology advances with international innovation bodies abroad. It is foreseeable that in the future, more international tech companies will come to Shenzhen, where they will actively assimilate with China's innovation system through regional innovation, helping Shenzhen become a global center of science and creativity and the Guangdong-Hong Kong-Macao Greater Bay Area being a pioneer in national innovation growth.

Vigorous development of emerging industries and optimisation of financial innovation

In addition to tech innovation, Shenzhen also has clear strengths when it comes to its balanced industrial structure, large-scale and boasts strong innovation capabilities. It is home to the world's top companies in the fields of the internet, communications, AI, robotics, the Internet of Things, biomedicine and future transportation. Shenzhen also houses a key industrial cluster of medical device companies and has advantages in the fields of genetic testing and medical imaging.

The Opinions propose improving the economic capabilities of financial services entities, researching and improving the GEM, refinancing and mergers and acquisitions restructuring system, and creating conditions to promote the reform of the registration system. Recent years have seen Shenzhen's "Asian Silicon Valley" innovative cluster take shape, but capital markets remain incapable of providing sufficient support. We believe reforms to the IPO registration system, refinancing system and the interoperability of markets in Hong Kong and Macao will effectively encourage capital investment in the incubation of new technologies, provide significant support for the entry of innovative tech companies into capital markets, and play a major role in accelerating the development of innovative tech companies. Developments in tech will also drive growth in the financial industry, helping the interconnection of financial markets. Following the release of the Opinions, Shenzhen is expected to see more mature fintech companies participating in the capital markets. Reform of the registration system is a key factor driving the further development of Shenzhen's capital markets.

Deepening reform and opening up will inject vitality into the economy

The Opinions stated support for Shenzhen in carrying out a comprehensive reform of regional state-owned assets and state-owned enterprises. The establishment of a free-trade pilot zone with high standards and high quality will speed up the construction of a new, open economic system that is in line with international standards. It also called

for efforts to support deeper reforms to foreign exchange management in the pilot zone and encourage more international organisations and institutions to come to Shenzhen.

On 21 August, the Shenzhen Regional State-owned Assets-Enterprise Comprehensive Reform Experimental Implementation Plan was approved. It stated that by 2020, Shenzhen will have allocated more than 85% of state-owned capital investment to focus on developing public infrastructure, as well as on financial and strategic emerging industries; it will have created a number of large state-owned key enterprises, and will have made efforts to form one to two Fortune 500 companies, six to seven companies with over RMB 100 billion in assets, and two company groups with market capitalisations exceeding RMB 100 billion. We believe that using its unique role as a model to attract talent, capital and innovation, Shenzhen's comprehensive reform experiment will serve as an example for the reform of state-owned enterprises.

Promoting the coordinated development of the Guangdong-Hong Kong-Macao Greater Bay Area

During the creation of the Guangdong-Hong Kong-Macao Greater Bay Area, Shenzhen has become the creator and leader of a collaborative cluster of innovative urban areas in the region and is playing an instrumental role in promoting the upgrading of industry.

On the one hand, Shenzhen's industry itself has a strong ability to radiate outwards, and is the core industrial node of the Guangdong, Hong Kong and Macao urban agglomerations. Cooperation between Shenzhen and Hong Kong will further enhance Shenzhen's ability to pull industries forward; promote industrial upgrading in Guangdong, Hong Kong and Macao; and accelerate the construction of a modern industrial system. In October 2018, KPMG China, HSBC and the Hong Kong General Chamber of Commerce released a joint survey in Hong Kong called Exploring the Great Bay Area – Second Annual Survey Report on the Key Drivers of Success. The report indicated that technology and innovation, trade and logistics, and financial services will be the three key industries that benefit the most from the creation of the Greater Bay Area.

On the other hand, Shenzhen has always been a testing ground for reform and a window for the opening up of China. A pioneer in supervising markets, nurturing industry and governmententerprise cooperation, the city has found a development path that is suited to the conditions in China. Going forward, in-depth cooperation between Shenzhen and Hong Kong in the fields of technology and finance is expected to act as a testing ground for fintech innovation, cross-border financial supervision and the interconnection of financial markets, helping promote the rapid growth of the Guangdong-Hong Kong-Macao Greater Bay Area.

Nowhere is more important for testing out China's national innovation and development strategy than the Guangdong-Hong Kong-Macao Greater Bay Area. In the future, Shenzhen is set to go even further as an engine that promotes healthy, stable growth and boasts a high level of innovative prowess. The Opinions' measures for attracting talent will also have a significant effect in promoting talent in the Greater Bay Area, ensuring efficient and effective development characterised by interconnectivity.

China to transfer state assets to pension funds

On 20 September 2019, the Ministry of Finance, the Ministry of Human Resources and Social Welfare, and the State Assets Supervision and Administration Commission announced the Notice on Comprehensively Promoting the Transfer of Some State Assets to Pension Funds, which also included the announcement of the Operational Measures for the Transferral of Part of State Assets to Pension Funds as an appendix. According to the notice, 2019 saw the full-scale launch of work involving the central and local transfer of part of state assets to pension funds. At the central level, the transfer work for applicable enterprises was to be completed by 2019, and the deadline for enterprises with difficulties is the end of 2020. At the local level, the transfer work will be completed by the end of 2020. The Measures clarified matters related to the transfer of part of state assets to pension funds from seven aspects, including determining the range and target of transfers, as well as the transfer method for multi-shareholding enterprises.

In terms of both sides' obligations towards equity transfer, the notice clarifies that the responsible SOEs should be in charge of the share transfer. The undertaking entity shall ensure the centralised holding and separate accounting of the received equity, and accept assessment and supervision. The transferred state-owned local enterprise shares shall be uniformly held, managed and operated by a state-owned sole proprietorship company established by the provincial people's government, or entrusted to a company specialising in the management of state assets investment.

Regarding the party responsible for transfer, the notice clarifies that the people's government of the provinces (or autonomous regions and municipalities directly under the central government) should bear the overall responsibility for the region's transfer work, strengthen organisation and leadership, and formulate concrete implementation measures in light of the actual situation to ensure that the transfer tasks are completed as required. In addition, it is necessary to strengthen the supervision and management of the receiving entities and ensure that the transferred state assets is used exclusively to make up for the gap in pension payments. Relevant departments such as finance, human resources and social security, and state assets supervision at all levels should strengthen coordination and cooperation and strive to effectively perform their duties.

Regarding the requirements for standardising transfer operations,

the notice attaches the Operational Measures on Transferring Part of State Assets to Enrich the Social Security Fund as an appendix, requiring the national transfer work to strictly follow the above-mentioned operational methods to standardise transfer operations.

In November 2017, the State Council issued the Implementation Plan for the Transfer of Some State Asset to the Social Security Funds, in which the decision was made to transfer some state assets to make up for the gap in the basic endowment insurance fund for enterprise employees. The targets of this transfer were to be central and local state-owned and state-controlled large and medium-sized enterprises and financial institutions. The transfer ratio will be 10% of the state-owned equity. On 10 July 2019, the State Council executive meeting decided to begin the full-scale launch of the work on transferring some state assets to the social security fund that year.

According to the Comprehensive Report of the State Council on the Management of State Assets in 2017 issued by the State Council, at the end of 2017, China's state assets totaled RMB 87 trillion. If part of it could be allocated to the social security funds, it would effectively top up the scale of social security funds.⁶

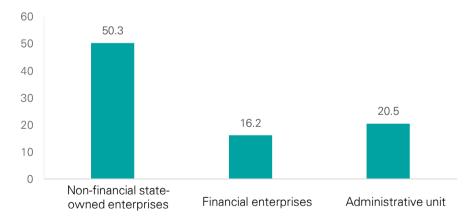


Figure 31: State assets and equity, in RMB trillion

Source: "Comprehensive Report of the State Council on the Management of State Assets in 2017", KPMG Analysis

KPMG analysis

Lu Qingping, director of the Asset Management Department of the Ministry of Finance, said at the State Council policy briefing on 19 July that, with the approval of the State Council, 2018 would see the launch of pilots in three centrally managed enterprises including China Unicom, two centrally-managed financial institutions including China Re, and the provinces of Zhejiang and Yunnan. Based on the basic completion of the pilots, the central government has carried out transfers for additional 15 centrally-managed enterprises and four financial institutions; of this, the transfer of two batches of 24 enterprises has been completed at the

6 "Comprehensive Report of the State Council on the Management of State Assess in 2017", SASAC website, October 2018, http://www.sasac.gov.cn/n2588025/n2588164/n4437287/c9748923/content.html

central level. In the near future, transfer will also be carried out for another 35 central management enterprises. It is estimated that 59 enterprises at the central level will transfer about RMB 660 billion of state assets. On 25 September, the Agricultural Bank of China and the Industrial and Commercial Bank of China announced the transfer of 10% of shares held by the banks to the National Council for Social Security Fund. The PICC Group and Bank of Communications subsequently followed suit.

In 2018, people aged 60 and over accounted for 17.9% of China's total population. The number of elderly people in China continues to rise: According to the United Nations' 2019 forecast, China's population aged 60 and over will increase to 24.8% by 2030 and will hit 34.6% by 2050. In recent years, revenue from basic pension insurance fund contributions from urban employees in China has fallen short of total expenditure. According to statistics from the Ministry of Human Resources and Social Security, the shortfall in the annual revenue of the national urban workers' basic old-age insurance in 2014, 2015 and 2016 were RMB 132.1 billion, RMB 279.7 billion and RMB 508.6 billion, respectively. The shortfall is gradually getting bigger, leading to an increase in financial subsidies. As the shortfall in the pension fund continues to increase, the model that relies entirely on financial subsidies will be difficult to sustain. The transfer of state assets to pension fund will not only reduce the pressure on enterprises to pay pension fees but also enable them to have a stable source of capital through their dividend income, so as to cope with the future income and expenditure gap of pension funds.⁷

7 World Population Ageing 2019, United Nations, June 2019, https://www.un.org/en/development/desa/population/index.asp



3

Special study: local government debt

In the face of the ever-changing international environment and the slowdown in domestic economic growth, the Chinese government has adopted a series of counter-cyclical adjustment measures to ensure that the economy maintains steady growth. Among them, positive fiscal policy has played an important role. Studying government debt, especially local government debt, is critical to analysing fiscal policy. Here we examine the distribution of fiscal revenue and expenditure between the central and local levels, the history of government debt, and types of local debts and operational mechanisms to better understand local government debt issues and future infrastructure investment trends.





Central and local fiscal revenue and expenditure distribution

Development of China's fiscal decentralisation system

After the founding of the People's Republic of China, financial and administrative power was centralized. In 1950, the Decision on Unified Management of Fiscal Revenue and Expenditure in 1950 issued by the State Council clearly stipulated that China should implement a fiscal management system that unified income and expenditure; that is, all local fiscal revenue should be turned over to the central government and local financial expenditure should be allocated by the central government — concentrating both financial and administrative power in the hands of state authorities.

In 1953, China began to implement a fiscal sharing system, with local governments also allocated some administrative power. Under the system, fiscal revenue was distributed between the central and local governments, and expenditures were classified as either central fiscal expenditure or the local expenditure.

From 1980 to 1993, there was a further expansion of local governments' financial power. In February 1980, the State Council issued the Interim Provisions on the Implementation of the Financial Management System in which it established a financial management system of "dividing revenue and expenditure, grading and contracting". According to the nature of various fiscal revenues and the affiliation of enterprises and institutions, fiscal revenue is divided into three categories: central government income, local government income, and the transfer income between central and local governments. The fiscal expenditure is divided according to the affiliation relationship of enterprises and institutions. For example, if the enterprise is administered by the central government, its expenditure is classified as

central government expenditure.

The tax-sharing reform in 1994 resulted in a significant increase in the share of fiscal revenue allocated to the central government. In 1994, the central government's fiscal revenue surged 200% from the previous year, representing 56% of the country's total fiscal revenue, up from 22% in the previous year. However, responsibility for expenditure remained at the local level, which accounted for 80% of the public services. The mismatch between financial and administrative power has put pressure on local government finances, which led local governments to borrow large amounts of debt in order to develop the local economies. In addition, the replacement of business tax with value-added tax and "the merger of state and local taxation" has continued to deepen the mismatch between local financial and administrative power.

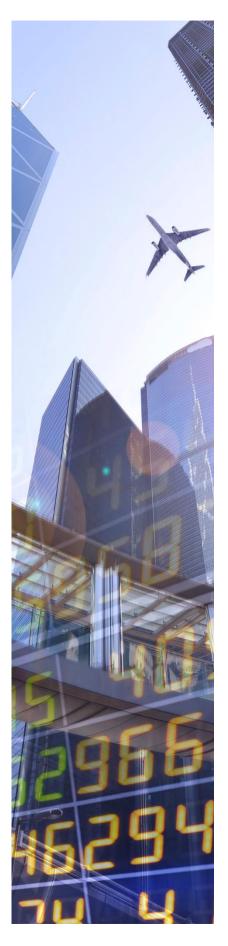
Current distribution of central and local fiscal revenue and expenditure

The state's fiscal revenue includes tax revenue and non-tax revenue. Under the tax-sharing system, the State Administration of Taxation allocates tax revenue to central and local governments through a system of revenue sharing by type of tax. Non-tax revenue is collected by local government and then divided between central and local government coffers. The central government will transfer part of the central income to the local area based on local conditions.

Table 3: Central and local tax sharing system

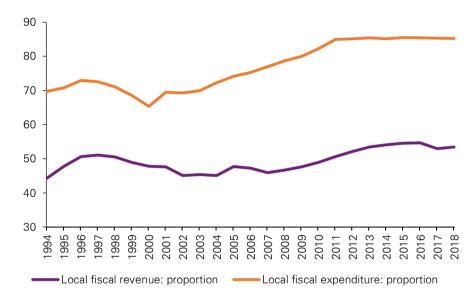
No.	Tax type	Subdivision	Central	Local	
				Provincial	District/ county
1		Customs collection of value-added tax	100%		
	VAT	Non-customs collection of value-added tax	50%	50%	
2	Tariff		100%		
3	Vehicle purchase tax		100%		
4	Sale tax		100%		
5	Personal income tax		60%	15%	25%
6	Corporate income tax	Paid by SOEs, local banks, foreign- funded banks and non-bank financial enterprises, railway departments, bank head offices, insurance companies, etc.	100%		
		Paid by other companies	60%	15%	25%
7	Resource tax	Paid by offshore oil companies	100%		
		Paid by non-offshore oil companies		100%	
8	Urban maintenance and construction tax	Paid by central enterprises, local banks, foreign-funded banks and non-bank financial enterprises, railway departments, bank head offices, insurance companies, etc.	100%		
		Paid by other companies		100%	
9	Stamp duty	Securities transaction stamp duty	94%	6%	
		Other stamp duty		100%	
10	Environmental protection tax			100%	
11	Cultivated land occupation tax			100%	
12	Property tax			100%	
13	Urban land use tax			100%	
14	Deed tax			100%	
15	Education surcharge			100%	
16	Local education surcharge	Urban area County level		10%	90% 100%
17	Land value-added tax			100%	
18	Vehicle usage tax			100%	
19	Local water conservancy construction fund			50%	50%

Source: Online data collation, KPMG analysis



In 2018, the central government's budget revenue was RMB 8.5447 trillion, which represented a year-on-year increase of 5.3% and accounted for 46.6% of the national general public budget revenue; the local governments' budget revenue, meanwhile, was RMB 9.79 trillion, which represented a 7% year-on-year increase and accounted for 53.4%. In comparison, the central government budget expenditure was RMB 3.27 trillion, which represented an increase of 8.8% year-on-year and accounted for just 14.81% of the total expenditure, while the local general public budget expenditure was RMB 18.82 trillion, which represented an increase of 8.7% year-on-year and accounted for 85.19%.

Figure 32: Local fiscal revenue and expenditure ratio (1994-2018)



Source: Wind, KPMG analysis

It is worth noting that on 9 October this year, the State Council issued the Promotion Plan for the Reform of the Central and Local Revenue Division after the Implementation of Larger Tax Cuts and Fee Reductions. Three major measures are included in the Plan — the existing "fifth-fifty sharing" ratio of VAT is maintained, the VAT rebate and refund sharing mechanism is adjusted and improved, and the collection of consumption tax is shifted to the point of sales from the production and import stage and will be steadily delegated to local governments. All of these measures are conducive to increasing local autonomy and have further rationalised the financial distribution relationship between the central and local governments, empowering local governments to implement tax and fee cut policies.

History of local government debt

As the downward pressure on the economy increases and the pressure on stable economic growth rises, the responsibility of local governments is also growing, and the role of local government debt is becoming increasingly important. Clarifying the formation and evolution of local government debt is conducive to a better understanding of local government debt problems.

Phase I (1994-2008): Prohibition of local debt, rise of local financing platform companies

After the implementation of the tax-sharing reform in 1994, local governments began to face increasingly serious financial problems. The Budget Law at that time, however, stipulated that "local governments should not issue local government bonds unless otherwise stipulated by the law and the State Council". The budget was prepared based on the principle of balance of expenditure and income and expenditure; the deficit was not listed, and the local government's debt issuance was suspended. Due to the limited financing channels of local governments (borrowing from banks or issuing bonds was not allowed) and limited by the policy of "non-listing of deficit", local governments faced increasing pressure in infrastructure investment following the 1997-1998 Asian financial crisis, putting them in serious financial difficulties. Against this backdrop, local governments set up financing platform companies to participate in urban construction and promoted them nationwide. The urban investment model became a local investment and financing model with Chinese characteristics, and financing platform companies played an increasingly important role in local government debt financing.

Phase II (2009-2014): Lifting of local debt, urban investment companies gradually standardised

The "representational issuance and collection" model

In response to the 2008 financial crisis and in order to address the financing difficulties of local governments, a "ban" on local debts was issued. In 2009, the National Council Work Report proposed the issuance of RMB 200 billion in local bonds, and the Ministry of Finance issued local government bonds on behalf of the Ministry of Finance, with a view to partially alleviating the pressure on the supporting funds of local governments in the RMB 4 trillion investment plan. The "representational issuance and return" model continued from 2009 to 2011: during this period RMB 200 billion was approved per year.

The "self-issuance and representational collection" model

The year 2011 saw the distribution model of local government bonds reformed for the first time. In October 2011, the Ministry of Finance issued the 2011 Local Government Self-issuance Pilot Program, which initiated pilot projects for local governments in Shanghai, Zhejiang, Guangdong and Shenzhen. Pilot provinces and municipalities could issue three-year and five-year bonds and manage annual issuance amounts. Following this reform, the issuance of local government bonds began to be liberalised, but the principal and interest payments were still carried out by the Ministry of Finance — i.e. in what was called the "self-issuance and representational collection" model. Beginning in 2013, the pilot areas were expanded to include Jiangsu and Shandong, the bond issuance period was appropriately extended (three, five and seven years), and the scale of bond issuance was increased. In 2012 and 2013, the approved guotas for local government bonds hit RMB 250 billion and RMB 350 billion, respectively.

The "self-issuance and self-collection" model

In May 2014, the Ministry of Finance issued the 2014 Pilot Program for the Self Issuance and Self Collection of Local Government Bonds, in which it continued to promote the reform of the local government bond issuance model. Compared with the original model, the "self-issuance and self-collection" model has achieved breakthroughs in many aspects: firstly, local debt maturity has been extended from the previous three, five and seven years to five, seven and 10 years; secondly, for the first time, the basis of local government bonds became local government credit gualification, with issuance and collection by local governments; finally, this round of pilot programs required local government bonds to carry out credit ratings for the first time, and disclosed the economic and financial status, as well as the debt data of the issuers.

From relaxed to standardised regulation for municipal investment companies

Along with the gradual opening up of local bond issuance, the status of local government financing platforms has been further enhanced. In particular, People's Bank of China (PBOC) and the China Banking Regulatory Commission in the No. 92 document issued in March 2009 proposed "supporting local governments to establish investment and financing platforms, issuing corporate bonds, medium-term notes and other financing tools, and broadening the financing channels for supporting funds for central government investment projects", which saw the auxiliary financing function of municipal investment companies approved for the first time. In October of the same year, the Ministry of Finance issued the No. 631 document, clarifying that funds supporting local governments can be raised through the market mechanism using government financing platforms. Following the publication of the above documents, the number of local financing platform companies grew rapidly. According to statistics, there were more than 2,000 new financing platforms in China in 2009 alone. In comparison, just 6,000 were established from 1992 to 2008.

Starting in 2009, to improve the financing capabilities of urban investment companies and complete infrastructure tasks, local governments provided various forms of guarantees to the urban investment companies and the local financing platform companies borrowed heavily. Increasingly large risks lay hidden behind such behaviour. In view of this, the regulatory authorities began to control local government financing platforms in 2010. Associated documents include the Notice on Strengthening the Management of Local Government Financing Platform Companies (GF No. 19) and the Guiding Opinions on Strengthening Loan Risk Supervision of Local Government Financing Platforms in 2013 (YJ No. 10).

Phase III (2015-present): The local government bonds market has come to a stage of comprehensive regulation

The new budget law passed in 2014 clarified that local government bonds issued by provincial governments are the only legal channel for government financing. This law was officially introduced in 2015. In September 2014, the State Council also issued the Circular No. 43 Opinions on Strengthening Local Government Debt Management, in which it clearly disaggregated the government financing function of urban investment companies, prohibited financing platforms from adding government debt, and separated the government and corporation debt. It also began to rectify local government debt problems nationwide. At the same time, it encouraged the promotion of the PPP model and called for social capital to participate in the provision of infrastructure and public services. The revision of the budget law and the promulgation of Circular No. 43 means that China's local government bond market is now heavily regulated. According to the results of the national government debt audit released by the National Audit Office in 2013, as of the end of June 2013, the local government had RMB 11 trillion of debts to repay, of which 89% were non-bond debts — an excessively large share. In order to address the previous local government's accumulated debts through non-bond financing such as bank loans and financing platforms, China carried out local government debt swaps for about three years from 2015, resolving the excessive ratio and concentrated maturity of non-standard debts.

In recent years, the central government has continuously strengthened supervision over the debts of local governments and municipal investment companies, as well as requiring financial institutions to tighten off-balance sheet financing for local governments, leading to a sharp fall in trust loans and entrusted loans. In March 2018, the Ministry of Finance issued Circular No. 23 to strengthen supervision of the asset side of financial institutions and regulate their financing of local governments and state-owned enterprises including urban investment. Coordinating the two major entities, the central government has woven a dense network of local government debt supervision, effectively curbing the growth of local government's illegal debts and focusing on resolving local government debt risks.



Classification of local government debt

At present, local government debt can be roughly divided into two categories: explicit debt and implicit debt.

- Explicit debt for which a local government has direct repayment or guarantee liability, refers to the local debt issued by the local government within the quota management and budget management plan. If the local government's balance sheet is compiled, the debt directly reflected in the liability project will be disclosed monthly by the Budget Department of the Ministry of Finance.
- Implicit debt is not clearly defined. It is usually not in the government debt limit and budget management plan and does not exist in the form of local debt, but local governments may need to bear certain repayment obligations. This includes debts generated by local governments through financing platforms, purchasing services, various development funds and guiding funds, and financial leasing. Implicit debt is mainly concentrated in municipal and county-level local governments that cannot be financed by issuing local debt.

The following is chiefly a discussion on the classification of explicit debt.

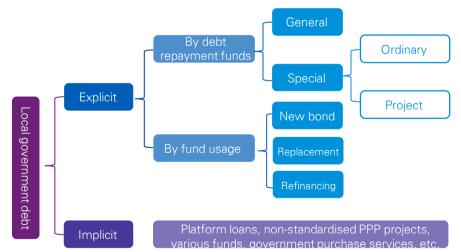


Figure 33: Classification of local government debt

Source: Public data compilation, KPMG analysis

By the source of debt repayment funds, explicit debt can be divided into general bonds and special bonds

Local government general bonds are government bonds issued for non-profit public welfare projects and repaying principal and interest on general public budget income. Therefore, the issuance of both local government general bonds and government bonds must be included in general public budget and government deficit management. The issuable periods are one year, three years, five years, seven years and 10 years.



Local government special bonds are government bonds issued for public welfare projects with certain income, government funds corresponding to public welfare projects, or special income repayments. These bonds are not included in the calculation of the deficit rate; the income and expense of special bond debts are included in the management of government fund budgets. The issuable periods are one year, two years, three years, five years, seven years and 10 years.

It can be seen that the biggest difference between general bonds and special bonds is whether the corresponding public welfare projects can generate income. For projects that do not generate income, the source of debt repayment funds is general public budget income, corresponding to general bonds. For projects with certain income, the source of debt repayment funds is government funds or special income, corresponding to special bonds.

Table 4: Main differences between the local government generalbonds and special bonds

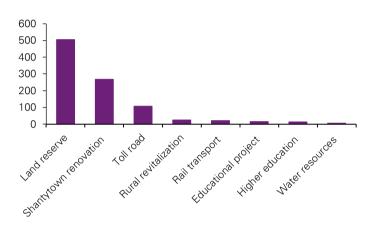
	Local government general bonds	Local government special bonds
Fund usage	Non-profit public welfare project	Public welfare projects with certain income
Source of debt repayment funds	Financial general public budget income	Government funds or special income corresponding to public welfare projects
Information disclosure	Basic information on bonds, financial and economic operations, and debt	Basic information on bonds, financial and economic operations, debt, corresponding government funds or special income, and major issues that may affect the ability to repay special bonds

Source: Ministry of Finance, Interim Measures for the Administration of Local Governments' General Bond Issuance, Interim Measures for the Administration of Local Governments' Special Bond Issuance, KPMG Analysis

At present, there are two major types of special bonds: ordinary special bonds and special bonds for project income. Since May 2017, the Ministry of Finance has issued special documents such as CY [2017] No. 62, CY [2017] No. 89, CY [2017] No. 97 to guide local governments in issuing project income according to the government fund income item classification. Up to now, the special bonds for project income that have been issued in the market include land reserve special bonds, special bonds on the renovation of shantytowns, toll road special bonds and rural revitalisation special bonds. Compared with general debts and other special debts, these are characterised by a corresponding project, and with final debt payment falling on the corresponding project income. The data shows

that, as of 18 October 2019, the total number of special government bonds for local government projects was 1,302 — of which 505, 267 and 106 were special debts for land reserve, shantytown renovation and toll roads, respectively, accounting for 71.3% of special bonds in total.

Figure 34: Issuance of selected local government special bonds for project income, by type of project



Source: Wind, KPMG analysis *Note: Data as of 18 October 2019

By the use of funds, explicit debt can be divided into new bonds, replacement bonds and refinancing bonds

New bonds: The issuance of new bonds each year cannot exceed the region's new debt limit issued by the Ministry of Finance. For example, the new local government debt limit in 2019 was RMB 3.08 trillion (made up of a general debt limit of RMB 930 billion and a special debt limit of RMB 2.15 trillion). The proportion of new bond issuance is mainly affected by the government's debt burden and the amount of capital demand. New bonds are mainly used for capital expenditure, and the capital expenditure cycle is longer.

Replacement bonds: In 2015, China officially launched local debt replacement program, issuing bonds in the name of the government, and using the funds raised to repay the local government debts in the form of non-bonds. In that year, RMB 3.2 trillion of replacement bonds were issued. The replacement of debt effectively solved the problem of the maturity mismatch between local government debt and high financing costs. However, the replacement of debt does not change the debt quota. It only changes the form of the debt and converts the debt from nongovernment bonds into debt in the form of government bonds.

Refinancing bonds: The refinancing bond was proposed by the Ministry of Finance in the Opinions on the Issuance of Local Government Bonds in 2018 (CK [2018] No. 61) and disclosed for the first time in the Statement on Local Government Bond Issuance and Debt Balance in April 2018. The Ministry of Finance clearly stated that the refinancing bonds are used to repay part of the local government bond principal due, since the period of local government bonds issued in previous years was relatively short, and repayment of the principal was already due in some cases. The issuance of refinancing bonds will effectively alleviate the pressure on local governments to repay debts.

It should be noted that although both replacement bonds and refinancing bonds are "to pay old debts with new", there is a difference between the two in terms of the payment of these "old debts": the replacement bonds are for local government debts in the form of non-government bonds, while refinancing bonds are targeted at local government debt in the form of government bonds. With the end of the threeyear replacement period for local government debt in August 2018, future local government bonds will be dominated by new bonds and refinancing bonds.



Figure 35: Number of local government bonds issued in previous years, by type of funds, in RMB trillion

Source: Wind, KPMG analysis *Note: Data as of 18 October 2019

Trends in future infrastructure investment

The government has always been the mainstay of China's infrastructure investment, and the availability of funding sources is of great significance to trends in infrastructure investment. There are four major sources of capital for capital investment: self-raised funds, state budget funds, domestic loans, and other funds and foreign capital utilisation. Self-raised funds are the most important, accounting for about 60% of all funding sources; state budget funds and domestic loans, meanwhile, account for about 15%.

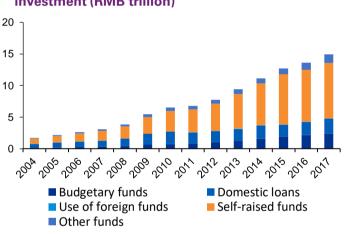


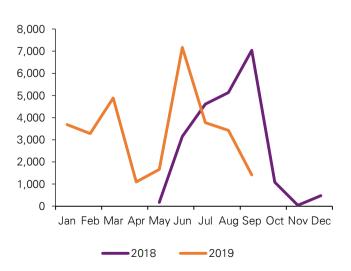
Figure 36: Sources of funds in infrastructure investment (RMB trillion)

Self-raised funds mainly come from government fund income, local government special debt, non-standard financing and PPP capital. Of these, land transfer fees are the most important source of income for local government funds. In 2018, the income from local government funds was RMB 714 million, of which RMB 652 million (91%) was income from state-owned land use rights. With the tightening of the national real estate policy and the continuous strengthening of the supervision of non-standard financing, the self-raised funds in infrastructure investment are facing greater downward pressure. Against this backdrop, local government special debts are playing an increasing role in infrastructure investment. The amount of new local government special debt has increased from RMB 400 billion in 2016 to RMB 2.15 trillion in 2019. In addition, the number of special debts is gradually increasing, with the intention of supporting local government infrastructure construction funding sources in various areas.

The new budget law, which was implemented in 2015, clearly stipulates the implementation of quota management for local government bond issuance and the adoption of a level-by-level mechanism. The local government from the central to the municipal level usually needs to go through four steps: 1) determine the total national government debt limit and new quotas; 2) determine and release sub-regional debt limits; 3) identify and approve provincial-level government debt arrangements; and 4) identify and approve municipal and county-level government debt lending and use plans. Following the steps, the issuance of local government bonds usually does not happen until June and July before reaching the peak, and county-level government usually will wait even longer to be funded.

In order to better balance the issue of insufficient local government bond issuance in the first half of the year, at the end of December 2018, the National People's Congress authorised the State Council to issue some new quotas for local government bonds in advance in 2019. Compared with last year, the issuance of local government bonds in 2019 was significantly ahead of schedule. As of September 2019, newly added local government bonds totaling about RMB 3.04 trillion were issued, effectively reaching the annual new bond limit.

Figure 37: Monthly issuance of new bonds issued by local governments (RMB 100 million)





Source: Wind, KPMG analysis

On 4 September 2019, the State Council executive meeting confirmed that the new quota for special bonds for 2020 would be released in advance to ensure their effective use early next year. According to the previous limit of no more than 60% of the new quota in the current year, up to RMB 1.29 trillion of new local government special bonds can be issued in advance. At the same time as the debt limit for the next year was released, the State Council also expanded the scope of use of special bonds, focusing on infrastructure construction such as transportation, energy, ecological and environmental protection, and people's livelihood services.⁸

We believe that although China's infrastructure construction has made great progress, there is still significant room for development. Infrastructure investment in the following three areas is particularly noteworthy:

- Regional integrated construction. At the end of 2018, the Central Economic Work Conference clearly stated that it is necessary to promote the development of Beijing-Tianjin-Hebei, Guangdong-Hong Kong-Macao Greater Bay Area and the Yangtze River Delta region. This year, the Outline of the Yangtze River Delta Regional Integration Development Plan will be further introduced. In addition, the integrated development of Chengdu-Chongqing urban agglomeration and the middle reaches of the Yangtze River also entered the "fast lane". In this context, the integration of infrastructure such as rail transit, highways, and city pipelines for water, sewage, natural gas etc. related to urban agglomeration construction and regional integration will be the focus for future investment.
- Infrastructure investment related to industrial structure upgrading. At the end of 2018, the Central Economic Work Conference proposed the concept of a broad "new infrastructure"; this year's government work report further proposed that information infrastructure should be strengthened. Since the beginning of the year, provinces and

cities including Shanxi, Zhejiang, Guangdong, Hunan and Shanghai have introduced action plans or construction plans to support the development of 5G commercial licenses by the Ministry of Industry and Information Technology in June, the development of related infrastructure will accelerate. According to estimates by the China Information and Communication Research Institute, the communications industry will generate more than RMB 800 billion of investment in the next three years. By 2025, the direct and indirect output driven by 5G will reach RMB 3.3 trillion and RMB 6.3 trillion, respectively.

Social security infrastructure related to people's livelihood. The Notice on Renovation of Old Residential Areas in 2019 issued in April this year clearly states the need to speed up "the renovation of infrastructure and facilities for older communities, roads, water supply and drainage. power supply, gas supply, heat supply, greenery, lighting and walls." Renovation of old community infrastructure, upgrading of supporting facilities, infrastructure construction such as road traffic, water supply and power supply directly related to the community, construction of urban sewage systems and treatment facilities will become an important part of the next phase of urban infrastructure construction. In the central and western regions as well as rural areas, there are still many obvious areas for improvement in infrastructure and facilities. The upgrading of traditional infrastructure, and the renovation of transportation, rural water supply projects and power grids will also become investment priorities.

8 "Li Keqiang presides over State Council executive meeting to deploy precise strategies and strengthen the work of "six stables", China Government Network, http://www.gov.cn/premier/2019-09/04/content-5427292.htm

Appendix: Key indicators

			2017	2018	2019					
	Indicator	Unit	Annual	Annual	Apr	May	Jun	Jul	Aug	Sep
Economic activity	Nominal GDP	Trillion RMB	82.1	90.0		23.8			24.7	
	Real GDP	% YOY	6.8	6.6		6.2			6.0	
	Industrial production	% YOY	6.6	6.2	5.4	5.0	6.3	4.8	4.4	5.8
	Industrial profit	% YOY YTD	21.0	22.0	-3.4	-2.3	-2.4	-1.7	-1.7	-2.1
	Retail sales	% YOY	10.2	9.0	7.2	8.6	9.8	7.6	7.5	7.8
	Fixed asset investment	% YOY YTD	7.2	5.9	6.1	5.6	5.8	5.7	5.5	5.4
	Property starts	% YOY YTD	7.0	17.2	13.1	10.5	10.1	9.5	8.9	8.6
	Property sales	% YOY YTD	7.7	1.3	-0.3	-1.6	-1.8	-1.3	-0.6	-0.1
	Land purchases	% YOY YTD	15.8	14.2	-33.8	-33.2	-27.5	-29.4	-25.6	-20.2
	Manufacturing PMI	Index	51.6	50.9	50.1	49.4	49.4	49.7	49.5	49.8
	Exports	% YOY	7.9	9.9	-2.8	1.0	-1.3	3.3	-1.0	-3.2
International trade and investments	Imports	% YOY	16.1	15.8	4.2	-8.5	-7.2	-5.3	-5.6	-8.5
	Trade balance	USD billion	419.6	350.9	13.4	41.7	50.6	44.5	34.8	39.6
	Foreign direct investment (FDI)	USD billion	131.0	132.0	9.3	9.5	16.1	8.1	10.5	11.5
	Outbound direct investment (ODI)	USD billion	120.1	120.5	9.4	9.9	9.3	9.9	8.5	8.8
	RMB exchange rate	USD/RMB	6.75	6.62	6.72	6.85	6.88	6.88	7.02	7.08
	RMB real effective exchange rate	Index	121.0	122.6	124.0	122.2	120.4	121.2	119.8	120.0
	Shanghai Composite Index (Period end)	Index	3307	2494	3078	2899	2979	2933	2886	2905
Financial	Money supply (M2)	% YOY	8.1	8.1	8.5	8.5	8.5	8.1	8.2	8.4
market	Stock of Total Social Financing (TSF)	% YOY	12.0	12.0	10.5	10.7	11.0	10.9	10.8	10.8
	New TSF	RMB billion	19440	19440	1407	1453	2300	1084	2017	2272
	New bank loans	RMB billion	13523	16166	1020	1180	1660	1060	1210	1690
	Shibor (overnight)	%	2.63	2.48	2.3	2.2	1.5	2.1	2.6	2.4
Price	Consumer price index (CPI)	% YOY	1.6	2.1	2.5	2.7	2.7	2.8	2.8	3.0
	Producer price index (PPI)	% YOY	6.3	3.5	0.9	0.6	0.0	-0.3	-0.8	-1.2
	Crude oil (WTI)	USD/barrel	50.9	64.9	63.9	60.8	54.7	57.5	54.8	56.9
	Steel (rebar)	RMB/ ton	3878	4177	4117	4119	3980	4035	3790	3794
	Housing price index (70 cities)	% YOY	8.5	7.3	11.4	11.3	10.8	10.1	9.1	8.6

Source: Wind, KPMG Analysis

Contact Us



Jacky Zou Senior Partner, Northern Region KPMG China +86 (10) 85087038 jacky.zou@kpmg.com



Ricky Wong Senior Partner, Southern Region KPMG China +86 (20) 38138833 ricky.wong@kpmg.com



William Gong Senior Partner, Eastern & Western Region, KPMG China +86 (21) 22122999 william.gong@kpmg.com



Andrew Weir Senior Partner, Hong Kong KPMG China +852 28267243 andrew.weir@kpmg.com



Raymond Ng Head of Markets KPMG China +86 (10) 85087067 raymond.kk.ng@kpmg.com



Kevin Kang Chief Economist KPMG China +86 (10) 85087198 k.kang@kpmg.com



Thomas Stanley COO of Markets KPMG China +86 (21) 22123884 thomas.stanley@kpmg.com

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