
Mizuho Economic Commentary-China

November 2018 edition

◆ Topic

The Chinese economy has entered a recessionary phase

The business cycle clock confirms that China's economy entered a recessionary phase in August 2018. This was mainly due to sluggish automobile sales and infrastructure investment. From here on, a major factor will be the weakness of exports on US/China trade frictions, with the recession likely to continue.

◆ Economic trends

Major indices swung to and fro in October, though the economy continued to slow

Investment growth picked up on an expansion of infrastructure investment, though consumption slowed. Production grew at a slightly faster pace, but the output/inventory balance slipped into negative territories, with pressure for production cuts continuing to grow.

1. Topic: The Chinese economy has entered a recessionary phase

The business cycle clock shows China entering into a recessionary phase	<p>The Chinese economy is slowing, though this is hard to discern from the GDP data alone. In order to assess the economic situation in China, we prepared a ‘business cycle clock’ (BCC) based on methods used by Statistics Netherlands, for example. A BCC looks at economic indicators and separates the trend component pointing to long-term trends from the cycle component indicating short-term movements. The vertical axis of the BCC shows the divergence of the cycle component from the trend line (economic expectations) while the horizontal axis measures the month-on-month increase or decrease (economic direction). A BCC usually has four phases that move in an anti-clockwise direction: (1) ‘Expansion,’ when economic expectations are heading upwards and performing well compared to the trend line, (2) ‘Slowdown,’ when the economy starts to slow while remaining in a healthy state, (3) ‘Recession,’ when the economy is slowing and economic expectations have deteriorated compared to the trend line, (4) ‘Recovery,’ when the economy is picking up while remaining in an unhealthy state, then finally back to ‘Expansion.’</p> <p>We used a diffusion index (DI), which is comprised of six key economic indicators (production, investment, retail, imports, the jobs-to-applicants ratio, and corporate earnings; all Mizuho Research Institute estimates), for the BCC. A glance at this DI BCC shows China entering a slowdown phase at the start of 2017 and a recessionary phase in August 2018 (Fig. 1). Compared to the previous slowdown, the 2017 slowdown was up sharply compared to the trend line, with corporate and consumer sentiments remaining healthy. From mid-2018, though, domestic and overseas attention started to focus on a shift in the economic situation in China. This occurred as: private enterprises faced cash flow problems as a result of stricter financial regulations; investment and consumption slowed; and uncertainty about the future grew following an intensification of US/China trade frictions. The BCC reconfirmed that China’s real economy has entered a new phase.</p>
The recession was prompted by a downswing in retail and corporate earnings	<p>In order to ascertain why the BCC has entered a recessionary phase, we examined the movement of the cycle components of the DI constituent indicators after discounting the trend components. This shows exports moving firmly and investment trending upwards at present, with the downswing caused by the weak performance of retail and corporate earnings (Fig 1, right).</p>
The retail slowdown is mainly due to weak automobile sales	<p>The retail slowdown is mainly due to weak automobile sales. Automobile sales dipped on the previous year from July 2018 before suffering a double-digit y-o-y slump over September–October. A glance at the cycle component of automobile sales (discounting the trend component, as with the DI) shows sales dipping below the trend line in May 2018, with sales subsequently falling below the level that obtained during the slump that followed the 2008 financial crisis (Fig. 2).</p>
The end of a tax break on small vehicles lies behind the slump in automobile sales	<p>This fall in sales is probably a backlash to the surge in demand before a tax break on small vehicles (implemented in October 2015) wound down at the end of 2017. There are several opinions as to the duration or extent of this backlash, but a glance at what happened the last time a tax break on small vehicles came to an end (January 2009–December 2012) suggests this adjustment (the below-trend phase) could last until 2019.</p>
The growing burden of housing loans could also be weighing down consumption	<p>However, this cyclical downturn is more pronounced than the last one. This suggests there are other factors at play besides the end of the tax break. Since 2016, the burden of household mortgages (as a percentage of GDP) has climbed as house prices have risen at a faster pace (Fig. 3). There are concerns this is acting as a drag on consumption.</p>
Corporate earnings fell on sluggish automobile sales and infrastructure investment	<p>It appears corporate earnings were hit by sluggish automobile sales and infrastructure investment. A glance at the contribution of each industry to corporate earnings (industrial) in July–September 2018 shows profits in the automobile manufacturing sector falling compared to the first half of 2018, with profit growth also slowing when it came to nonmetallic mineral products, ferrous metals and non-ferrous metals (all sectors with a high ratio of infrastructure investment). However, the government has already switched back and is now ratcheting up its economic stimulus, so the profit slump in infrastructure-related sectors looks set to ease off.</p>

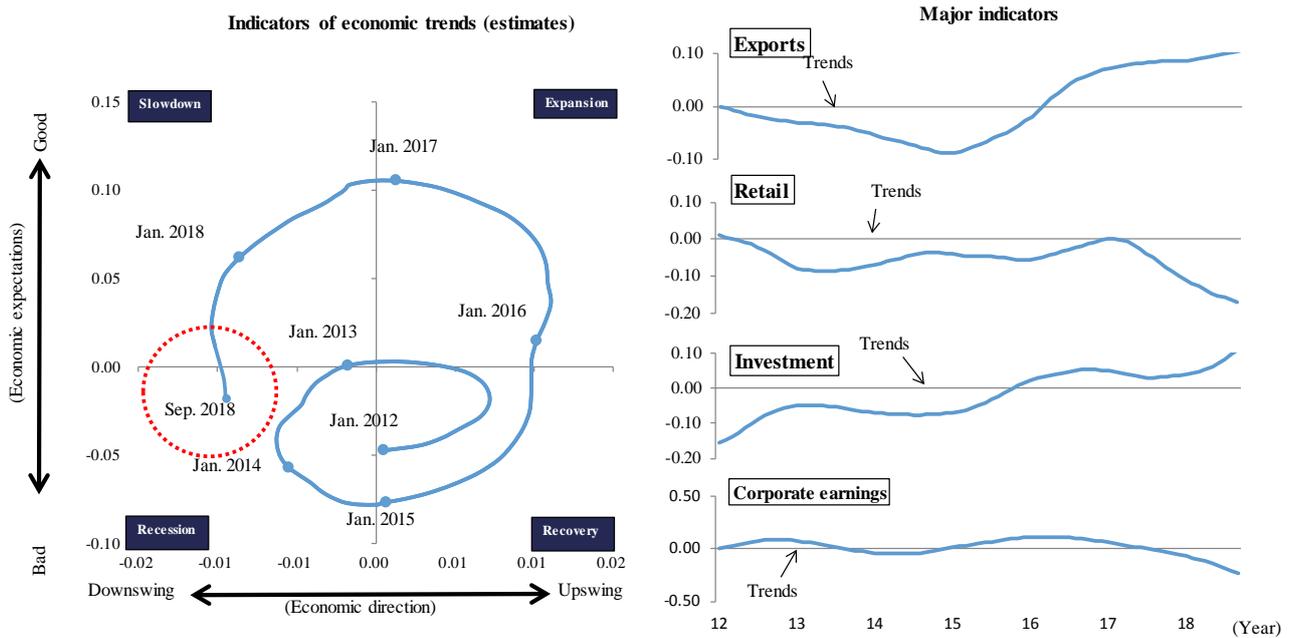
Infrastructure investment had remained down on the previous year from May onwards, but the scale of this contraction fell in September and investment returned to positive territories for the first time in six months in October. With the BCC suggesting the Chinese economy has entered a recessionary phase, infrastructure investment is starting to alleviate the economic slowdown.

The recession looks set to continue as exports slump on US/China trade frictions

Though the Chinese economy has entered a recessionary phase on sluggish automobile sales and infrastructure investment, from here on a major factor will be the weakness of exports on US/China trade frictions, with the recession likely to continue. Government stimulus will act as a shock absorber to a certain extent, but if intensified US/China trade frictions hit investment and consumption as well as exports, this could lead to a long period of adjustment, so caution will be needed from here on.

(Kaori Yamato)

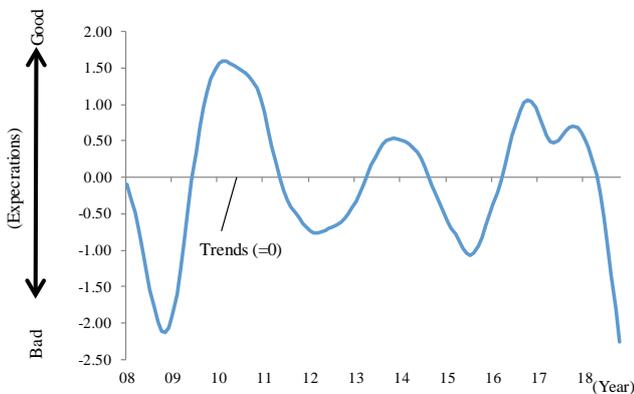
Fig. 1: China's business cycle clock



Note: The diffusion index is comprised of six indicators: value-added industrial production, total retail sales of consumer goods (real), investment in fixed assets, exports, the jobs-to-applicants ratio, and corporate earnings. These indicators are given similar weightings after standardization, the removal of trend components, and the processing of outliers, for example. The y-axis shows the divergence above or below the trend line; the x-axis shows the time series variation of cycle components (m-o-m).

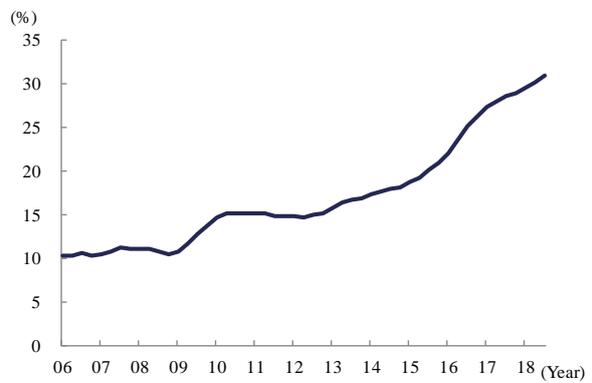
Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China and the General Administration of Customs

Fig. 2: The cycle component of automobile sales



Note: The cycle component was identified using the HP filter.
Source: Prepared by Mizuho Research Institute based on the materials from the China Association of Automobile Manufacturers

Fig. 3: The housing loan balance to GDP



Source: Prepared by Mizuho Research Institute based on the materials from the People's Bank of China and the National Bureau of Statistics of China

2. Overview: Major indices swung to and fro in October, though the economy continued to slow

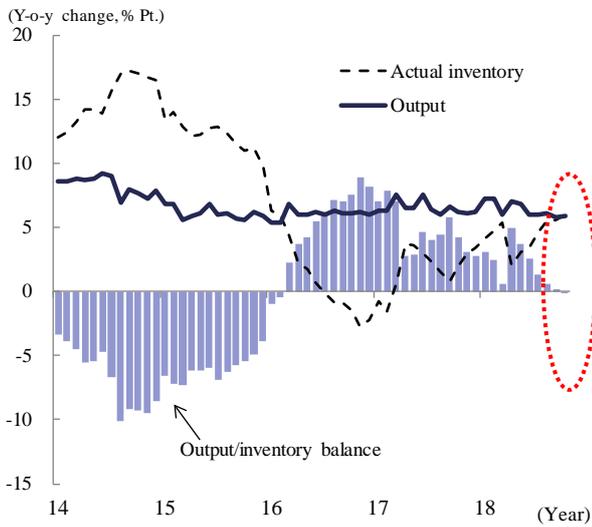
Production and investment grew at a faster clip in October, though the economy continued to slow	A glance at the major indices in October 2018 shows consumption slowing, though production rose slightly and investment accelerated on an expansion of infrastructure investment. However, the output/inventory balance slipped into negative territories, with the economy continuing to slow on growing pressure for production cuts.
Production grew at a slightly faster pace in October	At +5.9% y-o-y, real value-added industrial production began growing again in October, albeit at a gentle pace (September: +5.8% y-o-y) (Fig. 4). The manufacturing sector helped push up the overall figure thanks to faster growth when it came to food (from +4.5% y-o-y in September to +7.7% y-o-y in October), telecommunications (from +12.6% y-o-y to +14.6% y-o-y), and non-metallic mineral products (from +5.2% y-o-y to +7.7% y-o-y), for example. At -0.7% y-o-y, though, automobile production growth contracted for the first time since July 2015 on sluggish sales (September: +0.7% y-o-y). At -0.1%Pt, the output/inventory balance for industry as a whole dipped into negative territories for the first time since February 2016, with pressure for production cuts growing (September: +0.2%Pt).
The government's Manufacturing PMI fell in October	At 50.2, the government's Manufacturing PMI fell for the second straight month in October to hit its lowest level since July 2016 (September: 50.8) (Fig. 5). All five of the constituent indices fell, with production plunging to 52.0 (September: 53.0) and new orders to 50.8 (September: 52.0). At 46.9, new export orders (an indicator referenced by the PMI) moved below the key threshold of 50 for the fifth straight month (September: 48.0). This also represented the indicator's lowest level since January 2016. It seems the impact of US/China trade frictions is spreading. The figures for small-sized enterprises (49.8, down from 50.4 in September) and medium-sized enterprises (47.7, down from 48.7 in September) were both below 50.
Exports grew at a faster pace in October	At +15.6% y-o-y, export growth (nominal, dollar-denominated) rose for the second successive month in October (September: +14.4% y-o-y) (Fig. 6). The hi-tech products sectors saw faster growth, though equipment and machinery exports grew at a slower pace. At +13.2% y-o-y, exports to the US fell slightly (September: +14.0% y-o-y), though they remain at a high level. Exports to the EU and Japan contracted, though exports to Hong Kong and South and Central America moved briskly.
Imports also grew at a faster pace in October	At +21.4% y-o-y, import growth (nominal, dollar-denominated) began to rise in October (September: +14.3% y-o-y) (Fig. 6). Imports of resources like crude oil and natural gas grew at a fast clip, while imports of transportation equipment also began growing again. At -1.8% y-o-y, imports from the US were down on the previous year for the second straight month (September: -1.2% y-o-y). After sliding in September, though, imports from Japan grew by +11.4% y-o-y (September: +3.1% y-o-y), with imports to the EU and South and Central America also growing at a faster pace.
China's trade surplus expanded in October	China's trade surplus grew for the second straight month to hit \$34.0 billion in October (September: \$31.3 billion). At \$31.8 billion, its surplus with the US fell slightly (September: \$34.1 billion). However, its surplus with the EU and the ASEAN region grew.
Investment in fixed assets grew at a faster pace	At +8.0% y-o-y, the nominal growth rate of investment in fixed assets (*) rose for the third straight month in October (September: +6.0% y-o-y). The overall figure was pushed up when infrastructure investment hit +5.9% y-o-y to record positive growth for the first time in six months (September: -2.0% y-o-y) (Fig. 7). This suggests the Chinese government's monetary and fiscal policies are starting to stimulate the economy. However, manufacturing investment slowed to +12.2% y-o-y (September: +16.3% y-o-y). The non-metallic minerals sector saw slower growth, while the non-ferrous metals sector dipped into negative territories. At +2.5% y-o-y, the real growth rate of investment in fixed assets (*) accelerated for the second straight month (September: +0.6% y-o-y).
Retail sales grew at a slower pace	At +8.6% y-o-y, nominal total retail sales of consumer goods grew at a slower pace in October. This figure also represented the lowest growth in five months (September: +9.2% y-o-y) (Fig. 8). The breakdown for retail sales above a designated size shows the telecommunications equipment sector growing at +7.1% y-o-y, down on the +16.9% y-o-y recorded in September. At -6.4% y-o-y, automobile sales growth remained down on the previous year for the sixth

straight month, though this marked a slight improvement on the previous month (September: -7.1% y-o-y). At +5.6% y-o-y, the real growth rate (*) slowed for the second successive month (September: +6.4% y-o-y).

(*) denotes a Mizuho Research Institute estimate

(Naoaki Sato)

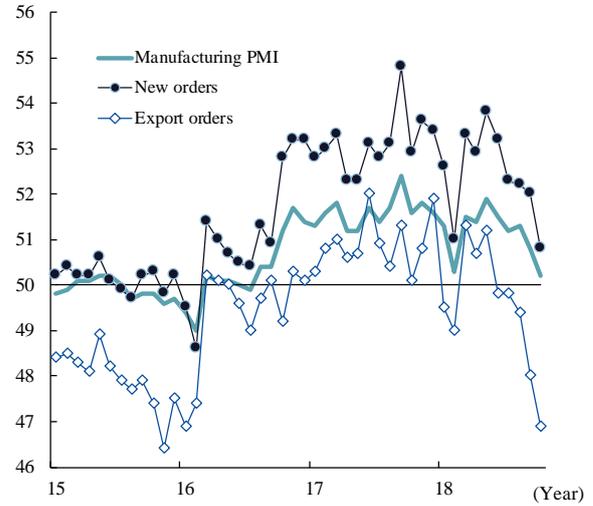
Fig. 4: Output/Inventory Balance



Note: Output/Inventory Balance= y-o-y output growth minus y-o-y inventory growth.

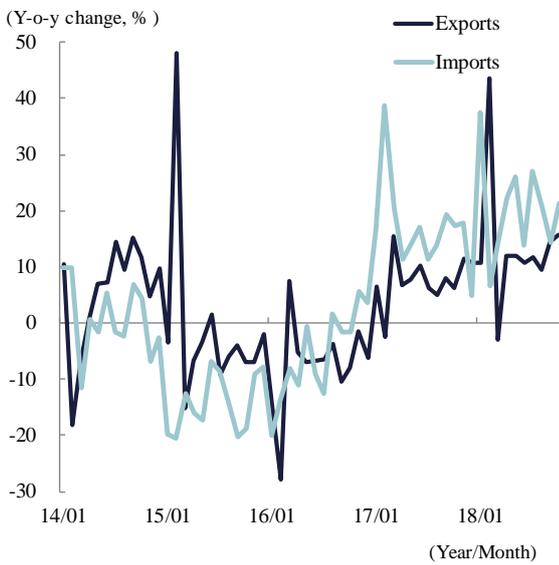
Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

Fig. 5: Manufacturing PMI



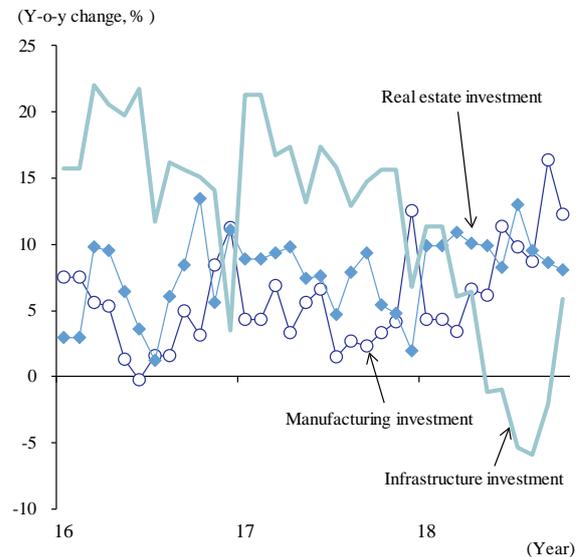
Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

Fig. 6: Value of Imports and Exports



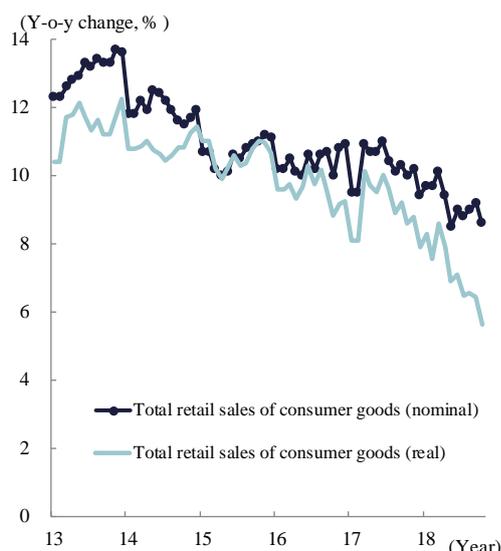
Source: Prepared by Mizuho Research Institute based on the materials from the General Administration of Customs

Fig. 7: Investment in manufacturing, real estate and infrastructure



Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

Fig. 8: Total Retail Sales of Consumer Goods



Note: 1. The figures for January and February were aggregated and compared to the same period last year.
 2. The total retail sales of consumer goods data (real) has been indexed using the retail price index (The figures for January and February were publicly-released cumulative values).

Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

3. Inflation: The CPI moved flatly but the PPI fell

CPI moved flatly but core CPI rose

At +2.5% y-o-y, consumer price index (CPI) growth moved flatly in October (September: +2.5% y-o-y) (Fig. 9). With food items making a large contribution to the data, the overall CPI result was pushed up when pork prices contracted at a slower pace, with pork supply and demand squeezed by the spread of swine fever. However, the sluggish growth of vegetable prices made a negative contribution. At +1.8% y-o-y, the core CPI data (excluding energy and food) rose as telecommunications prices contracted at a slower pace (September: +1.7% y-o-y).

PPI growth slowed on a y-o-y basis

At +3.3% y-o-y, producer price index (PPI) growth slowed for the fourth straight month in October (September: +3.6% y-o-y) (Fig. 9). This was because sectors like ferrous and non-ferrous metal continued to slow after growing at a fast clip the previous year. At +0.4% m-o-m, the PPI grew at a slower pace on a monthly basis (September: +0.6% m-o-m).

Homes prices grew at a faster y-o-y pace for the 6th straight month

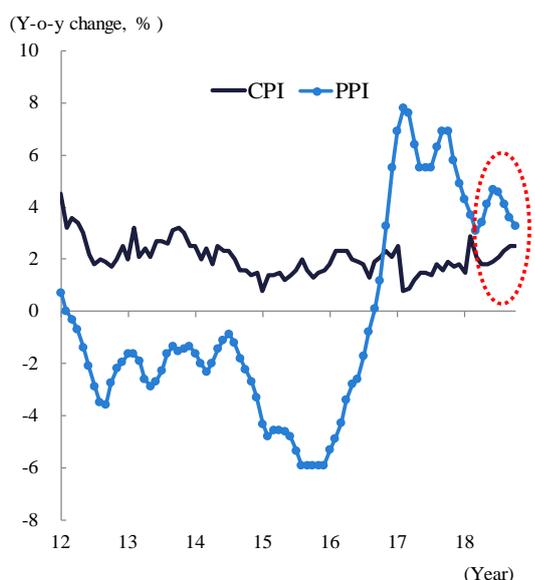
At +9.7% y-o-y, the sales price indices of newly constructed commercial residential buildings (the average of 70 major Chinese cities, *) grew at a faster y-o-y pace for the sixth straight month in October (September: +8.9% y-o-y) (Fig. 10). Every tier of city saw faster growth. However, average m-o-m growth in the 70 major Chinese cities moved flatly at +1.0% m-o-m (September: +1.0% m-o-m). Sixty-five cities saw prices rising on a monthly basis (up from 64 in September), while four cities saw prices falling (up from three in September) and one city saw prices moving flatly (down from three in September).

The growth of real estate sales in terms of floor space contracted for the second straight month, with investment in development also slowing

At -3.1% y-o-y, the growth of real estate sales in terms of floor space remained in negative territories for the second straight month in October (September: -3.6% y-o-y). Sales growth began contracting in first-tier cities. Growth also slowed in third-tier cities (the main targets of moves to redevelop urban barrack zones), though it remained at high levels. At +8.1% y-o-y, investment in real estate development also grew at a slower pace in October (September: +8.7% y-o-y). The overall data was pushed down by an ongoing slide in housing investment growth.

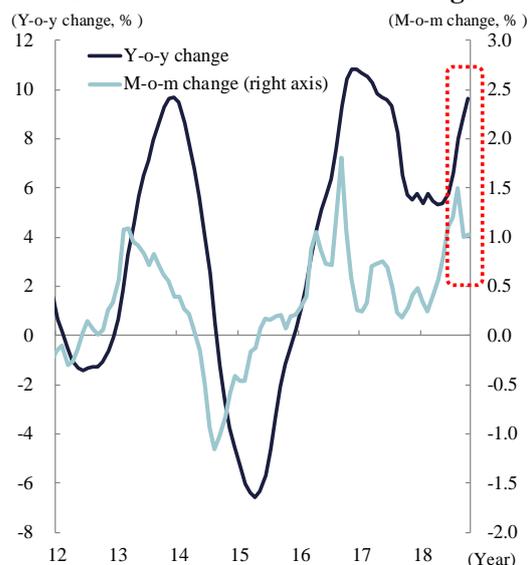
(Miho Takase)

Fig. 9: CPI and PPI



Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

Fig.10: Sales Price Indices of Newly Constructed Commercial Residential Buildings



Note: The average price indices of new homes in 70 major Chinese cities.
Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China

4. Monetary policy: The financial authorities announced a series of measures to support private companies

M2 growth fell

At +8.0% y-o-y, money supply (M2) growth began trending downward in October (September: +8.3% y-o-y). At +2.7% y-o-y (September: +4.0% y-o-y), narrow money supply (M1) growth fell to its lowest level since March 2015 (+2.9% y-o-y) (Fig. 11).

The outstanding RMB loan balance grew at a slower pace, particularly when it came to medium-to-long-term loans

New RMB loans totaled RMB 697 billion in October. This was down on the previous month (RMB 1.38 trillion) but up slightly on the same month last year (RMB 663.2 billion). At +13.1% y-o-y, the outstanding RMB loan balance fell slightly as medium-to-long-term loans grew at a slower pace (September: +13.2% y-o-y).

Total social financing grew at a slower pace

At RMB 728.8 billion, total social financing was down on the previous month in October (September: RMB 2.1682 trillion). A m-o-m breakdown reveals that RMB loans fell, while issuances of local government special bonds also dipped from RMB 738.9 billion in September to RMB 86.8 billion. At +10.2% y-o-y, the total social financing balance grew at a slower pace for the second straight month (September: +10.6% y-o-y) (Fig. 12). The overall figure was pushed down by a decline in off-balance-sheet transactions. There was a faster contraction when it came to entrusted loans (from -7.7% y-o-y in September to -8.5% in October) and bank acceptances (from -13.9% y-o-y to -14.9% y-o-y), for instance, while trust loan growth also dipped into negative territories at -2.6% y-o-y (September: +0.2%).

In October, the PBOC absorbed net funds via its open-market operations, the SLF and the MLF

In October, the PBOC absorbed net funds from the markets via its open-market operations (a net RMB 60 billion) (Fig. 13). It absorbed a net total of RMB 530 billion via its open-market operations, the Standing Lending Facility (SLF) and the Medium-term Lending Facility (MLF) (in September it supplied a net RMB 479.1 billion).

In November, the PBOC absorbed net funds via its open-market operations

In November, the PBOC absorbed a net RMB 100 billion as part of its open-market operations. The MLF provided RMB 403.5 billion to replace maturing loans of the same value (as of November 29).

The financial authorities have announced a series of measures to support private companies

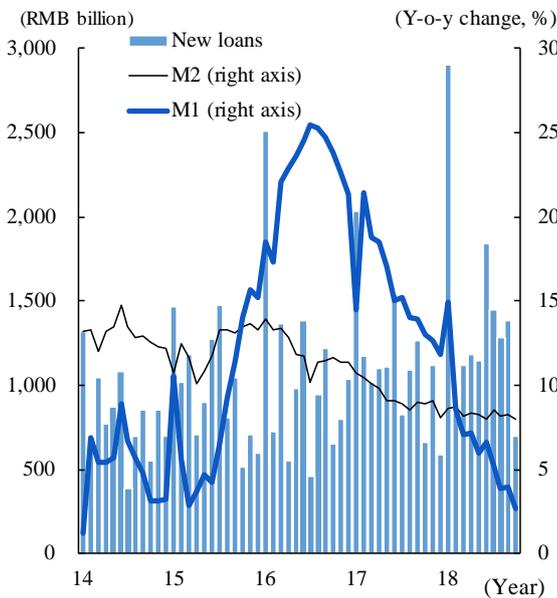
The financial authorities have announced a series of measures to support private companies facing fund-raising problems due to policies to tackle financial risk. On October 22, the PBOC lifted its relending and rediscount quotas by RMB 150 billion. These quotas are used by the PBOC to supply financial institutions with money for lending purposes. As a means of providing targeted funds, the quotas are used to encourage financial institutions to lend to private companies and small and micro enterprises. In an interview with the Financial Times on November 7, meanwhile, Guo Shuqing, chairman of the China Banking and Insurance Regulatory Commission, said regulators were looking at introducing a ‘one two five’ target for banks, with large banks required to extend at least a third and small and medium-sized banks at least two-thirds of all new corporate loans to private companies, with over 50% of all new bank loans earmarked for private enterprises over the following three years. The aim of the targets is to encourage lending to private firms.

Stocks swung to and fro on US/China trade frictions; the RMB weakened against the dollar

The Shanghai Stock Exchange Composite Index temporarily recovered to 2,700 points on expectations for an easing of US/China trade frictions. However, it then dropped back as US government officials adopted a cautious stance towards the trade dispute, with stocks also buffeted by rising bank NPL ratios (Fig. 14). The RMB strengthened against the dollar for a time after the US mid-term elections, though it then weakened as China’s foreign currency reserves fell for the third straight month and the FOMC remained committed to lifting interest rates (Fig.15).

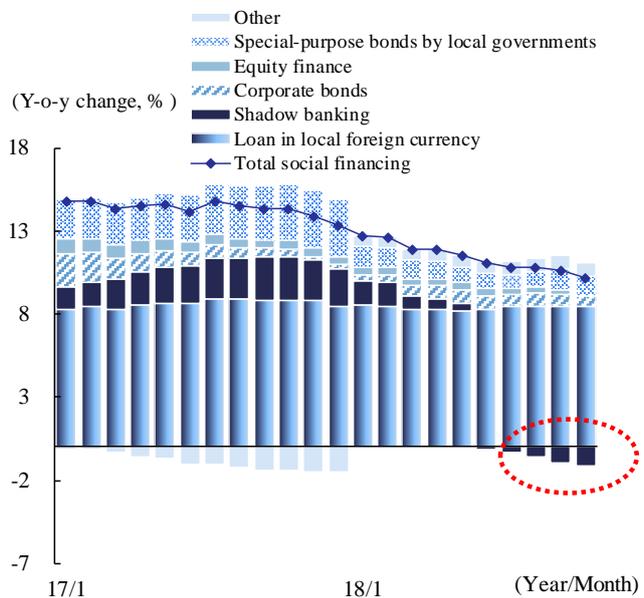
(Naoaki Sato)

Fig. 11: Financial Indicators



Note: ‘New loans’ denotes the amount of new RMB loans.
Source: Prepared by Mizuho Research Institute based on the materials from the People’s Bank of China

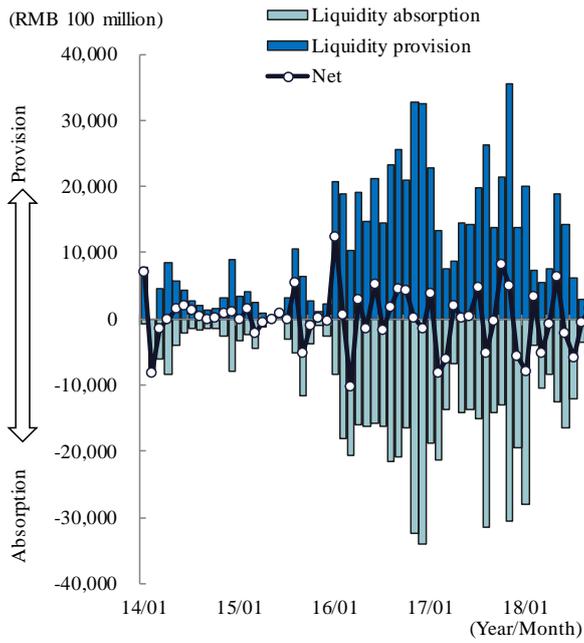
Fig. 12: The Total Social Financing Balance (Y-o-y change)



Note: ‘Shadow banking’ denotes the total amount of entrusted loans, trust loans and bank acceptances. Other denotes the total amount of deposit-taking financial institution ABS and loans written off. These were newly added when the data was revised in July 2018. Local government special bonds were newly added when the data was revised in September 2018.

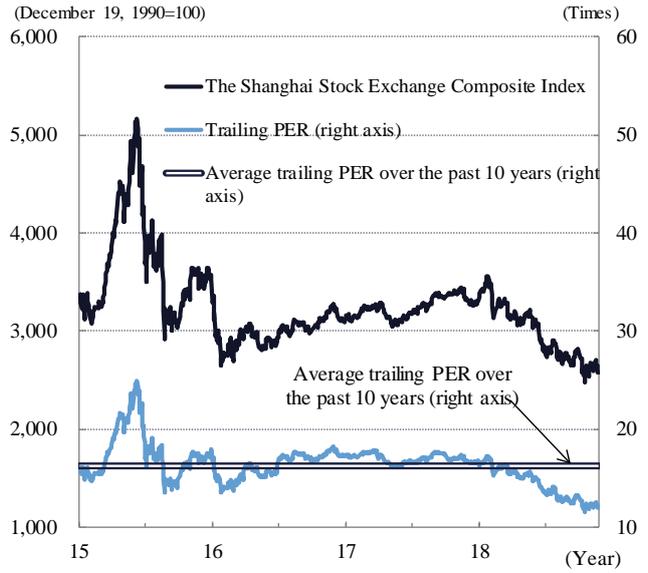
Source: Prepared by Mizuho Research Institute based on the materials from the People’s Bank of China

Fig. 13: Open Market Operation



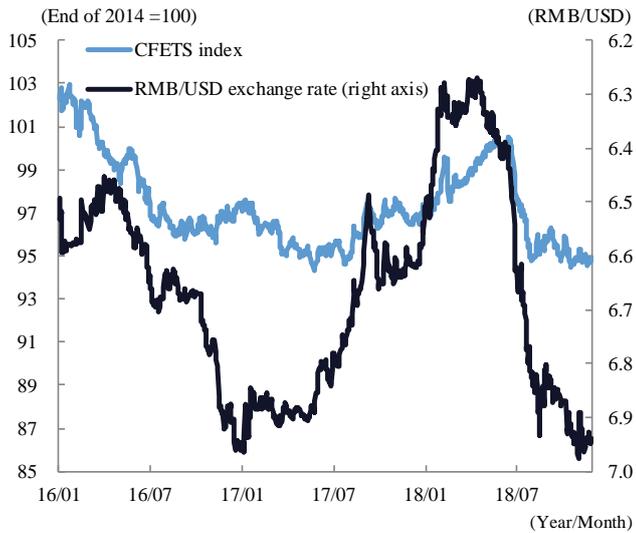
Note: Monthly data
 Source: Prepared by Mizuho Research Institute based on the materials from the People's Bank of China

Fig. 14: Stocks



Note: Daily data; The most recent day: November 26
 Source: Prepared by Mizuho Research Institute based on the materials from the People's Bank of China and CEIC data

Fig. 15: Foreign Exchange



Note: The CFETS index is a Mizuho Research Institute estimate; Daily data; The most recent day: November 26
 Source: Prepared by Mizuho Research Institute based on the materials from the China Foreign Exchange Trade System (CFETS) and Bloomberg data

Appendix: China's Major Economic Indicators (1)

Headings		Unit	2016	2017	18/1Q	18/2Q	18/3Q	August	September	October
GDP	Real GDP	Y-o-y change (%)	6.7	6.9	6.8	6.7	6.5	n.a.	n.a.	n.a.
	Nominal GDP	Year-to-date (total), RMB 1 trillion	74.36	82.71	19.88	41.90	65.09	n.a.	n.a.	n.a.
Business Sentiment	PMI	End-of-period figure, points			51.6	51.5	51.5	51.3	50.8	50.2
	New Orders	Points			53.4	53.3	53.2	52.2	52.0	50.8
Production	Value-added Industrial Production (Real)	Y-o-y change (%)	6.0	6.6	6.2	6.0	6.6	6.1	5.8	5.9
	Light Industry	Y-o-y change (%)	4.7	6.9	5.8	5.4	4.5	4.7	3.8	4.2
	Materials	Y-o-y change (%)	6.2	4.8	4.8	5.3	6.2	6.8	6.9	7.0
	Machinery	Y-o-y change (%)	8.4	10.5	9.7	8.0	7.8	5.8	5.7	6.0
	Electric Power Generation	Y-o-y change (%)	4.8	5.2	3.6	2.1	7.8	7.3	4.6	4.8
	Industrial Goods Inventories	Y-o-y change (%)			17.5	17.5	17.5	9.8	9.4	9.5
	Light Industry	Y-o-y change (%)			5.2	4.4	4.7	7.6	8.6	8.2
	Materials	Y-o-y change (%)			10.2	9.3	7.5	11.2	14.1	13.9
	Machinery	Y-o-y change (%)			9.6	11.0	8.9	12.0	10.6	11.0
	Passenger Transportation Volume	Year-to-date y-o-y change (%), passenger-kilometer	- 0.4	4.6	14.8	7.1	4.7	6.7	4.5	5.5
Freight Transportation Volume	Year-to-date y-o-y change (%), ton-kilometer	- 1.5	7.6	6.1	14.2	10.1	3.5	8.7	5.3	
Investment	Investment in Fixed Assets	Year-to-date (total), RMB 1 trillion	59.7	63.2	63.17	10.08	29.73	41.52	48.34	54.76
		Year-to-date y-o-y change (%)	8.1	7.2	7.2	7.5	6.0	5.3	5.4	5.7
	Primary Industry	Year-to-date y-o-y change (%)	21.1	11.8	11.8	24.2	13.5	14.2	11.7	13.4
	Secondary Industry	Year-to-date y-o-y change (%)	3.5	3.2	3.2	2.0	3.8	4.3	5.2	5.8
	Manufacturing	Year-to-date y-o-y change (%)	4.2	4.8	4.8	3.8	6.8	7.5	8.7	9.1
	Tertiary Industry	Year-to-date y-o-y change (%)	10.9	9.5	9.5	10.0	6.8	5.5	5.3	5.4
	Real estate development investment	Year-to-date y-o-y change (%)						10.1	9.9	9.7
	Actual Direct Investment	Year-to-date (total), USD 100 million	1,337	1,363	345	683	980	865	980	1,077
	Year-to-date y-o-y change (%)	- 1.4	1.9	2.1	4.1	6.4	6.1	6.4	6.5	
Trade	Exports	USD 100 million	21,366	22,804	6,353	5,438	6,259	2,170	2,265	2,173
		Y-o-y change (%)	- 6.4	6.7	9.6	13.7	11.4	9.6	14.4	15.6
	To the U.S.	Y-o-y change (%)	- 5.1	11.3	12.1	13.6	11.3	13.2	14.0	13.2
	To the EU	Y-o-y change (%)	- 3.7	9.1	12.8	12.5	9.8	8.4	17.4	14.6
	To Japan	Y-o-y change (%)	- 4.7	6.1	10.1	6.8	8.8	3.7	14.3	7.9
	To NIES, ASEAN	Y-o-y change (%)	- 8.5	2.4	6.6	12.7	14.2	9.4	13.7	16.9
	Imports	USD 100 million	15,895	18,423	5,061	4,990	5,356	1,906	1,952	1,824
		Y-o-y change (%)	- 5.4	15.9	12.8	19.4	20.6	20.6	14.5	20.8
	From the U.S.	Y-o-y change (%)	- 9.8	14.8	5.2	8.4	13.6	2.2	- 1.2	- 1.8
	From the EU	Y-o-y change (%)	- 0.5	17.7	21.8	17.7	12.1	10.3	9.1	12.3
From Japan	Y-o-y change (%)	1.7	13.9	11.1	12.9	12.8	10.5	3.1	11.4	
From NIES, ASEAN	Y-o-y change (%)	- 1.6	12.6	14.3	21.3	21.8	13.6	15.9	17.3	
Trade Balance	USD 100 million	5,471	4,380	1,292	448	903	264	313	349	

Note 1: Value-added Industrial Production is calculated for industrial enterprises above a designated size. In 2011, this size was adjusted to "industrial enterprises with annual revenue of RMB 20 million or more" (it was previously "industrial enterprises with annual revenue of RMB 5 million or more). The National Bureau of Statistics explains that the post-change figures and trends remain essentially the same.

Note 2: From the January-February 2015 edition of Mizuho Economic Commentary onwards, all annual figures for Value-added Industrial Production show the year-to-date y-o-y change (up until the November 2014 edition, the figures for Light Industry, Materials and Machinery were calculated as a simple average of the quarterly figures).

Note 3: The 1Q Value-added Industrial Production figure shows the year-to-date y-o-y change for the period January–March.

Note 4: The figures for Inventories show publicly-released y-o-y statistics by the government.

Note 5: The annual y-o-y change figures in the Passenger Transportation Volume/Freight Transportation Volume show the year-to-date y-o-y change for the period from January.

Note 6: Statistics for Investment in Fixed Assets were only collected for urban areas up until 2010. Investment by enterprises or collectives in rural areas has also been included since 2011.

Note 7: The Value-added Industrial Production figures and the Investment in Fixed Assets figures for January and February show the aggregate results for the period January–February.

Note 8: The Inventory figures for January and February show the aggregate result for the period January–February.

Note 9: All figures are nominal unless denoted as "real."

Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China, the General Administration of Customs, and the Ministry of Commerce of the People's Republic of China

Appendix: China's Major Economic Indicators (2)

Headings		Unit	2016	2017	18/1Q	18/2Q	18/3Q	August	September	October
Consumption	Consumer Confidence Index	End-of-period figure, points			122.3	118.2	118.5	118.6	118.5	119.1
	Consumer Expectations Index	End-of-period figure, points			125.7	121.2	121.9	121.9	121.9	122.3
	Total Retail Sales of Consumer Goods	RMB 1 trillion	33.23	36.63	2.92	8.97	9.43	3.15	3.20	3.55
		Y-o-y change (%)	10.4	10.2	10.1	9.0	9.0	9.0	9.2	8.6
	Sales at Retailers Above a Designated Size	Y-o-y change (%)	8.1	8.1	8.9	6.6	5.7	5.9	5.6	3.6
	Automobile Sales	10,000 automobiles	2793.9	2894.1	718.3	688.0	638.7	210.3	239.4	238.0
		Y-o-y change (%)	13.7	4.1	1.7	8.6	-6.4	-3.8	-11.6	-11.7
	Nationwide Disposable Income per Capita Figure	Year-to-date y-o-y change (%)	8.4	9.0	8.8	8.7	8.8	n.a.	n.a.	n.a.
	Jobs-to-applicants Ratio	End-of-period figure, times	1.13	n.a.	1.23	1.23	n.a.	n.a.	n.a.	n.a.
Prices	Consumer Price Index	Y-o-y change (%)	2.0	1.6	2.2	1.8	2.3	2.3	2.5	2.5
	Core CPI (excluding foods and energy)	Y-o-y change (%)	1.6	2.2	2.1	1.9	1.9	2.0	1.7	1.8
	Foods	Y-o-y change (%)	4.6	-1.4	2.0	0.4	1.9	1.7	3.6	3.3
	Producer Price Index	Y-o-y change (%)	-1.3	6.3	3.7	4.1	4.1	4.1	3.6	3.3
	Producer Goods	Y-o-y change (%)	-1.7	8.4	4.9	5.3	5.3	5.2	4.6	4.2
	Consumer Goods	Y-o-y change (%)	-0.0	0.6	0.3	0.3	0.7	0.7	0.8	0.7
	New-home Price Index (average price of 70 major cities)	Y-o-y change (%)	0.0	1.4	5.5	5.8	8.9	8.0	8.9	9.7
Finance	Money Supply (M2)	End-of-period figure, RMB 1 trillion	155.01	167.68	173.99	177.02	180.17	178.87	180.17	179.56
		End-of-period figure, y-o-y change (%)	11.3	8.1	8.2	8.0	8.3	8.2	8.3	8.0
	Outstanding Loans	End-of-period figure, RMB 1 trillion	106.60	120.13	124.98	129.15	133.27	131.88	133.27	133.96
		End-of-period figure, y-o-y change (%)	13.5	12.7	12.8	12.7	13.2	13.2	13.2	13.1
	Net Increase	Mid-period increase, RMB 10 billion	1265	1353	485	417	411	128	138	70
	Deposits	End-of-period figure, RMB 1 trillion	150.59	164.10	169.18	173.12	176.13	175.24	176.13	176.48
		End-of-period figure, y-o-y change	11.0	9.0	8.7	8.4	8.5	8.3	8.5	8.1
	Required Reserve Ratio (Large Enterprises)	End-of-period figure, %	17.0	17.0	17.0	16.0	15.5	15.5	15.5	14.5
	1-year Benchmark Lending Rate	End-of-period figure, %	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35
	Overnight Repo Rate	End-of-period figure, %	2.10	2.82	2.73	2.80	2.65	2.34	2.65	2.40
Foreign Currency Reserves	End-of-period figure, USD 100 million	30,105	31,399	31,428	31,121	30,870	31,097	30,870	30,531	
Exchange Rates	RMB/USD Exchange Rate	End-of-period figure, RMB/USD	6.94	6.51	6.27	6.62	6.87	6.83	6.87	6.97
	JPY/RMB Exchange Rate	End-of-period figure, JPY/RMB	16.82	17.32	16.93	16.73	16.52	16.25	16.52	16.18
Stocks	Shanghai Composite Index	End-of-period figure, December 19, 1990 = 100	3,104	3,307	3,169	2,847	2,821	2,725	2,821	2,603
	PER	End-of-period figure, times	15.9	18.2	17.8	14.1	14.1	13.6	14.1	13.0
	Market Capitalization (Shanghai, Shenzhen)	End-of-period figure, RMB 10 billion	5,077	5,671	17,067	15,910	14,685	4,757	4,866	4,465
	Turnover (Shanghai, Shenzhen)	RMB 10 billion	12,777	11,281	2,830	2,425	1,936	659	498	524
Public Finances	Fiscal Revenue	Year-to-date y-o-y change (%)	4.8	8.1	13.9	10.6	8.7	9.4	8.7	7.4
	Fiscal Expenditure	Year-to-date y-o-y change (%)	6.8	8.2	11.1	7.8	7.5	6.9	7.5	7.6

Note 1: The government releases both the real data and the y-o-y figures for Total Retail Sales of Consumer Goods, Sales at Retailers Above a Designated Size, and Automobile Sales. However, the y-o-y figures calculated from the real data sometimes diverge from the publicly-released y-o-y figures. This appendix uses the publicly-released y-o-y figures.

Note 2: With regards to the Total Retail Sales of Consumer Goods and Sales at Retailers Above a Designated Size, the (1) annual real data and (2) annual y-o-y figures show the (1) year-to-date sales and (2) year-to-date y-o-y change, respectively (up until the November 2014 edition, the data was calculated based on an aggregation of the standalone monthly figures).

Note 3: The Nationwide Disposable Income per Capita figure shows the year-to-date y-o-y change from January onwards.

Note 4: The Total Retail Sales of Consumer Goods figures and the Sales at Retailers Above a Designated Size figures for January and February show the aggregate results for the period January–February.

Note 5: The quarterly CPI and PPI figures are calculated as a simple average of the monthly figures.

Note 6: Since October 2011, the Money Supply (M2) data includes deposits of housing provident fund centers and non-depository financial institutions' deposits with depository financial institutions (the margin accounts of securities companies, for example). Furthermore, in January 2018 MMF deposits (including CD) were replaced in the M2 MMF data by MMF held by non-depository institutions, households and non-financial institutions. Following this change, the y-o-y figures calculated from the real data and the publicly-released y-o-y figures have diverged from October 2011 and from January 2018 onwards. This appendix uses the publicly-released y-o-y figures.

Note 7: The outstanding loan growth rate is a y-o-y figure released by the PBOC. However, the y-o-y figures calculated from the real data and the publicly-released y-o-y figures have diverged from November 2008 to November 2009 and from January 2011 onwards.

Note 8: The deposit growth rate is a y-o-y figure released by the PBOC. However, the y-o-y figures calculated from the real data and the publicly-released y-o-y figures have diverged from 2011 onwards.

Note 9: PER shows the prior period's actual PER (stock price divided by net income in the last fiscal year). The standards are revised each May.

Source: Prepared by Mizuho Research Institute based on the materials from the National Bureau of Statistics of China, the China Association of Automobile Manufacturers, the Ministry of Human Resources and Social Security of the People's Republic of China, the People's Bank of China, the FRB, the Shanghai Stock Exchange, the Shenzhen Stock Exchange, and the Ministry of Finance of the People's Republic of China

Release on November 30, 2018

**Kaori Yamato; Senior Economist, China Unit, Research Department-Asia
Mizuho Research Institute Ltd.**

+81-3-3591-1368 kaori.yamato@mizuho-ri.co.jp

**Naoaki Sato; Senior Economist, China Unit, Research Department-Asia
Mizuho Research Institute Ltd.**

+81-3-3591-1367 naoaki.sato@mizuho-ri.co.jp

**Miho Takase; Economist, China Unit, Research Department-Asia
Mizuho Research Institute Ltd.**

+81-3-3591-1413 miho.takase@mizuho-ri.co.jp

This publication is compiled solely for the purpose of providing readers with information on a free-of-charge basis and is in no way meant to solicit transactions. Although this publication is compiled on the basis of sources which we believe to be reliable and correct, Mizuho Research Institute does not warrant its accuracy and certainty. Readers are requested to exercise their own judgment in the use of this publication. Please also note that the contents of this publication may be subject to change without prior notice. In the event readers do not wish to receive information free of charge from Mizuho Research Institute, readers are requested to notify their wish to suspend subscription.
