China Monetary Policy Report
Quarter Four, 2018

(February 21, 2019)

Monetary Policy Analysis Group of

the People's Bank of China

Executive Summary

In 2018 the global economy continued its general recovery trend, yet the external environment witnessed obvious changes with increasing uncertain factors. The Chinese economy maintained its relatively strong resilience. However, during the transitional period with new growth drivers replacing old ones, the long-accumulated and latent risks were increasingly exposed. The financing difficulties of small and micro businesses (SMBs) and private enterprises were rather prominent and the Chinese economy was under downward pressures.

Facing the internal and external environments characterized by changes and concerns amidst stability and following the arrangements of the CPC Central Committee and the State Council, the PBC adhered to the overall strategy of seeking progress while maintaining stability and implemented sound monetary policies. Insisting on the basic requirement that financing should be channeled to serve the real economy, the PBC proactively carried out innovative operations so as to address targeted problems. It adopted a series of counter-cyclical adjustments in a forward-looking manner to motivate and guide financial institutions to beef up support to the real economy, especially to small and micro enterprises and the private sector, by relieving constraints on capital, liquidity and interest rates. It enhanced the transmission of monetary policy and established a proper balance between the internal and the external equilibrium so as to provide a favorable monetary and financial environment for supply-side structural reforms and high-quality development.

First, through operations such as targeted reductions of the reserve requirement ratios and the Medium-term Lending Facility (MLF), the medium and long-term liquidity supply was increased to keep liquidity at a reasonable and adequate level. The effects of the decline in money-market interest rates have gradually been transmitted to the real economy.

Second, structural monetary-policy tools were employed and innovated to step up support for SMBs and private enterprises, while keeping the aggregate money supply at an appropriate level. The scope of collaterals for instruments such as the MLF was expanded, and quotas on central-bank lending and central-bank discounts were raised three times with a cumulative increase of RMB 400 billion, and central-bank lending rate for SMBs was lowered by 0.5 percentage point, and the scope of entities and enterprises eligible for central-bank lending to SMBs was expanded. A targeted Medium-term Lending Facility was launched to provide a long-term stable source of funding at favorable rates for financial institutions based on the growth of their loans to SMBs and private enterprises. It used perpetual bonds as one of the channels to replenish the capital of the commercial banks and launched the central-bank bill swap (CBS) to provide liquidity support for the issuance of perpetual bonds by banks.

Third, macro-prudential policies were adjusted and improved in a timely manner. The PBC gave full play to the role of macro-prudential assessments (MPA) in counter-cyclical adjustments and structural guidance. It added certain specific indices, such as indices on financing to SMBs and private enterprises and indices on debt-to-equity swaps in the MPA so as to encourage financial institutions to step up their support for the real economy. The PBC also released new asset management regulations and promoted their steady implementation.

Fourth, the PBC continued to deepen the reform of interest-rate marketization and the reform of the RMB exchange-rate formation mechanism. It further improved the self-discipline mechanism of market interest-rate pricing, promoted the orderly development of interbank CDs and large-value CDs, guided financial institutions to establish independent and reasonable pricing, and improved the formulation, adjustment and transmission mechanism of market-based interest rates. While maintaining a flexible RMB exchange rate, the PBC decisively adopted a series of targeted and innovative measures, adjusted the foreign-exchange risk reserve ratio, and reintroduced “counter-cyclical factors” in the pricing of the RMB central parity. It effectively stabilized market expectations and kept the RMB exchange rate basically stable at a reasonable and balanced level. The PBC issued central-bank bills in Hong Kong, thus improving the RMB yield curve there.

In general, the monetary-policy adjustments established a good balance between supporting the real economy and maintaining an internal and external equilibrium. It worked to better serve the real economy without massive stimulation so as to promote stable and healthy economic growth. Liquidity in the banking system was reasonable and adequate, and lending by financial institutions grew much more rapidly than during the same period in 2017. In general, the growth of broad money (M2) and all-system financing aggregates matched the growth of nominal GDP, and the macro leverage ratio remained stable. In 2018 M2 growth remained above 8 percent. RMB loans registered an increase of RMB 16.2 trillion from the beginning of the year, up by RMB 2.6 trillion from the previous year. At the end of the year, outstanding all-system financing aggregates were growing by 9.8 percent year on year. By December 2018, the weighted average interest rate on loans to non-financial enterprises and other sectors had dropped for four consecutive months, with a cumulative decrease of 0.25 percentage point. Among these, the interest rate on loans to micro firms dropped for five consecutive months, with a cumulative decrease of 0.39 percentage point. At the end of 2018, the CFETS RMB exchange-rate index was 93.28 and expectations about the RMB exchange rate were generally stable. The economy continued to grow within a reasonable range. GDP in 2018 grew by 6.6 percent, with consumption playing a bigger role in driving the economy, and the CPI rose 2.1 percent year on year.

Now there are a number of favorable factors to keep the Chinese economy operating smoothly. China will continue to be in a phase of vital strategic opportunities for a long time. The economy still has great potential as the effects of the macroeconomic policies are gradually emerging, the three critical battles start well, the supply-side structural reforms deepen, and the reform and opening-up has increased. However, as the global economic situation becomes more complicated and the risks and challenges resulting from internal and external changes affect our development in the long and short run, the endogenous growth momentum should be further enhanced. Going forward, under the overall arrangements of the CPC Central Committee and the State Council, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as guidance, the PBC will insist on the principle of seeking progress while maintaining stability, implement the concept of new development, promote high-quality development, and focus on supply-side structural reforms. To fulfill the three tasks of serving the real economy, guarding against financial risks, and deepening financial reform, the PBC will work on innovating and enhancing financial measures to make macroeconomic adjustments. It will maintain an adequate sound monetary policy with reasonably ample liquidity in the banking system and reasonably stable interest rates in the money market so as to promote the adequate growth of the money supply and of all-system financing aggregates. It will watch both the aggregate and its structure, provide innovative monetary-policy instruments, and make full use of various policies in other agencies to consolidate the micro foundation for smooth monetary-policy transmission from both the supply and demand sides. It will coordinate RMB and foreign exchange policies to strike a balance between an internal and external equilibrium, maintain the elasticity of the RMB exchange rate, and keep the RMB exchange rate generally stable at a reasonably balanced level. It will effectively prevent and defuse financial risks in key sectors and strike the right balance between promoting growth and forestalling risks. It will enhance the adaptability of the financial structure and strengthen the resilience of the financial system while also upgrading and transforming the structure of the service economy. Implementation of a sound and neutral monetary policy, enhancement of the vitality of micro entities, and full use of capital markets will form a triangular support framework to facilitate a virtuous economic circle.

Contents

Boxes

Tables

Figures

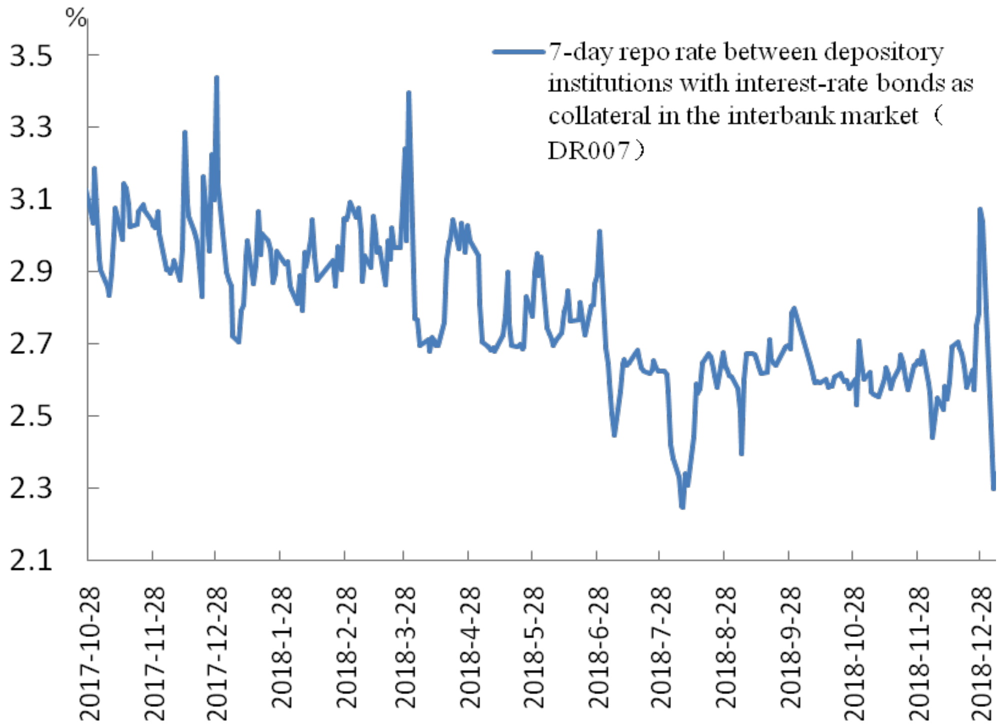
Part 1. Money and Credit Analysis

From the beginning of 2018, following the policy arrangements of the CPC Central Committee and the State Council, the PBC continued to implement sound monetary policies. In light of rising external uncertainties and heightened downward pressures on the economy, the PBC conducted and targeted preemptive adjustments and fine-tunings when appropriate, and enhanced financial support for the real economy, especially for small and micro businesses (SMBs) and private enterprises. Liquidity in the banking sector was reasonable and, abundant, and money-market rates were generally declining. Lending by financial institutions was growing rapidly, while the lending structure continued to improve. Both money supply and all-system financing aggregates increased at a steady pace. The RMB exchange rates were becoming more flexible.

I. Liquidity was ample and appropriate, and money-market rates generally declined

In 2018, the PBC increased the medium- and long-term liquidity supply through four cuts to the required reserve ratio and the use of the Medium-term Lending Facility (MLF), while flexibly conducting open market repo operations to ensure ample and appropriate liquidity in the banking system. At end-2018, the excess reserve ratio for financial institutions was 2.4 percent, which was 0.3 percentage point higher year on year. Overall, the money market functioned smoothly, with terminal interest rates declining somewhat. In December, the 7-day repo rate (DR007) between depository institutions with interest rate bonds as collateral in the interbank market stood at 2.6 percent, 30 basis points lower than that at end-2017.

Figure 1 Interest Rates in the Money Market



Source: www.chinamoney.com.cn.

II. Lending by financial institutions grew rapidly and lending rates remained stable with a slight decline

Lending grew rapidly, providing strong support for the real economy. At end-2018, outstanding loans in domestic and foreign currencies by financial institutions grew 12.9 percent year on year to RMB 141.8 trillion, which marked an increase of RMB 16.2 trillion from the start of the year and represented a year-on-year acceleration of RMB 2.6 trillion. The outstanding RMB-denominated loans grew 13.5 percent year on year to RMB 136.3 trillion, which marked an increase of RMB 16.2 trillion from the beginning of the year and represented a year-on-year acceleration of RMB 2.6 trillion. The acceleration tripled that in the previous year, which, to some extent, made up for the decline in off-balance-sheet financing. Since 2018 Q4, the PBC has further strengthened counter-cyclical adjustment, attaching importance to easing capital, liquidity and interest rate constraints that weigh on credit supply and guiding commercial banks to beef up credit support to the real economy, which has achieved good results.

The credit structure continued to improve, and loans to SMBs increased rapidly. The PBC has guided financial institutions to increase credit support to SMBs for financial inclusion purpose since mid-2018, which has gradually yielded good results. As of end-2018, incremental small and micro loans at a value below RMB 10 million per enterprise amounted to RMB 1.23 trillion, 2.3 times of that in the previous year. The outstanding small and micro loans grew by 15.2 percent year on year, representing an acceleration of 8.2 percentage points from the previous year. Broken down by sectors, the growth of RMB loans to the household sector moderated, registering 18.2 percent at end-2018, which was on a par with that at end-September and 3.2 percentage points lower than at end-2017. In particular, the growth of mortgage loans fell to 17.8 percent, down 4.4 percentage points from end-2017. Since the start of 2018, mortgage loans increased by RMB 3.9 trillion, representing a deceleration of RMB 81.8 billion year on year and constituting 24.1 percent of the total new loans, down 5.3 percentage points year on year. Other loans to the household sector increased by RMB 3.5 trillion from the beginning of the year, representing an acceleration of RMB 311.7 billion year on year. Loans to non-financial enterprises and government departments and organizations increased by RMB 8.3 trillion from the beginning of the year, representing an acceleration of RMB 1.6 trillion year on year. In terms of the maturities of RMB loans, the share of medium- and long-term loans among new loans dropped. At end-2018, medium- and long-term loans increased by RMB 10.5 trillion from the beginning of the year, representing a deceleration of RMB 1.2 trillion year on year and accounting for 65 percent of the total new loans, down 21.2 percentage points year on year.

Table 1 Structure of RMB Loans during 2018

RMB 100 million

	Outstanding amount at end-2018	Year-on-year growth	Increase from the beginning of the year	Change in the increase from the same period of the last year
RMB loans to	1,362,967	13.5%	161705	26427
Households	478,843	18.2%	73641	2299
Non-financial enterprises, government departments, and organizations	868,289	10.5%	83082	16010
Non-banking financial institutions	10,760	69.2%	4401	7584
Overseas	5,075	14.8%	581	534

Source: People’s Bank of China.

Table 2 New RMB Loans by Financial Institutions during 2018

RMB 100 million

	New loans	Year-on-year acceleration
Chinese-funded large-sized banks [1]	63388	9773
Chinese-funded small- and medium-sized banks[2]	97915	24286
Small-sized rural financial institutions[3]	20002	4400
Foreign-funded financial institutions	908	-569

Notes: 1. Chinese-funded large-sized banks refer to banks with assets (in both domestic and foreign currencies) of RMB 2 trillion or more (according to the amount of total assets in both domestic and foreign currency at end-2008).

2. Chinese-funded small- and medium-sized banks refer to banks with total assets (both in domestic and foreign currency) of less than RMB 2 trillion (according to the amount of total assets in both domestic and foreign currencies at end-2008).

3. Small-sized rural financial institutions include rural commercial banks, rural cooperative banks, and rural credit cooperatives.

Source: People's Bank of China.

Lending rates declined, with the rates of loans to enterprises as a whole and to SMBs falling for four and five consecutive months respectively. In December, the weighted average interest rate on loans to non-financial enterprises and other sectors was 5.63 percent, down 0.11 percentage point year and year and down 0.31 percentage point from September. In particular, the weighted average interest rates on ordinary loans and on bill financing registered 5.91 percent and 3.84 percent respectively, down by 0.28 and 0.38 percentage point respectively from September. Interest rates on mortgage loans remained basically stable, with the weighted average interest rate reaching 5.75 percent in December, up 0.03 percentage point from September. The previously-unveiled policies supporting private, SMBs have gradually yielded good results. The average weighted interest rate on enterprise loans fell for the fourth month in a row by 0.25 percentage point in cumulative terms; whereas the lending interest rates for SMBs fell for the fifth month in a row by 0.39 percentage point in cumulative terms. In general, the comprehensive costs of all-system financing, including bank loans, bonds and off-balance-sheet financing dropped somewhat year on year.

Broken down by floating ranges, the share of loans with interest rates above the benchmark rates dropped, whereas the share of loans with interest rates at or below the benchmark rates rose. Since August, the share of loans with interest rates above the benchmark rates has been falling continuously, and registered 65.26 percent in December, down 11.07 percentage points from July; the share of loans with interest rates below the benchmark rates registered 16.27 percent, up 6.68 percentage points from July; the share of loans with interest rates at the benchmark rate also began to rise since September.

Table 3 Shares of RMB Loans with Rates Below, At, or Above the Benchmark Rates, January through December 2018

Unit: %

Month	Lower than the benchmark	At the benchmark	Higher than the benchmark					
			Sub-total	(1,1.1]	(1.1,1.3]	(1.3,1.5]	(1.5,2.0]	More than 2.0
January	11.89	20.31	67.80	16.45	19.67	12.32	12.11	7.26
February	12.50	18.83	68.67	15.98	18.66	12.88	12.65	8.50
March	9.61	16.04	74.35	15.86	21.29	14.00	14.53	8.68
April	10.38	15.15	74.47	15.77	21.12	14.13	14.72	8.73
May	9.03	14.36	76.61	16.60	20.85	14.39	15.65	9.12
June	9.93	14.83	75.24	15.19	21.36	14.10	16.32	8.27
July	9.59	14.08	76.33	14.96	21.08	14.07	16.63	9.59
August	11.87	13.33	74.81	13.20	20.53	14.23	16.31	10.55
September	12.60	13.64	73.76	12.79	21.26	13.87	16.06	9.78
October	12.91	14.40	72.69	12.15	19.73	13.22	16.49	11.10
November	14.92	14.87	70.21	12.39	19.71	13.12	15.28	9.70
December	16.27	18.47	65.26	13.59	17.81	11.52	13.89	8.45

Source: People's Bank of China.

Affected by the four interest rate hikes by the Federal Reserve and the changes in the balance between supply and demand in domestic foreign-currency funds, interest rates on foreign-currency deposits and loans continued to rise. In December, the weighted average interest rates on large-value USD demand deposits and deposits with maturities within 3 months registered 0.40 percent and 2.64 percent respectively, up 0.20 and 0.94 percentage point from end-2017. The weighted average interest rates of USD loans with maturities within 3 months and with maturities between 3 months (including 3 months) and 6 months registered 3.61 percent and 3.89 percent respectively, up 0.94 and 0.90 percentage point from end-2017.

Table 4 Average Interest Rates of Large-Value Deposits and Loans in USD, January through December 2018

Unit: %

Month	Large-value deposits						Loans				
	Demand deposits	Within 3 months	3–6 months (including 3 months)	6–12 months (including 6 months)	1 year	More than 1 year	Within 3 months	3–6 months (including 3 months)	6–12 months (including 6 months)	1 year	More than 1 year
January	0.19	1.79	2.37	2.61	2.77	2.87	2.72	3.10	2.84	3.04	4.48
February	0.18	1.82	2.39	2.70	2.97	2.81	2.79	3.28	2.95	3.21	4.11
March	0.30	1.92	2.70	3.09	3.28	3.33	3.17	3.42	3.21	3.73	4.23
April	0.31	2.00	2.90	3.21	2.82	3.26	3.28	3.63	3.39	3.67	4.99
May	0.32	2.06	3.30	3.45	3.31	3.23	3.30	3.60	3.49	3.60	4.60
June	0.33	2.15	2.95	2.95	3.40	3.43	3.35	3.61	3.55	3.67	4.32
July	0.30	2.18	2.94	3.11	3.41	3.34	3.47	3.67	3.57	3.61	4.66
August	0.38	2.23	3.00	3.20	2.80	3.54	3.50	3.71	3.59	4.01	4.39
September	0.40	2.34	2.95	3.37	3.03	3.19	3.49	3.66	3.56	3.82	4.49
October	0.42	2.45	3.03	3.33	3.68	3.09	3.64	3.87	3.89	5.09	4.74
November	0.37	2.46	3.22	3.75	3.74	3.99	3.65	4.05	4.07	4.21	4.85
December	0.40	2.64	3.31	3.45	3.54	3.59	3.61	3.89	3.91	3.93	4.74

Source: People's Bank of China.

Growth of deposits moderated, with term deposits accounting for a larger share of the total new deposits. At end-2018, outstanding deposits in domestic and foreign currency in all financial institutions posted RMB 182.5 trillion, up 7.8 percent year on year and a deceleration of 1.0 percentage point from end-2017. This also marked an increase of RMB 13.2 trillion from the beginning of the year and a deceleration of RMB 504 billion year on year. Outstanding RMB deposits registered RMB 177.5 trillion, up 8.2 percent year on year and a deceleration of 0.8 percentage point from the end of the last year. This represented an increase of RMB 13.4 trillion from the start of the year and a deceleration of RMB 107.1 billion year on year. Outstanding deposits in foreign currencies stood at USD 727.5 billion, a decrease of USD 63.4 billion from the beginning of the year. In 2018, term deposits accounted for 80.7 percent of new deposits by households and non-financial enterprises, up 25.9 percentage points year on year. Broken down by sectors, deposits by households and non-banking financial institutions registered a year-on-year acceleration of RMB 2.6 trillion and RMB 730 billion respectively, whereas deposits by non-financial enterprises and the government sector recorded a year-on-year deceleration of RMB 1.9 trillion and 1.4 trillion respectively.

Table 5 The Structure of RMB Deposits during 2018

RMB 100 million

	Deposits at end-2018	Year-on-year growth	Increase from the beginning of the year	Change in the increase from the same period of the last year
RMB deposits	1,775,226	8.2%	134,049	-1071
Households	716,038	11.2%	71,970	25985
Non-financial enterprises	562,976	3.8%	21,584	-19320
Government	325,585	6.8%	20,566	-13627
Non-banking financial institutions	159,798	14.5%	19,569	7300
Overseas	10,828	3.5%	361	-1409

Source: People’s Bank of China.

III. The Money supply and all-system financing aggregates increased moderately

The M2 growth stabilized and was roughly equivalent to nominal GDP growth. At end-2018, outstanding M2 stood at RMB 182.7 trillion, up 8.1 percent year on year, same as its growth during the previous year. Outstanding M1 was RMB 55.2 trillion, up 1.5 percent year on year. Outstanding M0 reached RMB 7.3 trillion, up 3.6 percent year on year. During 2018, on a net basis, PBC injected RMB 256.3 billion of cash into the economy, an increase of RMB 22.1 billion year on year. The M@ growth in 2018 stabilized at over 8 percent, generally in line with nominal GDP growth, and the overall leverage ratio was stable. At end-January 2019, outstanding M2 was RMB 186.6 trillion, up 8.4 percent, an acceleration of 0.3 from end-December 2018.

Box 1 Money Issuance Mechanism

Money issuance covers both cash issuance and the creation of broad money such as deposits. In the system of credit currency system, while commercial banks create broad money by expanding their assets such as issuing loans, the central bank creates base money by expanding its assets and adjusts the capacity of commercial banks to create broad money by adjusting base money.

Across the world, an economy usually selects the money issuance mechanism on basis of its own economic development and the need of monetary policy control. For example, the US Federal Reserve provides base money by purchasing and selling sovereign bonds in the open market. The foundation of its money issuance is its fiscal credit. Before the global financial crisis, the American banking system held a small amount of reserves and the vast majority of base money was in the form of cash. Therefore, the amount of sovereign bonds purchased by the US Federal Reserve was linked to the amount of cash it issued. The money issuance mechanism does not remain unchanged all the time and can be adjusted based on actual needs. In response to the shocks of the Global Financial Crisis, developed economies such as US, Europe and Japan implemented QE and other unconventional monetary policies after 2008, supplying a large amount of base money to the market by purchasing sovereign bonds, credit bonds with high ratings, ETFs, etc.

China’s money issuance mechanism mainly serves the economic development and macro-control, subject to adjustment according to the requirement in different period of time. In more than a decade into the new century, Chinese economy was featured by sustained and large “double surplus” of BOP and the accumulation of foreign reserves. In order to adapt to the situation, PBC supplied base money by purchasing corresponding amount of foreign reserves in the market while initiating the reform of exchange rate regime and enhancing the flexibility of RMB exchange rate. Although China supplied base money through funds from foreign reserves at this stage, it doesn’t mean that money issuance and credit expansion in China were subject to USD or other currencies. In fact, foreign reserves, for which Chinese exports are exchanged, can be used to purchase goods from other countries at any time. Therefore, the foundation of RMB issuance is, in nature, the goods under the state control. While buying FX and supplying RMB, PBC offset massive liquidity through reserves ratio hikes, open market operations and issuance of central bank bills, etc., and enhanced the flexibility of RMB exchange rate. The measures effectively coped with the challenges and problems of “double surplus”, helped maintain the basic stability of prices and steady economic growth and created a suitable monetary environment for economic restructuring.

Since 2014, with China’s BOP closer to equilibrium, PBC has supplied base money to the market and provided strong support to the priority industries and weak sectors of the economy through open market operations, MLF, PSL and other facilities. The central bank’s capacity to supply and adjust liquidity has been further strengthened. The changes of base money issuance mechanism are in line with the new situation and changes of the economic and financial development, effectively meet the demand of broad money created by the banking system and provide foundation for the transmission of monetary policy framework from quantity-based to price-based scheme.

In general, the arrangements and adjustments of RMB issuance mechanism are basically in line with the economic and financial development in China They reflect the independence and proactive nature of Chinese monetary policies. At present, Chinese financial system is dominated by banks, which are the vital to monetary policy transmission. It has been proved effective for PBC to encourage or adjust bank loans to create deposit money through market-oriented monetary policy operations. There is still plenty of room for monetary policies, no need to make large-scale asset (such as sovereign bonds) purchases from the financial market and no need to implement the so-called QE. Going forward, based on the economic and financial development and the need for financial macro-adjustment, PBC will continue to improve RMB issuance mechanism, clear the monetary policy transmission channels and enable the financial sector to better serve the real economy development.

All-system financing aggregates increased moderately. According to preliminary statistics, outstanding all-system financing aggregates reached RMB 200.75 trillion at end-2018, up 9.8 percent year on year. During the whole year, incremental all-system financing aggregates reached RMB 19.26 trillion, down RMB 3.14 trillion year on year, mainly due to sharp decrease of off-balance sheet financing. Incremental all-system financing aggregates were characterized by the following: first, growth of RMB loans to the real economy registered a year-on-year acceleration. During 2018, RMB loans by financial institutions to the real economy increased by RMB 15.67 trillion, an acceleration of RMB 1.83 trillion from the same period of the previous year and accounting for 81.4 percent of the incremental all-system financing aggregates. Second, the growth of entrusted loans, trust loans and undiscounted bankers' acceptance bills registered a significant year-on-year deceleration. During 2018, the three types of off-balance sheet financing decreased by RMB 2.93 trillion, representing a deceleration of RMB 6.5 trillion from the previous year. Third, corporate debt financing registered a significant year-on-year acceleration and equity financing registered a year-on-year deceleration. During 2018, corporate debt financing registered RMB 2.48 trillion, a year-on-year increase of RMB 2.03 trillion, and equity financing by non-financial enterprises recorded RMB 360.6 billion, a year-on-year decrease of RMB 515.3 billion. Fourth, special bonds issued by local governments registered a year-on-year deceleration. During 2018, local government special bond financing recorded RMB 1.79 trillion, down RMB 211.0 billion from the last year. Fifth, asset-backed securities and loan write-off by deposit-taking financial institutions registered an acceleration. During 2018, in the category of other financing, asset-backed security financing by deposit-taking financial institutions recorded RMB 594.0 billion, an acceleration of RMB 396.3 billion year on year; loan write-off recorded RMB 1.02 trillion, an acceleration of RMB 256.5 billion. As of end-January 2019, outstanding all-system financing reached RMB 205.08 trillion, up 10.4% year on year. From the perspective of financing structure, in 2018, the outstanding RMB loans to the real economy accounted for 67.4 percent of the outstanding all-system financing, up 1.9 percentage points year on year.

Table 6 All-system Financing Aggregates during the 2018

Unit: RMB 100 million

	At End 2018		2018	
	Outstanding （RMB trillion）	Year-on-year Change	Increment （RMB trillion）	Year-on-year change (RMB 100 million)
All-system Financing Aggregate	200.75	9.8	192584	-31386
Of Which：RMB Loans	134.69	13.2	156712	18280
Foreign Currency Loans （Converted into RMB）	2.21	-10.7	-4201	-4219
Entrusted Loans	12.36	-11.5	-16067	-23837
Trust Loans	7.85	-8	-6901	-29456
Undiscounted Bankers' Acceptance Bills	3.81	-14.3	-6343	-11707
Corporate Debt	20.13	9.2	24756	20335
Specific Bonds Issued by Local Governments	7.27	32.6	17852	-2110
Domestic Equity Financing by Non-financial Enterprises	7.01	5.4	3606	-5153
Other Financing	5.25	43.3	15901	5834
Of Which ：Asset-backed Securities by Deposit-taking Financial Institutions	1.28	86.7	5940	3963
Loan Write-Off	3.01	50.9	10151	2565

Notes: 1. The outstanding all-system financing aggregates refer to the balance of financing provided by the financial system to the real economy at the end of a certain period of time. The increment in the all-system financing aggregate refers to the volume of financing provided by the financial system to the real economy during a certain period of time.

2. Since July 2018, PBC has improved its statistical method for all-system financing aggregates and has included "asset-backed securities by deposit-taking financial institutions" and "loan write-off" into the all-system financing aggregates, under the category of "other financing."

3. Since August 2018, the issuance of local government specific bonds has accelerated, which has had a significant "replacement effect" on bank loans and corporate debts. In order to reflect the "replacement effect" in the all-system financing aggregates, beginning in September 2018 PBC started to include "specific bonds issued by local governments" in the statistics of the all-system financing aggregates and the data on specific bonds issued by local governments are calculated based on the registration date of the claim and debt.

Sources: People's Bank of China, China Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, China Central Depository & Clearing Co., Ltd., National Association of Financial Market Institutional Investors, and so forth.

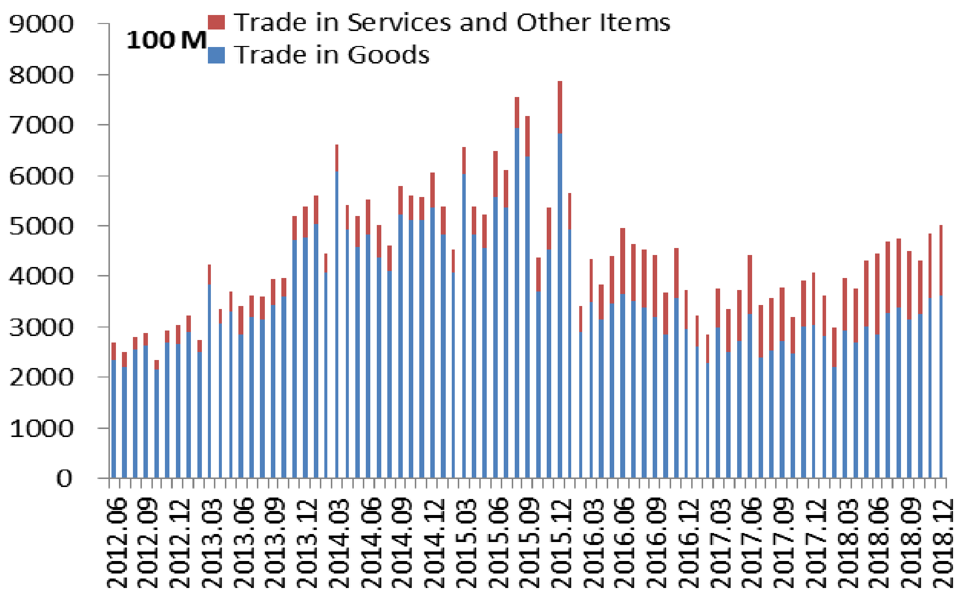
IV. The RMB exchange rate was basically stable and more flexible in terms of two-way fluctuations, and cross-border RMB transactions saw rapid growth

The RMB exchange rate against a basket of currencies has remained basically stable; the flexibility of the RMB exchange rate against the USD strengthened further, with stronger two-way fluctuations; and exchange-rate expectations remained well-anchored. At end-2018, the CFETS RMB exchange-rate index closed at 93.28, down 1.7 percent from end-2017; the RMB exchange-rate index based on the SDR basket closed at 93.14, down 3.0 percent from end-2017. According to calculations by the Bank for International Settlements (BIS), during 2018, the NEER and REER of the RMB appreciated by 1.17 percent and 0.94 percent respectively. From the reform of the exchange-rate formation regime in 2005 to end-September 2018, the NEER and REER of the RMB appreciated by 35.54 percent and 44.37

percent respectively. At end-2018, the central parity of the RMB against the USD was 6.8632, a depreciation of 4.8 percent from end-2017. From the launch of reform on exchange-rate formation regime in 2005 to end-2018, the central parity of the RMB against the USD appreciated by 20.59 percent on a cumulative basis. During 2018, the annualized volatility rate of the central parity of the RMB against the USD was 4.2 percent, which was a significant increase from the last year, which played a bigger role of "automatic stabilizer" in adjusting the macro-economy and the balance of payments.

Cross-border RMB transactions grew rapidly with balanced receipts and payments. In 2018, cross-border receipts and payments in RMB totaled RMB 15.85 trillion, up 46 percent year on year. In particular, RMB receipts and payments registered RMB 8 trillion and RMB 7.85 trillion respectively. RMB cross-border receipts and payments under the current account posted RMB 5.11 trillion, a year-on-year increase of 18 percent. In particular, the settlement of trade in goods registered RMB 3.66 trillion, whereas the settlement of trade in services and other items registered RMB 1.45 trillion. RMB cross-border receipts and payments under the capital account posted RMB 10.74 trillion, a year-on-year increase of 65 percent.

Figure 2 Monthly RMB Payments and Receipts under the Current Account



Source: People's Bank of China.

Part 2. Monetary-Policy Operations

In 2018 the domestic and international economic and financial situations became more complex and changeable. By comprehensively implementing the arrangements of the Central Committee of the Communist Party of China (CPC) and the State Council, the PBC adopted a sound and neutral monetary policy and, in accordance with the changing situation, preemptively conducted a series of counter-cyclical measures to ensure that monetary policy would be neither too tight nor too loose, liquidity would remain at reasonable and sufficient levels, and the reasonable growth of money and credit and financing aggregates would be maintained to contribute to the mutually reinforcing interactions between economic and financial developments and to create a favorable monetary and financial environment for supply-side structural reforms and high-quality development.

I. Conducting Open Market Operations (OMOs) in a flexible manner

Conducting short-term repos in a flexible manner. In order to make up for the short-term liquidity gap and to keep total liquidity in the banking system at reasonable and sufficient levels, the PBC flexibly conducted OMOs mainly through 7-day repos combined with operations of different maturities as timely counter-measures against the impact on liquidity of taxation, holiday cash supplies, quarter-end regulatory assessments, and other factors. At the same time, in view of the increased episodes of endogenous volatility of market liquidity during the structural de-leveraging of the financial system, the PBC appropriately increased the liquidity cushion at critical points in time to maintain smooth operations in the financial market. In addition, the PBC disclosed information, such as changes in liquidity, through the *Announcement on Open Market Transactions*, improved the transparency of monetary-policy operations, effectively guided market expectations, and enhanced the effects of operations.

Guiding money-market interest rates in a downward direction. The DR007—the money-market benchmark rate—declined from about 2.9 percent at the beginning of the year to about 2.6 percent, and it remained stable since the fourth quarter until the Spring Festival of 2019. In the first quarter of 2018, the PBC's 7-day repo rate rose by 5 basis points after the Fed's rate hike, and the interest rates of other operations rose accordingly. Since the second quarter, the Fed raised interest rates three times, while the PBC stabilized OMO rates so as to consolidate the transmission effect of a declining rate from the money market to the bond and credit market, which created a favorable monetary and financial environment to stabilize the financing demands of the real economy, to reduce the financing costs of small and micro-businesses (SMBs), and to help stabilize market expectations about economic prospects.

In 2018 the PBC conducted a total of RMB 10.84 trillion of repos, including RMB 7.1 trillion of 7-day operations, RMB 2.6 trillion of 14-day operations, RMB 910 billion of 28-day operations, and RMB 230 billion of 63-day operations. At the end of the year, outstanding repos stood at RMB 840 billion.

II. Conducting the Medium-term Lending Facility (MLF) and the Standing Lending Facility (SLF) in a timely manner

MLF operations were conducted in a timely manner to make up for the medium and long-term liquidity gap in the banking system. The MLF has become an important channel for the supply of base money. In 2018 the PBC carried out a total of RMB 4951 billion of MLF operations, all with a maturity of 1 year. A total of RMB 1223.5 billion, RMB 1186.5 billion, RMB 1664 billion, and RMB 877 billion of MLF operations was conducted in each quarter respectively. At the end of the year, outstanding of MLF operations stood at RMB 4931.5 billion, an increase of RMB 410 billion over the beginning of the year. The bid rate of the MLF rose by 5 basis points in the second quarter and since then has remained stable. In 2018 the bid rate of the last operation with a 1-year maturity recorded 3.30 percent. In April and October, some financial institutions used the funds released by the RRR cuts to replace a total of RMB 1351.5 billion of MLFs.

SLF operations were conducted in a timely manner to meet the short-term liquidity needs of small and medium-sized financial institutions during the Spring Festival and at month-end and quarter-end when money-market interest rates were prone to fluctuations. In 2018 the PBC conducted a total of RMB 438.5 billion of SLF operations. In each quarter, it carried out RMB 106.9 billion, RMB 142.5 billion, RMB 51.9 billion, and RMB 137.2 billion of SLF operations respectively, and year-end outstanding SLFs stood at RMB 92.8 billion. The PBC will explore the role of the SLF rate as the ceiling of the interest-rate corridor to promote the smooth operation of the money market. As required by the implementation of monetary policy, in the first quarter the SLF rate was raised by 5 basis points and since then it has remained stable. Currently, the overnight, 7-day, and 1-month SLF rates are 3.40 percent, 3.55 percent, and 3.90 percent respectively.

III. Cutting the RRRs for financial institutions

In 2018 the RRRs for financial institutions were lowered four times, and credit support for SMBs, private enterprises, and other sectors in the real economy was strengthened. In January, the targeted RRR cut for inclusive finance was fully implemented, releasing about RMB 450 billion. A targeted RRR cut for inclusive finance expands and optimizes the targeted RRR cut to the extent that it applies a lower RRR to financial institutions whose financial inclusion loans reach a certain standard. In April and October, the PBC on two occasions lowered the RRR for large commercial banks, joint-stock commercial banks, city commercial banks, non-county rural commercial banks, and foreign-funded commercial banks by one percentage point respectively, and partly replaced the outstanding MLFs with a net liquidity supply of about RMB 1.15 trillion. In July 2018, the PBC cut the RRR for large commercial banks, joint-stock commercial banks, city commercial banks, non-county rural commercial banks, and foreign banks by 0.5 percentage point. Specifically, 5 state-owned commercial banks and 12 joint-stock commercial banks saw the release of liquidity in the amount of about RMB 500 billion, which was used to support law-based and market-based debt-for-equity swaps. Meanwhile, other financial institutions released liquidity in the amount of about RMB 200 billion. These measures will help enhance the stability of liquidity in the banking system, optimize the liquidity structure, and expand the financial institutions' sources of funds to increase support to key areas and weak links, such as SMBs, private enterprises, and law-based and market-based debt-for-equity swaps so as to promote the healthy development of the real economy.

In January 2019 the PBC lowered the RRR for financial institutions, adjusted the assessment criterion, and conducted a dynamic assessment of the targeted

RRR cut for inclusive finance. First, the PBC cut the RRR for financial institutions by 1 percentage point, implementing it in two installments, which unleashed a net amount of over RMB 300 billion of long-term liquidity. In addition, the outstanding MLFs that were due to mature in the first quarter of this year will not be renewed. **Second,** starting from 2019 the PBC adjusted the assessment criterion of loans granted to SMBs by implementing the targeted RRR cuts from "less than RMB 5 million per enterprise" to "less than RMB 10 million per enterprise." This move will expand the coverage of the targeted RRR cuts and benefit more SMBs. **Third,** the PBC conducted the 2018 dynamic assessment of the targeted RRR cuts for inclusive finance. Due to policy incentives, more financial institutions met the criteria for targeted RRR cuts aimed at encouraging inclusive finance and freeing up a long-term fund in a net amount of about RMB 250 billion. With the adoption of the targeted RRR cuts as a substitute for the MLFs, combined with the dynamic assessment for inclusive finance targeted RRR cuts, and the RMB 257.5 billion of targeted MLF operations conducted in January, a total of about RMB 800 billion of long-term liquidity was released.

Box 2 The Current Reserve Requirement Ratio for Financial Institutions

On January 4, 2019, the PBC announced it would lower the financial institutions' reserve requirement ratio (RRR) by 1 percentage point. The reduction was implemented in two steps and was completed on January 25. To date, there are three figures for benchmark RRRs, i.e., 13.5 percent for large commercial banks, 11.5 percent for small- and medium-sized commercial banks, and 8 percent for county-level financial institutions in rural areas. Large commercial banks include 6 financial institutions, namely the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (IBC), the Bank of China (BOC), the China Construction Bank (CBC), the Bank of Communications (BOC), and the Postal Savings Bank of China (PSBC). Small- and medium-sized commercial banks mainly consist of joint-stock commercial banks, city commercial banks, non-county level commercial banks in rural areas, private banks, and foreign-funded banks. County and rural financial institutions mainly include rural credit cooperatives, rural cooperative banks, and village and township banks.

Based on the above benchmarks, the PBC carried out evaluations of the RRR cuts for financial institutions in a targeted manner. The aim was to promote inclusive finance and to ensure that a certain portion of new deposits goes to local loans. Both the large commercial banks and the small- and medium-sized commercial banks can participate in the evaluation to apply for RRR cuts. Once they meet certain criteria, their reserve requirement ratios can be lowered further, i.e., by 0.5 or 1.5 percentage points from the corresponding benchmark rate. When the local loans of county and rural commercial banks and financial institutions account for a certain proportion of their new deposits, they can enjoy a further RRR cut of 1 percentage point from the corresponding benchmark mark. These two measures are aimed at encouraging financial institutions to allocate more financing resources to inclusive finance, such as small and medium-sized enterprises (SMEs) and agriculture-related areas. On January 25, 2019, the PBC completed its work to adjust the dynamic evaluation arrangements for the targeted RRR cuts for inclusive finance purposes.

With the above measures, all six of the largest commercial banks must be qualified for at least the minimum notch of the targeted RRR cuts. Their effective RRRs are now 12 or 13 percent. The effective RRRs for small- and medium-sized commercial banks are 10 percent, 11 percent, or 11.5 percent. The effective RRRs for county and rural financial institutions are 7 or 8 percent. Most financial institutions are eligible for reduced RRRs. At present, the actual RRR applied to policy banks is 7.5 percent, and the RRR applied to finance companies, financial leasing companies, and auto finance companies is 6 percent. The weighted average RRR for all financial institutions is 11 percent.

IV. Further improving the framework for macro-prudential policies

The PBC enhanced macro-prudential management and gave full play to the

counter-cyclical role of macro-prudential assessments (MPA). The MPA parameters were adjusted to expand the scope for the broad credit growth of financial institutions, encourage the inclusion of eligible off-balance-sheet assets onto the balance sheet, and therefore to guide financial institutions to increase support for the real economy. In order to give full play to the guiding role of the MPA in the structural adjustments, the PBC added special indicators to assess the performance of financial institutions in supporting private enterprises, SMBs, and debt-to-equity swaps.

The foreign-exchange risk reserve ratio was adjusted in a timely manner. Since Q2 of 2018, due to factors such as trade tensions and changes in the international foreign-exchange market, there have been signs of pro-cyclical fluctuations in the foreign-exchange market. In order to prevent macro-financial risks, promote the sound management of financial institutions, and strengthen macro-prudential management, the PBC decided to adjust the foreign-exchange risk reserve ratio for forward foreign-exchange sales business from 0 to 20 percent, starting from August 6.

New regulations and detailed rules on asset management were promulgated. In order to follow the guidance of the 19th National Congress of the CPC and the requirements of the national financial work conference and to effectively prevent and mitigate financial risks, the PBC, together with the relevant departments, formulated and promulgated the *Guiding Opinions on Regulating the Asset Management Business of Financial Institutions* (hereinafter referred to as “the new regulations on asset management”). On March 28, 2018, the first meeting of the Central Committee on the Comprehensive Deepening of Reform deliberated and adopted new regulations on assets management. On April 27, as approved by the State Council, the PBC, the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission, and the State Administration of Foreign Exchange jointly issued the *Guiding Opinions on Regulating the Asset Management Business of Financial Institutions* (Yinfa [2018], No. 106), which unified the regulatory standards based on the categories of the asset management products to make up for regulatory defects, deal with market chaos, and prevent systemic risks. On July 20, in order to guide financial institutions to better implement the new regulations on asset management and to ensure a smooth transition amid increasing external shocks, such as the U.S.-China trade tensions and the slower growth of social financing aggregates, the PBC issued the *Notice of the General Office of the People's Bank of China on Further Clarifying Matters Related to the Guiding Opinions for Regulating the Asset Management Business of Financial Institutions* (Yinbanfa [2018], No. 129 (hereafter referred to as the "Notice") to further clarify specific operational issues during the transition period to signal active support for the financing of the real economy. After the Notice was issued, the issuance of asset management products accelerated, some investments that had been suspended by institutions due to their wait-and-see attitude were resumed, and market confidence was boosted. Meanwhile, the PBC and other financial regulators strengthened communications and coordination to promote the introduction of detailed rules to support the new regulations. Since September 2018 detailed rules consistent with the overall framework for the new regulations on asset management have been formulated and implemented in various asset management industries, such as the banks' wealth management business, subsidiaries of the banks' wealth management business, and securities and private equity asset management business, to further clarify the regulatory requirements for specific industries so as to promote the return of the asset management business to its original source and to guide the asset management funds to enter the real economy and financial markets in a legal and standardized manner.

V. Supporting the expansion of credit supply for key areas and weak links, such as SMBs and private enterprises

The PBC actively used central-bank lending, central-bank discounts, Pledged Supplementary Lending (PSL), and other policy instruments to guide financial institutions to increase support for key areas and weak links in the economy such

as SMBs and private enterprises. Since 2018 the PBC has expanded central-bank lending and discounts by RMB 400 billion to support SMBs, agriculture, rural areas, and farmers. In addition, the PBC cut the rate of central-bank lending to support the SMBs by 0.5 percentage point to guide financial institutions to increase financing to SMBs and private enterprises so as to reduce their financing costs. At year-end, outstanding central-bank lending and discounts amounted to RMB 833.2 billion, an increase of RMB 300.9 billion compared with the start of the year. Among this, central-bank lending for supporting agriculture, rural areas, and farmers stood at RMB 287.0 billion (including RMB 182.2 billion for poverty alleviation), lending for SMBs posted RMB 217.2 billion, and central-bank discounts stood at RMB 329.0 billion. In 2018 PSLs to policy and development banks posted RMB 691.9 billion, with a year-end outstanding value of RMB 3379.5 billion.

A Targeted Medium-term Lending Facility (TMLF) was introduced. In December 2018 the PBC introduced a TMLF to provide long-term stable funding to financial institutions as targeted support for them to increase credit to SMBs and private enterprises. On January 23, 2019, the PBC carried out TMLF operations for Q1. The interest rate of the TMLF was 15 basis points lower than that of the MLF and the amount of the TMLF operations was RMB 257.5 billion. The amount of the TMLFs is determined by taking into account the extent of credit support that financial institutions extend to SMBs and to private enterprises, which will be conducive to leveraging bank credit to support the weak links in the real economy.

A Central Bank Bills Swap (CBS) was launched to promote the issuance of perpetual bonds. The PBC, together with the relevant departments, accelerated the issuance of perpetual bonds issued by banks to replenish their capital and clearly set the maturity date of perpetual bonds as the banks' duration and allowed such bonds to be included in other Tier-1 capital. On January 25, 2019, the first perpetual bond was successfully issued, with a bid-to-cover ratio of 2 and a coupon rate at the lower limit of the market forecast range. To improve the liquidity of the banks' perpetual bonds (including capital bonds without fixed terms) and to encourage banks to replenish capital through the issuance of perpetual bonds, the PBC launched the CBS in January 2019. Primary dealers in open market operations can swap perpetual bonds issued by qualified banks for central-bank bills with the PBC. On February 20, the PBC conducted the first 1-year CBS, at a rate of 0.25 percent and in an amount of RMB 1.5 billion. The CBS allows financial institutions holding banks' perpetual bonds to have more high-quality collateral, improves market liquidity of such bonds, and makes them more attractive to market investors, thereby supporting banks to replenish capital via the issuance of perpetual bonds and creating favorable conditions for stepping up financial support for the real economy. It also helps improve the monetary-policy transmission mechanism, prevent and mitigate financial risks and ease the financing difficulties faced by SMBs and private enterprises. As a "bond for bond swap" which does not involve the injection or withdrawal of base money, the CBS is not quantitative easing and it will have a neutral effect on liquidity in the banking system.

The PBC appropriately expanded the scope of eligible collateral. The scope of eligible collateral was expanded to cover financial bonds with a rating of AA or higher and was issued to support SMBs, green economy, agriculture, rural areas, and farmers, AA+ or AA corporate debenture bonds, high-quality SMBs, private enterprises, and green loans, as well as banks' perpetual bonds with ratings of no lower than AA. The PBC promoted nationwide pledges of credit assets and central-bank internal ratings.

Box 3 Using Structured Monetary-Policy Tools to Support the Development of Private Enterprises and SMEs

A prudent monetary policy that is "neither too tight nor too loose" means that it provides a reasonable level of overall liquidity, its structure is optimized, and it can create a favorable monetary and financial environment for supply-side structural reforms and for high-quality growth. On the one hand, to implement a prudent monetary policy the total volume of liquidity must be managed. In other words, we must prevent sudden credit crunches from hurting the real economy and, at the same time, we also must avoid flooding the system with too much liquidity, which will hamper our deleveraging efforts. On the other hand, we must make sure that liquidity goes to the right places. We will make efforts to give full play to the structured monetary-policy tools in providing liquidity in a targeted manner so as to enhance the vibrancy of market players while keeping overall liquidity at an appropriate level. In order to find the right balance between the level of overall liquidity and its structure and to make sure that the policy is “neither too tight nor too loose” we need to appropriately use structured monetary-policy tools.

Conventional economic theories hold that monetary policy belongs to short-term aggregate-level policies and cannot be used to effectively adjust the economic structure. These theories are correct with certain prerequisites, but there are situations where these theories do not work. In the aftermath of 2008 Global Financial Crisis, the major advanced economies made efforts to explore the theories and practices of structured monetary-policy tools. For instance, the European Central Bank unveiled its Targeted Long-term Refinancing Operation (TLTRO), the Bank of England launched its Funding for Lending Scheme (FLS), and the Bank of Japan introduced a Lending Support Plan (LSP). All these measures helped improve monetary-policy transmission and enhanced support from the financial sector to the real economy. In China, when implementing monetary policies the PBC always attaches importance to coordinating credit and industrial policies. With years of practice, it has accumulated abundant experience and has established a solid foundation for promoting structural monetary policies. Among others, these policies include differentiated reserve requirement ratios, central-bank lending, and credit policies. They have played a positive role in supporting the development of key areas and weak links in the economy.

Since 2018 the PBC has strengthened its preemptive adjustments and fine-tunings in a forward-looking manner to keep a reasonable and ample level of liquidity in the banking system. From the perspective of the monetary-policy transmission mechanism, whether the liquidity, when injected into the system, can be transmitted to the real economy and used effectively depends on the willingness and the capability of those who supply the funds and on those who need them. If credit expansion is constrained, then the liquidity in the financial system cannot reach the real economy. When this occurs, merely adjusting the overall liquidity level may not deliver the desired results. In fact, structured adjustments may facilitate adjustments in the overall liquidity level and a failure to adjust the structure may end in a failure to adjust the overall liquidity level. Therefore, when working to ensure an appropriate level of overall liquidity, we must bear in mind its structure. We need to use targeted measures to improve the monetary-policy transmission channels so as to guide more funding resources to the real economy. In a modern monetary system, credit expansion by banks lies at the center of the operations of the monetary system. The key to improving the transmission of monetary policy is to guide the banks' behavior. Instead of using administrative measures, we should make efforts to improve the system by introducing positive incentive mechanisms to encourage commercial banks to proactively step up their support to the real economy.

Since 2018, in the face of complex economic and financial conditions, the PBC has carried out further innovations and practices on structured monetary-policy instruments in a proactive and market-based manner. The PBC has designed an incentive-compatible mechanism in which it uses counter-cyclical adjustment measures on the one hand and enhances the weak links and promotes long-term institutional development on the other hand. With these efforts, the PBC has effectively strengthened support to the key areas in the economy, such as private enterprises and small and micro businesses (SMBs).

First, the PBC cut the reserve requirement ratio on four occasions to release medium- and long-term funds. This has improved the liquidity structure and has guided financial institutions to strengthen their efforts to support inclusive finance areas, such as agriculture-related fields, SMBs, poverty alleviation, "mass entrepreneurship and innovation," and other areas such as private enterprises and debt-for-equity swaps.

Second, the PBC carried out innovative explorations to upgrade central-bank lending to support credit policies. By adopting a new approach of letting banks "first grant loans to firms and then borrow from the central bank," the PBC guided commercial banks to channel more financial resources to private enterprises and SMBs. Under this mode, commercial banks are asked to keep accounts of the loans they extend under the quota that they are granted. The efficiency of approving central-bank lending has been improved by approving a credit line under which multiple withdrawals can be automatically granted. The PBC increased central-bank lending on three occasions by RMB 400 billion and lowered the interest rate of specialized central-bank lending for small enterprises by 0.5 percentage point. The PBC also initiated pilot programs in twelve provinces to improve the pricing mechanism for loans under "the poverty reduction loan scheme."

Third, the PBC widened the scope of eligible collateral for monetary-policy instruments, such as central-bank lending, to include bonds issued by SMBs with credit ratings no lower than AA as well as normal SMB loans for financial inclusion purposes, private enterprises loans, and green loans that have not been rated by the central bank's internal rating process. The criterion for granting SMB loans for inclusive finance purposes was extended from "no more than RMB 5 million per enterprise" to "no more than RMB 10 million per enterprise."

Fourth, the role of the Macro-Prudential Assessment (MPA) in providing structural guidance was brought into play. New measures were added to assess the financial institutions' performance in supporting SMBs, private enterprises, and debt-for-equity swaps.

Fifth, the PBC made innovative explorations and introduced tools to support bond financing by private enterprises. According to this arrangement, the PBC provides part of the initial funds and specialized institutions provide credit enhancement services to private enterprises to help them issue bonds.

Sixth, the PBC introduced the Targeted Medium-term Lending Facility (TMLF) to provide long-term liquidity with favorable interest rates to major financial institutions. The amount of the TMLF is linked to the performance of major financial institutions in supporting SMBs and private enterprises.

Seventh, the PBC accelerated steps to encourage banks to issue perpetual debts to raise additional capital. The PBC used the introduction of perpetual debts as a chance to require banks to raise additional capital. For this, the PBC introduced the Central Bank Bills Swap (CBS) to provide liquidity support for the banks' issuance of perpetual bonds.

To sum up, structured monetary-policy tools are quite effective in guiding financial institutions and improving the financing conditions for SMBs and private enterprises. Financial services in key areas and weak links in the economy, such as private enterprises and SMBs, have seen improvements on the margins, and these services have taken on the features of "increased quantity, reduced prices, expanded coverage, and a trend in the direction of recovery. In 2018 SMB loans for inclusive finance purposes grew substantially. The year-on-year growth of outstanding SMB loans at end-2018 accelerated by 8.2 percentage points from the previous year, with declining financing costs. In December, newly issued SMB loans with an amount of under RMB 10 million had an average interest rate of 6.28 percent, 0.26 percentage point lower than that during the same period of the last year. At end-2018, the number of SMBs that has received loans from financial institutions for inclusive finance purposes reached RMB 18.15 million, an increase of RMB 4.65 million or up 34.5 percent from the end of the previous year. Outstanding loans in RMB and foreign currencies to private enterprises and individuals accounted for 61.6 percent of the outstanding loans to the non-financial sector, up 0.7 percentage point from end-2017. Outstanding loans to state-owned enterprises (SOEs) and private enterprises posted RMB 90.6 trillion. Outstanding loans to SOEs registered RMB 47.7 trillion, or 52.6 percent of the total; outstanding loans to private enterprises stood at RMB 42.9 trillion, or 47.4 percent of the total. The share of loans to private enterprises was similar to the share of loans to SOEs. With the introduction of the relevant tools, bond financing by private enterprises began to improve.

A support instrument was established for bond financing by private enterprises. The initial funding for the support instrument was partly provided by the PBC through central-bank lending. Run by professional institutions on a market-oriented basis, the support instrument mainly focuses on supporting bond financing by private enterprises that face temporary difficulties but have market potential, good prospects, and technological competitiveness through a variety of ways, such as selling credit risk mitigation (CRM) instruments and providing credit enhancement guarantees. At the same time, the PBC actively supported commercial banks, insurance companies, bond credit enhancement companies, and other institutions in their effort to bolster private enterprise bond financing via CRM and various other means based on strengthened risk identification and control. The role of local governments was also brought into full play to improve the business environment and to guide the regulated conduct of private businesses. The PBC supported financial institutions in issuing financial bonds and loan-backed securities for SMBs to expand the sources of funds to support them. Meanwhile, on-site supervision and guidance for such financial services were conducted to strengthen policy transmission. Market-based efforts following the rule of law were taken to stabilize the financing of private enterprises in temporary difficulties. In addition, the PBC, together with the relevant departments, studied the support instrument for equity financing by private enterprises in order to provide equity-financing support to private enterprises with financial difficulties by following market-based principles and rule of law as well as open and transparent procedures.

Box 4 The PBC Actively Implements Instruments to Support Bond Financing by Private Enterprises

In 2018 China's economy maintained a steady momentum. However, the economy faced new challenges both at home and abroad, such as defaults by some private enterprises, a reduced risk appetite among financial institutions toward private enterprises, and financing difficulties faced by some healthy enterprises. Some private enterprises were trapped in a vicious cycle of debt defaults, mounting financing difficulties, and rising risks from posting equity as pledges. The weakened financial positions and deteriorating financing conditions of the firms were mutually reinforcing. On October 22, the State Council Standing Committee decided to establish instruments to support debt financing by private enterprises. According to this arrangement, the PBC provides initial finding support to specialized institutions and authorizes them to provide credit enhancement services to healthy private enterprises that face temporary liquidity difficulties. These specialized institutions sell credit risk mitigation instruments and provide credit enhancement services. They also operate in a market-oriented manner and follow the principles of risk prevention.

In designing and using such instruments, three key principles should be followed. First, law-based and market-oriented principles should be followed. The market-oriented operations of specialized institutions will help stabilize and promote bond financing by private enterprises. Second, the principle of "only providing temporary support and setting a deadline for an exit from the failing businesses" will be adhered to. The priority is to support and satisfy the financing needs of private enterprises that face temporary difficulties but that have promising prospects, big market potential, and advanced technologies. Third, a risk-sharing mechanism was put into place to effectively prevent moral hazards.

By end-2018, with the help of instruments to support bond financing by private enterprises and Credit Risk Mitigation Warrants (CRMW), 35 private enterprises had issued debt financing instruments in an amount of RMB 22.92 billion. These arrangements have played a role in guiding market expectations and restoring the confidence of private enterprises. This has improved the environment for private enterprises to raise funds using debt instruments, thereby supporting market confidence. During the last two months of 2018, private enterprises issued bonds with a total volume of RMB 155 billion, up 70 percent from the same period of the last year. Net bond financing by private enterprises stood at RMB 25.2 billion, which ended the declining trend that existed during the last half-year.

For the next step, the PBC will thoroughly study experiences accumulated since the introduction of the above instruments, continue to improve the supporting policies, promote the wider use of instruments, and make sure that all parties work together to generate synergy so as to help more private enterprises improve their financial conditions.

VI. Giving full play to window guidance and credit policies for structural guidance

To implement the decisions of the CPC Central Committee and the State Council, the PBC combined the promotion of supply-side structural reforms with structural adjustments to the credit policies by improving the economic structure, upgrading the industrial structure, transforming the energy mix, and providing inclusive financial services to improve the people's livelihood so as to guide financial resources to key fields and weak links for economic and social development and to effectively meet the financing needs of the real economy. **First,** extensive efforts were made to provide financial support for well-targeted poverty alleviation. The PBC promoted financial support for poverty alleviation, especially in deeply impoverished areas, by channeling financial resources into such areas via better use of the pricing mechanism for loans derived from central-bank lending for poverty alleviation and the synergy of financial support and the promotion of rural industries so as to promote poverty reduction in a better-targeted and more effective manner. **Second,** efforts were made to provide quality financial services in the rural areas. The reform of rural financial institutions was deepened in order to establish a sound rural financial system. The PBC guided financial institutions to promote product and services innovations in line with the requirements for the rural revitalization strategy. Sound progress was made in pressing ahead with pilots on the collateralization of operational rights of contracted farmland and farmers' property rights. **Third,** efforts were made to improve the framework for local government debt and to guide banking financial institutions to implement policies that require that local governments be financed in a prudent and compliant manner, to ensure the financing needs of projects under construction, and to provide support for infrastructure construction in a well-regulated way. **Fourth,** efforts were made to promote coordinated regional development through financial support for the major national strategic areas, such as the coordinated development of Beijing, Tianjin, and Hebei, the Belt and Road Initiative, the development of the Yangtze Economic Belt, the Western China Development Drive, and the development of the maritime economy. **Fifth,** efforts were made to encourage banking financial institutions to improve their financial services for quality manufacturing and sci-tech innovation to enhance financial support for key manufacturing areas as well as for the transformation and upgrading of the economic structure. The pilot project of allowing banks to provide equity investments plus credit to the tech-fin industry was furthered to improve financial services for sci-tech and innovative enterprises in key areas. **Sixth,** by attaching more priority to ensure stable employment, the PBC enhanced the provision of guaranteed loans for start-ups by increasing the quota for loan applications so as to help start-ups play a better role in driving employment. The PBC also studied measures to provide financial support for veterans to start businesses and find jobs. Meanwhile, continued efforts were made to improve financial services for weak links and underprivileged groups, such as students from impoverished families, migrant workers, and ethnic minority regions. **Seventh,** a green financial system was set up and improved, featuring firm support for green financing. **Eighth,** efforts were made to improve the market-based operational mechanism for asset securitization to coordinate overall development.

VII. Deepening the market-based interest-rate reform

Continued efforts were made to deepen the market-based interest-rate reform so as to merge the two interest-rate tracks. **First,** the PBC improved its ability to guide interest rates in a market-oriented manner so as to facilitate the transmission of monetary policy. **Second,** the PBC continued to improve the self-disciplinary mechanism for the pricing of market rates and for the joining of more members. Currently, the number of members of the self-disciplinary mechanism has risen to 2,051, including 15 core members, 1,182 basic members, and 854 observers. **Third,** the PBC accelerated the development of CDs. The scope of CDs issuers was expanded contingent on sound market order so as to "open the front door," tapping their role in promoting the market-based reform of interest rates. **Fourth,** the PBC promoted the well-regulated development of inter-bank CDs and provided that beginning in the first quarter of 2019, inter-bank CDs issued by financial institutions with assets of less than RMB 500 billion will be included in the inter-bank liabilities of the MPA assessments. In general, the market-based reform of interest rates was further deepened and achieved positive results. The independent pricing and risk management capabilities of financial institutions were improved. The interest-rate corridor was preliminarily established. The market-based interest-rate formation mechanism was continuously improved and the central bank has become more adept in guiding and transmitting the interest rates.

VIII. Improving the market-based RMB exchange-rate regime

Efforts were made to maintain the flexibility of the RMB exchange rate and to stabilize market expectations. Since the beginning of 2018, in the face of a complicated external environment, the PBC focused on the domestic situations while giving due consideration to international factors, thereby achieving an overall balance with multiple objectives. During the first quarter, against the backdrop of the weakening USD and the basically balanced cross-border capital flows and foreign-exchange supply and demand, the PBC let the market play a decisive role in forming the exchange rate, and previous counter-cyclical adjustments gradually became neutral. Since the second quarter, affected by a stronger USD index and trade frictions, the RMB exchange rate depreciated. The PBC continued to steadily deepen the market-based exchange-rate reform and maintained a flexible exchange rate so that it will play the role of an automatic stabilizer for the macro-economy and a balancer of payments. At the same time, in light of the changing situation, the PBC also adopted macro-prudential policies and other well-targeted measures, such as strengthening communication with the market, raising the foreign-exchange risk reserve ratio for forward foreign-exchange sales, and reintroducing the "counter-cyclical factor" in the quotations of the central parity. More innovative instruments were added to the toolbox to guide and anchor market expectations. All these measures released positive signals and yielded positive results. China's cross-border capital flows, exchange rate expectations, and foreign-exchange market were basically stable, and the RMB exchange rate remained generally stable at a reasonable and equilibrium level.

In 2018 the highest and lowest central parities of the RMB against the USD were RMB 6.2764 and RMB 6.9670 per USD, respectively. During the 243 trading days, the RMB appreciated on 104 days and depreciated on 139 days. The biggest intra-day appreciation and depreciation were 0.71 percent (492 bps) and 0.89 percent (605 bps), respectively. Movements of the RMB against the other major currencies diverged. At end-2018, the central parities of the RMB against the euro, the British pound, and the Japanese yen stood at RMB 7.8473 per euro, RMB 8.6762 per pound, and RMB 6.1887 per 100 yen, representing a depreciation of 0.57 percent, an appreciation of 1.19 percent, and a depreciation of 6.47 percent from end-2017 respectively. Since the launch of the reform of the RMB exchange-rate regime in 2005 to end-2018, the RMB appreciated by a cumulative 27.61 percent against the euro and 18.05 percent against the yen. In 2018 direct RMB trading was buoyant in the interbank foreign-exchange market, with an obvious increase in liquidity, which lowered the conversion costs for market participants and facilitated bilateral trade and investment.

Table 7 Trading Volume of the RMB Against Other Currencies in the Interbank Foreign-Exchange Spot Market in 2018

Unit：RMB 100 million

Currency	USD	EUR	JPY	HKD	GBP	AUD	NZD
Trading volume	491906.91	7546.77	2784.26	1919.95	516.34	879.09	196.20
Currency	SGD	CHF	CAD	MYR	RUB	ZAR	KRW
Trading volume	553.63	295.89	581.26	34.58	148.29	5.66	218.45
Currency	AED	SAR	HUF	PLN	DKK	SEK	NOK
Trading volume	85.89	74.41	4.38	7.33	46.78	100.14	20.55
Currency	TRY	MXN	THB	KHR	KZT	VND	MNT
Trading volume	2.32	4.20	180.99	0.006	0.025	0.008	0.080

Source: China Foreign Exchange Trade System.

At end-2018, under the bilateral currency swap agreements between the PBC and foreign monetary authorities, the latter utilized a total of RMB 32.786 billion and the former utilized the equivalent of USD 471 million of foreign currency. These operations played a positive role in promoting bilateral trade and investment.

The issuance of central-bank bills in Hong Kong enriched Hong Kong's high credit rating for financial products denominated in RMB and improved the RMB yield curve in Hong Kong. On September 20, 2018, the PBC and the Hong Kong Monetary Authority (HKMA) signed the *Memorandum of Cooperation on Using Central Money-Market Units for the Issuance of PBC Bills*. On November 7, 2018, the PBC issued RMB 20 billion of RMB-denominated central-bank bills by tender on HKMA's Central Money Market Unit (CMU) bond tendering platform, among which the three-month and one-year bills accounted for RMB 10 billion respectively and the bid rates were 3.79 percent and 4.20 percent respectively. On February 13, 2019, the PBC issued another RMB 20 billion of central-bank bills denominated in RMB with the same maturity structure, and the bid rates for three-month and one-year bills stood at 2.45 percent and 2.80 percent respectively. The issuance attracted active subscriptions by a large number of investors in the offshore market, ranging from commercial banks, funds, securities traders, central banks, and international financial organizations. The total bid exceeded RMB 120 billion, andthe bid-to-cover ratio exceeded 6 for both issuances. The issuance of RMB-denominated central-bank bills expands the spectrum of RMB investment products with high credit ratings in Hong Kong and diversifies the tools for RMB liquidity management. It is also conducive to improving the yield curve of RMB bonds in Hong Kong and promoting the internationalization of the RMB.

IX. Deepening reforms of financial institutions

The reform plan for development and policy financial institutions has been fully implemented. The PBC, together with members of the reform working group, orderly advanced reform measures, such as putting in place a board of directors and improving its functioning, enhancing the governance structure of such financial institutions, and defining their scope of business. Currently, new boards of directors of the China Development Bank and of the China EximBank have been established and are functioning effectively. A board of directors of the Agricultural Development Bank of China is in the process of being formed. The PBC continued to encourage the three banks to pay attention to their functions, strengthen risk prevention and control, and better play their roles as development and policy financial institutions to serve the national strategies.

X. Deepening reforms of foreign-exchange administration

Improvements were made in foreign-exchange management to better serve the real economy. First, efforts were made to further exercise law-based governance and deepen reforms to delegate powers and improve regulations and services. Continued efforts were made to streamline administration and regulatory documents so as to improve the quality and efficiency of public services in foreign-exchange management. Second, efforts were made to facilitate the liberalization of trade and investment, support the development of new business formats, and facilitate pilot zones for cross-border e-commerce and cross-border payments for market procurement trade. Third, support was provided for the regional opening up and for the innovation and development of special zones.

Reforms in key areas were deepened. First, the PBC lifted the restrictions on outward remittances of qualified foreign institutional investors (QFII/RQFII), removed the lock-up period, and allowed investors to hedge against exchange-rate risks so as to expand the opening up of the capital market in an orderly way. Second, the quota for qualified domestic institutional investors (QDII) was expanded and an open and transparent mechanism for quota allocations was established. Third, support was provided for developing products and optimizing services in the foreign-exchange market. The trading hours for regional transactions of the CNY/KZT currency pair were extended.

Order in the foreign-exchange market was effectively safeguarded. First, management was improved to crack down on fake and fraudulent transactions, such as entrepôt trade and overseas loans under domestic guarantees. Second, the PBC maintained its tight grip on underground banks and their counterparties, clamped down on illegal online platforms engaging in foreign-currency speculation, and joined forces with numerous departments to crack down on foreign-exchange violations.

Part 3 Analysis of the Financial Market

In 2018 the performance of the money and bond markets was generally smooth, and the fluctuations in the stock market were relatively large. Money-market interest rates declined and the volume of trading increased rapidly. Bond coupon rates fell, whereas growth in the volume of bond issuances accelerated year on year. The government bond yield curve moved downward and became steeper while spot bond trading was brisk. The stock-market indices dropped while the trading volume and the amount of equity financing declined year on year. The growth of assets in the insurance industry decelerated somewhat.

I. Analysis of the financial market

1. Money-market interest rates declined and the volume of trading saw rapid growth

Liquidity in the banking system was at a reasonable and adequate level and money-market interest rates declined. In December 2018 the weighted average interest rate of interbank lending and the weighted average rate of pledged repos posted 2.57 percent and 2.68 percent respectively, down 34 basis points and 43 basis points from the corresponding period of the previous year. The weighted average interest rate of repos between deposit-taking institutions with rate securities as pledges posted 2.43 percent, down 31 basis points from the same period of the previous year. The Shibor rates generally declined. At end-2018, the overnight and 7-day Shibor rate posted 2.55 percent and 2.90 percent respectively, down 29 basis points and 5 basis points respectively from end-2017. The 3-month and 1-year Shibor posted 3.35 percent and 3.52 percent respectively, down 157 basis points and 124 basis points from end-2017.

Repo transactions and lending on the interbank market grew rapidly, with Chinese-funded large and medium-sized banks as the major net lenders. In 2018 the cumulative volume of bond repos on the interbank market totaled RMB 722.7 trillion, representing an average daily turnover of RMB 2.9 trillion, a year-on-year increase of 16.8 percent, and an acceleration of 14.3 percentage points from the previous year. The volume of interbank lending reached RMB 139.3 trillion, with an average daily turnover of RMB 552.8 billion and a year-on-year increase of 75.7 percent, as compared with a year-on-year decline of 17.7 percent in 2017. In terms of the maturity structure, overnight repos and overnight lending accounted for 81.6 percent and 90.1 percent respectively of the turnover in bond repos and interbank lending, up 1.1 percentage points and 4.0 percentage points year on year. The volume of bond repos on the exchange markets declined 11.2 percent year on year to RMB 231.1 trillion. In terms of financing among the financial institutions, the flow of funds displayed the following characteristics. First, Chinese-funded large and medium-sized banks were net lenders, providing RMB 301.5 trillion of net lending in 2018 through repos and interbank lending, up 26.4 percent year on year. Second, borrowing by insurance and securities companies grew notably in the latter half of 2018, reaching RMB 29.7 trillion and RMB 27.8 trillion respectively in the third and fourth quarters and accounting for 30.7 percent and 28.7 percent respectively of total net borrowing in 2018. Third, net borrowing of other financial institutions and vehicles continued their rapid growth, totaling RMB 137.3 trillion in 2018 and up 49.3 percent year on year.

Table 8 Fund Flows among Financial Institutions, 2018

Unit: RMB 100 million

	Repos		Interbank lending	
	2018	2017	2018	2017
Chinese-funded large banks①	–1,669,110	–1,450,764	–290,833	–170,598
Chinese-funded medium-sized banks②	–920,274	–651,465	–134,766	–111,693
Chinese-funded small-sized banks③	438,495	701,303	184,557	135,183
Securities institutions④	692,711	465,915	201,362	119,990
Insurance institutions⑤	74,081	-8,761	930	77
Foreign-funded banks	68,718	49,186	–18,563	2,295
Other financial institutions and vehicles⑥	1,315,380	894,587	57,313	24,747

Notes：① Chinese-funded large banks include the Industrial and Commercial Bank of China, the Agricultural Bank of China, the Bank of China, the China Construction Bank, the China Development Bank, the Bank of Communications, and the Postal Savings Bank of China.

② Chinese-funded medium-sized banks refer to policy banks, the China Merchants Bank, and eight other joint-equity commercial banks, the Bank of Beijing, the Bank of Shanghai, and the Bank of Jiangsu.

③ Chinese-funded small-sized banks refer to Hengfeng Bank, China Zheshang Bank, China Bohai Bank, other city commercial banks, rural commercial banks, rural cooperative banks, and village and township banks.

④ Securities institutions include securities firms, fund-management companies, and futures companies.

⑤ Insurance institutions include insurance firms and corporate annuities.

⑥ Other financial institutions and vehicles include urban credit cooperatives, rural credit cooperatives, finance companies, trust and investment companies, financial leasing companies, asset-management companies, social-security funds, mutual funds, wealth management products, trust plans, and other investment vehicles. Some of these financial institutions and vehicles do not participate in the interbank lending market.

⑦ A negative sign indicates net lending and a positive sign indicates net borrowing.

Source: China Foreign Exchange Trade System.

Interbank CDs and CD businesses witnessed orderly development. In 2018 a total of 27,306 interbank CDs were issued on the interbank market, raising RMB 21.1 trillion. The volume of trading on the secondary market totaled RMB 149.85 trillion, and the issuance and trading of CDs were all priced with reference to the Shibor. In 2018 the average weighted interest rate for the issuance of 3-month interbank CDs was 4.06 percent, 32 basis points higher than that of the 3-month Shibor. A total of 39,961 CDs was issued by financial institutions, raising RMB 9.23 trillion, an increase of RMB 2.99 trillion year on year. The orderly development of CD businesses helped further expand the scope of market-priced liability products, build the pricing capability of financial institutions, and improve the market-based interest-rate mechanism and the transmission mechanism.

Interest-rate swaps saw rapid growth. In 2018 188,500 deals were reached on the RMB interest-rate swap market, a year-on-year increase of 36.2 percent, with the volume of the notional principal totaling RMB 21.49 trillion, an increase of 49.2 percent year on year. In terms of the maturity structure, the notional principal volume of contracts with maturities of up to one year reached RMB 15.18 trillion, accounting for 70.6 percent of the total. In terms of the reference rates, the 7-day fixed repo rate and the Shibor served as the reference rates for the floating leg of RMB interest-rate swap transactions, accounting for 79.4 percent and 19.1 percent respectively of the total notional principal of the interest-rate swaps.

Table 9 Interest-Rate Swaps, 2018

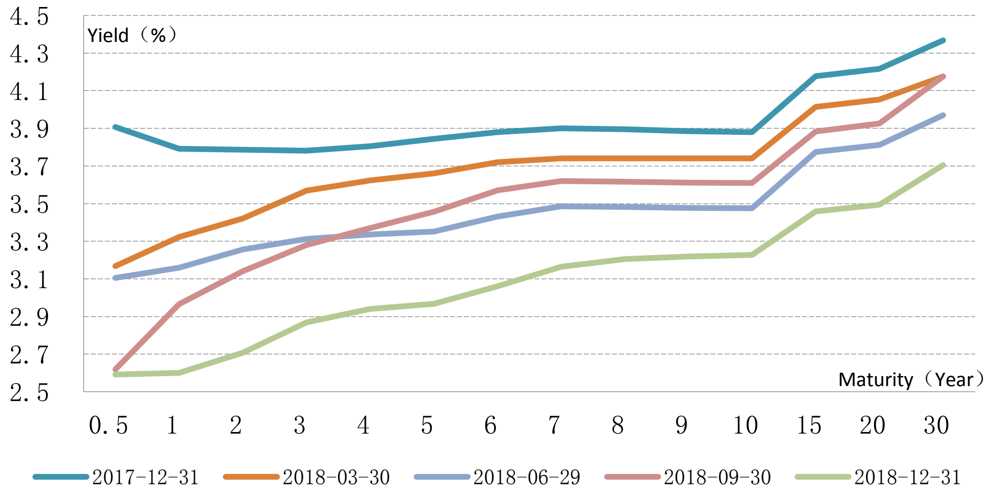
	Deals (lots)	Amount of the notional principal (RMB 100 million)
2018	188,459	214,911
2017	138,410	144,073

Source: China Foreign Exchange Trade System.

2. Bond coupon rates declined notably and the government bond yield curve moved downward

The government bond yield curve moved downward and became steeper. In 2018 government bond yields of all maturities generally declined. At end-2018, the yield of 1-year, 3-year, 5-year, 7-year, and 10-year government bonds posted 2.60 percent, 2.87 percent, 2.97 percent, 3.16 percent, and 3.23 percent respectively, down 119 basis points, 91 basis points, 88 basis points, 74 basis points, and 65 basis points from the beginning of 2018. The spread between 1-year and 10-year government bonds was 63 basis points, an expansion of 54 basis points from the beginning of 2018. The bond indices rallied moderately. The China Bond Composite Index (net price) was 101.92 points, up 4.03 percent from the end of 2017. The China Bond Composite Index (full price) reached 118.80 points, registering an increase of 4.79 percent. The Shanghai Securities Exchange T-Bond Index posted 169.88 points, an increase of 5.61 percent.

Figure 3 Yield Curve of Government Securities in the Interbank Market



Source: China Central Depository & Clearing Co., Ltd.

In general, bond coupon rates declined. The coupon rate of 10-year government bonds issued in December was 3.25 percent, a decrease of 57 basis points from those of the same maturity issued in 2017. The coupon rate of 10-year financial bonds issued by the China Development Bank in December was 3.60 percent, a fall of 134 basis points from those of the same maturity issued in 2017. The average rate of 1-year short-term financing bills (rated A-1) issued by AAA-rated enterprises was 4.02 percent, down 149 basis points from those of the same maturity issued in 2017. The average coupon rate of 5-year medium-term notes was 5.11 percent, a decline of 112 basis points from June. The Shibor continued to serve as an important benchmark rate for bond pricing. In 2018 a total of 34 floating-rate bonds and interbank certificates of deposit were issued based on the Shibor, with a gross issuance volume of RMB 11.55 billion. A total of 286 fixed-rate enterprise bonds was issued, with a gross issuance volume of RMB 241.84 billion, all based on the Shibor. A total of RMB 356.11 billion of fixed-rate short-term financing bills was issued based on the Shibor, accounting for 74.5 percent of all fixed-rate short-term financing bills.

Spot bond trading on the interbank market was brisk. In 2018 the cumulative volume of spot bond trading posted RMB 150.7 trillion, representing a daily average of RMB 598.2 billion and an increase of 46 percent year on year. In terms of the trading entities, Chinese-funded small- and medium-sized banks and securities institutions were net bond sellers, with net sales totaling RMB 9.1 trillion; other financial institutions and vehicles were net bond buyers, with net purchases totaling RMB 8.7 trillion. With respect to the products, a total of RMB 23.5 trillion of spot government bonds was traded, accounting for 15.6 percent of the total spot transactions on the interbank market. The volume of spot trading of financial bonds and corporate debenture bonds was RMB 109.3 trillion and RMB 17.9 trillion respectively, accounting for 72.5 percent and 11.9 percent respectively. Separately, the volume of spot bond transactions on the stock exchanges totaled RMB 6.4 trillion, an increase of 15.3 percent year on year.

The year-on-year growth in the volume of bond issuances accelerated. In 2018 a total of RMB 43.1 trillion of bonds was issued, an increase of RMB 3 trillion year on year and an acceleration of 7.5 percent. This was mainly due to the increase in the issuance of interbank CDs and the debt financing instruments of non-financial enterprises. At end-2018, the total volume of outstanding bonds posted RMB 86 trillion, up 15.1 percent year on year.

Table 10 Bond Issuances, 2018

Unit: RMB 100 million

Type of bond	Issuances	Year-on-year change
Government securities	36,626	-3,306
Local government bonds	41,652	-1,929

Central-bank bills	0	0
Financial bonds①	274,056	16,000
Of which: Financial bonds issued by the China Development Bank and policy financial bonds	33,602	1,067
Interbank certificates of deposits	210,832	8,960
Corporate debenture bonds②	77,905	19,173
Of which: Debt-financing instruments of non-financial enterprises	57,938	17,694
Enterprise bonds	4,812	-1,119
Corporate bonds	14,555	4,748
Bonds issued by international institutions	720	147
Total	430,959	30,086

Notes: ① Including financial bonds issued by the China Development Bank, policy financial bonds, bonds issued by commercial banks (including ordinary bonds, subordinated bonds, and hybrid bonds), bonds issued by securities firms, interbank certificates of deposits, and so forth.

② Including debt-financing instruments issued by non-financial enterprises, enterprise bonds, corporate bonds, convertible bonds, bonds with detachable warrants, privately placed SME bonds, and so forth.

Sources: People's Bank of China, China Securities Regulatory Commission, and China Central Clearing Co., Ltd.

3. The volume of bill financing rose rapidly, whereas interest rates declined amidst fluctuations

The outstanding volume of bill acceptances witnessed rapid growth. At end-2018, the outstanding volume of commercial bills was RMB 9.4 trillion, up 14.9 percent year on year. In the first half of 2018 the outstanding volume of bill acceptances expanded moderately, registering growth of RMB 361.2 billion from the beginning of the year to end-June 2018. In the latter half of 2018, growth accelerated, registering an increase of RMB 1.2 trillion from the beginning of 2018 to the end of 2018. The rapid growth of bill acceptances provided increased support for the real economy, especially for small and medium businesses. In terms of the issuing industries, outstanding bankers' acceptances were mainly issued by enterprises in the manufacturing, wholesale, and retail industries, with small- and medium-sized enterprises issuing about two-thirds of the total.

The outstanding volume of bill financing surged, whereas bill market interest rates decreased amidst fluctuations. At end-2018, the discount balance was RMB 5.8 trillion, up 48.7 percent year on year. Bill financing surged by RMB 385.7 billion in the first half of 2018; in the latter half of 2018, the acceleration quickened somewhat. As a result, the outstanding volume increased by RMB 1.9 trillion from the beginning to the end of 2018. The share of outstanding bill financing in the total outstanding loans was 4.2 percent, a year-on-year increase of 1 percentage point. In 2018 liquidity in the banking system was reasonable and adequate. As the fund supply in the bill market increased, bill interest rates declined amidst fluctuations.

4. The stock indices, the trading volume and the amount of equity financing dropped year on year

The stock indices dropped. At end-2018 the Shanghai Stock Exchange Composite Index closed at 2,494 points, down 24.6 percent from the previous year. The Shenzhen Stock Exchange Component Index closed at 7,240 points, down 34.4 percent from the previous year. The Growth Enterprise Board (GEM Board) Index closed at 1,251 points, a decrease of 28.6 percent from the previous year. At end-2018 the weighted average P/E ratio of A-shares on the Shanghai Stock Exchange fell from 18.2 times at end-2017 to 12.5 times at end-2018, and that on the Shenzhen Stock Exchange decreased from 36.5 times at end-2017 to 20.2 times at end-2018.

Turnover on the stock markets decreased. In 2018 the combined turnover on the Shanghai and Shenzhen Stock Exchanges reached RMB 90.2 trillion and the average daily turnover was RMB 371.1 billion, down 19.5 percent year on year. Turnover on the GEM Board totaled RMB 15.9 trillion, a decrease of 4 percent year on year. At end-2018 the combined market capitalization of the Shanghai and Shenzhen Exchanges posted RMB 35.4 trillion, a decline of 21.3 percent year on year. The market capitalization of tradable shares on the GEM Board posted RMB 2.5 trillion, a decrease of 19.5 percent year on year.

Equity financing plummeted year on year. In 2018 domestic enterprises and financial institutions raised a total of RMB 682.7 billion by way of IPOs, additional offerings, rights issuances and warrant exercises on the domestic and overseas stock markets, a decrease of 41.9 percent year on year. Among this total, RMB 553 billion was raised on the A-share market, down 44.9 percent year on year.

5. Asset growth in the insurance sector decelerated

Premium income saw a year-on-year decline. In 2018 total premium income in the insurance sector reached RMB 3.8 trillion, a year-on-year decrease of 1.5 percent. Claims and benefit payments posted RMB 1.2 trillion, a year-on-year increase of 0.9 percent. Specifically, total property insurance claims and benefit payments increased 5.4 percent year on year and total life-insurance claims and benefit payments decreased 2.9 percent.

Asset growth in the insurance industry slowed down. At end-2018 total assets in the insurance industry posted RMB 18.3 trillion, up 9.4 percent year on year and a deceleration of 1.4 percentage points from end-2017. Among this, outstanding bank deposits increased 26.4 percent year on year and investment-linked assets increased 7.5 percent year on year.

Table 11. Asset Allocations in the Insurance Industry at End-2018

Unit: RMB100 million, %

	Outstanding balance		As a share of total assets	
	End-2018	End-2017	End-2018	End-2017
Total assets	183,309	167,489	100	100
Of which: Bank deposits	24,363	19,274	13.2	11.5
Investments	139,725	129,932	76.2	77.6

Source: China Banking and Insurance Regulatory Commission.

6. Swap transactions on the foreign-exchange market witnessed rapid growth.

Trading on the foreign-exchange market was active. In 2018 the turnover of spot RMB/foreign-exchange transactions reached USD 7.6 trillion, an increase of 19.3 percent year on year. The turnover of RMB/foreign-exchange swap transactions totaled USD 16.4 trillion, up 22.7 percent year on year. Specifically, overnight RMB/USD swap transactions posted USD 9.2 trillion, accounting for 56.1 percent of total swap turnovers. The turnover on the RMB/foreign-exchange forward market totaled USD 87.5 billion, down 15.3 percent year on year. The turnover of foreign currency/foreign currency transactions totaled USD 186.7 billion, an increase of 57.2 percent year on year, and the EUR/USD transactions registered the largest trading volume accounting for 42.3 percent of the total.

Participants on the foreign-exchange market expanded further. At end-2018, there were 678 members on the foreign-exchange spot market, 212 members on the foreign-exchange forward market, 207 members on the foreign-exchange swap market, 175 members on the currency-swap market. and 124 members on the foreign-exchange options market. There were 32 market-makers on the spot market and 27 market-makers on the forward and swap markets.

7. Gold prices fluctuated, reflecting a weak market

Gold prices on the Shanghai Gold Exchange fluctuated in a weak market and closed with a slight rise. In 2018, international gold prices peaked at USD 1,360.25 per ounce and hit a trough of USD 1,176.7 per ounce, closing at USD 1,281.65 per ounce at end-2018, a year-on-year decrease of 1.15 percent. The peak and trough prices of gold (AU9999) on the Shanghai Gold Exchange were RMB 284.9 per gram and RMB 260.75 per gram respectively. At end-2018, the AU9999 closed at RMB 284.6 per gram on the Shanghai Gold Exchange, up 4.25 percent year on year.

The volume of trading on the Shanghai Gold Exchange maintained its growth. In 2018 the cumulative volume of gold trading on the Shanghai Gold Exchange was 67,500 tons, an increase of 24.35 percent year on year, and the turnover posted RMB 18.3 trillion, up 22.23 percent year on year.

II. The development of institutional arrangements in the financial markets

1. Institutional arrangements for the bond market continued to improve

First, the PBC released Notice No. 3 [2018], regulating the issuance of bonds for capital replenishment. Second, it further improved its supervision of green bonds and enhanced the transparency of relevant information disclosures. Third, the issuance requirements for short-term financing bills of security firms were improved and the requirements on applying security firms were streamlined. Fourth, this gradually unified the qualifications for providing rating services on the interbank bond market and the exchange-based bond market, and strengthened supervision and supervisory information-sharing of the credit-rating agencies. Fifth, the PBC released the *Interim Measures for the Administration of Bond Issuances by Overseas Institutions on the National Interbank Bond Market*, improving the institutional arrangements for issuances by overseas institutions on the interbank bond market, promoting the convergence of relevant rules and regulations with global practices, and further enhancing globalization of the Chinese bond market. Sixth, the PBC officially launched third-party repurchase transactions on the interbank bond market, which enabled market participants to more conveniently conduct repurchases and reduced the risks from settlement failures. Seventh, it specified the type of local government debt that would be allowed for over-the-counter transactions and expanded the variety of over-the-counter bonds. Eighth, it was confirmed that the CRSC would be responsible for carrying out unified law enforcement actions for any law violations in the interbank and exchange-based bond markets to intensify supervision and law enforcement and to strengthen coordination and cooperation.

2. Regulatory arrangements for the securities and futures industries were strengthened.

The corporate governance system for listed companies was further improved. First, the CRSC released the amended *Code of Corporate Governance for Listed Companies*, intensifying constraints on controlling shareholders, actual controllers, and other related parties, focusing on the protection of minority investors, promoting the participation of institutional investors in corporate governance, and specifying the requirements for stable control of the company, performance of duties by independent directors, and information disclosures. Second, the CSRC, the Ministry of Finance (MOF), and the State-owned Asset Supervision and Administration Commission (SASAC) jointly released the *Opinions on Supporting the Repurchase of Shares by Listed Companies*, supporting all kinds of listed companies to repurchase shares that can be used for equity incentives and for employee share-holding plans, encouraging the use of various market instruments to provide financing support for share repurchases and for streamlining repurchase procedures. Third, the SASAC, MOF, and CSRC jointly issued the *Regulatory Rules on State-owned Shares in Listed Firms*, unifying the institutional arrangements for the transfer of shares in listed companies by state-owned shareholders and putting in place a multi-layered regulatory system for state-owned assets.

The regulatory rules for securities and futures business institutions were further improved. First, the CRSC issued the *Measures for the Administration of the Privately Offered Asset Management Business of Securities and the Business of Futures Institutions*, unifying the regulatory rules for privately offered asset management of securities and futures business institutions, removing regulatory arbitrage, focusing on improving the institutional system in terms of strengthening risk prevention and control, regulating affiliated transactions, guarding against tunneling, and specifying the legal responsibilities of the business institutions. Second, the CSRC and the PBC jointly issued the *Guidelines on Internet-based Sales and the Redemption of Money Market Funds,* requiring strict enforcement of licensed operations of Internet-based sales of money-market funds, prohibiting fund embezzlement, establishing a ceiling for T+0 redemptions, and banning irregular advance payments.

The opening-up of the capital market was further enhanced. First, the limits on foreign ownership of securities firms and future companies were further relaxed and their business scope was expanded. The CSRC amended the *Administrative Measures for Foreign-Funded Securities Firms,* allowing foreign investors to be controlling shareholders in joint-venture securities companies and gradually expanding their business scope. The CSRC issued the *Administrative Measures for Foreign-Funded Futures Companies*, clarifying the requirements for overseas shareholders investing in domestic futures companies and regulating indirect shareholding by foreign investors. The National Development and Reform Commission and the Ministry of Commerce released the *Special Administrative Measures (Negative List) for the Access of Foreign Investment (2018),* expanding foreign investors' shareholding in securities firms, fund management companies, and future companies to be no more than 51% by now, which is set to be entirely removed in 2021. Second, the CSRC issued the *(Interim) Provisions on the Supervision and Administration of Depository Receipts* *under the Stock Connect Scheme between the Shanghai Stock Exchange and the London Stock Exchange*. It announced the launch of global depository receipts (GDR) under the Shanghai-London Stock Connect Scheme, clarifying the review and approval regime for the issuance of GDR, the cross-border conversion mechanism, the regulatory arrangements for the issuance of GDR by domestic listed companies, and stipulating the regulatory requirements for overseas security firms and depositories. Third, further restrictions were removed on eligible foreign investors to open A-shares securities accounts, allowing foreign individuals working on the Chinese mainland and foreign employees of A-share listed companies working overseas to open A-shares securities accounts and to participate in transactions. Fourth, various crude oil, iron ore, and PTA futures were successively opened up to overseas investors.

The pilot program for innovative domestic enterprises to issue stocks or depository receipts on the domestic market was steadily promoted. The General Office of the State Council issued the *Notice on Forwarding the Several Opinions of the China Securities Regulatory Commission on Launching the Pilot Program for Innovative Enterprises to Issue Stocks or Depository Receipt on the Domestic Market* and announced the launch of the pilot program. The CSRC issued the *(Interim) Administrative Rules on the Issuance and Transaction of Depository Receipts,* and amended the requirements concerning the qualifications for IPOs in the *Administrative Rules on Initial Public Offerings and Stock Listings* and the *Administrative Measures on Initial Public Offerings and Stock Listings on the Growth Enterprise Market,* putting in place well-defined supervisory arrangements for the pilot program.

3. Institutional arrangements in the insurance market were improved

Risk prevention and control of the insurance industry were strengthened. First, the behavior of shareholders of insurance companies was regulated. The insurance regulatory authority issued the *Administrative Measures for Equities of Insurance Companies*, mainly focusing on shareholder access, shareholder structure, capital authenticity, and penetration supervision. Second, monitoring of the matching of assets and liabilities in insurance companies was intensified. The insurance regulatory authority issued regulatory rules for asset-liability management, evaluating the asset-liability management capability of insurance companies both qualitatively and quantitatively. Third, supervision of insurance-fund allocations was strengthened. The insurance regulatory authority released the *Administrative Measures for the Utilization of Insurance Funds*, further regulating the behavior of investment managers as trustees in managing insurance funds, intensifying supervision of overseas investments, and further specifying requirements for information disclosures of insurance-fund allocations.

Insurance services were enhanced and improved, promoting the support of insurance funds to the real economy. The CBIRC issued the *Notice on Vigorously Strengthening and Improving Insurance Services* to strengthen regulations on the sale of insurance products to improve claim settlements and to enhance supervision of Internet-based insurance. The CBIRC released the *Notice on the Launch of Specialized Products by Insurance Asset Management Companies,* allowing insurance funds to launch specialized products to handle liquidity risks from stock pledges in listed companies, stepping up the investment of insurance funds in high-quality listed companies, taking advantage of the long-term and stable nature of insurance-fund investments, and confirming that such products will not be included in the calculation of the investment proportion of equity assets in insurance companies.

The reform and opening-up of the insurance industry was promoted. First, the pilot program of individual tax-deferred pension insurance was launched. The CBIRC successively issued the *Notice on Conducting a Pilot Program for Individual Tax-Deferred Commercial Pension Insurance Business* and *the Notice on Issuing Interim Measures for the Administration of the Individual Tax-Deferred Commercial*

Pension Insurance Business, administrative measures on the utilization of individual tax-deferred pension insurance funds and guidelines for product design and model clauses to promote the orderly implementation of the pilot policies. Second, the reform and opening-up of the insurance industry was expanded, with the business scope of foreign-funded insurance brokerage companies the same as that of Chinese-funded insurance brokerage companies. Foreign investors were allowed to be insurance agents as well as insurance assessors.

Part 4. Macroeconomic Overview

I. Global economic and financial developments

In 2018 the global economy continued to grow but at a slower pace as growth became less synchronized. Due to global trade tensions and changes in financial conditions, financial market volatility heightened somewhat and downside risks increased.

1. Economic developments in the major economies

Growth in the major advanced economies slowed down slightly amid diverging economic performance. The U.S. economy saw strong growth, but showed signs of a slowdown. Its annualized quarter-on-quarter GDP growth during the first three quarters of 2018 was 2.2 percent, 4.2 percent, and 3.4 percent respectively. In particular, growth in Q2 was the highest since Q4 of 2014. The manufacturing PMI of the Institute for Supply Management remained high throughout the year, remaining above 50 for 34 consecutive months, but it dropped unexpectedly to 54.10 in December. The University of Michigan's Consumer Sentiment Index remained high in 2018, with some fluctuations since Q4. The reading of the Consumer Price Index (CPI) reached a high of 2.9 percent in June and July, followed by a gradual decline and posting of 2.2 percent and 1.9 percent in November and December. The core CPI, which excludes highly volatile energy and food prices, rose moderately during the corresponding period. After rising 2.1 percent in March, it consistently remained slightly above 2 percent. In November and December, it grew 2.2 percent. The labor market continued to be tight as the unemployment rate remained at low levels., dropping to a fifty-year low of 3.7 percent in Q3 and then climbing slightly to 3.9 percent in December.

In the euro area, economic growth continued to slow down. From Q1 to Q4, year-on-year GDP growth in the euro area was 2.4 percent, 2.2 percent, 1.6 percent, and 1.2 percent respectively, reflecting a continuous slowdown. In particular, GDP in Q3 contracted 0.2 percent quarter on quarter in Germany, the first negative growth since 2015. Consumer sentiment in the euro area continued to drop after being relatively optimistic at the beginning of 2018. The manufacturing PMI also showed a downward trend in 2018, falling below 52 in Q4. Overall, inflation in the euro area remained subdued, as the year-on-year growth of the core Harmonized Index of Consumer Prices (HICP) was about 1.0 percent throughout the year. The unemployment rate remained low, posting 8.0 percent, 7.9 percent, and 7.9 percent respectively in October, November, and December.

Economic growth volatility in Japan increased. Due to natural disasters, the annualized quarter-on-quarter GDP growth in Q3 was –2.5 percent, falling into negative territory after it contracted 1.3 percent in Q1, the biggest decline since Q2 of 2014. The labor market was close to full employment. However, as employers are reluctant to raise wages and inflation expectations remain weak, inflation is expected to remain low.

The UK economy continued to grow slowly amid Brexit uncertainties. GDP growth posted merely 1.3 percent in Q1, the lowest growth rate in six years, and it remained low despite a slight rebound. In the meantime, inflation continually exceeded the target of the Bank of England (BOE), rising 2.3 percent and 2.1 percent respectively year on year in November and December. In the UK there are differences about the existing Brexit agreement, creating uncertainties about an orderly Brexit.

Performance in the emerging market economies continued to diverge. Growth in

Brazil regained some momentum, as the GDP rose 1.3 percent in Q3 of 2018, 0.4 percentage point higher than that in Q2. In Russia, the price recovery of oil and other commodities gradually stabilized, growing 1.9 percent and 1.5 percent year on year in Q2 and Q3 respectively. Inflation was contained but recently it has slightly rebounded . The Indian economy grew rapidly, as year-on-year growth reached 8.2 percent in Q2 and dropped slightly to 7.1 percent in Q3. Inflationary pressures eased moderately. Growth in South Africa picked up slightly in Q3, but the unemployment rate remained stubbornly high. Affected by turbulence in the financial market in Q2 and Q3, the GDP in Argentina continued to contract on a year-on-year basis.

Table 12 Macroeconomic and Financial Indicators in the Major Advanced Economies

Country	Indicator	2017Q4			2018Q1			2018Q2			2018Q3			2018Q4		
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
United States	Real GDP Growth (annualized quarterly rate, %)	2.3			2.2			4.2			3.4			…		
	Unemployment Rate (%)	4.1	4.2	4.1	4.1	4.1	4.0	3.9	3.8	4.0	3.9	3.8	3.7	3.8	3.7	3.9
	CPI (year-on-year, %)	2.0	2.2	2.1	2.1	2.2	2.4	2.5	2.8	2.9	2.9	2.7	2.3	2.5	2.2	1.9
	DJ Industrial Average (end of the period)	23377	24272	24719	26149	25029	24103	24163	24416	24271	25415	25965	26458	25116	25538	23327
Euro Area	Real GDP Growth (annualized quarterly rate, %)	2.7			2.4			2.2			1.6			1.2		
	Unemployment Rate (%)	8.8	8.7	8.6	8.6	8.5	8.5	8.4	8.2	8.2	8.1	8.0	8.0	8.0	7.9	7.9
	HICP (year-on-year, %)	1.4	1.5	1.4	1.3	1.1	1.3	1.3	1.9	2.0	2.1	2.0	2.1	2.2	1.9	1.6
	EURO STOXX 50 (end of the period)	3674	3570	3504	3609	3439	3362	3537	3407	3396	3525	3393	3399	3198	3173	3001
United Kingdom	Real GDP growth (year-on year, %)	1.6			1.3			1.4			1.5			...		
	Unemployment Rate (%)	4.3	4.3	4.4	4.3	4.2	4.2	4.2	4.2	4.0	4.0	4.0	4.1	4.1	4.0	...

	CPI (year-on-year, %)	3.0	3.1	3.0	3.0	2.7	2.5	2.4	2.4	2.4	2.5	2.7	2.4	2.4	2.3	2.1
	FTSE 100 (end of the period)	7493	7327	7688	7534	7232	7057	7509	7678	7637	7749	7432	7510	7128	6980	6728
Japan	Real GDP Growth (annualized quarterly rate, %)	1.5			-1.3			2.8			-2.5			...		
	Unemployment Rate (%)	2.8	2.7	2.8	2.4	2.5	2.5	2.5	2.2	2.4	2.5	2.4	2.3	2.4	2.5	2.4
	CPI (year-on-year, %)	0.2	0.6	1.0	1.4	1.5	1.1	0.6	0.7	0.7	0.9	1.3	1.2	1.4	0.8	0.3
	NIKKEI 225 (end of the period)	22011	22725	22765	23098	22068	21454	22468	22202	22304	22554	22865	24120	21920	22351	20015

Sources: Statistical Bureaus and Central Banks of the Relevant Economies.

2. Developments in global financial markets

External and internal factors triggered financial market turbulence in some emerging market economies in 2018. The exchange-rate depreciation, the slumping bond prices, and the tumbling stock indexes coincided, which caused the large stock-market fluctuations in the advanced economies.

The USD Index jumped. The euro and the British pound fell against the U.S. dollar. The currencies in some emerging market economies weakened sharply, but thereafter regained their losses. At end-2018, the USD Index closed at 96.17, up 4.40 percent from end-2017. The exchange rates of the euro, the British pound, and the Japanese yen were 1.1469 dollars per euro, 1.2757 dollars per pound, and 109.56 yen per U.S. dollar, depreciating 4.39 percent, 5.59 percent, and appreciating 2.84 percent respectively from end-2017. Among the emerging market currencies, the Argentine peso, the Turkish lira, the Brazilian real, and the Indian rupee appreciated 9.73 percent, 14.51 percent, 4.31 percent, and 4.23 percent respectively against the U.S. dollar as compared with the end of the previous quarter, and depreciated 50.57 percent, 28.34 percent, 14.65 percent, and 8.24 percent respectively as compared with the end of 2017. The Russian ruble weakened 5.89 percent against the dollar over the end of the prior quarter and 17.25 percent over the year, while the Mexican peso lost

4.75 percent over the end of the prior quarter but strengthened marginally by 0.04 percent over the year.

The yields of government bonds in the major economies recently dropped, but performance was mixed throughout the year. As of end-2018, the yield of 10-year U.S. Treasuries closed at 2.691 percent, down 36.5 basis points (bps) from end-September, but up 28 bps over end-2017. Meanwhile, the yields of 10-year German and Japanese government bonds dropped 22.8 bps and 12.4 bps respectively compared with end-September and lost 17.8 bps and 4.8 bps over end-2017, while the yield of 10-year UK government bonds sank 30.5 bps over end-September, but gained 8.1 bps in 2018. Among the emerging market economies, the yield of 10-year Brazilian government bonds slashed 236.5 bps from end-September and 100 bps in 2018, the yield of 10-year Turkish government bonds shed 148 bps over end-September but jumped 440 bps in 2018, and the yield of 9-year Argentine government bonds advanced 227.5 bps over end-September and 562.1 bps in 2018. The yields of 10-year Russian and Mexican government bonds went up 16 bps and 71 bps respectively over end-September, and 114 bps and 93 bps respectively over end-2017.

The stock markets in the major economies first peaked but then retreated. There has been a recent broad-based decline in the stock markets of the advanced economies amid concerns about trade tensions, rate hikes by the U.S. Fed, and a possible peak in the economic cycle. As of end-2018, the U.S. Dow Jones Industrial Average, the Japanese Nikkei 225, the German DAX, the Euro STOXX 50, and the UK FTSE 100 tumbled 11.83 percent, 17.02 percent, 13.78 percent, 11.70 percent, and 10.41 percent respectively over end-September, slumping 5.63 percent, 12.08 percent, 18.26 percent, 14.34 percent, and 12.48 percent respectively over end-2017. Among the emerging market economies, the Brazilian BOVESPA jumped 10.77 percent over the end of the previous quarter and 15.03 percent in 2018. The Argentine BUSE MERVAL and the Indian SENSEX retreated 9.47 percent and 0.44 percent over end-September but gained 0.75 percent and 5.91 percent in 2018. The Mexican MXX, the Turkish BIST30, and the Russian RTS lost 15.89 percent, 7.75 percent, and 10.56 percent respectively over the end of the previous quarter and plunged 15.63 percent, 19.54 percent, and 7.65 percent respectively in 2018.

Global money-market rates generally edged up. Due to continuous interest-rate hikes by the Fed, the USD Libor in the London interbank market rose slightly. The 1-year Libor stood at 3.0054 percent on December 31, 2018, up 8.7 bps from end-September and up 89.8 bps over end-2017. The Euro Area Interbank Lending Rate (Euribor) edged up due to expectations of a policy tightening by the European Central Bank (ECB). On December 31, the 1-year Euribor registered –0.117 percent, with a gain of 4.2 bps over end-September and 6.9 bps over end-2017.

3. Monetary policies in the major economies

The advanced economies moved in the direction of policy normalization. The U.S. Fed hiked rates on four occasions in 2018, each by 25 bps, and a total of nine times since late 2015 when it began to raise rates. The federal funds rate was increased from the 1.25–1.50 percent range at the beginning of the year to the 2.25–2.50 percent range. In addition, from October 2017 the Fed continued to unwind its balance sheet. The Federal Open Market Committee (FOMC) met on December 19, 2018 and revised downward the median of the projections of the federal funds rate at end-2019 and end-2020 from 3.1 percent and 3.4 percent to 2.9 percent and 3.1 percent respectively. The FOMC reduced the expected frequency of rate hikes in 2019 from three times to two times and kept the frequency of rate hikes in 2020 unchanged at one time. On January 30, 2019, the Fed kept the target range of the federal funds rate on hold at 2.25–2.50 percent but eliminated the wording of gradual and announced the FOMC will be patient as it determines future adjustments to the target range for the federal funds rate and it will adjust the pace of unwinding the balance sheet in line with economic and financial developments.

In 2018, **the ECB** kept the interest rate on the main refinancing operations, marginal lending facility, and deposit facility unchanged at 0 percent, 0.25 percent, and –0.4 percent respectively, and announced that the interest rates would remain on hold at least through the summer of 2019. In addition, the ECB decided to continue its monthly asset-purchase program (APP) of EUR 30 billion until September 2018, reduce it to EUR 15 billion from October to December, and then exit from the APP by the end of 2018. However, it would keep the size of its balance sheet unchanged by reinvesting in full the principal payments from maturing securities purchased under the APP for an extended period of time until the ECB starts raising key interest rates.

The Bank of Japan (BOJ) continued quantitative and qualitative monetary easing (QQE) with yield curve control in order to achieve an inflation target of 2 percent. In 2018, it continued to apply a negative interest rate of –0.1 percent to the Policy-Rate Balances in the current accounts held by financial institutions at the BOJ, and the size of asset purchases remained unchanged. When meeting on July 31, the Policy Board introduced forward guidance for policy rates, under which the BOJ intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time.

The Bank of England (BOE) kept its benchmark rate and the size of its asset purchases unchanged during the first half of 2018. On August 2, the Monetary Policy Committee decided to raise the Bank Rate by 25 bps to 0.75 percent. Thereafter, the benchmark rate and the size of asset purchases remained unchanged.

The Bank of Canada (BOC) raised the target for the overnight rate three times in 2018 to 1.75 percent and would gradually lift it to the neutral range over time to achieve its inflation target.

The monetary-policy stances of the emerging market economies diverged. Facing tightening global financial conditions and currency depreciation pressures, a

number of central banks raised rates or were biased toward a neutral monetary-policy stance. To stem the sliding currency and capital outflows, the Central Bank of Turkey increased its policy rate three times in June and September 2018 from 8 percent to 24 percent. The Central Bank of Argentina increased its policy rate five times in April, May, and August 2018, lifting it from 27.25 percent to 60 percent. At end-September, the Central Bank of Argentina adjusted its monetary-policy framework by maintaining zero growth of base money and adopting the average daily market bidding rate as the policy rate. The Central Bank of the Russian Federation cut its key rate twice in Q1 by a total of 50 bps to 7.25 percent. However, as inflation returned to the 4 percent target more rapidly than expected, it hiked the key rate twice in September and December to 7.75 percent, and announced it would consider further rate hikes in the future. In Mexico, rising oil prices and a currency depreciation led to higher inflationary pressures. To address the weakening of the peso, capital outflows, and domestic inflationary pressures, the Banco de Mexico raised the target for the interbank funding rate four times in 2018 by a total of 100 bps to 8.25 percent. To reduce the current account deficit, the Bank Indonesia raised the 7-day reverse repo rate six times in 2018 by a total of 175 bps to 6 percent. The Bank of Korea still maintained its accommodative monetary policy but hiked the Base Rate by 25 bps on November 30 to 1.75 percent in an attempt to contain the rapid growth of household debts. As inflation remained at low levels, the Central Bank of Brazil cut rates twice in Q1 by a total of 50 bps to 6.50 percent in a bid to boost growth. The Reserve Bank of India hiked rates twice in Q2 by a total of 50 bps to 6.50 percent, but cut the rate by 25 bps in February 2019 to 6.25 percent.

4. Global economic outlook and key risks

In its updated January 2019 *World Economic Outlook*, the International Monetary Fund (IMF) forecast that the global economy would grow 3.7 percent and 3.5 percent in 2018 and 2019 respectively, revising downward the growth projection for 2019 by 0.2 percentage point compared with the October 2018 forecast. The growth forecast for the advanced economies and for the emerging market and developing economies were both revised downward. Looking ahead, the global economy may face the following risks.

First, trade tensions and policy uncertainties remain prominent risks. Amid the gradually unfolding trade tensions uncertainties and the impact of higher tariffs on inflation and the global supply chain, enterprises chose either to postpone investment decisions or considered adjusting the supply chain. Some economies at the upper and lower ends of the supply chain were exposed to shocks, such as a weakening external demand. Trade tensions may also aggravate turmoil in the global financial market by undermining confidence.

Second, the vulnerability of each economy may become amplified amid escalating trade tensions and uncertain global financial conditions. At present, asset prices throughout the world are at high levels and the vulnerability of the financial market has increased. If liquidity sees unexpected changes or market fears about an economic slowdown grow, asset price fluctuations and financial market turbulence may be triggered. In addition, a tightening of global financial conditions and a weakening appetite for risk may pose challenges to the emerging market economies.

Third, as the downside risks to growth are on the rise, the policy responses of some economies may face certain challenges. On the monetary-policy front, low rates in some economies have limited the room for policy-rate adjustments. The room for further balance-sheet expansion is also constrained. On the fiscal-policy front, the fiscal deficit and the government debt levels are high in some economies, making it difficult to create room for future policy responses.

In addition, geopolitical tensions have occurred in numerous places and risk factors and uncertainties have been growing at a rapid pace, having a greater impact on the global economy and financial markets. Meanwhile, risks from new technologies, such as FinTech, should not be neglected as they may pose additional challenges to global financial regulation and supervision.

II. Macroeconomic developments in China

In 2018 the Chinese economy was generally stable and the structure of the economy continued to improve. The services industry continued to grow at a steady and relatively rapid pace, with consumption contributing more to economic growth. International payments were generally balanced. Overall price levels remained stable. Preliminary estimates show that the GDP recorded RMB 90 trillion during the year, up 6.6 percent year on year in comparable terms, which is in line with the annual growth forecast of 6.5 percent. Growth in the four quarters was 6.8 percent, 6.7 percent, 6.5 percent, and 6.4 percent respectively year on year. During the year, the CPI went up by 2.1 percent year on year, whereas the industrial PPI rose by 3.5 percent year on year.

1. Output of the industrial sector and the services sector remained generally stable and the industrial structure continued to improve

The share of tertiary industry continued to rise. The value-added of the primary, secondary, and tertiary industries accounted for 7.2 percent, 40.7 percent, and 52.2 percent of GDP respectively. The share of tertiary industry exceeded that of secondary industry by 11.5 percentage points, up 0.3 percentage point from the last year. The value-added of the primary, secondary, and tertiary industries registered RMB 6.5 trillion, RMB 36.6 trillion, and RMB 47.0 trillion respectively, up 3.5 percent, 5.8 percent, and 7.6 percent year on year.

Agricultural production was stable. Total grain output registered 657.89 million tons in 2018, down 0.6 percent from the previous year. That said, 2018 was one of the years with the highest grain output, and annual output was above 650 million tons for four consecutive years. During the year, the output of pork, beef, mutton, and poultry decreased marginally by 0.3 percent from the previous year to 85.17 million tons.

Industrial production was generally stable and the industrial structure continued to improve. In 2018 the value-added of statistically large industrial firms (SLIFs) increased by 6.2 percent year on year in real terms while\ growth moderated and stabilized. The value-added of the high-tech manufacturing industries, emerging strategic industries, and equipment manufacturing industries expanded 11.7 percent, 8.9 percent, and 8.1 percent year on year respectively, which was 5.5 percentage points, 2.7 percentage points, and 1.9 percentage points higher than that of the SLIFs. The profits of the SLIF increased by 10.3 percent over the past year and the profits from their main business rose by 6.49 percent, an acceleration of 0.03 percentage point from the last year. The Q4 *Enterprise Survey of 5,000 Enterprises* conducted by the PBC revealed that the Enterprise Confidence Index was 57.9 percent, up 1 percentage point from the previous quarter and down 1.9 percentage points from the same period of the last year. The profitability of enterprises declined as the Enterprise Profitability Index registered 58.7 percent, which was down 0.2 percentage point from the previous quarter and down 2.8 percentage points from the same period of the last year.

The services industry continued to grow at a steady and relatively rapid pace. In 2018 the value-added of the services industry grew 7.6 percent year on year, a deceleration of 0.3 percentage point from the previous year. The communications, software, and information technology sectors grow 30.7 percent, an acceleration of 8.9 percentage points over the last year. Leasing and business services increased by 8.9 percent, a deceleration of 0.9 percentage point from the last year.

2. Consumption contributed more to growth, whereas growth of investment moderated and stabilized

Consumption contributed more to economic growth and online retail sales grew actively. In 2018 total retail sales grew 9.0 percent year on year to RMB 38 trillion, and final consumption expenditures contributed 76.2 percent to GDP growth. Retail sales in the rural areas grew 10.1 percent year on year, 1.3 percentage points higher than that in the urban areas. Online retail sales grew strongly, increasing 23.9 percent over the last year and reaching RMB 9 trillion. Household income grew steadily, lending support to consumption. In 2018 per capita disposable income registered RMB 28,228, up 8.7 percent year on year in nominal terms and 6.5 percent in real terms, outpacing the growth of per capita GDP. The structure of income distribution continued to improve, with the growth of per capita disposable income of rural residents outpacing that of urban residents. The gap between the per capita income of urban and rural residents was 2.69 times, down 0.02 from the previous year. According to the Q4 Urban Depositors' Survey conducted by the PBC, 28.6 percent of consumers were inclined to "consume more," up 2.4 percentage points from the previous year.

Manufacturing investments and private investments grew strongly, whereas the growth of infrastructure investments decelerated and stabilized. In 2018 nationwide fixed-asset investments (excluding those by rural households) reached RMB 63.6 trillion, up 5.9 percent year on year, and the growth rate was 1.3 percentage points lower than that in the previous year. The growth of manufacturing investments accelerated, reaching 9.5 percent year on year, an acceleration of 4.7 percentage points from the previous year. The growth of real-estate investments was generally stable, reaching 9.5 percent, an acceleration of 2.5 percentage points from 2017. The growth of infrastructure investments declined since October. Infrastructure investments grew 3.8 percent during 2018, 15.2 percentage points less than in the previous year. The growth of private investments was relatively strong, increasing by 8.7 percent year on year in 2018, an acceleration of 2.7 percentage points from 2017. Investments by state-owned enterprises and state-controlled entities lost steam, growing 1.9 percent year on year, a deceleration of 8.2 percentage points from the previous year.

3. Imports and exports continued to grow rapidly and the balance of payments was generally balanced without interventions

Imports and exports continued to grow rapidly and the trade surplus declined. In 2018 imports and exports reached RMB 30.5 trillion, up 9.7 percent year on year. Exports expanded 7.1 percent year on year to RMB 16.4 trillion, and imports grew 12.9 percent year on year to RMB 14.1 trillion. The trade surplus narrowed by 18.3 percent from the previous year to RMB 2.3 trillion. The trade structure continued to improve. The share of general trade increased and accounted for 57.8 percent of total exports and imports, up 1.4 percentage points from the last year. Exports of machinery and electronics grew 7.9 percent, accounting for 58.8 percent of total exports and assuming a leading position among all exports. Imports and exports by private enterprises grew 12.9 percent, accounting for 39.7 percent of the total.

Foreign direct investments (FDI) continued to flow in to high-end industries. In 2018 a total of 60,533 foreign-invested companies were established nationwide, up 69.8 percent year on year. Actually utilized FDI reached RMB 885.6 billion, up 0.9 percent year on year. Actually utilized FDI in the manufacturing industries grew 20.1 percent year on year, accounting for 30.6 percent of the total and up p 4.8 percentage points. Actually utilized FDI in the high-tech manufacturing industries grew 35.1 percent year on year. The structure of outbound investments continued to improve. Outbound direct investments by enterprises in all industries during the reached USD 129.83 billion, up 4.2 percent year on year. Outbound investments mainly focused on leasing/commercial services, manufacturing, mining, and wholesale/retail industries, accounting for 37 percent, 15.6 percent, 8.8 percent, and 7.7 percent of the total. Non-rational investments were effectively curtailed as there were no new outbound investments in the overseas real estate, sports, or entertainment industries.

The balance of payments showed a "double surplus." According to preliminary data, China's current account surplus registered USD 49.1 billion in 2018. The non-reserve financial account surplus registered USD 60.2 billion. By the end of 2018, China’s foreign reserves stood at USD 3072.7 billion and its foreign debt continued to grow. By the end of September, the total external debt, including that in local and foreign currencies, registered USD 1,913.2 billion, up USD 42.7 billion from end-June. The short-term external debt registered USD 1,207.3 billion, accounting for 63 percent of the total.

4. Consumer prices rose moderately while the growth of producer prices decelerated

Growth of the GDP deflator declined. In 2018 the GDP deflator (the ratio of GDP at current prices to GDP at constant prices) rose 2.9 percent year on year, a deceleration of 0.4 percentage point from the previous quarter. Specifically, the quarterly growth of the GDP deflator registered 3.0 percent, 2.8 percent, 2.8 percent, and 1.6 percent respectively.

Consumer prices witnessed a moderate rise. In 2018 the CPI rose by 2.1 percent year on year, an acceleration of 0.5 percentage point from the previous year. Quarterly CPI growth registered 2.2 percent, 1.8 percent, 2.3 percent, and 2.2 percent respectively. Growth of food prices turned from negative to positive, and non-food prices rose moderately. Food prices in 2018 registered a year-on-year increase of 1.8 percent, compared with a year-on-year decrease of 1.4 percent in 2017. Non-food prices went up by 2.2 percent year on year, a deceleration of 0.1 percentage point from the previous year. The price of consumer goods rose faster while the price of services declined somewhat from the previous year. Prices of consumer goods increased 1.9 percent, 1.2 percentage points higher than that in 2017. The prices of services moved up by 2.5 percent, 0.5 percentage point lower than that in 2017.

Growth of producer prices declined. The PPI in 2018 increased 3.5 percent year on year, down 2.8 percentage point from the previous year. Specifically, the quarterly PPI growth rates stood at 3.7 percent, 4.1 percent, 4.1 percent and 2.3 percent respectively.

In particular, the rise of producer prices was relatively stable, while the growth of capital goods prices obviously decelerated. Producer prices registered a year-on-year rise of 0.5 percent, down 0.2 percentage point from the previous year. Prices of capital goods increased 4.6 percent year on year, down 3.7 percentage points from the previous year. The Purchasing Price Index for Industrial Products (PPIIP) went up by 4.1 percent year on year, a deceleration of 4.0 percentage points from the previous quarter. Specifically, the quarterly growth of the PPIIP stood at 4.4 percent, 4.4 percent, 4.7 percent, and 3.0 percent respectively. The Corporate Goods Price Index (CGPI) rose 3.0 percent year on year, a deceleration of 3.8 percentage points from the previous year. The price of agricultural capital goods saw a year-on-year increase of 3.1 percent, up 2.5 percentage points from the previous year, and the price of agricultural products decreased 0.9 percent year on year, 2.6 percentage points narrower than the drop in the previous year.

5. Fiscal expenditures grew steadily

Growth of fiscal revenue slowed down. In 2018 general-budget fiscal revenue totaled RMB 18.3 trillion, up 6.2 percent year on year and representing a deceleration of 1.2 percentage points from the previous year. In terms of the revenue structure, tax revenue registered RMB 15.6 trillion, up 8.3 percent year on year, and non-tax revenue decreased 4.7 percent year on year to RMB 2.7 trillion. In particular, the domestic value-added tax and the domestic consumption tax were up 9.1 percent and 4.0 percent respectively year on year. The corporate income tax and the individual income tax witnessed a year-on-year increase of 10.0 percent and 15.9 percent respectively.

Fiscal expenditures were relatively stable. In 2018 general-budget fiscal expenditures registered RMB 22.1 trillion, up 8.7 percent year on year and representing an acceleration of 1 percentage point from 2017. In terms of the expenditure structure, expenditures for science/technology, energy-savings/environmental protection, and urban/rural communities increased 14.5 percent, 13.0 percent and 10.2 percent respectively year on year.

In 2018 budget revenue of central government–managed funds reached RMB 7.5 trillion, up 22.6 percent year on year. In particular, revenue from land sales totaled RMB 6.5 trillion, increasing 25 percent year on year. Budget expenditures of central government–managed funds totaled RMB 8.1 trillion, registering a year-on-year rise of 32.1 percent.

6. The job market remained stable

The surveyed unemployment rate was basically stable. In 2018 new employment in the urban areas reached 13.61 million, up 100,000 from the previous year. In December, the surveyed unemployment rate in urban areas was 4.9 percent, down by 0.1 percentage point from the last December. In 2018 migration of the rural labor force totaled 172.66 million, a year-on-year increase of 0.5 percent. According to the PBC’s Urban Depositors’ Survey, the Employment Sentiment Index registered 45.5 percent in Q4 of 2018, up 1.3 percentage points from the previous quarter; the Employment Expectation Index reached 53.3 percent, up 1.6 percentage point from the previous quarter.

7. Analysis by sectors

(1) The real-estate sector

In 2018 the growth of housing sales continued to slow down. Driven up by the third- and fourth-tier cities, the area and extent of increases in housing prices expanded, real-estate investments maintained relatively fast growth, while the growth of real-estate loans continued to moderate steadily.

The regions and pace of the rising housing prices increased, mainly led by the third- and fourth-tier cities. In December 2018 the prices of newly-built residential housing recorded year-on-year growth in 69 out of 70 large and medium-sized cities, 8 cities more than in the previous year. The average price growth was 10.6 percent, increasing 4.8 percentage points from the same period of the previous year. The price of pre-owned residential housing witnessed a year-on-year rise in 66 cities, 1 city more than in 2017. The average price growth was 7.6 percent, up 2.6 percentage points from the same period of the previous year.

Growth of housing sales continued to slow down. In 2018 the total floor area of sold units posted 1.717 billion square meters, up 1.3 percent year on year, which was 6.4 percentage points lower than that in 2017. Housing sales reached RMB 15 trillion, up 12.2 percent year on year, which was 1.5 percentage points lower than that in 2017. In particular, residential housing accounted for 86.2 percent of the total sold floor area and 84.3 percent of the total sales.

Real-estate investments witnessed fairly fast growth. In 2018 real-estate investments throughout the country registered RMB 12.03 trillion, up 9.5 percent year on year and an acceleration of 2.5 percentage points from the previous year. Specifically, investments in residential housing, which accounted for 70.8 percent of real-estate investments, reached RMB 8.5 trillion, up 13.4 percent year on year and representing an acceleration of 4 percentage points from the previous year. The floor area of newly started real-estate projects increased 17.2 percent year on year to 2.093 billion square meters, an acceleration of 10.2 percentage points from 2017. The floor area of real-estate projects under construction grew by 5.2 percent year on year to 8.22 billion square meters, an acceleration of 2.2 percentage points from 2017. The floor area of completed real-estate projects declined by 7.8 percent year on year to 0.94 billion square meters, dropping 3.4 percentage points from that in 2017.

Growth of real-estate loans moderated slightly with some changes in the loan structure. At end-2018, outstanding real-estate lending by major financial institutions (including foreign financial institutions) stood at RMB 38.7 trillion, up 20 percent year on year and a deceleration of 0.9 percentage point from end-2017. Outstanding real-estate loans accounted for 28.4 percent of total lending. Specifically, outstanding personal mortgages reached RMB 25.8 trillion, up by 17.8 percent year on year and a deceleration of 4.4 percentage points from end-2017. Outstanding housing development loans reached RMB 7.33 trillion, up by 31.9 percent year on year and an acceleration of 5.2 percentage points from end-2017. Outstanding land development loans stood at RMB 1.38 trillion, up 3.9 percent year on year and 11.8 percentage points higher than that at end-2017.

Support for welfare-housing loans continued. At end-2018, outstanding loans for the development of government-subsidized housing registered RMB 4.32 trillion, up 29.5 percent year on year and a deceleration of 3.1 percentage points from that at end-2017. New loans for the development of government-subsidized housing in 2018 totaled RMB 983.8 billion, accounting for 53.9 percent of all new real-estate development loans and up by RMB 163.5 billion from the previous year. By end-2018, loans for 373 government-subsidized housing projects in 85 cities had been approved, RMB 87.22 billion had been disbursed as scheduled, and RMB 82.6 billion of the loan principal had been recovered.

(2) Industrial Robot Manufacturing Industry

Industrial robots are key supporting equipment for the advanced manufacturing industry and they play an important role in supporting intelligent manufacturing and improving efficiency. Promoting industrial robot applications helps to reduce labor costs, to meet the need of transforming to more flexible, intelligent, and fine-graded production model, and to address safety-related issues under poor working conditions, such as dangerous or toxic environments. Vigorous development of the industrial robot manufacturing industry is an important channel to construct a modern manufacturing system characterized by intelligent manufacturing. It is vital for building up the advantages of Chinese manufacturing, promoting the industrial transformation and upgrading, and accelerating the construction of a manufacturing powerhouse.

In recent years the industrial robot market in China has witnessed rapid development.[1] In the national standards of the *Classification of National Economic Industries* revised in June 2017, industrial robot manufacturing became an independent industry for the first time. Since 2013 China has become the largest market for industrial robots. In 2017 the sales volume of industrial robots in China totaled 137,900, hitting a record high with a year-on-year increase of 58.5 percent. The sales volume in China has ranked at the top of the world for five consecutive years, accounting for 36.2 percent of global sales of industrial robots, up by 6.6 percent year on year. In 2017 the density of industrial robots in the Chinese manufacturing industry was 97 pieces per 10,000 people, up by 29 pieces year on year and surpassing the global average of 85 pieces for the first time. Industrial robots in China are mainly carrying/changing, welding/brazing, and assembling/dissembling robots, accounting for 45 percent, 25 percent, and 20 percent respectively of national sales in 2017. They are mainly employed in the electrical/electronic machinery manufacturing industry and the car manufacturing industry, which account for about 35 percent and 31 percent of total national sales in 2017. According to data from the National Statistics Bureau, the national output of industrial robots was 131,110 sets in 2017 and 147,700 sets in 2018.

Development of the industrial robot manufacturing industry in China still faces various challenges. First, the capacity for innovation in core techniques needs to be improved, as the key components, such as high-precision decelerators, servo motors, and controllers, rely on imports. The high-precision reducer, servo motor, and controller are the key components of industrial robots, which altogether account for 60 to 70 percent of the total production costs. Second, although leading firms are emerging, the industry still features small, weak, and sparsely located firms. There are a number of industrial robot manufacturers in China and many traditional machinery

[1] Unless otherwise noted, all relevant data are from the International Federation of Robots (IFR) and the China Robot Industry Alliance (CRIA).

manufacturers are shifting to industrial robot production. The industry needs to be further concentrated. Third, the lack of professional talent is rather prominent. The shortage of talent in manufacturing has resulted in bottlenecks in producing the above-mentioned three key components of industrial robots. The shortage of talent in applications has resulted in constraints on the operation, maintenance, and application of industrial robots, thus the growth of installed capacity has been limited. The shortage of talent in system integration has impeded the transformation and upgrading of the industrial robot industry and has slowed down its development. Fourth, a framework for the standard certification system for industrial robots has just been established and it still needs to be improved.

Going forward, financial institutions should be encouraged to promote innovations in financing, leasing, and pledge operations so as to step up financial support to the industrial robot industry. The market should play a decisive role in demand-oriented resource allocations to promote the development of core techniques, the construction of industrial chains, the expansion of application coverage, and regional agglomeration. Efforts should be made to strengthen intellectual property rights (IPR) protection, create a fair playing ground for competition, and enhance international exchanges and cooperation in order to promote the sustainable, healthy, and rapid development of the domestic industrial robot industry.

Part 5. MonetaryPolicy Stance to be Adopted during the Next Stage

I. Outlook for the Chinese economy

During the next period several favorable factors will support the sound growth of the Chinese economy. The global economy is facing mounting downward pressures but the recovery is continuing. The IMF’s growth-rate projection for 2019 remains basically flat with that of the previous years. In the long run, the Chinese economy will continue to face important strategic opportunities. A good start has been made in the three critical battles of preventing and mitigating key risks, poverty reduction and pollution control, and further advancing supply-side reforms. The reform and opening up has been enhanced and the people's livelihood has seen further improvements. Sustained and healthy development has been achieved and the economy has been resilient and full of potential. Domestic demand is contributing more to growth, with the further improvements in the economic structure as a result of the booming emerging industries and good progress in the upgrading of the traditional industries. Employment has remained stable. In 2018 the urbanization rate increased by more than 1 percentage point, with a remarkable growth potential in new urbanization, the services industry, and the high-end manufacturing industry, and there is much room for policy maneuvers. Efforts to prevent financial risks have produced results, and the overall leverage of the economy has stabilized. In 2018 China's M2 as a percentage of GDP declined by 3 percentage points year on year. Meanwhile, the financial sector has provided sound support to the real economy and the recent counter-cyclical measures are yielding results. The PBC's Quarterly Survey of Entrepreneurs and Bankers in Q4 of2018 reveals that the macroeconomic indicator and confidence indicator have edged down both year on year and quarter on quarter, but they are still at relatively high levels. The index for the business climate has edged up quarter on quarter.The Survey of Urban Depositors shows that household employment sentiment and expectations edged up quarter on quarter and remained at a relatively high level.

It is worth noting that growth is facing profound and complicated changes in both the international environment and in domestic conditions. The fostering of supply-side structural reforms will inexorably face difficulties and challenges. The economic situation is characterized by changes amid overall stability and concerns in tandem with changes. Some chronic risks and hidden dangers have been exposed and the economy is facing greater downward pressures. The global economic landscape has become more complicated. Geopolitical risks remain heightened and monetary-policy normalization in the advanced economies is creating uncertainties.

Trade tensions have brought about export uncertainties and may result in external demand producingdiminishing marginal contributions to growth, a dampening of investor confidence, and aggravation of financial market fluctuations. Domestically, the traditional key industries, such as real estate and automobiles, are adjusting and most emerging industries and new growth drivers are smaller in size compared with the key traditional industries. Meanwhile, consumption growth is lackluster and the momentum for endogenous growth must be further strengthened. The effective financing needs of the corporate sector have fallen and financial institutions which are facing constraints, have demonstrated a lower appetite for risks.

Prices are generally stable, but future developments warrant close monitoring. The pace of price hikes is determined by boththe economic fundamentals and the relative changes in supply and demand. Domestically, growth is generally stable. Favorable developments, such as the grain and cotton harvests, the upgrading of industrial consumption goods, the reduction in overcapacity as a result of the supply-side structural reforms, and the generally balanced supply and demand, all contribute to stable price levels and well-anchored inflationary expectations. According to the Q4Urban Depositors' Survey conducted by the PBC, the Future Price Expectation Index remained flat year on year at 64.3 percent. In general, the CPI may continue to grow moderately during the next period. The PPI is subject to price developments in international commodities as well as in domestic supply and demand. Such uncertainties warrant continued monitoring of the PPI trajectory.

II. Monetary policy during the next stage

Going forward, the PBC will act in accordance with the decisions and overall arrangements of the CPC Central Committee and the State Council, follow the guidance of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, continue to adhere to the guiding principles of seeking progress while maintaining stability and to the new vision for development, pursue high-quality growth, press ahead with the supply-side structural reform, focus on the three major tasks of serving the real economy, preventing financial risks, and deepening financial reforms, and adopt innovative approaches and improve financial macro-management. Efforts will be made to maintain a prudent monetary policy with appropriate intensity, strengthen counter-cyclical adjustment, conduct macroeconomic management in a well-measured manner, and strike a balance among multiple objectives. Efforts will be made to enhance policy coordination, smooth monetary-policy transmission channels, make innovations in monetary-policy tools and mechanisms, and further enhance the abilityand willingness of the financial sector to serve the real economy. A three-pronged approach should be taken for implementing a sound monetary policy, enhancing the dynamism of market players, and tapping the capital market so as tofoster a virtuous cycle in the national economy.

Box 5 Understanding the Sound Monetary Policy

It was noted at the Central Economic Work Conference in December 2018 that a sound monetary policy shall be maintained. The stance of a sound monetary policy remains unchanged, and the "soundness" emphasizes that monetary policy should adhere to the overarching principle of steady progress. In response to the complicated and severe economic situations both at home and abroad, sound monetary policy should be appropriate in intensity and be handled in a more forward-looking, flexible, and targeted manner. Counter-cyclical adjustments should be strengthened, while carefully calibrating macro control, so as to maintain that monetary conditions are in line with the requirements of stable economic growth and price stability. Money supply can neither be excessive nor inadequate.

Continued implementation of a sound monetary policy does not mean that monetary conditions remain unchanged. Rather, it means that dynamic regulation and counter-cyclical adjustments should be carried out in light of developments and changes in the economic conditions, moderately ironing out cyclical fluctuations of the economy. These moves should also prevent overheating and inflation in the economic upturn and deal with economic recessions and deflation in the downturn. In terms of liquidity, the growth of M2 and aggregate financing to the real economy should generally be in aligned with nominal GDP growth. As for costs, interest rate should meet the requirements of maintaining potential economic output. Appropriate measures should be adopted to tap structural monetary policy to provide liquidity where it is most needed, optimize investment and liquidity structure, and promote structural adjustments and reforms, while keeping the aggregate liquidity at an appropriate level. The implementation of a sound monetary policy should meet the needs of the three uphill battles (mitigating major risks, targeted poverty alleviation and pollution control) and of preventing systemic financial risks, thus creating a favorable monetary environment for forestalling and defusing major risks. Efforts should also be made to prevent risks arising from excessively tight monetary conditions, while preventing massive indiscriminate stimulus that could create further distortions and accumulate more risks. In the context of an open economy, additional measures should be taken to maintain the soundness of monetary policy by striking the right balance between the internal and external equilibrium, and better coordinating policies governing the local and foreign currencies. In the event of any contradiction between the internal and external equilibrium, as China is a major economy that relies on domestic demand, priority should be placed on internal equilibrium while giving consideration to external equilibrium to find the optimal balance point.

Economic situations both at home and abroad have become complicated since 2018. In response, the PBC worked earnestly to implement a sound monetary policy, conducted preemptive adjustments and fine-tunings in a forward-looking manner, strengthened counter-cyclical adjustments, gave top priority to serving the real economy, and enhanced financial support for the real economy, especially for small and micro businesses (SMBs) and private enterprises. Both money supply and all-system financing aggregates increased at a steady pace, compatible with the nominal GDP growth. The monetary policy struck a balance between supporting the real economy and balancing the internal and external equilibria. At end-2018, M2 was up 8.1 percent year on year, unchanged from 2017. All-system financing aggregates grew by 9.8 percent year on year. New loans in 2018 totaled RMB 16.2 trillion, representing an acceleration of RMB 2.6 trillion year on year. Loans to SMBs for inclusive growth purposes grew at a rate significantly faster than in 2017. The efforts to prevent financial risks have produced results, and the overall leverage of the economy has remained stable.

In the coming period, there are many favorable conditions for the stable and sound development of the Chinese economy. In general, the global economy continued its recovery momentum. Supply-side reforms continued to push forward domestically, and the Chinese economy is resilient and has great growth potentials. As a result, the effect of macroeconomic policy has become more pronounced. At the same time, the Chinese economy faces some challenges to achieve steady development. The momentum of global economic growth has weakened, domestic economy is under downward pressures, and the drivers for endogenous growth need to be further enhanced. There is plenty room for monetary policy maneuver, but tough challenges exit as well.

Going forward, the PBC will continue to focus on supply-side structural reforms and promote high-quality economic development. The sound monetary policy should be calibrated to avoid risks arising from excessively tight monetary conditions and to prevent massive indiscriminate stimulus that could give rise to further distortions and accumulation of risks. The essence of monetary policy is to serve the real economy. Meanwhile, measures will be taken to keep a good balance between the aggregates and the structure of monetary supply, innovate monetary policy tools, and leverage the policy synergy forged by all parties involved, thus consolidating micro foundations for a smooth transmission mechanism of monetary policy from both the supply and the demand sides. Additional measures will be taken to reinforce policy coordination between local and foreign currencies, striking a balance between the internal and external equilibria. Efforts will be taken to strengthen the incentive mechanism, optimize the financial structure, improve the adaptability of financial structure, and enhance the resilience of the financial system in the process of economic transformation and upgrading. The two-pillar macro-management framework of monetary policy and macro-prudential policy will be improved to hold the bottom line of preventing systemic financial risks. Measures will be adopted to strengthen policy coordination and enhance compatibility of incentive mechanisms, while giving play to the role of the sound monetary policy. Continued efforts will be taken to promote supply-side structural reforms, improve weak links, stabilize market expectations, improve business environment, shore up the confidence of entrepreneurs and market players, so as to maintain stable and sustainable economic growth.

First, the PBC will implement a sound monetary policy with appropriate intensity, enhance counter-cyclical adjustments, maintain reasonably abundant liquidity, and keep market interest rates at an appropriately stable level. Thetwo-pillar macro-management framework of monetary policy and macro-prudential policy will be improved by flexibly adopting a mix of monetary-policy tools in a well-coordinated manner. Efforts will be made to strike a balance between aggregates and structure, to tap the synergy among the relevant government agencies,to lay a solid foundation for smooth monetary-policy transmission from both the supply and the demand sides, and to maintain reasonable growth of money, credit, and all-system financing. Measures will be taken to further enhance macro-prudential management, facilitate capital replenishment by commercial banks via multiple channels, make full use of the MPA in counter-cyclical adjustments, and to take advantage of the role of the structural adjustments by guiding financial institutions to give more support to SMBs, private enterprises, and other weak links in the economy.

Second, monetary policy will promote structural optimizationand better serve the real economy. A mix of monetary-policy tools will be adopted to guide financial institutions to enhance their support for the private sector and SMBs in a market-based and lawful manner. Structural monetary-policy instruments, such as a targeted cut in the reserve requirement ratio, a targeted Medium-term Lending Facility, central-bank lending and central-bank discounts, as well as new monetary-policy tools, will be adopted to provide well-targeted financing support. Measures will be taken to guide financial institutions to provide quality financial services to key sectors and to weak links in the economy by enhancing financial support to high- and new-tech firms, emerging industries, as well as to restructuring and upgrading the manufacturing industry, promoting financial services for thevitalization of the rural areas, focusing on poverty reduction in seriously impoverished regions, improving the mechanism for linking industrial development and poverty alleviation so as to win the critical battle of poverty reduction. A smooth transition will take place after the expiration of the pilot program on collateralized lending against rights for contractual management of rural land and for using rural homesteads. Efforts will be made to widen financing channels for high-tech and innovative firms, enhance implementation of guaranteed lending for starting businesses, and better support self-employment and employment of key groups, such as university graduates, veterans, and returned migrant workers. Policy requirements will be implemented by curbing new contingent liabilities, soundly tackling the stock of bank debt, and promoting resolution in a categorized manner so as to protect the lawful rights of creditors. Eligible credit assets will be securitized to activate the stock of assets, thus promoting quality growth and economic upgrading.

Third, market-based interest-rate reforms and the RMB exchangerate regime reforms will be furthered to improve the efficiency of financial resource allocations and to improve the financial management system. Steady progress will be made to promote a gradual convergence of the two-track interest-rate system into a unified arrangement by improving the market-based interest-rate formation, adjustment, and transmission mechanism. The PBC will make its policy rates more effective to guide market rates, improve the interest-rate corridor mechanism, enhance its capacity to guide interest rates in order to further improve the transmission of central-bank policy rates to the financial market and to the real economy, and enhance the capacity of financial institutions to price loans so as to foster competition and to better serve the real economy. More measures will be adopted to develop market-based benchmark rates, to improve the yield curves of government securities, and to continuously improve the market-based interest-rate pricing mechanism. Oversight and management of irrational pricing of financial institutions will be bolstered and the important role of market interest rates and the self-disciplinary mechanism will be tapped. Effective approaches will be adopted to provide incentives and to regulate interest-rate pricing, while industry self-discipline and risk prevention will be reinforced to maintain order for fair pricing. The reform of the market-based RMB exchange-rate regime will be deepened to improve the managed floating exchange rate based on market supply and demand and with reference to a basket of currencies, to allow the market to play a greater role in determining the exchange rate, to enhance two-way flexibility in the RMB exchange rate, and to keep the RMB exchange rate basically stable at an adaptive and equilibrium level. Based on the principle that finance should serve the real economy, development of the foreign-exchange market will be accelerated to provide exchange-rate risk management services based on actual needs. The PBC will steadily promote the convertibility of the RMB under the capital account, promote market development for direct trading of the RMB against other currencies, improve the policy framework and infrastructure for the use of RMB in cross-border activities, and strike a balance between development, reform, and risk prevention, thus supporting the use of the RMB in the settlement of cross-border trade.

Fourth, the financial-market system will be improved to enhance its role in stabilizing growth, facilitating restructuring, promoting reforms, and preventing risks. In accordance with the principle that the financial sector must serve the real economy, product innovation for capital replenishment has been facilitated, such as the launch of perpetual debt on the part of commercial banks. Measures will be taken to improve the risk prevention and resolution mechanism for bond defaults, promote the integration of rules for the issuance, entrance, and disclosure of corporate credit debt instruments, and strengthen the supervision and management of green financial bonds during their maturity. The two-way opening of the bond market will continue to be facilitated by encouraging various overseas institutions to issue bonds on the onshore RMB market, for domestic institutions to place bonds on offshore markets, and to encourage overseas institutions to invest in the onshore bond market. Development of the secondary bond market will be facilitated via better institutional arrangements for trading, clearing, and settlement, and improvements will be made in the market-maker assessment system so as to enhance liquidity in the bond market and to put in place a friendlier and more facilitating investment environment. An overarching management framework for the infrastructure of the financial market will be put in place to enhance market infrastructure and to ensure the safe and efficient operation and the overall stability of the financial market. A unified law enforcement mechanism for the bond market will be built to crack down on crimes and illegal activities so as to protect investors' interests, safeguard market order, and promote the sound development of the bond market

Fifth, reform of financial institutions will be deepened and financial services will be improved by increasing supply and enhancing competition. Reform of large commercial banks and other large financial institutions will be further deepened by improving corporate governance, regulating the relationship among the shareholders' meeting, the board of directors, the board of supervisors, and management, improving the operation authorization system, establishing an effective system for decision making, execution, and checks and balances, and improving the quality of operations and management and the capacity for risk-control. Further reforms of the management and operational mechanisms of the Agricultural and Rural Financial Service Division of the Agricultural Bank of China will be promoted, and effective measures will be taken to revitalize the County Service Division to improve its capacity to serve the real economy at the county level. The reform program for development and policy financial institutions will be implemented in a comprehensive manner. The PBC will coordinate the relevant authorities, in light of the requirements and the division of responsibilities put forward by the reform plan, to rapidly complete the follow-up tasks for improving the governance structure, specifying the scope of businesses, improving the risk compensation mechanisms, and deepening the reforms in order to nurture development and policy financial institutions with Chinese characteristics that provide services for economic development and operate on a sustainable basis. A more adaptable financial structure will be put in place to enhance the resilience of the financial system while also serving economic restructuring and upgrading.

Sixth, efforts will be made to win the critical battle of preventing and mitigating major financial risks. Following the leadership of the Financial Stability and Development Committee under the State Council, the PBC will earnestly fulfill its role as the committee's office, continue to implement the plan for preventing and mitigating major financial risks, stabilize the macro-leverage ratio, launch regulatory measures governing financial holding companies, fill gaps in financial regulation, and further press ahead with the special campaign to manage risks with respect to Internet finance. The aim is to enhance the adaptability of the financial structure, enhance the capacity of the financial system to serve the real economy, significantly improve the legal framework of the financial sector, and put in place institutional arrangements with hard constraints so as to effectively prevent and control systemic risks and to create a favorable financial environment for building a moderately prosperous society in all respects by the year 2020.