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Executive Summary

In 2015, the recovery of global economy was slow. Growth performance and monetary policies of major advanced economies further diverged, and international financial markets and commodity prices experienced large fluctuations. Overall speaking, performance of the Chinese economy was stable. The reform of the financial sector deepened, financial institutions became more competitive, the development of financial markets was characterized by enhanced regulation and innovation, and the building of financial market infrastructure made further progress. The financial system was generally stable and sound, and gained strength in servicing the real economy.

The development of the financial sector was well regulated. The assets and liabilities of the banking sector continued to expand, and the services to the agricultural sector, rural areas, farmers, small and micro enterprises further improved. As a result, more credit resources were allocated to the key areas and weak links in economic and social development. The reforms of development and policy financial institutions made important progress. The CAR of the banking sector remained stable and on the increase. The credit risks were generally under control. The operation of the securities and futures sector was stable. The market participants registered sound growth; product innovation was orderly; market institutional arrangements were further improved; and capital market opening-up continued in both directions. The assets of the insurance sector kept expanding with insurance premium income growing at a fast pace; investment yield of insurance fund increased substantially; profits and efficiency improved steadily, and the capacity to serve the society and improve the people's livelihood was enhanced.

The performance of financial markets was stable. The products and market participants were both diversified. Infrastructure improvement continued and further progress was made in opening-up. Overall speaking, interest rates were down in the money market, and trading volume expanded significantly. The issuance volume increased notably in the bond market. Secondary market trading was increasingly brisk, bond market participants were further diversified, and the cost of financing for enterprises declined. The stock indices fluctuated by a large margin but rallied in general. The volume of equity financing surged. The trading volume of futures grew rapidly and prices of commodity futures declined, while the prices of stock index futures had large swings. The RMB interest rate derivatives were traded more briskly and product innovation was in a boom.

The building of financial infrastructure made concrete progress. The payment, clearing and settlement systems were further improved, and the CIPS system was launched. The financial laws, regulations and rules were further enhanced, and the items subject to administrative approval were further streamlined. The accounting standard system was further improved, with enterprise accounting standards optimized and progress made in government comprehensive financial reporting system. The development of credit information industry and social credit system was sound and orderly while regulation of the credit information market and credit rating market was enhanced. The AML work was conducted steadily, and law enforcement review and international cooperation continued. The mechanism for financial consumer protection was improved and the related surveillance and assessment made progress.

The macroprudential regulation was further strengthened. The mechanism of Joint Ministerial Conference on Financial Regulatiory Coordination was constantly improved. The studies on major financial topics were further deepened, and coordination between macro-economic management and financial regulation was enhanced. The financial institution macroprudential assessment system was established, updating the mechanism of dynamic adjustment of differentiated reserve requirements into macroprudential assessment. The foreign exchange liquidity and cross-border fund flow were included into the scope of macroprudential regulation in an effort to further improve macroprudential policy framework. The systemic risk monitoring and assessment, as well as regulation of systemically important financial institutions, were enhanced.

At present, the Chinese economy is at a critical stage of structural adjustment, transformation and upgrading. The development of financial sector faces more dilemmas and even multilemmas. Destabilizing factors are on the increase and there are challenges to financial stability. From the international perspective, the global economy continues the profound adjustment and rebalancing, as recovery in advanced economies is not solidly based and growth of emerging market economies is tepid. The international financial markets are more volatile and geopolitical risks are on the rise, all pointing to increased uncertainties in the outlook for global economy and financial markets. From the domestic perspective, the Chinese economy is changing gear and going through laborious structural adjustment when old growth drivers are being replaced by new ones. The endogenous drive for growth is not yet strong, while structural problems and conflicts remain acute. The potential risks in certain regions and industries have gradually surfaced. With the existence of high structural excess capacity and elevated level of enterprise leverage ratio, the NPLs of banking sector has further rebounded. The risk of illegal fundraising has resurfaced. Some cross-market, cross-sector risks and their potential spread should be closely monitored.

In 2016, given the increasing complexity in economic and financial situation, it is necessary to implement the decisions adopted at the 18th CPC National Congress, the 3rd, 4th and 5th Plenary Sessions of the 18th CPC Central Committee, adapt to the new normal of the economy, continue to make progress while maintaining stability, implement a pro-active fiscal policy and a sound monetary policy, and make special efforts to strengthen supply-side structural reforms. That is, overcapacity will be removed, the excess inventory, leverage ratio and costs will be reduced, and the weak spots will be shored up to improve the quality and efficiency of the supply system, promote higher-quality, more efficient, more equitable and more sustainable development of the real economy and financial sector. The reform and opening-up of financial sector will be advanced to release reform dividends continuously. The key reforms will be deepened, financial regulation enhanced, and the macroprudential policy framework improved. The financial risk monitoring, assessment, early warning and resolution system will be improved. Potential risks should be screened across the board, and the analysis and study of cross-sector, cross-market risks and risk contagion will be enhanced. The financial regulatory coordination mechanism will be improved to address regulatory vacuum and prevent regulatory arbitrage. The implementation of deposit insurance scheme will continue as a vital step to improve the financial safety net. The bottom-line thinking will be reinforced so that effective measures will be adopted in a timely manner to hold on to the bottom line of allowing no systemic and regional financial risks to happen.

Abbreviations and Acronyms

ABC	Agricultural Bank of China
ACS	Accounting Data Centralized System
ADBC	Agricultural Development Bank of China
AML	Anti-money laundering
APG	Asia/Pacific Group on Money Laundering
ASEAN	Association of Southeast Asian Nations
BaFin	Federal Financial Supervisory Authority
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BOC	Bank of China
BOCOM	Bank of Communications
BOP	Balance of payments
CABD	County Area Banking Division
CAR	Capital adequacy ratio
CBRC	China Banking Regulatory Commission
CCB	China Construction Bank
CCP	Central counterparty
CD	Certificate of deposit
CDB	China Development Bank
CDS	Credit default swap
CFETS	China Foreign Exchange Trade System
CFT	Combating the Financing of Terrorism
CIPS	Cross-border Inter-bank Payment System
CIRC	China Insurance Regulatory Commission
CMG	Crisis management group
COAG	Cross-border cooperation agreement
CPC	Communist Party of China
CPI	Consumer price index
CPMI	Committee on Payments and Market Infrastructures

CRA	Credit rating agency
CSI	China Securities Index
CSRC	China Securities Regulatory Commission
D-SIB	Domestic systemically important bank
DSTI	Debt-service-to-income
DTI	Debt-to-income
DVP	Delivery versus payment
EAG	Eurasian Group on Combating Money Laundering and Financing of Terrorism
EC	European Commission
ECB	European Central Bank
EME	Emerging market economy
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
ETF	Exchange-traded fund
EU	European Union
EUR	Euro
Euribor	Euro Interbank Offered Rate
Eximbank	Export-Import Bank of China
FATF	Financial Action Task Force
FDIC	Federal Deposit Insurance Corporation
FMI	Financial market infrastructure
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FX	Foreign exchange
G20	Group of Twenty
GDP	Gross Domestic Product
GEB	Growth Enterprise Board
GPFI	Global Partnership for Financial Inclusion
G-SIB	Global systemically important bank
G-SII	Global systemically important insurer
IADI	International Association of Deposit Insurers
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
ICBC	Industrial and Commercial Bank of China
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IPO	Initial public offering

ISDA	International Swaps and Derivatives Association
JSCB	Joint-stock commercial bank
LCB	Large commercial bank
LGD	Loss given default
LGFP	Local government financing platform
Libor	London Interbank Offered Rate
LTD	Loan-to-deposit
LTI	Loan-to-income
LTV	Loan-to-value
M&A	Mergers and acquisitions
MLF	Medium-term Lending Facility
MMF	Money market fund
MOF	Ministry of Finance
MPA	Macroprudential Assessment
NBS	National Bureau of Statistics
NDRC	National Development and Reform Commission
NPL	Non-performing loan
OMO	Open Market Operations
OTC	Over the counter
PBC	People’s Bank of China
PPI	Producer price index
PSBC	Postal Savings Bank of China
PSL	Pledged Supplementary Lending
QFII	Qualified Foreign Institutional Investors
RAP	Resolvability assessment process
RCAP	Regulatory Consistency Assessment Programme
RMB	Renminbi
ROA	Return on assets
ROE	Return on equity
ROI	Return on investment
RQDII	RMB Qualified Domestic Institutional Investors
RQFII	RMB Qualified Foreign Institutional Investors
RRP	Recovery and resolution plan
RWA	Risk-weighted asset
SAR	Special Administrative Region
SDR	Special Drawing Right

SEACEN	South East Asian Central Banks
SEC	Securities and Exchange Commission
Shibor	Shanghai Interbank Offered Rate
SIFI	Systemically important financial institution
SLF	Standing Lending Facility
SLO	Short-term Liquidity Operation
SME	Small and medium-sized enterprise
SOE	State-owned enterprise
SSB	Standard-setting body
SSE	Shanghai Stock Exchange
SWIFT	Society for Worldwide Interbank Financial Telecommunications
TLAC	Total Loss Absorbing Capacity
UK	United Kingdom
US	United States
USD	US Dollar
XBRL	Extensible Business Reporting Language
y-o-y	year-on-year

CONTENTS

Chapter Ⅰ

International Economic and Financial Environment

In 2015, the world economic situation became even more complex, with major economies diverging further in terms of growth momentum and monetary policies, international financial markets and commodity prices experiencing greater fluctuation and non-economic disturbing factors including geopolitical risks also increasing. Looking forward to the year 2016, there are still many unstable and uncertain aspects during the world economic recovery, and all economies should take active measures to respond to adverse shocks, step up structural reforms, reinforce macroeconomic policy coordination and ensure stable economic growth.

I. Economic Developments in Major Economies

In 2015, the world economy continued to undergo a slow recovery. Growth in major advanced economies remained modest, with growth momentum in the U.S. relatively steady, the euro area recovering tepidly, and growth in Japan fluctuating greatly accompanied by deflation pressure. Emerging market economies still grew faster than advanced economies, but their growth slowed down for the fifth consecutive year, and weakness in some economies further emerged.

The U.S. recovery tended to be steady. GDP growth recorded 2.5 percent for the entire year. Real annualized quarterly rate dropped to 0.6 percent in the first quarter influenced by adverse factors such as bad weather, but rebounded since the second quarter, driven by multiple factors including strong growth of manufacturing and services, increase of consumption growth rate and continuous improvement of the real estate market. But the growth in manufacturing and services slowed down in the fourth quarter, and the annualized quarterly rate for the last 3 quarters recorded 3.9 percent, 2.0 percent and 1.4 percent respectively. The labor market improved further, with the unemployment rate dropping to 5.0 percent in December, the lowest level since 2008. Inflation remained low throughout the year, and CPI registered only 0.7 percent y-o-y at the end of December. The trade deficit continued to increase to USD 531.5 billion for the whole year.

The economy in **the euro area** recovered tepidly. As a result of the ECB stimulus policies and euro depreciation, the economy in the euro area recovered tepidly. In 2015, the euro area grew at a moderate pace, with the GDP growth rate posting 2.3 percent, 1.6 percent, 1.2 percent and 1.3 percent for each quarter respectively. The ZEW indicator of economic sentiment, which measures consumer and enterprise confidence, edged up to 106.7 in December, the highest level in the recent four years. The labor market improved continuously, and the unemployment rate declined steadily to 10.4 percent in December, the lowest level since February 2012. Despite the multiple stimulus policies by the ECB, the CPI level in the euro area remained low with significant downward pressure.

Growth in **Japan** fluctuated greatly accompanied by deflation pressure. Economic growth rebounded significantly for the first quarter of 2015, but declined afterwards due to sharp contraction of private consumption and net exports, with the annualized quarterly rate for the last 3 quarters recording –1.4 percent, 1.4 percent and –1.1 percent respectively. Manufacturing PMI recovered remarkably and the unemployment rate kept improving. But affected by factors including continuous and rapid drop of international oil prices, the CPI level remained low amid downward pressure except for the first quarter, far from the 2 percent inflation target of Bank of Japan. Moreover, the exchange rate had remained low since 2013, but its contribution to exports was not significant. Affected by sharp decrease of imports, the trade deficit for 2015 contracted largely to JPY 2.84 trillion.

Table 1.1 Macro-economic and Financial Indices in Major Advanced Economies

Country	Index	2015Q1			2015Q2			2015Q3			2015Q4		
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
United States	Real GDP Growth Rate (annualized quarterly rate, %)	0.6			3.9			2.0			1.0		
	Unemployment Rate (Seasonally adjusted, %)	5.7	5.5	5.5	5.4	5.5	5.3	5.3	5.1	5.1	5.0	5.0	5.0
	CPI (y-o-y, %)	-0.1	0.0	-0.1	-0.2	0.0	0.1	0.2	0.2	0.0	0.2	0.5	0.7
	DJ Industrial Average (closing number)	17 165	18 133	17 776	17 841	18 011	17 620	17 690	16 528	16 285	17 664	17 720	17 425
Euro Area	Real GDP Growth Rate (annualized quarterly rate, %)	2.3			1.6			1.2			1.3		
	Unemployment Rate (Seasonally adjusted, %)	11.2	11.2	11.2	11.1	11.0	11.0	10.8	10.8	10.7	10.6	10.5	10.4
	HICP (y-o-y, %)	-0.6	-0.3	-0.1	0.0	0.3	0.2	0.2	0.1	-0.1	0.1	0.1	0.2
	EURO STOXX 50 (closing number)	3 198	3 401	3 435	3 439	3 444	3 285	3 432	3 110	2 977	3 216	3 288	3 100
Japan	Real GDP Growth Rate (annualized quarterly rate, %)	4.6			-1.4			1.4			-1.1		
	Unemployment Rate (Seasonally adjusted, %)	3.6	3.5	3.4	3.3	3.3	3.4	3.3	3.4	3.4	3.1	3.3	3.3
	Core CPI (y-o-y, %)	2.2	2.0	2.2	0.3	0.1	0.1	0.0	-0.1	-0.1	-0.1	0.1	0.1
	NIKKEI225 (closing number)	17 674	18 798	19 207	19 520	20 563	20 235	20 585	18 890	17 388	19 083	19 747	19 034

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

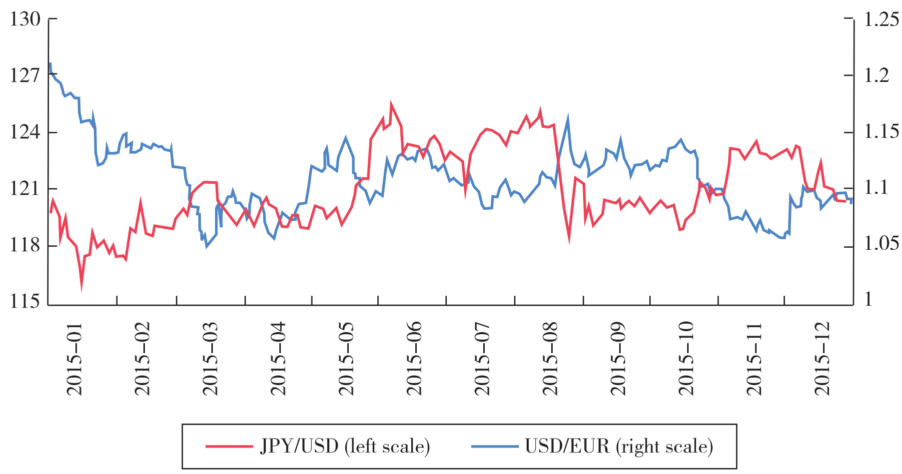
Growth in **emerging market economies** as a whole further slowed down, with vulnerabilities rising in some economies. Except for India which grew at a high pace of 7.3 percent, most emerging market economies such as Malaysia and Indonesia were confronted with increase in financial market risks and significant economic slowdown, because of expectation of higher U.S. federal funds rate, reversal in international capital flows, slump commodity prices, geopolitical shocks as well as domestic structural problems. Some economies even went into recessions, for example, GDP in Brazil declining by 3.8 percent and Russia declining by 3.7 percent y-o-y.

II. International Financial Market Performance

In 2015, affected by expectation of the increase in the U.S. federal funds rate, continuous monetary policy divergence in major economies and rising geopolitical risks, the international financial markets fluctuated dramatically. In particular, most currencies depreciated against the US dollar, Treasury bond and stock markets fluctuated more wildly, commodity prices kept declining, and international oil prices still mired in a slump.

Most currencies depreciated against the US dollar. Affected by expectation of the increase in the US federal funds rate, the US Dollar Index kept rising and most other major currencies depreciated against the US dollar to various degrees. As of end-2015, the exchange rates of the USD/EUR, USD/GBP and JPY/USD closed at 1.086 dollar per euro, 1.4738 dollar per pound and 120.3 yen per dollar, with the depreciation being 10.23 percent, 5.36 percent and 0.52 percent from end-2014 respectively. Most of the emerging market currencies also depreciated against the US dollar. In particular, the Kazakhstani Tenge and Brazilian real depreciated by more than 30 percent against the US dollar. The South African rand, Russian ruble and Argentina peso depreciated by more than 20 percent. The Malaysian Ringgit, Mexican peso and Indonesian rupiah depreciated by more than 10 percent.

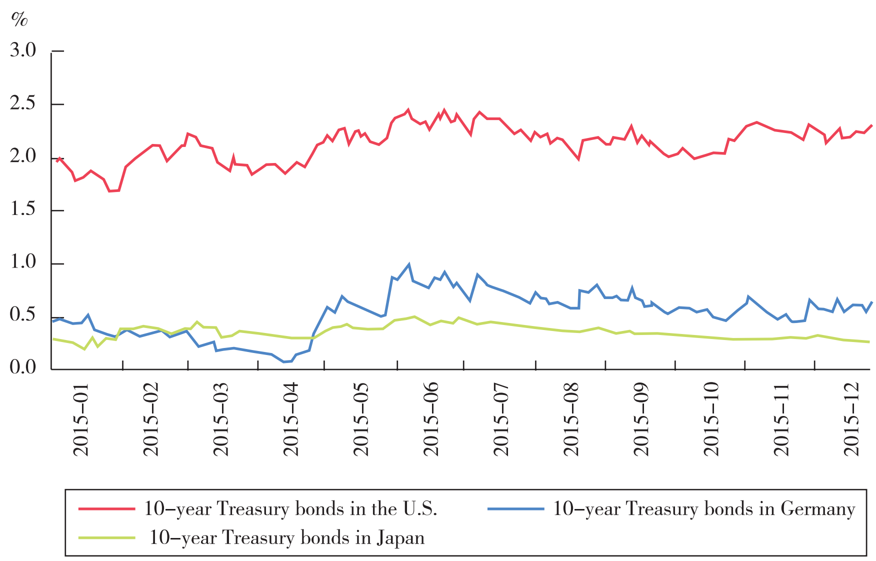
Figure 1.1 Exchange Rate Movements of Major Currencies



Source: Reuters.

Treasury bond yields in different economies began to diverge. Due to differences in monetary policies, Treasury bond yields in advanced economies diverged. As of the end of 2015, 10-year Treasury bond yields in the U.S., Germany and United Kingdom closed at 2.275 percent, 0.634 percent and 1.961 percent respectively, up 10, 14 and 21 basis points compared with the end of 2014. The 10-year Treasury bond yield in Japan closed at 0.325 percent, down 5 basis points. Treasury bond yields in emerging market economies also diverged, with 10-year Treasury bond yields in Argentina, Russia and Greece down 840, 428 and 121 basis points respectively compared with end-2014, while Brazil, Turkey, South Africa and Indonesia up 416, 238, 197 and 102 basis points respectively.

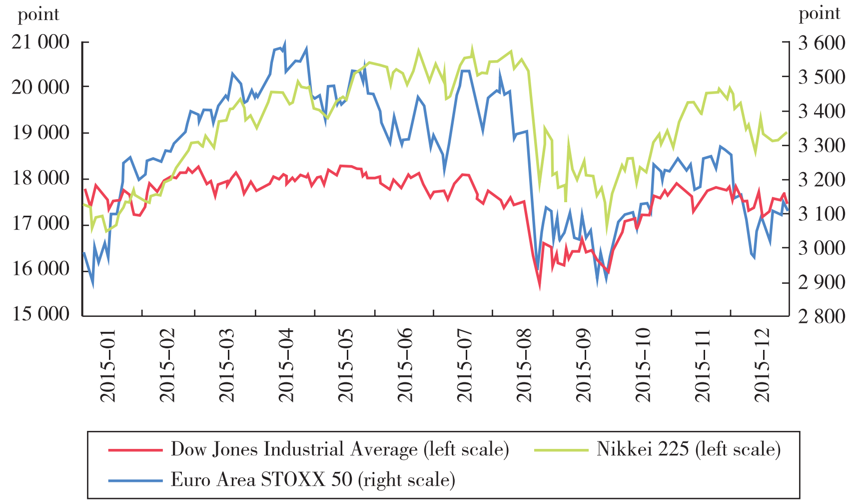
Figure 1.2 Yields of Treasury bonds in Major Economies



Source: Reuters.

Global stock markets fluctuated more wildly. In the first quarter of 2015, the global stock markets performed well, but fluctuated more wildly with dramatic drop in the second and third quarters, and then rebounded in the fourth quarter. As of end-2015, the Dow Jones Industrial Average Index closed at 17425.03, down 2.23 percent from the end of the last year. The STOXX 50 Index and Nikkei 225 Index closed at 3100.26 and 19033.71 respectively, up 3.21 percent and 9.07 percent. Stock markets in emerging market economies generally declined, with Turkey and Indonesia in the lead, losing 16.32 percent and 12.39 percent respectively.

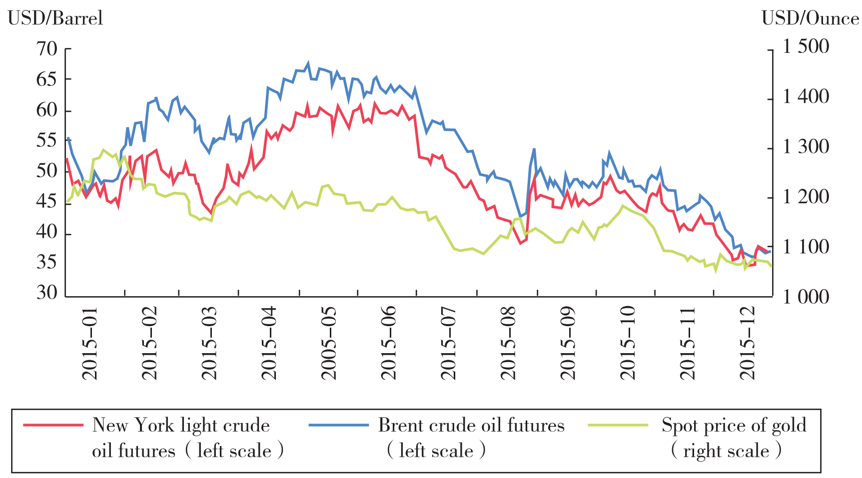
Figure 1.3 Major Stock Indices



Source: Reuters.

The international gold and crude oil prices continued to decline. As of the end of 2015, the U.S. Commodity Research Bureau (CRB) Spot Index, which comprises of most commodities on the international markets, closed at 374.70, with a widening y-o-y fall of 63.05. The gold price continued to decline. The highest gold price during the year was USD 1295.75 per ounce, and the lowest USD 1049.40 per ounce. It closed at USD 1062.25 per ounce at the year-end, falling by USD 137.00 per ounce compared with the last year. Meanwhile, the international crude oil price also kept declining. As of the end of 2015, the New York light crude oil futures and London Brent crude oil futures closed at USD 37.04 and USD 37.28 per barrel respectively, falling by 29.7 percent and 33.9 percent y-o-y.

Figure 1.4 Price Indices of Gold and Crude Oil on the International Markets



Source: Reuters.

Global money market interest rates diverged. In 2015, due to the expectation that the Federal Reserve will raise interest rates, the USD Libor in the London Inter-bank Market edged up amid fluctuation, rising more significantly since November. At the end of 2015, the USD Libor posted 1.178 percent, a large increase of 55 basis points from the previous year. As a result of the further easing monetary policies by the ECB, the Euro Libor closed at 0.0593 percent, down 23 basis points from the end of 2014. The Euribor maintained the declining tendency of last year, closing at 0.060 percent, a decrease of 27 basis points from the previous year.

III. Monetary Policies of Major Economies

In 2015, monetary policies diverged further across major advanced economies and some emerging market economies.

The Federal Reserve raised the policy rates. On 16 December, the Federal Reserve announced to adjust the target range of the federal funds rate from 0-0.25 percent to 0.25-0.5 percent, up 25 basis points. It also decided to raise the interest rate paid on required and excess reserve balances from 0.25 percent to 0.5 percent, up 25 basis points, and announced a 0.25 basis point increase in the discount rate from 0.75 percent to 1.00 percent. The Federal Reserve promised to maintain its accommodative monetary policy stance for a certain period of time after this adjustment.

The ECB reinforced its accommodative monetary policies. In January, the ECB decided to increase the scale of the asset purchase program to EUR 60 billion, and expand it to bonds issued by euro area central governments, agencies and European institutions. It also implemented the Public Sector Purchase Programme (PSPP) in March, and increased the issue share limit of a single issuer from 25 percent to 33 percent in September. On 3 December, the ECB announced that the interest rate on the deposit facility would be decreased by 10 basis points to –0.30 percent, and the interest rates on refinancing operations and the marginal lending facility would remain unchanged at 0.05 percent and 0.30 percent respectively. It also decided to extend the Asset Purchase Programme until March 2017, and the current fixed-rate full-allotment tender procedure for the main refinancing operations (MRO) and three-month longer-term refinancing operations (LTRO) until at least the end of 2017.

The Bank of England maintained its current monetary policies. The Bank of England maintained the Bank Rate at 0.5 percent and the scale of its asset purchases of GBP 375 billion.

The Bank of Japan announced additional easing monetary policies. In 2015, the Bank of Japan continued to carry out its quantitative and qualitative easing (QQE) monetary policies, and announced to maintain the annual increase pace of monetary base at JPY 80 trillion. On 18 December, the Bank of Japan decided to establish a new exchange-traded fund purchase plan, to increase its purchase scale of Japan real estate investment trusts (J-REITs) to 10 percent of the total amount from the previous 5 percent, and extend the average remaining maturity of the Bank's JGB purchases to about 7-12 years from the previous 7-10 years. The Bank of Japan stated that implementation of easing monetary policies would bring exchange rate expectation effects, but it is still challenging to achieve the target inflation rate of 2 percent. The Bank of Japan will maintain its easing monetary policies in the future.

Monetary policies in emerging market economies diverged further, making it even harder to make policies. On the one hand, some economies including Russia, Korea, Hungary, Indonesia, India and Ukraine eased their monetary policies to support economic growth and respond to external shocks. Russia lowered its 7-day repo rate for 5 times by 600 basis points to 11 percent, and Korea and Hungary lowered their benchmark rates to the historical lowest. On the other hand, some other economies such as Brazil, Peru, South Africa, Columbia, Chile, Mexico, Saudi Arabia, the United Arab Emirates and Kuwait tightened their monetary policies to address the inflationary pressure and impacts of rate raising by the U.S. Federal Reserve. Moreover, the rate raising by the Federal Reserve and continuous slump in commodity prices brought the fiscal stance and foreign exchange reserves of some economies under pressure. In this regard, Kazakhstan, Argentina, Azerbaijan and South Sudan declared to give up their fixed exchange rate regimes successively to allow for free floating.

IV. Risks and Challenges

At present, the world economy is still in the process of profound adjustment and rebalancing, with growth slowing down and uncertainties and instabilities increasing. Monetary policies of advanced economies diverged, some emerging market economies slowed down, and international commodity prices fluctuated at a subdued level, all of which constitute the main challenges to the world economic growth.

Further divergence of the monetary policies of major advanced economies resulting from the rise in the U.S. policy rates may produce spillovers. Divergent monetary policies of major economies and their interactions would lead to global asset reallocation and risk repricing, therefore adding to the exchange rate volatility of major reserve currencies and cross-border capital flows. Meanwhile, the process of the U.S. Federal Reserve to raise its policy rates will be influenced by multiple factors, including that the U.S. economy may lose its expanding momentum due to cyclical factors, U.S. economic growth may be stricken by external shocks or the US dollar may strengthen significantly in a continuous way, etc. All these uncertainties would heighten the volatility of the world economy and financial markets.

Some emerging market economies might encounter significant slowdown pressure. Before the policy rate tightening by the U.S. Federal Reserve, some emerging market economies had already suffered from economic vulnerabilities including high proportion of current account deficit and external debt. After the tightening, it became even more difficult for emerging market economies to get their macroeconomic policies coordinated with the advanced economies. Many economies were caught in the dilemma of tightening monetary policies or combating slowing growth. In this regard, potential risks should be more closely watched in those emerging market economies with comparatively high current account deficit, high dependence on external debt and commodity exports as well as dollar-pegged exchange rate schemes whether in nominal or real terms.

Fluctuating and low international commodity prices brought downside economic pressure and increasing debt risks to exporting countries. In 2015, commodity prices, especially the oil price, kept fluctuating at a subdued level. Affected by factors such as global economic recovery worse than expectations, geopolitical tensions and demand-supply changes, uncertainties with future commodity prices are still high. Those economies with simple economic structures and counting on primary commodity exports may be badly shocked, and their debt risks warrant attention.

Geopolitical risks increased. The international anti-terrorism situation is becoming more tensional, and geopolitical complexity in the Middle East is increasing, all of which may have a bearing on global financial markets including the crude oil price. In addition, emigrant flows to the Europe would continue, and it is hard to find proper solutions in the short run, which may also dampen the euro area recovery.

V. Outlook

In 2016, the world economy will still maintain an unbalanced recovery. According to the estimate by IMF, global growth rate is projected to be 3.4 percent and 3.6 percent for 2016 and 2017, lower than its previous forecast. It is essential for the sound development of the world economy and finance whether all economies could enhance coordination of their macro policies, respond properly to potential adverse impacts and bolster economic growth.

The U.S. economy is expected to keep improving. Supported by favorable factors including low energy prices, fiscal deficit narrowing down and improvements in the real estate and labor markets, the U.S. recovery is projected to continue. According to the estimate by IMF, U.S. growth is projected to level off at 2.6 percent in 2016, rising from the 2.5 percent of 2015. But stronger dollar may also bring pressure to exports and manufacturing, and then bear on the growth prospects of the U.S. economy. Efforts should be continued to promote structural reforms and establish long-term fiscal plans, which would help to improve the labor market, enhance labor participation and productivity, ensure fiscal sustainability and foster economic growth.

The euro area is expected to continue to recover modestly. According to the estimate by IMF, the growth rate of the euro area is projected to rise to 1.7 percent in 2016 from the 1.5 percent of 2015, supported by low energy prices, accommodative monetary policies and euro depreciation. In order to promote growth, the euro area may adopt a series of further measures, including retaining fiscal flexibility, keep implementing the European Investment Plan and making more active use of the public fund to bolster private investments; further promoting structural reforms with emphasis put on the labor and services market to encourage innovation; and responding to the shocks and potential impacts of the emigrant inflows.

A slow recovery is anticipated for **Japan.** The fiscal consolidation postponement, lower energy prices, accommodative financial conditions and stronger consumption would all help to maintain the recovery momentum in the short run. According to the estimate by IMF, the growth rate of Japan is projected to rise to 1.0 percent for 2016, from the 0.6 percent of 2015. To stimulate economic growth, Japan may take measures to further promote structural reforms, improve policies concerning agriculture, energy and tax, and mitigate pressure from labor deficiency. At the same time, attentions should be paid to the resilience of the financial system to risks such as a decrease in market liquidity and increasing asset price volatility against the backdrop of accommodative monetary policies.

The growth of **emerging market economies** may rebound a little. According to the estimate by IMF, the growth rate is projected to be 4.3 percent in 2016, compare to the 4.0 percent in 2015. In order to mitigate the economic fragility and promote growth, emerging market economies could take the following measures: moving on to implement structural reforms, dismantling the infrastructure bottlenecks and easing supply-side constraints to cultivate a vigorous and innovative business environment; strengthening the supervision of financial sector and applying macroprudential policies to maintain financial stability; and maintaining the flexibility of exchange rate policies to guard against external shocks. Those economies with fiscal problems may also consider cutting public expenditure, enhancing spending efficiency, increase non-commodity revenue and boost up financial sustainability.

Chapter II

China's Economic and Financial Performance

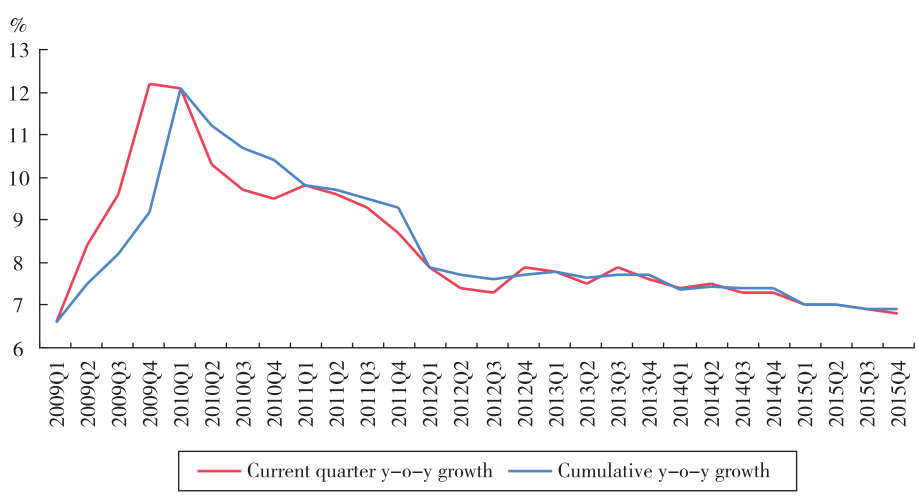
In 2015, facing a complex international environment as well as an arduous task of domestic development, stabilization and reform, the Chinese government adhered to the guideline of seeking progress amidst stability, proactively adapted to and guided the new normal of economic development, focused on stabilizing growth, restructuring the economy and mitigating risks, innovated macro-economic management methods, and continued to implement a proactive fiscal policy and a sound monetary policy. The economy performed generally stable, with progress and good signs amidst stability.

I. Macroeconomic Performance

1. Economic growth was generally stable and industrial structure continued to improve

According to preliminary statistics of the National Bureau of Statistics (NBS), nominal GDP in 2015 posted RMB 67.67 trillion yuan, up 6.9 percent y-o-y in comparable price terms. GDP growth in the four quarters registered 7.0 percent, 7.0 percent, 6.9 percent and 6.8 percent respectively (Figure 2.1), showing a generally stable trend. Broken down by industry, value added of the primary industry, the second industry and the tertiary industry totaled RMB 6.09, 27.43 and 34.16 trillion yuan, up 3.9 percent, 6.0 percent and 8.3 percent respectively y-o-y. In terms of share of added value of the three industries in the GDP, added value of the primary industry accounted for 9.0 percent of the GDP, down by 0.2 percentage point; that of the secondary industry took up 40.5 percent of the GDP, representing a drop of 2.2 percentage points; and that of the tertiary industry accounted for 50.5 percent of the GDP, up 2.4 percentage points, and 10.0 percentage points higher than that of the secondary industry. The share of the tertiary industry steadily rose and exceeded 50 percent for the first time in history, showing continued improvement in the industrial structure.

Figure 2.1 China's Economic Growth

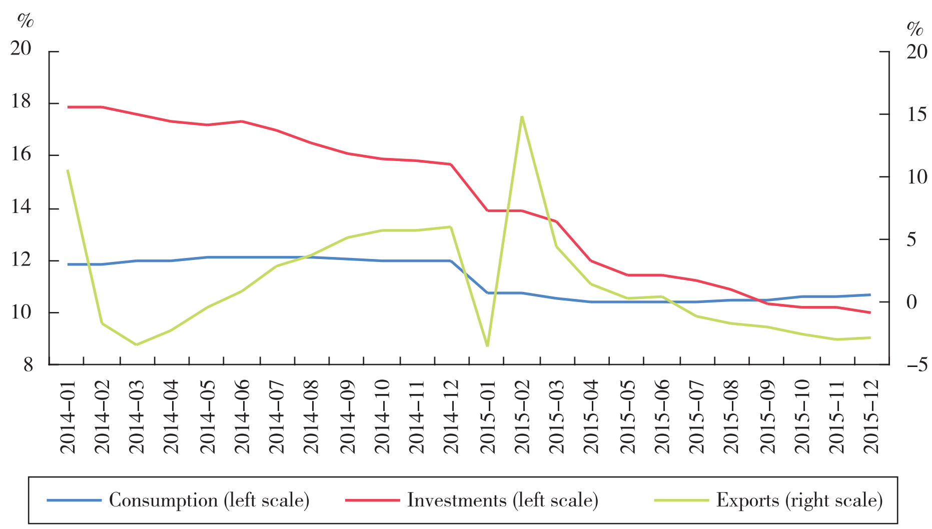


Source: The NBS.

2. Demand structure improved, and BOP achieved basic equilibrium

In 2015, investments in fixed assets totaled RMB 56.20 trillion yuan, up 9.8 percent y-o-y (Figure 2.2), representing a deceleration of 5.5 percentage points from 2014. Retail sales of consumer goods registered RMB 30.09 trillion yuan, up 10.7 percent y-o-y, representing a deceleration of 1.3 percentage points. Total imports and exports posted RMB 24.58 trillion yuan, down by 7.0 percent y-o-y. Among this total, exports dropped by 1.8 percent to RMB 14.13 trillion yuan, and imports declined by 13.2 percent to RMB 10.45 trillion yuan. The trade surplus grew 56.3 percent y-o-y to RMB 3.68 trillion yuan. The structure of the domestic demand continued to improve, with final consumption expenditure contributing 66.4 percent to the GDP growth, 15.4 percentage points higher than that in the previous year.

Figure 2.2 Growth of Consumption, Investments and Exports



Source: The NBS.

In 2015, the current account surplus grew 19 percent y-o-y to USD 330.6 billion, accounting for 3.0 percent of the GDP. The balance of the capital and financial account posted USD 142.4 billion deficit. Among this total, the non-reserve financial account posted a deficit of USD 485.6 billion, and the stock of reserve assets decreased by USD 342.9 billion. By the end of 2015, the foreign exchange reserves registered USD 3.33 trillion, down by USD 512.7 billion or 13 percent from end-2014, but still topped the world. In particular, USD 342.3 billion of the decrease could be explained by BOP transactions, whereas USD 170.3 billion of the decrease in book value was caused by exchange rate and asset price movements and other non-BOP-related factors.

Box 1 RMB Internationalization Continued to Advance

With a view of finance serving the real economy and facilitating trade and investment, RMB internationalization continued to advance rapidly in 2015.

1. Inclusion of the RMB into the SDR Basket

On November 30, 2015, the Executive Board of IMF decided to include the RMB in the currency basket of SDR as the fifth currency, along with the US dollar, the euro, the Japanese yen, and the British pound. The weight of the RMB in the SDR basket is 10.92 percent, whereas the weights of the US dollar, the euro, the Japanese yen, and the British pound are 41.73 percent, 30.93 percent, 8.33 percent, and 8.09 percent respectively. The new basket will become effective on October 1, 2016. The inclusion of the RMB in the SDR basket will increase the representativeness and attractiveness of the SDR, help improve the current international currency system, and enhance the resilience of the international monetary and financial system, which will support the development and stability of China and world economy, thus benefiting both China and the rest of the world.

2. International Use of the RMB Increased Steadily

According to SWIFT, as of December 2015, the RMB was the world's third largest trade financing currency, the fifth most traded currency in foreign exchange market and the fifth most used payment currency. Based on BOP data, the RMB was the second largest currency for cross-border payment and receipt in China for five consecutive years. In 2015, cross-border RMB payment and receipt totaled RMB 12.1 trillion yuan, up 22 percent y-o-y. As of the end of 2015, over 170,000 domestic enterprises used the RMB for settlement, and banks from over 124 countries and regions opened onshore RMB correspondent accounts. At the same time, RMB-denominated cross-border financial transactions proceeded in an orderly manner. As of the end of the year, a total of 292 foreign institutions were granted a combined quota of RMB 1.98 trillion yuan for investing in the inter-bank bond market. And 16 countries (regions) were granted the RQFII quotas, jumping from 10 at end-2014, and approved quota of 156 foreign qualified institutions reached RMB 444.3 billion yuan. Fifteen institutions opened 115 RMB special accounts for RQDII scheme. RMB financial assets held by foreign institutions and individuals totaled RMB 3.74 trillion yuan. More foreign central banks (or monetary authorities) held RMB-denominated reserve assets, and by end-2015 about 50 foreign central banks or monetary authorities held RMB financial assets onshore and included them in their foreign exchange reserves.

3. Policy Framework for Cross-border RMB Businesses Continued to Improve

In order to facilitate two-way cash pooling of the RMB by multinational corporations (MNCs), the PBC released the *Notice on Further Facilitating Two-Way Cross-Border RMB Cash Pooling by Multinational Corporation Groups*, with a view to providing more convenience and room for MNC groups to transfer RMB funds across borders. Efforts were made to promote innovation of cross-border RMB businesses, and pilot programs were conducted in 15 regions across the nation. Cross-border RMB financial trading channels were broadened, and two-way opening-up of the financial markets accelerated notably. RMB clearing banks and participating banks that were granted access to the inter-bank bond market were allowed to conduct bond repo transactions; foreign central banks, international financial institutions and sovereign wealth funds could enter the inter-bank bond market on registration basis and decide on their own size of investment; crude oil futures in the domestic market were denominated and settled in RMB , and foreign traders and brokers were allowed in; foreign central banks and similar institutions also gained access to the inter-bank foreign exchange market.

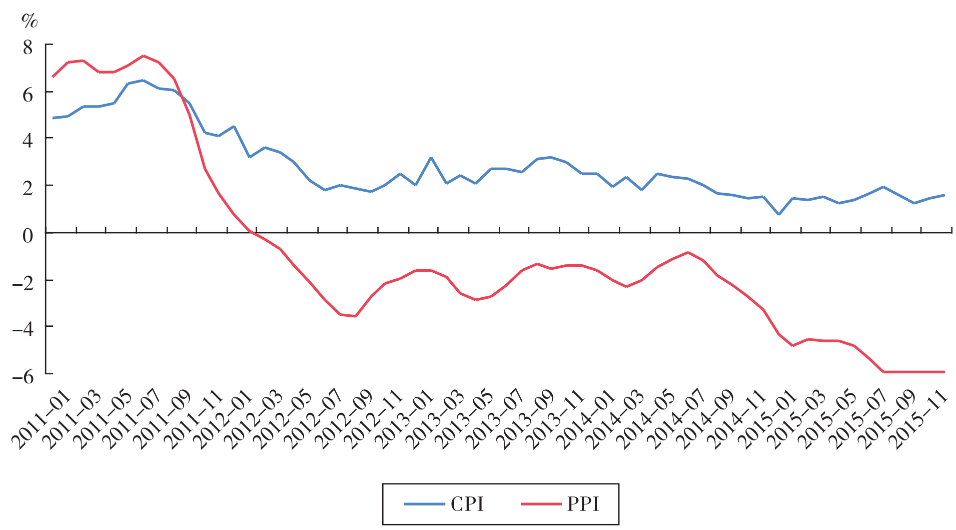
4. Infrastructure Continued to Improve, and International Cooperation Made Notable Progress

The CIPS was launched successfully, marking new breakthroughs in run time and clearing channels of the cross-border RMB clearing and settlement system. The RMB Cross-border Payment Management Information System (RCPMIS) was further improved, enabling comprehensive monitoring, analysis and evaluation of cross-border fund movements, and providing support for on-site and off-site inspections to mitigate risks. Overseas RMB clearing arrangements were set up with more countries and regions. As of end-2015, the PBC signed RMB clearing agreements with 20 countries and regions in Southeast Asia, West Europe, Central Europe, Middle East, North America, South America, the Oceania and Africa. In 2015, overseas clearing banks processed RMB clearing of RMB 312.09 trillion yuan. Bilateral currency cooperation deepened. As of end-2015, the PBC signed bilateral currency swap agreements with 33 central banks or monetary authorities, totaling RMB 3.3 trillion yuan. The swap agreements played a positive role in facilitating bilateral trade and investment as well as safeguarding regional financial stability.

3.The CPI grew modestly, whereas the PPI continued to drop

In 2015, the CPI was up 1.4 percent y-o-y, representing a deceleration of 0.6 percentage point from the previous year (Figure 2.3). In the four quarters, the CPI growth posted 1.2 percent, 1.4 percent, 1.7 percent and 1.5 percent respectively. Broken down into different items, food, nonfood, consumer goods and services prices rose by 2.3 percent, 1.0 percent, 1.2 percent and 2.0 percent, indicating deceleration of 0.8 percentage point, 0.4 percentage point, 0.6 percentage point and 0.5 percentage point respectively from the previous year. The PPI fell by 5.2 percent y-o-y, representing an acceleration of 3.3 percentage points. In particular, the prices of production materials dropped 6.7 percent y-o-y, while those of consumer products dropped by 0.3 percent. The Purchasing Price Index of Raw Material (PPIRM) declined by 6.1 percent y-o-y, 3.9 percentage points faster than that in the previous year.

Figure 2.3 Monthly Movements of the Major Price Indices, y-o-y



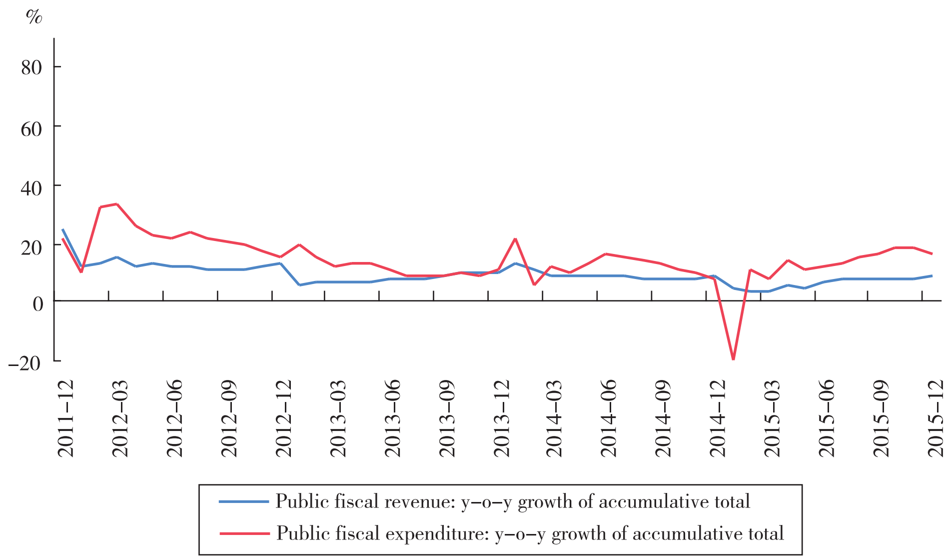
Source: The NBS.

4.Growth of fiscal revenue slowed down, and fiscal expenditure increased due to inelasticity

In 2015 general public budget revenue posted RMB 15.22 trillion yuan, up 5.8 percent y-o-y (the same coverage applies below), representing a deceleration of 2.8 percentage points from the last year (Figure 2.4), slower than the growth estimated in the previous budget report. Among this total, general public budget revenue of the central government posted RMB 6.92 trillion yuan, accounting for 45.5 percent of the total revenue and representing a y-o-y growth of 7 percent; general public budget revenue of local governments posted RMB 8.30 trillion yuan, representing a y-o-y growth of 4.8 percent. In terms of the structure of general public budget revenue, tax revenue registered RMB 12.49 trillion yuan, accounting for 82.1 percent of the total, and up by 4.8 percent y-o-y; non-tax revenue registered RMB 2.73 trillion yuan, up by 10.6 percent y-o-y.

General public budget expenditure reached RMB 17.58 trillion yuan, an increase of 13.2 percent y-o-y, an acceleration of 4.9 percentage points from the previous year. Among this total, general public budget expenditure of the central government grew by 12.8 percent y-o-y to RMB 2.55 trillion yuan; general public budget expenditure of local governments grew by 13.2 percent y-o-y to RMB 15.02 trillion yuan. Fiscal deficit posted RMB 1.62 trillion yuan, accounting for 2.4 percent of the GDP.

Figure 2.4 Growth of fiscal revenue and expenditure



Source: The NBS.

Box 2 Issuance of Local Government Bonds in 2015

In 2015, in accordance with the overall arrangements of the State Council, local government bond swap advanced steadily to replace those debts of high cost and low transparency. In general, issuance of local government bonds exhibited the following characteristics:

Issuance volume grew relatively fast. Following the pilot program of bond issuance by selected local goverments in 2014, the issuance scale increased rapidly in 2015. Throughout 2015, 30 provincial governments and 4 governments of cities separately listed in the State plan issued bonds of RMB 3.8 trillion yuan in total, including RMB 3 trillion yuan through open tender and RMB 0.8 trillion yuan through targeted underwriting. With regard to issuance volume, Jiangsu, Guizhou, Zhejiang, Shandong and Sichuan ranked the top five, and accounted for one quarter of the total nationwide. Monthly issuance in June and November exceeded RMB 700 billion yuan, accounting for about 40 percent of the issuance for the whole year.

The issuance had a long maturity, and the interest rate spread versus central government bonds widened gradually. There are five maturities of local government bonds, including 1-year, 3-year, 5-year, 7-year and 10-year. Most local governments chose to issue bonds with maturities over 3 years, and the average maturity was approximately 6.4 years. In terms of issuance interest rate, interest rate of local government bonds through open tender was at a par with that of central government bond in the beginning, but the spread gradually increased, and was about 30bps higher than that of central government bonds. Issuance interest rate of local government bonds through targeted underwriting was generally 50bps higher than the benchmark interest rate of central government bonds.

Banks constituted the bulk of the investor base. At the initial stage of local government bond issuance, all the participating entities were banking financial institutions including large commercial banks and local commercial banks. After October, the secondary market trading became more active with increasing trading volume and turnover as well as diversified investors, and some securities companies and funds started to invest as well.

Issuance of local government bonds could help reduce the cost of local government debt, adjust the debt structure, and alleviate debt pressure of local governments, thus conducive to the establishment of a transparent and well-regulated local government investment and financing mechanism. At the same time, issuance of local government bonds diversified the types of bond issuers, and markedly increased the share of government bonds in the total bond issuance.

5. Facing with operational difficulties, revenue growth of industrial enterprises decelerated

In 2015 revenue of main business of statistically large industrial enterprises increased 0.8 percent y-o-y① to RMB 110.33 trillion yuan, down by 6.2 percentage points from the last year. Realized profits totaled RMB 6.36 trillion yuan, down 2.3 percent y-o-y, representing a deceleration of 5.6 percentage points from the last year. The profit margin of main business posted 5.76 percent, a decline of 0.14 percentage point y-o-y. Among the 41 industrial categories, 29 earned more profits than those in the previous year, and 12 witnessed declines in gross profits. In particular, gross profits in the electricity, heat, gas and water production and supply industries grew rapidly by 13.6 percent y-o-y to reach RMB 534.06 billion yuan, whereas gross profits in the mining industry registered RMB 260.42 billion yuan, a decline of 58.2 percent y-o-y.

According to the PBC Survey of 5,000 Industrial Enterprises, business operations faced with great headwinds. Revenue growth rate of main business of the sample enterprises fell from 2.6 percent in 2014② in y-o-y terms to -8.5 percent in 2015③. Gross profits declined by 22.4 percent y-o-y, 20.2 percentage points larger compared to that in 2014. In terms of asset turnover, in 2015, the inventory turnover of the sample enterprises was 4.9 times, a decline of 0.5 time compared with that in the previous year. The total asset turnover ratio posted 0.7 time, down by 0.1 time y-o-y. The operating cycle was 143.5 days, 13.8 days more than that of the previous year. The liabilities/assets ratio rose by 0.5 percentage point from 2014 to 62.4 percent. The current ratio was 101.5 percent, at a par with that of 2014. The quick ratio was 75.5 percent, gaining 1.5 percentage points y-o-y (Figure 2.5). The interest coverage multiplier was 3.4 times, down 0.7 time y-o-y.

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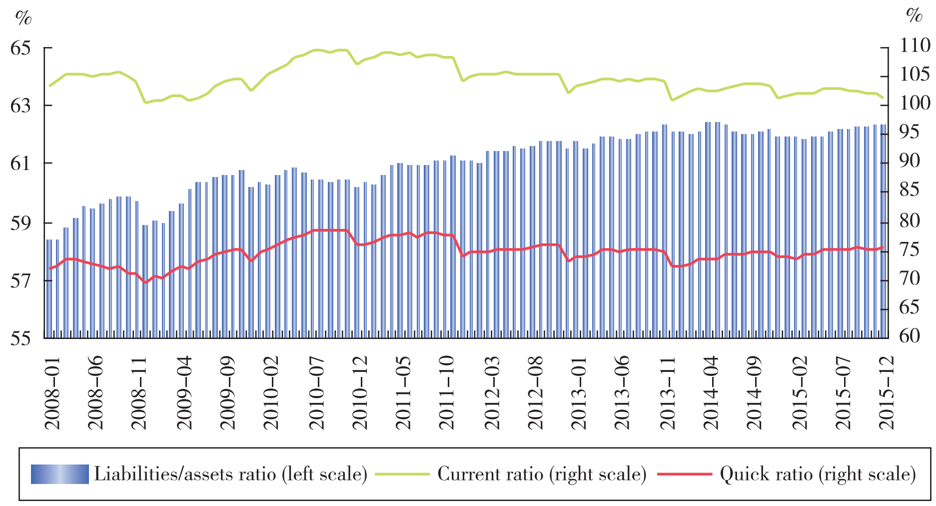
① As the coverage of statistically large industrial enterprises changes every year, in order to make the 2015 data comparable with those in the previous year, the coverage in 2014 used to calculate y-o-y growth and growth volume of various indicators is the same with that in the report year, but different from that of the data published in 2014.

② Due to adjustment of sample enterprises, updating of financial data and other reasons, data for end-2014 in this report are newly published and adjusted, and there may be some differences between these data and those used in the previous annual report.

③ For some enterprises, it is required to disclose annual report data that have been audited; therefore, the reporting of data might have been postponed. The end-2015 financial data have been updated based on the data reported by the enterprises as of end-March 2016, which might be different from the final annual report data.

Figure 2.5 Liabilities/assets Ratio, Current Ratio and Quick Ratio of 5 000 Industrial Enterprises

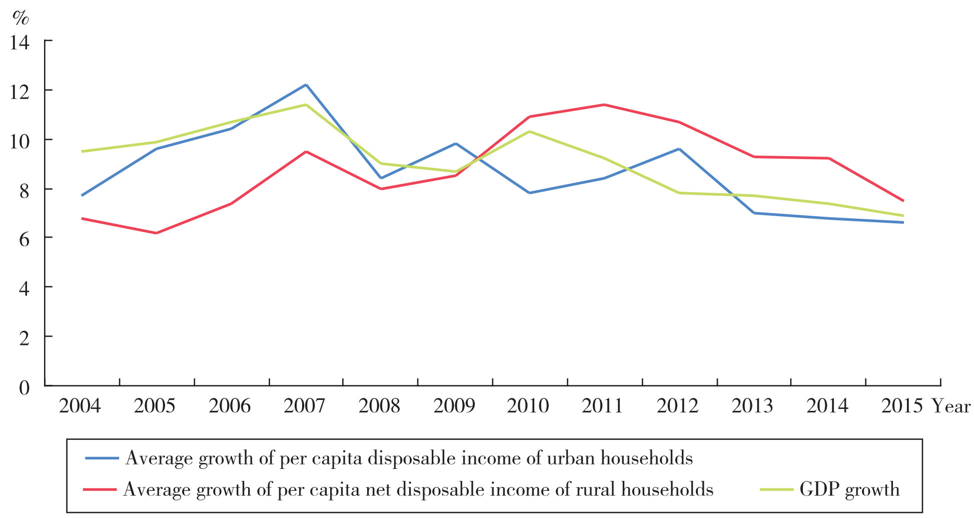


Source: The PBC.

6. Employment remained generally stable, and the trend of households shifting bank deposits to wealth management funds continued

In 2015, newly employed population in the urban areas reached 13.12 million, 100,000 fewer than that of the previous year. Urban registered unemployment rate posted 4.05 percent, down by 0.04 percentage point from 2014. Per capita disposable income posted RMB 21,966 yuan, representing a nominal growth of 8.9 percent y-o-y and price-adjusted y-o-y real growth of 7.4 percent. Per capita disposable income of urban households reached RMB 31,195 yuan, representing a price-adjusted real growth of 6.6 percent, down by 0.2 percentage point from the previous year. The per capita disposable income of rural households registered RMB 11,422 yuan, representing a price-adjusted y-o-y real growth of 7.5 percent, a deceleration of 1.7 percentage points from the previous year (Figure 2.6). The income gap between urban and rural households continued to narrow, reflected by the real growth of per capita disposable income of rural households outpacing that of urban households by 0.9 percentage point.

Figure 2.6　Growth of Per Capita Income of Urban and Rural Households and GDP



Source: The NBS.

Households continued to shift bank deposits to wealth management funds. At end-2015, outstanding deposits of the household sector stood at RMB 55.2 trillion yuan, up 8.9 percent y-o-y, a deceleration of 0.1 percentage point from the previous year. Outstanding household loans posted RMB 27.0 trillion yuan, up by 16.8 percent y-o-y, an acceleration of 0.2 percentage point from the end of 2014. In particular, mortgage loans grew by RMB 2.5 trillion yuan from the beginning of the year, up by RMB 933.3 billion yuan y-o-y. As of end-2015, book value of outstanding wealth management funds reached RMB 22.5 trillion yuan, up 62.3 percent y-o-y, an acceleration of 14.6 percentage points from the previous year. Among this total, wealth management funds of individuals grew by 29.1 percent y-o-y to RMB 11.5 trillion yuan. Clients' asset management schemes of securities firms registered RMB 11.88 trillion yuan, up 45 percent y-o-y; publicly offered funds managed by fund management companies and securities firms with publicly offered fund licenses posted RMB 8.4 trillion yuan; funds put in special wealth management accounts totaled RMB 12.7 trillion yuan, and market capitalization of the negotiable A-shares held by individual investors reached RMB 12.5 trillion yuan. Outstanding NPLs and NPL ratio of individual loans increased. At end-2015, outstanding NPLs of individual loans (including both non-business loans and business loans) posted RMB 513.88 billion yuan, RMB 125.9 billion yuan more than that at the beginning of the year, and the NPL ratio was 1.9 percent, up 0.22 percentage point from the beginning of the year. Outstanding NPLs in areas of individual mortgage loans, individual credit card loans and individual auto loans posted RMB 50.27 billion yuan, RMB 59.16 billion yuan and RMB 5.04 billion yuan respectively, representing increases of RMB 20.23 billion yuan, RMB 19.85 billion yuan and RMB 480 million yuan from the beginning of the year. The NPL ratios of individual mortgage loans, individual credit card loans and individual auto loans posted 0.4 percent, 1.8 percent and 1 percent respectively.

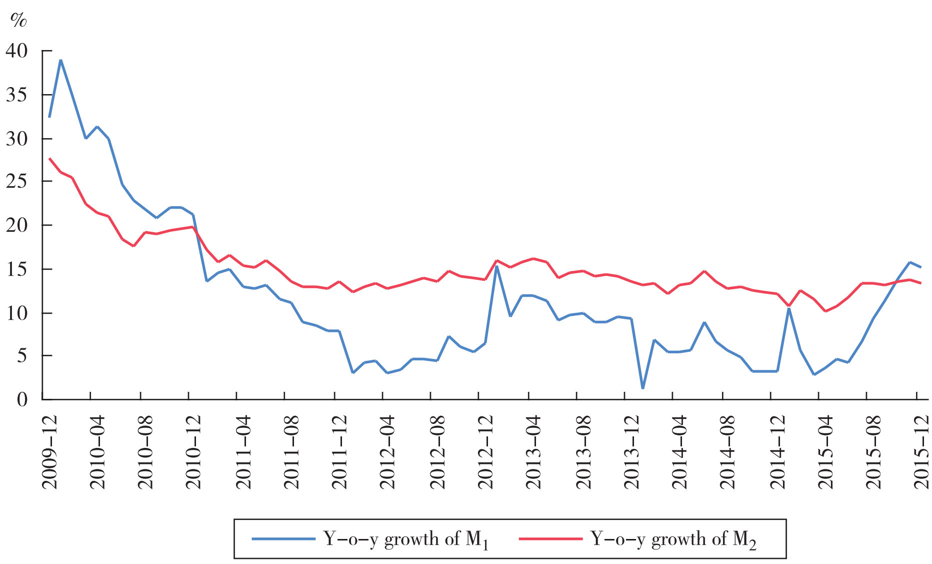
II. Monetary and Financial Performance

In 2015, the PBC continued to implement a sound monetary policy, strengthened preemptive adjustment and fine-tuning, optimized the mix of policy tools, attached more importance to reform and innovation, unclogged the monetary policy transmission channels towards the real economy and improved the functioning of the financial system and its capability of serving the real economy. In general, liquidity in the banking system was reasonably adequate, money, credit, and all-system financing aggregates grew steadily and relatively fast, interest rates fell markedly, flexibility of the RMB exchange rate strengthened, and the monetary and financial environment remained basically stable.

1. Money supply and credit extension registered stable growth

Monetary aggregates grew steadily. At the end of 2015, outstanding broad money (M_2) stood at RMB 139.2 trillion yuan, up 13.3 percent y-o-y, representing an acceleration of 1.1 percentage points from end-2014. Outstanding narrow money (M_1) stood at RMB 40.1 trillion yuan, up 15.2 percent y-o-y, representing an acceleration of 12.0 percentage points from end-2014. Currency in circulation (M_0) grew by 4.9 percent y-o-y to RMB 6.3 trillion yuan, representing an acceleration of 2.0 percentage points from end-2014. On

Figure 2.7　Growth of Money Supplies

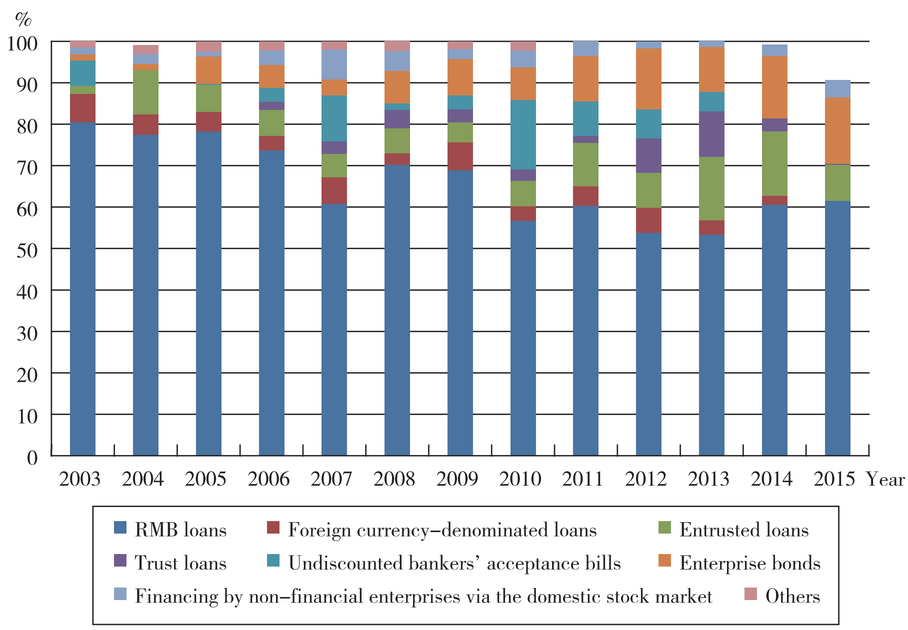


Source: The PBC.

a net basis, the central bank injected RMB 295.7 billion yuan of cash throughout 2015, an increase of RMB 126.9 billion yuan y-o-y. In 2015 M_2 growth picked up after a slow start, and posted a relatively rapid growth trend throughout the year. Liquidity in the banking system was relatively adequate. Lending to the government sector expanded rapidly, as commercial banks purchased a lot of local government bonds and other securities to provide plenty of liquidity.

Size of all-system financing aggregates was generally appropriate. According to preliminary statistics, in 2015 all-system financing aggregates reached RMB 15.41 trillion yuan, a decrease of RMB 467.5 billion yuan y-o-y. With regard to the composition of the flows, first, share of new RMB loans increased significantly, accounting for 73.1 percent of all-system financing aggregates, up 11.7 percentage points y-o-y. Second, the size of entrusted loans, trust loans and undiscounted bankers' acceptance bills dropped by a large margin y-o-y, which accounted for 3.7 percent of the increment of all-system financing aggregates, down by 12.5 percentage points from 2014. Third, both bond and equity financing by non-financial enterprises increased notably, accounting for 24.0 percent of the increment of all-system financing aggregates during the same period of time, up by 6.0 percentage points y-o-y. Fourth, foreign currency–denominated loans decreased for the sixth successive month.

Figure 2.8 Shares of Different Financing Modes in All-system Financing Aggregates



Source: The PBC, NDRC, CSRC, CIRC, China Central Depository & Clearing Co., Ltd (CCDC), National Association of Financial Market Institutional Investors (NAFMII), and etc.

Deposits of financial institutions registered stable growth, new loans increased by a relatively large margin and lending interest rates declined. At end-2015, outstanding deposits in domestic and foreign currencies of all financial institutions posted RMB 139.8 trillion yuan, up 12.4 percent y-o-y. This was an increase of RMB 15.3 trillion yuan from the beginning of the year and an acceleration of RMB 1.6 trillion yuan y-o-y. Outstanding loans in domestic and foreign currencies of all financial institutions registered RMB 99.3 trillion yuan, up 13.4 percent y-o-y, and increased by RMB 11.7 trillion yuan from the beginning of the year, an acceleration of RMB 1.3 trillion yuan y-o-y. New RMB loans posted RMB 11.7 trillion yuan, an acceleration of RMB 1.8 trillion yuan y-o-y. Lending interest rates of financial institutions fell markedly. In December, the weighted average interest rate of loans to non-financial enterprises and other sectors stood at 5.27 percent, down by 1.5 percentage points from December 2014, and the lowest level since 2010.

2. Monetary Policy Operations

The mix of monetary policy tools and the term structure were improved to keep liquidity at a reasonably adequate level. In 2015, affected by the interest rate hike by the Federal Reserve, changes in foreign exchange purchase and other factors, liquidity management in the banking system became more difficult and complex. The PBC adjusted the operation direction of the monetary policy tools in a timely manner and flexibly provided liquidity of differing maturities with a view to keeping liquidity at a reasonably adequate level. The reserve requirement ratio was cut on five occasions to make up for the shortfall in long-term liquidity. Open market operations were conducted in a flexible manner by mainly replying on repo operations supplemented by the short-term liquidity operation (SLO) to effectively smooth out short-term liquidity fluctuations. The standing lending facility (SLF), the medium-term lending facility (MLF) and the pledged supplementary lending (PSL) were employed as appropriate to inject liquidity into the banking system. The pilot program of central bank lending with pledged credit assets was expanded to improve the central bank's pledge management framework.

The price levers were given a bigger role to play in guiding the market interest rate to descend. The benchmark RMB lending and deposit rates of financial institutions were reduced on five occasions, and on nine occasions the PBC guided the 7-day repo interest rate to drop. Measures were taken to narrow the spread between the overnight lending rate and the 7-day repo rate to improve the term structure of short-term interest rates. In order to speed up the establishment of a medium-term policy rate and the ceiling of the interest rate corridor, the MLF was used to inject base money over the medium run, which strengthened its role as a medium-term policy rate.

The macroprudential policy framework was improved to achieve reasonable growth of money and credit. The dynamic adjustment mechanism on differentiated reserve ratio was upgraded to the macroprudential assessment (MPA) system. Starting from 2016, multi-dimensional guidance would be conducted with regard to financial institutions' capital and leverage, assets and liabilities, liquidity, pricing behaviors, asset quality, cross-border financing risks and implementation of credit policies. Meanwhile, efforts were made to study and establish a macroprudential policy framework for capital flow management. Building on the model of the Shanghai Free Trade Zone, a macroprudential management framework for gross cross-border financing denominated both in the local and foreign currencies was being set up.

The PBC beefed up support to priority areas and weak links in the economy to promote structural adjustment and upgrading. Lower reserve requirement ratio was applied to small and medium-sized and agro-linked financial institutions, with a view to providing positive incentives to these institutions and supporting structural adjustment through such targeted reduction of reserve requirement ratio. Quotas for central bank lending to the agro-linked sector and small businesses as well as for central bank discounting were appropriately raised, and the interest rate of central bank lending to support credit policies was lowered. The PBC also examined setting up central bank lending for poverty reduction purpose under the agro-linked central bank lending program in order to guide financial resources to flow to poverty stricken areas and improve the financial services for poverty reduction and development purposes. PSL operations for development and policy finance were enhanced through expanding the policy targets from the CDB to the ADBC and the Eximbank, which could use the program to provide loans to renovation of shanty housing, water conservation projects and globalization of the RMB.

Reforms were pursued amid improving regulation, with a view to enhancing functioning efficiency of the financial system. First, the market-based interest rate reform was accelerated by improving the formation and transmission mechanism of market-based interest rates. After elimination of the ceiling of the deposit interest rates, interest rates were basically liberalized. The self-disciplinary mechanism for market-based interest rate pricing was improved. Continuous efforts were made to advance the development of the inter-bank certificates of deposit, and certificates of deposit to enterprises and individuals started to be launched. Second, two-way flexibility of the RMB exchange rate was strengthened through improvement of the RMB exchange rate central parity formation mechanism. Third, reserve was examined on an average basis to allow financial institutions to manage liquidity more flexibly and to smooth out money market fluctuations.

Box 3 Reform of the RMB Exchange Rate Formation Mechanism was Promoted in a Prudent and Orderly Manner

The PBC has been promoting the reform on the market-based formation mechanism of RMB exchange rate in a prudent and orderly manner since 2005. The band within which the RMB floated against the USD was adjusted from 0.3 percent to 2 percent on three occasions of May 21, 2007, April 16, 2012 and March 17, 2014. From September 2005, when converting the RMB against non-USD currencies for their customers, banks were no longer subject to a floating band of the quoted exchange rate. From July 2014, the floating band of the quoted exchange rate between the RMB against the USD for banks' clients was eliminated.

On August 11, 2015, the PBC announced that it would improve the RMB to USD central parity rate formation mechanism. The daily quotes of the central parity that market-makers report to the CFETS before the market opens should refer to the closing rate of the inter-bank foreign exchange market on the previous trading day, and it should take into account the demand and supply conditions in the foreign exchange market and the exchange rate movements of the major currencies. On the one hand, the decisive role of market supply and demand in the formation of the exchange rate has been enhanced to make the central parity rate more market-based. On the other hand, the RMB exchange rate has been adjusted in accordance with market forces to a more adaptive and equilibrium level. The deviation of the central parity rate from the market exchange rate has been corrected, and the market-based characteristics and benchmark status of the central parity have been obviously strengthened.

In the future, the PBC will continue its market orientation, follow the reform decisions of the central government, monitor the changes in the BOP, improve the market-based exchange rate formation mechanism in a prudent and orderly manner, increase the decisive role of the market, enhance the two-way floating elasticity of the RMB exchange rate and establish a long-term market-based mechanism to adjust the BOP through exchange rates, so as to stabilize the exchange rate of RMB against a basket of currencies and promote the BOP equilibrium .

III. Outlook

At present, the healthy fundamentals and features that could sustain long-term growth such as strong resilience, large potentials and sufficient policy space remain unchanged. With continued economic restructuring as well as deepening reforms and opening-up, new industries, new businesses and new growth momentum are being built, and the service sector and consumption have been growing rapidly, becoming a major force driving economic growth. However, the economic and financial conditions at home and abroad remain complex and grave, posing acute problems and conflicts in economic development. The world economy is undergoing profound adjustment with tepid recovery and increasing external uncertainty and instability. The Chinese economy is changing gears, with ongoing economic restructuring interwoven with the shift of growth engines. Downward pressures are mounting due to structural contradictions and problems in particular structural over-capacity and high corporate debt.

The year 2015 is the first year of the 13th Five-Year Plan period. It is necessary to earnestly implement the decisions of the 18th CPC National Congress, the third, fourth and fifth Plenary Sessions of the 18th CPC Central Committee, and the Central Economic Work Conference, adopt the concept of innovation-driven, coordinated, green, open and shared development, adapt to the new normal, adhere to the overarching principle of making progress amidst stability, and lay emphasis upon supply-side structural reform. While expanding aggregate demand as appropriate, quality and efficiency of the supply side should be strengthened through reducing capacity, destocking, deleveraging, cutting cost and making up weak spots, so as to promote the economic and financial system to develop with higher quality, better efficiency, more impartiality and more sustainability.

Efforts would be made to make macroeconomic adjustment more sound and effective. Proactive fiscal policy and prudent monetary policy will be continued, combined with innovative macro-adjustment approaches and strengthened range control, targeted regulation and discretionary adjustment. A mix of policy tools—fiscal, monetary, industrial, investment and price—will be employed, and structural reforms in particular supply-side structural reform measures will be adopted in order to create a benign environment for economic development. Fiscal policy will become more proactive. The moderate increase in government deficit is projected primarily to cover tax and fee reductions for enterprises, which will further reduce their burdens. Innovation in ways to make fiscal expenditure will optimize the expenditure structure, and it is appropriate to increase necessary fiscal spending as well as government investment to provide more support to people's livelihood and other weak links in the economy. The continuity and stability of the monetary policy will be maintained, and various monetary policy instruments including open market operations, interest rate, reserve requirement ratio and central bank lending will be used in a well-coordinated manner to keep liquidity in the banking system reasonably adequate, unclog the transmission channels and reduce financing cost. The macroprudential policy framework will be further improved. The MPA system will be implemented earnestly to guide reasonable growth of broad credit provided by financial institutions and create an appropriate monetary and financial environment that is neither too tight nor too loose.

The credit structure will be optimized to support the real economy. The stock of credit assets will be revitalized and better use will be made of incremental loans to improve the financing structure and the credit structure as well as support the formation of new growth momentums in the economy. The coordination between credit policies and industrial policies will be strengthened to support priority areas and industrial transformation, and render financial support to the initiatives of "the Belt and Road" and coordinated development of Beijing, Tianjin and Hebei province. Financial services to rural areas will be improved with a view to delivering comprehensive financial services for poverty reduction and development purposes. More support will be provided for science and technology, culture, entrepreneurship and innovation.

Reforms in priority areas will be deepened to continue to release reform bonus. The market-based interest rate reform will be further advanced to improve the interest rate formation and transmission mechanism and the central bank policy rate system to further tap the self-disciplinary role of market-based interest rate pricing. The RMB exchange rate formation regime will be further improved to promote the development of the foreign exchange market and its two-way opening-up, and to keep the exchange rate basically stable at an adaptive and equilibrium level. Reforms and the legal framework of the stock and bond markets will be advanced to promote the healthy development of the multi-layered capital market, and increase the share of direct financing. The reform of the financial institutions will be continuously deepened to enhance their corporate governance. The deposit insurance mechanism will be improved to play its role in early correction and timely disposal of risks.

Measure will be taken to strengthen financial regulation and improve macroprudential regulation. Financial regulation should be strengthened while encouraging financial innovation and reducing administrative approval. The PBC will actively take part in the making of international financial rules and standards, and prudently push ahead the implementation of international regulatory reform measures and prudential standards. The role of the financial regulatory coordination mechanism will be put into active play, which will help clarify policy principles and put into place regulatory responsibilities on cross-market, cross-sector and cross-product financial innovations so as to prevent regulatory vacuum and arbitrage. Continued efforts will be made to strengthen macroprudential regulation to improve the macroprudential policy framework and strengthen the capacity and means for countercyclical regulation. Macroprudential regulation over systemically important financial institutions and financial infrastructure as well as external debt will be reinforced.

Efforts should be continued to effectively prevent and mitigate financial risks, and earnestly maintain financial stability. Efforts will be made in problems shooting and setting up a comprehensive risk monitoring and early warning system. The integrated operation of the financial industry will be improved by establishing a comprehensive statistical system and information platform for cross-sector products to strengthen the monitoring and analysis of financial risks arising from cross-sector, cross-market products, with the focus laid upon preventing risk contagion. Monitoring, assessment, early warning and resolution systems of financial risks will be improved to prudently handle risk events. The baseline of preventing systemic and regional financial risks should be held onto through timely efforts in taking effective measures.

Box 4 Actively Promoting the Development of Financial Inclusion

Since the concept was put forward, financial inclusion has been endorsed by the G20, the World Bank and the IMF, and has gradually become a development strategic concept related to economic restructuring, financial reform and other important issues. China, in 2015-2017, co-chairs the Global Partnership for Financial Inclusion (GPFI), an organization that is committed to promoting financial inclusion worldwide under the G20 framework.

China has attached great importance to promoting financial inclusion. The 3rd Plenary Session of the 18th CPC Central Committee set out to "develop financial inclusion". In November 2015, the **Recommendations of the Central Committee of the Communist Party of China for the 13th Five-Year Plan for Economic and Social Development** put forward "developing financial inclusion through enhancing financial services to micro, small and medium-sized enterprises, rural areas and in particular poverty-stricken areas". The **Plans of Developing Financial Inclusion (2016-2020)** announced by the State Council on December 31 laid out a blueprint for the development of financial inclusion for the next five years.

Relevant government agencies have taken various measures to actively promote the development of financial inclusion. First, monetary and credit policy incentives have been implemented. Differentiated reserve requirement ratios, central bank lending that supports the agro-linked sector and small and micro businesses, and the central bank discounting policies were used to guide local financial entities to expand credit provision to the agro-linked sector and small and micro businesses in order to reduce social financing costs and to help small- and medium-sized rural financial institutions to improve inclusive financial services. Second, supportive fiscal policies have been carried out. The fiscal funds have been leveraged through the launch of preferential tax policies to support and guide financial institutions and funding from the private sector to support the development of small and micro businesses and services to agriculture, farmers and rural areas. Third, financial infrastructure construction has been sped up. A bank account service system has been established that can facilitate implementation of various agro-linked preferential policies, with a view to achieving full coverage of bank accounts and direct transfer of subsidies. Fourth, the credit information system has been developing in a well-regulated manner. The PBC's financial credit information database established credit files for all the enterprises and individuals involved in banking credit activities. The data quality and the services keep improving. Fifth, a financial system comprising of various types of financial institutions has been established. Support has been rendered to foster development of private-funded banks, village and township banks and micro-lending companies. Sixth, new industries such as internet finance have been guided to develop in a well-regulated manner. In the recent years, population of mobile netizens in the rural areas is big and has kept growing fast, enabling banks, securities firms, insurance companies and other financial institutions to expand service perimeters, thus conducive to improve financial service coverage and introduce competition in rural areas. Seventh, financial product innovation has been encouraged targeting the disadvantaged groups, less developed areas and small- and medium-sized enterprises. Pilot programs in rural areas on various property right pledged loans were initiated such as forest right pledged loans, loans pledged with operational rights of contracted rural land, and rural housing property right pledged loans. Efforts have been made to expand the financing channels of agro-linked enterprises and to encourage agro-linked enterprises to access financing through short-term financial bills and other non-financial enterprise debt financing instruments. Eighth, a pilot program on comprehensive demonstration area of financial inclusion has been rolled out. Ningbo was approved to establish a pilot program on comprehensive demonstration area of financial inclusion, and Qinghai and Yijun of Shaanxi Province were selected to prepare for establishing similar pilot programs. In such pilot programs, efforts were made to explore the ways of effectively providing financial services for development purposes, and of setting up a financial inclusion system in line with local characteristics. Ninth, financial consumer protection and consumer education have been reinforced. Financial consumer protection, as an important guarantee for development of financial inclusion, has made good progress with the release of important documents on financial consumer protection, establishment of a working mechanism of consumer protection as well as activities on education and dissemination of financial knowledge.

Chapter III

Banking Sector

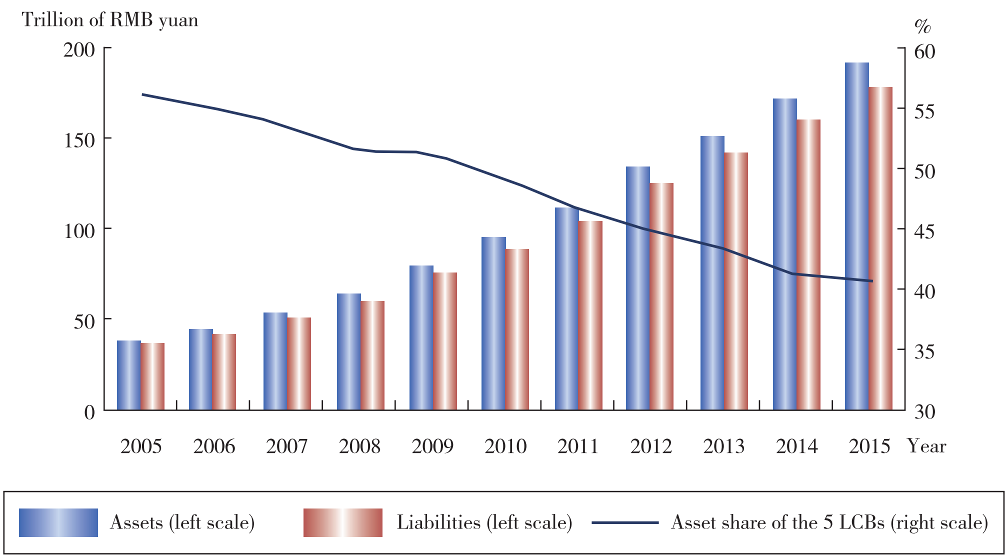
In 2015, China's banking sector implemented the national macro-economic policies, achieved active progress in reforms and development, enhanced capabilities of supporting the real economy and social development, and strengthened risk prevention. However, financial risks in certain industries, areas and regions started to expose themselves further, and the banking sector was facing a more complex operational environment. Waves of comprehensive reforms and financial innovations should be geared, and stronger capabilities are requested for risk prevention and serving the real economy.

I. Recent Developments

1. Total assets and liabilities maintained a steady growth, and banking structure was further improved

Total assets and liabilities maintained a steady growth. By the end of 2015, total assets of banking institutions reached RMB 199.35 trillion yuan, which increased by RMB 27.01 trillion yuan or 15.7 percent year-on-year, a growth rate 1.81 percentage points higher than that of last year. Total liabilities amounted to RMB 184.14 trillion yuan, a year-on-year increase of RMB 24.12 trillion yuan or a growth of 15.1 percent, and the growth rate was 1.73 percentage points higher than that of last year. Assets of the five large commercial banks (LCBs) accounted for 39.21 percent of total commercial bank assets, which was 2 percentage points lower year-on-year. The asset proportion of joint-stock commercial banks (JSCBs), city commercial banks and rural financial institutions grew by 0.35, 0.88 and 0.04 percentage point respectively (Figure 3.1).

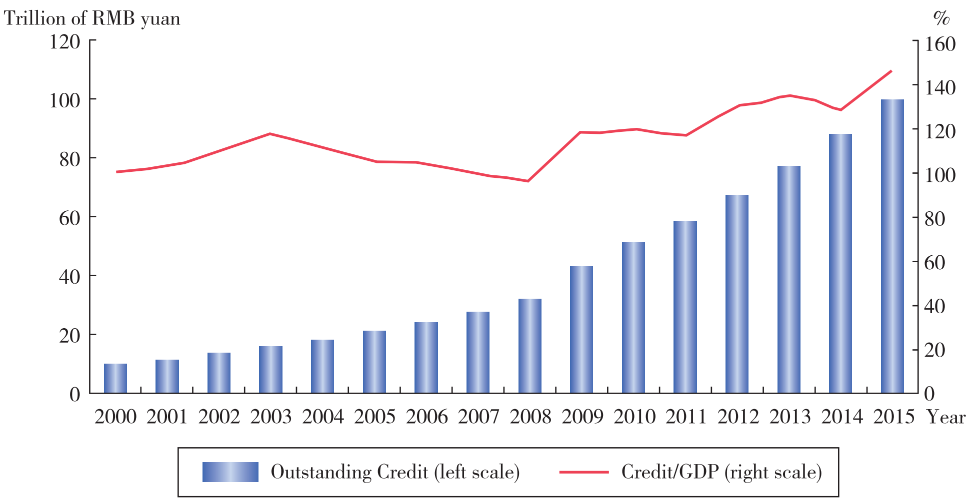
Figure 3.1 Total Assets and Liabilities of Banking Institutions



Source: The CBRC.

Growth of deposits and loans slowed down. By the end of 2015, the outstanding bank deposits denominated in both domestic and foreign currencies totaled RMB 139.78 trillion yuan, which increased year-on-year by RMB 15.3 trillion yuan or 12.29 percent, a growth rate lower by 3.97 percentage points than that of 2014. The outstanding loans were up by RMB 11.70 trillion yuan to RMB 98.49 trillion yuan, a year-on-year growth of 13.48 percent, which was 0.1 percentage point lower than the previous year (Figure 3.2). In terms of maturity, the volume of medium and long-term loans had a more substantial growth, marked by an increase of RMB 6.32 trillion yuan to RMB 50.02 trillion yuan, a growth rate of 15.4 percent year-on-year. In terms of institutions, JSCBs, city commercial banks and rural financial institutions witnessed greater expansion in loan volume.

Figure 3.2 Changes in RMB Credit Structure of Banking Institutions



Source: The PBC and NBS.

Banking structure was further improved. The number and market share of small and medium-sized banking institutions continued to increase, leading to lower market concentration and more intense competition. By the end of 2015, there were 133 city commercial banks, 859 rural commercial banks, 71 rural cooperative banks, 1373 rural credit cooperatives and 1311 village banks. The private bank scheme demonstrated a significant step forward , and five private banks were licensed.

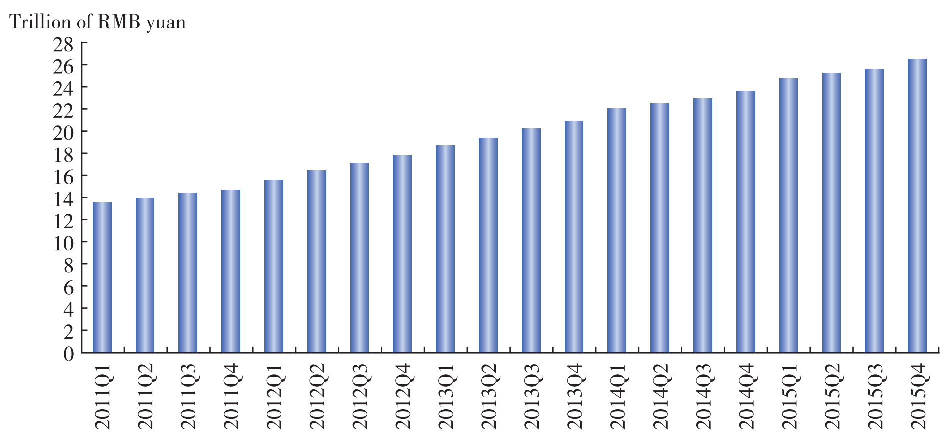
2. Favorable strategies were launched to bolster economic upgrading, and credit support to weak links was intensified.

Banking institutions fueled the quality and

efficiency of real economy and structural upgrading. Focusing on revitalizing asset stockpiles and making full use of new assets, the banking sector attached more attention to structural adjustment by implementing the national strategies such as "the Belt and Road" and the Chinese enterprises "Going Global", and by enhancing credit support to small and micro enterprises, so as to extend solid credit support to the real economy. The banking sector was committed to providing financial services to contribute to mitigating industrial over-capacity and to enhancing support to emerging industries with strategic importance and other industries such as environmental protection, old age care, medical care and domestic trade and distribution. By the end of 2015, loans extended to the infrastructure industry, emerging industries with strategic importance and welfare housing projects increased by 9.4 percent, 7.8 percent and 58.8 percent respectively. Mid-and-long-term loans to the tertiary industry grew by 14.9 percent, while those to culture-related sectors (i.e. culture, sports and entertainment) expanded by 22.0 percent.

Strenuous efforts were made to foster agriculture, rural areas and farmers. Innovation was made in business models to provide financial support to agro-related (i.e. agriculture, rural areas and farmers) development, and the balance of agro-related loans grew steadily which, by the end of 2015, reached RMB 26.4 trillion yuan, a year-on-year growth of 11.7 percent (Figure 3.3). With improved capital capacity, financial performance and corporate governance, rural financial institutions were in a better position to support rural areas. At end-2015, the outstanding loans of rural financial institutions amounted to RMB 12.51 trillion yuan with a year-on-year growth of 12.91 percent. Besides full coverage of financial services in all villages and towns nationwide, twenty-five provinces (including cities specifically designated in the state plan) achieved coverage of both financial services and institutions.

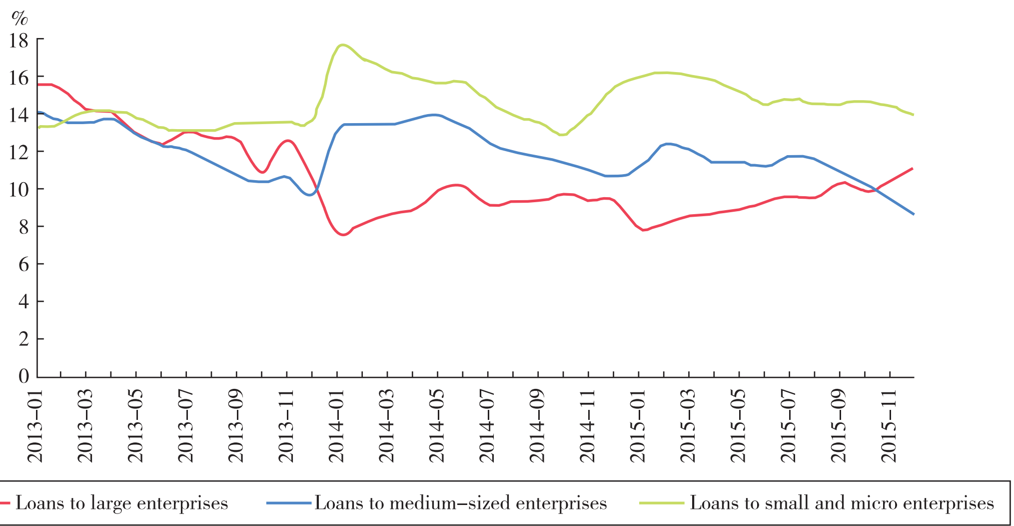
Figure 3.3 Outstanding Agro-Related Loans



Source: The PBC.

Financial services to small and micro enterprises were improved. At end-2015, the outstanding loans to small and micro enterprises registered RMB 23.46 trillion yuan, accounting for 36.55 percent of total corporate loans. The year-on-year growth was 13.3 percent, higher than the growth rate of loans to large and medium enterprises during the same period by 1.7 and 4.4 percentage points respectively (Figure 3.4). In 2015, newly originated loans to small and micro enterprises totaled RMB 2.76 trillion yuan, taking up 41.2 percent of total new corporate loans. At end-2015, there were 8910 micro-lending companies with a total lending balance of RMB 941.2 billion yuan, which contributed to alleviating the funding stress of small and micro enterprises.

Figure 3.4 Year-on-Year Growth of Loans to Large, Medium and Small Enterprises



Source: The PBC.

3. Reforms of financial institutions accelerated, and risk prevention was enhanced

Breakthroughs were made in the reforms of development banks and policy banks. The overall reform plan for the ADBC was approved in December 2014, and the in-depth reform plan for the CDB and the overall reform plan for Eximbank were approved in March 2015. The plans specified the mandates, business scope, capital replenishment, governance structure, internal reform, external supervision and supporting measures of the three banks. In July 2015, the CDB and the Eximbank received USD 48 billion and USD 45 billion injection from the foreign exchange reserve respectively, which contributed to the enhanced capital capacity and risk prevention capability, and facilitated the sustainable development of the banks. At the same time, the identification of business scope, improvement of governance structure and update of articles of association of the three banks were also well underway.

Box 5 Financial Reforms of Development and Policy Banks

Since founded in 1994, the CDB, the Eximbank and the ADBC have played an important role in supporting the development of infrastructures, basic industries, pillar industries, international trade, the "going global" initiative of enterprises, the purchase and storage of crops, cotton and oil, and infrastructure construction in rural areas. However, with the evolving environment, drawbacks started to emerge in terms of governance structure, capital adequacy, constraint mechanism and capabilities of sustainable development, which called for further reforms.

The State Council and the CPC Central Committee have attached great importance to the reforms and development of policy-designated finance. It is highlighted in the Third Plenary Session of the 18th CPC Central Committee and the Report on the Work of the Government of 2014 that "reforms of policy-designated financial institutions should be promoted". Cooperating with relevant authorities, the PBC carried out in-depth researches, studied international experiences and formulated detailed reform plans for the three banks, which were then submitted to the State Council. The approval of the reform plans marks a great breakthrough of the reforms of policy and development banks in China, and has laid a solid foundation for these banks to fulfill their responsibilities under the new normal of Chinese economy.

The reform plans specify the mandates and business scopeof the three banks. The plans highlight the roles of the Eximbank and the ADBC as policy banks and the CDB as a development bank, differentiate business types through separate accounting management, and establish a dynamic adjustment mechanism of business scope so as to coordinate the development of policy-designated business, development-oriented business and commercial business. It is stressed that the governance structure should be improved and internal reform be enhanced. The three banks should establish efficient operation mechanisms where the Board of Directors is the strategic decision maker, the Board of Supervisors is the lawful supervisiorwhile the senior management is delegated with business management. At the same time, internal control and risk management should be strengthened to ensure sound operation and development.

The core element of the reform plans is to establish a capital constraint mechanism. Capital adequacy is the basis for internal control and external regulation of financial institutions. Both the experiences from the shareholding reforms of China's large commercial banks and the recent international financial crisis demonstrate that capital adequacy is the most efficient market-oriented constraint to financial institutions, as it gives banks incentives to develop efficient resource allocation mechanisms, to enhance risk control and to guard against moral hazard. Moreover, international experiences suggest that policy banks and development banks tend to have a higher capital adequacy ratio than commercial financial institutions. In July 2015, the CDB and the Eximbank received USD 48 billion and USD 45 billion capital injection from the foreign exchange reserve respectively, which improved the market-oriented capital constraint mechanism and helped those banks to fulfill their roles.

It is also highlighted in the reform plans that external supervision should be enhanced, and a differentiated evaluation mechanism should be introduced. Given that development and policy banks make serving national strategies their primary goal while commercial success as a secondary one, it is important to assess the performances of the three banks independently, so as to evaluate their operation and capital management in a reasonable manner. The reform plans also specify some supporting policies including risk compensation mechanisms for policy-designated business to promote a sustainable financial development, tax preferential policies for policy-designated business to alleviate tax burdens, and credit support to ensure stable funding sources. After the reform, the three banks will greatly enhance capital capacity and risk prevention capability, improve governance structure, constraint mechanism and internal management, and reinforce financial services and sustainable development capability. This will give full play to the three banks, critical role in important areas, in weak links or during key time periods, and to contribute more to social and economic development.

Reforms of LCBs were deepened. Progress was made in the reforms of ICBC, ABC, BOC, CCB and BOCOM with achievements including better corporate governance, accelerated restructuring, endogenous growth incentives, more effective management and enhanced risk prevention. By the end of 2015, capital adequacy ratio (CAR) of the above-mentioned LCBs stood at 15.22 percent, 13.40 percent, 14.06 percent, 15.39 percent and 13.49 percent respectively, and their non-performing loan (NPL) ratio recorded 1.50 percent, 2.39 percent, 1.43 percent, 1.58 percent and 1.51 percent respectively. The five banks registered whole year net profits at RMB 277.72 billion yuan, RMB 180.774 billion yuan, RMB 179.417 billion yuan, RMB 228.886 billion yuan and RMB 66.528 billion yuan, with a year-on-year growth of 0.52 percent, 0.70 percent, -1.25 percent, -0.28 percent and 1.03 percent respectively. Pilot reform of ABC's Country Area Banking Division (CABD) was expanded to the whole country. With approval of the State Council, the PBC released in April the *Notice on Expanding the Reform of the Rural Area Banking Division of the Agricultural Bank of China,* which incorporated all the county-level branches of ABC into the reform of CABD so as to improve the financial services for rural areas and for counties. By the end of 2015, the outstanding loans of ABC's CABDs in provinces, cities, districts and counties included in the pilot program recorded RMB 2.86 trillion yuan, a year-on-year increase of RMB 208.5 billion yuan and a growth rate of 7.86 percent. The in-depth reform plan of the BOCOM was approved by the State Council in June. The plan put forward reform measures including equity restructuring, improving corporate governance, deepening internal reform and enhancing external supervision, which would promote the BOCOM to upgrade business operation, enhance competitiveness and improve its capability to serve the real economy.

Reforms of other financial institutions were promoted. In August, the transforming plans of the China Great Wall Asset Management Corporation and the China Orient Asset Management Corporation were approved, which indicated further commercialization of the asset management companies. In December, the Postal Savings Bank of China solicited capital injection of RMB 45.1 billion yuan from 10 domestic and overseas strategic investors, replacing the sole shareholder model with a diversified shareholding system. Reform and restructuring of the Lixian Rural Credit Cooperative of Hebei Province were successfully completed, which effectively addressed the regional financial risks.

Box 6 Reform and Restructuring of Lixian Rural Credit Cooperative of Hebei Province Were Successfully Completed

Lixian Rural Credit Cooperative of Hebei Province used to have 27 legal entities, of which 19 were affiliated to the ABC due to historical reasons and 8 were transformed from urban credit cooperatives. All the 27 entities were faced with insolvency and losses because of historical burdens, bringing negative impact on local financial and social stability. Since September 2012, the PBC cooperated with relevant authorities to propose a plan to reform the Lixian Rural Credit Cooperative based on several rounds of on-site researches and studies, and the plan was then approved by the State Council which specified the steps to resolve the risks including takeover and entrusted management, asset liquidation and financial restructuring and establishment of a rural commercial bank. On April 18, 2014, the 27 entities were officially taken over and entrusted to the Bank of Beijing, after which measures were initiated including asset liquidation, legal due diligence, debt registration, real-name registration of deposits, cancellation of credit agencies and new share offerings. On August 31, 2015, Lizhou Beiyin Rural Commercial Bank of Hebei Province was approved to start business since September 2, marking the end to the 3-year reform and restructuring. As a result, the long-standing issues of Lixian Rural Credit Cooperative were solved, which facilitated the mitigation of regional financial risks, promoted the coordinated economic development of Beijing, Tianjin and Hebei and contributed to social stability.

The reform of Lixian Rural Credit Cooperative offers valuable inspiration as to the prevention and resolution of regional financial risks and risks related to rural credit cooperatives. First, it is important to let local governments play crucial roles in the reform of local financial institutions and risk resolution. It would help to ensure efficient risk resolution for relevant authorities and financial institutions to fulfill due responsibilities and cooperating with each other. Second, it is necessary to evaluate the merits and drawbacks of different risk resolution tools and measures based on specific local environments. The measures of takeover and restructuring are relatively mild, conducive to the continuity of local financial services and to the mitigation of unintended impact on real economy. Third, it is important to give full play to the deposit insurance resolution regime and improve the market-driven exit mechanism for financial institutions. For the next steps of risk resolution, in line with the *Deposit Insurance Regulations,* the deposit insurance mechanism should play an active role in enhancing the "fittest for survival" mechanism in the financial system through early correctness and market-driven resolution measures, so as to enhance the market discipline, guard against moral hazard and safeguard financial stability.

4. The effectiveness of supervision was intensified and deep involvement in international banking regulatoryreform was committed.

Domestic regulation became more effective. The PBC constantly improved macroprudential toolkit and mechanism, continued to rely on the dynamic adjustment mechanism of the differentiated reserve requirements to conduct counter-cyclical adjustment and provide structural guidance, and pushed the commercial banks forward to manage liquidity in a more proactive and reasonable manner. The CBRC further improved a series of regulatory rules regarding the management of commercial banks' leverage ratio and disclosure of liquidity coverage ratio, which strengthened the risk response capabilities of the banking sector and enhanced regulatory effectiveness. Relevant regulatory authorities worked in close cooperation with an appropriate division of responsibilities, enhanced risk monitoring and assessment, supported commercial banks to replenish capital, guarded against credit risk and liquidity risk, strengthened prudential regulation of the shadow banking sector, and made supervison more targeted and effective.

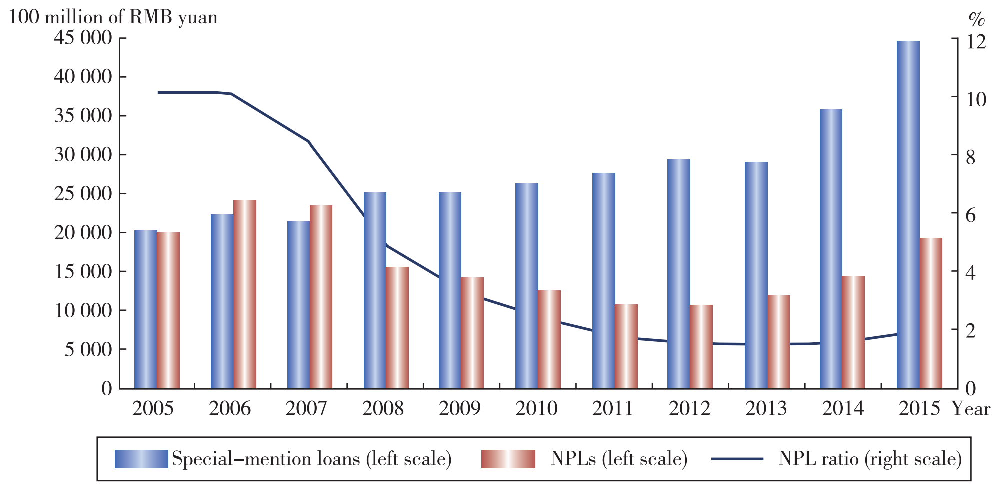
Relevant authorities continued to be deeply involved in the international banking regulatory reform. The PBC, MOF and CBRC continued to participate in the regulatory reforms of the FSB and the BCBS and steadily promoted the implementation of relevant standards and rules in China. They participated in the FSB's policy making on the TLAC requirements of G-SIBs and actively represented the pursuits of emerging economies; continued to promote Chinese G-SIBs to establish crisis management groups(CMGs), to formulate or renew recovery and resolution plans, to conduct resolvability assessments and to promote the establishment of effective resolution mechanisms.Authorities also continued to be involved in the regulatory reforms of the BCBS regarding credit risk, market risk and operation risk of commercial banks; and promoted the implementation of Basel III, establishing a banking regulatory framework consistent with international standards, guiding commercial banks to enforce new regulatory standards on capital, leverage ratio and liquidity, and continuing to work on the assessment methodologies and regulatory rules for D-SIBs.

The deposit insurance mechanism was implemented steadily. On May 1, 2015, the *Deposit Insurance Regulations* became effective. Since then, the banking sector remained sound, and the deposits of large, medium and small-sized banks were stable. All the deposit-taking banking institutions have subscribed to the deposit insurance regime and started to pay premiums. The implementation of the deposit insurance mechanism went on smoothly. As an important and fundamental institutional arrangementof the financial sector, the deposit insurance mechanism greatly contributes to improving financial safety net, enhancing the protection of depositors, building a market-driven mechanism for financial risk prevention and resolution, and establishing a long-term mechanism to safeguard financial stability.

II. Soundness Assessment

Downward pressure mounted on asset quality. In 2015, NPLs of commercial banks continued to increase given decelerating economic growth, shrinking external demands and difficulties in enterprises' operation. By the end of the year, banking institutions registered a total outstanding NPLs of RMB 1.96 trillion yuan and a NPL ratio of 1.94 percent. The NPLs of commercial banks increased by RMB 431.9 billion yuan to RMB 1.27 trillion yuan, maintaining an upward trend for 17 consecutive quarters. The NPL ratio of commercial banks went up by 0.43 percentage point to 1.67 percent by the end of 2015. The banking institutions recorded special-mention loans totaling RMB 4.45 trillion yuan, up by RMB 1.18 trillion yuan year-on-year, and a special-mention loan ratio of 4.69 percent,which was 0.71 percentage point higher than that of last year (Figure 3.5). The volume of past due loans of banking institutions reached RMB 2.81 trillion yuan, a year-on-year rise of RMB 1.01 trillion yuan or 56.52 percent, accounting for 2.8 percent of total outstanding loans, which was 0.77 percentage point higher year-on-year. The past due loans over 90 days took up 94.63 percent of total NPLs, which was 14.55 percentage points higher than that of last year. The provision coverage ratio of commercial banks dropped by 50.86 percentage points to 181.18 percent, and the provision to loan ratio was 3.03 percent, a rise of 0.13 percentage point year-on-year.

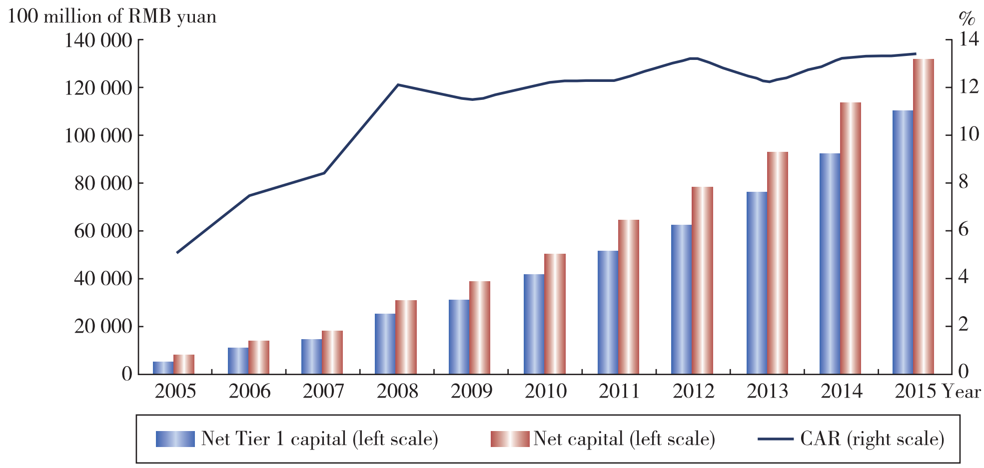
Figure 3.5 Changes of Special-Mention Loans and NPLs of Banking Institutions



Source: The CBRC.

Capital adequacy ratio remained stable and grew slightly. By the end of 2015, commercial banks maintained a relatively high CAR of 13.45 percent, which was 0.27 percentage point higher year-on-year (Figure 3.6). The CET1 ratio reached 10.91 percent, up by 0.35 percentage point from the previous year, and the total CET1 took up 81.1 percent of total capital, suggesting relatively high quality of the capital.

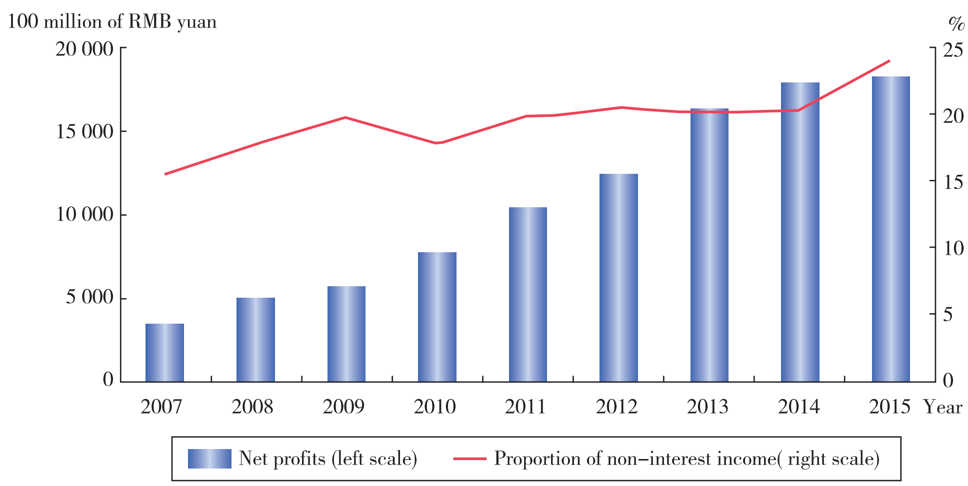
Figure 3.6 CAR and Capital Structure of Commercial Banks



Source: The CBRC.

Profit growth continued to decelerate. In 2015, banking institutions achieved a net profit of RMB 1.97 trillion yuan, a year-on-year growth of 2.39 percent, and witnessed a drop in growth rate for the second consecutive year—a decrease of 8.1 percentage points for 2015. By the end of the year, banking institutions registered a ROA of 1.06 percent which was 0.13 percentage point lower year-on-year and a ROE of 14.35 percent, dropping by 2.8 percentage points. The net interest margin lowered by 0.24 percentage point to 2.47 percent, and non-interest income went up by 3.7 percentage points to 24.1 percent (Figure 3.7). With development of the financial market and liberalization of interest rates, the net interest margin tended to narrow further. By the end of 2015, the proportion of net interest income to the net operating income was 56.96 percent, which was 4.88 percentage points lower than the previous year.

Figure 3.7 Profitability and Proportion of Non-Interest Income of Banking Institutions



Source:The CBRC.

The overall credit risk was manageable and debt risks of non-financial enterprises intensified. In 2015, credit risks of banking institutions went up and the number of risk incidents increased for enterprises that achieved banking credit over RMB 1 billion yuan, but the overall risk was generally manageable. Non-financial enterprises were faced with relatively heavy debt burdens, and the high leverage ratio prevented many of them from further borrowing. Some enterprises had to borrow money to repay existing debts or even the interests of debts, which might easily trigger debt risks and further spread to other sectors through debt or industrial networks. Moreover, the practices of reciprocal and cross guarantee were quite prevalent among enterprises with over-capacity or in certain regions, which would result in cross default and risk contagion, triggering or intensifying debt risks of enterprises more easily.

Box 7 Banking Risk Contagion: A Financial Network Model Based on Inter-bank Data

Risk contagion among banking institutions refers to the situation where fluctuations or adverse changes in trading counterparties, related institutions or financial markets cause negative impact, directly or indirectly, on an individual banking institution or the entire banking system. The transmission channels of risks include: default risk exposure of certain banking institutions leading to direct losses of their tradingcounterparties or intense volatility of the asset prices in the financial market, causing damage to balance sheets of other banking institutions; or negative market expectation or irrational panic that spread to the entire banking system. Inspired by the financial network models commonly used by the international community and based on China's interbank business data, we have made dynamic simulation of the transmission pathways and the impact of interbank contagion risks.

I. Financial Network Model

Based on interbank data, the financial network model can be set as follows:

Network nodes represent banking institutions, and the lines connecting the nodes refer to interbank capital flows between banking institutions. Assuming that there are n banking institutions in the system, and capital flows among them form an $n \times n$ matrix M called interbank capital matrix. At certain time, Matrix M is demonstrated like this:

$$M = \begin{bmatrix} M_{1,1} & \cdots & M_{1,j} & \cdots & M_{1,n} \\ \vdots & & & & \vdots \\ M_{i,1} & \cdots & M_{i,j} & \cdots & M_{i,n} \\ \vdots & & & & \vdots \\ M_{n,1} & \cdots & M_{n,j} & \cdots & M_{n,n} \end{bmatrix}$$

Among them, the element M_{ij} represents the interbank lending assets from bank i to bank j at a certain point of time. Similarly, the vector of the overall asset volume of the interbank market, $\vec{p} = (p_1, \dots, p_n)$, could be defined as $p_i = \sum_{j=1}^{n} M_{ij}$, where p_i refers to the total interbank assets lent out by bank i to all the banking institutions in the network.

$$a_i + (p_i - \theta M_{ih}) = (k_i - \theta M_{ih}) + b_i$$

Assuming that an interbank default occurs to bank h in the network, the assets and liabilities of bank i that has interbank business with bank h will be as follows:

where ai, ki, and bi represent the other assets, net capital and liabilities of bank i respectively, and θ refers to loss given default (LGD). If bank i, after bearing losses, is left with a capital position lower than the minimum regulatory requirement, it is suggested that bank i has been infected and will be subject to default. If the default of bank *h* results in n banks being infected and the simultaneous defaults of those banks lead to a further contagion effect, by repeating this loop until there is no bank subject to default, we can evaluate the risks brought by bank *h* to other banks in the system due to the interbank default.

II. The Stability Analysis of China's Banking Network

According to the above framework, we selected data on interbank assets and liabilities from 31 medium and large commercial banks as of the year-end of 2015 to estimate bilateral interbank risk exposures. These 31 banks include 6 large banks, 12 JSCBs, 9 city commercial banks and 4 rural commercial banks. We have set two types of shock scenarios, namely a mild shock scenario in which LGD (θ) is set as 50 percent and a severe shock scenario where LGD (θ) is set as 100 percent. In accordance with the the *Capital Rules for Commercial Banks (Provisional)*, we set the minimum capital requirement for non-systematically important commercial banks as 9.3 percent and for systematically important ones, 10.3 percent. In the mild shock scenario, the risk contagion among those banks is moderate. In the severe shock scenario, the stability analysis of the 31-bank network is presented as follows:

LCBs. In the case where a LCB starts an interbank credit default, an average of 1.33 banks will be infected and the transmission will be only one round, and the average consumed capital accounts for 3.73 percent of the total capital of the 31 banks. In particular, there is one large bank which, if defaults, will lead to four rounds of transmission and default of six other banks, and the proportion of consumed capital to the total capital of 31 banks will be 11.03 percent. In terms of interbank market trading, LCBs are major lenders, and the money borrowed by LCBs is less than 40 percent of the money they lend out. As a result, risks caused by their default are less contagious. In addition, LCBs usually have stronger capability to resist risks due to their adequate capital positions.

JSCBs. Where an interbank credit default comes from a JSCB, an average of 4.73 banks will be infected and the transmission will last for two rounds, during which the capital loss takes up 8.15 percent of the total capital of the 31 banks. There are only three banks whose default will not infect others. In general, the interbank financing business among JSCBs witnessed a significant year-on-year drop in 2015, reflected by a plunge of assets and liabilities of 25.28 percent and 20.00 percent respectively. However, JSCBs remain to be the largest net borrower in the interbank market and will incur broad impact in case of interbank credit default.

City commercial banks. The impact and contagion effect of the interbank credit default of city commercial banks are limited. When a single city commercial bank commits interbank credit default, an average of 1.22 banks will be infected and the transmission will last for only 0.44 round, with a 2.52 percent proportion of capital loss percent. For city commercial banks, who are net borrowers in the interbank market, both the trading counterparties and the trading volumes are quite disperse, therefore most of those banks will not bring significant impact on their trading counterparties in the event of default.

Rural commercial banks. The contagion risk of rural commercial banks is rather small. Interbank credit default of any individual rural commercial bank will not trigger contagion effects on other banks in the system, and the average capital loss is only 0.39 percent.

In general, all 31 banks have more adequate capital than the previous year and stronger capability to resist contagion risks, leading to a significant decrease in the transmission range and the potential capital loss in case of an interbank credit default. Most banks pass the stress testing on contagion risks in the mild shock scenario; even in the context of severe shock, there are still more than 50 percent of banks passing the testing, suggesting that the overall contagion risk of the banking sector is manageable. However, it warrants attention that certain banks are not able to offset interbank asset losses with their own capital under extreme circumstances.

Figure 3.8 Contagion Risks by Bank Type

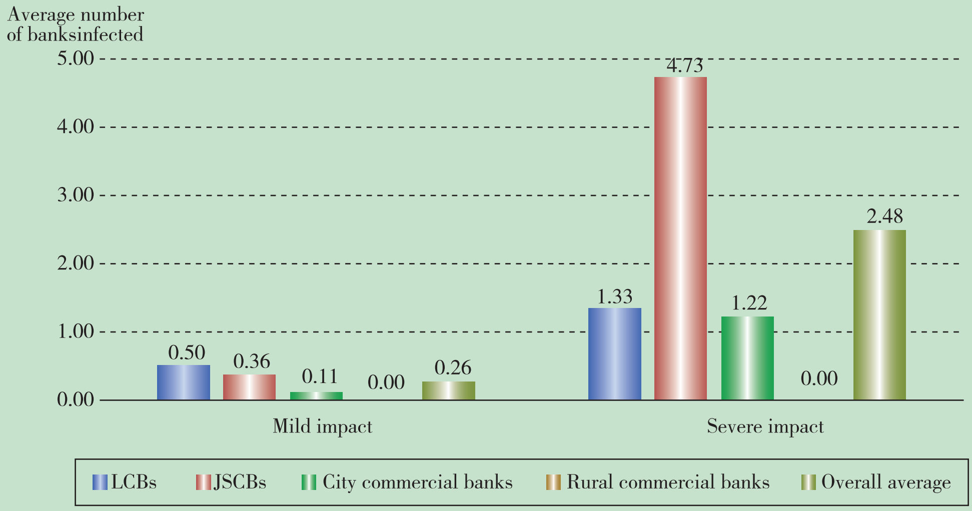
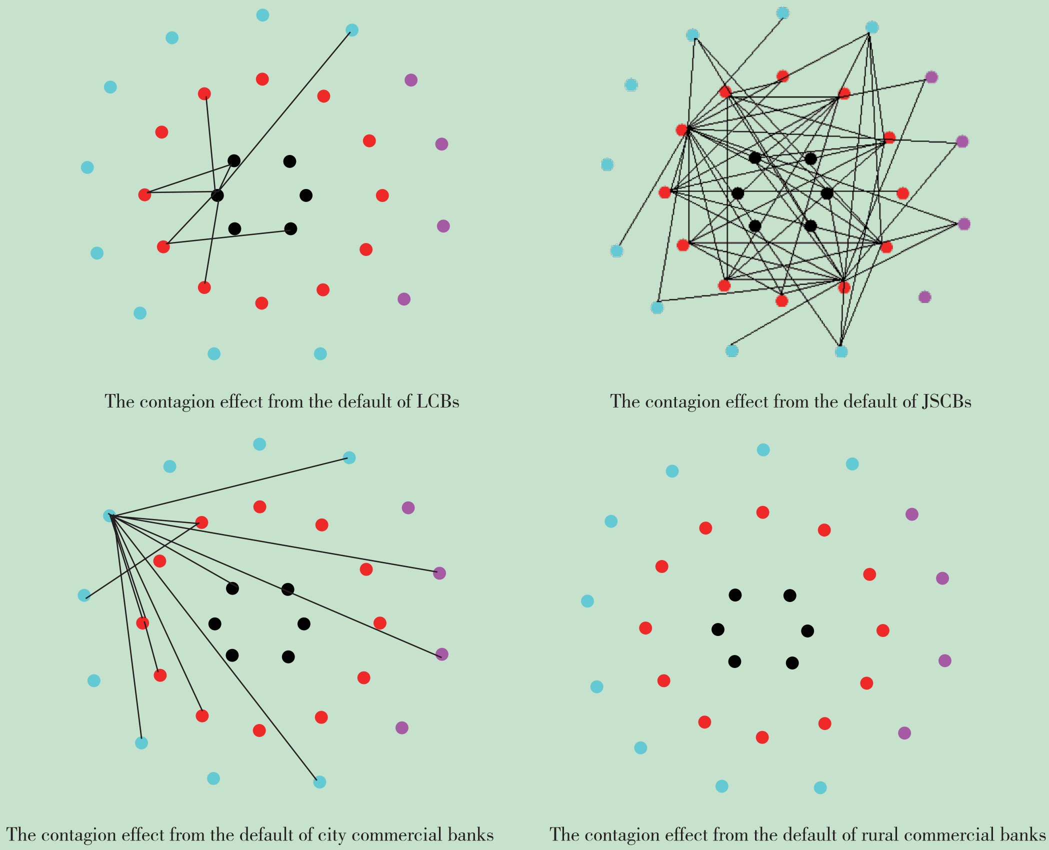


Figure 3.9 Contagion Effect in Banking Network (by Bank Type①)

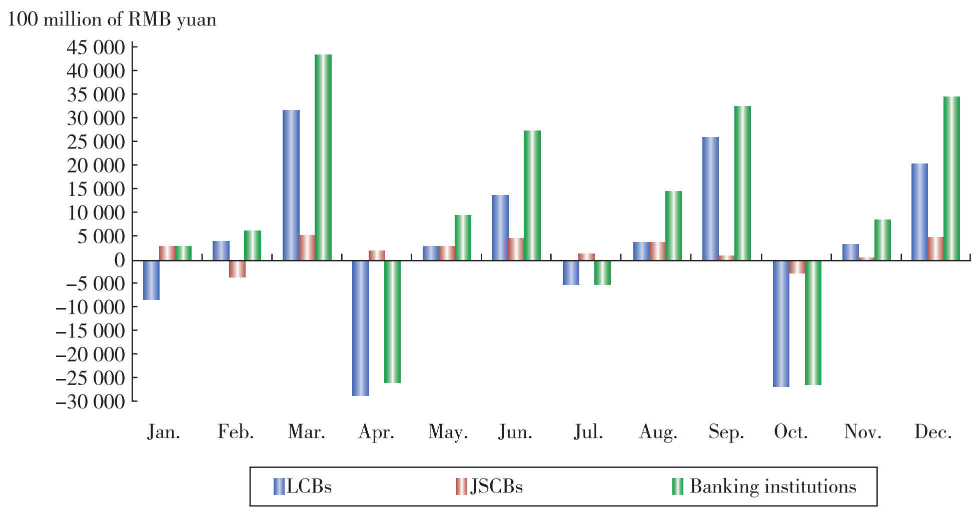


① In Picture 2, dots denote banks and lines mean that the banks connected are affected. Black, red, blue and purple dots refer to LCBs, JSCBs, urban commercial banks and rural commercial banks respectively.

The real estate market began to diverge. In 2015, the real estate market of China witnessed regional divergence, as eastern, middle and western regions registered year-on-year sales growth of 23.1 percent, 12.5 percent and 5 percent respectively while housing prices of some cities were still expected to move downward. By the end of 2015, the total outstanding real estate loans extended by banking institutions reached RMB 20.97 trillion yuan, and took up 21.57 percent of the total loans, 0.48 percentage point lower compared to the previous year. The outstanding real estate NPLs stood at RMB 104.273 billion yuan with a NPL ratio of 0.5 percent, and some regions witnessed a rising NPL ratio.

Liquidity remained reasonably sufficient while increasing instability loomed. By the end of the year, commercial banks registered a liquidity ratio of 48.01 percent and a deposit to loan ratio of 67.24 percent, which implied a reasonably sufficient liquidity position. But there still remained some uncertainties. First, fluctuation of deposit volume was still significant. In 2015, the largest monthly volatility of deposits cross quarters exceeded RMB 4 trillion yuan (Figure 3.10), and for commercial banks, the proportion of total deposits to total debts dropped from 87.2 percent at end-2006 to 75.4 percent at end-2015. Second, the stability of banks' funding sources needed to be improved. In 2015, sequential growth of deposits of commercial banks was below 10 percent for the whole year, in which four months registered negative sequential growth. Interbank liabilities, a relatively unstable source of funding, increased rapidly. By the end of the year, interbank liabilities of banking institutions accounted for 14.48 percent of total liabilities, which was 2.1 percentage points higher year-on-year. Management of liquidity risks became particularly difficult for small and medium-sized banks with a large proportion of interbank exposure and significant asset-liability mismatch.

Figure 3.10 Monthly Deposits of Banking Institutions in 2015



Source: The PBC and CBRC.

Off-balance sheet business continued to expand while potential risks remained. At the end of 2015, the balance of off-balance sheet businesses of banking institutions (including entrusted loans) registered RMB 82.36 trillion yuan, an increase of RMB 16.2 trillion yuan or a growth of 24.48 percent year-on-year. The off-balance sheet assets were equal to 42.41 percent of the total on-balance sheet assets, which was 3.07 percentage points higher than the previous year. Among this total, entrusted loans stood at RMB 12.38 trillion yuan and the volume of bankers' acceptances was RMB 10.43 trillion yuan. Management of the off-balance sheet business of commercial banks remained weak, and there was a possibility of cross-contagion between on- and off-balance sheet risks.

Risks of private financing and illegal fundraising began to reassert themselves. The year 2015 witnessed active private financing activities and acute problems of illegal fundraising, of which risks might be transmitted to the legitimate financial institutions. Some private financing organizations distributed financial products across the country via internet and acted as credit intermediaries in the name of Peer-to-Peer lending platforms and wealth management companies. The embedded risks should not be neglected, particularly when risk incidents already happened to some internet lending platforms such as the E-zubao.

Financial crimes increased and significant risks were embedded in the non-financial institutions providing financing services. Against the backdrop of economic downturn, some regions experienced deterioration in the financial eco-environment, marked by rising financial crimes including debt evasion, loan deceits, etc., and this significantly disturbed the order of the local financial market. Some banks should strengthen their internal management, since cases such as lost of bankers' acceptance notes happened from time to time. Some non-financial institutions that provided financing services such as micro-lending companies, pawnshops and financial guarantee companies were faced with accumulated risks due to incomplete internal management and weak external supervision.

Box 8 Improving the Financial Eco-environment and Boosting Incentives for Credit Origination of Banks

Financial eco-environment refers to the infrastructure, the fundamental systems and the external economic conditions that enable the operation of the financial sector. It includes regulations and law enforcement, accounting systems, intermediary services, social security system, local culture, etc. A sound financial eco-environment is important for the financial sector to support the real economy. Regions with robust financial eco-environment, transparent legal system, favorable social credit environment, sound intermediaries and solid protection of creditors' rights tend to provide higher incentives to banks to extend loans and solicit funds more effectively, promoting the fast growth of local economy and facilitating the coordinated development between the economic and financial sectors. In contrast, regions with weak social credit environment, high loan loss ratio, low liquidity and ineffective protection over bank assets will undermine the confidence of investors both within and outside the regions, which may lead to capital outflow and a possible vicious circle between economic and financial development.

The deterioration of the financial eco-environment in some regions is one of the contributors to the rapid increase of banking NPLs, containing banks' incentives for loan extension. First, there is insufficient protection over the rights and interests of creditors in terms of judicial administration and law enforcement, represented by weak binding power of certain laws and regulations, impropriety even loopholes in law enforcement, and weakness or absence of punishment for dishonest behaviors. Second, there is increasing deliberate delinquent payment or debt evasion among enterprises. Due to the economic downturn, accelerated economic restructuring and poor operation and management, some enterprises have deliberately gone delinquent as cash flow shrank and profits declined. Some enterprises evaded bank loans by establishing new companies to transfer assets. Third, protection over bank creditors' by some local governments was not strong enough. Currently, cases where local governments directly intervene and assist enterprises to evade repayment of banks loans have decreased, but there still remains implicit intervention.

To strengthen the support of the financial sector to the real economy, it is necessary to improve the current financial eco-environment. First, we should crack down on debt evasion, enhance punishment for dishonest behaviors and ensure financial claims. It is also important to improve the cooperation among judicial authorities, financial regulators and banks so as to form working synergy. Second, we should improve the social credit system, strengthen education for credibility, advocate integrity, enhance market discipline and continuously optimize the financial eco-environment. Third, we should strengthen the constraint over the conduct of local governments, abandon local protectionism, actively protect the legitimate rights and interests of banks and safeguard banks' financial claims. Local governments should attach great importance to the improvement of the financial eco-environment and act as the active advocators for sound financial eco-environment.

III. Outlook

In 2016, the banking sector will be faced with a more complex business environment and more daunting tasks to improve quality, enhance performance and prevent risks. The banking sector will operate in line with the macro-economic situation, be committed to the mandate of serving the real economy, improve financial risk management and hold the bottom line of preventing systemic and regional risks from happening.

Continue to implement sound monetary policies to support the development of real economy. It is important to adhere to the decisions of the CPC Central Committee and the State Council to cut overcapacity, deleverage, reduce excess inventory, lower costs and bolster areas of weakness, make loan origination at a reasonable pace, optimize credit structure and improve the quality and efficiency of credit utilization so as to provide stronger support to the economic transformation and upgrading. It is crucial to enhance the coordination between credit and industrial policies, promote stable growth, smooth restructuring and better performance of the industrial sectors, facilitate the development of advanced manufacturing and the financial services innovation related to aged care, and support the transformation and upgrading of major industries. Financial sector should provide solid support to the collaborative development of the Beijing-Tianjin-Hebei region, the implementation of "the Belt and Road" initiative, the growth of the Yangtze River economic belt and the international cooperation on production capacity. It is important to promote financial inclusion, strengthen credit support to impoverished regions, and stimulate credit extension to weak areas such as agriculture-related industries andsmall and micro enterprises.

Continue to deepen reforms to improve growth sustainability. It is important to accelerate the implementation of reforming plans of the development and policy financial institutions, put in place a capital restraint mechanism, optimize governance structure and provide favorable fiscal and taxation policies, so that the development and policy financial institutions could adapt to China's reality, support economic growth more effectively and achieve a sustainable growth. Efforts should be continued to deepen the reforms of LCBs, improve their corporate governance and ensure that their daily operation and risk control are in line with the requirements of corporate governance. The ABC's CABDs should be promoted to enhance the capacity to serve agriculture, rural areas, farmers and counties. The in-depth reform plan of the BOCOM should be implemented. The reforms of the PSBC and asset management companies should be further promoted. Efforts should be made to normalize the establishment of private banks and expand channels for private capital to enter into banking business, and ensure the sound implementation of the deposit insurance mechanism and build up a long-term mechanism to safeguard financial stability.

Promote commercial banks to transform profit model and replenish capital through

multiple channels. Against the background of interest rate liberalization, it is important to improve internal control of the banking sector and enhance its capability of reasonable pricing and risk management. Measures should be taken to encourage banks to strengthen cost management of debts, to increase the proportion of intermediary business income and abandon the profit model that heavily relies on net interest margin. Banks should be encouraged to replenish capital via both equity and debt markets and to enhance capital adequacy and quality, so as to consolidate the foundation for supporting the real economy and preventing risks.

Enhance financial risk analysis, identification and response, and mitigate and resolverisks in a timely manner. Efforts should be continued to strengthen studies and analysis on economic development, industrial restructuring and upgrading, and pay close attention to the potential risks in the real economy, particularly those related to industries with overcapacity, the real estate sector and local government debts. Keen attention should be paid to asset quality and liquidity changes of banking institutions. The monitoring of private financing and studies on the risks of non-financial institutions including micro-lending companies, financial guarantee companies, pawnshops and finance lease companies should be enhanced. Contingent plans to properly mitigate and resolve financial risks in a timely manner should be improved. Measures should be taken to crack down on illegal fundraising, prevent it from spreading and properly resolve risk incidents in private financing.

Learn from international experiences of the banking regulatory reforms and improve banking regulatory standards. Relevant authorities should promote the enforcement of Basel III, establish a banking regulatory framework compatible with the international standards, and guide commercial banks to steadily implement the new regulatory standards of capital, leverage ratio and liquidity in accordance. Efforts should also be continued to explore and formulate D-SIBs assessment methodology and regulatory rules, guide Chinese G-SIBs to develop recovery and resolution plans, carry out resolvability assessments and constantly optimize the effective resolution mechanism.

Chapter IV

Securities and Futures Sector

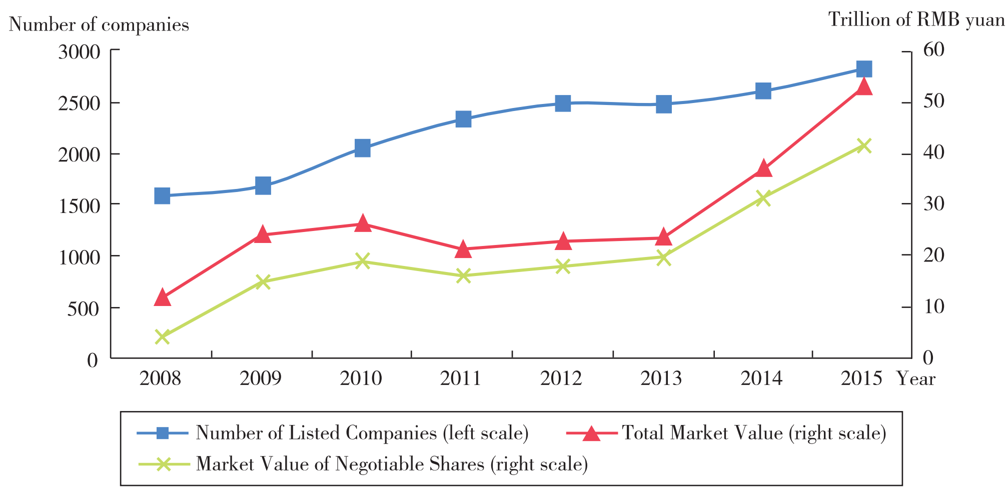
In 2015, the securities and futures sector operated soundly in general, with improved institutional arrangements. Going forward, efforts are needed to continue to push forward the market-oriented reforms, intensify regulatory efficacy, and enhance two-way opening up, so as to promote regulated and healthy development of the securities and futures sector.

I. Recent developments

1. The market entities achieved steady development

The capitalization of listed companies increased steadily. At end-2015, there were 2,827 listed companies on the Shanghai Stock Exchange and Shenzhen Stock Exchange altogether, an increase of 214 from the end of the previous year, with 224 newly listed companies and 10 delisted. The total market value and that of negotiable shares reached RMB 53.13 trillion yuan and RMB 41.79 trillion yuan respectively, an increase of 42.63 percent and 32.41 percent y-o-y (Figure 4.1). The market value of negotiable shares accounted for 73.29 percent of the total market value, down by 11.43 percentage points from the end of the previous year.

Figure 4.1 Number and Market Value of Listed Companies, 2008-2015

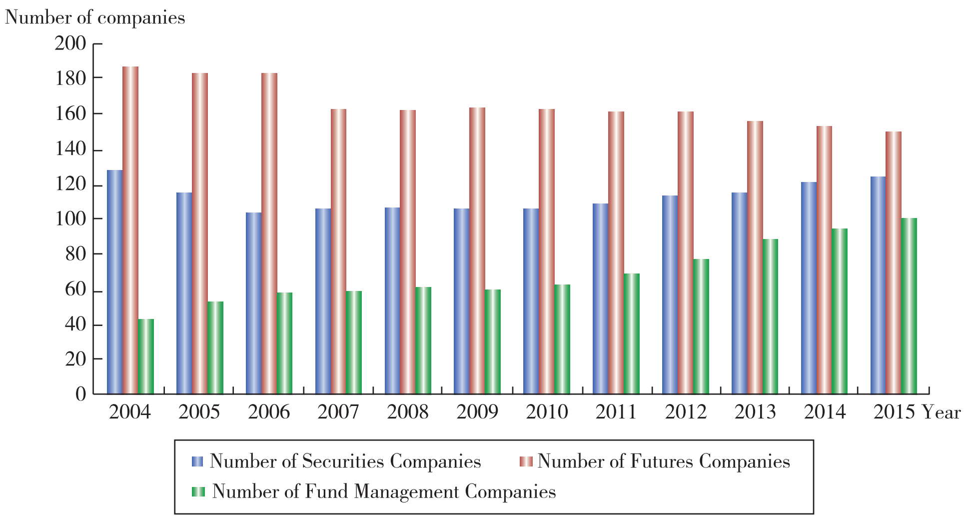


Source: The CSRC.

The number of companies listed on the New Third Board and regional equity markets, along with their equity financing continued expansion. As of end-2015, a total of 5,129 companies were listed on the National Equities Exchange and Quotations System for Small and Medium Enterprises (New Third Board), an increase of 3,557 from end-2014. The total shares and market capitalization reached 296 billion shares and RMB 121.617 billion yuan, up 3.5 and 8.21 times y-o-y, respectively. Meanwhile, the 37 regional equity markets had 3,375 listed companies and 41.5 thousand demonstrated companies altogether, achieving various equity financing for companies up to RMB 433.156 billion yuan.

The number of securities and futures companies increased steadily. By the end of 2015, there were 124 securities companies, up by 3 y-o-y, of which 25 firms were listed securities companies, up by 3 y-o-y. There were 150 futures companies, down by 3 y-o-y. The number of fund management companies was 101, an increase of 6 from end-2014 (Figure 4.2).

Figure 4.2 Number of Institutions Operating in the Securities and Futures Sector, 2004-2015



Source: The CSRC.

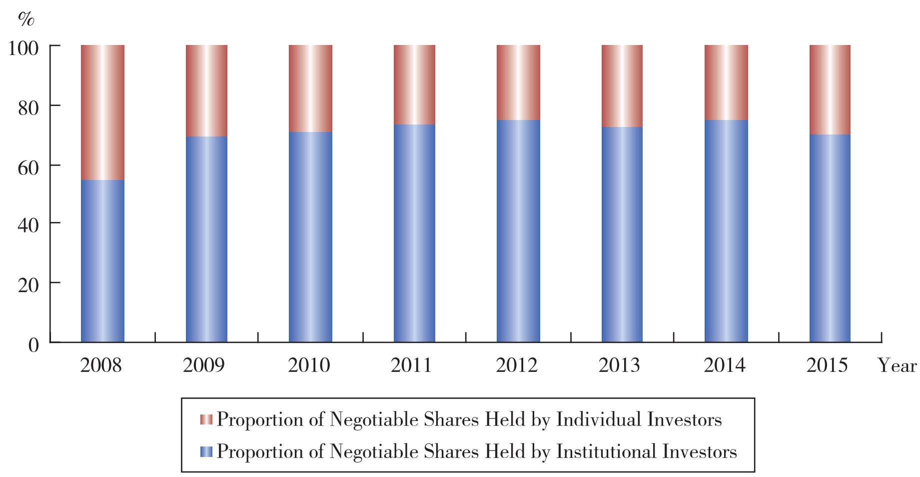
Assets of securities and futures companies kept growing. By the end of 2015, total assets of securities companies (excluding customers' assets) amounted to RMB 4.40 trillion yuan, up 54.92 percent y-o-y. The futures companies' assets (excluding customers' assets) totaled RMB 93.221 billion yuan, up 27.92 percent y-o-y. The total amount of mutual funds managed by fund management companies and 11 asset management institutions with mutual fund licenses posted RMB 8.35 trillion yuan, up 83.92 percent y-o-y. Twenty-five thousand registered private equity managers were managing 24 thousand private equity funds. About RMB 5.1 trillion yuan of private equity funds were subscribed, up 138 percent y-o-y. ①

① Financial data of securities companies, futures companies and fund management companies in 2015 were not audited. The same applies in other chapters.

Innovation by securities and futures companies was pushed forward steadily. Business and product innovation was underway by securities companies focusing on servicing the real economy. Several kinds of services were innovated, including registration, payment, financing, custodian and sales by agent. License approval of mutual fund management companies and mutual fund businesses made steady progress, with gradual advancement of unified regulation on various institutions which were approved to conduct mutual fund businesses. Futures companies explored integration of futures and spot businesses at service of new business models such as "contract farming" and "insurance of target prices of agro-products". Subsidiary risk-management companies of futures companies played a positive role in warehouse receipt-based services, cooperative hedging, pricing and market making. The functions of futures companies in serving the real economy and managing risks were thus amplified.

Institutional investors went from strength to strength. *Measures for the Administration of Investment of Basic Endowment Insurance Funds* was promulgated, which clarified that up to 30 percent of net asset value of basic pension funds was allowed to invest in stocks, equity funds, hybrid funds, and equity-type pension products. By the end of 2015, the market value for negotiable shares held by institutional investors on the Shanghai and Shenzhen Stock Markets represented 70.18 percent of the total A-share market value (Figure 4.3).

Figure 4.3 Comparison of Proportions of Negotiable Shares Held by Institutional and Individual Investors in Negotiable A-Share Market, 2008-2015



Source: The CSRC

2. Institutional infrastructure achieved steady progress

Regulatory rules for innovative businesses of securities companies were further improved. *Measures for the Administration of Margin Financing and Securities Lending Business of Securities Companies* was released after revision, which provides the reasonable ceiling of business sacle of margin financing and securities lending, allows the business contracts to extend their terms, and optimizes disposal standards and modes of collaterals against client defaults.

Management system of mutual funds and private equity funds continued to improve. The promulgation of the *Regulatory Measures on Money Market Funds* represents a further step to enhancing regulatory requirements on investment scopes, terms and proportion of money market funds, provides an institutional arrangement on liquidity management of money market funds, and specifies requirements on on-line sales and information disclosure of money market funds, therefore encourages innovative development of money market funds on the basis of effective harness of key risks. Joint regulatory meeting regime for private equity funds was officially established, together with the private equity fund statistical and reporting regime. Measures in developing private equity sector such as exemption of state-owned share transfer underwent constant improvement, and private equity institutions were encouraged to conduct mutual fund management business.

Innovation of securities, futures and derivatives products was conducted on an orderly basis. Fund product innovation was carried out on an orderly basis, marked by the completion of the registration review for the first commodity futures fund and real estate securities investment fund. The registration system of publicly offered fund products was further implemented with 1,297 products registered over the past year. The promulgation of the *Administrative Measures on the Pilot Program of Stock Option Trading* clarified institutional arrangements for trading venues and settlement institutions of stock option transactions, occupational requirements of practitioners, investor protection and risk control measures thereof. The pilot program of SSE 50ETF options, the 10-year government bond futures, and the SSE 50 and CSI 500 index futures were launched successfully. Tin and nickel futures products were made available in the market, while preparation for launch of crude oil futures was underway.

3. Regulatory enforcement intensified

Reform of the administrative approval system proceeded at deeper level. In 2015 the securities regulatory authority canceled administrative approval requirements for 8 items and non-administrative approval requirements for 4 items. Comments arising from review and approval process for IPO, refinancing, M&A, and public offering of corporate bonds are so far all publicly available.

Ad hoc inspections were enhanced. In 2015, ad hoc inspections were enhanced by relevant authorities over securities, fund and futures institutions along with their professionals with a view to addressing issues and risks. Over the past year, administrative regulation measures were adopted 281 times upon listed companies, 92 times upon securities, fund and futures institutions, and 48 person-times of professionals. On-site inspection or illegal fund-raising investigations were carried out to over 190 private equity management institutions with potential risks. Ad hoc inspections were conducted to 141 internet-based non-public equity financing platforms.

Law enforcement has been strengthened. In 2015, 723 reported clues of illicit behaviors were accepted, up 6.64 percent y-o-y; 345 cases were opened, up 68.29 percent y-o-y; 273 punishment cases were handed over; administrative penalty decisions or prior informing notice for penalty were issued to 767 institutions and individuals, up over 100 percent y-o-y, which involved over RMB 5.4 billion yuan of fine and forfeiture, 1.5 times over the total of the past ten years.

Supervisory cooperation among relevant authorities improved. According to the *MOU on Strengthening Supervisory Cooperation in the Securities and Futures Sector to Jointly Safeguard Financial Stability* between the PBC and CSRC, the two agencies shared information with each other, and continued cooperation in cracking down on illegal behaviors in the securities and futures sector, revamping regional transaction platforms, monitoring financial risks, protecting investors' rights and interests, and responding to emergencies.

4. Two-way opening up of the capital market continued making progress

Reform of the approval system for overseas listing further forged ahead. Domestic enterprises were allowed to carry out overseas financing through innovative approaches such as preferred stocks and convertible bonds. IPO and refinancing applications of 69 domestic enterprises were approved in 2015, up 82 percent y-o-y, raising USD 45.4 billion, up 23 percent y-o-y. The promulgation of *the Interim Provisions on management of Hong Kong Mutual Recognition Funds* enabled mutual recognition of fund products between Mainland China and Hong Kong, with successful completion of registration of the first 4 Mainland mutual recognition funds and 3 Hong Kong mutual recognition funds. Review and approval exercise of QFII made steady progress, while pilot scope of RQFII were expanded to 16 countries and regions with total investment quota over RMB 1 trillion yuan.

II Soundness Assessment

1. Business pressure of some listed companies continued mounting with potential risks deserving attention

By April 30, 2016, all of the 2,862 listed companies had published their annual reports, which indicated that 336 of them were in a loss, accounting for 11.7 percent; 274

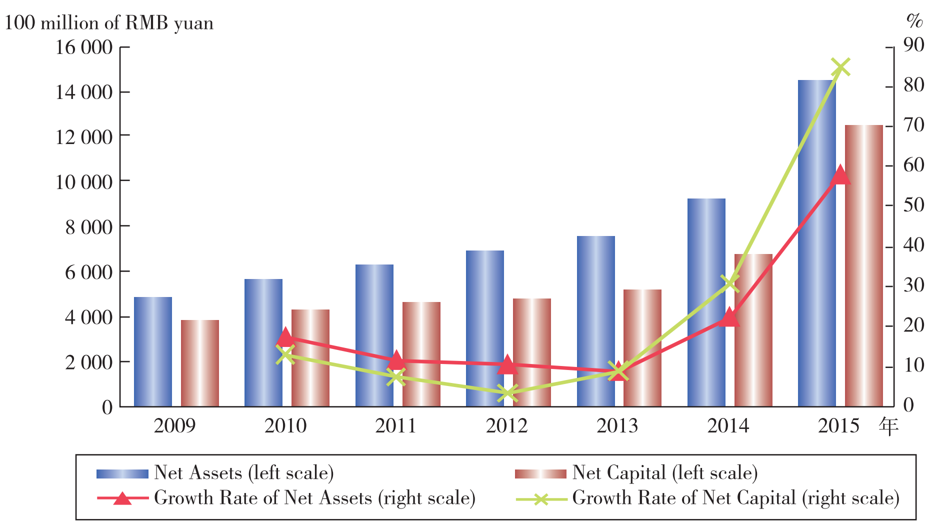
companies ran in a loss for the first time and 62 continued losses. The loss-suffering firms were concentrated in chemical raw material and chemical manufacturing industry, the computer, communication and other electronic equipment manufacturing industry, dedicated device manufacturing industry, and ferrous metal smelting and calendering industry. The first two industries were also the ones in which many enterprises reported losses in 2014.

Given the increasing downside pressure on the domestic economy in 2015, the overall profitability of listed companies was at a moderate level. With ever more complex domestic and international economic situations in the future, along with deepening economic transformation and upgrading, some listed companies may subsequently encounter increased pressure and thereby risks of delisting may materialize. Potential social and financial risks thereof deserve close attention.

2. Securities companies operated in relative steadiness with continued improvement of profitability

In 2015 the overall operations of securities companies were sound in general while risks were under control. By the end of the year, the total assets, total net assets and total net capital of securities companies touched RMB 6.42 trillion yuan, RMB 1.45 trillion yuan and RMB 1.25 trillion yuan, up 59.07 percent, 60.45 percent and 88.44 percent respectively (Figure 4.4), and growth rates of net assets and net capital have undergone substantial increase for two consecutive years. In terms of the industry average, the ratio of net capital of a single securities company to its total risk-based capital provisions reached 708.84 percent, up 162.54 percentage points from end-2014, and the ratio of liabilities to net capital posted 396.51 percent, down 74.39 percentage points from end-2014.

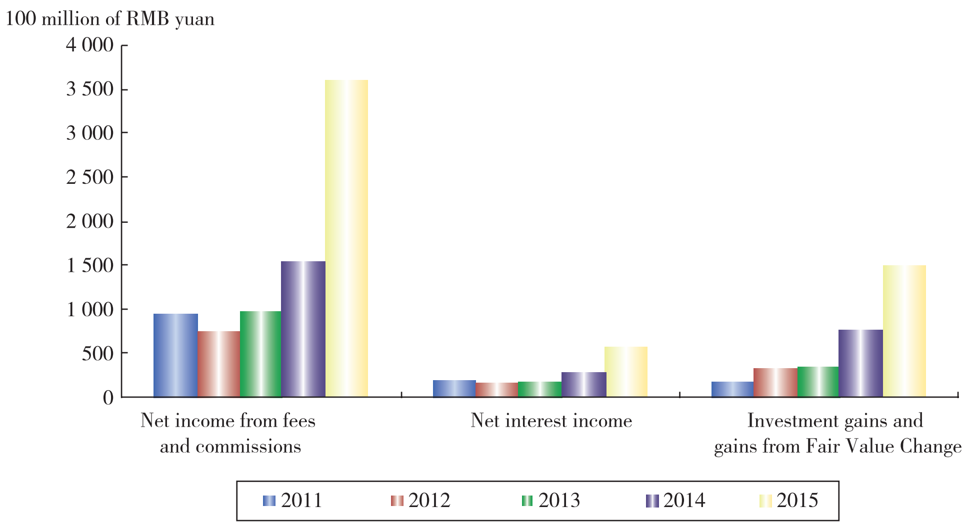
Figure 4.4 Changes of Net Assets and Net Capital of Securities Companies, 2009-2015



Source: The CSRC

Thanks to swift business expansion during the first half of the year, overall profitability of securities companies underwent substantial increase. The entire sector generated RMB 575.155 billion yuan of operating revenue in 2015, up 125.22 percent y-o-y. Among others, net income from fees and commissions, securities investment gains (including investment gains and gains from fair value changes), and net interest income posted RMB 361.798 billion yuan, RMB 150.540 billion yuan, and RMB 59.125 billion yuan, up 138.68 percentand 100.36 percent and 114.33 percent y-o-y respectively (Figure 4.5). The net profits of 2015 totaled RMB 244.763 billion yuan, up 158.05 percent y-o-y. From the perspective of income composition, fees and commissions remained the major source of income of securities companies, with the proportion increasing from 59.33 percent in the previous year to 62.90 percent of the year.

Figure 4.5 Comparison of Securities Companies' Income Structures, 2011-2015



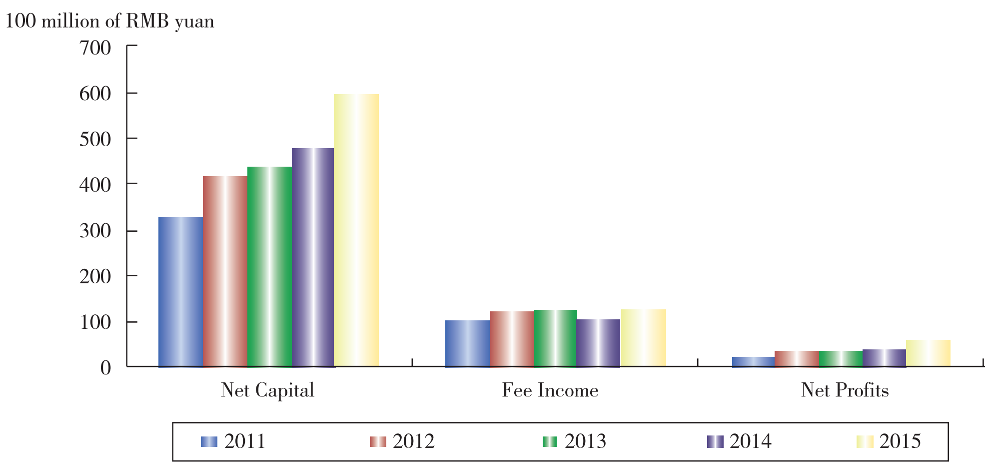
Source: The CSRC

Quasi-credit businesses of securities companies marked by margin financing and securities lending businesses and pledge-style repo were obviously affected by the stock market fluctuation in 2015. By the end of the year, the balance of margin financing and securities lending businesses summed RMB 1,174.267 billion yuan, out of which margin financing balance summed RMB 1,171.307 billion yuan, down 48.34 percent and 48.32 percent respectively as opposed to the historical peaks on June 18, 2015. Risk control of quasi-credit businesses of securities companies was mainly relying on pledged cash deposits and stocks. In the circumstance of substantial stock market fluctuation, a few securities companies were encountered with substantial devaluation of collaterals and difficulties in cashing the collaterals. It is required to further enhance countercyclical macroprudential management, structure more sophisticated and effective risk control system for securities companies, and improve the ability of securities companies to cope with credit risk, market risk, and liquidity risk under extreme market circumstances.

3. Futures companies are yet to be developed in spite of expansion of scales

As of end-2015, net assets and net capital of futures companies reached RMB 78.294 billion yuan and RMB 60.038 billion yuan, up 26.08 percent and 25.82 percent y-o-y respectively. The total clients' margins amounted to RMB 378.411 billion yuan, up 39.40 percent y-o-y. The ratio of their net capital to entrusted assets from clients hit 15.87 percent, down 1.71 percentage points from end-2014. During the year, futures companies generated RMB 24.464 billion yuan of operating revenue, up 28.79 percent y-o-y, and RMB 6.053 billion yuan of net profits, up 48.14 percent y-o-y (Figure 4.6).

Figure 4.6 Changes of Major Indicators for Futures Companies, 2011-2015



Source: The CSRC

By and large, futures companies were under a rather slower process of development as opposed to other securities financial institutions. Main sources of their operating revenue were fee income and income from interests on clients' margins, which amounted to RMB 12.333 billion yuan and RMB 9.599 billion yuan respectively, accounting for 50.41 percent and 39.24 percent in total operating revenue. Challenges remained to diversify their business models.

4. Net value of assets managed in the fund industry continued growth while private equity fund development was to be standardized

As of end-2015, the net value of publicly offered funds posted RMB 8.35 trillion yuan, up 83.92 percent y-o-y. Thereinto, stock market funds represented 8.40 percent, down 20.56 percentage points from end-2014; hybrid funds accounted for 27.36 percent, up 14.08 percentage points from end-2014; bond market funds made up 8.43 percent, up 0.76 percentage point from end-2014; and money market funds comprised 54.85 percent, up 8.86 percentage points from end-2014. Private equity fund subscription reached RMB 5.1 trillion yuan in 2015, up 138 percent y-o-y.

Private equity funds underwent rather fast development over recent years as a new player in the wealth management industry, and played a positive role at certain level in promoting diversification of the capital market. In the process of fast development, however, some issues emerged in succession from the private equity fund industry, including: disguised public offering, break of qualified investors' criteria; incompliant operation, benefit tunneling, encroachment on investors' rights and interests; defective internal management and risk control system, involvement in P2P and private lending by a few institutions through credit enhancement by means of registration with associations; incompleteness, inveracity and inaccuracy of filing information with registration, weak awareness of compliance on the part of some institutions which even evaded from regulation.

III Outlook

The securities and futures sector will, over the course of 2016, make efforts to implement the strategy of capital market reform and development to achieve steady and healthy development, by pursuing market and legitimate orientations of reform, achieving organic integration of stabilizing, restoring and constructing the market, continuing institutional mechanism reform, and embracing the capital market with sophisticated financing capabilities, solid infrastructural systems, effective market regulations, and adequate protection of legal rights and interests of investors.

1. Continued promotion of market-oriented reform of M&A and other business

Efforts are to be committed to accelerating the shaping of a capital market with sophisticated financing capabilities, where a stock issuance responsibility system enables each market participant to play its role and assume its responsibilities. Market-oriented M&A reform will be deepened by further removing and simplifying administrative approvals for M&A, supporting innovation of M&A approaches, and developing and promulgating detailed implementation rules for issuance of preferred stocks and introduction of convertible bonds as the means of payment in M&A. Listed companies, particularly state-owned listed companies, are to be supported to optimize and strengthen development through asset injection, introduction of strategic investors, consolidation by merger, and holistic listing, thus to better facilitate structural transformation of the economy and industrial upgrading.

2. Improving systems and rules of capital market transactions

Leverage financing is to be regulated through further improving countercyclical macroprudential management system for margin financing and securities lending businesses of securities companies, promoting balanced development of such businesses, and imposing stringent restrictions on structured products of stock financing with excessive leverage levels. Management over algorithmic trading is to be tightened to safeguard a fair trading environment by refining access stipulations of algorithmic trading systems, and improving regulatory requirements for securities, fund management and futures institutions to adopt algorithmic trading. Management over futures market transactions will be intensified by enhancing management over accounts under de facto control and regulation over unusual transactions, and regulating the development of stock index futures. Asset management businesses are to be promoted with enhanced regulation. Unified identification and monitoring will be enhanced over cross-market transactions in the multi-layered capital market.

Box 9 Enhanced Regulation over High-frequency Trading

During the stock market plummet in 2015, high-frequency trading and algorithmic trading were under heated debate. It is necessary to clarify the cognition of market transaction frequency, taking reference from overseas regulatory experience vis-à-vis high-frequency transactions, so as to improve China's regulatory practice in the same regard.

1. Definition and status quo of high-frequency trading

High-frequency trading (HFT) is a special kind of algorithmic trading which is based on the computer as its technical tool and conducts trading in high speed and large scale automatically per set programs. Algorithmic trading above certain frequency becomes HFT. Algorithmic trading and HFT have currently emerged in the securities and futures market in China. In spite of the restrictions on trading frequency by the T+1 trading regime of the stock market, investors may still conduct HFT in disguised form through returning securities borrowed on the same day.

HFT traders release fault transaction signals to the market through frequent submissions and withdrawals of transaction orders, while the auto-trigger mechanism may intensify convergence of trading activities and thus aggravate stock market fluctuation. In addition, any technical failure of the automated trading programs may produce "wrong bills" which in turn disturb proper operation of the market and even trigger risks. The very "EverBright fat finger" accident on August 16, 2013 was caused by the abnormal operation of the ETF interest arbitrage system of the EverBright Securities Company.

Generally the fluctuation frequency of macro economy and fundamentals of listed companies tends to be moderate. Securities valuation on the part of investors also appears relatively stable accordingly. Tradable frequency that the secondary market provides to investors thus also needs a relatively comfortable range. When trading frequency becomes excessively high, financial trading may deviate from the range of real economy and be abused for financial speculations, eventually ending up with violent fluctuation of the securities market.

2. International experience in regulating HFT

In spite of permission for HFT in the United States and European countries and regions, measures are employed to keep HFT under stringent regulation, limiting unfavorable impacts of excessively high frequency trading to the market.

In the United States: 1) Information soliciting and regular monitoring is enhanced over HFT activities. Specialized identification codes are assigned to high-frequency traders, requiring brokers to report trading records to the Securities and Exchange Commission (SEC) on the date subsequent to the occurrence of trading. 2) Market information data analysis system is deployed in order to monitor and identify small-scale "Flash Crash" and locate potential illegal activities. 3) Corresponding filtering mechanism is created aiming at potential disturbance of HFT to the market, for example, fee levying to excessive orders. 4) Emergency response mechanism is established, which includes circuit breaker mechanism against unusual transactions and wrong bill cancellation mechanism, etc. 5) Restrictions are imposed to certain HFT, including prohibition of flash orders, to safeguard market fairness.

In Europe: The European Parliament passed the *Markets in Financial Instruments Directive (MiFID) II* in March 2014, requiring HFT companies to obtain approval from regulatory authorities for their proprietary trading, those using market-making strategies to reach agreements with the stock exchanges, the stock exchanges to provide ceiling for the proportion of trading by orders, minimum quote unit be set for individual security price, the exchanges to establish pricing adjustment mechanism, and penalty be imposed to excessive dispatch of invalid commands. The Federal Financial Supervisory Authority?of Germany (BaFin) promulgated the *Act for the Prevention of Risks and the Abuse of High Frequency*

Trading in September 2012, which was the first draft in the world to exclusively impose regulation on HFT. The Act brings HFT under regulation and requires for the risk control system of HFT traders to "be able to cope with extreme volume of trading, be exempt from transmission of false commands, and from disturbing normal market operation". The Act identifies market manipulation activities of HFT and requires exchanges to establish mechanisms to prevent market prices from radical fluctuation.

3. Recommendations on intensifying HFT regulation

It is recommended to borrow international experience to escalate regulation over HFT on the basis of risk control.

Firstly, stereometric defenses are to be created against risks of HFT, with the first defense line being internal risk control mechanism of HFT traders focusing on harnessing the magnitude and frequency of trading; the second defense line being the risk control system of exchanges, covering the control of magnitude and frequency of orders, threshold to terminate HFT in light of market fluctuation levels, improving restrictions upon access mechanism, capacity and proportion of order trading; the third defense line lying with clearing members who are mainly responsible for checking out risk profile and determining whether to suspend trading; and the fourth defense line referring to the management of central counterparties, where potential HFT risks are assessed in light of their own data.

Secondly, a prudent view should be taken vis-à-vis T+0 trading in the A share market. The current institutional infrastructure of China's capital market calls for further improvement where risk control systems of various institutional investors remain weak, and small and medium investors are featured with irrational investment decisions. Prior to fundamental changes to such a circumstance, resuming T+0 trading without prudent weighing would make no contribution to market efficiency, but rather contribute to the boom of HFT and aggravate financial opportunistic atmosphere, triggering systematic financial risks.

3.Improving effectiveness of market regulation

Market regulation is to be exercised vigorously by strict enforcement of regulatory rules, and severely cracking down on such illegal and incompliant actions as market manipulation, insider trading, and fraudulent issuance. Efforts are to be deployed to improve the integrity of capital market, including establishing the system of information disclosure rules for listed companies, and implementing joint penalty mechanism by multi authorities. Protection of investors will continue improving by enhancing the regulation over eligibility management of investors and account opening investigation, and guiding investors to establish the awareness of rational investment. Overall understanding is to be escalated regarding monitoring and assessment of systemic financial risks in the capital market. Unified and efficient information sharing and coordination mechanism is to be established on a step-by-step basis so as to improve the capabilities of prevention and disposal of systemic financial risks.

4. Promoting compliant development of main entities in the securities and futures market

Efforts are to be made to vigorously develop institutional investors, further open the threshold of approval for public funds and private equity funds, enlarge the proportion of institutional investors in the capital market, continue promoting commercial banks to invest in and establish fund management companies, improve the structure of investors, and enhance market stability; continue introducing long-term funds into the market to meet the financing demand of the real economy; encourage securities and futures institutions to carry out innovation and enhance risk prevention and control based on the purpose of serving real economy and orientation of being intermediary service providers in the capital market; study to establish comprehensive prevention and control mechanism for liquidity risks of publicly offered funds, and improve classified regulation and risk supervision index system of subsidiary fund companies; promote private equity operation in line with law and integrity, intensifying integrity and self-regulation of the sector while bringing violation of law or regulations under serious penalty.

5. Expanding two-way openness of the capital market

Efforts are to be deployed to expand channels for domestic companies to go public overseas, and resolve the issue of “full circulation” of H shares. QFII and RQFII systems are to be improved by gradually relaxing investment quota, promoting A share to be incorporated in international indices, and introducing long-term funds such as overseas sovereign wealth funds, pension funds, and passive index funds to intensify their investment in China. The Shenzhen-Hong Kong Stock Connect is to be launched, Shanghai-Hong Kong Stock Connect is to be improved, and Shanghai-London Stock Connect is to be explored. Efforts will be made to promote new financial pilots in free trade zones. Measures will be in place to promote institutions from Hong Kong and Macau to establish joint-venture securities and fund operation institutions in the mainland. Support will be given to securities and futures institutions in developing their overseas subsidiaries. Efforts will also be made to promote mutual fund recognition between mainland China and Hong Kong, with steady steps to facilitate mutually recognized funds from Hong Kong to be registered in the mainland.

Chapter V

Insurance Sector

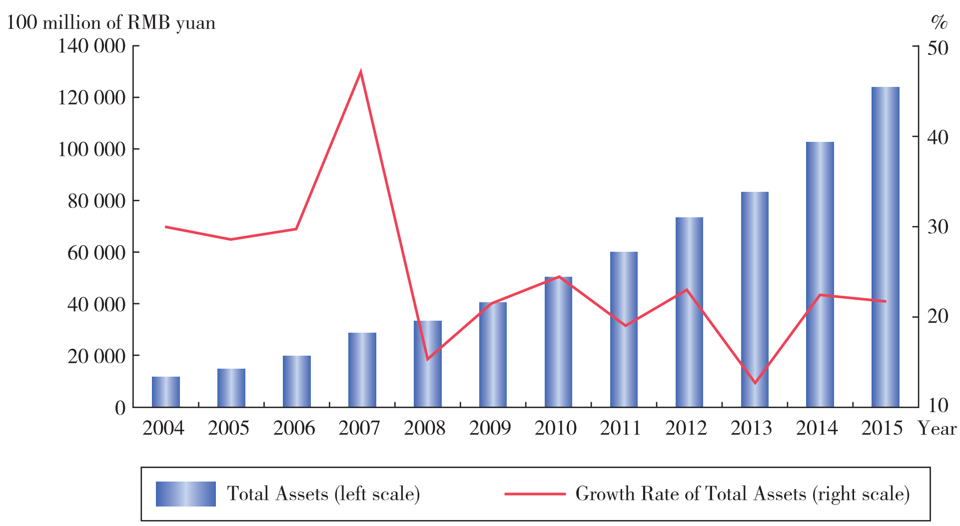
In 2015, China's insurance sector continued to perform stably, with reforms pushed forward, the size of assets expanded, profits steadily increased, and the capacity to support the development of the economy and society strengthened. At present, the development of the insurance sector is facing new challenges, as external and domestic economic and financial conjuncture become more complicated and changeable. Looking ahead, China will concentrate on supply-side structural reforms, enhance the quality of insurance supply, deepen reforms and innovation, avoid and mitigate risks, and ensure the sustainable and healthy development of the insurance sector.

I. Recent developments

1. The size of insurance assets kept expanding, and the premium income grew at a fast pace.

As of the end of 2015, the total assets of the insurance sector registered RMB 12.4 trillion yuan, up by 21.7 percent y-o-y (Figure 5.1). Specifically, total assets of property insurance companies, personal insurance companies, reinsurance companies and asset management companies reached RMB 1.8 trillion yuan, 9.9 trillion yuan, 541.0 billion yuan, and 35.2 billion yuan, up by 31.4 percent, 20.4 percent, 45.8 percent and 46.4 percent compared with those in the previous year, respectively. Premium income for the whole year reached RMB 2.4 trillion yuan, 20 percent higher than the previous year. In terms of premium income, China has become the third largest insurance market in the world. In particular, the premium income of property insurance, life insurance, health insurance and accident insurance increased by RMB 799.5 billion yuan, 1.3 trillion yuan, 241.0 billion yuan and 63.6 billion yuan, rising by 11.0 percent, 21.5 percent, 51.9 percent and 17.1 percent y-o-y, respectively.

Figure 5.1 Total Assets and Growth Rate of the Insurance Sector



Source: The CIRC.

2. The growth of business in key areas accelerated, and the capacity of the insurance sector to serve the society and improve the people's livelihood was enhanced.

The insurance sector took an active role and made contributions to the building of China's social security system. The critical illness insurance for urban and rural residents has achieved full coverage over 31 provinces (regions and municipalities), which serves as the last line of social security. As the proportion of reimbursement paid to patients for critical illness was generally raised by 10 to 15 percentage points, the phenomena of illness-induced poverty or return to poverty has been relieved to some extent. Insurers actively participated in the management of enterprise annuity, with the amount of trusted assets and the assets under investment management reaching RMB 416.9 billion yuan and 486.1 billion yuan. The preferential individual income tax policy for commercial health insurance has been officially launched. Starting from 2016, pilot programs will cover 31 cities across the nation, and the individual expenditures on commercial health insurance products that satisfy related conditions would be deducted from individual income when calculating the individual income tax, within the ceiling of RMB 2400 yuan per year. The product diversification and coverage of liability insurance continuously increased, with fast development in the areas such as medical, environment pollution and food safety, etc. The total premium income of the liability insurance sector registered RMB 30.2 billion yuan, up by 19.17 percent y-o-y, and the insured amount reached RMB 91 trillion yuan, which was 36.8 percent higher than the previous year. Breakthrough has been achieved in the area of catastrophe insurance. Principally approved by the State Council, the *Implementation Plan on Establishing the Household Earthquake Insurance Mechanism for Urban and Rural Residents* was put into force, and China Residential Earthquake Insurance Pool has been established. In addition, catastrophe insurance pilot programs have been launched in provinces such as Yunnan and Sichuan, and China's first catastrophe bond has been successfully issued in the international market.

Box 10 Improving the Mechanism of Critical Illness Insurance for Urban and Rural Residents

In addition to basic medical insurance, the critical illness insurance for urban and rural residents provides further compensation for patients with critical illness, so as to avoid the phenomena of illness-induced poverty or return to poverty caused by high medical expenditures. In August 2015, the State Council issued *Opinions on*

Comprehensively Promoting Critical Illness Insurance for Urban and Rural Residents, which requires that critical illness insurance covers all urban and rural residents insured by basic medical insurance and a well-performing critical illness insurance mechanism established in China by 2017.

China's critical illness insurance was led by the government and operated by professional insurance companies. China allows local governments to launch pilot programs and share profits and costs with insurance companies according to the principles of balancing revenue and expenditure, breaking even or realizing a narrow margin of profits. After development of more than three years, China's critical illness insurance mechanism has achieved evident progress. First, pilot programs have been promoted at a fast pace. As of the end of 2015, critical illness insurance covered 31 provinces (regions and municipalities) and 920 million people, and the premium income reached RMB 25.24 billion yuan. Second, the social security function of critical illness insurance has performed well. Claims and payments have reached RMB 21.4 billion yuan, which directly benefited 3.45 million patients with critical illness. The proportion of reimbursement paid to patients was generally raised by 10 to 15 percentage points without requirement of further contributions. Third, the critical illness insurance also helps the transformation of government functions. By undertaking critical illness insurance, the insurance companies not only accelerated their own business development, but also played a role in efficiently managing medical care expenditure, deepening medical insurance system reform and raising efficiency of services, etc.

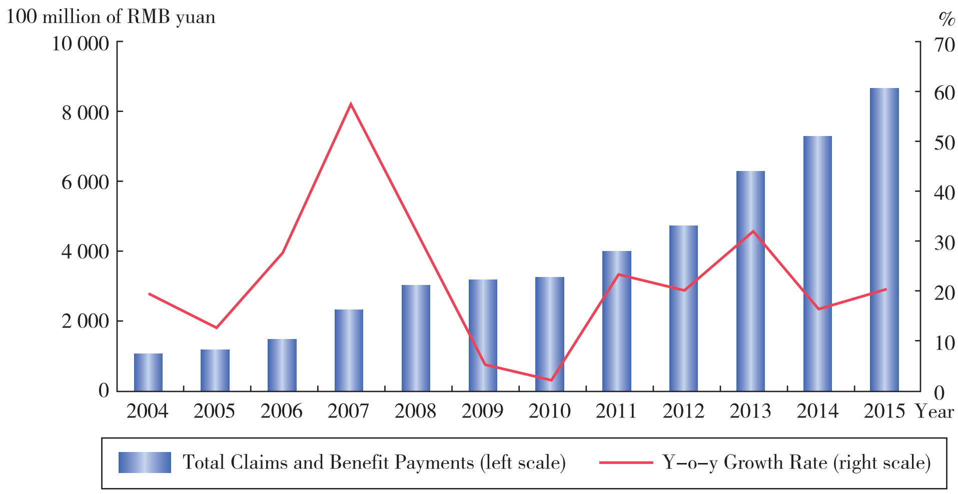
In the meantime, there have also been some problems revealed in the performance of critical illness insurance. First, the pooling level and the funding standard were low. Only a few regions have achieved provincial-level pooling, while most of the regions only achieved prefectural-level or county-level pooling. The source of funds was solely the accumulating balance from basic medical insurance funds. Second, as operating costs are high and the risk adjustment mechanism still needs improving, it is difficult to break even or realize a narrow margin of profits. Third, the extent of information sharing among government agencies, hospitals and insurance companies was relatively low, and the professional advantages of insurance companies in actuarial skills, risk management as well as network of branches have not been fully exploited, and the quality of services and products is in need of improvement. Fourth, the social awareness of critical illness insurance was relatively low.

Next, China will continue to improve the critical illness insurance mechanism and realize sustainable development. The first is to clarify the boundary between government and market, formulate appropriate basic policies, improve risk sharing mechanism and give full play to the initiative of market participants. The second is to expand funding sources. Starting from fund pooling at the prefectural-level, China will encourage provinces (regions and municipalities) with mature conditions to explore fund pooling at the provincial-level. The third is to strengthen information sharing on the premise of ensuring information and data security, encourage insurance companies to better make use of its professional advantages, improve staff training, and enhance management and service capacities. The fourth is to efficiently integrate resources of related agencies and realize synergy in regulation, so that regulation and supervision will be strengthened and medical services will be properly regulated. The fifth is to establish a sustainable propaganda mechanism in order to promote the understanding and awareness of the society of the critical illness insurance policies and to improve people's motivation to participate.

3. The insurance sector's risk prevention function and the advantage of long-term investment has performed well, which has served the growth of the real economy.

The insurance sector has provided risk coverage of RMB 1,718 trillion yuan to the society, up by 54.2 percent y-o-y. Claims and benefit payments reached RMB 867.4 billion yuan, increasing by 20.2 percent y-o-y (Figure 5.2). The premium income of agriculture insurance reached RMB 37.5 billion yuan, with participating rural households registering around 230 million and the amount insured close to RMB 2 trillion yuan. The pilot program on grain crops price insurance was expanded to 26 provinces, and the kinds of grain crops covered were increased to 18. The scope of rural housing insurance has been enlarged to all provinces and cities across the country, providing risk coverage of RMB 1.4 trillion yuan. Small and micro enterprises and individuals have received financing worthy of RMB 101.56 billion yuan with the support of loan guarantee insurance, and short-term export credit insurance has offered nearly 390 billion dollar of risk coverage for 63,000 export enterprises. The insurance sector has established insurance compensation mechanism for the first major technical equipment, covering risks for China's equipment manufacturing enterprises. At the same time, the insurance sector continued to take advantage of its long-term investment profile by initiating 499 debt, equity and asset-backed plans with a total volume of RMB 1.3 trillion yuan and offered funds for national key projects, shantytown renovation and urbanization, etc. China insurance investment fund was approved. The total value of the fund is expected to be RMB 300 billion yuan. Concentrating on China's national industrial policy and development strategies, key projects worth of initial RMB 100 billion yuan have been launched.

Figure 5.2 Insurance Claims and Benefit Payments and Growth Rate



Source: The CIRC.

4. The market-oriented reform has been continuously pushed forward, and the development space of the sector was improved further.

Market-oriented reform of insurance tariffs has been steadily pushed forward. The pilot programs of tariff reforms for universal life insurance, participating life insurance and commercial auto insurance haven been launched. Market-oriented reform on insurance fund investment was deepened, with the regulatory proportion of investment allowed in blue-chip stocks raised, the scope of overseas investment expanded, products such as stock and bond mixed ones developed, asset-backed plans and insurance private equity funds promoted, and the establishment of insurance asset trading system explored. The development of internet insurance was regulated. The establishment of three internet insurance companies has been approved, and innovation of internet insurance products was encouraged. The establishment of Shanghai Insurance Exchange has been accelerated to provide a market-oriented trading platform for the insurance sector. The development of new types of insurance organizations such as mutual insurance has been explored.

Box 11 The Market-Oriented Insurance Tariff Reform Continued to be Pushed Forward

In 1999, with the aim of avoiding interest rate spread risk, China's insurance regulatory agency requested that the assumed interest rate ceiling would be 2.5 percent for life insurance policies. This policy played a positive role in guiding the insurance companies to operate in a rational way and prevent risk, but also restrained insurance demand from consumers. In 2013, CIRC started to promote the market-oriented reform of life insurance tariffs, and formulated the reform roadmap in the sequence of ordinary life insurance, universal life insurance, and participating life insurance. In August 2013, the *Notice on Reforming Policies Related to Ordinary Life Insurance Tariffs* was issued, which allows insurance companies to set assumed premium rates on their own and according to market demand and supply; the ceiling of 2.5 percent no longer applies, and the prescribing reserves evaluation rate shall not exceed the minimum of the assumed interest rate of the policy and 3.5 percent. In February 2015, the *Notice on Reforming Policies Related to Universal Life Insurance Tariffs* was issued, which cancelled the minimum guaranteed interest rate of 2.5 percent, and raised the ceiling of prescribing reserves evaluation rate from 2.5 percent to 3.5 percent. In September 2015, the *Notice on Reforming Policies Related to Participating Life Insurance Tariffs* was issued, which lifted the ceiling of 2.5 percent on the assumed rate of participating insurance, and required the insurance companies to use the minimum of assumed policy rate and 3 percent as the prescribing reserves evaluation rate when calculating and drawing reserves.

In order to establish and improve the formation mechanism of commercial auto insurance term rates, in March 2015, CIRC issued the *Working Plan on the Pilot Program for Deepening the Reform on the Administration of Commercial Auto Insurance Clauses and Tariffs,* and launched pilot programs on commercial auto insurance reform in six areas including Hei Longjiang and Shandong provinces. On January 1st, 2016, the scope of pilot programs was further expanded to 18 areas. The reform plan established the sector benchmark for the formation and adjustment mechanism of pure risk premium, allowed insurance companies to estimate the additional charge rate and the tariff adjustment coefficient, so as to increase their price-setting abilities.

The market-oriented tariff reform has achieved substantial progress. After the implementation of the reform, the prices of ordinary life insurance products have decreased by around 20 percent, and those of universal life insurance and participating life insurance products decreased by around 15 percent. In 2015, the premium income of life insurance increased by 43.1 percent. Commercial auto insurance premium per car in the areas where the first round of pilot programs were launched has decreased by 7.7 percent, and the combined ratio of insurance companies' commercial auto insurance was reduced by 2.7 percentage points. In the meantime, the market-oriented reform on clauses and tariffs has also increased operational pressure for insurance companies, which requires insurance companies to improve their abilities in product designing and pricing, fund investment, asset-liability management and risk prevention.

5. The regulatory system has been improved and risk prevention strengthened.

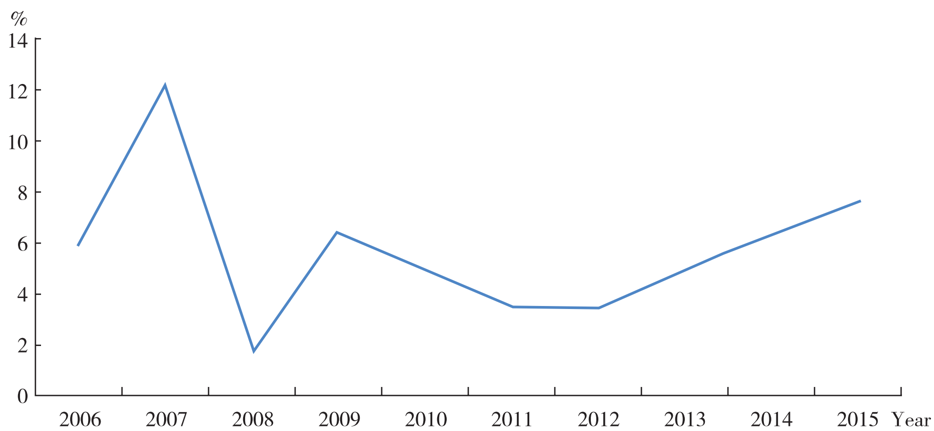
Solvency regulation has been strengthened . At the beginning of 2015, China Risk Oriented Solvency System (C-ROSS for short) was launched and put into trial, and has been formally implemented since 2016. The capital sources of insurance sector have been expanded, as insurance companies are allowed to issue capital supplement bonds in the interbank market. Regulation on insurance fund investment has been enhanced by issuing guidance on internal control over insurance fund investment, regulating affiliated transactions of insurance companies and information disclosure when insurers invest in shares of a listed company. Prudential regulatory mechanism for asset allocation of insurance companies was established, and the soft constraints on asset and liability management of insurance companies are being transformed to hard constraints. Corporate governance regulation has been strengthened through the governance evaluation system for insurance legal entities and the regulation on internal auditing of insurance companies. China also implemented industry-wide risk assessment and stress tests, and enhanced risk early warning, monitoring, prevention and mitigation in terms of insolvency, surrender and maturity payments, fund investment and cross-border risk transmission, etc. Risk resolution has also been enhanced by improving the risk prevention system and working mechanism against illegal fund-raising in the insurance sector. China Insurance Security Fund has successfully transferred the equities it held of China Insurance at a premium price.

II. Soundness Assessment

1. The share of high-risk assets increased, and the return on fund investment realized substantial growth.

In 2015, there was an obvious change in the insurance sector's asset portfolio. The ratio of bank deposits and bond investment to the total portfolio has decreased by 6.0 percentage points and 3.7 percentage points, respectively, while that of securities investment fund, stocks (equities) and other investment (mainly alternative investment) increased by 2.9 percentage points, 2.4 percentage points and 3.9 percentage points, respectively. During the year, total return on investment registered RMB 780.4 billion yuan, up by 45.6 percent y-o-y, and the average rate of return reached 7.56 percent, which was the highest level since the global financial crisis in 2008. Specifically, investment in stocks of listed companies has contributed the most to the increase in rate of return. Notably, with downward pressure on China's economy as well as rising credit and market risk, the insurance sector's adjustment of asset portfolio from low-risk assets such as deposits and bonds to high-risk assets such as equities and alternative investments will pose increasing potential risks.

igure 5.3 Average ROI of Insurance Funds



Source: the CIRC.

Box 12 Investment of Insurance Funds is Facing Challenges

Investment of insurance funds is facing many challenges in the context of current macroeconomic and financial market developments.

The first is the low interest rate environment. In 2015, newly increased assets of the insurance sector amounted to RMB 2.3 trillion yuan, and a large amount of bank deposits and bond investment has matured. In this context, the need to increase investment and reinvestment has been huge. However, as the market rates kept going down, and fixed-income assets accounted for over 50 percent of the total asset portfolio, more and more assets with low interest rates will replace the matured ones with high rates. As a result, the return of insurance fund investment will be negatively affected.

The second is the rise of credit risk. Insurance institutions are major investors in the bond market. As the return of bonds declined, the risk preference of insurance institutions also rose, and they increased the investment in corporate debenture bonds. Nevertheless, the issuers of many corporate debenture bonds come from traditional industries. As the impact of economic growth slowdown and structural adjustment materialized, their credit risk has been increasing, and some debt default cases started to emerge. In this case, the insurance funds could suffer losses.

The third is increased market risk. Some small and medium-sized insurance institutions have invested a large amount of funds in equities. However, the stock market has undergone large fluctuations in 2015, which affected the soundness of these institutions. In addition, the volatility of bond markets also increased, and the market risk of equity and bond investment rose accordingly.

The fourth is the lack of high-quality alternative investment projects. Under the pressure of reducing overcapacity, leverage and excess inventory, the corporations' willingness to invest has been weak. Besides, as the conditions on issuing corporate bonds and enterprise bonds were loosened and the requirement of banks' loan-to-deposit ratio was cancelled, the limited financing demand of corporations could be satisfied through bonds and bank loans that cost less. Therefore, the alternative investment projects that conform to the investment standard of insurance institutions have declined.

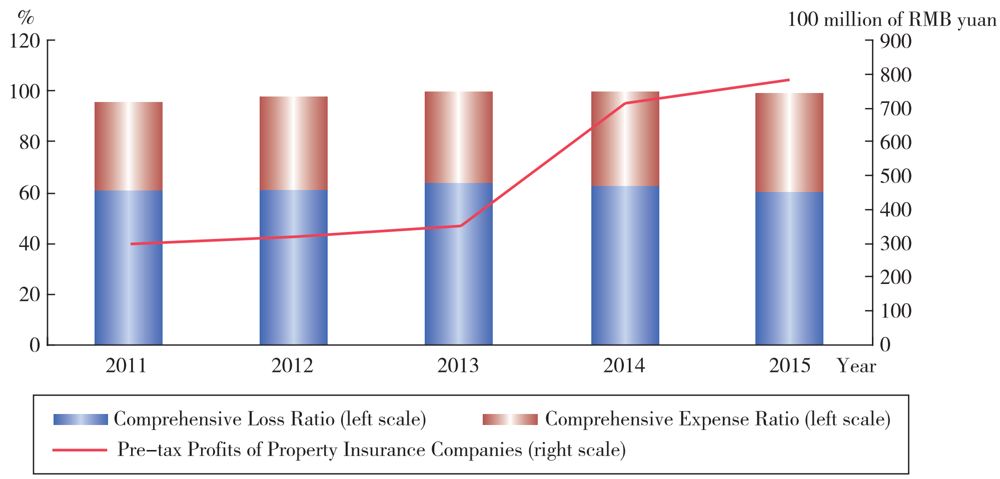
The fifth is that the capability of insurance institutions to invest still needs improvement. In recent years, as the market-oriented reform of insurance fund investment is pushed forward, and the scope of investment has been expanded to a large extent, insurance institutions are facing wider investment areas and needs more professional operations. However, many insurance institutions are lack of professional staff that are both good at investment management and familiar with investment projects, and improvement is still required in the areas of institutional structure arrangements, investment risk management and the incentive mechanism for talented people.

In sum, the insurance sector needs to enhance its ability to invest and manage funds, strengthen the balance between assets and liabilities, improve regulatory system construction, and avoid investment risks at the same time of deepening market-oriented reform.

2. The growth of premium income of property insurance sector slowed down, and the performance of different companies diversified.

In 2015, the premium income of property insurance companies registered RMB 842.3 billion yuan, up by 11.7 percent, which was 4.8 percentage points lower than the previous year. To be specific, the premium income of auto insurance reached RMB 619.9 billion yuan, 12.4 percent higher compared with that of the previous year. Affected by factors such as the downward pressure on economic growth and structural adjustment, the premium income of cargo insurance, hull insurance, credit insurance and commercial property insurance has experienced negative growth. The combined ratio of the sector was 98.6 percent, which was 0.6 percentage point lower than in 2014. The pre-tax profits of all property insurance companies were RMB 78.2 billion yuan, up by 9.2 percent. Although the sector as a whole has achieved profits, the performance of different kinds of companies has diverged. The advantage of large companies was evident, while small and medium-sized companies that have not developed core competitiveness had suffered from operational difficulties because of underwriting loss and lack of investment abilities.

Figure 5.4 The Underwriting Performance of the Property Insurance Sector

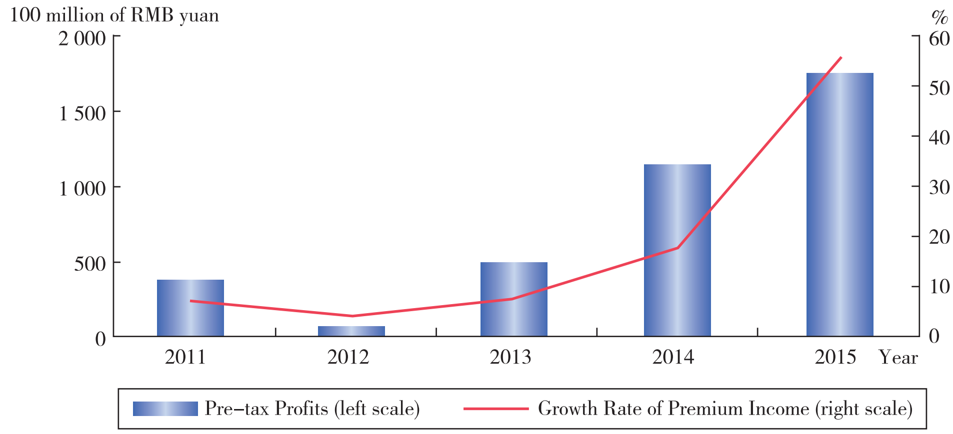


Source: The CIRC.

3. Premium income of life insurance companies grew fast, and profits reached new record-high.

In 2015, the premium income of personal insurance companies registered RMB 1.6 trillion yuan, up by 25.0 percent y-o-y, which was 6.9 percentage points more than that in the previous year. Insurance products with investment features experienced significant growth in the past year. The incremental amount in the policyholders' investment contracts exceeded RMB 760 billion yuan, up by 95.2 percent y-o-y, and the incremental amount in the separate accounts of investment-linked insurance reached 67.8 billion yuan, up by 135 percent y-o-y. The written premiums① increased by 43.1 percent y-o-y and reached RMB 2.4 trillion yuan. At the same time, investment performance improved remarkably, up by 51.4 percent. The pre-tax profits for the whole year are expected to be RMB 174.0 billion yuan, an increase of 54.8 percent y-o-y.

Figure 5.5 Pre-tax Profits and Growth Rate of Premium Income of the Life Insurance Companies



Source: The CIRC.

4. The management of asset-liability matching of the life insurance sector has been difficult, and liquidity risk has increasingly become a concern.

In 2015, the total maturity payments were over RMB 270 billion yuan for life insurance companies, up by 30 percent y-o-y. Payment for surrender exceeded RMB 390 billion yuan, and the surrender rate registered 5.97 percent, up by 0.4 percentage point compared with the previous year. Overall, the duration of liabilities of the whole life insurance sector has been longer than that of assets, which means the sector has been using long-term funds on shorter-term investment. The amount gap between assets and liabilities with duration

① Written premiums refer to all premiums received from the policies underwritten by insurers, prior to the significant insurance risk and separating of hybrid contracts. It equals to the sum of premium income, the incremental amount in the policyholders' investment contracts, and the increment amount in the separate accounts of investment-linked insurance.

of more than 15 years has reached RMB 5.4 trillion yuan. However, in recent years, in order to expand scale and relieve maturity payment and surrender pressure, some small and medium-sized companies have issued a large amount of high cash-value products that have relatively shorter maturities and higher costs of funds, and invested in less liquid assets such as equities and alternative assets to achieve high income. This reflected a phenomenon of using short-term funds to finance longer-term investment, resulting in greater liquidity risk. Once investment suffers losses, the rollover of high cash-value products will be unsustainable.

5. The market structure of property insurance kept stable, and the market landscape of life insurance has significantly changed.

In 2015, the market share of the largest property insurance company and the Herfindahl-Hirschman Index (HHI)[①] for the property insurance sector were 33.4 percent and 0.171, respectively, which were the same with the previous year. The market share of the largest life insurance company and the HHI for the life insurance sector were 23 percent and 0.094, down by 3.1 percentage points and 0.02, respectively. With the fast growth in the area of high-return wealth management products, some small and medium-sized companies realized fast expansion in their market share of the written premium, and resulted in substantial changes in the structure of life insurance market. With respect to the written premium, the largest life insurance company's market share decreased to 16.8 percent, with a HHI of 0.067, down by 4.3 percentage points and 0.021, respectively.

6. The growth of insurance complaints decelerated, and the protection of consumers required further strengthening.

In 2015, insurance regulatory agencies had received 30,204 effective cases of complaints, up by 8.3 percent, which was 22.3 percentage points lower than the previous year. For every RMB 100 million yuan of premium, the property insurance companies received an average of 1.75 cases of complaints, up by 0.07 than the last year. But for every 10 thousand policies, the case of complaints received declined from 0.1 to 0.04. For life insurance companies, the average case of complaints was 0.97 for every RMB 100 million yuan of premium, down by 0.22, while the case of complaints for every 10 thousand policies was 0.21, basically the same with 2014. In property insurance complaints, conflicts over claims/payments accounted for 76.2 percent, and automobile-related cases were the majority. Among life insurance complaints, complaint cases with respect to conflicts over surrender,

① HHI is the sum of squares of every institution's market share in the sector. The higher the HHI goes, the more concentrated the market is.

claims/payments, non-compliance in sales and underwriting ranked the top four in proportion, respectively. Compared with the previous year, the cases of non-compliance dropped to some extent, but surrender cases increased, and the conflicts over claims of health insurance and accident insurance experienced relatively fast growth. As internet insurance kept its fast pace of development, complaint cases related to internet insurance sales witnessed an evident increase, with a growth rate of 46.5 percent y-o-y and accounted for 4.79 percent of total complaints.

III. Outlook

The year 2016 was the beginning year of the decisive stage for China to complete the task of building a modestly prosperous society. The insurance sector should take advantage of the opportunity of supply-side structural reform, stick to and promote innovative, coordinated, green, open and shared development, improve the quality of insurance supply, deepen the market-oriented reform, strengthen risk prevention and promote the sustainable and healthy development of the insurance sector.

1. Speed up transformation and upgrade of the insurance sector, and promote targeted and effective supply of insurance

The insurance resources should be effectively exploited and utilized, and the transformation from an extensive growth model with high costs, high inputs and high resource-consumption to an intensive growth model with refined growth that concentrates more on quality should be promoted. Product and service innovation should be encouraged, and the insurance products should perform the function of risk protection, and satisfy the diversified social demand. The coverage of agricultural insurance should be steadily increased, the pilot programs on price insurance should be expanded, the study on risk and premium tariff zoning of major crops should be deepened, and the reinsurance pool mechanism for agriculture insurance should be improved, so as to increase the sector's underwriting capacity. Health and old-age security services should be provided more actively, the performing mechanism of critical illness insurance should be improved, and the implementation of one-stop settlement and instant cross-area settlement of medical payments should be pushed forward in order to improve the quality of services. The legislative process concerning earthquake insurance and local pilot programs on catastrophe insurance should be promoted, and the catastrophe insurance mechanism that covers all major natural disasters including floods and typhoon should be studied and explored. The development of liability insurance in areas such as medical treatment and industrial production safety should be promoted, and the plan on formulating the mechanism on compulsory liability insurance on environment pollution should be studied. The pilot program on micro loans guarantee insurance and the development of short-term export credit insurance should also be promoted.

2. Promote market-oriented reform in a comprehensive way, and enhance the sustainable development momentum of the sector

The market-oriented reform on life insurance tariffs should be deepened, the market-oriented process of commercial auto insurance clauses and tariffs should be steadily accelerated, and the market-oriented reform on accident insurance tariffs should be launched. The market-oriented reform concerning the investment of insurance funds should be deepened, the insurance funds should be guided to support the implementation of national key strategies and major project constructions concerning the people's livelihood through the means of debt investment plans and equity investment plans, etc., and to support small and micro high-tech enterprises and strategic emerging industries by means of insurance private equity funds, etc. The rights and responsibilities, and the investment scope and investment abilities of market participants should be better matched. The reform on market admittance and exit mechanism should be promoted, the development of new type of insurance organizations such as insurance captives, mutual insurance and internet insurance should be actively pursued, the development of professional insurance institutions such as reinsurance companies should be promoted, the regulations on procedures concerning insurance institutions' rectification and take-over should be studied and developed, and practices concerning the exit of insurance institutions from regional markets should be accelerated.

3. Promote market order and protect consumers' rights

Special inspection on auto insurance market should be conducted, and behaviors that disturb the market order should be strictly prohibited. On-site inspection on agricultural insurance should be increased, and every case of non-compliance should be dealt with. The development of life insurance products with short and medium term duration should be regulated. Regulation on the underwriting of all kinds of critical illness insurance should be strengthened. The problem of reluctant payment of insurers should be dealt with, quality monitoring on small-amount payment services of insurance companies should be launched, and mechanisms for disclosing basic indicators of auto insurance claims and for service evaluation should be established. Misleading sales should be regulated, the sales of insurance products through bancassurance channel and the granting of insurance products by companies should be supervised, and a backtracking mechanism for sales through certain channels and in certain lines should be established. The management and development of insurance intermediary institutions should be regulated, and the management of insurance salespersons' qualification should be strengthened. The evaluation system of insurance services and related processing mechanism for insurance consumers' complaints should be improved, the mechanism for insurance conflict mediation should be deepened, and the insurance consumer education and risk warning should be enhanced.

4. Enhance regulation and prevent and mitigate risks

The regulatory mechanism and approaches should continue to be improved, and the corporate governance and internal control of insurance companies should be enhanced. The infrastructure of the insurance sector should be strengthened, and more information-based supervision and information disclosure should be promoted. The risks of maturity payments and irregular surrender should be avoided, potential risks and group events should be properly dealt with, existing risks should be mitigated, dynamic monitoring and early warning for insurance companies with potential risks should be conducted, and cash flow stress tests should be launched. The risk of insolvency should be prevented, the formal launch of C-ROSS should be prudently promoted, and the solvency conditions of companies should be monitored continuously. The risks related with fund investment should be prevented, a long-term mechanism for supervising the asset-liability matching should be established, and the management of insurance business and investment business matching according to maturity, rates of return and risk matching should be improved. Case risks should be avoided and comprehensive case management should be strengthened. Cross-sector financial product risks and cross-border and cross-market financial risk contagion should be prevented, and regulatory coordination and information sharing should be strengthened.

Chapter VI

Financial Market

In 2015, the financial market in China developed further with more diversified financial products and participants, better infrastructure and wider openness to the outside world. The financial market played an active role in supporting and improving macro-economic management, meeting financing demands of the real economy and lowering social financing cost.

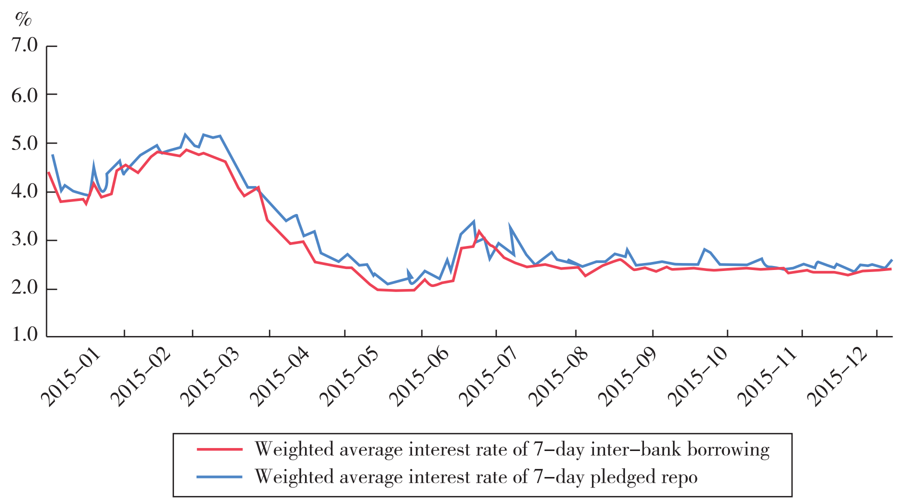
I. Market Overview

1. Money market

Turnover in the money market increased substantially y-o-y, and most of the transactions were of short maturities. In 2015, turnover in the money market totaled RMB 522 trillion yuan, gaining 99.2 percent y-o-y. Broken down, turnover of inter-bank borrowing registered RMB 64.2 trillion yuan, growing by 70.5 percent y-o-y, and the turnover of bond repo went up by 104 percent y-o-y to RMB 457.8 trillion yuan. In particular, turnover of inter-bank borrowing with maturities less than 7 days posted RMB 61.69 trillion yuan, accounting for 96 percent of the total, which was 2 percentage points higher than the previous year; turnover of pledged repo with maturities within 7 days stood at RMB 416.24 trillion yuan, accounting for 91 percent of the total, which was 2 percentage points less than the previous year.

Key interest rates declined significantly, starting high in the beginning of the year while remaining subdued afterwards. In Q1 2015, the weighted average interest rate of pledged repo registered 4.3 percent, which fell sharply to 2.6 percent by end-Q2, and fluctuated between 2-2.6 percent in the second half of 2015. As a result of cash reserve provisioning for the Spring Festival, the weighted average interest rate of 7-day pledged repo peaked at 4.87 percent on February 16, which slid down to the year's trough of 1.88 percent on May 15. In December, the monthly weighted average interest rate of pledged

Figure 6.1 Money Market Rates in 2015



Source: The National Inter-bank Funding Center.

repo posted 1.95 percent, which was 154 basis points lower than that at the beginning of the year. The weighted average inter-bank borrowing rate registered 1.97 percent, which was 152 basis points less y-o-y.

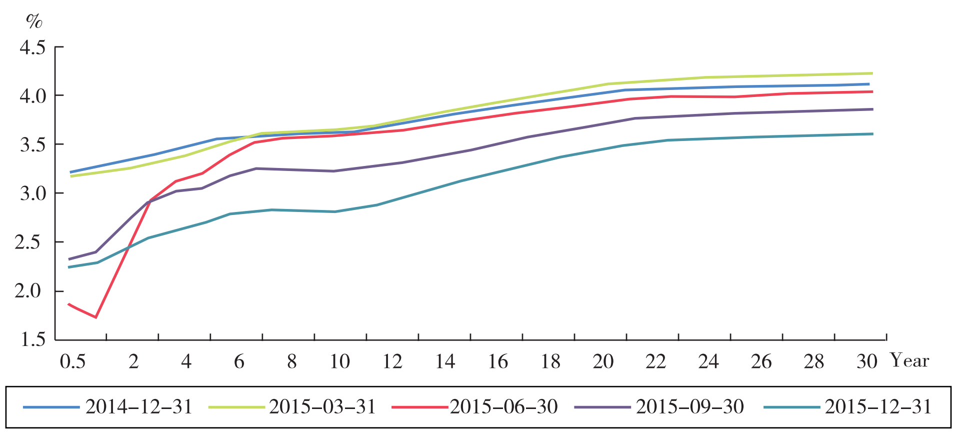
2. Foreign exchange market

Turnover in the foreign exchange market rose substantially. In 2015, trading volume in the inter-bank foreign exchange market totaled USD 13.67 trillion, rising 54.2 percent y-o-y, among which, turnover in the RMB foreign exchange market gained 53.9 percent to USD 13.55 trillion, and the trading volume of foreign currency pair transactions surged 98.5 percent y-o-y to USD 120.21 billion. Broken down by product, the turnover of foreign exchange derivatives had been higher than that of spot transactions since 2009, and accounted for an increasing share of total transactions year by year. In 2015, turnover of foreign exchange derivatives soared 85.9 percent y-o-y to USD 8.7 trillion and trading volume of spot foreign exchange transactions increased by 18.4 percent y-o-y to USD 4.9 trillion. Turnover of foreign exchange derivatives accounted for 63.9 percent of the total, marking a growth for the 7th year in a row. Direct RMB trading against the Swiss Franc was launched in 2015, further improving the currency structure of the market.

3. Bond market

Turnover of spot bonds surged y-o-y, and the yield curve moved downward by a large margin. In 2015, turnover of spot bonds in the inter-bank market stood at RMB 86.7 trillion yuan, representing a y-o-y increase of 115.8 percent. Total trading volume of all spot bonds in the exchange market rose by 21.9 percent to RMB 3.4 trillion yuan. The inter-bank bond index increased 7.94 percent from 158.77 at the beginning of 2015 to 171.37 at the year-end. The government bond index of the exchange market rose by 5.99 percent from 145.8 at the beginning of the year to 154.54 at end-2015.

Figure 6.2 Government bond yield curve of the inter-bank bond market in 2015



Source：The China Central Depository & Clearing Co. Ltd. (CCDC).

The government bond yield curve of the inter-bank market shifted downward substantially, with yields of 1-year, 3-year, 5-year, 7-year and 10-year government bonds dropping by 96, 82, 81, 77 and 80 points respectively at end-2015.

Investors in the inter-bank market continued to increase. By end-2015, there were altogether 9642 participants in the inter-bank market, increasing by 3180 or 49.21 percent y-o-y. Among this total, domestic corporate entities grossed 2094, while domestic non-corporate entities totaled 7240. By end-2015, a total number of 308 foreign institutions[①], including foreign central banks or monetary authorities, international financial institutions, sovereign wealth funds, RMB clearing banks, participating banks in RMB settlement of cross-border trade transactions, foreign insurance institutions, RQFII and QFII, were allowed to enter the inter-bank bond market, 128 more than that at end-2014.

Box 13 Promoting the Development of Green Finance

Green development is a high priority on China's agenda, and it was designated as one of the five major philosophies guiding future growth and tackling development challenges in the 13th Five-year-plan period. Promoting green finance aims to take efficient use of natural resources and environmental protection as one of the standards measuring efficiency of financial activities, by guiding and serving market participants in reducing environmental harm and protecting natural resources through financial activities. At present, it is pivotal to accelerate building a green financial system in order to shift to a green and sustainable growth model. In September 2015, the State Council issued *General Plan on the Reform of Ecological Civilization System,* making strategic arrangements for establishing a green financial system in China for the first time. Relevant authorities stepped up efforts to study and explore how to put in place a framework for green financial system, so as to improve the financial market and financial policy system, and promote the development of green finance in China.

Establishing and improving the green bond market. In December 2015, the PBC released a notice which laid out the policy framework on establishing and developing

① Data standard adjusted from the previous year, accounts opened for trading products by foreign institutions included.

the green bond market in China, launched green financial bonds on the inter-bank market, provided guidance and norms on green financial bonds related issues such as how to define green industry projects, where to invest funds raised via bond issuance, fund management before maturity, information disclosure and the assessment or authentication from independent institutions, and incorporated qualified green financial bonds as collateral or pledge for monetary policy operations. By end-February 2016, the Shanghai Pudong Development Bank and the Industrial Bank had issued green financial bonds worth RMB 30 billion yuan. Meanwhile, efforts were made to promote the securitization of green credit assets, and push forward enterprises to issue green financing instruments for fund raising. The Industrial Bank issued green credit asset backed securities worth RMB 2.65 billion yuan, while relevant green enterprises issued RMB 2.2 trillion yuan of debt financing instruments.

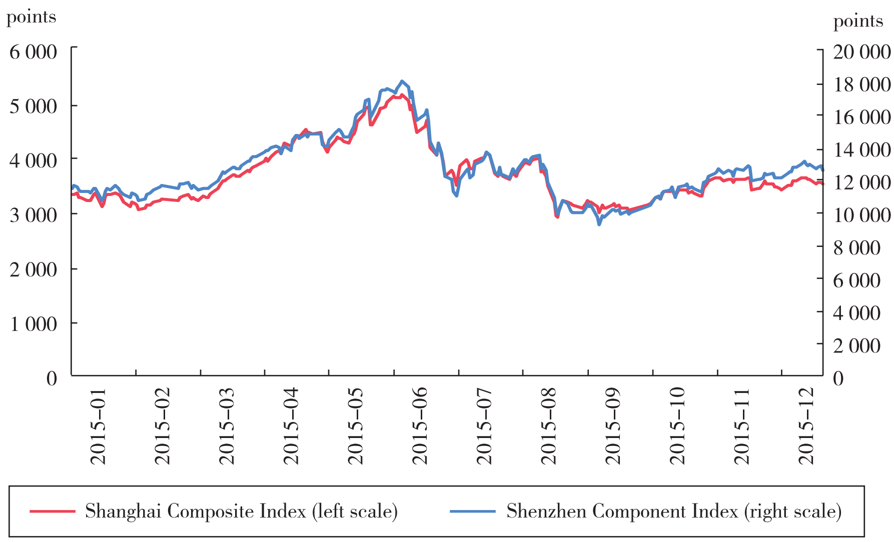
Enhancing macro credit guidance and boost the development of green credit. A mix of policy instruments was adopted to support the development of green credit via central bank lending, guarantee mechanisms, etc. Commercial banks were guided to formulate and improve access standards for green credit, establish risk assessment systems on green projects, improve the capacity to evaluate investment returns and credit risks in terms of energy saving and environmental protection. The credit information system was given its due role as an incentive in environmental protection.

Pushing forward studies on setting up a framework of international green financial system. The green finance working group was set up to enhance top-down design of green finance system. The G20 Green Finance Study Group, which was established as per the proposal by China and approved by the G20 Finance and Central Bank Deputies Meeting held in December 2015, will play a positive role in promoting international cooperation in the field of green finance, and will also enhance China's international influence on this front.

4. Stock market

Stock indices fluctuated significantly. In H1 2015, stock indices of the Shanghai and Shenzhen exchanges surged. The Shanghai Composite Index peaked at 5178.19 points during the day on June 12, which was 60.08 percent higher than end-2014. Since June 15, stock indices of Shanghai and Shenzhen exchanges tumbled, with Shanghai Composite Index touching the year's trough of 2850.71 points on August 26, which was 44.95 percent lower than the year's high; Shenzhen Component Index touched the year's trough of 9259.65 points on September 15, which was 49.17 percent lower than the year's peak; fluctuations persisted at both markets afterwards. By end-2015, Shanghai Composite Index closed at 3539.18 points, hiking by 304.5 points or 9.41 percent compared with end-2014. Shenzhen Component Index rose by 1650.27 points or 14.98 percent to end at 12664.89 points by end-2015.

Figure 6.3 Shanghai Composite Index and Shenzhen Component Index in 2015



Source: Wind.

The stock market traded more briskly. In 2015, total turnover in the two stock exchanges registered RMB 1038.102 billion yuan, increasing by RMB 734.462 billion yuan or 241.89 percent y-o-y. The turnover ratio in the Shanghai and Shenzhen stock exchanges increased by 494.3 and 438.8 percentage points respectively compared with those in 2014, indicating more active trading than the previous year.

5. Futures and option market

Turnover in the futures market increased rapidly. By end-2015, there were altogether 52 types of futures and option products in domestic market, among which 46 were commodity futures, 5 were financial futures and 1 was financial option. Total trading volume in domestic market rose by 42.78 percent y-o-y to 3.578 billion, and total turnover gained 89.81 percent to RMB 554 trillion yuan. Among this total, trading volume and turnover of commodity futures registered 3.237 billion board lotsand RMB 136.47 trillion yuan, rising by 41.46 percent and 6.64 percent respectively; trading volume and turnover of stock index futures stood at 335 million board lots and RMB 411.75 trillion yuan respectively, rising by 54.52 percent and 152.39 percent. Total trading volume of 5-year treasury futures posted 4.4036 million board lots, climbing by 377.16 percent y-o-y; trading volume of 10-year treasury futures launched in March stood at 1.6839 million board lots for the whole year. Compared with the previous year, the trading volume of aluminum, fuel oil, asphalt, hot rolled coils, methanol, rapeseeds, sugar, PTA, corn, iron ore, polyethylene, 5-year treasury futures contracts rose more significantly.

The price of commodity futures continued to decline, and the price of stock index futures fluctuated within a wide range. In 2015, as a result of dwindling demand for commodities and interest rate hike of the U.S. Fed, domestic commodity futures price resumed the tumbling momentum from the last year. By end-2015, the commodity futures index in China closed at 694.54 points, which was 13.44 percent lower than end-2014; index of agricultural products futures declined by 5.92 percent to close at 817.47 points; index of industrial products futures fell by 17.99 percent to close at 610.19 points. Stock index futures fluctuated significantly. Major contracts of Shanghai Stock Exchange 50 A Share Index peaked at 3565 points while reaching the low of 1781 points, with a fluctuation range of 54.33 percent; major contracts of Shanghai Shenzhen 300 Stock Index Futures reached the year's high of 5400 points and the trough of 2686 points, with a fluctuation range of 75.53 percent; major contracts of CSI 500 Index Futures peaked at 11585 points while reaching the low of 5101.8 points, with a fluctuation range of 84.11 percent. Major contracts of five-year treasury futures closed at 100.680 yuan at year end, which was 3.908 yuan higher than the end of the previous year.

China's first exchange option was listed and posted steady performance. On February 9, the first exchange-based option in China, Shanghai Stock Exchange 50 ETF option, was listed for trading. In 2015, a total of 23.27 million contracts with the face value of RMB 591 billion yuan were traded cumulatively, with the premium turnover at RMB 23.7 billion yuan. The bid-ask spread lowered from 2.16 percent in the first month since its listing to 1.5 percent in December. The price impact cost fell from 2.91 percent in the first month to 1.47 percent in December, indicating enhanced market liquidity. The ratio of volume of trade to open interest averaged 0.42, and the futures-spot turnover ratio was 0.03[①].

6. Bill market

Bill financing posted rapid growth and

① In foreign stock option markets, speculation usually accounts for 30-40 percent of total trading, and the futures-spot turnover ratio is usually larger than 1.

interest rate in the bill market slid among fluctuations. In 2015, cumulative bill acceptance by financial institutions rose by 68.2 percent y-o-y to RMB 102.1 trillion yuan. By end-2015, outstanding bill acceptance gained 56.9 percent y-o-y to RMB 4.6 trillion yuan. Outstanding value of bill financing rose rapidly by RMB 1.7 trillion yuan at year-end compared with the beginning of the year, accounting for 4.9 percent of total loans, which was 1.3 percentage points higher y-o-y. In 2015, interest rate in the bill market fluctuated down as the result of abundant liquidity in the banking system, lower money market rate and evolution in supply-demand in the bill market.

7. RMB interest rate derivatives market

The RMB interest rate derivatives market traded ever more actively. In 2015, a total of 64557 RMB interest rate swap transactions were completed, increasing by 50 percent y-o-y; total value of nominal principal surged 104 percent y-o-y to RMB 8.23 trillion yuan. Broken down by maturity, trading of swaps with maturities of 1 year or less was the most active, with the value of nominal principal totaling RMB 7.24 trillion yuan, accounting for 88 percent of the total. The fixing rate of 7-day repo and Shibor were major reference interest rates for the floating end of the RMB interest rate swaps, with total value of nominal principal of interest rate swaps linked with the two rates accounting for 89.5 percent and 10.2 percent of the total respectively.

Innovative products posted rapid development. Standardized bond forward products were launched in 2015, and traded in 83 transactions with a turnover of RMB 1.96 billion yuan. After its launch in November 2014, trading in standardized interest rate derivatives got off the ground, completing 994 transactions in 2015 with nominal principal totaling RMB 501.4 billion yuan.

8. Gold Market

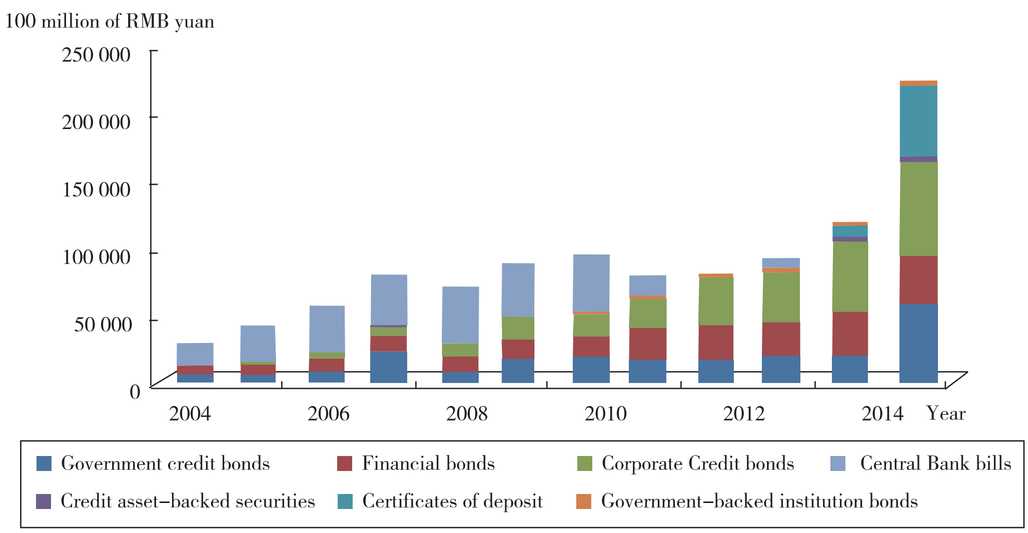
Gold price fluctuated downward and the trading volume registered a rapid growth. In 2015, both domestic and international gold prices trended down, while the price gap widened a bit. International gold price declined by USD 137 per ounce or 11.42 percent y-o-y to close at USD 1062.25 per ounce at end-2015, with a yearly high of USD 1295.75 per ounce and low of USD 1049.40 per ounce. The price of AU9999 at Shanghai Gold Exchange reached the year's peak and trough of RMB 265 yuan per gram and RMB 210.79 yuan per gram respectively, and closed at RMB 222.86 yuan per gram at end-2015, which was RMB 17.73 yuan per gram or 7.37 percent lower than end-2014. Trading volume at the Shanghai Gold Exchange for the whole year rose significantly by 89.58 percent y-o-y to 34100 tons, while the turnover went up by 79.42 percent y-o-y to RMB 8.01 trillion yuan.

II. Overview of Market Financing

Bond issuance and deposit in the bond market continued to increase at a more rapid pace. In 2015, RMB-denominated bond issuance increased by 87.5 percent y-o-y to RMB 22.3 trillion yuan, which was 55.2

percentage points[1] higher than the previous year. By end-2015, depository trust on the bond market reached RMB 47.9 trillion yuan, rising by 34.6 percent y-o-y, which was 6.4 percentage points higher than that in the previous year. Among this total, RMB 21 trillion yuan of RMB-denominated bonds were issued on the inter-bank bond market, and deposit of bonds on the inter-bank bond market registered RMB 43.9 trillion yuan. Currently, bond issuers in the inter-bank market included the Ministry of Finance, China Development Bank, policy banks, China Railway, commercial banks, non-bank financial institutions, international development institutions, non-financial enterprises, foreign non-financial enterprises, foreign financial institutions and foreign governments, with further diversification of bond products and tiers of credit.

Figure 6.4 The issuance of major bonds on the bond market in recent years



Source: The China Central Depository & Clearing Co. Ltd., Shanghai Clearing House.

In 2015, the issuance of local government bonds soared by 858.8 percent y-o-y to RMB 3.8 trillion yuan. Structure of credit bonds issued by the corporate sector further evolved. Among which, issuance of non-financial enterprise debt-financing instruments maintained high growth, rising by 30.3 percent y-o-y to RMB 5.4 trillion yuan; issuance of enterprise bonds declined by 50.6 percent y-o-y to RMB 343.1 billion yuan; issuance of corporate bonds rose rapidly by 272.6 percent y-o-y to RMB 1.3 trillion yuan.

① Year-on-year increase was calculated based on comparable data, the same hereinafter.

Table 6.1 Issuance of Major Bonds in 2015

types of bonds	issuance(100 million of RMB yuan)	y-o-y growth(%)
Treasury bonds①	19 875.4	16.6
Local government bonds	38 350.6	858.8
Bonds issued by China Development Bank and other policy banks	25 790.2	12.6
Short-term financing bills issued by securities firms	3 515.6	-17.2
Other financial bonds	6 295.6	15.3
Corporate credit bonds	70 128.1	35.8
Among which：non-financial enterprise debt-financing instruments②	53 715.6	30.3
Enterprise bonds	3 431.0	-50.6
Corporate bonds③	12 981.5	272.6

Source: The China Central Depository & Clearing Co. Ltd, Shanghai Clearing House.

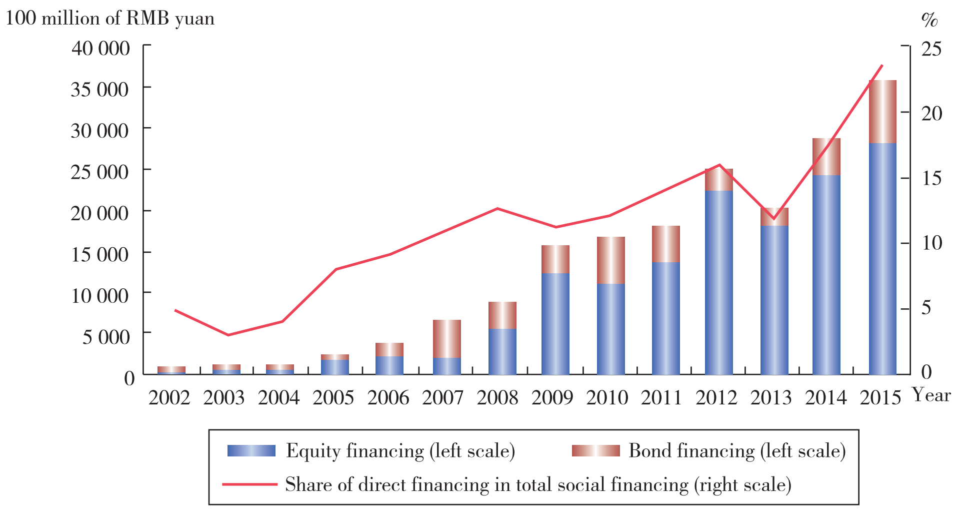
Equity financing increased substantially. In 2015, 220 enterprises got IPO, obtaining financing of RMB 157.829 billion yuan, with the enterprise number and financing sum increasing by 76 percent and 136 percent y-o-y respectively. A total of 399 listed companies raised RMB 893.196 billion yuan via secondary offering, increasing by 31 percent y-o-y. Among this total, 12 listed companies issued preferred stocks and raised RMB 203.65 billion yuan, rising by 93 percent y-o-y.

① Certificate Treasury bonds excluded.

② Bonds issued by China Railway excluded, the same with the enterprise bonds.

③ Debt instruments issued by securities firms on exchanges included.

Figure 6.5 The direct financing by non-financial enterprises and its proportion in the total social financing in 2002-2015



Source: The PBC.

III. Infrastructure Building

Product innovation and diversification of financial bonds made headway. Insurance company capital supplement bonds were launched on the inter-bank bond market, providing supplementary channel for capital replenishment by insurers, which would help enhance their solvency and resilience. Efforts were made to launch green financial bonds, in order to support financing of green projects such as environmental protection, energy conservancy, clean energy and green transportation, and to enhance the supply of green credit, especially sufficient supply of medium and long-term green credit. New instruments for non-financial enterprise debt financing were introduced such as perpetual bills, M&A bills, asset-backed securities, and "debt+loan" products.

A wider range of participants were allowed access to the inter-bank bond market, and the approval for the trading and transfer of bonds was lifted. Efforts have been made to introduce foreign financial institutions such as HSBC and foreign governments such as the government of the Republic of Korea to issue RMB bonds onshore. Efforts were also made to consider the improvement of the overseas debt issuance mechanism by foreign financial institutions, further facilitate access to a wide variety of issuers on the inter-bank bond market, add to the RMB financing channels for foreign institutions, enhance the opening-up of the bond market, and promote the cross-border use of RMB. Policies concerning trading and transfer of bonds in the inter-bank market have been adjusted, by lifting approval procedures on trading and transfer, and by reinforcing information disclosure and investor protection requirements, so as to underpin the well-regulated development of the bond market.

The investor base has been diversified, and the scope of investment by foreign institutions in the inter-bank bond market has been expanded. Foreign central banks, international financial institutions and sovereign wealth funds were allowed to participate in spot trading and repo transactions of bonds, bond lending, interest rate swap and other transactions as permitted by the PBC, which further improved the efficiency when foreign central banks and other public institutions alike invest in the inter-bank market. Overseas RMB clearing banks and participating banks were allowed to enter into bond repo transactions, so as to meet the requirements of foreign institutions for liquidity management of their RMB assets. Qualified private equity funds were permitted to invest in the inter-bank bond market, to improve the multi-layer market system.

Regulated development of the gold market was promoted. The gold price asking option was launched on the trading platform of the Shanghai Gold Exchange, in order to further improve the product line on the gold market. Assets of value were allowed to be taken as margins so as to lower investors' cost. Pilot market making system was steadily pushed forward to enhance market liquidity. The pilot for overseas settlement banking business was launched, and the Shanghai Gold Exchange and the Chinese Gold and Silver Exchange Society located in Hong Kong jointly launched the Shanghai-Hong Kong gold connect business in Hong Kong.

Box 14 Capital Account Convertibility of RMB and the Opening-up of China's Financial Market

It was designated in the report of the 3rd Plenary Session of the 18th CPC Central Committee that efforts should be made to promote the two-way opening-up of the capital market, enhance the convertibility of cross-border capital and financial transactions in an orderly manner, establish and improve an external debt and capital flow management system under the macroprudential management framework, and accelerate the RMB convertibility of the capital account. The *CPC Central Committee's Recommendations for the 13th Five-year Plan for Economic and Social Development* approved on October 29 in 2015 stipulated to achieve capital account convertibility of RMB in an orderly manner and promote the inclusion of RMB into the SDR basket, and make RMB a convertible and freely-usable currency.

China has been pressing ahead with capital account convertibility of RMB and made significant progress since it was convertible under the current account in 1996. Latest developments include foreign exchange purchase and payment based on real investment and financing demands when enterprises are going global, launching the Shanghai-HongKong Stock Connect, mutual recognition of funds in mainland and Hong Kong, enhanced facilitation for the issuance of onshore RMB bonds by foreign institutions, full access by overseas central banking institutions to the inter-bank bond market and foreign exchange market, steady progress in Shanghai Free Trade Zone accounting unit, etc. There are altogether 40 sub-items under the capital and financial account convertibility standards by the IMF, and China has achieved full or partial convertibility under 37 sub-items, indicating that China is not far from the goal of full capital account convertibility of RMB. On November 30, 2015, the executive board of IMF made the decision to include RMB into the SDR basket, which recognized progress made in capital account convertibility and financial market opening-up in China.

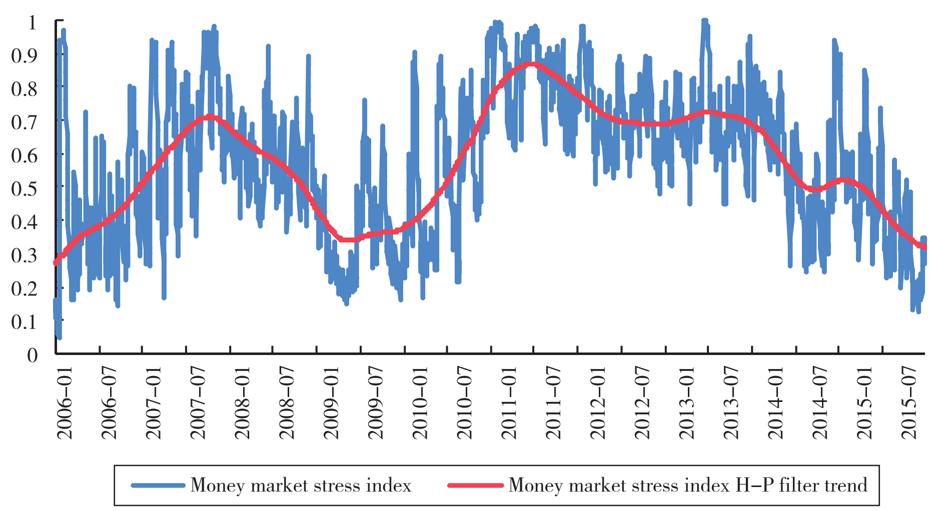
Going forward, capital account convertibility of RMB will be pursued in an orderly manner, and the convertibility of each sub-item will be achieved as soon as the time is ripe, to further enhance the convertibility and free usability of RMB with the precondition that risks are under control, so as to better meet the demand of real economy. In the next period of time, major tasks concerning capital account convertibility and financial market opening-up include: First, efforts should be made to enhance facilitation of individual investments within China, and promote outbound investments into overseas financial markets and more free and convenient access by foreign investors to China's financial market. Second, measures should be taken to enhance the two-way opening-up of the capital market, elimination of domestic and foreign investment quota; opening-up of the stock and bond markets, orderly expansion of the scope and size of external investors into the inter-bank bond market in China, expansion of the participant and geographic scopes of domestic institutions to issue bonds overseas, less restrictions on onshore issuance of RMB bonds by foreign institutions, etc. Efforts will be made to study the feasibility for quality foreign companies to issue stocks in China, improve institutional arrangements on Shanghai-Hong Kong Stock Connect and launch Shenzhen-Hong Kong Stock Connect in due time, further expand the scope of participants allowed to apply for QDII and QFII quotas and enhance such quotas, eliminate the approval of qualification and quota when conditions permit, and expand relevant investment facilities to cover all domestic and foreign legal institutions. Third, The Foreign Exchange Management Regulation of the People's Bank of China is under revision, by sorting out relevant rules and regulations, and making the whole legal framework compatible with capital account convertibility, and to make the financial market more consistent with international practices. Fourth, the macroprudential policy framework on foreign debt and cross-border capital flow has been studied to set up an efficient risk warning and prevention system.

IV. Soundness Assessment

In 2015, the stress index of the stock and foreign exchange markets soared sharply, while that of the money market and bond market declined from the previous year.

Money market rates declined in general while market stress lessened. In 2015, aggregate liquidity in the money market was reasonably abundant, with basically balanced supply and demand, and the money market rates were generally trending downward. By end-2015, weighted average interest rates of overnight credit borrowing and 7-day pledged repo stood at 2.14 percent and 2.39 percent respectively, declining by 135 basis points and 245 basis points y-o-y. Shibor rates of all maturities declined. In particular, overnight Shibor fell 154 basis points to 1.99 percent, 7-day Shibor fell 228 basis points to 2.35 percent and 3-month Shibor dropped 205 basis points to 3.09 percent. Evolution in the market stress indices showed that the volatility of major products in the money market declined in 2015, and the market stress was falling to a level lower than that in 2014, and the stress of money market kept at a moderate level in 2015.

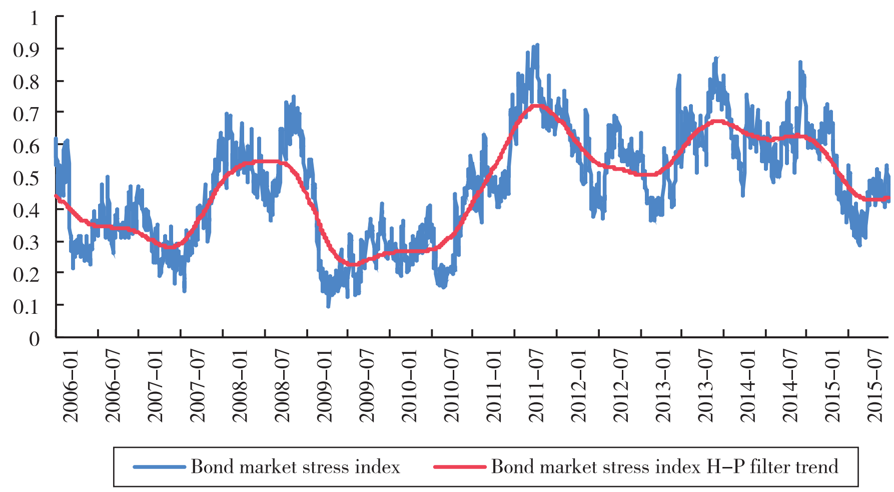
Figure 6.6 Money Market Stress Index, 2006-2015



Source: The PBC.

Yield in the bond market shifted downward and market stress went down. In 2015, all three components of bond market stress index, namely interest rate risk, pessimistic expectation of institutional investors and credit risk, went down, indicating lower stress in the bond market than the previous year to a moderate level. More specifically, affected by multiple factors including downward adjustment of the benchmark rate, lower money market rate and stronger risk aversion, yields in the bond market were generally on a decline; in the meantime, volatility of yields for 1-year, 5-year and 10-year treasury bonds fell, indicating lower interest rate risks in the bond market. The curve of yields to maturity steepened during the year, with the daily average term premium between 1-year and 10-year treasury bonds standing at 82 basis points, which was 16.1 basis points higher than the 65.9 basis points of the previous year, and the pessimistic expectation by institutional investors in the bond market moderated from the previous year. The spread between AA-rated medium-term notes of major maturities and treasury bonds of the same maturities declined by 29.7 basis points and 54.9 basis points respectively to 179.5 basis points and 203.6 basis points; the narrowing spread between AA-rated medium-term notes and treasury bonds of the same maturities (credit risk premium) pointed to moderated credit risk in the bond market. It is worth-noting, however, that the credit risk premium in the above-mentioned bond market may be partly explained by expectation of rigid redemption, and credit risk in the bond market may be underestimated.

Figure 6.7　Bond Market Stress Index, 2006-2015



Source: The PBC.

Box 15 Despite of Increasing Defaults in the Bond Market, Credit Risk was Basically Under Control

In 2015, the bond market in China continued rapid growth, with total issuance of RMB 7 trillion yuan worth of credit bonds by the corporate sector, increasing by 35.8 percent y-o-y, and playing an important role in stabilizing growth, promoting restructuring, expanding financing channels, lowering costs and effectively transmitting monetary policy. Amidst the downward adjustment of the economy, however, part of bond issuers encountered difficulties in their operation, and credit risk in the bond market gradually surfaced.

Currently, there are two characteristics of credit risk in the bond market: firstly, there have been more bond defaults. According to public data, there were altogether 18 defaults of corporate bonds, enterprise bonds and debt financing instruments in 2015, more than the previous year. In particular, 12 were corporate bond defaults, involving principal of RMB 3.53 billion yuan, 2 were enterprise bond defaults, involving RMB 2.3 billion yuan of principal; 4 were debt financing instrument defaults, involving RMB 6 billion yuan of principal. Secondly, default enterprises mainly concentrated in overcapacity industries. In 2015, most of the defaulting enterprises were from overcapacity industries such as photovoltaic industry, ship manufacturing industry, wind-power industry, coal industry and non-ferrous metal industry. About 80 percent of the default firms were private, while the defaults of SOEs also emerged.

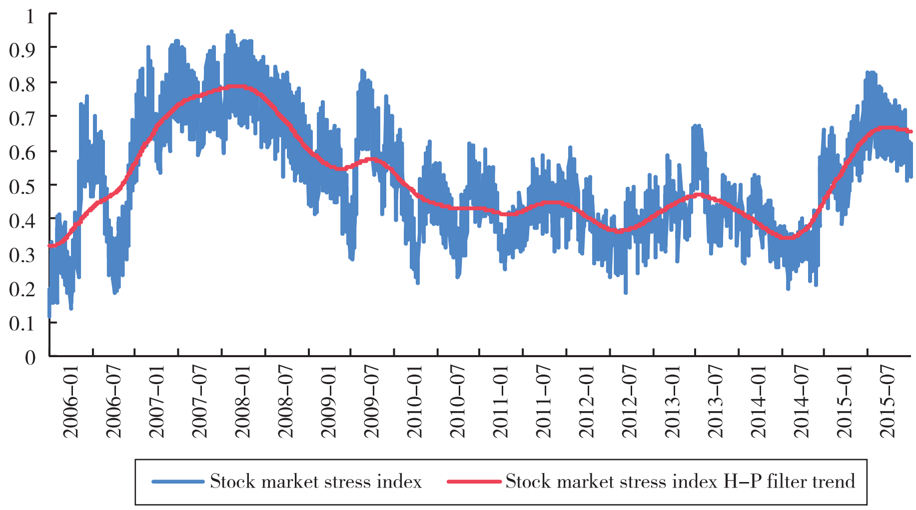
Credit risk in the bond market should be viewed objectively. In the downward cycle of the economy, it is common internationally for more defaults to happen. According to Standard & Poor’s, default rate of credit bond market in the United States rose from 0.49 percent to 5.71 percent during 2007-2011. China’s bond market has been developing rapidly during the upward cycle of the economy in the past few years with few defaults. Amidst the slowdown of macroeconomic growth and operational difficulties by some issuers, heightened default probability is a natural reflection of the release of corporate credit risks.

Generally, credit risk in the bond market is basically controllable at present. Firstly, defaults concentrated in overcapacity industries in recent years, while the bonds issued by the steel, coal, non-ferrous metal and glass industries took a small percentage in current stock of bonds. Secondly, most corporate credit bonds are held by institutional investors, which are better prepared for risk taking in terms of expectation, mechanism and capability, and more capable of safeguarding their own rights and interests, indicating a low probability of risk contagion. Thirdly, the bonds could be traded on the secondary market, where investors could release risks in case of risk events. Fourthly, a full-fledged market-based risk prevention and mitigation mechanism has already been set up in the bond market. Taking debt financing instruments of non-financial enterprises as an example, the holders' meeting mechanism, information disclosure system and credit risk early warning and emergency resolution mechanism have been put in place, in order to monitor issuers and main underwriters and provide risk warning, urge them to disclose information in a timely manner, so as to protect interests of investors.

In the next stage, the key to promote healthy development of the bond market is to accelerate improving credit risk resolution system in a market-based and legal manner. Firstly, the implementation of the bankruptcy law should be reinforced, with smooth connection between the holders' meeting, trustees and law enforcement procedures, so as to lower the cost of default resolution. Secondly, efforts should be made to urge credit enhancement institutions to fulfill the payment responsibilities according to contracts, and support investors to safeguard their own legal rights and interests and to avoid debtors and their shareholders to evade or abolish their liabilities. Thirdly, the information disclosure mechanism should be further improved to make more detailed requirements, and urge issuers to disclose relevant information on firm operation in a timely, sufficient and fully manner. Behavior of the credit rating agencies should be regulated so that credit rating should disclose credit risk of issuers in an authentic, accurate and comprehensive manner. Fourthly, steady development of the credit derivatives market should be pursued to provide more credit risk management instruments for investors. Fifthly, the accountability system should be improved, and support investors to hold relevant intermediaries accountable when necessary.

The stock market fluctuated by a large margin, and the stress index of the stock market climbed to a high level in the second half of 2015. The A-share market rebounded after prolonged sluggish growth. From April 2014 to March 2015, Shanghai Composite Index (SCI) soared by 84.3 percent while the GEB surged by 75.9 percent. A massive amount of investors entered the market, and the number of accounts opened posted 615 thousand on the peak day of April 2015, which was 374.9 percent higher than the daily average by end-2014; outstanding value of securities settlement increased sharply by 168.9 percent from end-2014 to RMB 3.1 trillion yuan on June 12. Some investors bought stocks via margin financing and securities lending, structured trusts and OTC margin financing, which pushed up excessive growth of the A-share market. From April to June 12, 2015, SCI increased by 37.8 percent while GEB gained 67 percent, and the outstanding value of margin financing and securities lending reached RMB 2.3 trillion yuan. Partly as a result of measures taken to regulate OTC margin financing, the plummet in financing transaction position triggered the downward spiral in the stock market. From June 15 to July 7 in 2015, thousands of stocks suspended in the A-share market for consecutive days and market liquidity squeezed abruptly, with the SCI, GEB and outstanding value of margin financing and securities lending falling by 27.9 percent, 39.7 percent and 27 percent. After July 8, relevant government agencies made active and coordinated policy response, and the market entered an episode of fluctuation. In August 2015, due to multiple domestic and foreign factors, the A-share market experienced another sharp falling, with SCI, GEB and outstanding value of margin financing and securities lending plummeting by 22.8 percent, 26.5 percent and 18.7 percent from August 20 to 26. By December31, 2015, SCI closed at 3539.18 points, which rose 9.41 percent from the beginning of the year; the Shenzhen Component Index ended at 12664.89 points, which increased by 14.98 percent compared with the beginning of the year. Developments of the stock market stress index showed that, valuation risk was the main source of stress in the A-share market in the first half of 2015, which fed rapid increase of the stress index. With the burst of the bubble in the second half, volatility risk heightened rapidly while valuation risk was on a decline, and the overall stress in the stock market as indicated by the stress index rose quite rapidly to end at a relatively high level at year-end. Valuation of different boards diverged significantly, with the valuation of large-cap and blue-chip stocks below that of SME board and GEB. By end-2015, rolling price-to-earnings ratios of all AB shares, Shanghai-Shenzhen 300, SME board and GEB rose 46.2 percent, 18.6 percent, 105.7 percent and 108.9 percent y-o-y to 28.5 times, 16.6 times, 88.4 times and 134.3 times respectively; and their respective price-to-book ratios gained -11.5 percent, -27.3 percent, 40 percent and 44.8 percent y-o-y to 2.3 times, 1.6 times, 5.6 times and 8.4 times. At the beginning of 2016, affected by prevailing decline in peripheral markets and heightened expectation for interest rate hike by major economies, the circuit breaker mechanism was triggered twice during the four trading days from January 4 to 7, leading to early market closure on 4 and 7 in January. The Shanghai Stock Exchange, Shenzhen Stock Exchange and China Financial Futures Exchange announced to suspend the circuit breaker mechanism since January 8, 2016.

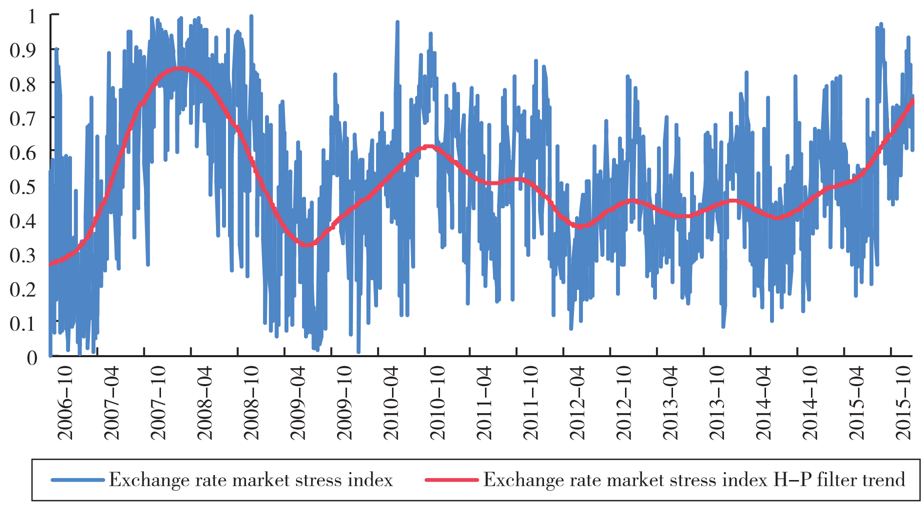
Figure 6.8 Stock market stress index, 2006-2015



Source: The PBC.

RMB depreciated slightly against the U.S. dollar, and stress index in the exchange rate market was elevated in the second half of 2015. At end-2015, RMB depreciated by a small margin against the U.S. dollar, featuring two-way floating and enhanced flexibility. The RMB exchange rate against a basket of currencies kept basically stable, and the expectation of RMB exchange rate was generally well anchored. By end-2015, the RMB exchange rate against the U.S. dollar stood at RMB 6.4936 yuan per U.S. dollar in the onshore market, depreciating by 2896 basis points or 4.7 percent from the end of the last year; the price was RMB 6.5687 per dollar in Hong Kong market, depreciating by 3502 basis points or 5.6 percent compared with end-2014. The volatility of spot RMB exchange rate against the U.S. dollar expanded significantly in the second half of 2015, indicating higher volatility risk in the foreign exchange market; the PBC further improved the quotation mechanism of the central parity of the RMB against the U.S. dollar, and as a result of supply and demand factors, the divergence between offshore and onshore exchange rates widened. Generally speaking, stress in the foreign exchange market rose rapidly to an elevated level in the second half of 2015, which was higher than the previous year.

Figure 6.9 Exchange rate market stress index, 2006-2015



Source: The PBC

V. Outlook

In 2016, further efforts will be made to promote market-based reforms, improve fundamental institutional arrangements, and facilitate well-regulated development of the financial market, so as to let the financial market play a positive role in stabilizing growth, promoting restructuring, and preventing financial risks.

Further promote the market-based interest rate reform. Efforts will be made to urge financial institutions to improve internal control system, and enhance capability of self-initiated pricing and risk management. The market-based benchmark interest rates and yield curve will be fostered, and the interest rate formation and transmission mechanism improved. The role of self-discipline in market-based interest rate pricing and macroprudentialassessment will be put into full play, in order to enhance regulation over irrational pricing.

Strengthen institutional infrastructure in the bond market. Efforts will be made to let bond market continue to play its due role in optimizing resource allocation and enhancing the share of direct financing, improve liquidity management and pricing functions of the bond market, further enrich the range of products and make progress in internationalization of the bond market. Amidst enhanced connection between sub-financial markets, risk prevention should be enhanced to appropriately tackle with risks associated with higher default probability of corporate credit bonds in the context of downward economic pressure.

Continue to push forward opening-up of the bond market. In line with the progress made in capital account convertibility, efforts should be made to further open up the bond market, diversify investors and issuers, expand the size of investments and financing by foreign institutions in the bond market, improve and enhance management efficiency, and improve institutional arrangements in accounting, auditing, taxation and credit rating.

Further develop a multi-layered equity market. Efforts will be made to further strengthen the main board and vitalize the blue-chip market; promote the development of SME board and deepen the reform of the GEB. Improvement of rules and regulations in the New Third Board will be accelerated in order to optimize the investment and financing mechanism for small cap firms in a prompt, flexible and diversified manner, and better support innovation-oriented enterprises, start-ups and growth enterprises. Regional equity transfer markets will be developed so that they can play an important role in financing and equity transfer of medium, small and micro enterprises within the region.

Box 16 Promoting the Healthy Development of a Multi-layered Capital Market

The development of a multi-layered capital market and diversified channels to promote equity financing are pivotal for better serving the real economy, promoting restructuring and industrial upgrading and deleveraging in the real economy.

Principles for promoting the development of a multi-layered capital market. China is a vast country with distinct regional differences and a massive amount of enterprises. Enterprises of different types and in various stages vary widely in their demand. At the same time, diversified investment and financing demands by investors require the capital market to differentiate in terms of institutional arrangements on issuance, trading and regulation. Two principles should be adhered to when building a multi-layered capital market system: Firstly, a multi-layered capital market is not static but evolving; secondly, a multi-layered capital market is rooted in the multi-layered and diversified real economy, and the precondition for building the capital market is serving the real economy.

Continue to improve the main board, SME board and GEB. Steady promotion of the market-based IPO system and the improvement of delisting mechanism lie at the core of efforts to further improve the main board, SME board and GEB. The key for IPO reform is to balance the role of the government and the market, reduce substantial review and approval procedures and value judgment by regulators on eligibility of issuers, and to construct an accountability system with a reasonable division of labor and responsibilities, in order to reduce the cost of stock issuance and enhance financing efficiency. Meanwhile, further efforts should be made to improve the delisting mechanism, in order to enhance the quality of listed companies by natural selection. Illegal behaviors in the securities market such as false statement, market manipulation and insider trading should be clamped down on more forcefully to strengthen market and credibility discipline over listed companies and intermediaries, so as to protect the rights and interests of investors and facilitate a fair, equitable and open environment in the securities market. Starting from there, the main board market should be further reinforced to add more vitality to the blue-chip market. In the meantime, efforts should be made to promote the development of SME board, deepen the reform of the GEB, and add to the depth of the market, so as to enhance the support for innovation-oriented enterprises and start-ups.

Further promote the development of the National Equities Exchange and Quotations System. Efforts should be made to enhance the efficiency of review and approval for listing, offering and M&A on the National Equities Exchange and Quotations System (New Third Board), enhance the financing function of the market and foster a multi-tiered system within the New Third Board to adopt differentiated management accordingly. Improvement of institutional arrangements for the New Third Board should be accelerated to optimize a fast-responding, flexible and diversified investment and financing system for small cap enterprises, so as to better serve innovation-oriented enterprises, start-ups, as well as medium, small and micro-sized growth enterprises.

Push ahead well-regulated development of regional equity markets. Well-regulated development of regional equity markets is beneficial for both the central and local authorities and participants to play a more active role, to release the dynamism of reform at the grass root level, and promote equity capital formation of regional medium, small and micro-sized enterprises. How to establish a cooperation mechanism between regional equity markets and the New Third Board will be explored to guide registered and well-regulated private equities and relevant institutional investors to participate in regional equity markets. Regional equity markets should be built as a platform for private placement, focus on improving direct financing for medium, small and micro-sized enterprises, and be innovative in operation and service provision models.

Further improve the foreign exchange market. The market-based RMB exchange rate reform will be furthered in a proactive, controllable and gradual manner, so as to keep RMB exchange rate basically stable at a reasonable and equilibrium level. The foreign exchange market should be deepened and open wider to the outside world with more products and the introduction of qualified foreign participants. Efforts will be made to support individuals be engaged in derivatives transactions and align onshore and offshore RMB exchange rates.

Actively develop the gold market. Opening-up strategy of the gold market should be further studied to accelerate the improvement of the international board in the Shanghai Gold Exchange, and the gold fixing system denominated in RMB will be studied and launched. Product innovation will be enhanced to provide more targeted and better quality products, and develop new products catering market demand. Market participants should be further diversified to accelerate the introduction of financial institutions such as securities firms, funds, trusts and insurers to be engaged in gold transactions, and improve the channel of agent services. Gold market infrastructure will be further improved to put in place the market making system, explore building of the medium and long-term gold benchmark pricing system and improving the IT system.

Steadily push forward innovations in the derivatives market. Studies will be conducted on how to improve the pilot program of stock option, so as to put in place a market mechanism where the shorts and longs could balance each other. Rules on hedging will be improved by reinforcing review and recognition of hedgers, in order that stock futures could play its due role. Based on comprehensive appraisal and preparedness for risk prevention, oil futures and other futures of strategic importance should be launched carefully, and pilots for agricultural product futures such as sugar and soybean meal will be promoted to meet the risk management needs of various industries. Steady progress should be made in pilots of “insurance+futures”, and further improving the channels and mechanism for the futures market to benefit the agricultural sector, farmers and the rural area. Feasibility study on trading of carbon emission futures will be conducted to let market-based mechanism play a role in promoting green development.

Chapter VII

Financial Infrastructure

In 2015, the building of financial infrastructure in China further progressed with improved payment system, gradually upgraded financial laws and regulations, optimized accounting standards, significant improvement of credit information administration and services, more progress in anti-money laundering and counter-terrorist financing, and reinforced working mechanism for financial consumer protection, which contributed to overall improvement of financial infrastructure and better financial service in China.

I. The payment, Clearing and Settlement System

1. Institutional building continued to improve

Legal framework continued to be reinforced. First, the Administrative Measures on Participants of the Payment Systems Operated by PBC was issued in order to strengthen supervision and management over participants of the payment systems of the PBC. The Plan for Payment and Clearing System Crisis Response was revised and enacted so as to enhance the capability of handling emergency events in the payment systems. Second, documents including the Provisional Rules on RMB Cross-border Inter-bank Payment System (CIPS) and the Regulatory and Administrative Measures on Operating Institutions of RMB Cross-border Inter-bank Payment System were published to provide regulatory requirements for participants and operators of the CIPS. Third, the Administrative Measures on Online Payment by Non-bank Payment Institutions was released to regulate online payment businesses, prevent payment risks, protect legal rights and interests of clients, and promote payment service innovation and healthy development of the payment market.

Payment infrastructure was improved. First, the second generation payment system was applied nationwide, which enabled banking institutions to participate in single entry settlement as legal persons, thus enhancing the efficiency of payment and settlement. Second, the first phase of CIPS was launched to further integrate current cross-border RMB payment and settlement channels and resources. Third, the comprehensive front-end subsystem of the Accounting Data Centralized System (ACS) was put into operation in 23 provinces (municipalities) including Beijing and Shanghai. Payment systems of all types in China operated in a safe and stable manner. In 2015, a total of 46.948 billion transactions with a value of RMB 4383.16 trillion yuan were processed by various payment systems in China, increasing by 53.74 percent and 29.34 percent y-o-y respectively. The number and value of transactions processed by payment systems of the PBC[①] stood at 5.996 billion

① Including the High Value Payment System (HVPS), Bulk Electronic Payment System (BEPS), Internet Banking Payment System (IBPS), Automatic Clearing House (ACH), Domestic Foreign Currency Payment System (DFCPS), and national Cheque Image System (CIS).

transactions and RMB 3135.25 trillion yuan, rising by 43.31 percent and 27.67 percent y-o-y respectively, among which a total of 2.966 billion transactions with a worth of RMB 27.76 trillion yuan were processed by the online payment cross-bank clearing system, gaining 80.92 percent and 56.03 percent respectively. Businesses of clearing institutions including China Union Pay, Clearing Center for City Commercial Banks and Rural Credit Banks Funds Clearing Center continued to expand. In particular, the cross-bank bankcard trading and clearing system of China Union Pay processed 20.668 transactions worth RMB 49.28 trillion yuan, increasing by 10.68 percent and 19.86 percent y-o-y respectively.

Businesses of central counterparties progressed steadily. First, the business scope was expanded. The Shanghai Clearing House Co., Ltd. extended the business of central counterparties for OTC derivatives to cover foreign exchange transactions as agents for customers, and the spot, repo and forward transactions of bonds, which enhanced the efficiency of clearing. Multiple commodities central counterparty clearing businesses were also launched to cover shipping, energy, metal and chemicals. China Financial Futures Exchange launched new products including SSE 50 stock index futures, CSI 500 index futures contracts and 10-year treasury bond futures. Second, risk control was reinforced. China Financial Futures Exchange and Zhengzhou Commodity Exchange started to accept treasury bonds as margin for futures, which facilitated the futures market to play its due role in price discovery and risk management. The real-time margin estimation and settlement simulation system was adopted by the Zhengzhou Commodity Exchange, which could connect in real time with the trading system, calculate the flow of funds of members and provide early warning signals according to different parameters, in order to warn members of funding risks; the bank-futures connect system was upgraded to automatically allocate funds from earmarked bank account of a member to meet margin calls.

Securities settlement systems operated stably. The securities depository and settlement business of the China Central Depository & Clearing Co., Ltd., the Shanghai Clearing House Co., Ltd., and the China Securities Depository and Clearing Co., Ltd. (China Clear) continued to increase. The bonds depository value rose by 33.48 percent y-o-y to RMB 47.9 trillion yuan, among which RMB 10.33 trillion yuan was deposited with the Shanghai Clearing House Co., Ltd. Total value of settlement for spot bond trading, bond lending and bond repo rose by 88.14 percent y-o-y to RMB 674.91 trillion yuan. DVP settlement further expanded to account for 99.93 percent of the total.

International communication and cooperation on payment and settlement were further deepened. On international platforms such as the CPMI, the EMEAP, the SEACEN and the ASEAN 10+3, efforts were made to keep updated on international developments on payment and settlement fronts, to promote convergence with international practices and to enhance China's say in the payment and settlement arena. The Principles for Financial Market Infrastructures (PFMI) was implemented, and the evaluation on financial market infrastructure by financial institutions per se and regulators was carried out. International evaluation on China's implementation of PFMI was also conducted.

2. Outlook

In the next stage, a safer and more efficient national payment system will be put in place, so that the payment system could better bolster economic and social development. First, the legal system for payment and settlement will be improved to lay a solid foundation for the sound and efficient operation of the payment market. Second, the payment system will be further improved and applied more widely and its safe and sound operation will be maintained. Third, the implementation of PFMI will be sped up and the list of qualified financial market infrastructures will be published as soon as possible. Fourth, international communication on payment systems will be enhanced and participation in relevant international affairs will be deepened.

Box 17 The Cross-border Inter-bank Payment System went into Operation

Since 2009, in accordance with the deployment by the CPCCentral Committee and the State Council on expanding the cross-border use of RMB, the PBC carried out a series of policies to facilitate the use of RMB in cross-border trade and investment, and deepen bilateral currency cooperation. Multiple models such as agent banks and clearing banks have been developed to support cross-border RMB payment. At present, RMB has become the second largest cross-border payment currency in China and the fifth largest payment currency in the world, and therefore China is in urgent need of infrastructure support to business development. In order to meet the demand for cross-border use of RMB and further integrate current RMB cross-border payment and settlement channels, the PBC started building the Cross-border Inter-bank Payment System (CIPS) in 2012.

Since March 2014, in order to implement the instruction by the CPC Central Committee and the State Council to accelerate CIPS construction, the PBC decided to divide the building of CIPS into two phases. Phase I mainly targets the settlement of cross-border trade of goods and services, cross-border direct investment, cross-border financing and cross-border individual remittance. Phase II will adopt a mixed calculation methodology in order to save liquidity and to provide comprehensive support to cross-border and offshore RMB businesses.

On October 8, 2015, CIPS Phase I was put into operation in Shanghai. By December 31, 2015, the system had been operating and processing transactions soundly. There are 19 direct participants and 185 indirect participants to the CIPS, covering 6 continents, 50 countries and regions. Throughout 2015, a total of 86,703 payment transactions with a value of RMB 480.898 billion yuan were processed by CIPS cumulatively, with a daily average of 1,398 transactions worth RMB 7.76 billion yuan.

The main features of CIPS Phase I include the following: first, remittance of customers and financial institutions are processed in real time and in gross value; second, direct participants are enabled single entry access, which provides centralized clearing to cut short the clearing route and enhance clearing efficiency; third, the internationally-accepted ISO 20022 messaging standard is adopted to help participants have direct access to the processing of cross-border businesses; fourth, the time of operation covers major times zones of RMB transactions in Europe, Asia, Africa and Oceania; and fifth, domestic direct participants are given special line access.

In order to level the playing field for competition, the PBC issued the *Provisional Rules on RMB Cross-border Payment System* which specifiedeligibility for access, account management and business processing requirements, laying a solid institutional foundation for participants. Meanwhile, the Cross-border Interbank Payment and Settlement (Shanghai) Co,. Ltd. was established to be the independent operator of CIPS. The company is regulated by the PBC.

As an important component of the financial infrastructure in China, CIPS is consistent with international regulatory requirements specified by PFMI. The completion and launch of CIPS marks another milestone in infrastructure building in China's financial market, which will help to enhance the efficiency of RMB cross-border settlement, support the development of real economy and international trade, promote the use of RMB worldwide and facilitate the implementation of "the Belt and Road" strategy.

II. Legal Environment

1.The legal system governing the financial sector further improved

New laws and regulations were made. First, in order to safeguard national and public security, the *National Security Law of the People*'s *Republic of China* was passed, defining the role of financial security in the national security framework, improving macroprudential management in the financial sector, strengthening the financial risk prevention and resolution mechanism, and reinforcing financial infrastructure and capacity building. The *Counter-Terrorism Law of the People*'s *Republic of China* was approved, which made more stringent provisions on verification of the identities of financial customers, the inspection, freezing and forfeiture of terrorism-related assets and counter-terrorist financing, and strengthened counter-terrorism intelligence and emergency response plans. The *Amendment IX to the Criminal Law of the People*'s *Republic of China* was passed, strengthening regulation and constraints on terrorism financing and infringement upon citizens' private information, and adjusting the penalty applied to counterfeiting currency and its smuggling. Second, in order to improve the legislative process in China, the *Law on Legislation of the People*'s *Republic of China* was amended and approved, aligning legislation with reform decision making and providing guarantee for legislation concerning the financial sector. Third, in order to promote financial reform, the *Commercial Bank Law of the People*'s *Republic of China* was revised, lifting restrictions on the loan-to-deposit ratio for commercial banks to add vigor to banks' operation. The Insurance Law of the People's Republic of China was amended, revising the eligibility of practitioners and ex-ante review and approval for registration with the administrative authorities for industry and commerce. The *Securities Investment Fund Law of the People*'s *Republic of China* was revised, eliminating the approval procedure for senior management of publicly offered funds. The State Council was authorized to make temporary adjustment in 232 pilot counties (cities, districts) including the Daxing district of Beijing, when implementing the provisions that the right to farm land should not be used as collateral, and also to make temporary adjustment in 59 pilot counties (cities, districts) including Jixian of Tianjin, when inplementing relevant provisions that the homestead right should not be used as collateral, which would facilitate the pilot program of taking the right of using farm land and homestead as collateral and lay the foundation for deepening financial reform and innovation in the rural area. The *Deposit Insurance Regulations* was released, which set up and regulated the requirements on the goal, scope, fund raising and management mechanism of the deposit insurance system, the differentiated deposit insurance premium, and limited compensation principles, and defined the role of deposit insurance system in the resolution of insured institutions, facilitating the protection of legal rights and interests of depositors, the prevention and mitigation of financial risks in a timely manner and thus further improving the financial safety net in China. The *Decision on the Management of Bankcard Clearing Institutions' Market Access of the State Council* was published, specifying market access issues for bankcard clearing institutions. The *Opinions on Implementing Negative Lists on Market Access of the State Council* was issued, stipulating that market should play a decisive role in resource allocation, which would facilitate the building of an open economy.

More judicial interpretations were released. The Supreme People's Court published the *Provisions on Applicable Laws on Hearing Private Lending Cases,* which defined the scope of private lending, and made requirements on private lending contracts, validity of inter-enterprise lending, liabilities of internet lending platforms and interest rates of private lending. The *Interpretation on Several Issues Concerning the Application of the Insurance Law of the People's Republic of China (III)* was issued, specifying resumed validity of insurance contracts, etc. The *Interpretation on Several Issues Concerning the Application of Administrative Litigation Law of the People's Republic of China* was issued, which clarified on items including the hearing attendance of person-in-charge of administrative agencies and cases where review organs are co-defendants, making stricter requirements for administrative organs to comply with laws and rules. The *Interpretation on the Application of Civil Litigation Law of the People's Republic of China* made more detailed requirements on the jurisdiction of financial leasing contracts and insurance contract disputes, specified the status of branch offices of financial institutions as participants in litigation and the application of small-value case hearing procedure for bankcard disputes, and improved requirements on information sharing concerning the freezing and forfeiture of bank deposits and the persons subject to enforcement due to dishonest conduct, therefore providing better guarantee for parties involved.

New rules and measures were made. The PBC issued rules to regulate and strengthen the administration of the export and import of gold and gold products, and opened up more channels for the export and import of gold and gold products. Relevant normative documents were released to further open up investment channels for the inter-bank market, facilitate cross-border use of RMB and payment in RMB, shift the calculation base of reserve requirement from required reserve at a period end to average daily value, regulate the internet finance industry to foster its healthy development, regulate the development of credit asset securitization, green financial bonds and certificates of deposit, reinforce the administration over online payment of non-bank payment institutions, and define the standard of classification of financial institutions. Relevant regulatory authorities issued regulations and normative documents to specify on on-site examination by regulators and regulatory responsibilities of relevant agencies of regulators, simplify and improve the procedure of administrative approval, strengthen the management of liquidity risks of commercial banks, enhance the management of specified types of futures transactions, stock option transactions, money market funds, margin financing and securities lending, and solvency of the insurance sector, and specify relevant rules and regulations on pilot programs of administrative reconciliation and the issuance and trading of corporate bonds.

2. Outlook

In 2016, continued efforts will be made to put in place a financial regulatory framework that is in line with the development of a modern financial market, to promote the reform of the financial system and macroprudential management in the financial sector, to improve the legal system of the financial sector, to accelerate the revision of the *Law of the People*'s *Bank of China,* the *Law on Commercial Banks,* the *Law on Securities,* the *Law on Insurance, Regulations on Foreign Exchange Administration,* and *Provisional Regulations on Cash Management,* and to promote the formulation of a series of regulations on non-deposit taking lending institutions, management of financial statistics, payment and settlement, the management of private equity investment funds, management of listed companies, and the administration of financing guarantee companies, etc.

Box 18 Promoting Well-regulated Development of Internet Finance

Internet finance is a new model of financial services featuring financing, payment, investment and information intermediation by traditional financial institutions and internet firms using internet technologies and information and communication technologies (ICT). In recent years, amidst continuous breakthroughs made in internet technologies and ICT, internet finance has boomed with an expanding influence. The CPC CentralCommittee and the State Council take internet finance as a high priority, and designate the promotion of healthy development of internet finance as a major task in the Government Work Report in 2014. As approved by the CPC Central Committee and the State Council, the PBC issued the *Guiding Opinions on Promoting Healthy Development of Internet Finance (hereafter referred to as the "Guiding Opinions")* in joint efforts with relevant authorities on July 18, 2015.

In line with the general requirements of encouraging innovation, preventing risks, tapping on advantages and avoiding disadvantages, and healthy development, the *Guiding Opinions* made requirements as follows. First, a series of pro-innovation policies supporting stable development of internet finance have been carried out. Specifically, such policies encourage innovation of internet finance platforms, products and services in order to foster a more dynamic market; encourage relevant institutions to cooperate in a mutually-complementary manner; and expand the financing channels of relevant institutions so as to improve the financing environment. Second, differentiated guidance has been provided to define regulatory responsibilities concerning internet finance. In accordance with the principles of lawful, appropriate and coordinated regulation with differentiated guidance and innovation when necessary, the *Guiding Opinions* defined regulatory responsibilities and division of labor among regulators for major business lines of internet finance, and specified boundaries and bottom lines for internet finance businesses such as internet payment, online peer-to-peer lending, online micro loans and equity crowdfunding. Third, a series of detailed requirements were made to regulate the order of internet finance market and to provide a healthy development environment for internet finance. Fourth, arrangements have been made to streamline the administrative process, improve relevant fiscal and taxation policies and enhance credit infrastructure in order to put in place a supporting service system for internet finance.

The issuance of the *Guiding Opinions* proposed relevant measures and requirements for the well-regulated development of the internet finance sector. First, it makes clear that a balance should be stricken between innovation and regulation in the internet finance sector and puts in place multiple incentive policies and supporting service measures. Second, the basic principles and requirements concerning major business lines of internet finance have been specified, which helps to prevent related risks. Third, regulatory principles of internet finance have been well defined, and division of labor concerning the regulatory responsibilities for major business lines has been specified, which would promote the healthy development of internet finance and make it better serve the real economy.

Supporting regulatory measures have been released by relevant regulators in accordance with the principles designated in the *Guiding Opinions*, so as to make concrete progress in various aspects. On July 22, 2015, the CIRC issued the *Provisional Measures on the Regulation of Internet Insurance* to regulate online insurance; on December 18, 2015, the CSRC and the PBC jointly issued the *Administrative Measures on Regulation of Money Market Funds,* making targeted requirements on online vending of money market products and relevant information disclosure; on December 28, 2015, the PBC officially launched the *Administrative Measures on Online Payment by Non-bank Payment Institutions,* so as to further regulate online payment businesses; and the CBRC has taken the lead in formulating the *Provisional Administrative Measures on Businesses of Online Lending Information*

Intermediaries, and the CSRC has been leading the preparation of a pilot program on equity crowd funding.

In terms of self-disciplinary management, according to the requirements of the *Guiding Opinions,* the PBC made joint efforts with relevant authorities in promoting the establishment of the National Internet Finance Association of China. The association, established in Shanghai on March 25, 2016, is a self-disciplinary organization for internet finance industry in China, and it will play a positive role in reinforcing self-discipline of the internet finance industry, promoting regulated development of the industry, protecting consumers' rights and interests, and letting out the potential of innovation of market participants.

III. Accounting Standards

1. Further progress was made in building the accounting standard system

First, continued efforts were made to improve the corporate accounting standard system, in order to solve outstanding problems regarding the implementation of corporate accounting standards and to pursue convergence and equivalence with international accounting standards. Normative documents on accounting have been thoroughly reviewed, and 39 documents including the Accounting Measures on Trust Businesses were abolished and expired; new rules have been made including the *Interpretation No. 7 of Corporate Accounting Standards, the Interpretation No. 8 of Corporate Accounting Standards,* the *Provisional Regulations on the Accounting of Commodity Futures Hedging Business,* and the *Corporate Accounting Standard No. 14—Revenue (Exposure Draft),* and the revision of accounting standards for financial instruments was initiated. Second, the building of an accrual-based comprehensive government financing reporting system was promoted, the Fiscal Budget Accounting System and the Government Accounting: Basic Principles have been published, and detailed rules on 4 specific items for government accounting including inventory were published for public comment. Third, the application of XBRL technology was expanded, and the *General Classification Standards of Corporate Accounting 2015* was issued to promote the application of general classification standards in all types of enterprises.

2. Outlook

First, continued efforts should be made to promote the revision of the *Accounting Law* to lay a solid foundation for deepening the accounting reform in a comprehensive manner. Second, close attention will be paid to relevant international financial reporting standards, and continued efforts will be made to revise and improve corporate accounting standards. Revision of rules on leasing and insurance contracts will be started as appropriate. In-depth studies will be carried out on new situations and new issues emerging during the implementation of corporate accounting standards, and interpretation of corporate accounting standards will be conducted to foster effective implementation of such rules. Third, the government accounting standard system will be further improved and studies will be carried out on government accounting system. Efforts will be made to promote the building of the government accounting standard system, and accelerate the reform toward an accrual-based comprehensive government financial reporting system. Fourth, management of the accounting guidance system and internal control system will be reinforced to enhance capacity for internal management and risk prevention. Fifth, the application of information technology in accounting will be strengthened by applying the general classification standards in various areas and by making national standards on data interface of accounting softwares. Sixth, greater efforts will be devoted to participating in the formulation and revision of international accounting standards, and to strengthening technical communication with the IASB on accounting issues.

IV. Credit Environment

1. The credit information industry and social credit system developed in an orderly manner

The *Guidance on Regulation and supervision of Credit Information Agencies* was launched and regulatory institutional arrangements on credit information became more detailed. In October 2015, the PBC issued the *Guidance on Regulation and of Credit Information Agencies,* making detailed provisions on licensing and registration procedures of credit information agencies, the management of reserve fund by individual credit information agencies, off-site and on-site examinations and other regulatory items, measures and procedures covering the whole business lifecycle of credit information agencies, in line with the principle of complying with laws and regulations, protecting rights and interests, and full coverage. The Guidance is a detailed supplement to the *Regulations on Administration of the Credit Reference Industry and the Measures on Administration of Credit Information Agencies,* which would help identify and solve problems emerging during the operation of credit information agencies and contribute to the sophisticated management of credit information agencies.

Supervision was strengthened to regulate the development of credit information agencies. On-site examination on the credit information business of institutions connecting to the basic database of financial credit information was conducted. Risks of information leakage were reviewed and irregularities about credit information was punished. Complaints on credit information business were handled in order to safeguard the rights and interests of information owners. A total of 162 complaints were accepted and all cases were solved in 2015. The licensing of personal credit information agencies and registration of enterprise credit information agencies progressed steadily; a statistics and reporting mechanism for credit information agencies was launched; institutions involving in personal credit information business without licenses were closed down, in order to promote well-regulated development of the credit information market.

In-the-process and ex-post management has been carried out to cultivate and regulate the credit rating market. More detailed rules have been made on the registration procedure of credit rating agencies, and the dynamic monitoring and analysis of credit rating statistics have been improved. Efforts have also been made to review the default rate of credit ratings, in order to put in place more tools for in-the-process and ex-post regulation. Examination on credit rating agencies that have breached relevant rules and have a high default ratio has been strengthened. Differentiated regulation over different classes of credit rating agencies have been carried out to foster well-regulated development of the credit rating market. By end-2015, a total of 112 credit rating agencies as legal persons and 80 credit rating institutions as non-legal persons were registered with the PBC. In 2015, 28.3 thousand of credit rating businesses were completed on the credit market and the bond market. Credit rating of micro-loan companies and financing guarantee institutions has been carried out nationwide to establish the long-term mechanism for credit rating work of the two types of institutions, and to make better use of the credit rating results, so as to promote healthy development of the micro-loan companies and financing guarantee institutions and prevent financial risks. By end-2015, credit rating of 882 micro-loan companies and 1,772 financing guarantee institutions had been made.

Well-coordinated progress has been made in building the social credit system. Members of the Inter-Ministerial Meeting for the Development of Social Credit System actively collected credit information in industries they regulated and built databases using such information, and improved the disclosure and the application of credit information in fulfilling their administrative responsibilities. Member authorities signed agreements or MOUs on the sharing of information, especially information about discreditable conduct, so has to conduct coordinated penalty and coercion on dishonest behaviors. For example, 21 authorities including the State Administration on Taxation signed *MOU on Joint Punishment Measures over Parties Involved in Major Tax Violation Cases,* and 38 authorities including the State Administration for Industry and Commerce signed the *MOU on Coordinated Regulation and Joint Punishment of Discreditable Enterprises*. Progress has been made to build the credit information sharing and exchange platform and the Credit China website, in order to facilitate inter-ministerial sharing and public inquiry of credit information, providing easier access to credit information by relevant parties.

New achievements have been made in building credit systems for SMEs and the rural areas. Documents including the

Opinions on Promoting the Establishment of Credit Systems for SMEs and Rural Areas, the *SME Credit Information Indicators* and the Rural Resident Credit Information Indicators were issued to comprehensively promote the well-regulated development of SME and rural credit systems. Building of SME and rural credit info database made progress, and the SMEs and rural resident information collection, credit rating and credit information application of SMEs and micro enterprises as well as rural residents made headway, which helped credible SMEs and micro enterprises as well as rural residents get easier access to financing facilities at lower costs. By end-2015, credit files had been established for about 2.59 million SMEs and 159 million rural residents across the country, and more than 200 databases for credit information of SMEs and rural residents had been established at the prefecture (city/county) level.

Education on credit information was deepened and social credit awareness was enhanced. In September 2015, the PBC, the NDRC, the Ministry of Education and the Central Committee of the Communist Youth League jointly issued the *Notice on Further Cultivating Credit Culture and Education,* so as to make joint efforts in promoting credit culture and education, and to incorporate credit information into the national education system. An outreach program themed "Strengthening Credit Information Education, Enhancing Credit Level of Citizens" was carried out nationwide. It was estimated that the outreach program covered more than 97 percent of branch offices of financial institutions, credit information agencies and credit rating agencies, and was participated by 2,580 government agencies, 2,200 universities and colleges and 45 million person-time.

2. Outlook

In the next stage, continued efforts will be made to improve laws and regulations regarding credit information, formulate credit information standards, enhance in-the-process and ex post management of credit rating agencies, and protect lawful rights and interests of credit information owners and market participants, so as to promote the healthy development of the market. Endeavors will also be made to improve the Inter-Ministerial Joint Meeting for the development of Social Credit System, make progress in the building of social credit system and establish SME and rural credit systems, so as to support the financing and development of SMEs and micro enterprises as well as rural residents. Outreach and educational programs focusing on the theme of credit culture will be conducted in various ways to enhance credit awareness of the society.

V. Anti-money Laundering

1. AML reform progressed steadily

Preparation for the fourth round of AML mutual evaluation under the Financial Action Task Force (FTAF) framework has started. Self-evaluation has been carried out according to the standards and methodology of FATF. Gaps between China's practices and international standards in terms of AML and CFT were identified, and plans for the mutual evaluation were made. The first National Money Laundering Risk Assessment Report was completed.

AML regulation and management were reinforced. AML examination targeting large commercial banks and payment institutions were carried out, conducting comprehensive evaluations on internal control on AML, customer identification, keeping of customer and transaction materials, and identification and analysis of large-value suspicious transactions. A comprehensive review over their AML systems, procedures and business systems was carried out, so that the industry could further improve AML practice and enhance prevention of money laundering risks.

AML investigations went on. A significant increase was seen in the number of clues received on suspicious transactions, the number of investigation cases, the number of clues transferred and the number of cases of providing help to investigative authorities, as well as the number of cases solved with assistance of clues transferred. Money laundering risk warning was conducted targeting economic crimes involving large number of victims such as opening bank accounts using ID cards of other people, incited account opening by the deaf and mute and new trends in terrorist financing, so as to guide financial institutions to improve customer identification and the reporting of suspicious transactions. The PBC also cooperated with relevant agencies to carry out special campaigns on combating illicit money transfer using offshore companies and underground banks, and the efforts were very productive.

Closer international cooperation on AML has been carried out. The PBC has participated in relevant activities of international (regional) AML institutions such as FATF, EAG and APG, and promoted bilateral AML cooperation. The PBC and the Monetary Authority of Macao signed the *MOU on Preventing Money Laundering and Terrorist Financing,* and the China Anti-Money Laundering Monitoring and Analysis Center signed the *MOU on Information Exchange and Cooperation on AML* and CFT with the Financial Crimes Enforcement Network of the United States and other foreign counterparts, further improving the AML regulation and information cooperation network.

2. Outlook

In the next step, the mechanism for AML and CFT will be further improved, taking into account the preparation for the fourth round of peer review under the FATF framework. Efforts will be made to carry out administration in a lawful manner, improve AML regulation, pay greater attention to AML priorities and deepen international AML cooperation.

VI. Financial Consumer

Protection

1. Steady progress has been made in financial consumer protection

First, significant progress has been made in establishing the legal framework for financial consumer protection. On November 13, 2015, the State Council issued the *Guiding Opinions on Strengthening the Protection of Rights and Interests of Financial Consumers,* establishing the regulatory and safeguard mechanism for the protection of financial consumers and regulating activities of financial institutions. Second, continued efforts have been made to provide financial education including via surveys on financial literacy and to publish reports on such surveys periodically. Third, financial inclusion made headway in an orderly manner. Efforts were made to draft the *Plans to Promote Development of Financial Inclusion (2016-2020),* to carry out pilot programs on financial inclusion in various regions, and to preliminarily set up a financial inclusion indicator system with Chinese characteristics. Fourth, the supervision and examination system further improved. Efforts were made to put in place a database on typical cases for financial consumer protection and a system for reporting relevant cases, to carry out examinations and evaluation in terms of consumer protection according to current laws and regulations of the PBC, to guide financial institutions to make rectifications, enhance management, comply with laws and regulations and prevent risks, and to penalize breaches on the rights and interests of financial consumers. Fifth, a diversified dispute resolution mechanism has been established. The hotline for financial consumer protection (tel: 12363) operated soundly, and the financial consumer protection information platform went into trial operation. Steady progress has been made to press ahead with the pilot program of third-party non-litigation financial consumption dispute resolution mechanism in some provinces and municipalities.

2. Outlook

Going forward, efforts will be made to formulate the implementation rules for the *Guiding Opinions on Strengthening the Protection of Rights and Interests of Financial Consumers,* to carry out quality education and outreach programs on the Financial Consumer Protection Day on March 15 and Financial Education Month in September, to improve the financial literacy survey system, to implement the *Plan to Promote Development of Financial Inclusion (2016-2020)* and launch relevant policies and measures, to conduct special examinations targeting areas where complaints from financial consumers concentrated and which draw much attention from the general public in accordance with the development trend of the financial market, to continue to reinforce jurisdiction-based management over the complaints filed via the 12363 hotline in order to provide more satisfactory services for financial consumers, and to play a more active role in international communication and host the 2016 GPFI meeting successfully.

Chapter Ⅷ

Macroprudential Regulation

In 2015, the international community continuously improved the macroprudential policy framework and promoted the effective implementation of macroprudential policies. China continued to enhance macroprudential regulation, established the macroprudential assessment program, improved the financial regulatory coordination mechanism, carried out effectively countercyclical macro-adjustment measures, strengthened the assessment and monitoring of systemic risks, reinforced the regulation of systemically important financial institutions, and forcefully held on to the bottom line of allowing no systemic or regional risks to emerge.

I. International Developments on Macroprudential Regulation

1. Building more resilient financial institutions

Further improving the policy framework. The Basel Ⅲ package of reforms made by BCBS is the centerpiece of the international community's work to build more resilient banking institutions. BCBS Ⅲ policy framework has been further improved in 2015. Firstly, standardized approach of credit risk and inner-rating approaches were revised, where the use of inner model was limited to reduce the difference of risk-weighted asset calculations. Secondly, market risk framework has been revised and quantitative impact study has been carried out. Thirdly, the calculating framework of capital requirement on operational risks has been simplified through the cancellation of advanced approach for operational risk and the development of standardized calculation approach based on the banking business income and operational risk empirical losses. Fourthly, the calibration of leverage ratio has been completed and discussion is ongoing to decide whether to set more stringent leverage ratio requirement to G-SIBs. Fifthly, work related to the requirement of capital floor is on track. All of the above work will be accomplished by the end of 2016.

Promoting the implementation of Basel III. BCBS published in October 2015 a progress report on implementation, which illustrated that all of the BCBS members had implemented the Basel Ⅲ risk-weighted capital requirement, most of the members had implemented the liquidity coverage ratio requirement, 19 members had implemented the leverage requirement, and 20 members (mainly G-SIBs home jurisdictions①) had published regulatory requirements on G-SIBs. Meanwhile, BCBS kept on monitoring the implementation status of its members. The RCAP, covering 22 members (all G-SIBs home jurisdictions included), has been completed to monitor the implementation of risk-weighted capital requirement. BCBS plans to extend the RCAP on risk-weighted capital requirement to

① G-SIBs home jurisdictions consist of China, the United States, France, Germany, Italy, Netherlands, Spain, UK, Japan, Switzerland and Sweden so far.

all members by September 2016.

2. Strengthening the supervision on SIFIs

Updating the list of G-SIBs. In November 2015, the FSB updated the list of G-SIBs based on the end-2014 data. Thirty banks were designated as G-SIBs (Table 8.1) and the total number of G-SIBs remained the same as that in 2014. Royal Bank of Scotland was reallocated from Bucket 2 to Bucket 1; BBVA was removed from the list; CCB was added to the list for the first time, which was allocated in the Bucket 1 together with BOC, ICBC and ABC. The corresponding loss absorbency requirement is 1 percent. The list will be updated every November and the designated G-SIBs in the updated list will apply higher loss absorbency requirement in January of the year after the next year, 14 months after the updating date.

Table 8.1 Updated List of G-SIBs

Bucket (Higher Loss Absorbency Requirement)	G-SIBs in alphabetical order within each bucket
5 (3.5%)	(Empty)
4 (2.5%)	HSBC JP Morgan Chase
3 (2.0%)	Barclays BNP Paribas Citigroup Deutsche Bank
2 (1.5%)	Bank of America Credit Suisse Goldman Sachs Mitsubishi UFJ FG Morgan Stanley Agricultural Bank of China
1 (1.0%)	Bank of China Bank of New York Mellon China Construction Bank Groupe BPCE Group Crédit Agricole Industrial and Commercial Bank of China Limited ING Bank Mizuho FG Nordea Royal Bank of Scotland Santander Société Générale Standard Chartered State Street Sumitomo Mitsui FG UBS Unicredit Group Wells Fargo

Source: *2015 Update of Group of Global Systemically Important Banks* by the FSB, Nov. 2015.

Updating the list of G-SIIs. The FSB, together with IAIS, published the first list of G-SIIs in July 2013, where 9 insurance companies including Ping An Group were designated as G-SIIs. IAIS updated the list in 2015 based on the end-2014 data. Aegon was added to the list while Generali was removed from the list, as a result of which the total number of G-SIIs remained 9 (Table 8.2). Besides, IAIS revised the assessment methodology of G-SIIs and the new methodology will be applied in 2016.

Table 8.2 Updated List of G-SIIs

Aegon N.V.
Allianz SE
American International Group, Inc.
Aviva plc
Axa S.A.
Metlife, Inc.
Ping An Insurance (Group) Company of China, Ltd.
Prudential Financial, Inc.
Prudential plc

Source: *2015 Update of Group of Global Systemically Important Banks* by the FSB, Nov. 2015.

Developing capital requirements for G-SIIs. In 2013, IAIS started to develop the capital requirement for G-SIIs through a "three-step" approach after the publishment of the first list of G-SIIs. The first step is to develop the basic capital requirements (BCR) for G-SIIs on all the business; the second step is to develop higher loss absorbency (HLA) requirements for G-SIIs with a focus on their non-traditional and non-insurance (NTNI) business; the third step is to develop the insurance capital standard (ICS) for internationally active insurance groups (IAIGs) based on the assessment of risks at the group level, so as to promote the comparability of capital requirements among different jurisdictions. BCR standard was published in October 2014 and implemented since 2015. IAIS published HLA requirements in October 2015 to reduce the probability that G-SIIs might fell into distress or default and mitigate the related influence to the financial system. The HLA requirements will be put in force in 2019 and the regulatory capital floor for G-SIIs will be the sum of BCR and HLA from then on.

3. Promoting effective resolution regime

Developing TLAC requirements. It was iterated in *Progress and Next Step Towards Ending "Too-Big-To-Fail" (TBTF)* by the FSB in 2013 that G-SIBs should hold sufficient loss absorbing capacity under orderly resolution to minimize the influence to financial stability. To accomplish this objective, the FSB published the TLAC consultative document on November 11, 2014 and conducted a series of quantitative impact studies as well as market researches together with BCBS and BIS. TLAC requirements were finally published on November 9, 2015.

BOX 19 Total Loss Absorbing Capacity Requirements for G-SIBs were Published

The FSB published TLAC requirements for G-SIBs on November 9, 2015 to ensure that G-SIBs hold sufficient capital and qualified debt instruments to absorb losses and to mitigate risks during both going-concern and gone-concern periods. This could keep the continuity of banks' critical functions without exposing public funds at risk, therefore helping to safeguard financial stability.

The TLAC framework mainly consists of four aspects. First, a globally unique minimum TLAC is developed and implemented by two phases. All G-SIBs, with the exception of those headquartered in EME, shall comply with the TLAC standard of at least 16% of RWA and 6% of the Basel Ⅲ leverage ratio denominator from January 1, 2019, and then comply with the standard of at least 18% of RWA and 6.75% of the Basel Ⅲ leverage ratio denominator from January 1, 2022. The total capital requirement will account for 19.5-21 percent of RWA at the beginning of 2019 and 21.5-23 percent of RWA at the beginning of 2022, including the existing requirements on capital conservation buffer of 2.5 percent and a 1-2.5 percent G-SIB surcharge. Second, TLAC-eligible instruments consist of capital and debt instruments where debt instruments should have a minimum remaining contractual maturity of at least 1 year, could be written down or converted into equity, and should be subordinated to general liabilities. Instruments such as deposits and tax liabilities that are prior to be repaid during banking insolvency liquidation must not be recognized as TLAC-eligible instruments. It is suggested that qualified debt instruments should account for at least one third of total TLAC-eligible instruments. Third, deposit insurance funds which are funded by banks and committed ex ante to be freely available during G-SIBs' recapitalization could be recognized as TLAC-eligible instruments subject to some limits on scale. Forth, in order to reduce risk contagion among the banking system, G-SIBs must deduct TLAC-eligible instruments issued by other G-SIBs from their own regulatory capital.

Given the difference between EME and advanced economies in their G-SIBs' capital structure, funding sources, degree of globalization, and the depth of bond markets, EME could postpone the implementation of TLAC requirements. First, G-SIBs headquartered in EME shall comply with TLAC requirements by January 1, 2025 for the 16 percent of RWA and 6 percent of the Basel III leverage ratio denominator, and by January 1, 2028 for the 18 percent of RWA and 6.75 percent of the Basel III leverage ratio denominator. Second, the conformance period will accelerate to 3 years from the threshold is triggered if, by the end of 2020, the aggregate amount of the EME's corporate debt securities (excluding issuance by policy banks) exceeds 55 percent of the EME's GDP. Third, the threshold will be subject to review by the FSB in 2019.

Promoting the effective resolution regime for G-SIBs. CMGs of G-SIBs continued to improve their recovery and resolution plans (RRPs) and made significant progress in the adoption of cross-border cooperation agreements (COAGs). Thirteen such agreements have now been signed where detailed rules were developed on the cross-border coordination between home and host jurisdictions in an actual crisis about information sharing and procedure of carrying out resolvability assessment process (RAP). Meanwhile, 28 out of the 29 G-SIBs (based on the 2013 list) have completed their first RAP. The RAP identified a number of impediments to the resolvability of G-SIBs, including insufficient funding and liquidity arrangements in resolution, significant complexity and interconnection of institutions, obstacles to continued access to FMIs such as payment, settlement and clearing systems and inadequate cross-border effectiveness of resolution actions, etc.

Promoting the effective resolution regime for G-SIIs. Most G-SIIs have established their CMGs and developed RRPs. However, further work is necessary to develop operational resolution strategies for RRPs. To support this process, the FSB, with the participation of IAIS, released the consultative guidance on *Developing Effective Resolution Strategies and Plans for Systemically Important Insurers* in November 2015. The guidance complements the Insurance Annex to the *Key Attributes for Effective Resolution Regimes for Financial Institutions* ("*Key Attributes*" for short) which was published in October 2014, and involves resolution powers and the analytical bases of resolution strategies for the insurance sector. The guidance clarifies how *Key Attributes* should be interpreted for insurers.

Promoting the cross-border effectiveness

of resolution actions. The FSB issued the *Principles for Cross-border Effectiveness of Resolution Actions* in November 2015. The document sets out elements of both statutory frameworks and contractual approaches to cross-border recognition. Besides, ISDA developed a protocol for OTC derivatives contracts to support a temporary stay on early termination rights. The ISDA is now considering to extend the protocol from OTC derivatives to securities financing transactions. All of the G-SIBs should be expected to adhere to the extended ISDA protocol by end 2016 at latest.

Promoting the implementation of Key Attributes. The FSB has kept on monitoring the implementation of reforms on resolution regimes and conducted the second thematic peer review of resolution regimes. The preliminary findings from the review indicate that, a subset of the FSB jurisdictions, mostly G-SIB home jurisdictions, have a resolution regime that are broadly in line with the *Key Attributes;* the powers that are most commonly lacking are to write down or convert liabilities and to impose a temporary stay on early termination rights. Resolution regimes in the large majority of FSB jurisdictions apply broadly across all types of banks, but the application of resolution powers to bank holding companies, foreign branches and unregulated entities in financial groups remains limited. Moreover, the FSB, with the involvement of CPMI, IADI, IAIS and IOSCO, has been working on the development of an assessment methodology for the Key Attributes, which will be completed by end 2016.

4. Strengthening supervision on shadow banking

Continuously Monitoring. In November 2015, the FSB published *Global Shadow Banking Monitoring Report 2015* based on the end-2014 data, covering 26 jurisdictions including Ireland for the first time and the euro area as a whole, which together account for about 81 percent of global GDP and 89 percent of global financial system assets. This report made an enhancement to the monitoring methodology. First, a new activity-based "economic function" measure of shadow banking has been introduced, based on which shadow banking entities are categorized into 5 types to better identify financial risks resulted from different shadow banking activities. Second, a comprehensive approach has been introduced to monitor non-bank financial innovation, where pension funds and insurance companies are included in the broad measure of Monitoring Universe of Non-bank Financial Intermediation (MUNFI[①]). Based on this broad

① The FSB's MUNFI is the newly introduced broad measure by the *Global Shadow Banking Monitoring Report 2015*, which is broader than the measure of other financial intermediaries (OFIs) in 2014 and includes financial institutions other than banks, public financial institutions, central banks and financial affiliates, i.e. the OFIs plus pension funds and insurance companies.

measure, the global shadow banking grew by 9 percent to USD 137 trillion by the end of 2014, accounting for about 128 percent of GDP and 40 percent of total financial system assets in participating jurisdictions. Among this total, OFIs registered USD 80 trillion. Based on the narrow measure, global shadow banking amounted to USD 36 trillion in 2014 for the 26 participating jurisdictions. This was equivalent to 59 percent of GDP and 12 percent of financial system assets of participating jurisdictions. More than 80 percent of global shadow banking assets resided in a subset of advanced economies in North America, Asia and Europe, among which the US had the largest shadow banking sector, accounting for 40 percent of global scale, followed by the UK of 11 percent.

Strengthening Supervision. The FSB, together with SSBs, has been contributing to the development and implementation of shadow banking regulatory policies from five aspects. First, to mitigate risks in banks' interactions with shadow banking entities. Efforts were continued to discuss the scope of consolidation for banks in order to put both on- and off-balance sheet activities into the regulatory perimeter. Meanwhile, risk-sensitive capital requirements for banks' investment in the equity of funds and the supervisory framework for limiting banks' large exposures to single counterparties were developed. Second, to put forward MMFs reforms. The implementation of the agreed reforms related to MMFs has been ongoing for member jurisdictions in eight areas, namely the scope of the regulatory reform, limitations to the types of assets taken by MMFs, valuation practices of MMFs, liquidity management for MMFs, MMFs that offer a stable NAV, use of ratings by the MMF industry, disclosure to investors, and MMF practices in relation to repos. Third, to improve the incentives in securitisation. The BCBS and IOSCO published *Criteria for Identifying Simple, Transparent and Comparable Securitisations* in June 2015 to assist in the development of simple and transparent securitisation structures. Forth, to dampen procyclicality and other financial stability risks in securities financing transactions. In November 2015, the FSB published a revised regulatory framework for haircuts on non-centrally cleared securities financing transactions, which extended the former scope of numerical haircut floors for bank-to-non-bank transactions to also cover transactions between non-banks and postponed the implementation date to the end of 2018. Fifth, to conduct the thematic peer review on other shadow banking entities and activities so as to monitor the relevant implementation of policy frameworks in member jurisdictions.

5. Promoting reforms of OTC derivatives markets

Progress continued to be made in reforming global OTC derivatives markets in 2015. In terms of the implementation of international standards, almost all jurisdictions had in force the trade reporting and higher capital requirements for non-centrally cleared derivatives, covering over 90 percent of transactions in their markets. Frameworks of central clearing were in place for 12 member jurisdictions, and frameworks of exchange or electronic platform trading were in place for 8 member jurisdictions. However, most member jurisdictions were still at the early stage of implementation of the margin requirements for non-centrally cleared OTC derivatives. In terms of cross-border coordination, given the unevenness in the pace of implementation of reforms, as well as inconsistencies or gaps in the application of regulatory requirements, IOSCO published in September 2015 a report on cross-border regulation to guide authorities on how they might enhance cross-border coordination.

6. Strengthening reforms of central counterparties

IOSCO, CPMI and FSB have been working on enhancing the resilience, recovery planning and resolvability of CCPs. In terms of enhancing resilience, work has been carried out on assessing the necessity of stress tests for CCPs and the design of a consistent and comparable framework of stress tests. In terms of improving recovery planning, a stocktaking work is underway on the different existing recovery mechanisms as well as loss allocation tools, and the need for a more granular guidance for CCP recovery planning is under consideration to mitigate the spillover effects to other part of the financial system when CCPs enter the recovery process. In terms of promoting resolvability, work is in process on a stocktaking of different resolution regimes, research of the need for a more granular guidance for CCP resolution strategies, resolution tools and cross-border recognition of resolution actions, as well as the assessment on the need for additional prefunded financial resources and liquidity arrangements. Besides, BCBS, CPMI, FSB and IOSCO are jointly analyzing the interdependencies between CCPs and major clearing members as well as any resulting systemic implications.

7. Reducing misconduct risk

Recently more misconduct risk emerged in financial institutions that may create systemic risks and undermine trust in financial institutions and markets. The FSB made kinds of efforts in 2015 to mitigate risks associated with misconduct. First, compensation, risk management and risk culture reforms were put forward to reduce misconduct risk in the perspective of incentives. Second, as a response to the recent scandals in the fixed income, currency and commodities (FICC) markets, UK and EU issued documents to regulate market behaviors and kept on improving the calculating approach of FX benchmarks. The administrators of the most widely used interest rate benchmarks — EURIBOR, LIBOR and TIBOR — all took steps in assessing the definition and identification of benchmarks as well as in making benchmarks more based on real transactions by enhancing information collection. Third, the IOSCO *Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMoU)* ensures stronger multilateral enforcement and coordination in behavior regulation. There are currently 105 signatories to the MMoU.

8. Others

Besides the reform areas above, significant progress was also made in other areas in 2015. First, the BIS international data hub was created to collect and share data of G-SIBs and the work to close data gaps has been largely completed. Second, almost all jurisdictions reported that they had put in place requirements for the registration and oversight of CRAs. However, more work is needed to reduce reliance on CRA ratings. Third, the international and US accounting standard setting bodies are proceeding with separate standards on expected loan loss provisioning, and the FSB has been calling for the two parties making efforts towards accounting convergence. Forth, the global LEI system is well functioning. By the end of 2015, 26 jurisdictions had been authorized to issue LEIs and over 410,000 entities had received their LEIs.

BOX 20 IMF Published *Staff Guidance Note on Macroprudential Policy*

At the end of 2014, IMF published Staff Guidance Note on Macroprudential Policy, to clarify the operational considerations of macroprudential policy, introduce a set of policy tools and monitoring indicators, and propose principles of establishing macroprudential policy frameworks.

Operations of macroprudential policy. It is suggested that macroprudential policy should start with a comprehensive analysis of vulnerabilities in both time and structural dimensions and then map the sources of vulnerabilities into macroprudential policy making. The guidance develops a set of monitoring indicators for different vulnerability sources to identify the timing of tightening or relaxing policy tools (Table 8.3). Market information, supervisory assessment and stress tests could help to make judgment. Furthermore, the guidance proposes that in order to promote the efficient use of macroprudential policy tools, the selection, sequencing and multistep implementation of multiple tools should achieve a good balance between benefits and enforcement costs depending on the nature and extent of risks, and the effectiveness and potential costs of tools. In addition, public communication should be enhanced to promote the understanding of the public in the necessity of macroprudential policies.

Macroprudential policy tools and their functioning mechanism. The guidance proposes four classes of tools including broad-base, household, corporate and liquidity. Broad-based, household and corporate tools focus on strengthening the resilience of the banking system and mitigating vulnerabilities from excessive credits during booming periods by means of increasing capital requirements, putting limits on the scale of loans and raising the requirement for debtors' insolvency (Table 8.3). Liquidity tools focus on keeping the banking system from liquidity shocks in fund markets by means of holding enough liquid assets and introducing limits on funding illiquid assets by banks' noncore liabilities. Supervisory authorities should relax policy tools when systemic risk dissipates or financial conditions tighten, to arrest the development of adverse feedback loops and maintain financial balance. However, the relaxation should be well considered in accordance with the prudential regulatory bottom line to ensure an appropriate degree of resilience against future shocks.

Table 8.3 Macroprudential Policy Tools and Monitoring Indicators

Categories of Tools	Tools	Monitoring Indicators	
		Tightening	Relaxing
Broad-based tools	Countercyclical capital buffer (CCB); Leverage ratio; Dynamic loan loss provisioning requirement（DPR）; Caps on credit growth.	Credit/GDP gap	High frequency indicators under balance sheet stress, such as increases in bank CDS spreads; Increases in lending rates/spreads; Slowing credit growth; Increasing default rates and NPLs; Indication of worsening credit supply from credit surveys.
Household tools	Increases in sectoral capital requirements; LTV; DSTI.	Household loan growth rate; Rising house prices（nominal and real growth）; House price-to-rent and house price-to-disposable income ratios; Increasing share of household loans to total credit.	Decreasing house prices; Decreasing real estate transactions; Increasing spreads on household loans; Decreasing prices of mortgage- backed securities; Slowing net household loan growth; Slowing growth of new household loans; Increasing household NPLs.

(Continue table)

Categories of Tools	Tools	Monitoring Indicators	
		Tightening	Relaxing
Corporate tools	Risk weights of corporate exposures; Caps on credit growth; Limits to loan concentration.	Corporate loan growth rate;• Increasing share of corporate loans to total credit; Increasing commercial property prices; Increasing commercial real estate credit; Increasing share of FX loans.	High frequency indicators, e.g. corporate CDS spreads, bond yields; Increases in lending rates/spreads; Slowing corporate loan growth; Increasing corporate default rates/ NPLs; Indication of worsening credit supply from lending surveys.
Liquidity tools	Liquidity buffer requirements; Stable funding requirements; Liquidity charges; Reserve requirements; Constraints on open FX positions; Constraints on FX funding; The policy toolkit for non-banks.	Increasing LTD ratio; Increasing share of noncore funding to total liabilities.	Increasing spread between interbank rates and swap rates; Increasing funding costs in the wholesale market; Increasing recourse to central bank liquidity windows; Swap rates of local currency against foreign currencies; Reversal of gross capital inflows.

Resource：IMF

Key principles for establishing macroprudential policy frameworks. It is suggested in the report that several key principles should be introduced to establish effective macroprudential policy frameworks and make the crisis less frequent and severe. First, *willingness to act*. In order to assure willingness to act, a clear legitimacy could underpin the objective of macroprudential policies, establish an accountability framework of multiple communication tools, set up a dedicated financial stability unit, analyze systemic risks, develop and monitor core indicators fitting for domestic situations, provide recommendations to macroprudential policy making bodies and clarify the leading role of the central banks in macroprudential policy making. Second, *ability to act*. Macroprudential policy making bodies should have the power of access to information, adjustment of regulatory policies and identification of SIFIs. Third, *cooperation in risk analysis* *and mitigation*. Overlapping membership between monetary and macroprudential policy making bodies could enhance the cooperation between monetary and macroprudential policies. A dedicated arrangement should be established during crisis to foster the coordination of mandates between macroprudential regulation and crisis management.

Other considerations of macroprudential policy making. First, the accessibility of data and supervisory capacity are the preconditions for the effective use of macroprudential policy tools. Second, given the impact of debt level, despite a slow growth of credit, macroprudential policy actions may be needed based on the analysis of credit/GDP. Third, the economic structures should be considered. Some low income countries with low economic diversification, whose economic and financial systems are more sensitive to external shocks from volatility of commodity prices, may maintain permanent capital buffer standards higher than the global standard floor. Forth, capital account liberalization will amplify domestic financial system's exposures to the global financial system and reduce the independence of monetary policies, which more necessarily calls on macroprudential policies. Fifth, multi-dimensioned and structured macroprudential policy tools should be introduced when the financial system is highly interconnected and of huge scale.

II. Major jurisdictions' progress in Macroprudential Policies

1. United States

Continuing to conduct monitoring and assessment of systemic risks. The Financial Stability Oversight Council (FSOC), in charge of systemic risk identification and mitigation, published in May 2015 its annual report to assess the potential vulnerabilities to the financial stability of the US. First, cyber attacks may threaten safety of core financial data and systems as well as the normal functioning of systems. Second, the hike of interest rates may lead to long-term asset losses by banks, fire sales by leveraged investors and further decline of assets prices. Third, technology, supervision and competition factors are changing the structure of financial markets, and thus impacting market liquidity and market functioning and amplifying operational risks. Forth, regulatory rules for systemically important central counterparties and their risk management capacities need to be promoted.

Promoting regulatory standards for SIFIs. The Federal Reserve Board (FRB) approved the additional capital requirement for G-SIBs in July 2015, which would be implemented gradually from January 1, 2016 to January 1, 2019. Based on data of the fiscal year across 2014 and 2015, 8 G-SIBs in the US should apply to the additional capital requirement of 1-4.5 percent. The FRB issued prudential regulatory standards for General Electric Capital Corporation (GECC) in July 2015, which would be implemented in two phases. GECC is subject to regulatory standards similar with large bank holding companies on capital, leverage ratio, liquidity coverage ratio and reporting requirements by January 1, 2016; If it is still designated as a systemically important non-financial institution, GECC will be subject to regulatory requirements on liquidity risk management, aggregated risk management, capital planning, stress tests, related party transactions and corporate governance. The FRB issued the new regulation on TLAC for G-SIBs in October 2015, which stipulates that 8 G-SIBs headquartered in the US shall raise their TLAC, including some eligible debt instruments, to over 18 percent of RWAs by January 1, 2022. The FRB has been promoting the supervision over payment systems of large financial institutions since August 2015 by means of examining the equipment of instruments and human resources and a better monitoring of their capital flows.

Strengthening regulatory enforcement and promoting financial market transparency. The SEC issued a new regulation in April 2015 according to which all high frequency trading companies shall register with the Financial Industry Regulatory Authority (FINRA) and provide FINRA with their order tracking system reports so as to ensure the safety of electronic transactions. The SEC issued a consultative document in September 2015 of *Liquidity Management Rules for Mutual Funds and ETFs* which developed a three-day liquid asset minimum requirement for funds, and enhanced the board's responsibility for the management, review and examination of liquidity risks. The SEC asked Dark Pools in November 2015 to meet other disclosure requirements such as Alternative Trading system-N (ATS-N) reporting, etc.

Properly constraining the power of emergency lending. In November 2015, the FRB issued a final rule specifying its use of emergency lending which introduced some limits to its lending power. Emergency lending would be limited to programs approved by the Secretary of the Treasury with "broad-based eligibility" and at lest five eligible entities to participate. The maturity of emergency lending program is one year. Emergency lending has been prohibited to borrowers that fail to pay undisputed debts for 90 days or intend to transfer lending to insolvent firms. If mendacious?information provided, the FRB will introduce a penalty rate and require full repayment in advance.

2. United Kingdom

Furthering the financial regulatory system reform. In 2015, UK authorities reviewed the post-crisis financial regulatory system comprehensively and issued *Bank of England Bill: technical consultation* in July 2015 to further the financial regulatory system reform and adjust financial regulatory institutional arrangement. First, the Prudential Regulation Authority (PRA) was integrated into Bank of England (BoE), and Prudential Regulation Committee was newly established as one of the inner committees of BoE together with Monetary Policy Committee (MPC) and Financial Policy Committee (FPC). This arrangement could further clarify the relationship between PRA and BoE and promote the coordination among monetary policies, macroprudential policies and microprudential policies. Second, management of the central bank was improved through reducing the scale and enhancing the responsibility of board of BoE, which could reduce the administrative costs. The transparency and accountability of BoE's policy-making procedure was enhanced and BoE was first included in the auditing perimeter of National Audit Office (NAO). Third, information sharing between BoE and HM Treasury was enhanced, and crisis management and resolution mechanism were improved so as to prevent public funds from losses and address moral hazard.

Specifying macroprudential policies. In 2015, FPC continued to execute its macroprudential mandate. First, FPC published the policy statement on additional capital requirements to clarify the countercyclical capital requirement for all banks, building societies and large investment firms, and different sector-based capital requirements for residential real estate, commercial real estate and other financial industries, which could raise capital requirements to specific sector exposures more targetedly. FPC sets the countercyclical capital requirement rate to zero at present. Second, FPC published the policy statement on leverage tools to develop three kinds of leverage ratio requirements, including the minimum leverage ratio requirement and countercyclical leverage ratio buffer requirement for all banks, building societies and investment firms regulated by PRA, and additional leverage ratio buffer requirement for G-SIBs and D-SIBs in UK, building societies and investment firms regulated by PRA. The leverage ratio requirement, risk-weighted capital requirement and stress tests all together form the capital regulation framework of UK banking system. Third, FPC issued the policy statement on LTV and DTI. FPC directed PRA and Financial Conduct Authority (FCA) to constrain the issuance of high LTV and DTI mortgage loans by financial institutions.

Conducting stress tests. BoE conducted stress tests to the banking system in March 2015 with the scope of 7 large banks and building societies accounting for 70 percent of total loans. The test result indicated that based on the end-2014 data, Barclays, HSBC, Lloyds Banking Group, Nationwide Building Society and Santander UK did not reveal evident capital inadequacies under the stress scenarios. The Tier 1 capital adequacy ratios of Royal Bank of Scotland and Standard Chartered were 6.1 percent and 5.4 percent respectively under the stress scenarios, below their capital adequacy requirements. But considering measures recently taken by the two banks to strengthen their capital and plans to issue additional tier 1 capital in the future, PRA decided, though temporarily, not to require them to submit plans of capital supplement. In order to further improve the stress test framework, based on the stress test practices in 2014 and 2015, the *BoE*'s *Approach to Stress Test the UK Banking System* was issued in October 2015, which prescribed that Concurrent Stress Test should be conducted annually and the stress scenarios include cyclical and exploratory ones.

3. European Union

Pushing forward the making and implementation of policies. The European Systemic Risk Board (ESRB) enhanced the monitoring and assessment of sovereign debt risks of EU members, continued to direct EU regulatory authorities to execute macroprudential policies and tools, pushed forward the implementation of EU financial regulation resilience standards, and addressed and mitigated systemic financial risks. First, ESRB issued the *Report on the Regulatory Treatment of Sovereign Exposure* to comprehensively discuss the impact of financial institutions' excessive exposures to sovereign risks and propose requirements on capital, risk concentration, liquidity and disclosure. Second, ESRB developed the stress scenarios and directed European Banking Authority (EBA) and European Insurance and Occupational Pensions Authority (EIOPA) to conduct stress tests to European banking and insurance sectors. This could improve the valuation of the banking sector and push forward the implementation of the second generation of solvency standards. Third, ESRB accelerated the implementation of macroprudential policy tools. ESRB instructed member jurisdictions to implement countercyclical capital buffer and capital conservation buffer requirements, raise risk weights as well as introduce constraint indicators such as LTV, LTI and DSTI to mitigate the risks of real estate market, excessively rapid credit growth and high leverage of banks. Meanwhile, ESRB paid close attention to the cross-border spillover effects of members' macroprudential policies and fostered regulatory recognition and policy coordination.

Publishing guidance on assessment of other systemically important institutions (O-SIIs). EBA developed and published the guidance on assessment of O-SIIs. The assessment methodology consists of 10 indicators of 4 categories, namely size, importance, complexity and interconnectedness. Member regulatory authorities could assess the importance of relevant financial institutions in two steps. First, financial institutions with the scores over 350, which could be adjusted by regulatory authorities, should be directly designated as O-SIIs; Second, regulatory authorities could designate financial institutions with scores below the threshold as O-SIIs based on other indicators that could reflect their systemic importance. According to this methodology, ACPR directly designated 5 credit institutions, namely BNP Paribas, Group Crédit Agricole, Société Générale, Groupe BPCE and Group Credit Mutuel, as O-SIIs, and designated La Banque Postale as an O-SII based on regulatory judgment. Belgium directly designated BNP Paribas Fortis, KBC Group NV, Belfius Bank, ING

Belgium, Euroclear Bank, Axa Bank Europe and the Bank of New York Mellon SA/NV as O-SIIs, and designated Argenta Spaarbank, which accounts for a market share of 9% of retail deposits, as an O-SII based on regulatory judgment.

Establishing a single deposit insurance mechanism in EU. Since ECB began to supervise large commercial banks with systemic importance and the Single Resolution Mechanism began to function on January 1, 2016, the single deposit insurance is the only gap of the three pillars of European Banking Union. In November 2015, EC suggested a "three-step" proposal to gradually establish by the end of 2023 a single deposit insurance fund of EUR 43 billion covering 0.8 percent of total EU insured deposits. From 2024 on, the single deposit insurance fund will provide insurance to EU depositors. The establishment of the single deposit insurance mechanism will be the significant landmark of the finalization of EU Banking Union.

4. Germany

Enhancing macroprudential regulation. First, the Capital Requirements Directive IV (CRD IV) was incorporated into Germany's banking laws and solvency regulatory rules. Meanwhile, the Financial Stability Committee (FSC) suggested the federal government to include mortgage loans into the macroprudential regulation scope and introduce four new macroprudential tools (LTV ceiling, DSTI ceiling, DTI ceiling and limit of loan amortization) in June 2015. Second, Deutsche Bundesbank announced the technical framework of countercyclical capital buffer in November 2015 and German Federal Financial Supervisory Authority (Bafin) was mandated as the execution authority. Since January 1, 2016, Bafin would set quarterly domestic countercyclical capital ratio as well as the compliance period, and decide whether to recognize foreign countercyclical capital ratio requirements if necessary. Given that monitoring indicators did not indicate an excessive credit supply, Bafin set the first countercyclical capital buffer to zero which went into force on January 1, 2016. Third, Financial Market Stabilization Agency (FMSA) continued to provide assistance to financial institutions through the Special Financial Market Stabilization Fund (SoFFin). By the end of 2015, SoFFin committed a credit line of EUR 480 billion in total, among which EUR 80 billion was committed to recapitalization of financial institutions and EUR 15.8 billion was actually used.

Addressing too-big-to-fail. First, the FSB's capital buffer requirement for G-SIBs was incorporated in German laws, and Deutsche Bank shall implement a capital buffer reqirement of 2 percent since 1 January, 2016. At the same time, Deutsche Bundesbank and Bafin jointly developed the designation methodology of domestic systemically important financial institutions to be used in designation of domestic or European Economic Area (EEA) SIFIs since 2016, and designated institutions should be subject to a capital buffer of 2 percent. Second, relevant requirements of the *Bank Recovery and Resolution Directive*

(BRRD) were incorporated into German Recovery and Resolution Law; requirements on resolution regime from SRM were incorporated into the Recovery and Resolution Law; new clauses were added to the Banking Bill to adjust the subordination of part of debts.

III. China's Practice in Macroprudential regulation

1. Constantly improving the Joint Ministerial Conference on Financial Regulatory Coordination Mechanism

The Joint Ministerial Conference on Financial Regulatory Coordination (Joint Conference in short) conducted further analyses on key, emerging and potential issues of the financial sector. Meanwhile, Joint Conference focused on promoting the coordination of regulatory policies and their implementation. By the end of 2015, 11 meetings were held and over 50 issues were discussed in total, among which 3 meetings were held and 13 issues were discussed in 2015.

First, the Joint Conference promoted the coordination between macro-control and financial supervision and ensured that finance serves the real economy. The Joint Conference proposed a series of policies to ensure that the financial sector could better implement the principle of "maintaining flexibility in micro policies" and further expand the credit supply to real economy. The Joint Conference studied the establishment of the green finance system and its accelerating development, and regulated the development of new types of rural cooperative finance. Second, the Joint Conference analyzed the reform and improvement of financial regulatory mechanism to better adjust to the evolution of modern financial markets. It pushed forward the reform and improvement of financial regulation mechanism, and explored the improvement of the regulatory mechanism for the bond market and the enhancement of its management and market infrastructure. It also regulated the issuance procedure of key policies in the capital market by promoting the transparent policy making procedure and timely disclosure and responses, and further pushed forward the coordination of the financial comprehensive statistics. Third, the Joint Conference clarified the principles for the regulation of cross-market and cross-sector financial innovations to promote the normative development of emerging financial activities. Measures were taken to promote the implementation of *Guidance on Promoting the Health Development of Internet Finance* and analyze the overall planning of categorized regulation for internet finance and supporting measures. The Joint Conference also examined the legal nature of collective investment scheme and promoted the improvement of its regulation, and further accelerated the development of securitization with some large state-owned commercial banks exploring NPL securitization. Fourth, the Joint Conference strengthened mitigation of key financial risks to allow no systemic and regional risks to happen. It conducted researches on the standard use of HOMS and sorted out illegal securities business using information technology; it studied on the policy recommendations to mitigate the risk of rising NPLs in the banking sector and establish a market-based and normalized resolution mechanism for NPLs; it also improved the arrangement for issuance of new shares in order to bate the shocks to money market from the concentrated issuance of new shares.

2. Updating the dynamic adjustment mechanism on differentiated reserve ratio to the Macroprudential Assessment (MPA) System

Since its introduction in 2011, the dynamic adjustment mechanism on differentiated reserve ratio has been playing an important role in strengthening macroprudential regulation, stabilizing the growth of aggregate money and credit and maintaining financial stability. In order to further improve the macroprudential policy framework, better address systemic risks and promote the fully functioning of countercyclical adjustment in line with the trend of portfolio diversification, the PBC established the MPA system as the update to the dynamic adjustment mechanism on differentiated reserve ratio. The MPA system was announced in December 2015 and implemented since 2016.

The MPA system makes some improvement while maintaining the continuity and stability of the macroprudential policy framework. First, the MPA system considers more comprehensively and systemically the profile of capital, leverage, balance sheet, liquidity, pricing behavior, asset quality, external liabilities and the implementation of credit policies. It helps to enhance countercyclical adjustment and mitigate systemic financial risks through comprehensive assessment. Second, the capital adequacy ratio serves as the core of MPA. Capital is a key element for financial institutions to strengthen their loss absorbing capacity, and the principle that assets shall expand with capital constraints must be complied with as a succession to the former requirement on desirable lending. Third, the MPA system shifts the focus from narrow lending to broad credit, including bond investments, equity and other investments and assets hold for trading. This helps to guide financial institutions to reduce their practice of asset transfer to elude regulation. Fourth, the MPA system treats interest rate pricing behavior as an important consideration to improve the pricing capacity and risk management of financial institutions, regulate irrational pricing, avoid vicious competition and reduce the funding costs for enterprises. Fifth, the MPA system is more flexible by conducting ex ante assessment based on quarterly data and carrying out monitoring and guidance during and after business every month. Thus it operationally makes financial institutions and self-regulatory mechanism play more important roles in self-discipline.

3. Establishing the macroprudential policy framework for foreign exchange liquidity and cross-border capital flow

The PBC included foreign exchange liquidity and cross-border capital flow into the scope of macroprudential regulation in 2015 to further improve the macroprudential policy framework. First, countercyclical dynamic adjustment was made to foreign exchange liquidity by means of introducing the reserve requirement to forward foreign-exchange sales transactions and raising the commission charge of squaring off the positions of RMB for specific banks, etc. The implementation of these measures achieved a good effect on prohibiting short-term arbitrage, improving term structure of forward foreign-exchange sales, restraining the cross-border arbitrage on forward transactions and normalizing the scale of longing and shorting RMB. Second, based on the Shanghai Free Trade Zone mode, the PBC established a comprehensive macroprudential regulation framework for cross-border financing in both domestic and foreign currencies. Enterprises registered in four free trade zones in Shanghai, Guangdong, Tianjin, Fujian and other relevant regions and 27 banking institutions shall be subject to the comprehensive macroprudential regulation framework for cross-border financing in both domestic and foreign currencies, which links the debtor's credit line to its capital and solvency. The framework could contain the risks from leverage and currency mismatch by adjusting macroprudential parameters to suit the scale of cross-border financing to macroeconomic vitality, overall solvency and balance of payments. Third, deposits from foreign financial institutions to domestic financial institutions shall be subject to the normal reserve requirement ratio since January 25, 2016, which indicates the establishment of the long-term countercyclical adjustment mechanism for cross-border RMB fund flow. This could contain the procyclicality of cross-border RMB fund flow, guide foreign financial institutions to better mange the liquidity of RMB funds and promote their sound operation.

4. Strengthening monitoring and assessment of systemic risks

The PBC comprehensively enhanced the daily monitoring of banking sector, securities sector, insurance sector, financial holding companies and non-financial institutions with financing functions by means of carrying out financial institution on-site assessments and annual financial stability stress tests for commercial banks and securities companies. Efforts were continued to improve the risk monitoring mechanism of large problem enterprises, risky listed companies and kinds of local exchanges, so as to better study and anticipate the macroeconomic profile, regional financial risks and trends of specific industries. The PBC also conducted financial risk investigation to strengthen the monitoring and analysis in key areas such as banks' asset quality, over-capacity industries, payment upon maturity and surrender in the insurance sector and asset management sector, etc. It also assessed and summarized the outcomes of the financial integrated operation pilot.

Box 21 China Update Financial Sector Assessment Program was Formally Initiated

Financial Sector Assessment Program (FSAP) was developed jointly by the IMF and the World Bank in May 1999, with a view to enhancing the monitoring and assessment of financial vulnerabilities of IMF member jurisdictions, reducing the probability of financial crisis and pushing forward the financial reform and development. FSAP now has become a worldwide recognized assessment framework of financial stability with ongoing development and improvement.

To honour our commitment at the G20 Summit to reviewing the resilience of our financial system from an international perspective, China initiated the first FSAP conducted by the IMF and the World Bank in August 2009. The PBC, together with 11 authorities, established the FSAP Cross-agency Leading Group and Working Group and developed working principles and mechanism. After careful organization and hard working by both domestic and foreign parties for over two years, the assessment was accomplished successfully in November 2011 and plenty of achievements were made. In general, China FSAP, as the first comprehensive and systemic assessment of China's financial system conducted by international organizations, helped domestic regulatory authorities to take stock of current financial system and regulatory framework, and made many valuable recommendations on the reform and development of China's financial system. Most of the proposed recommendations, such like the market-base interest rate reform, enhancing coordination of financial regulation, and establishing countercyclical macroprudential policy framework, have been included into "the twelfth 5-year plan", which indicates that domestic and foreign parties have basically common views on advancing China's financial reforms and safeguarding financial stability.

In accordance with the requirement by the IMF and the World Bank, countries (regions) with systemically importance should conduct an update FSAP every five years. Upon the approval of the State Council, China update FSAP was initiated in October 2015, and the IMF and the World Bank formed a joint scoping mission to hold a kick-off meeting together with domestic authorities. During its stay in China, the review team fully shared views with relevant authorities on the development status of China's financial system, assessment scope and timetable. After several rounds of discussions, the two parties reached a consensus on the scope and timetable of the update FSAP.

In terms of the assessment scope, the two parties agreed that the assessment would: involve China's implementation status of *Basel Core Principles for Effective Banking Supervision, Objectives and Principles of Securities Regulation* and *Insurance Core Principles;* conduct stress tests for the banking sector; carry out thematic analysis and reviews on the structure and functioning of the financial system, legal framework, systemic risk management, financial safe net and crisis management, NPL management, financial inclusion/SME finance, shape of the future financial system to support economic rebalancing, financial market infrastructures, AML/CFT, policy financial institutions and bond market.

According to the agreed timetable, the assessment mission will come to China to conduct three on-site reviews in December 2016, February 2017 and May 2017 respectively. The assessment will be finalized in October 2017. At present, relevant authorities are undertaking work related to update FSAP based on the agreed plan.

5. Enhancing regulation on SIFIs

CMGs of BOC and ICBC have approved their annually renewed RRPs. BOC and ICBC completed the first round of RAP and submitted the results to the FSB. CMG of ABC has been established. The annually updated RRP of Ping An Insurance (Group) Company of China has been approved by its CMG.

Box 22 BOC and ICBC Completed the First Round of RAP

In order to implement the FSB requirement on G-SIFIs and promote the establishment of an effective resolution regime for China's G-SIFIs, the 5 CMG member authorities, namely the CBRC, PBC, Ministry of Finance, Hong Kong Monetary Authority and Monetary Authority of Macao, formed a joint assessment group in August 2015, to conduct the RAPs for ICBC and BOC. The RAPs comprehensively assessed the feasibility, reliability and systemic impact of the RRPs of ICBC and BOC in accordance with the requirement on RAPs in *the Key Attributes*. The RAPs involved nine aspects, namely bank's structure and performance, interconnectedness, FMI membership, information management system, adequacy of RRP, resolution regime and power, funding sources in resolution, cross-border resolution and the systemic impact of resolution.

After on-site assessment, communication with banks' management and discussion among CMG members, the RAP results indicate that: the recovery plans of the two banks generally meet the requirement of *the Key Attributes*; the legal framework has basically been established on resolution regime, power and funding resources; banks have clear institutional structures, interconnectedness among entities remains relatively low, and the fairness and complexity of internal transactions could generally satisfy the requirement of resolvability; resolution funding arrangement could support the resolution strategies; information management system could provide relevant information on both normal and extreme occasions; entry criteria of the accessibility to FMIs could be satisfied in stress scenarios; good environment has been formed on communication and information sharing for cross-border regulatory coordination, and CMG members would sign *the COAGs for G-SIBs Recovery and Resolution*. In general, no distinct obstacle to resolvability has been found in RAPs. The resolution plans of the two banks could keep the continuity of their key functions and ensure the effective resolution in time of crisis to mitigate the shocks to domestic and foreign financial markets and economies.

But there are still some room for future improvement according to the RAPs. First, the specific trigger mechanism for group resolution should be further discussed and the analysis and assessment of trigger conditions as well as crisis scenarios should be enhanced. Second, work should be further specified on the assessment of TLAC for parent companies, feasible bail-in measures and the transfering mechanism of rescue funds. Third, the capacity of information management system to aggregate data and report group risks for resolution decision-making should be further enhanced. Forth, more arrangements should be made on the transfer of FMI membership qualification and rights as well as service continuity. Fifth, the real willingness and effectiveness of cooperation between home and host regulatory authorities need to be examined.

Thus, China will take active actions to promote the resolvability of systemically important banks. First, improving existing legal framework, developing complementary regulations and specifying resolution arrangements for systemically important banks in accordance with *the Key Attributes*. Second, promoting the development of markets of debt instruments with loss absorbing capacity, such as bonds that could be written down and converted. Third, further clarifying the mandate and working procedure of different authorities, enriching the selected indicators of the trigger mechanism in resolution plans and promoting the feasibility of recovery and resolution plans. Forth, start to study the transfer of banks' FMI membership qualification and rights during the crisis. Fifth, giving impetus to the banks to improve functions of their information management systems, facilitate the establishment of deposit insurance information system and promote the timely aggregation of risk data. Sixth, revising and signing the COAGs and enhancing the cooperation with non-CMG host jurisdictions.

Special Topic Ⅰ

Accelerating the Market-based Interest Rate Reform

Market-based interest rate reform is one of the core reforms of China's financial sector. In accordance with the strategic plan of the CPC Central Committee and the State Council, the market-based interest rate in China has accelerated, the setting and transmission mechanism for market-based interest rates have improved, the central bank's capability of managing interest rates has been strengthened and the market has played a more decisive role in resource allocation. The removal of the upper limit on deposit rates in October 2015 marked the end of interest rate controls and represented a significant step in market-based interest rate reform, which is a milestone in the reform of China's financial sector.

I. Significant Progress has been made in Market-based Interest Rate Reform

Since 1996, controls over interest rates in the inter-bank lending market, bond repurchase and spot bond transactions have been lifted successively, and the market-based interest rates of both money and bond markets have been achieved. Since 2000, interest rates for domestic loans denominated in foreign currencies, large-value denomination deposits in foreign currencies and small amount deposits in foreign currencies with maturities over 1 year were liberalized in an orderly way. In October 2004, the upper limit of the interest rates for RMB loans was removed and the floor of the floating band was expanded to 0.9 times of the benchmark rate. Meanwhile, the floor of RMB deposit interest rate was also eliminated. In 2007, the Shanghai Interbank Offered Rate (Shibor) was launched and gradually became the benchmark rate for the money market. Based on the above-mentioned achievements, the market-based interest rate reform in China has made further progress since the 18th CPC National Congress in 2012.

1. Interest rate control was generally lifted

Controls over lending interest rates were gradually removed. On June 8 and July 6, 2012, while the benchmark lending and deposit interest rates were cut for two times, the floor of the floating band of interest rates for RMB loans of financial institutions was expanded from 0.9 times to 0.7 times of the benchmark rate. On July 20, 2013, the control on the lending interest rates of financial institutions was lifted completely by removing the floor for lending rates. After the full liberalization of lending rates, pricing of the asset side of Chinese financial institutions has became fully market-based, which has great significance for enhancing financial institutions' pricing capacity, reinforcing the decisive role of the market in resource allocation and promoting restructuring, transformation and upgrading of the economy.

Controls over deposit interest rates were generally released. On June 8, 2012, deposit interest rates of financial institutions were allowed to float upward and the upper limit of the floating band was expanded to 1.1 times of the benchmark rate. Moreover, the upper limit on RMB deposit interest rates was further adjusted to 1.2, 1.3 and 1.5 times of the benchmark rate on November 22, 2014, March 1 and May 11, 2015 successively. On August 26, 2015, the upper limit on the interest rate for time deposit beyond 1 year (excluding 1 year) was removed. On October 24 of 2015, the upper limit on deposit interest rates of commercial banks and rural cooperative financial institutions was scraped, indicating the end of RMB interest-rate controls.

In addition, controls over foreign-currency deposit interest rates were eased completely. On March 1, 2014, a pilot program to lift the cap on interest rates of small foreign-currency deposits was launched in the China (Shanghai) Pilot Free-Trade Zone, and on May 11, 2015, the ceiling was removed across the whole country.

2. A self-regulatory pricing mechanism for market interest rates was established and improved

The self-regulatory pricing mechanism for market interest rates was initiated on September 24, 2013. It has performed the important incentive and restraint function in financial institutions' self-regulatory management on interest rates for money market, credit market and other financial markets, promoting financial institutions to improve corporate governance, enhance hard financial constraints and strengthen pricing capability, facilitating the issuance and trading of inter-bank certificates of deposit CDs and CDs, as well as maintaining market order for fair competition and promoting the regulated and healthy development of the market. Since March 2015, the provincial self-regulatory pricing mechanisms for market interest rates have been established successively, which greatly promoted local small and medium-sized financial institutions to enhance their pricing capacity and the development of interest rate pricing mechanism.

3. Issuance and trading of inter-bank CDs and CDs proceeded steadily

In December 2013 and June 2015, the PBC released the *Provisioned Rules on the Management of Inter-bank Certificates of Deposit* and the *Provisioned Rules on the Management of Certificates of Deposit*, which initiated officially the issuance and trading of inter-bank CDs and CDs. Since then, the scope of issuers of inter-bank CDs and CDs gradually expanded, and the issuance and trading of inter-bank CDs and CDs became increasingly vigorous. By the end of 2015, the inter-bank market had issued 7,109 inter-bank CDs totaling RMB 6.24 trillion yuan with a trading volume at the secondary market of RMB 18.85 trillion yuan, and there had been 4,757 CDs issued totaling RMB 2.29 trillion yuan.

4. Benchmark interest rates of the financial market were nurtured

The Shibor regime was further improved by enhancing market discipline and oversight of the formation of Shibor quotes. In October 2012, the number of Shibor panel banks was expanded from 16 to 18, and the highest and lowest 4 quoting banks rather than 2 quoting banks would be eliminated in the calculation of Shibor, which makes the quoting banks more representative. On October 25, 2013, the loan prime rate (LPR) centralized quote and release mechanism was launched, and the average LPR started to be released, providing important references for financial institutions to price credit products. At the same time, the PBC actively participated in the development of the government bond yield curve by promoting the authorities of finance to issue 3-month treasury bills on a weekly and rolling basis since October 2015 so as to form a relatively complete government bond yield curve.

5. Interest rate adjustment system of the central bank was gradually optimized

In recent years, the PBC has taken various measures such as reform of the central bank lending and discount rate formation mechanism and the regime of interest rate on reserves, improvement of OMO regime and introduction of SLF and MLF, so as to improve the central bank's interest rate adjustment system, dredge the interest rate transmission channel and enhance the effectiveness of the central bank's guidance on and adjustment of market interest rates.

II. The Market-based Interest Rate Reform Has Great Significance

First, it's significant for the optimization of resource allocation. With the market-based interest rates, the role of interest rates as the price leverage will be enhanced, and financial resources will flow to promising industries and enterprises with real need of funding. This will help let market play a decisive role in resource allocation and enhance allocation efficiency. In particular, as the Chinese economy is in the crucial period while old industries are being replaced by new ones and economic driving forces are transforming, lift of controls over interest rates will give financial institutions greater autonomy in selecting industries and enterprises in accordance with market principles, which will contribute to maintaining economic growth, adjusting the economic structure, improving people's livelihood and promoting the healthy and sustainable growth of the economy.

Second, it gives new impetus to the transformation and development of financial institutions. With the removal of interest rate controls, the traditional "scale brings profits" business model under the circumstance of interest rate protection will no longer be sustainable. This will help financial institutions to form a new "profit focus" concept, accelerate the transformation of business models, improve pricing mechanism, enhance pricing capability and realize differentiated pricing, so as to satisfy the diversified financial demands, improve the quality of financial services and further enhance the sustainability of growth.

Third, it creates favorable conditions for the shift of the monetary policy framework. With the growing financial innovations in recent years, the relevance between monetary aggregates as an intermediate policy target and ultimate targets such as economic growth and stable prices has become weaker to some extent. The market-based interest rates truly reflect the supply-demand situation of the market and provide important reference to the central bank for interest rate adjustment. International experiences suggest that it is an inevitable choice to strengthen price management for enhancing efficiency of macro-economic control, and the removal of interest rate controls and a sound market-based interest rate formation and adjustment mechanism are prerequisites for the shift of the monetary policy framework.

Currently, the PBC has seized the opportunity of subdued price levels and downward trends in market interest rates to lift interest rate controls, which has achieved good results. Financial institutions are generally rational when setting interest rates and a pricing pattern featuring stratification, good order and differentiated competition has been in shape. At the same time, the improvement of the market-based interest rate formation andadjustment mechanism will also facilitate the decline of social financing costs and the creation of a favorable monetary and financial environment for the healthy and sustainable growth of the economy.

III. The Market-based Interest Rate Reform Remains an Arduous Task

After the removal of administrative controls over interest rates, the market-based interest rate reform of China has entered a new stage, of which the core task is to make full use of the three "defense lines", namely financial institutions, the self-regulatory mechanism and the central bank, so as to further improve the market-based interest rate formation and adjustment mechanism. On one hand, we should promote financial institutions to improve pricing capacity, determining their own interest rates based on market supply and demand, so as to improve the market-based interest rate formation mechanism. On the other hand, we should improve the interest rate adjustment regime of the central bank and optimize the interest rate transmission channel, so as to make the central bank's guidance and management of interest rates more effective. At the same time, it is important to exercise self-regulation and oversight of certain irrational pricing behaviors to guard against potential risks.

1. Urging financial institutions to improve pricing capacity

In terms of deposit rates, we should guide financial institutions to enhance their analysis and research capacity, ensuring the process of pricing is rational and scientific, and comprehensively considering multiple factors including macro-economic situation, orientation of monetary policy control, requirements of their own liquidity and balance sheet management as well as customer demands. In terms of lending rates, we should promote financial institutions to optimize IT systems and quantitative analysis techniques, focusing on the accumulation, mining and analysis of data of different regions, industries and customers, to improve internal credit risk rating models and to enhance the capacity of analyzing risk factors such as probability of default. At the same time, efforts should be made to urge financial institutions to optimize the internal transfer pricing mechanism and the pricing authorization system to lay a foundation for a market-based interest rate formation mechanism.

2. Improving the central bank's interest rate adjustment and transmission mechanism

First, a guiding system of the central bank on policy interest rates should be set up. The PBC will make greater use of short-term repo rates and SLF, gradually cultivate short-term policy rates and guide the formation of short-term market interest rates; direct and stabilize medium and long-term market rates by using tools such ascentral bank lending, MLF and PSL. Second, the development of the benchmark rates and the yield curve should be strengthened. The development of financial markets and the build-up of a benchmark rate system covering all markets should be stepped up. Third, the interest rate transmission channel should be straightened out. The transmission from central bank's policy rates to all types of market benchmark rates, and the transmission from money market to bond market and credit market, then to all other markets and even the real economy should be further optimized.

3. Strengthening supervision on irrational pricing behaviors

First, the interest rate statistical and monitoring system as well as the systemic risk early warning system should be improved, so as to identify potential risks in a timely manner. Second, the self-regulatory mechanism of interest rate pricing should play a bigger role in constraining financial institutions from illicit competition and in guiding interest rate pricing. Third, the oversight and management of market interest rates should be enhanced. The incentive and constraint mechanism for the interest rate pricing of financial institutions should be further perfected to make sure exceptional irrational pricing behaviors could be contained in the first place.

Special Topic II

The Development and Reform of the International Deposit Insurance System

As the fundamental institutional arrangement for protecting depositors, dealing with financial risks in a timely manner and safeguarding financial stability, the deposit insurance system constitutes one of the three pillars of the modern financial safety net, together with the central banks' lender-of-the-last-resort function and prudential regulation. Currently, there are more than 110 countries and regions around the world that have established the deposit insurance systems. For the 24 FSB member jurisdictions, the deposit insurance systems have been implemented in 23 jurisdictions. Since 2014, the BCBS and IADI have further improved *the Core Principles for Effective Deposit Insurance Systems*, requiring the deposit insurance systems playing a key role in the early identification and intervention of the problem banks and strengthening its resolution power and crisis management capacity. More countries have expanded and strengthened the deposit insurers' risk prevention and resolution mandates to enhance the financial safety net.

I. More global deposit insurance systems switching to the "risk-minimizer" model

According to the IADI criteria, there are 3 models of the deposit insurance system in terms of the mandate. The first type is the "pay-box" model, under which the deposit insurer is responsible for compensating depositors after the banks fail, such as Australia and UK before the 2008 global financial crisis. The second is the "loss-minimizer" model, under which the deposit insurer is mandated with various risk monitoring and resolution powers to deal with bank failures, so as to minimize the losses of the deposit insurance fund, such as Japan and Canada. The third is the "risk-minimizer" model, under which the deposit insurer is able to take prompt corrective and supplementary supervision actions against the troubled banks and adopt effective risk prevention and control measures to deal with the potential financial failures, in order to minimize its risk exposures, such as the United States, Korea and Taiwan Province of China.

With the historical evolution and tested by the financial crisis, the "pay-box" model has been demonstrated to be inefficient in maintaining financial stability for the reason that under such model the role of the deposit insurer is limited to compensating the depositors afterwards and can not cope with regulatory forbearance or contain the moral hazard, which would increase the resolution cost and is not effective in preventing and mitigating financial risks. Before the crisis, the deposit insurance system in UK was of the "pay-box" model, funded on the ex-post basis and lacking the reliable back-up funding arrangement. The run on the Northern Rock during the crisis was actually the run on the UK "pay-box" deposit insurance system. After the crisis, the UK policymakers summarized crisis lessons and reformed the deposit insurance system dramatically, expanding the deposit insurer's access to the information of insured financial institutions and its role in the resolution regime. In comparison, the deposit insurance system in the United States was relatively well-mandated. The Federal Deposit Insurance Corporation(FDIC) dealt with the failed banks with diversified market-based resolution methods, and enhanced the public and market's confidence in the financial system effectively and rapidly. Overall speaking, with more and more jurisdictions transiting to the "risk-minimizer" model, the global deposit insurance system models have converged obviously after the crisis.

Table 1 The Three Models of the Deposit Insurance System

Models	Major Responsibilites
"Pay-box"	Obtaining the information of insured banks; Examining the insured banks; Reimbursing depositors. Examples: UK (before the 2008 crisis) and Australia.
"Loss-Minimizer"	Obtaining the information of insured banks; Examining the insured banks; Being appointed as the liquidator or administrator for the failed banks, and utilizing different resolution strategies, such as purchase and assumption transactions, the bridge bank, open bank assistance and direct reimbursement. Examples: Japan and Canada.
"Risk-Minimizer"	Obtaining the information of insured banks; Examining the insured banks; Being appointed as the liquidator or administrator for the failed banks, and utilizing different resolution strategies, such as purchase and assumption transactions, the bridge bank, open bank assistance and direct reimbursement; Taking risk warning and prompt corrective measures, such as requiring the banks to replenish capital and restricting business growth. Examples: Untied States, Korea and Taiwan Province of China.

Sources; IADI website.

II. Implementing the risk-based premium system to better prevent and manage the risks

The risk-based premium system is the arrangement under which the insured financial institution's premium is determined based on its risk profile. Lower premiums will apply to less risky insured institutions and vice versa. Implementing the risk-based premium system can help to promote fair competition and market discipline, as well as make the deposit insurance system correctly incentivized. On the one hand, the fact that premiums are related to the insured institutions' risk profiles helps to require the financial institutions operating in a prudential manner and contain moral hazard. On the other hand, such arrangement is effective in avoiding the case of cross-subsidy, where the less risky banks subsidize the more risky banks when all the insured institutions are subject to the same premium rate, and in achieving the fairness of the premium system.

As can be seen from the international experience, the flat rate premium system is widely criticized for encouraging non-prudential operation by banks, causing the subsidy to risky banks by safe banks and leading to moral hazard. An example is the savings and loan crisis in 1980s in the United States, where the flat rate premium system is regarded as one of the factors contributing to the development of the crisis. Starting from the United States, more and more countries and regions have begun implementing the risk-based premium system. In *the Core Principles for Effective Deposit Insurance Systems* issued by the IADI, the risk-based premium system is a core feature of the effective deposit insurance system. The FSB also advises member jurisdictions to adopt this system. Currently, the risk-based premium system has been adopted in about 40 countries and regions, including the United States, Russia, Germany, Canada, Finland, France, Spain and Korea. Among the 23 FSB member jurisdictions who have established the deposit insurance systems, 12 have implemented the risk-based premium system. In recent years, the countries and regions with newly established deposit insurance systems, such as Singapore and Hong Kong SAR, directly implemented the risk-based premium system at the very beginning.

After 20 years' development, especially after the 2008 global financial crisis, the design of the risk-based premium system has become more complicated, under which the deposit insurer shall determine the premiums based on both quantative and qualitative methods. Drawn from the international practices, the effective risk-based premium system should be featured with independent risk rating mechanism to assess the risk profiles of insured financial institutions in an accurate and timely way, as well as combining the prompt corrective and resolution measures with the risk-based premium mechanism to better prevent and control the risks of insured institutions and to safeguard deposits and the deposit insurance funds.

III. Expanding the deposit insurers' role in taking prompt corrective actions to effectively identify and prevent financial risks

In 1980s, about 3000 banks and savings and loans failed in the United States during the large-scale savings and loan crisis and resulted in USD 924 billion losses. The research and inquiry of the US Congress after the crisis found out that the lack of authority to examine and intervene in the problem banks by the deposit insurers contributed to the huge crisis cost. It was therefore advised to establish the structured early intervention and resolution mechanism, which would allow the deposit insurers to take necessary resolution measures before the losses of the banks exceeded the capital. In response, in *the Federal Deposit*

Insurance Corporation Improvement Act enacted in 1991, the Prompt Corrective Action (PCA) authority was introduced to empower the FDIC to take various corrective measures when the capital level of insured banks could meet the regulatory requirements, including the FDIC being appointed the receiver of the problem banks, to limit the potential losses of the deposit insurance funds. It was illustrated that such arrangement helped to promote the overall efficiency of financial regulation, and lift the banking industry's capital level and overall strength to withstand the crisis. From 1991 to end-1993, the capital adequacy ratio of the banking industry in the United States rose from 6.75 percent to 8.01 percent. The crisis was almost resolved by the end of 1995.

In 2008, the failure of the Washington Mutual Bank (WAMU), the largest savings and loan association in the United States, revealed the issue of regulatory lapse by its primary regulator, Office of the Thrift Supervision (OTS). When the OTS detected significant risks in the assets and management of the WAMU, it retained WAMU's high supervisory ratings and even did not require the WAMU to take necessary measures to respond to the risks only because the institution's earnings had kept growing. The failure of the WAMU promoted the shaping of the new regulatory regime in the United States. As a result, *the Dodd-Frank Wall Street Reform and Consumer Protection Act* enacted in 2010 greatly expands the role of the FDIC in taking corrective measures against the systemically important financial institutions (SIFIs). In November 2014, the FDIC issued new criteria and triggers for its prompt corrective actions and capital adequacy assessment system, ensuring its timely and multi-dimensional intervention of problem banks, and further strengthening the role of the deposit insurance system in promoting market discipline and risk prevention. According to *the Core Principles for Effective Deposit Insurance Systems*, the early identification and intervention of the problem banks by the deposit insurers lay a solid basis for the effective operation of the deposit insurance systems. As the stakeholder with the largest interests in the failed banks, the deposit insurers have the internal incentive to restrict the risky behaviors of the financial institutions. Expanding the deposit insurers' mandate in taking prompt corrective actions will help to prevent and contain regulatory forbearance and promote the overall regulatory quality and efficiency.

IV. Strengthening the role of the deposit insurance system in the resolution regime and improving the market-oriented exit regime for financial institutions

As the manager of premiums submitted by insured financial institutions and the main body to absorb the resolution cost, the deposit insurers have the incentive and responsibility to achieve minimum resolution cost. To act as the liquidator or to take control of the problem banks would help the deposit insurers join in resolution process as early as possible, better prepare for the possible depositor compensation in bank failures and reduce the losses of the deposit insurance funds. According to the IADI, the effectiveness of the resolution regime for financial institutions is closely related to the operational efficiency of the deposit insurance system. As have been demonstrated by the global financial crisis, the combination of the deposit insurance system with the resolution regime has been effective in minimizing resolution cost, enhancing the public confidence and strengthening the financial industry's overall crisis management capacity.

During 2007-2015, about 520 insured financial institutions failed in the United States. The US deposit insurance system had played a critical role by handling bank failures of different size effectively and efficiently with various market-oriented resolution methods, so as to maintain the public's confidence in the banking system, prevent the risk contagion caused by large bank failures to the whole financial system, safeguard the stability of the banking system and protect the interests of taxpayers. When dealing with failed banks, the FDIC abided by the "minimum cost" principle and relied upon the resolution strategy of purchase and assumption transaction, under which the FDIC could provide the financial assistance, including loans and guarantees, to attract healthy financial institutions to purchase the assets and liabilities of failed banks. For larger banks, the FDIC utilized the bridge bank strategy, under which the FDIC temporarily run the banks before selling them to the market. For banks that were SIFIs, the FDIC adopted the open bank assistance strategy, using the deposit insurance funds to recapitalize the banks in form of preferred stocks and applying the loss-sharing arrangement. As can be seen from the global practices and reform trends, a number of countries and regions have taken measures to strengthen the market-based resolution regime for financial institutions after the crisis, switching from the resolution regime led by administrative orders to market-based system and attaching greater importance to the role of deposit insurance as the resolution platform. According to the IADI survey in 2013, the proportion of deposit insurers with resolution mandates had increased from 50 percent of 2005 to 65 percent of 2013.

Table 2 FDIC's Resolution Strategies in the 2008 Financial Crisis

Resolution Methods	Numbers	Proportion
Purchase and Assumption	491	94.4%
Bridge Bank	11	2.1%
Direct Reimbursement	16	3.1%
Open Bank Assistance*	2	0.4%
In total	520	

Note: The 2 banks that received open bank assistance of the FDIC were Citi Bank and Bank of America.

Source: FDIC website.

The experiences in the 2008 global financial crisis illustrated that the effective resolution regime for financial institutions should cover the whole financial sector. The resolution mandates of the deposit insurers have been expanded in many countries and regions after the crisis. In light of the critical role the FDIC played in crisis management, *the Dodd-Frank Wall Street Reform and Consumer Protection Act* was enacted in 2010 in the United States to further expand the FDIC's resolution authority to systemically important non-bank financial institutions. Such expansion enable the FDIC to exercise the orderly liquidation authority when the SIFIs fail and review the resolution plans (namely "the living will") of these SIFIs periodically together with the Federal Reserve, and thus make deposit insurance system a risk prevention and resolution arrangement for the whole financial sector. In 2013, the resolution mandate of Japan's deposit insurance system was expanded from the banking sector to securities firms, insurance firms and bank holding companies. Under the new resolution authority, the Deposit Insurance Corporation of Japan (DICJ) is able to exercise orderly resolution measures for insolvent financial institutions and orderly stabilization measures for solvent financial institutions, to ensure the orderly resolution of systemic risks of the financial market.

V. The Core Principles for Effective Deposit Insurance Systems has been listed as a core international financial standard

After the 2008 global financial crisis, the international community has stressed the need of designing and implementing an effective deposit insurance system. Countries without the deposit insurance system have accelerated the process of introducing the system, while those already with established systems further reviewed and improved the system. In June 2009, BCBS and IADI jointly released the *Core Principles for Effective Deposit Insurance Systems*, as the formal international standard for deposit insurance. In its London Summit of 2009, the G20 Leaders committed to implementing key international financial standards, covering a number of essential areas including deposit insurance. In October 2011, the FSB Plenary Meeting issued *Key Attributes of Effective Resolution Regimes for Financial Institutions*, clarifying resolution targets and various resolution powers, including the power to transfer the assets and liabilities of failed banks and establish the bridge banks, which helped to lay the solid basis for orderly risk resolution mechanism.

In November 2014, in light of the *Key Attributes of Effective Resolution Regimes for Financial Institutions* and the deposit insurance reforming tendency, BCBS and IADI further improved the *Core Principles for Effective Deposit Insurance Systems* to stress the important role the deposit insurance system in the market-oriented resolution and crisis management regime. **Firstly**, the deposit insurance fund shall be established on the ex-ante basis, mainly composed of premiums collected from insured institutions to strengthen market discipline. **Secondly**, the deposit insurer should obtain directly from banks, accurate and comprehensive information to fulfill its mandates, receive and share information within the safety net, and examine the insured banks to ensure them abiding by deposit insurance rules. **Thirdly**, the deposit insurer should be an essential part of a framework that provides for the early detection of, and timely intervention in, troubled banks with clear qualitative and quantitative criteria and triggers. **Fourthly**, an effective resolution and crisis management regime should enable the deposit insurer play a key role in depositor protection and resolution, which are not limited to depositor reimbursement but the further powers to replace and remove senior management, terminate contracts, transfer and sell assets and liabilities, write down or convert debt to equity and/or establish a temporary bridge institution to ensure continuous key functions of the banks, protect interests of depositors effectively, and maintain financial and social stability. **Fifthly**, the deposit insurance system should reimburse depositors promptly, by requiring insured banks keeping and updating depositors' records accurately for easy inquiry, as well as establishing and strengthening the IT services in support of prompt reimbursement.

Special Topic III

The Banking Sector Stress Tests

I. The Snapshot of the Stress Tests

At the end of 2015, the PBC organized 31 large- and medium-sized commercial banks, whose assets are above RMB 500 billion yuan at the end of the third quarter of 2015, to conduct Financial Stability Stress Tests of 2016. The tests were composed of credit risk stress test, market risk stress test and liquidity risk stress test. The tests, based on the end-2015 balance sheets data of 31 commercial banks, were to assess the resilience of the commercial banks when facing negative shocks.

Scope. The tests covered 31 banks including the large commercial banks (LCBs) and the medium commercial banks (MCBs), based on the classification standards for commercial banks in Regulation on Classification of Financial Institutions by Size. The LCBs participating in the tests are ICBC, ABC, BOC, CCB, BOCOM, PSBC and Industrial Bank, whose assets are above RMB 5 trillion yuan. The MCBs participating in the tests are China Merchants Bank, Shanghai Pudong Development Bank, China CITIC Bank, China Minsheng Banking Corporation, Everbright Bank, Huaxia Bank, Guangdong Development Bank, Pingan Bank, China Zheshang Bank, Bohai Bank, Evergrowing Bank, Bank of Beijing, Bank of Shanghai, Bank of Jiangsu, Bank of Ningbo, Bank of Nanjing, Bank of Tianjin, Shengjing Bank, Huishang Bank, Bank of Hangzhou, Chongqing rural commercial bank, Beijing rural commercial bank, Chengdu rural commercial bank and Shanghai rural commercial bank, whose assets are between RMB 500 billion yuan and RMB 5 trillion yuan.

Approach. The tests followed both a top-down approach and a bottom-up approach. In the top-down approach, the PBC collected data in given format from the 31 commercial banks and conducted tests. In the bottom-up approach, tests were carried out by banks themselves, and aimed to assess the risk profile of individual banks or various groups of commercial banks. The PBC was in charge of collecting and analyzing the bottom-up tests results.

Methodology. The credit risk stress test consisted of sensitivity stress test and scenario stress test. The sensitivity stress test directly assessed the impact of credit risk exposure deterioration in key areas; the scenario stress test focused on the changes of overall NPL ratio and CAR in banking system under the condition of macroeconomic downturn. The market risk stress test mainly estimated the changes of CAR of the commercial banks stemming from both fluctuations in interest rate and exchange rate. The liquidity risk stress test measured how the policy factors and macroeconomic factors affected liquidity ratio of the commercial banks.

Stress Scenarios[①]. In the scenario test of credit

① The stress scenarios were hypothetical and based on questionnaire feedbacks from external economic experts, and should not be interpreted as a representation of PBC's judgments on macroeconomic conditions.

risk, we chose GDP growth rate, M_2 growth rate, real estate price drop and CPI annual rise as the stress indicators to characterize the macroeconomic downturn scenario. In the sensitivity stress test of credit risk, we selected aggregate credit assets and NPL rate, default or losses in seven key areas as the stress indicators. In the stress test on interest rate risk of banking book, we selected the spread narrowing between deposit and loan interest rates as the stress indicators; in the stress test on the interest rate risk of trading book, we used the RMB-bond yields ratio as the stress indicator. The stress indicator of exchange rate risk stress test was RMB/USD exchange rate. The liquidity stress indicators were securities' prices, NPL ratio, ratio of inter-bank assets turning to non-performing assets, deposit scale and inter-bank deposit (borrowing) scale.

Table 1 Scenarios for the Financial Stability Stress Test

Types of Risk	Types of Test	Stress Target	Stress Scenarios
Credit Risk	Scenario Stress Test	Aggregate credit assets	➢ Mild: GDP growth rate down to 6.5% ➢ Medium: GDP growth rate down to 5.5% ➢ Severe: GDP growth rate down to 4% （M_2 growth rate, real estate price drop and annual CPI rise were developed based on experts' opinions）
	Sensitivity Stress Test	Aggregate credit assets	➢ Mild: NPL ratio[2] up 100% ➢ Medium: NPL ratio up 300% ➢ Severe: NPL ratio up 700%
		Loans to LGFPs	➢ Mild: NPL ratio up 5 percentage points ➢ Medium: NPL ratio up 10 percentage points ➢ Severe: NPL ratio up 15 percentage points
		Loans to 'high pollution, high energy consumption and overcapacity' industries	➢Mild: NPL ratio up 10 percentage points ➢Medium: NPL ratio up 15 percentage points ➢Severe: NPL ratio up 20 percentage points
		Real estate loans	➢Mild: NPL ratios of real estate development loans (including land reserve loans) and residential mortgage loans up 5 percentage points respectively ➢Medium: NPL ratios of real estate development loans (including land reserve loans) and residential mortgage loans up 10 and 7 percentage points respectively ➢Severe: NPL ratios of real estate development loans (including land reserve loans) and residential mortgage loans up 15 and10 percentage points respectively

① Assuming that the initial NPL ratio is X %, up n % means the NPL ratio becomes X %(1+n%).

② Assuming that the initial NPL ratio is X %, up n percentage points means the NPL ratio becomes (X+n)%.

(Sensitivity Stress Test)

Types of Risk	Types of Test	Stress Target	Stress Scenarios
Credit Risk	Sensitivity Stress Test	Loans to Yangtze river delta region	➢ Mild: NPL ratio up 100% ➢ Medium: NPL ratio up 300% ➢ Severe: NPL ratio up 700%
		Customer concentration	➢ Mild: the top 1 largest group(legal entity) customer default ➢ Medium: the top 2 largest groups(legal entities) customer default ➢ Severe: the top 3 largest groups(legal entities) customer default
		Exposures to off-balance sheet activities	➢ Mild: 5% loss to exposure balance of off-banlance sheet activities occuring advances ➢ Medium: 10% loss to exposure balance of off-banlance sheet activities occuring advances ➢ Severe: 15% loss to exposure balance of off-banlance sheet activities occuring advances
		Exposures to on-and-off-balance sheet wealth management products①	➢ Mild: 10% loss of on-and-off-balance sheet wealth management products ➢ Medium: 20% loss of on-and-off-balance sheet wealth management products ➢ Severe: 30% loss of on-and-off-balance sheet wealth management products
Market Risk	Interest rate risk stress test	Banking book	➢ Mild: deposit rate up 25 bps, while loan rate remains unchanged ➢ Medium: deposit rate up 50 bps, while loan rate down 25 bps ➢ Severe: deposit rate up 75 bps, while loan rate down 50 bps
		Trading book	➢ Mild: bond yield curve up 100 bps ➢ Medium: bond yield curve up 250 bps ➢ Severe: bond yield curve up 350 bps
	Exchange rate risk stress test②	Banking book and trading book	➢ Mild：RMB appreciating/depreciating 10% against USD ➢ Medium：RMB appreciating/depreciating 20% against USD ➢ Severe：RMB appreciating/depreciating 30% against USD

① In terms of the investment orientations of wealth management products, the exposures tested in this stress test were credit wealth management products, exclusive of products invested in bonds and deposits, capital market trust or overseas wealth management products, etc.

② The shock in the exchange rate risk stress test refers to changes of exchange rate of the RMB against the USD, while assuming that exchange rates of the USD against other currencies remain stable.

(Sensitivity Stress Test)

Types of Risk	Types of Test	Stress Target	Stress Scenarios
Liquidity risk	Scenarios stress test	Banking book and trading book	➢ Mild: 4% of loans due within 30 days turn to NPLs, 2% of inter-bank deposits and borrowings due within 30 days turn to non-performing assets, securities' prices down 4%, deposits down 6%, inter-bank deposits and borrowings down 10% ➢ Medium: 7% of loans due within 30 days turn to NPLs, 4% of inter-bank deposits and borrowings due within 30 days turn to non-performing assets, securities' prices down 7%, deposits down 8%, inter-bank deposits and borrowings down 30% ➢ Severe: 10% of loans due within 30 days turn to NPLs, 6% of inter-bank deposits and borrowings due within 30 days turn to non-performing assets, securities' prices down 10%, deposits down 10%, inter-bank deposits and borrowings down 50%

II. Overview of the Stress Tests

1. Credit risk

The banking sector illustrates relatively strong resilience to credit shocks. Both the results of the Sensitivity Stress Test and the Scenarios Stress Test reflect banks having a relatively high level of asset quality and capital adequacy. The banking sector, represented by the 31 commercial banks, remains resilient under macroeconomic shocks and performs soundly.

The result of the Sensitivity Stress Test suggests that, under the severe shock that the overall NPL ratio rises by 700 percent, the CAR of the banking sector would fall from 13.32 percent to 9.53 percent (Figure 1), among which the CAR of LCBs would decrease by 4.06 percentage points, and the CAR of MCBs would decrease by 3.26 percentage points (Figure 2). Under the mild, medium and severe shocks to the credit exposures of the seven key areas, the CAR of banking sector remains relatively high. Even under the severe shock, the CAR would be more than 10.5 percent.

Figure1 The Sensitivity Stress Test for Aggregate Credit Assets: Overall (in percent)

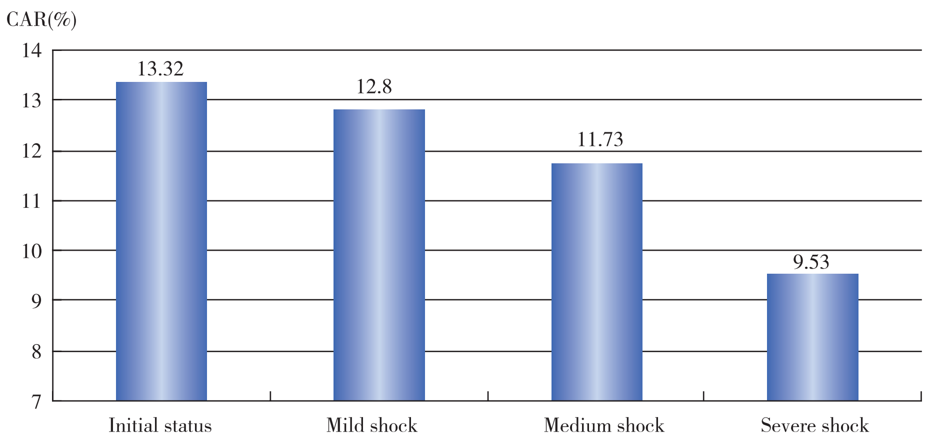
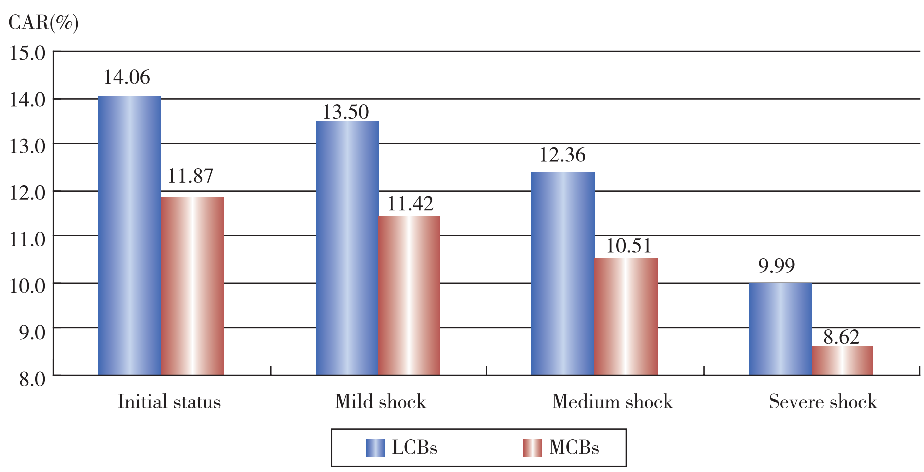
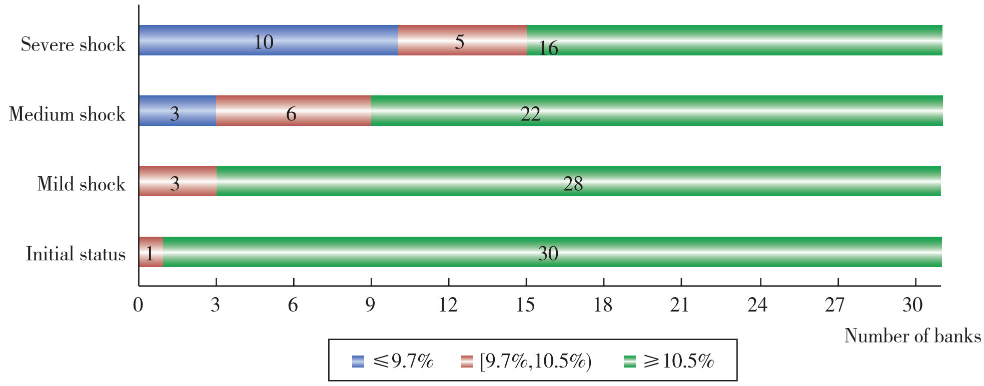


Figure2 The Sensitivity Stress Test for Aggregate Credit Assets: by group(in percent)



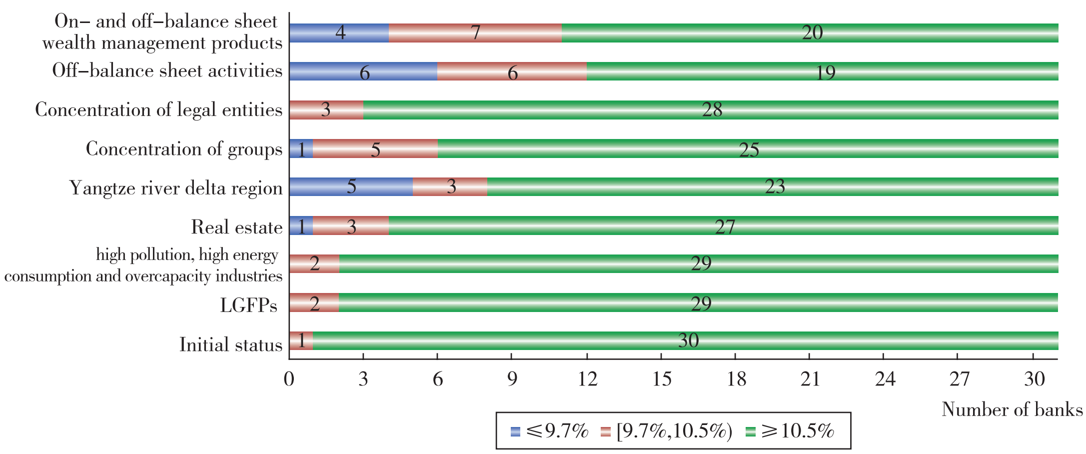
The Scenarios Stress Test of credit risk indicates that, under mild, medium and severe shocks, the overall CAR of banking sector would decrease to 12.64, 12.14 and 10.97 percent respectively. Although the severe shocks would have significant impact on the banking sector, the high CAR under such shocks shows that China's banking sector is resilient to macroeconomic shocks and performs soundly. Under the initial status, the CARs of 30 out of 31 commercial banks are higher than 10.5 percent, while under the mild, medium and severe shocks, the number would decrease to 28, 22 and 16 respectively (Figure 3).

Figure 3 Distribution of Bank's CARs: the Scenarios Stress Test



Credit risks in several key areas warrant concern. According to the results of Sensitivity Stress Test of credit exposures in seven key areas, risks in off-balance sheet activities, on- and off-balance sheet wealth management products as well as loans to Yangtze river delta region should be paid attention to (Figure 4). The test results show varying degrees of resilience among banks due to differences in capital adequacy, risk exposures and asset quality.

Figure 4 Distribution of Bank's CARs: the Sensitivity Stress Test (Severe Shock)



2. Market risk

The interest rate risk on banking book is controllable. Under mild, medium and severe shocks, while deposit rate up and loan rate down, the CAR of banking sector will fall by 0.24, 0.69 and 1.15 percentage points respectively, net interest margin will decrease by 0.16, 0.48 and 0.79 percentage point respectively (Figure 5). In particular, under the same shocks, the CARs of all types of banks drop almost the same, while the net interest margin of MCBs declines a little more than that of LCBs (Figure 6 and Figure 7).

Figure 5 Benchmark Interest Rate Risk of Banking Book

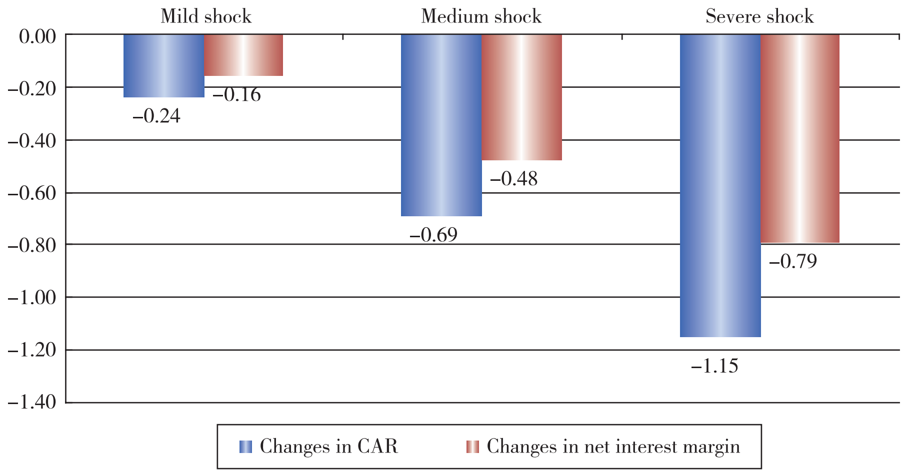


Figure 6 Benchmark interest rate risk of banking book: by group (CAR)

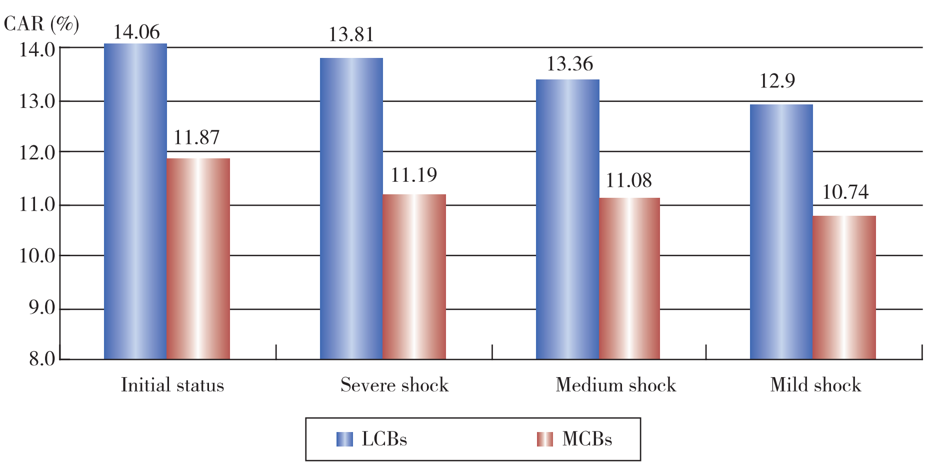
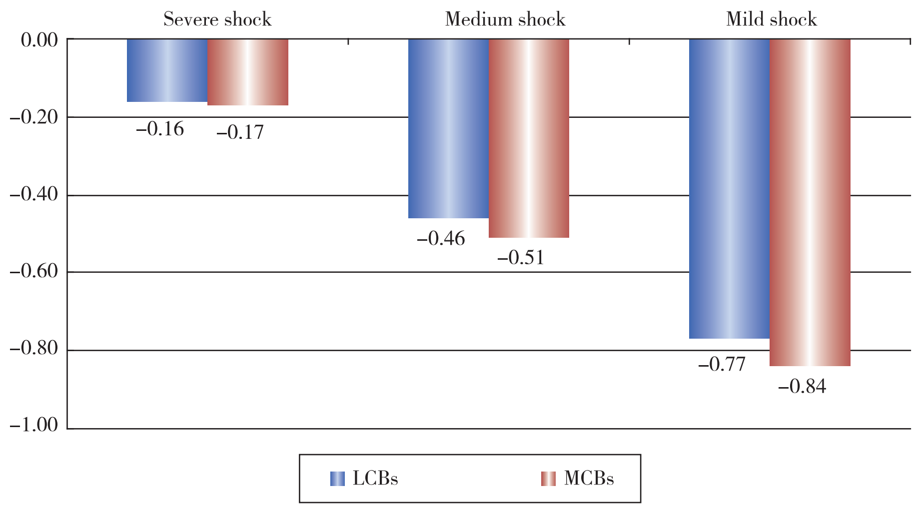


Figure 7 Benchmark Interest Rate Risk of Banking Book: by Group (Net Interest Margin)



The interest rate risk has little influence on trading book. The result of trading book interest rate stress test indicates that, under severe shock, even though the various bond yield curves up 350 bps, the CARs of 31 banks would drop slightly, and the CAR of the whole banking sector only decreases by 0.039 percentage point (Figure 8). In particular, under the same shocks, the CAR of MCBs declines markedly more than that of LCBs, demonstrating that MCBs are more sensitive to upswing of the bond yield curve (Figure 9).

Figure 8 Interest Rate Risk of the Trading Book

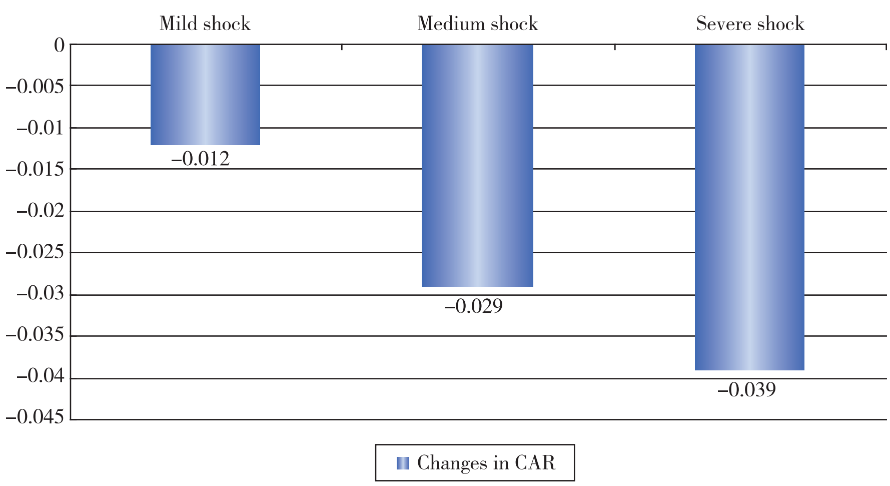
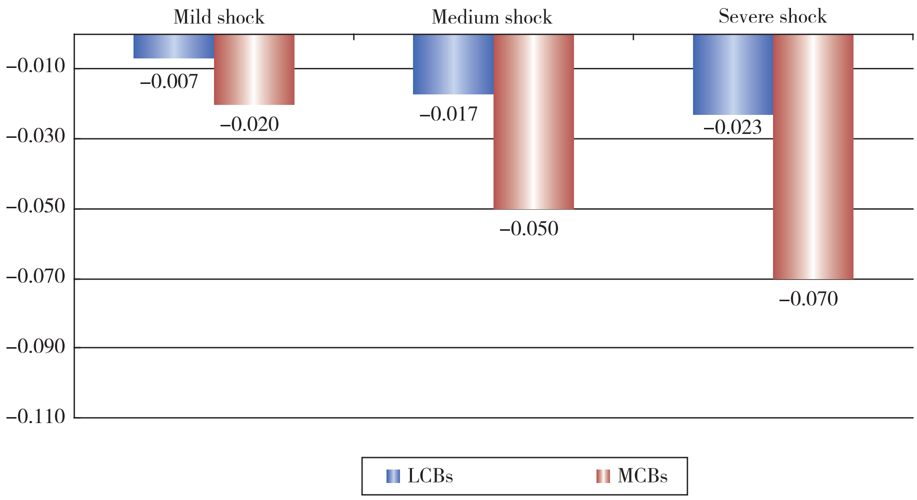


Figure 9 Changes of CAR Caused by Interest Rate Risk of the Trading Book: by Group



The direct impact of the change of exchange rate on banking sector is limited. The stress test results show, even under the severe shock, the CAR of the banking sector falls by merely 0.07 percentage point (Figure 10). In particular, under the same shocks, the CAR of MCBs has a bigger drop (Figure 11).

Figure 10 Direct Exchange Rate Risk

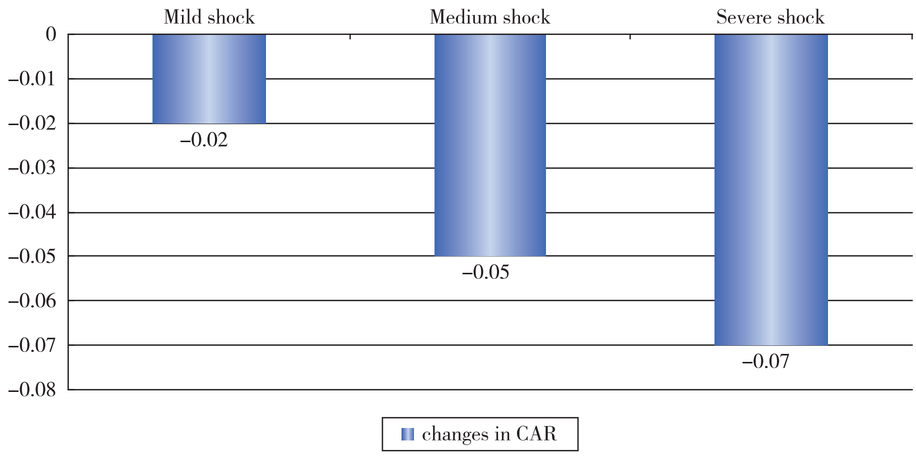
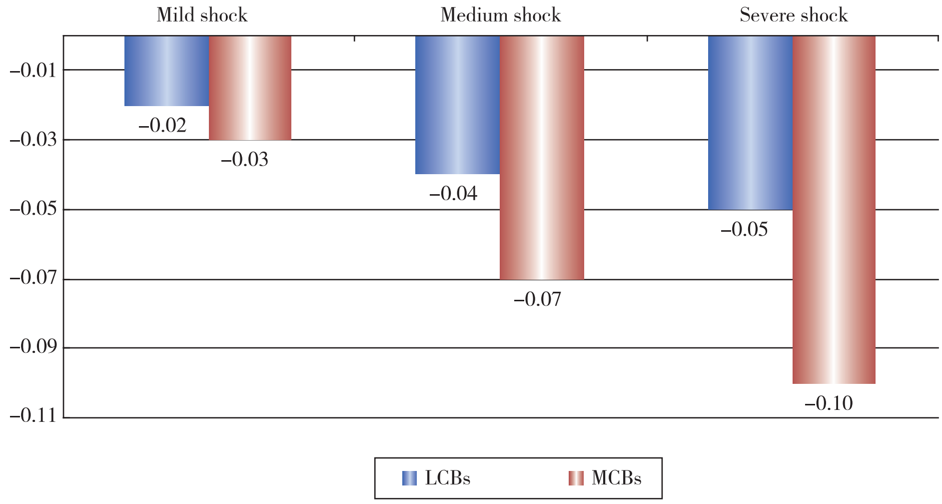


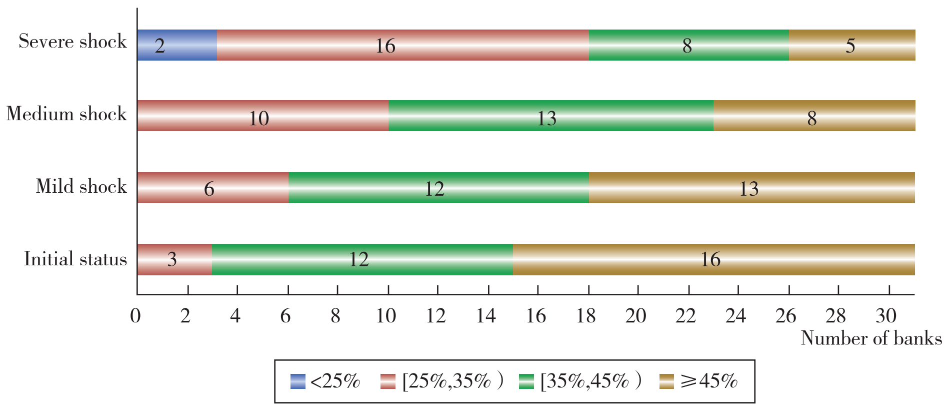
Figure 11　Changes in CARs Caused by Direct Exchange Rate Risk: by group



3. Liquidity risk

The liquidity risk stress test was carried out by the banks themselves. The results show that the liquidity ratio of the commercial banks will decrease in varying degrees under shocks. Under severe shock, there are merely 2 MCBs' liquidity ratios falling below the regulatory requirement① (Figure 12).

Figure 12　Distribution of Banks' Liquidity Radios: Liquidity Risk



① The *Core Indicators on Risk Regulation of Commercial Banks for Trial Implementation* issued by CBRC requires the liquidity ratio of a commercial bank should be above 25%.

Special Topic IV

The Insurance Sector Stress Tests

I. The Mechanism of the Insurance Sector Solvency Stress Tests

Solvency Stress Tests are part of the solvency regulatory mechanism of the insurance sector. China Risk Oriented Solvency System (C-ROSS for short) has been implemented since the first quarter of 2016 by the insurance sector.

1. Stress Tests before 2015

CIRC established the mechanism of dynamic solvency tests (i.e. stress tests) for life insurance companies (health insurance companies included) in 2006, and for property insurance companies in 2010. Dynamic solvency tests report, incorporated in the annual solvency report audited by the independent third party, was submitted to CIRC before every 15 April.

Dynamic solvency tests functioned as early warnings for the potential deterioration of insurance companies' solvency through assessing and anticipating solvency in the future (three years for life insurance companies, two years for property insurance companies) under the baseline scenario and stressed scenarios. The baseline scenario referred to the case that would happen most probably, which was developed based on the analysis and research of insurance companies' empirical data, industrial information and appropriate forecast of the future trend. The baseline scenario was the best estimation of assumed indicators such as emerging business, investment return rate, mortality rate, morbidity rate, other insurance accident occurrence rate, expenses and surrender rate (for life insurance companies), or indicators such as the growth rate of premium income, retention ratio of premium income, net earned premiums rate, loss ratio, loss mode, expense ratio and investment return rate, etc. Stress scenarios referred to the cases that may probably happen and cause great shocks to insurance companies' solvency. Stress scenarios consisted of compulsory scenarios and voluntary scenarios. The CIRC set three compulsory scenarios and required insurance companies to test at least one voluntary scenario.

2. C-ROSS Stress Tests

C-ROSS is more refined, sensitive, scientific and comprehensive in the reflection and quantification of risks, which improves the identification and early warning of risks. Compared with the first-generation solvency regulation system (Solvency I for short), C-ROSS stress tests don't change fundamentally the objectives and methodologies. They identify and warn about key risk factors of insolvency by assessing solvency adequacy ratio and liquidity under the baseline scenario and kinds of stress scenarios, so that timely regulatory and supervisory actions could be taken to address solvency risks. C-ROSS improves regulation on liquidity risk management and specifies the requirement on cash flow stress tests for insurance companies.

(1) Solvency adequacy ratio stress tests

C-ROSS focuses more on the prevention and management of risks and puts more regulatory constraints to the management of insurance companies. Solvency adequacy ratio stress tests don't inherit the requirement from Solvency I that *the results of dynamic solvency stress tests are not treated as the direct basis of regulatory actions by supervisory authorities*, and clarify that the assumptions, methodologies and management of stress tests should be aperiodically reviewed and penalty should be enforced to noncompliant insurance companies and responsible persons. Solvency margin ratio stress tests also strengthen the requirements on risk management practice and operational plans as well as planned improvement of solvency. If solvency margin ratio falls below 100 percent or core solvency margin ratio falls below 50 percent, CIRC may take actions such as regulatory dialogue and risk warning.

C-ROSS requires that insurance companies should conduct stress tests once a year and the test reports should be submitted to CIRC by 31 May after the approval of the boards. Under the baseline scenario, insurance companies predict their solvency adequacy ratios in the next two accounting years based on the C-ROSS rules. The prediction should be accordant with the business planning approved by the board or management and based on the empirical experience and judgment on future trends. Under stress scenarios, which consist of compulsory scenarios, voluntary scenarios and reverse scenarios, insurance companies should predict their solvency margin ratios for the next year. CIRC will decide on the compulsory scenarios based on the industrial profile. Based on its own risk profile, an insurance company should develop at least one voluntary scenario which involves at least two key risk factors. Under the baseline scenario, the insurance company, whose solvency margin ratio falls between 100 percent and 150 percent by the end of the year following the reporting year, should carry out reverse stress tests, i.e. selecting the most essential risk factor to make the solvency margin ratio to fall below 100 percent. The insurance company could carry out multiple reverse stress tests respectively based on the selection of different risk factors.

(2) Cash flow stress tests

In accordance with the requirements of C-ROSS, property insurance companies and reinsurance companies should conduct at least one cash flow stress test by the end of every year to predict the quarterly cash flow in the next year. Life insurance companies (including health insurance companies and pension insurance companies, the same below) should conduct at least one cash flow stress test quarterly, whose testing period is three years since the reporting year, where the prediction is made quarterly in the first year and annually thereafter. Insurance companies should disclose in the quarterly solvency reports information about their liquidity risk indicators and cash flow stress tests.

Cash flow stress tests involve tests on the operation, investment and funding. Property insurance companies and reinsurance companies should test their cash flow status on the whole company level, while life insurance companies should test the cash flow status on the level of the entire firms, traditional insurance business, participating insurance, universal life insurance and investment-linked insurance, respectively. Insurance companies should first predict their cash flows under the baseline scenario and then under stress scenarios. The baseline scenario refers to the best estimation which insurance companies can make based on the projection of existing and future business. Stress scenarios consist of compulsory scenarios and voluntary scenarios. Voluntary scenarios are developed by insurance companies themselves. To do this, insurance companies should consider potential negative factors for their liquidity in the future based on their business structure, empirical experience, liquidity characteristics and projection of the future market environment. CIRC will develop unified compulsory scenarios to reflect the industrial liquidity risks appropriately.

Insurance companies who have negative cash flows or abnormal comprehensive liquid ratios and liquidity coverage ratios under the baseline scenario and stress scenarios should report the intended improving measures and the estimated effects. Life insurance companies should review and analyze the difference between the real operational cash flow and the estimated outcome under the baseline scenario. When the difference exceeds CIRC's threshold for three months in succession, CIRC could require a regulatory dialogue, if necessary.

II. Insurance Sector Stress Tests

CIRC conducted stress tests respectively to the property insurance companies, life insurance companies and utilization of insurance funds in October 2015.

1. Solvency stress tests of property insurance companies

Scope. All of the 69 property insurance companies.

Model. CIRC developed the stress scenarios though the selection of typical risk factors including insurance and investment risks which insurance companies may often be faced with. Tested insurance companies calculated their solvency by the end of 2015 under stress scenarios based on end-2014 data according to requirements of Solvency I and C-ROSS respectively, and reported the assumptions and methodologies of the projections.

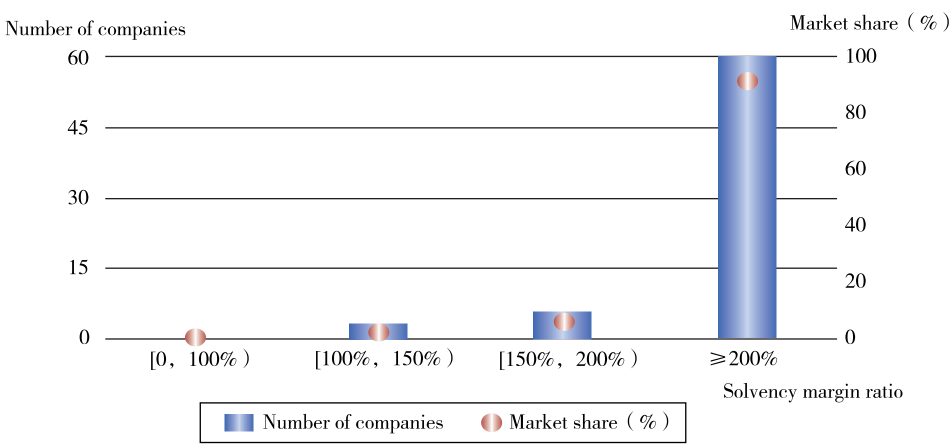
Stress scenarios. The variables involved in stress scenarios consist of premium income, payments and claims, combined expense ratio and fair value of equity assets, etc. (Table 1).

Table 1 Solvency Stress Test Scenarios for Property Insurance Companies

Key factors	Baseline Scenario	Stress Scenarios
Premium income	Real data in 2014	90% of the baseline scenario
Payments and claims		110% of the baseline scenario
Combined expense ratio		5 percentage points increase from the baseline scenario
Fair value of equity assets		90% of the baseline scenario

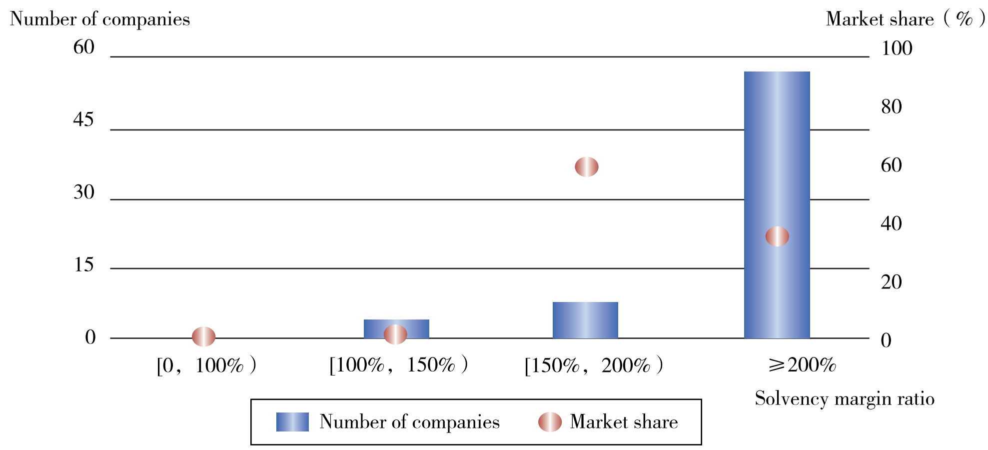
Results. Based on the rules of Solvency I, all of the 69 tested companies' solvency margin ratios exceeded 100 percent, among which 4 companies reach 100-150 percent with a market share of 2 percent; 8 companies reached 150-200 percent with a market share of 61 percent; 57 companies exceeded 200 percent with a market share of 37 percent (Figure 1).

Figure 1 Property insurance companies solvency stress tests (under rules of Solvency I)



Based on the rules of C-ROSS, all of the 69 tested companies' solvency margin ratios exceeded 100 percent, among which 3 companies reach 100-150 percent with a market share of 2 percent; 6 companies reached 150-200 percent with a market share of 6 percent; 60 companies exceeded 200 percent with a market share of 92 percent (Figure 2).

Figure 2 Property insurance companies solvency stress tests (under rules of C-ROSS)



2. Cash flow stress tests of life insurance companies

Scope. All of the 71 life insurance companies.

Model. Cash flows of effective and new business were estimated respectively, taking into account factors in the projective interval such as premium income, investment return, claims, surrender, expenses, dividends payment, reinsurance, etc. Under the above estimation, the life insurance companies' resilience and capacity of continuing operation could be assessed, by means that annual cash flows under both the baseline and stress scenarios were calculated, considering the influence to cash flows in the future from key impact factors, such as surrender and new business, etc. The forecast period is 3 years in the future, i.e. from 2016 to 2018.

Stress scenarios. There were 3 stress scenarios involving variables such as surrender rate and premium income from new business (Table 2). It should be clarified that the stress scenarios were all developed subjectively and do not necessarily reflect the real trends.

Table 2 Cash Flow Stress Tests for Life Insurance Companies

Baseline Scenario	Stress scenario 1	Stress scenario 2	Stress scenario 3
The best estimation of assumptions on the new business, investment return rate, death rate, prevalence rate, probability of other risk coverage accidents, expenditures and surrender, etc. The estimation is made based on the analysis and research of companies' empirical data, existing industrial information and reasonable projection for the trends.	Surrender rates for all projects reach 150 percent of the baseline scenario.	The growth rate of premium income from new business in the coming 3 years remains 0, i.e. the premium income from 2016 to 2018 keeps the same with that of 2015.	The premium income from new business in the fourth quarter of 2016 decreases by 30 percent from that in the fourth quarter of 2015 and remains at this level in the coming years.

Results. It is currently a good time for the development of life insurance companies and the industry has a good perspective. The test results indicate that, the future premium income will continue to grow at a relative high speed and could cover cash outflows and produce net cash inflows under all stress scenarios. In the 3 stress scenarios, the whole industry could appropriately address kinds of calls for emergency liquidity and negative cash flows do not emerge (Figure 3). From the perspective of individual companies, a few of them reported negative cash flows with a relative small scale. For example, under the most severe scenario the negative net cash flow reached RMB 98.6 billion yuan in 2018, while the net cash flow of the whole industry reaches RMB 285.6 billion yuan.

Figure 3 Result of the Cash Flow Stress Tests for Life Insurance Companies

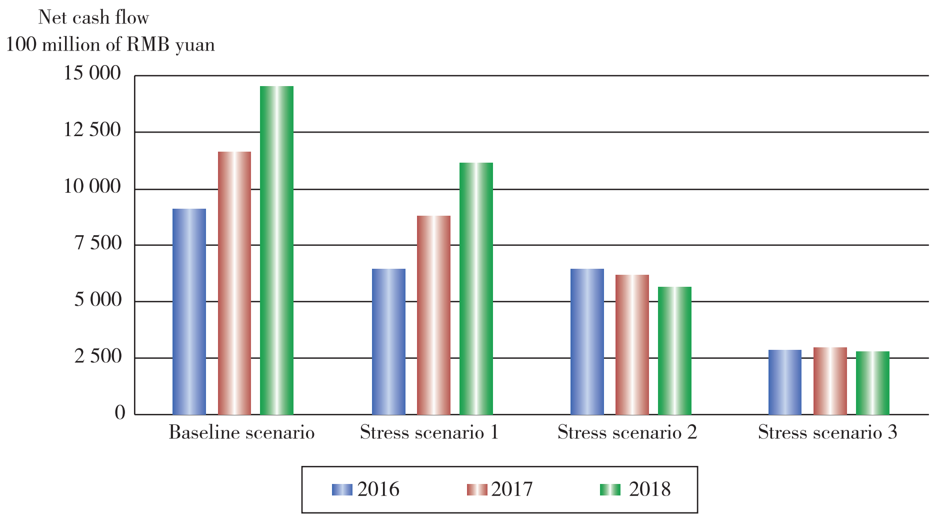


Figure 4 The Cash Flow Stress Tests for Life Insurance Companies (Stress Scenario 1)

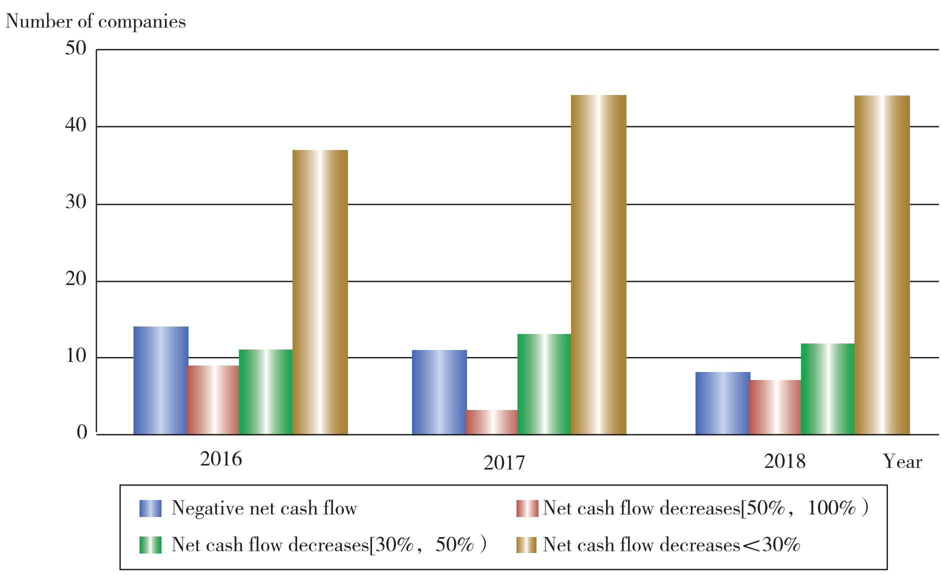


Figure 5 The Cash Flow Stress Tests for Life Insurance Companies (Stress Scenario 2)

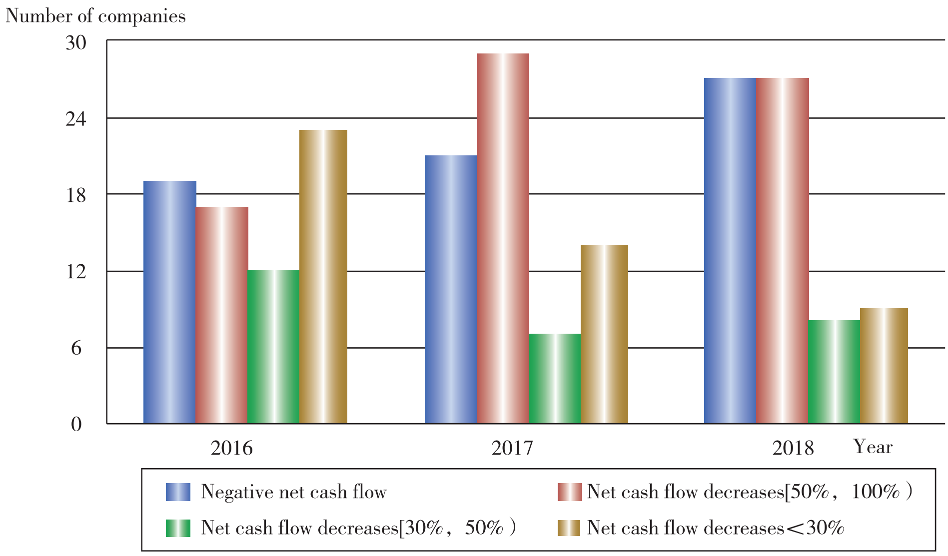
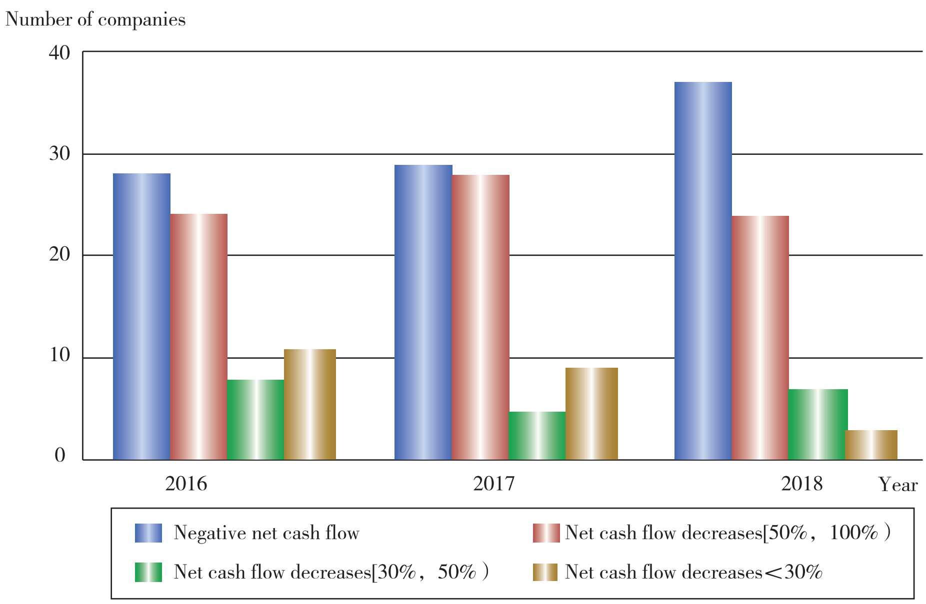


Figure 6 The Cash Flow Stress Tests for Life Insurance Companies (Stress Scenario 3)



3. Investment stress tests of insurance companies

Scope. Ten typical insurance companies were selected, whose premium income in total accounted for a market share of 54 percent and total investment balance accounted for 63 percent. To make it simple, this report focuses only on the equity asset investment of insurance companies.

Model. In accordance with relevant rules, cash flows, average maturity, investment return rates, funding costs and funding gaps involving relevant items on both the asset side and the liability side were estimated under the appropriate principle or methodology. The impact of changes in market value of equity assets on investment return rates, liquidity and solvency was assessed.

Stress scenarios. Changes of SSE composite index were the main consideration (Table 3).

Table 3 Investment Stress Tests Scenarios

Baseline scenario	Stress scenario 1	Stress scenario 2	Stress scenario 3
The closing data of SSE composite index by the end of September, 2015	10 percent down from the baseline scenario	20 percent down from the baseline scenario	30 percent down from the baseline scenario

Results. The stress test results indicate that the whole industry could achieve relatively high return rates on investment, adequate solvency, high solvency surplus and a thick fund buffer. Under stress scenarios, main insurance companies among the tested companies, whose premium income accounts for 67 percent of that of the tested companies and investment balance accounts for 62 percent, are faced with the problem that investment return rates shift from positive to negative (Figure 7). However, solvency is only influenced marginally with an over 200 percent solvency margin ratio. Solvency risks emerge in several companies in stress scenarios because of their aggressive investment and hence higher sensitivity to capital market volatility (Figure 8).

Figure 7 Investment Stress Tests of Insurance Companies (Investment Return Rate)

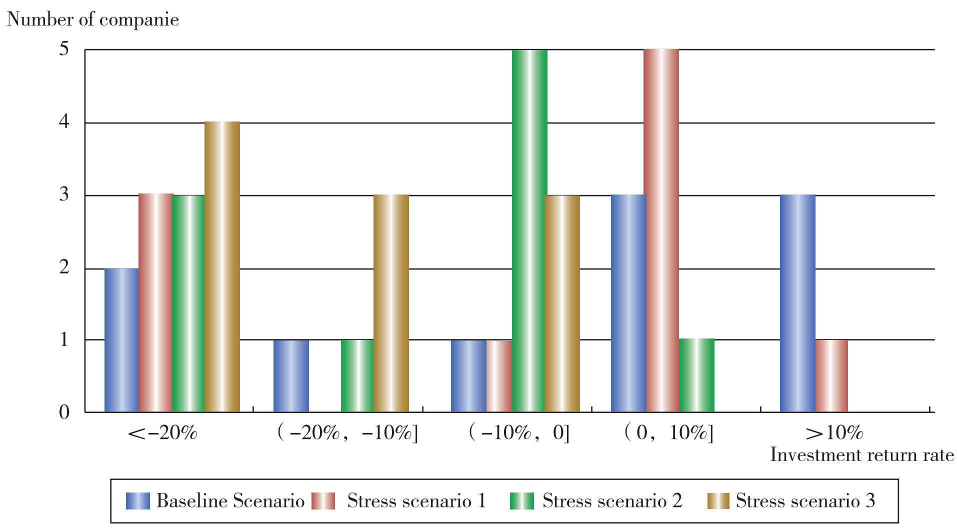
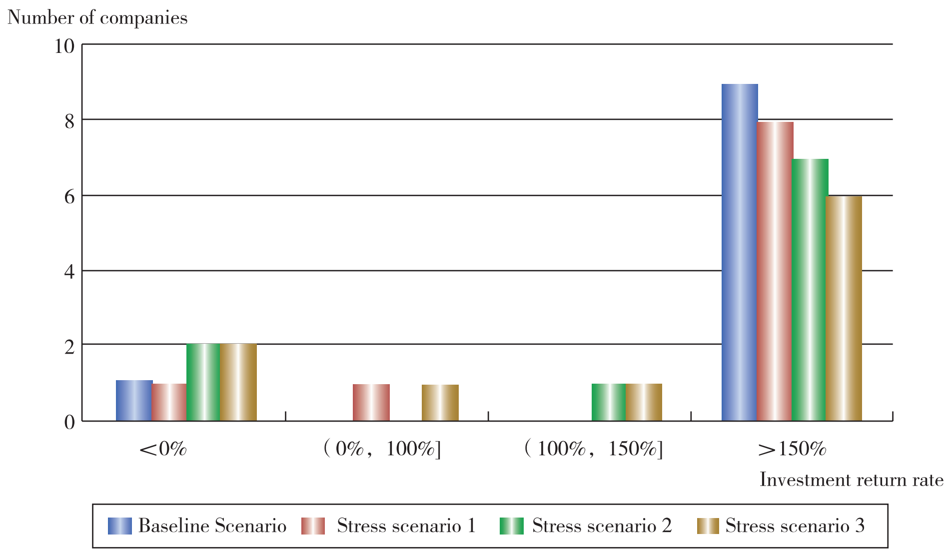


Figure 8 Investment Stress Tests of Insurance Companies (Solvency Margin Ratio)



Appendix

Statistics

Table1 Selected Economic Indicators

Items	2011	2012	2013	2014	2015
Gross Domestic Product (RMB 100 million yuan)	473 104	519 470	568 845	635 910	676 708
Industrial Value Added	188 470	199 671	210 689	227 991	228 974
Fixed Asset Investment (RMB 100 million yuan)	311 485	374 695	447 074	512 761	562 000
Retail Sales of Consumer Goods (RMB 100 million yuan)	18 3919	210 307	237 810	262 394	300 931
Exports & Imports (USD 100 million)	36 419	38 671	41 600	264 334	24 5741
Exports	18 984	20 487	22 096	143 912	14 1255
Imports	17 435	18 184	19 504	12 0423	10 4485
Balance	1 549	2 303	2 592	23 489	36 770
Foreign Direct Investment (USD 100 million)	1 160	1 117	1 176	1 196	1 263
Foreign Exchange Reserves (USD 100 million)	31 811	33 116	38 213	38 430	33 304
Consumer Price Index (previous year=100)	105.4	102.6	102.6	102.0	101.4
Fiscal Revenue (RMB 100 million yuan)	103 874.43	117 253.52	129 143	140 350	152 217
Fiscal Expenditure (RMB 100 million yuan)	109 247.79	125 952.97	1 39744	151 662	175 768
Per Capita Urban Household Dispensable Income (RMB yuan)	21 810	24 565	26 955	28 844	31 195
Per Capita Rural Household Net Income (RMB yuan)	6 977	7 917	8 896	9 892	10 772
Number of Employed Persons in Urban Area (million)	359.1	371.0	382.4	393.1	404.1
Registered Unemployment Rate in Urban Area (%)	4.1	4.1	4.05	4.09	4.05
Total Population (million)	1 347.4	1 354.0	1 360.7	1 367.8	1 374.6

Note: GDP from 2011 to 2014 is verified and final, and GDP in 2015 is preliminary.

Source: Calculated on the basis of data from China *Statistical Year Book* and *Statistical Communique of The People's Republic of China on the National Economic and Social Development.*

Table2 Selected Financial Indicators (1)

(Year-end Balance)

(RMB 100 million yuan)

Items	2011	2012	2013	2014	2015
Money & Quasi-money (M_2)	851 590.9	974 148.8	1 106 525.0	1 228 374.8	1 392 278.1
Money (M_1)	289 847.7	308 673.0	337 291.1	348 056.4	400 953.4
Currency in Circulation (M_0)	50 748.5	54 659.8	58 574.4	60 259.5	63 217.6
Total Deposits with Financial Institutions	809 368.3	917 368.1	1 043 846.9	1 138 644.6	1 357 021.6
Household Deposits	343 635.9	399 546.9	447 601.6	485 261.3	526 281.8
Non-financial Enterprise Deposits	303 504.3	327 444.9	361 555.2	378 333.8	430 247.4
Total Lending by Financial Institutions	547 946.7	629 906.6	718 961.5	816 770.0	939 540.2

Note: "Urban & Rural Deposits" and "Enterprise Deposits" have been replaced by "Household Deposits" and "Non-financial Enterprise Deposits" since 2011.

Source: The PBC.

Table 3 Selected Financial Indicators(2)

(Growth Rates)

(percent)

Items	2011	2012	2013	2014	2015
Money & Quasi-money (M_2)	13.61	13.80	13.59	12.16	13.34
Money (M_1)	7.85	6.49	9.27	3.19	15.20
Currency in Circulation (M_0)	13.76	7.71	7.16	2.88	4.91
Total Deposits with Financial Institutions	13.54	13.34	13.76	9.08	12.44
Household Deposits	13.78	16.27	12.03	8.41	8.45
Non-financial Enterprise Deposits	9.23	7.89	10.43	4.64	13.72
Total Lending by Financial Institutions	15.83	14.96	14.14	13.60	14.30

Note: Growth rates have been adjusted to reflect recent changes in statistical coverage.

Source: The PBC.

Table 4 International Liquidity

(USD million)

Items	2011	2012	2013	2014	2015
Total Reserves (minus gold)	3 197 107	3 325 440	3 833 291	3 853 760	3 341 006
Special Drawing Rights (SDRs)	11 855	11 366	11 184	10 456	10 282
IMF Reserve Position	4 104	2 485	792	286	362
Foreign Exchange	3 181 148	3 311 589	3 821 315	3 843 018	3 330 362
Gold (1 million ounces)	33.89	33.89	33.89	33.89	56.66
Gold (national valuation)	9 815	9 815	9 815	9 815	60 191
Foreign Liabilities of Other Depository Companies	123 250	157 509	294 789	409 995	199 865

Note: The gold by the end of 2015 is market value, which cannot be compared with data of previous years.

Source: The PBC.

Table 5 Gold and Foreign Exchange Reserves

Year	Gold Reserves (10 thousand ounces)	Foreign Exchange Reserves (USD 100 million)	Change in Foreign Exchange Reserves (percent)
1997	1 267	1 398.9	33.2
1998	1 267	1 449.6	3.6
1999	1 267	1 546.8	6.7
2000	1 267	1 655.7	7.0
2001	1 608	2 121.7	28.1
2002	1 929	2 864.1	35.0
2003	1 929	4 032.5	40.8
2004	1 929	6 099.3	51.3
2005	1 929	8 188.7	34.3
2006	1 929	10 663.4	30.2
2007	1 929	15 282.5	43.3
2008	1 929	19 460.3	27.3
2009	3 389	23 991.5	23.3
2010	3 389	28 473.4	18.7
2011	3 389	31 811.5	10.7
2012	3 389	33 115.9	4.1
2013	3 389	38 213.2	15.4
2014	3 389	38 430.2	0.6
2015	5 666	33 303.6	-13.3

Note: The PBC made adjustments to statistical coverage of gold reserves in December 2001, December 2002 and April 2009.

Source: The PBC.

Table 6 Assets of China's Financial Sector

(December 31, 2015)

(RMB trillion yuan)

Type of Financial Institutions	Assets
Financial Sector	240.36
Central Bank	31.78
Banking Financial Institutions	199.35
Securities Financial Institutions	4.40
Insurance Financial Institutions	12.36

Note: Assets of securities financial institutions refer to assets of securities companies, with assets of clients excluded.

Source: Calculated by the Financial Stability Analysis Group of PBC.

Table 7　Depository Corporations Survey in 2014

(Quarter-end Balance)

(RMB 100 million of yuan)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Net Foreign Assets	294 637.43	294 660.17	287 168.41	280 639.49
Domestic Credits	1 136 551.53	1 199 812.09	1 255 732.27	1 332 692.76
Claims on Government(net)	56 175.60	61 492.96	74 882.01	98 297.05
Claims on Non-financial Sectors	943 330.97	978 253.67	1 011 361.82	1 051 159.75
Claims on other Financial Sectors	137 044.96	160 065.45	169 488.44	183 235.96
Money & Quasi-money	1 275 332.78	1 333 375.36	1 359 824.06	1 392 278.11
Money	337 210.52	356 082.86	364 416.90	400 953.44
Currency in Circulation	61 949.81	58 604.26	61 022.97	63 216.58
Corporate Demand Deposits	275 260.72	297 478.59	303 393.93	337 736.86
Quasi-money	938 122.25	977 292.51	995 407.15	991 324.67
Corporate Time Deposits	275 189.30	289 329.28	298 571.22	288 240.66
Personal Deposits	544 693.66	539 127.13	547 874.00	552 073.48
Other Deposits	118 239.30	148 836.10	148 961.94	151 010.53
Deposits Excluded from Broad Money	36 494.53	34 231.37	36 664.59	36 439.86
Bonds	129 897.12	139 064.65	147 648.53	160 003.65
Paid-in Capital	37 931.02	39 132.15	40 955.60	43 214.43
Other Items(net)	-48 466.48	-51 331.27	-42 192.09	-18 603.80

Source: The PBC.

Table 8 Balance Sheet of the Monetary Authority in 2015

(Quarter-end Balance)

(RMB 100 million yuan))

Items	Quarter 1	Quarter 2	Quarter 2	Quarter 4
Foreign Assets	276 072.56	276 555.22	262 214.21	253 830.67
Foreign Exchange	268 160.81	267 149.38	258 244.37	248 537.59
Monetary Gold	669.84	2 094.73	2 207.71	2 329.54
Other Foreign Asstes	7 241.92	7 311.11	1 762.13	2 963.55
Claims on Government	15 312.73	15 312.73	15 312.73	15 312.73
of Which: Central Government	15 312.73	15 312.73	15 312.73	15 312.73
Claims on Other Depository Corporations	31 478.70	23 263.93	25 234.76	26 626.36
Claims on Other Financial Corporations	7 847.15	7 696.35	9 696.55	6 656.59
Claims on Non-financial Sector	41.30	55.01	57.28	71.74
Other Assets	11 473.10	14 192.58	13 523.34	15 338.87
Total Assets	**342 225.55**	**337 075.83**	**326 038.88**	**317 836.97**
Reserve Money	295 752.63	288 779.55	279 677.24	276 377.49
Currency Issue	69 078.10	65 111.90	68 454.85	69 885.95
Deposits of Other Depository Corporations	226 674.52	223 667.65	211 222.39	206 491.55
Deposits of Financial Corporations Excluded from Reserve Money	1 729.00	1 692.29	1 843.40	2 826.42
Bond Issue	6 522.00	6 522.00	6 522.00	6 572.00
Foreign Liabilities	1 405.32	1 465.51	1 649.93	1 807.28
Deposits of Government	29 829.21	32 481.29	31 542.01	27 179.03
Own Capital	219.75	219.75	219.75	219.75
Other Liabilities	6 767.64	5 915.43	4 584.55	2 855.00
Total Liabilities	**342 225.55**	**337 075.83**	**326 038.88**	**317 836.97**

Source: The PBC.

Table 9 Balance Sheet of Other Depository Corporations in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	40 915.72	40 914.79	43 382.85	41 594.51
Reserve Assets	233 400.50	233 976.54	224 109.93	219 330.07
Deposits with Central Bank	226 272.23	227 468.93	216 678.06	212 660.73
Cash in Vault	7 128.27	6 507.61	7 431.86	6 669.34
Claims on Government	70 692.07	78 661.52	91 111.29	110 163.34
Of Which: Central Government	70 692.07	78 661.52	91 111.29	110 163.34
Claims on Central Bank	6 568.56	6 429.01	6 402.74	6 229.24
Claims on Other Depository Corporations	279 793.79	302 876.28	301 713.57	314 186.47
Claims on Other Financial Institutions	129 197.82	152 369.11	159 791.89	176 579.37
Claims on Non-financial Institutions	705 300.56	729 636.71	752 394.89	783 762.11
Claims on Other Resident Sectors	237 989.11	248 561.96	258 909.64	267 325.90
Other Assets	86 129.97	86 872.17	95 715.91	72 385.48
Total Assets	**1 789 988.10**	**1 880 298.08**	**1 933 532.71**	**1 991 556.48**
Liabilities to Non-financial Institutions and Households	1 143 385.80	1 173 335.92	1 203 731.68	1 249 742.73
Deposits Included in Broad Money	1 095 143.67	1 125 935.00	1 149 839.15	1 178 051.00
Corporate Demand Deposits	275 260.72	297 478.59	303 393.93	337 736.86
Corporate Time Deposits	275 189.30	289 329.28	298 571.22	288 240.66
Personal Deposits	544 693.66	539 127.13	547 874.00	552 073.48
Deposits Excluded from Broad Money	36 494.53	34 231.37	36 664.59	36 439.86
Transferable Deposits	8 965.94	8 508.81	9 381.15	10 806.19
Other Deposits	27 528.58	25 722.56	27 283.43	25 633.66
Other Liabilities	11 747.61	13 169.55	17 227.95	35 251.87
Liabilities to Central Bank	34 526.73	32 126.43	31 295.57	33 638.06
Liabilities to Other Depository Corporations	107 778.75	118 407.41	117 974.71	131 306.03
Liabilities to Other Financial Corporations	122 365.09	154 896.51	152 605.04	155 914.90
Of Which: Deposits Included in Broad Money	118 239.30	148 836.10	148 961.94	151 010.53
Foreign Liabilities	20 945.54	21 344.34	16 778.72	12 978.41
Bond Issue	129 897.12	139 064.65	147 648.53	160 003.65
Paid-in Capital	37 711.26	38 912.39	40 735.85	42 994.68
Other Liabilities	193 377.81	202 210.43	222 762.61	204 978.01
Total Liabilities	**1 789 988.10**	**1 880 298.08**	**1 933 532.71**	**1 991 556.48**

Source: The PBC.

Table 10 Balance Sheet of Chinese-funded Large Banks in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter1	Quarter2	Quarter3	Quarter4
Foreign Assets	26 643.91	26 415.04	26 227.08	24 884.54
Reserve Assets	132 276.76	129 926.69	122 904.24	111 190.80
Deposits with Central Bank	128 435.92	126 452.59	118 656.81	107 456.99
Cash in Vault	3 840.84	3 474.11	4 247.42	3 733.80
Claims on Government	43 798.04	48 492.35	55 820.33	70 540.13
Of Which: Central Government	43 798.04	48 492.35	55 820.33	70 540.13
Claims on Central Bank	6 189.93	5 997.73	5 967.86	5 908.48
Claims on Other Depository Corporations	116 838.46	135 278.98	126 980.80	131 167.49
Claims on Other Financial Corporations	40 068.67	38 926.98	43 582.98	47 454.67
Claims on Non-financial Corporations	374 416.19	385 118.35	398 181.34	416 234.50
Claims on Other Resident Sectors	126 418.80	131 495.53	137 370.44	142 372.88
Other Assets	55 683.19	54 604.23	61 483.01	38 639.56
Total Assets	**922 333.95**	**956 255.89**	**978 518.08**	**988 393.06**
Liabilities to Non-financial Institutions and Households	618 823.78	626 352.02	640 428.91	661 772.38
Deposits Included in Broad Money	592 155.66	599 891.34	608 856.15	612 006.74
Corporate Demand Deposits	148 109.86	158 510.33	159 844.17	169 086.72
Corporate Time Deposits	111 368.25	115 631.36	118 251.44	112 675.75
Personal Deposits	332 677.54	325 749.65	330 760.54	330 244.27
Deposits Excluded from Broad Money	17 598.24	16 339.75	17 388.19	17 737.95
Transferable Deposits	4 115.88	3 957.38	4 216.04	5 022.13
Other Deposits	13 482.37	12 382.36	13 172.15	12 715.83
Other Liabilities	9 069.87	10 120.92	14 184.58	32 027.68
Liabilities to Central Bank	17 713.29	20 555.66	18 984.72	19 559.78
Liabilities to Other Depository Corporations	14 646.01	19 920.75	26 277.70	30 885.19
Liabilities to Other Financial Corporations	58 396.61	72 148.92	61 679.35	61 407.33
Of Which: Deposits Included in Broad Money	57 726.05	71 527.17	60 917.84	60 135.96
Foreign Liabilities	9 575.17	9 810.57	7 633.13	5 467.31
Bond Issue	71 502.76	73 542.59	76 658.12	80 907.47
Paid-in Capital	18 423.72	18 517.60	19 783.13	20 436.87
Other Liabilities	113 252.61	115 407.80	127 073.02	107 956.73
Total Liabilities	**922 333.95**	**956 255.89**	**978 518.08**	**988 393.06**

Source: The PBC.

Table 11 Balance Sheet of Chinese-funded Medium-Sized Banks in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter1	Quarter2	Quarter3	Quarter4
Foreign Assets	11 677.01	11 688.63	14 057.18	13 433.26
Reserve Assets	40 625.00	43 865.57	42 264.76	41 449.61
Deposits with Central Bank	39 923.03	43 198.68	41 613.37	40 820.81
Cash in Vault	701.96	666.89	651.39	628.80
Claims on Government	14 545.11	16 757.43	19 647.48	21 840.54
Of Which: Central Government	14 545.11	16 757.43	19 647.48	21 840.54
Claims on Central Bank	126.43	146.22	123.60	122.40
Claims on Other Depository Corporations	59 815.21	59 642.60	62 646.05	65 520.82
Claims on Other Financial Corporations	50 833.78	65 764.67	65 468.58	71 282.10
Claims on Non-financial Corporations	165 398.27	170 285.22	172 923.37	180 137.43
Claims on Other Resident Sectors	48 010.94	50 763.10	53 335.91	55 929.47
Other Assets	13 309.87	14 824.20	15 819.10	14 033.09
Total Assets	**404 341.61**	**433 737.65**	**446 286.03**	**463 748.73**
Liabilities to Non-financial Institutions and Households	205 713.47	215 778.57	219 594.41	226 090.77
Deposits Included in Broad Money	190 774.69	201 671.35	204 401.05	211 664.35
Corporate Demand Deposits	56 588.42	62 043.95	63 303.22	75 061.44
Corporate Time Deposits	88 974.28	94 097.81	95 721.62	90 444.21
Personal Deposits	45 211.98	45 529.59	45 376.21	46 158.70
Deposits Excluded from Broad Money	13 779.78	12 744.64	13 799.43	13 045.52
Transferable Deposits	2 808.35	2 591.26	2 956.42	3 342.09
Other Deposits	10 971.43	10 153.38	10 843.01	9 703.43
Other Liabilities	1 158.99	1 362.58	1 393.93	1 380.90
Liabilities to Central Bank	12 654.60	7 648.96	8 278.28	10 208.58
Liabilities to Other Depository Corporations	37 939.58	38 631.60	35 809.89	42 450.90
Liabilities to Other Financial Corporations	49 490.82	64 243.52	67 288.94	68 221.15
Of Which: Deposits Included in Broad Money	47 162.15	60 452.17	65 853.56	66 507.20
Foreign Liabilities	5 188.14	4 927.62	3 393.02	2 388.30
Bond Issue	51 701.04	56 201.88	59 761.51	64 192.10
Paid-in Capital	3 183.08	3 570.00	3 611.58	4 002.38
Other Liabilities	38 470.89	42 735.50	48 548.40	46 194.54
Total Liabilities	**404 341.61**	**433 737.65**	**446 286.03**	**463 748.73**

Source: The PBC.

Table 12 Balance Sheet of Chinese-funded Small Banks in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter1	Quarter2	Quarter3	Quarter4
Foreign Assets	517.21	610.15	716.82	693.71
Reserve Assets	42 754.10	43 901.47	43 031.88	47 046.77
Deposits with Central Bank	41 193.44	42 413.09	41 422.19	45 473.66
Cash in Vault	1 560.66	1 488.38	1 609.68	1 573.11
Claims on Government	10 001.52	10 852.62	12 642.92	14 705.23
Of Which: Central Government	10 001.52	10 852.62	12 642.92	14 705.23
Claims on Central Bank	96.67	121.36	129.59	88.47
Claims on Other Depository Corporations	63 572.92	66 913.97	70 198.25	75 065.01
Claims on Other Financial Corporations	32 223.41	40 187.49	42 931.42	50 200.43
Claims on Non-financial Corporations	118 063.58	126 158.67	132 840.83	139 038.96
Claims on Other Resident Sectors	39 771.04	42 292.19	44 329.18	46 630.56
Other Assets	11 386.63	11 780.74	12 446.42	13 154.98
Total Assets	**318 387.09**	**342 818.66**	**359 267.30**	**386 624.11**
Liabilities to Non-financial Institutions and Households	214 995.48	226 452.40	237 308.35	251 930.92
Deposits Included in Broad Money	212 132.53	223 416.55	233 998.61	248 664.15
Corporate Demand Deposits	48 235.59	51 942.10	54 791.79	62 771.09
Corporate Time Deposits	54 171.31	59 044.08	62 264.85	62 883.98
Personal Deposits	109 725.64	112 430.38	116 941.97	123 009.08
Deposits Excluded from Broad Money	1 976.22	2 142.31	2 334.11	2 208.27
Transferable Deposits	347.40	339.19	454.51	389.41
Other Deposits	1 628.83	1 803.12	1 879.60	1 818.86
Other Liabilities	886.73	893.54	975.63	1 058.49
Liabilities to Central Bank	2 669.46	2 418.96	2 574.89	2 668.09
Liabilities to Other Depository Corporations	43 663.18	47 571.90	43 709.83	47 394.93
Liabilities to Other Financial Corporations	13 038.21	16 594.40	21 708.67	24 054.77
Of Which: Deposits Included in Broad Money	12 486.17	15 769.32	20 774.01	22 820.54
Foreign Liabilities	805.94	978.23	862.96	850.26
Bond Issue	6 309.47	8 960.17	10 826.01	14 437.98
Paid-in Capital	8 945.78	9 493.88	9 812.31	10 641.37
Other Liabilities	27 959.56	30 348.73	32 464.28	34 645.79
Total Liabilities	**318 387.09**	**342 818.66**	**359 267.30**	**386 624.11**

Source: The PBC.

Table 13 Balance Sheet of Foreign-funded Banks in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter1	Quarter2	Quarter3	Quarter4
Foreign Assets	1 937.99	2 054.12	2 190.30	2 390.65
Reserve Assets	2 650.29	2 524.09	2 438.89	2 899.27
Deposits with Central Bank	2 639.24	2 513.54	2 427.63	2 889.05
Cash in Vault	11.05	10.55	11.26	10.22
Claims on Government	1 695.02	1 837.79	1 936.60	1 793.24
Of Which: Central Government	1 695.02	1 837.79	1 936.60	1 793.24
Claims on Central Bank	38.56	101.81	120.19	105.38
Claims on Other Depository Corporations	5 228.60	5 280.60	4 790.88	4 688.87
Claims on Other Financial Corporations	2 256.51	2 470.90	2 397.77	2 589.86
Claims on Non-financial Corporations	10 948.71	10 781.92	10 498.03	10 266.95
Claims on Other Resident Sectors	868.85	904.76	941.53	980.02
Other Assets	941.91	944.24	1 259.74	1 969.34
Total Assets	**26 566.44**	**26 900.23**	**26 573.93**	**27 683.59**
Liabilities to Non-financial Institutions and Households	14 266.01	14 079.04	13 844.17	14 592.80
Deposits Included in Broad Money	11 235.04	10 898.56	10 737.56	11 213.45
Corporate Demand Deposits	2 676.75	2 882.91	2 773.03	3 750.78
Corporate Time Deposits	6 765.12	6 344.67	6 375.07	5 958.48
Personal Deposits	1 793.17	1 670.97	1 589.47	1 504.20
Deposits Excluded from Broad Money	2 520.47	2 506.30	2 554.87	2 774.10
Transferable Deposits	1 218.48	1 290.64	1 389.18	1 562.76
Other Deposits	1 301.99	1 215.66	1 165.69	1 211.34
Other Liabilities	510.50	674.18	551.74	605.24
Liabilities to Central Bank	124.50	2.36	4.44	4.76
Liabilities to Other Depository Corporations	1 856.29	1 972.84	2 038.19	2 018.67
Liabilities to Other Financial Corporations	923.07	1 100.82	1 385.65	1 523.71
Of Which: Deposits Included in Broad Money	699.16	877.41	1 155.40	1 314.78
Foreign Liabilities	5 361.17	5 593.31	4 856.19	4 241.26
Bond Issue	193.38	153.70	155.51	257.42
Paid-in Capital	1 636.73	1 704.97	1 709.77	1 744.23
Other Liabilities	2 205.29	2 293.20	2 580.01	3 300.74
Total Liabilities	**26 566.44**	**26 900.23**	**26 573.93**	**27 683.59**

Source: The PBC.

Table 14 Balance Sheet of Rural Credit Cooperatives in 2015

(Quarter-end Balance)

(RMB 100 million yuan)

Items	Quarter1	Quarter2	Quarter3	Quarter4
Foreign Assets	2.96	3.15	3.54	3.42
Reserve Assets	12 181.81	11 644.13	11 487.68	14 569.64
Deposits with Central Bank	11 168.08	10 776.48	10 575.59	13 846.24
Cash in Vault	1 013.74	867.65	912.08	723.40
Claims on Government	595.32	658.96	988.37	1 217.19
Of Which: Central Government	595.32	658.96	988.37	1 217.19
Claims on Central Bank	116.97	61.88	61.49	4.50
Claims on Other Depository Corporations	24 671.46	24 024.44	24 133.03	19 771.18
Claims on Other Financial Corporations	2 432.60	3 258.82	3 062.65	2 709.76
Claims on Non-financial Corporations	23 308.55	23 467.09	23 748.30	22 691.57
Claims on Other Resident Sectors	22 420.11	22 583.31	22 361.20	20 729.17
Other Assets	4 536.73	4 426.50	4 419.46	4 249.14
Total Assets	**90 266.51**	**90 128.28**	**90 265.71**	**85 945.57**
Liabilities to Non-financial Institutions and Households	68 223.34	67 026.04	66 646.89	63 806.72
Deposits Included in Broad Money	68 104.31	66 910.11	66 526.46	63 630.41
Corporate Demand Deposits	9 895.24	10 129.58	10 325.42	9 916.45
Corporate Time Deposits	2 927.45	3 037.13	2 997.59	2 558.67
Personal Deposits	55 281.63	53 743.40	53 203.45	51 155.30
Deposits Excluded from Broad Money	6.89	6.74	6.88	7.46
Transferable Deposits	0.34	0.28	0.55	0.89
Other Deposits	6.55	6.46	6.33	6.57
Other Liabilities	112.14	109.19	113.55	168.85
Liabilities to Central Bank	1 241.75	1 390.03	1 342.91	1 071.97
Liabilities to Other Depository Corporations	8 990.70	9 725.46	9 799.85	7 908.88
Liabilities to Other Financial Corporations	418.39	691.40	394.61	507.92
Of Which: Deposits Included in Broad Money	103.08	126.13	147.96	126.59
Foreign Liabilities	0.13	0.11	0.17	0.18
Bond Issue	1.00	16.29	57.16	17.88
Paid-in Capital	2 518.32	2 529.16	2 535.23	2 566.03
Other Liabilities	8 872.89	8 749.78	9 488.89	10 065.99
Total Liabilities	**90 266.51**	**90 128.28**	**90 265.71**	**85 945.57**

Source: The PBC.

Table 15 Statistics of Securities Market

Year	2010	2011	2012	2013	2014	2015
Number of Domestic Listed Companies(A shares, B shares)	2 063	2 342	2 494	2 489	2 613	2 827
Number of Domestic Listed Foreign Investment Shares (B shares)	108	108	107	106	104	101
Number of Overseas Listed Companies(H shares)	165	171	179	182	205	231
Total Issued Shares (100 million shares)	33 184.35	36 095.52	38 395.00	40 569.08	43 610.13	49 997.26
of Which: Negotiable Shares (100 million shares)	25 642.03	28 850.26	31 339.60	36 744.16	39 104.28	44 026.44
Total Market Value of Shares (RMB 100 million yuan)	265 422.59	214 758.10	230 357.62	239 077.19	372 546.96	531 304.20
of Which: Negotiable Shares (RMB 100 million yuan)	193 110.41	164 921.30	181 658.26	199 579.54	315 624.31	417 925.40
Trading Volume of Shares （100 million shares)	42 151.99	33 957.55	32 881.06	48 372.67	73 754.61	171 039.46
Turnover of Shares(RMB 100 million yuan)	545 633.54	421 646.74	314 667.41	468 728.60	743 912.98	2 550 538.29
Shanghai Composite Index (close)	2 808.08	2 199.42	2 269.13	2 115.98	3 234.68	3 539.18
Shenzhen Composite Index (close)	1 290.87	866.65	881.17	1 057.67	1 415.19	2 308.91
Number of Investor Accounts (10 thoussand)	13 391.04	14 050.37	17 064.46	17 517.63	14 214.68	21 477.57
Average P/E Ratio						
Shanghai	21.61	13.40	12.30	10.99	15.99	17.63
Shenzhen	44.69	23.11	22.01	27.76	34.05	52.75
Average Turnover Rate (%)						
Shanghai	197.61	124.80	101.59	123.59	439.50	388.50
Shenzhen	557.46	340.49	297.85	389.11	635.81	946.04
Treasury Bond Issuance (RMB 100 million yuan)	19 778	17 100	16 154	20 230	21 747	59 408
Corporate Credit Bonds Issuance (RMB 100 million yuan)			37 365	36 784	51 516	67 205
Turnover of Outright Treasury Bond Purchase in the Inter-bank Market(RMB 100 million yuan)				58 152	58 797	99 296
Turnover of Treasury Bond Repo in the Inter-bank Market (RMB 100 million yuan)				591 766	839 347	1 589 806
Number of Securities Investment Funds	704	914	1 173	1 552	1 897	2 722
Total Net Asset Value of Securities Investment Funds(RMB 100 million yuan)	24 228.35	26 510.37	28 661.81	30 025.77	45 353.61	83 971.83
Turnover of Securities Investment Funds Listed on Exchanges（RMB 100 million yuan）	8 996.43	6 365.80	8 667.36	12 562.04	19 904.62	76 859.68
Trading Volume of Futures (10 thousand lots)	156 684.42	105 413.75	145 052.57	206 182.30	250 585.57	357 768.26
Turnover of Futures (RMB 100 million yuan)	1 540 296.21	1 375 162.44	1 711 269.35	2 674 662.02	2 919 882.26	5 530 159.69

Source: The PBC, the CSRC, Asset Management Association of China, China Central Depository &.Clearing Co., Ltd.

Table 16 Ratio of Stock Market Capitalization to GDP

(RMB 100 million yuan unless otherwise noted)

Year	GDP	Market Capitalization	Ratio of market captialization to GDP (percent)	Negotiable Market Capitalization	Ratio of negotiable market captialization to GDP (percent)
1998	84 402	19 506	23.11	5 746	6.81
1999	89 677	26 471	29.52	8 214	9.16
2000	99 215	48 091	48.47	16 088	16.21
2001	109 655	43 522	39.69	14 463	13.19
2002	120 333	38 329	31.85	12 485	10.38
2003	135 823	42 458	31.26	13 179	9.70
2004	159 878	37 056	23.18	11 689	7.31
2005	183 868	32 430	17.64	10 631	5.78
2006	211 923	89 404	42.19	25 004	11.80
2007	249 530	327 141	131.10	93 064	37.30
2008	300 670	121 366	40.36	45 214	15.04
2009	335 353	243 939	72.74	151 259	45.10
2010	397 983	265 422	66.69	193 110	48.52
2011	471 564	214 758	45.54	164 921	34.97
2012	519 322	230 358	44.36	181 658	34.98
2013	568 845	239 077	42.03	199 580	35.09
2014	636 463	372 547	58.53	315 624	49.59
2015	676 708	531 304	78.51	417 925	61.76

Source: The NBSC, the CSRC.

Table 17 Ratio of Domestic Stock Financing to Bank Loan Increment

(RMB 100 million yuan unless otherwise noted)

Year	Domestic Stock Financing	Bank Loan Increment	Ratio (percent)
1998	803.57	11 490.94	6.99
1999	897.39	10 846.36	8.27
2000	1 541.02	13 346.61	11.55
2001	1 182.13	12 439.41	9.50
2002	779.75	18 979.20	4.11
2003	823.10	27 702.30	2.97
2004	862.67	19 201.60	4.49
2005	338.13	16 492.60	2.05
2006	2 463.70	30 594.89	8.05
2007	7 722.99	36 405.60	21.21
2008	2 619.71	41 703.76	6.28
2009	3 894.53	96 290.18	4.04
2010	8 954.99	79 510.73	11.26
2011	5 073.07	68 751.14	7.38
2012	3 127.54	81 962.95	3.82
2013	3 457.52	93 326.01	3.70
2014	4 834.04	101 548.47	4.76
2015	8 295.14	117 007.11	7.09

Note: Since 2008,the statistics of stock refinancing were divided into two items: asset injection and cash injection, and the former was not included in "Domestic Stock Financing" from then on.

Source: Calculated on the basis of data from the CSRC and the PBC.

Table 18 Statistics of Stock Market

Year		2009	2010	2011	2012	2013	2014	2015
Number of Domestic Listed Companies (A shares, B shares)		1 718	2 063	2 342	2 494	2 489	2 613	2 827
Of Which: ST Companies		142	153	137	96	57	43	52
Medium/Small-sized Companies		327	531	646	701	701	732	776
Growth Enterprise Board		36	153	281	355	355	406	492
Number of Domestic Listed Foreign Investment Shares (B shares)		108	108	108	107	106	104	101
Of Which: ST Companies					12		4	0
Total Issued Shares (100 million shares)		26 162.85	33 184.35	36 095.52	38 395.00	40 569.08	43 610.13	49 997.26
Of Which:Medium/Small-sized Companies		794.13	1 366.74	1 943.50	2 410.25	2 818.48	3 470.59	4 853.94
Growth Enterprise Board		34.60	175.06	399.53	600.89	761.56	1 077.26	1 840.45
Total Market Capitalization of Shares (RMB 100 million yuan)		243 939.12	265 422.59	214 758.10	230 357.62	239 077.19	372 546.96	531 304.20
Of Which:Medium/Small-sized Companies		16 872.55	35 364.61	27 429.32	28 804.03	37 163.74	51 058.20	103 950.47
Growth Enterprise Board		1 610.08	7 365.22	7 433.79	8 731.20	15 091.98	21 850.95	55 916.25
Market Capitalization of Negotiable Shares (RMB 100 million yuan)		151 258.65	193 110.41	164 921.30	181 658.26	199 579.54	315 624.31	417 925.40
Of Which: Medium/ Small-sized Companies		7 503.57	16 150.32	14 343.52	16 244.15	25 543.70	36 017.99	69 737.04
Growth Enterprise Board		298.97	2 005.64	2 504.08	3 335.29	8 218.83	13 072.90	32 078.68
Volume (100 million shares)	Total	51 106.99	42 151.99	33 957.55	32 881.06	48 372.67	73 754.61	171 039.50
	Daily Average	209.45	174.18	139.17	135.31	203.25	301.04	700.98
	Medium/Small-sized	3 283.65	4 055.35	3 729.74	5 075.85	8 245.92	11 313.54	25 409.94
	Growth Enterprise Board	38.55	400.53	761.69	1 478.14	3 035.83	4 035.31	9 938.88

(concluded)

Year		2009	2010	2011	2012	2013	2014	2015
Turnover (RMB 100 million yuan)	Total	535 986.74	545 633.54	421 649.72	314 667.41	468 728.60	743 912.98	2 550 538.29
	Daily Average	2 196.67	2 254.68	1 728.07	1 294.93	1 969.45	3 036.38	10 453.03
	Medium/Small-sized	48 273.52	85 832.42	69 026.48	61 891.45	100 224.00	152 166.56	497 556.18
	Growth Enterprise Board	1 828.11	15 717.88	18 879.15	23 304.64	51 182.00	78 041.35	285 352.81
Average Turnover Rate (%)	Shanghai	499.41	197.61	124.80	101.59	123.59	439.50	388.50
	Shenzhen	793.27	557.46	340.49	297.85	389.11	635.81	946.04
Average P/E Ratio	Shanghai	28.73	21.61	13.40	12.30	10.99	15.99	17.63
	Shenzhen	46.01	44.69	23.11	22.01	27.76	34.05	52.75
	Medium/Small-sized	51.01	56.93	28.26	25.42	34.07	41.06	68.06
	Growth Enterprise Board	105.38	78.53	37.62	32.01	55.21	64.51	109.01
Shanghai Composite Index	Open	1 849.02	3 289.75	2 825.33	2 212.00	2 289.51	2 112.13	3 258.63
	Highest	3 478.01	3 306.75	3 067.46	2 478.37	2 444.80	3 234.68	5 166.35
	Date	2009-8-4	2010-1-11	2011-4-18	2012-2-27	2013-2-18	2014-12-31	2015-6-12
	Lowest	1 844.09	2 319.74	2 134.02	1 949.46	1 849.65	1 991.25	2 927.29
	Date	2009-1-5	2010-7-2	2011-12-28	2012-12-4	2013-6-25	2014-1-20	2015-8-26
	Close	3 277.14	2 808.08	2 199.42	2 269.13	2 115.98	3 234.68	3 539.18
Shenzhen Composite Index	Open	560.10	1 207.33	1 298.60	871.93	887.36	1 055.88	1 419.44
	Highest	1 240.64	1 414.64	1 316.19	1 020.29	1 106.27	1 504.48	3 140.66
	Date	2009-12-4	2010-11-11	2011-1-6	2012-3-14	2013-10-22	2014-12-16	2015-6-12
	Lowest	557.69	890.24	828.83	724.97	815.89	1,004.93	1,428.37
	Date	2009-1-5	2010-7-2	2011-12-28	2012-12-4	2013-06-25	2014-4-29	2015-1-19
		1 201.34	1 290.87	866.65	881.17	1 057.67	1 415.19	2 308.91

Sources: The CBRC,Shanghai Stock Exchange and Shenzhen Stock Exchange.

Table 19 Summary of China's Bond Issuance

(RMB 100 million yuan)

Year	Treasury Bonds			Financial Bonds			Corporate Credit Bonds		
	Issue	Redemption	Outstanding	Issue	Redemption	Outstanding	Issue	Redemption	Outstanding
1996	1 847.77	786.64	4 361.43				268.92	317.80	597.73
1997	2 411.79	1 264.29	5 508.93				255.23	219.81	521.02
1998	3 808.77	2 060.86	7 765.70				147.89	105.25	676.93
1999	4 015.00	1 238.70	10 542.00				158.20	56.50	778.63
2000	4 657.00	2 179.00	13 020.00				83.00		861.63
2001	4 884.00	2 286.00	15 618.00				147.00		
2002	5 934.30	2 216.20	19 336.10				325.00		
2003	6 280.10	2 755.80	22 603.60				358.00		
2004	6 923.90	3 749.90	25 777.60				327.00		
2005	7 042.00	4 045.50	28 774.00				2 046.50	37.00	
2006	8 883.30	6 208.61	31 448.69				3 938.30	1 672.40	
2007	23 139.10	5 846.80	48 741.00				5 181.00	2 880.90	7 683.30
2008	8 558.20	7 531.40	49 767.80				8 723.40	3 277.84	13 250.62
2009	17 927.24	9 745.06	57 949.98				16 599.30	4 309.12	25 540.80
2010	19 778.30	10 043.38	67 684.90				16 094.45	5 099.23	36 318.15
2011	17 100.00	10 959.00	75 832.00	23 491.00	7 683.00	75 748.00	23 548.00	10 326.00	49 095.00
2012	16 154.00	9 464.00	82 522.00	26 202.00	8 588.00	93 362.00	37 365.00	8 750.00	77 710.00
2013	20 229.94	8 996.11	95 470.65	26 310.04	13 305.88	105 771.74	36 783.92	18 672.74	93 241.68
2014	21 747.00	10 365.00	107 275.00	36 552.00	19 345.00	125 489.00	51 516.00	27 388.00	116 214.00
2015	59 408.00	12 803.00	154 524.00	102 095.00	53 852.00	184 596.00	67 205.00	39 757.00	144 329.00

Notes:①"Financial Bonds" are bonds issued by financial insitutions, including financial bonds issued by CDB; policy financial bonds; common bonds, subordinated bonds and hybrid bonds issued by commercial banks; asset-backed securities; bonds and short-term financing bills issued by securities companies; and financial bonds issued by asset management companies.

②Due to statistical method adjustment, since 2012, the item "Enterprise bonds" is replaced by "Corporate credit bonds", including debt financing instruments of non-financial enterprises, enterprise bonds, corporate bonds, convertible bonds, bonds with detachable warrants, and SME private-funded bonds.

Source: The PBC.

Table 20 Statistics of China's Insurance Sector

(100 million of RMB yuan unless otherwise noted)

Items	2009	Growth (y-o-y) (percent)	2010	Growth (y-o-y) (percent)	2011	Growth (y-o-y) (percent)	2012	Growth (y-o-y) (percent)	2013	Growth (y-o-y) (percent)	2014	Growth (y-o-y) (percent)	2015	Growth (y-o-y) (percent)
Premium Income	11 137.30	13.83	14 527.97	30.44	14 339.25	—	15 487.93	8.01	17 222.24	11.20	20 234.81	17.49	24 282.52	20.00
1.Property Insurance	2 875.83	23.07	3 895.64	35.46	4 617.82	18.54	5 330.93	15.44	6 212.26	16.53	7 203.38	15.95	7 994.97	10.99
2.Personal Accident Insurance	230.05	13.02	275.35	19.69	334.12	—	386.18	15.58	461.34	19.46	542.57	17.61	635.56	17.14
3.Health Insurance	573.98	-1.96	677.47	18.03	691.72	—	862.76	24.73	1 123.50	30.22	1 587.18	41.27	2 410.47	51.87
4.Life Insurance	7 457.44	12.00	9 679.51	29.80	8 695.59	—	8 908.06	2.44	9 425.14	5.80	10 901.69	15.67	13 241.52	21.46
Claims and Payments	3 125.48	5.19	3 200.43	2.40	3 929.37	22.78	4 716.32	20.03	6 212.90	31.73	7 216.21	16.15	8 674.14	20.20
1.Property Insurance	1 575.78	11.10	1 756.03	11.44	2 186.93	24.54	2 816.33	28.78	3 439.14	22.11	3 788.21	10.15	4 194.17	10.72
2.Personal Accident Insurance	63.92	2.15	71.39	11.69	81.84	14.64	96.80	18.28	109.51	13.12	128.42	17.27	151.84	18.24
3.Health Insurance	217.03	23.82	264.02	21.65	359.67	36.23	298.17	-17.10	411.13	37.88	571.16	38.92	762.97	33.58
4.Life Insurance	1 268.74	-3.52	1 108.99	-12.59	1 300.93	17.31	1 505.01	15.69	2 253.13	49.71	2 728.43	21.09	3 565.17	30.67
Operating Expenses	1 234.06	14.32	1 538.35	24.66	1 882.38	22.36	2 171.46	15.36	2 459.59	13.27	2 795.79	13.67	3 336.72	19.35
Bank Deposits	10 519.68	30.07	13 909.97	32.23	17 737.17	27.51	23 446.00	32.19	22 640.98	-3.43	25 233.44	11.45	24 349.67	-3.50
Investment	26 897.43	19.73	32 136.65	19.48	37 736.67	17.43	45 096.58	19.50	54 232.43	20.26	66 997.41	23.54	87 445.81	30.52
Of Which: Treasury Bonds	4 053.82	-3.67	4 815.78	18.80	4 742.40	-1.52	4 795.02	1.11	4 776.73	-0.38	5 009.88	4.88	5 831.12	16.39
Securities Investment Funds	2 758.78	67.56	2 620.73	-5.00	2 915.86	11.26	3 625.58	24.34	3 575.52	-1.38	4 714.28	31.85	8 856.50	87.87
Total Assets	40 634.75	21.59	50 481.61	24.23	60 138.10	19.13	73 545.73	22.29	82 886.95	12.70	101 591.47	22.57	123 597.76	21.66

Notes: ①Since 2011, the calculation of premium income has been adjusted according to the Interpretation No.2 of Corporate Accounting Standardscirculated by the Ministry of Finance. As a result, data of premium income since 2011 is incomparable with those in previous years.

②Data of premium income, claims and payments and operating expenses are data for the year.

③Data of bank deposits, investment and total assets are data of the year-end balance.

Source: Calculated based on data from CIRC Website.

Table 21 The Structure of Non-life Insurance Premium Income

(RMB 100 million yuan unless otherwise noted)

Insurance Lines	2011	Proportion (percent)	2012	Proportion (percent)	2013	Proportion (percent)	2014	Proportion (percent)	2015	Proportion (percent)
Automobile Insurance	3 504.56	73.33	4 005.17	72.43	4 720.79	72.84	5 515.93	73.11	6 198.96	73.59
Enterprise Property Insurance	329.81	6.90	360.36	6.52	378.80	5.84	387.35	5.13	386.16	4.58
Cargo Transportation Insurance	97.83	2.05	101.71	1.84	102.94	1.59	95.44	1.27	88.16	1.05
Accident Insurance	105.12	2.20	126.54	2.29	150.93	2.33	171.93	2.28	199.95	2.37
Liability Insurance	148.01	3.10	183.77	3.32	216.63	3.34	253.30	3.36	301.85	3.58
Others	593.73	12.42	752.33	13.60	911.07	14.06	1 120.45	14.85	1 248.18	14.82
Total	4 779.06	100.00	5 529.88	100.00	6 481.16	100.00	7 544.40	100.00	8 423.26	100.00

Source: The CIRC.

Table 22 The Structure of Life Insurance Premium Income

(RMB 100 million of yuan unless otherwise noted)

Insurance Lines	2011	Proportion (percent)	2012	Proportion (percent)	2013	Proportion (percent)	2014	Proportion (percent)	2015	Proportion (percent)
Life Insurance	8 695.40	90.96	8 907.90	89.46	9 424.99	87.75	10 901.57	85.90	13 241.40	83.49
Of Which: Common Life Insurance	951.20	9.95	969.65	9.74	1 200.27	11.17	4 296.49	33.86	6 728.14	42.42
Participating Insurance	7 662.54	80.15	7 854.29	78.88	8 132.81	75.72	6 508.75	51.29	6 413.19	40.44
Unit-linked Insurance	4.55	0.05	4.35	0.04	4.42	0.04	4.42	0.03	4.18	0.03
Accident Insurance	229.00	2.40	259.64	2.61	310.41	2.89	370.63	2.92	435.61	2.75
Health Insurance	635.61	6.65	790.35	7.94	1 005.52	9.36	1 418.09	11.17	2 182.13	13.76
Total	9 560.00	100.00	9 957.89	100.00	10 740.93	100.00	12 690.28	100.00	15 859.13	100.00

Source: The CIRC.

Table 23 Insurance Premium Income of China's Different Regions in 2015

(RMB 100 million of yuan)

Regions	Insurance Premium Income	Property Insurance	Life Insurance	Accident Insurance	Health Insurance
Total	24 282.52	7 994.97	13 241.52	635.56	2 410.47
Jiangsu	2 166.82	665.32	1 205.95	61.46	234.10
Guangdong	1 989.92	672.19	1 083.92	54.22	179.58
Shandong	1 543.49	473.76	881.85	32.20	155.67
Beijing	1 403.89	344.66	778.20	37.71	243.32
Zhejiang	1 267.30	421.44	690.83	32.89	122.14
Henan	1 248.76	320.16	794.72	22.44	111.44
Sichuan	1 207.08	525.42	541.40	37.68	102.58
Hebei	1 163.10	399.50	642.21	22.95	98.45
Shanghai	1 125.16	355.40	607.63	45.71	116.43
Hubei	843.63	238.24	495.40	22.01	87.97
Hunan	712.18	243.21	389.19	19.77	60.01
Anhui	708.01	206.90	402.69	11.70	86.72
Shenzhen	698.92	273.35	353.70	13.26	58.61
Fujian	647.55	214.55	331.16	25.41	76.42
Liaoning	631.22	199.26	344.18	18.13	69.64
Shaanxi	591.77	133.57	403.32	10.13	44.75
Shanxi	586.73	159.55	377.18	9.15	40.85
Heilongjiang	572.45	176.75	329.49	13.46	52.74
Chongqing	514.58	155.93	276.20	17.75	64.70
Yunnan	508.43	162.02	295.02	10.55	40.84
Jiangxi	434.60	201.19	170.46	17.06	45.89
Tianjin	431.32	120.57	270.78	6.29	33.67
Guangxi	398.34	120.28	236.66	7.46	33.94
Inner Mongolia	395.48	149.28	203.58	7.94	34.67
Xinjiang	385.75	147.14	185.42	15.21	37.97
Jilin	367.43	142.96	169.43	13.18	41.86
Ningbo	257.80	133.95	97.08	9.90	16.87
Guizhou	256.89	90.30	132.74	7.89	25.96
Gansu	244.12	93.23	125.10	5.61	20.17
Qingdao	233.35	70.99	138.74	4.79	18.83
Dalian	228.25	121.29	90.76	5.99	10.21
Xiamen	146.36	61.36	63.93	5.06	16.02
Ningxia	114.25	44.28	58.87	2.89	8.21
Hainan	103.31	41.01	47.43	2.97	11.90
Qinghai	56.30	26.12	22.67	1.64	5.87
Tibet	17.36	11.14	3.50	1.47	1.25
Group and Head Office Level	80.65	78.70	0.13	1.62	0.20

Note: Data of "Group and Head Office Level" refers to the premium income earned by the group and head office, which is not reflected in any region's data.

Source: The CIRC.

Table 24 Transactions of Payment Systems

(10 thousand transactions/RMB 100 million yuan)

Items/Year	2011		2012		2013		2014		2015	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
HVPS	37 211.44	13 552 814.97	47 035.96	17 719 972.13	59 548.66	20 607 617.10	71 256.49	23 468 933.87	78 883.86	29 520 565.22
BEPS	56 304.92	183 614.11	75 393.50	185 477.54	104 027.48	203 154.11	143 580.15	220 751.23	183 526.95	249 402.68
IBPS			26 580.35	35 630.14	71 784.34	94 684.65	163 914.52	177 893.21	296 555.07	277 563.81
ACH	41 803.08	709 484.72	39 135.21	665 182.46	41 871.79	682 892.87	38 381.54	632 193.30	39 515.72	1 243 363.80
CDFCPS	76.24	17 103.76	111.05	33 614.79	139.44	44 294.86	191.13	52 809.80	207.88	57 002.02
Intra-bank Payment Systems of Banking Institutions	729 076.77	5 305 821.12	895 492.15	6 245 593.61	1 075 915.50	7 452 224.44	1 431 813.80	8 962 797.55	1 970 775.51	11 940 122.11
UnionPay Bankcard Interbank Clearing System	1 038 147.93	159 285.29	1 248 897.88	217 631.82	1 513 946.08	322 972.28	1 867 366.07	411 097.10	2 066 757.44	492 752.74

Note: VPS (High Value Payment System), BEPS(Bulk Electronic Payment System), IBPS(Internet Banking Payment System), ACH(Automatic Clearing Houses), CDFCPS(China Domestic Foreign Currency Payment System)

Source: The PBC.