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Executive Summary

Since the beginning of 2020, the international situation has become more grave and complicated, and the tasks related to domestic reform, development and stability have remained arduous. In particular, the globe has experienced the most severe economic recession since the Second World War, as a result of the unprecedented shock induced by the COVID-19 pandemic. Faced with the serious tests and challenges, China has adhered to the direction of high-quality development, trying to strike a good balance between the COVID-19 response and socio-economic development. The 13th Five-Year Plan was successfully concluded, the fight against poverty secured a full victory, and the building of a moderately prosperous society in all respects was completed. In 2020, China's GDP grew by 2.3 percent year on year to over RMB 100 trillion, making China the only major economy with positive economic growth.

In line with the overall arrangements by the CPC Central Committee and the State Council and under the coordination of the Financial Stability and Development Committee, the financial sector, with a view to supporting the real economy, made all-out efforts to help enterprises and secure employment, while deepening financial reform and opening-up. Important progress has also been made in the critical battle against major financial risks. First, the rapid growth momentum of the macro leverage ratio has been effectively contained. The macro leverage ratio stabilized around 250 percent between 2017 and 2019, which has created room for countercyclical measures in response to the outbreak of COVID-19. The macro leverage ratio edged up temporarily in 2020, reflecting a weaker nominal GDP growth and greater policy supports in the wake of the COVID-19 pandemic, but is expected to gradually return to the trend of basic stability. Second, various high-risk institutions were handled in an orderly manner. The resolute and law-based takeover of the Baoshang Bank, while protecting the legitimate rights and interests of depositors and clients, broke away from implicit guarantees and demonstrated market discipline. After completing financial restructuring and capital replenishment, the Bank of Jinzhou resumed normal operation. The nine financial institutions controlled by the "Mingtian Group" were successfully taken over, with uninterrupted provision of basic financial services and smooth progress in validation of assets and capital, reform and restructuring. Risks of the Huaxin Group have been addressed, and risk resolution of the Anbang Group was in the final stage. Third, risks from shadow banking have continued to decline. Regulatory standards on asset management have been harmonized, and a reasonable transition period has been set up and then adjusted for the new guiding opinions on asset management. As a result, the phenomenon of financial institutions being distracted from their intended purposes and circulation of funds within the financial sector without financing the real economy has improved notably. Fourth, credit risks in the key areas have been properly addressed. Monitoring over issuance and trading of bonds has been strengthened, and corporate debt risks have been addressed through a host of measures. Contingency plans for rising NPLs have been made. Measures have been taken to support banks, in particular small- and medium-sized banks, to replenish capital through multiple channels. Fifth, the financial order has been comprehensively straightened. All the P2P institutions have been required to stop doing business, illegal financial activities such as illicit fund-raising, cross-border gambling and underground banks have been forcefully contained, progress has been made in dissolving risks concerning private funds and financial asset exchanges, and regulation on big techs has been strengthened. Sixth, institutional arrangements have been improved to mitigate financial risks, including establishing the countercyclical capital buffer regime, and promulgating rules for the assessment of systemically important banks and regulatory measures on financial holding companies. In addition, efforts have been made to coordinate regulation of financial infrastructures. The institutional and organizational setup of the deposit insurance mechanism has been improved to facilitate its function to take prompt corrective actions and its role as a risk resolution platform. The rules for monitoring the funds of influential real estate companies and for administrating their fund-raising activities have been promulgated, and the concentration of real estate loans has been subjected to an oversight mechanism. In general, through the above measures, financial risks are mitigated and under control, and the financial sector has developed in a stable and healthy manner, therefore creating favorable conditions for mitigating the impact of the COVID-19 pandemic and building a moderately prosperous society in all respects.

At the current juncture of intertwined changes and a pandemic both unseen in a century, the world has entered a period of turbulence and radical developments, and destabilizing factors and uncertainties both at home and abroad have increased significantly. On the international front, as the COVID-19 pandemic that began to spread globally in early 2020 has accelerated the changes unprecedented in a century, the world economy experienced a downturn, the global industrial chain and supply chain were dealt a severe blow due to non-economic reasons, international trade and investment dwindled considerably, the spillover effect of quantitative easing of advanced economies has continued to play out, economic globalization experienced setbacks, protectionism and unilateralism have been on a rise, and the international economic, scientific, cultural, security and political patterns have undergone significant adjustments. On the domestic front, pandemic control and containment is still facing pressures from imported cases, and economic recovery remains uneven and not solidly based. At the same time, plentiful financial risks exist in different aspects, hidden financial risks remain not fully tackled in certain regions, some corporates are confronted with increasing risks of debt default, and some small- and medium-sized banks struggle with prominent risks. All of these have raised requirements for financial authorities to safeguard financial stability.

Going forward, the fundamental features of China’s economy such as a good momentum for long-term stable growth, a large market and strong resilience for development will remain unchanged, and the new development paradigm with domestic circulation as the mainstay and domestic and international circulation reinforcing each other is taking shape. The year 2021 marks the first year of the 14th Five-Year Plan, and coincides with the 100th anniversary of the founding of the Communist Party of China. Therefore, it is very important to deliver sound socio-economic development in 2021, so as to take a solid first step in the journey of the 14th Five-Year Plan. To this end, a dialectical approach is needed to correctly understand the major trends both at home and abroad, coordinate the overall arrangements for the great rejuvenation of the Chinese nation and for the changes unseen in a century, have an in-depth grasp of the new characteristics and requirements brought about by the evolution of the main contradictions in society as well as the new problems and challenges posed by a complicated international environment, and raise the awareness of both opportunities and risks.

While continuing to coordinate epidemic control and socio-economic development, we should maintain the continuity, stability and sustainability of macro-financial policies. The sound monetary policy that is flexible, well-targeted and appropriate should focus on stimulating the vitality of market players by forcefully supporting micro and small businesses, rural revitalization, the manufacturing sector, scientific and technological innovation and green transition, and strengthen financial services to the real economy, so as to facilitate steady and healthy economic development. Efforts should be made to strike a good balance between financial development, financial stability and financial security. The mechanism for prevention, early warning, resolution, and accountability of financial risks should be improved. Small- and medium-sized financial institutions should be reformed to better tackle their risks. Credit risks should be closely monitored and reduced. Measures will be taken to maintain stable functioning of the stock, bond and foreign exchange markets. Shocks from external risks should be carefully guarded against. Efforts are also needed to deepen reform and opening-up, promote market-based reforms of the interest rate and exchange rate regimes, steadily advance reforms of the capital market, and promote high-quality development of the bond market. Reforms of financial institutions will be deepened to urge them return to their original purposes and focus on their main businesses. In the preconditions of effective risk prevention, continued efforts will be made to promote high-level financial opening-up.

Abbreviations and Acronyms

ACH	Automated clearing house
BCBS	Basel Committee on Banking Supervision
BEPS	Bulk electronic payment system
BIS	Bank for International Settlements
CAR	Capital adequacy ratio
CBIRC	China Banking and Insurance Regulatory Commission
CCB	China Construction Bank
CCP	Central counterparty
CCyB	Countercyclical capital buffer
CET 1	Common Equity Tier 1
CFXPS	China foreign exchange payment system
CIPS	China international payment system
CMG	Crisis management group
CPC	Communist Party of China
CPI	Consumer price index
CSDC	China Securities Depository and Clearing Corporation Limited
CSRC	China Securities Regulatory Commission
D-SIB	Domestic Systemically Important Bank
D-SII	Domestic Systemically Important Insurer
DSTI	Debt-service-to-income
ECB	European Central Bank
EME	Emerging market economy
ESRB	European Systemic Risk Board
ESTER	Euro Short-term Rate
EU	European Union
EUR	Euro
FCA	Financial Conduct Authority
FDIC	Federal Deposit Insurance Company
FHC	Financial holding company

FPC	Financial Policy Committee
FSB	Financial Stability Board
FSDC	Financial Stability and Development Committee
FSOC	Financial Stability Oversight Council
FX	Foreign exchange
GBP	Great Britain Pound
GDP	Gross Domestic Product
GFC	Global Financial Crisis
G-SIB	Global systemically important bank
HICP	Harmonised Index of Consumer Prices
HVPS	High-value real-time payment system
IASB	International Accounting Standards Board
IBOR	Interbank Offered Rate
IBPS	Internet banking payment system
IMF	International Monetary Fund
IPO	Initial public offering
ISDA	International Swaps and Derivatives Association
JPY	Japanese Yen
LCR	Liquidity Coverage Ratio
LEI	Legal Entity Identifier
LIBOR	London Interbank Offered Rate
LPR	Loan prime rate
LTV	Loan-to-value
MOF	Ministry of Finance
MPA	Macroprudential Assessment
NAFMII	National Association of Financial Market Institutional Investors
NBS	National Bureau of Statistics
NEEQ	National Equities Exchange and Quotations
NPA	Non-performing asset
NPL	Non-performing loan
NSFR	Net Stable Funding Ratio
OECD	Organisation for Economic Co-operation and Development
P/E	Price-to-earnings
PBC	People’s Bank of China
PCA	Prompt corrective action
PEPP	Pandemic emergency purchase program
PPI	Producer price index

PMCCF	Primary Market Corporate Credit Facility
QDII	Qualified Domestic Institutional Investors
QFII	Qualified Foreign Institutional Investors
RMB	Renminbi
ROA	Return on assets
ROE	Return on equity
ROI	Return on investment
RQFII	RMB Qualified Foreign Institutional Investors
RRP	Recovery and resolution plan
RWA	Risk-weighted Asset
SAR	Special administrative region
SARON	Swiss Average Rate Overnight
Shibor	Shanghai Interbank Offered Rate
SIFI	Systemically Important Financial Institution
SME	Small- and medium-sized enterprise
SOFR	Secured Overnight Financing Rate
SONIA	Sterling Overnight Index Average
SPV	Special purpose vehicle
SSB	Standard setting body
STAR Market	Sci-Tech Innovation Board
SyRB	Systemic risk buffer
TLAC	Total Loss-absorbing Capacity
TMLF	Targeted Medium-term Lending Facility
TONA	Tokyo Overnight Average
U.K.	United Kingdom
U.S.	United States
USD	U.S. dollar
y-o-y	Year-on-year

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Chapter I

Macroeconomic Performance

In 2020, China firmly pursued high-quality growth despite multiple severe shocks, including the sudden outbreak of COVID-19 and deep recession of global economy. It coordinated the COVID-19 response and social and economic development, and thus was the only major economy registering positive growth and meeting major annual development targets. However, as the COVID-19 pandemic continues to spread around the world, uncertainty and instability are mounting, which has complicated global economic prospects. The foundation for domestic economic recovery is not firm yet, and potential risks and challenges persist. Going forward, the financial sector will continue to seek progress while ensuring stability, ground work in this new stage of development, apply the new development philosophy, better coordinate development and security, and continue to ensure stability on six key fronts and maintain security in six key areas, so as to provide strong and effective support for fostering a new development paradigm and pursuing high-quality development.

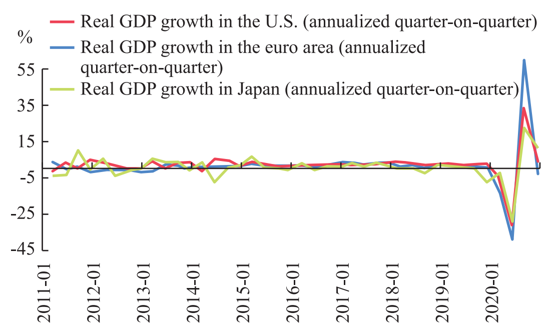
I. International Macroeconomic and Financial Developments

In 2020, the COVID-19 pandemic had a far-reaching impact on global economic structure, trade and investment, and macro adjustment framework. The global economy plunged into the deepest recession since the Second World War, with major economies registering a negative growth in the first half-year and seeing limited recovery in the second half. The global economic recovery still faces high uncertainties.

1. Developments in Major Economies

The global economy recovered slowly. In 2020, the GDP in major advanced economies recovered somewhat in the second half-year after a sharp decline in the second quarter, but growth momentum weakened. Quarter-on-quarter data show that in the second quarter of 2020, the annualized quarter-on-quarter GDP growth in the U.S., the euro area and Japan fell to -31.4 percent, -38.8 percent and -29.3 percent. It recovered strongly in the third quarter, but dropped back to 4.3 percent, -2.7 percent and 11.7 percent in the fourth quarter (Figure 1.1). For the whole year, the economy in the U.S., the euro area and Japan shrank 3.5 percent, 6.6 percent and 4.8 percent respectively year on year.

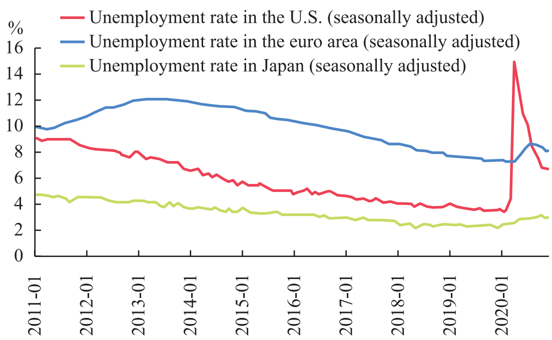
Figure 1.1 Growth Rates of Major Economies



Source: Wind.

Unemployment pressure remained elevated. In 2020, the U.S. unemployment rate edged down after hitting the high of 14.8 percent in April, but the pace of improvement slowed. The unemployment rate for December remained the same as that for November, posting 6.7 percent. From April to December 2020, the unemployment rate in the euro area and Japan rose from 7.2 percent to 8.1 percent and from 2.6 percent to 3.0 percent respectively (Figure 1.2).

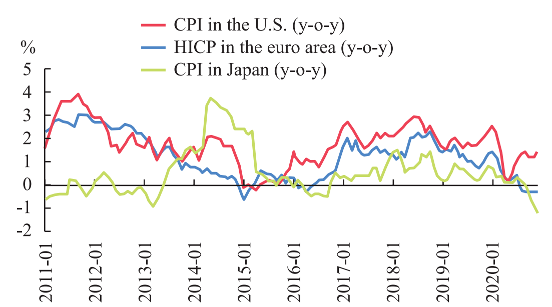
Figure 1.2 Unemployment Rates of Major Economies



Source: Wind.

Inflation went down in general, while diverged somewhat. In May 2020, the CPI in the U.S. dropped to a low level in recent years, rising 0.1 percent year on year, and rebounded to 1.4 percent in December. Prices remained low in the euro area and Japan in 2020, growing -0.3 percent and -1.2 percent in December (Figure 1.3). Some emerging market economies faced structural inflationary pressures. In December, the CPI rose 4.6 percent and 4.5 percent year on year in India and Brazil respectively due to rising food prices.

Figure 1.3 Price Indexes of Major Economies



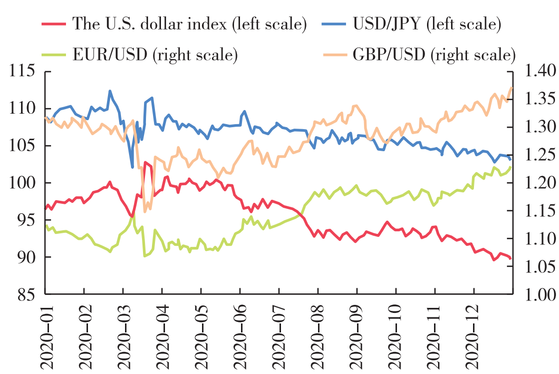
Source: Wind.

International trade and investment contracted. Data published by the World Trade Organization show that global trade in goods shrank 5.3 percent year on year in 2020, and was projected to grow 8 percent in 2021. Data by the United Nations Conference on Trade and Development show that global direct investment slashed 42 percent in 2020. By breakdown, foreign direct investment in advanced economies tumbled 69 percent, while that in developing economies slid 12 percent.

2. Financial Markets Recovered Faster than the Real Economy

The U.S. dollar index fell and other major currencies appreciated. In December 2020, the U.S. dollar index dropped to 90, hitting a fresh low since 2018. In 2020, the euro, the British pound and the Japanese yen appreciated 8.5 percent, 4.1 percent and 5.3 percent respectively against the dollar (Figure 1.4). Currencies of emerging market economies had also strengthened since the second half of 2020, but mostly failed to return to pre-pandemic levels.

Figure 1.4 Exchange Rates of Major Currencies

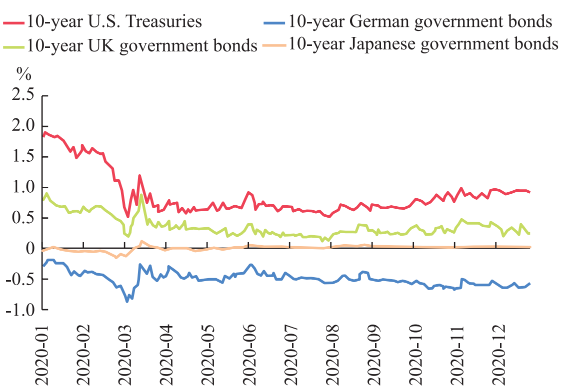


Source: Wind.

The yields on government bonds in major advanced economies dropped amid high

volatility. The outbreak of COVID-19 sparked panic in global financial markets. Government bonds, typically regarded as safe assets, also saw a sell-off, which pushed up the yields. As major advanced economies adopted highly accommodative monetary policy, the yields on government bonds fluctuated downwards. As of end-2020, the yields on 10-year government bonds in the U.S., Germany and the UK fell 99, 38 and 62 basis points respectively compared with end-2019 (Figure 1.5). It is worth noting that the yield on long-term U.S. Treasuries went up gradually after August 2020 when the expectation for economic outlook improved and investors adjusted asset allocation.

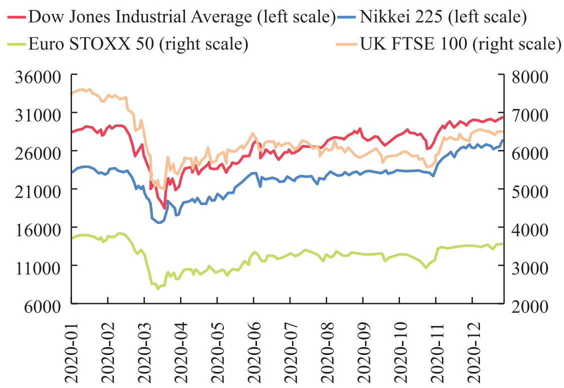
Figure 1.5 Yields on Government Bonds in Major Advanced Economies



Source: Wind.

Global stock markets continued to rise after a slump, but volatility increased. The outbreak of COVID-19 caused the collapse of global stock markets. From late March 2020 to end-December, major stock indices in the U.S. rebounded rapidly to record highs after returning to pre-pandemic levels. Major stock indices in Japan and most emerging market economies in Asia were also back to pre-pandemic levels, while those in the UK and some European countries were yet to recover fully. The rapid rebound came along with higher volatility. The U.S. stock market saw two corrections of around 8 percent respectively in September and October 2020, triggering a global adjustment (Figure 1.6).

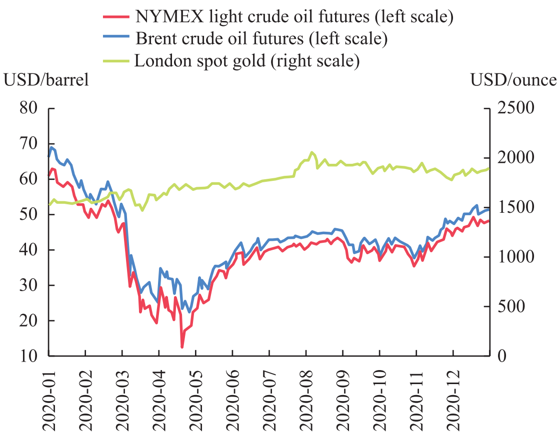
Figure 1.6 Movements of Major Indices



Source: Wind.

Commodity prices recovered somewhat after a drop. From March to May 2020, commodity prices tumbled amid the shock of COVID-19, but stabilized and recovered some losses in the second half of the year. The London Brent crude oil futures and NYMEX light crude oil futures closed at USD 48 and USD 52 per barrel at end-2020 after a gradual rebound from the rock bottom in late April, shedding 20.9 percent and 21.7 percent respectively from end-2019. The London spot gold price closed at USD 1897 per ounce, up 9.8 percent from end-2019 (Figure 1.7). Copper and aluminum futures at the London Metal Exchange jumped 25.7 percent and 9.8 percent respectively compared with end-2019.

Figure 1.7 Movements of International Gold and Crude Oil Prices



Source: Wind.

3. Risks and Challenges

According to the IMF's forecast in April 2021, the global economy was projected to grow 6.0 percent and 4.4 percent in 2021 and 2022 respectively. The advanced economies were projected to grow 5.1 percent and 3.6 percent respectively, while the emerging market and developing economies to grow 6.7 percent and 5.0 percent respectively. Looking ahead, the global economy may face the following risks.

The global economic recovery largely depends on the path of COVID-19. Despite the vaccine rollout, there are uncertainties surrounding virus variants, the effectiveness of vaccines and the public vaccination willingness. This may persistently disrupt economic recovery. If the COVID-19 pandemic lingers on, it may also trigger the shift of industrial chain, supply chain and global trade and investment landscape, with far-reaching impact on global productivity and inflation.

Potential financial risks have been increasing. Financial stability is under threat from rapidly rising asset prices, fast rebound in global stock markets, and record high housing prices in a number of countries. Risks have been exposed gradually, as the corporate debt burden increases and the leverage of non-bank financial institutions keeps rising. The highly accommodative monetary policy in the advanced economies has obvious spillover effects, and cross-border capital flows have become more volatile. Once major advanced economies signal a reverse in monetary policy, it may cause the repricing of risk assets and renewed tightening of global financial conditions. This will trigger large adjustments in financial markets, and undermine market confidence and financial stability.

Emerging market economies face grim challenges. First, the financing needs of emerging market economies remain strong in 2021. Public debts will pile up. According to the IMF's forecast, the public debt of emerging market economies (excluding China) would rise to 61 percent of GDP in 2021. Their financing needs are about 13 percent of GDP. In the meantime, as risk aversion has become more prevalent among investors amid the COVID-19 pandemic, many emerging market economies have issued more short-term and floating rate debt, becoming susceptible to higher rollover risks. Second, domestic banks have been the major buyer of government bonds in emerging market economies since the outbreak of COVID-19. This may aggravate the vicious cycle between higher sovereign debt risk and falling bank asset quality, and may also crowd out private borrowing. Third, emerging market economies are expected to lag behind advanced economies in recovery. Inflation expectations and rising interest rates in advanced economies may cause financial conditions in emerging market economies to tighten again and capital outflow pressures may resurface.

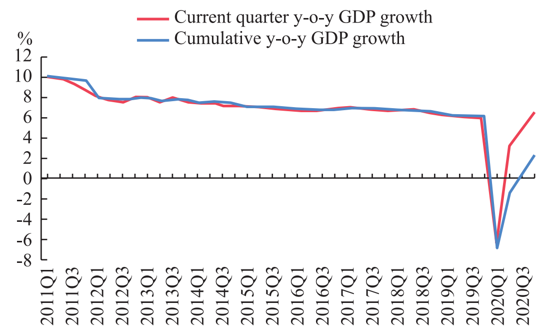
II. Domestic Macroeconomic Performance

In 2020, faced with grim situations abroad, heavy tasks of pursuing reform, development and stability at home, and in particular the big shock of the COVID-19 pandemic, China became the first to contain COVID-19, the first to reopen economy, and the first to achieve positive growth among global major economies through nationwide concerted efforts. China delivered strategic outcomes in coordinating the COVID-19 response and economic and social development. The 13th Five-Year Plan came to a perfect ending, and the building of a moderately prosperous society in all respects was completed as scheduled.

1. The Growth Rate Increased Quarter by Quarter and Industrial Structure Was Stable in General

In 2020, China's GDP registered RMB 101.60 trillion, increasing 2.3 percent year on year based on comparable prices. The y-o-y growth rate for each quarter was -6.8 percent, 3.2 percent, 4.9 percent and 6.5 percent respectively, gradually back to normal (Figure 1.8). Breakdown by industry shows that the added value of the primary industry added 3.0 percent over a year earlier to RMB 7.78 trillion, that of the secondary industry gained 2.6 percent over the prior year to RMB 38.43 trillion, and that of the tertiary industry was up 2.1 percent from 2019 to RMB 55.40 trillion. When compared with 2019, the added value of the primary industry as a share of GDP went up 0.6 percentage point to 7.7 percent, that of the secondary industry dropped 0.8 percentage point to 37.8 percent, and that of the tertiary industry edged up 0.2 percentage point to 54.5 percent.

Figure 1.8 China's Economic Growth

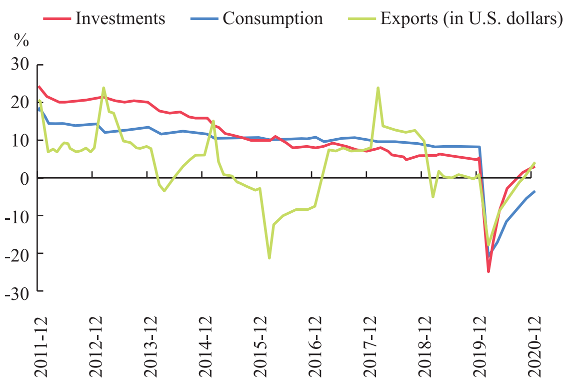


Source: The NBS.

2. Investment Became the Main Driver of Growth, and the Balance of Payments Was at An Equilibrium Level

In 2020, fixed asset investment (excluding those by rural households) stood at RMB 51.90 trillion, up 2.9 percent year on year, down 2.5 percentage points from 2019. Total retail sales of consumer goods reached RMB 39.20 trillion, down 3.9 percent from 2019, 11.9 percentage points lower than the growth in 2019. Exports and imports of goods totaled RMB 32.16 trillion, rising 1.9 percent year on year, down 1.5 percentage points compared with the growth rate in 2019. In particular, exports gained 4.0 percent over the previous year to RMB 17.93 trillion, while imports dipped 0.7 percent from the prior year to RMB 14.22 trillion. The whole year ran a trade surplus of RMB 3.71 trillion (Figure 1.9). The demand structure changed somewhat under the shock of COVID-19, with investment becoming the main driver of stable growth. In 2020, the contribution of final consumption expenditure to the GDP was -22.0 percent, dropping 80.6 percentage points from the previous year, while that of gross capital formation jumped 65.2 percentage points to 94.1 percent, and that of net exports of goods and services increased 15.4 percentage points to 28.0 percent.

Figure 1.9 Cumulative Changes of the Three Major Demands



Sources: The NBS and the General Administration of Customs.

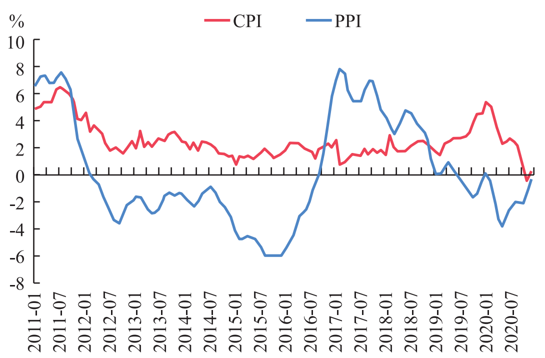
In 2020, China ran a current account surplus of USD 274 billion or 1.9 percent of GDP, up 1.1 percentage points compared with the prior year. The capital and financial account had a deficit of USD 105.8 billion, including a deficit of USD 77.8 billion under the non-reserve financial account and an increase of USD 28 billion in reserve assets. At the end of 2020, China's foreign exchange reserves posted USD 3.22 trillion, adding 3.5 percent or USD 108.6 billion over the end of 2019.

3. The CPI Saw a Structural Increase, While the PPI Dropped Slightly

In 2020, the CPI rose 2.5 percent year on year, down 0.4 percentage point compared with 2019. During the four quarters, it increased 5.0 percent, 2.7 percent, 2.3 percent and 0.1 percent respectively year on year. In particular, food prices jumped 10.6 percent, up 1.4 percentage points from that of 2019, while non-food prices edged up 0.4 percent, dropping 1.0 percentage point compared with 2019. Consumer goods prices went up 3.6 percent, almost the same as that of 2019, whereas services prices gained 0.6 percent, down 1.1 percentage points from that of 2019.

In 2020, the PPI declined 1.8 percent year on year, 1.5 percentage points higher than that of 2019. During the four quarters, it slid 0.6 percent, 3.3 percent, 2.2 percent and 1.3 percent respectively year on year (Figure 1.10). In particular, producer prices for consumer goods ticked up 0.5 percent, falling 0.4 percentage point from 2019, while the y-o-y producer prices for means of production dropped 2.7 percent, 1.9 percentage points higher than those of 2019. The Purchasing Price Index of Raw Materials, Fuel and Power (PPIRM) was down 2.3 percent, 1.6 percentage points higher than that of 2019. It declined by 0.8 percent, 4.4 percent, 2.7 percent and 1.3 percent respectively during the four consecutive quarters.

Figure 1.10 Monthly Movements of Major Price Indices



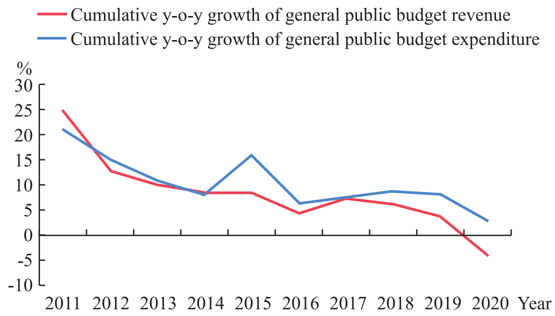
Source: The NBS.

4. Fiscal Revenue Increased Quarter by Quarter, Which Guaranteed the Spending in Key Areas

In 2020, the national general public budget revenue posted RMB 18.29 trillion, sliding 3.9 percent from a year earlier yet better than expected. Its y-o-y quarterly growth was -14.3 percent, -7.4 percent, 4.7 percent and 5.5 percent respectively, showing a winning tendency. By breakdown, the central government general public budget revenue lost 7.3 percent compared with the prior year to RMB 8.28 trillion, accounting for 45.3 percent of the national general public budget revenue. The local government general public budget revenue dipped 0.9 percent from 2019 to RMB 10.01 trillion, taking up 54.7 percent of the national total. Breakdown by revenue structure showed that tax revenues shed 2.3 percent year on year to RMB 15.43 trillion, representing 84.4 percent of the national general public budget revenue, while non-tax revenues dwindled 11.7 percent from the previous year to RMB 2.86 trillion, comprising 15.6 percent of the national total.

The national general public budget expenditure registered RMB 24.56 trillion in 2020, up 2.8 percent year on year, which guaranteed the spending in COVID-19 response, the critical battle of poverty reduction and efforts to ensure basic well-being of the public, timely payment of wages, and economic performance at the grassroots level. By breakdown, the central government general public budget expenditure remained almost the same as that of the last year, posting RMB 3.51 trillion, while the local government general public budget expenditure advanced 3.3 percent year on year to RMB 21.05 trillion (Figure 1.11).

Figure 1.11 Growth of Fiscal Revenue and Expenditure



Source: The MOF.

5. Profits of Industrial Enterprises Increased

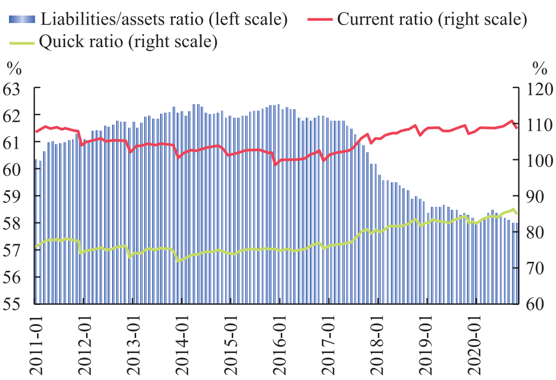
In 2020, the main business revenues of statistically large industrial firms edged up 0.8 percent year on year to RMB 106.1 trillion, while the main business costs went up 0.6 percent compared with 2019 to RMB 89.0 trillion, achieving a total profit of RMB 6.45 trillion, up 4.1 percent compared with 2019. The main business profit margin was 6.08 percent, up 0.20 percentage point[①]. Among the 41 industrial categories, 26 earned more profits than in the previous year, whereas 15 industries witnessed declines in gross profits.

According to the survey of 5000 industrial enterprises conducted by the PBC, the business operation of industrial enterprises remained stable in general. In terms of profits, the main

① According to the NBS, the above data are calculated on a comparable basis, taking into consideration adjustment in statistical coverage, improved statistical survey, deletion of overlapping data and other factors.

business revenues of sample enterprises dropped slightly, but at a slower pace compared with the previous year. The main business revenues of 5000 industrial enterprises slid 1.7 percent year on year in 2020, 4.7 percentage points lower than that of 2019[①]. Gross profits declined 0.8 percent from a year earlier, 5.5 percentage points higher than the growth in 2019. In terms of asset turnover, the inventory turnover ratio and the total asset turnover ratio of sample enterprises dropped 0.3 and 0.1 respectively compared with 2019, posting 5.5 and 0.7. The operating cycle was prolonged by 7.6 days to 129.8 days. The liabilities/assets ratio of sample enterprises dropped slightly to 58.0 percent at end-2020, down by 0.2 percentage point from end-2019. The current ratio and quick ratio were 109.0 percent and 85.1 percent respectively, adding 1.6 percentage points and 2.3 percentage points compared with end-2019 (Figure 1.12). The interest coverage multiplier was 5.7 times, down by 0.2 from the previous year.

Figure 1.12 Liabilities/Assets Ratio, Current Ratio and Quick Ratio of 5000 Industrial Enterprises

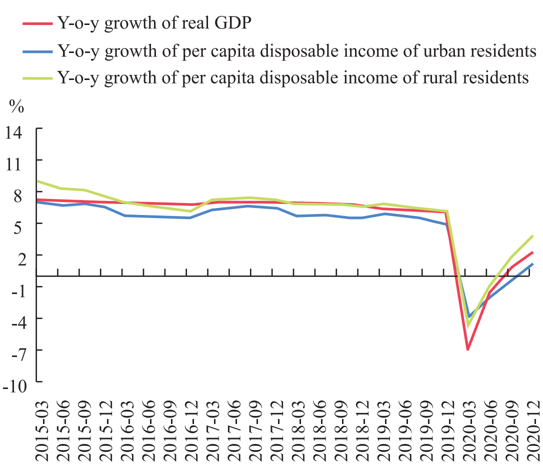


Source: The PBC.

6. Employment Remained Stable and Income Disparity between Urban and Rural Residents Further Narrowed

In 2020, 11.86 million new jobs were created in urban areas, 1.66 million less than those of the prior year. The national urban surveyed unemployment rate was 5.2 percent at end-2020, the same as that at end-2019. The per capita disposal income nationwide was RMB 32189, growing 2.1 percent year on year after being adjusted for inflation, 3.7 percentage points lower than that of 2019. By breakdown, the per capita disposal income of urban residents was RMB 43834, an increase of 1.2 percent in real terms, while that of rural residents was RMB 17131, a gain of 3.8 percent in real terms (Figure 1.13). The urban-to-rural per capital disposal income ratio was 2.56, narrowing by 0.08 compared with 2019.

Figure 1.13 Growth of Per Capita Income of Urban and Rural Residents and GDP



Source: The NBS.

① Due to adjustment of the sample enterprises, updates of financial data and other reasons, the data as of end-2019 are the latest and adjusted data, which may have some discrepancies if compared with data disclosed in last year's report.

7. Real Estate Sales Recovered Steadily and Growth of Loans to the Real Estate Sector Kept Falling

Real estate sales recovered steadily, while the housing price remained generally stable. In 2020, the total floor area of sold units posted 1.761 billion square meters, up 2.6 percent year on year, and the floor area of residential housing sold was 1.549 billion square meters, adding 3.2 percent. The growth rate was up 2.7 percentage points and 1.7 percentage points respectively compared with 2019. The value of housing sales in 2020 totaled RMB 17.36 trillion, jumping 8.7 percent year on year, up 2.2 percentage points from 2019. According to the NBS, the prices of newly-built and second-hand houses in 70 large- and medium-sized cities rose by 3.7 percent and 2.1 percent year on year in December 2020, dropping 3.1 and 1.5 percentage points respectively compared with the growth in the same period of 2019.

Growth of loans to the real estate sector continued to moderate. As of end-2020, outstanding real estate loans went up 11.7 percent year on year to RMB 49.58 trillion, down 3.1 percentage points from 2019. By breakdown, outstanding real estate development loans climbed by 6.1 percent to RMB 11.91 trillion, losing 4.0 percentage points from that of 2019, while outstanding personal mortgage loans amounted to RMB 34.44 trillion, gaining 14.6 percent, 2.1 percentage points lower than that of 2019.

III. Outlook

In 2021, the financial sector will continue to follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and act on the general principle of pursuing progress while ensuring stability. It will ground work in this new stage of development, apply the new development philosophy, and foster a new development paradigm. It will aim at promoting high-quality development, by centering on deepening supply-side structural reform, driven by reform and innovation. It will ensure coordination in pursuing development and upholding security, and consolidate and expand the outcomes of the COVID-19 response as well as social and economic development. It will fully support stable economic and financial performance through systemic and targeted macro policies so as to ensure a good start for the 14th Five-Year Plan.

Maintaining the continuity, stability and sustainability of macro policies. Continuous efforts will be made to implement the proactive fiscal policy and sound monetary policy and make policy implementation more targeted and effective. The relevant authorities will not pursue a premature reverse of policy stance and will properly manage the effectiveness, timing and intensity of policies. The quality, efficiency and sustainability of the proactive fiscal policy must be enhanced with moderate spending. It must act proactively in promoting scientific and technological innovation, speeding up economic restructuring and adjusting income distribution, and take substantive measures to mitigate the risk of implicit local government debts. The sound monetary policy must be flexible, targeted, reasonable and appropriate and put serving the real economy on a more prominent spot. The PBC will improve the mechanism for money supply management, and properly control the general valve of money supply through a policy mix. It will keep liquidity adequate at a reasonable level and keep the growth of money supply and aggregate financing to the real economy basically in line with the nominal GDP growth. It will put to good use the targeted policy instruments such as central bank lending and central bank discounts, and continue with the policy instruments directly supporting the real economy. The PBC will support financial inclusion, rural rejuvenation, manufacturing, scientific and technological innovation, and green transition. It will maintain the stability of the macro leverage ratio and strike a balance between economic recovery and risk prevention.

Strengthening financial market institutional building. The PBC will pursue institutional building and follow the principle of no intervention and zero tolerance. It will follow market-based principles, rule-of-law and international practices to deepen capital market reform and opening-up and enhance basic institutional building. The PBC will strengthen development of the bond market, improve the rules and regulations of the bond market, promote the interconnectivity of bond market infrastructures based on real market needs, and improve the efficiency of resolving bond defaults. It will tap the decisive role of market supply and demand in the formation of exchange rate and keep the RMB exchange rate flexible and basically stable at an adaptive and equilibrium level. It will advance the liberalization of the capital account in a measured way, and speed up the improvement of the administrative framework for the foreign exchange market. It will properly implement the prudential management system of real estate finance market, and improve the financial policy arrangements for the rental housing market.

Further promoting the reform of financial institutions to optimize the supply of financial services. The PBC will deepen the reform of large commercial banks with the focus on strengthening corporate governance to establish a modern financial enterprise system with Chinese characteristics. Large banks will be guided to shift their focus of services to the primary level and improve efficiency to better serve micro and small businesses as well as private enterprises. Small- and medium-sized banks and rural credit cooperatives will be encouraged to focus on main mandates and businesses, and reassume their role in serving local needs and their original purposes, by putting in place effective checks and balances for governance. Measures will be taken to reform and optimize development finance and policy finance, implement classified accounting based on the type of businesses, and improve the capacity for supporting national strategies.

Improving the systems of financial risk prevention, early warning and resolution as well as accountability, and developing a long-term mechanism for preventing and mitigating financial risks. The PBC will persist in considering the worst-case scenario and strengthen the all-round financial risk screening and early warning. It will fully mitigate existing risks, prevent the resurgence of all types of risks, and further clarify the responsibilities of all concerned parties to see that they truly perform their duties and forge synergy in resolving risks. It will prudently mitigate the risk of small- and medium-sized financial institutions by focusing on online repair, and will continuously promote the reform and risk resolution of small- and medium-sized financial institutions. The PBC will continue to mitigate the financial risks in key regions to safeguard local financial ecology, step up the write-off of non-performing assets of the banking sector, and replenish the capital of small- and medium-sized banks through tailored policies. It will tighten the regulation of the financial activities of platform enterprises, and crack down on the mining and trading of bitcoins. It will act quickly to shore up the weaknesses in the regulatory framework, speed up the improvement of the modern financial regulatory system, and enhance regulatory coordination. It will also improve the accountability of financial risks, and strengthen the accountability for major financial risks to effectively prevent moral hazard. The PBC will also fully tap the role of deposit insurance in early correction, and further improve its professional and market-based risk resolution mechanism. It will strictly guard against the shock of external risks, strengthen the management of expectations, and prepare contingency plans and policy reserves. On top of that, it will make financial risk prevention moreforward-looking, holistic and preemptive so as to secure the bottom line that no systemic risk should occur.

Actively taping the role of green finance as an accelerator in meeting carbon peak and carbon neutrality targets. The PBC will mobilize public and private funds for green economic activities, strengthen climate-related information disclosure, improve and coordinate green finance taxonomy, and create policy tools to provide low-cost funds for carbon emission reduction . It will step up support for green finance through measures including commercial credit rating, the premium rate of deposit insurance and the collateral framework for open market operations. The PBC will study the implications of climate change for financial stability, explore the consideration of climate factors in the stress test of financial institutions, gradually include climate-related risks in the macroprudential policy framework, and encourage financial institutions to assess and manage their environmental and climate risks. The PBC will assist in building a national carbon emission trading market to tap the role of carbon market in price discovery. In the meantime, it will strengthen cooperation in green finance with international organizations and counterparts from other economies to make due contributions to global environmental governance.

Special Topic 1 Changes in and Analysis of Macro Leverage Ratio

The macro leverage ratio refers to the ratio of outstanding credit to the non-financial corporate sector (hereinafter referred to as the corporate sector), the government sector and the household sector to the annual GDP. The credit to each sector usually refers to the liabilities originated through financial markets or financial institutions. The macro leverage ratio serves as an important policy input for financial risk mitigation and financial stability decisions.

I. Macro Leverage Ratio in China

The macro leverage ratio in China has been increasing since the Global Financial Crisis, up by almost 105.5 percentage points from 143.1 percent at end-2008 to 248.6 percent at end-2016. Between 2017 and 2019, It leveled off at around 250 percent, with an annualized average increase of 2.0 percentage points, lower than the 13.2 percentage point increase between end-2008 and end-2016. This has helped to create policy space for mitigation measures against the unprecedented COVID-19 pandemic.

In 2020, the macro leverage ratio in China went up temporarily amid the pandemic shocks. According to preliminary estimates, China's macro leverage ratio registered 279.4 percent at end-2020, up by 23.5 percentage points from end-2019. To look at the breakdown, leverage ratio in the corporate sector was 161.2 percent, up by 9.1 percentage points; the household sector 72.5 percent, up by 7.4 percentage points; and the government sector 45.7 percent, up by 7.1 percentage points.

II. The Macro Leverage Ratio Rebound in Perspective

First, from a global perspective, the macro leverage ratios of major economies have increased notably under adverse shocks of the COVID-19 pandemic, while the increase of this ratio was moderate in China. According to BIS statistics, macro leverage ratios in the US (296.1 percent) and Japan (418.9 percent) have witnessed an annual rise of 42.8 and 40.6 percentage points respectively, much higher than the 26.6 percentage point increase in China (by BIS definition) in the same period.

Second, a slowdown in the nominal GDP growth caused by the pandemic is one of the major reasons for China's macro leverage ratio increase, with a contribution of 58.4 percent. In 2020, China's nominal GDP grew by 3.0 percent, 4.3 percentage points lower than the previous year; and the real GDP 2.3 percent, down by 3.7 percentage points. Throughout the year 2020, China's macro leverage ratio rose by a margin 16.7 percentage points higher than that in the previous year. Out of this increase, 9.7 percentage points or 58.4 percent could be explained by the slowdown in the nominal GDP growth. Among it, a slower real GDP growth was the main contributor, resulting in a leverage increase of 7.9 percentage points, while the decline in price indices contributes another 1.8 percentage points.

Third, a steady recovery of China's economy has narrowed the increases in the macro leverage ratio quarter by quarter in 2020, with a net quarterly decline in the fourth quarter. Supported by major progress in pandemic response measures and targeted macro adjustment policies, China's economy started to recover steadily from the second quarter of 2020, with a real GDP growth of 3.2 percent, 4.9 percent and 6.5 percent for the second, third and fourth quarters respectively. In particular, the real GDP growth in the fourth quarter was the highest quarterly increase since 2019. As economic growth gradually returns to the reasonable range, the increase in macro leverage ratio moderated quarter by quarter. The ratio rose by 14.0 percentage points, 7.2 percentage points and 3.9 percentage points on a quarterly basis in the first three quarters respectively and declined by 1.6 percentage points in the fourth quarter. In the first half of 2021, steady recovery continued for China's economy; daily life and productive activities were back to normal; and the macro leverage ratio was successfully kept at a stable level.

Fourth, the efficiency of financial support to the real economy has improved, as relatively fewer incremental debts have financed faster recovery. In 2020, total debts grew by 12.4 percent, a relatively slow increase by historical record and about 4.6 percentage points lower than the average growth of total debts between 2009 and 2019. The size of new debts in the four quarters was RMB 10.7 trillion, 9.1 trillion, 7.7 trillion and 3.9 trillion respectively, shrinking by each quarter. The steady recovery of economic growth starting from the second quarter and dwindling quarterly debt increases indicate that our current macroeconomic policy has fed through into the real economy more smoothly and the efficiency of new debts has improved, with fewer new debts supporting a quicker recovery to the reasonable range.

III. Sectoral Analysis of the Macro Leverage Ratio in China

1. The Rapid Rise in Corporate Leverage Ratio Is a Key Reflection of the Macroeconomic Policy Aimed at Stabilizing Enterprises and Employment

China has properly dealt with existing risks in the corporate sector in recent years. The leverage ratio of the corporate sector is the key component of China's macro leverage ratio, with its contribution staying at around 60 percent. By international comparison, China's corporate leverage ratio ranks among the top of major economies. Between 2017 and 2019, this ratio witnessed a net decline for three consecutive years, with a total net decline of 7.6 percentage points. This helped to mitigate potential risks in an orderly manner and create space for the corporate sector to issue new debts.

The corporate leverage ratio went up by 9.1 percentage points at end-2020 compared with a year earlier and contributed 38.5 percent of the 23.5 percentage point increase in macro leverage ratio, making it the biggest contributor. The rebound of corporate leverage ratio could be partly explained by the slowdown in economic growth and partly by more accessible macro adjustment policies aimed at greater financial support for stabilizing enterprises and employment.

The risk of new corporate debt increases is well under control. In 2020, corporate debt increased by 9.1 percent, 1.8 percentage points higher than in 2019. By debt instrument, this increase mainly comprises loans and bonds. In 2020, the ratio of corporate loans and bonds to GDP was 12.4 percentage points higher than that in 2019, contributing more than 100 percent to the rise of corporate leverage ratio. In addition, off-balance sheet debts of the corporate sector continue to downsize as the phase-in period of the regulatory rules on asset management is coming to a close. In 2020, off-balance sheet corporate debts (such as trust loans and entrusted loans) as a share of GDP decreased by 3.0 percentage points compared with 2019.

2. Leverage Ratio of the Government Sector Increased Rapidly, Effectively Offsetting the Negative Impacts of the Pandemic

In recent years, continued efforts have been made in regulating financing activities by local governments and orderly defusing debt risks in the government sector. The leverage ratio in the government sector saw a total net decline of 2.8 percentage points as a result of deleveraging efforts between 2015 and 2017, and leveled off between 2018 and 2019, with a total increase of 2.6 percentage points.

At end-2020, the leverage ratio of the government sector increased by 7.1 percentage points from end-2019, an increase 4.8 percentage points higher than in the previous year and 6.4 percentage points higher than the annualized average increase between 2008 and 2019. The rapid rise in the government leverage ratio is partly due to economic slowdown caused by the pandemic, but mainly due to the adoption of a more proactive fiscal policy to offset shocks of the pandemic. According to the fiscal budget, the government deficit in 2020 was about RMB 3.76 trillion, with an issuance of special government bonds for COVID-19 response worth RMB 1 trillion, and the newly-added quota for special local government bonds was RMB 3.75 trillion, a total increase of about RMB 3.6 trillion compared with 2019. In 2020, the macroeconomic policy was targeted, effective and timely, which helped to stabilize the fundamentals of the economy and employment.

3. Increase in the Leverage Ratio of the Household Sector Is Limited and the Risk Is Well under Control

The leverage ratio of China's household sector has been rising in recent years, from 18.2 percent at end-2008 to 65.1 percent at end-2019, with an annualized average growth of 4.3 percentage points. The annual increase has been steady with limited volatility.

In 2020, the household leverage ratio in China was 7.4 percentage points higher than in the previous year, which was an limited increase, though 3.1 percentage points higher compared with the annualized average increase between 2008 and 2019. In addition, the role of the household sector debt in pushing up the macro leverage ratio is weakening, as it contributed 31.3 percent in 2020, dropping by 36.2 percentage points compared with the previous year.

The excessive increase in household debts has been effectively held in check. In terms of growth rate, household debt growth has been on the decline overall since 2018. The rate was 14.6 percent in 2020, 0.9 percentage point lower than in the previous year and declining for three consecutive years. As household debts slowed down in growth, its structure was also optimized, featuring "one rapid growth" and "two slowdowns". **First, policy-supported inclusive loans for micro and small individual businesses grew rapidly, which has served to ensure and improve people's livelihood.** In response to the pandemic, the macro adjustment policy prioritized support for market entities, in particular the self-employed as well as micro and small business owners, and innovated the directness of policy support to stabilize business operation and protect employment. In terms of incremental loans, newly issued inclusive loans to micro and small individual businesses stood at RMB 2.03 trillion in 2020, accounting for 21.6 percent of the total new debts of the household sector, 6.2 percentage points higher than in 2019. **Second, the growth of housing loans moderated.** It has been brought under control since the first quarter of 2018 and gradually slowed down as a result of real estate adjustment policies. In 2020, personal mortgage loans increased by 14.6 percent year on year, losing 2.1 percentage points compared with the previous year. **Third, the growth of consumer loans slowed down notably due to the impact of the pandemic,** which has dented household income and consumption behaviors. The final consumption in China dragged the GDP growth by 0.5 percentage point in 2020, as final consumption registered its first negative growth since the introduction of the GDP accounting system. Against this backdrop, the household consumer debt increased by 8.8 percent year on year, sinking by 7.6 percentage points compared with the same period of 2019.

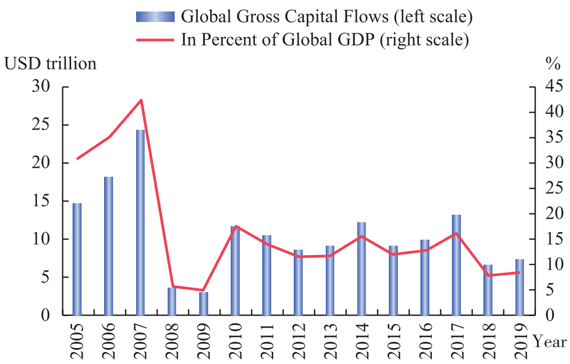
Special Topic 2　Cross-border Capital Flows and Their Implications on Financial Stability

Over the last decade or more, economies represented by the U.S. and the EU have, in response to the disruptive impacts of the Global Financial Crisis (GFC), the European Sovereign Debt Crisis and the COVID-19 pandemic, adopted a policy mix featuring large-scale quantitative easing, which has a bearing on the trends and characteristics of cross-border capital flow in this period. Capital flows can bring benefits while carrying risks. In particular, short-term cross-border capitals, which are profit-driven, overshooting-prone and pro-cyclical in nature, could trigger cross-border instability or a more serious financial crisis with large and sudden inflows and outflows. In dealing with this concern, the IMF proposed the introduction of an integrated policy approach to cross-border capital flow management. In 2017, drawing on practical experiences, the Chinese authorities put forward the integrated management framework of "macroprudential management and micro-regulation" on cross-border capital flow. Since its adoption, it has effectively contributed to the stability of the foreign exchange market and facilitated the two-way capital flow equilibrium. Next, further improvements will be made to the macroprudential management and micro-regulation on cross-border capital flows, in order to better serve the high-quality development of the real economy, enhance the authorities' ability to address risks of cross-border capital flows and maintain national economic and financial security.

I. Cross-border Capital Flow Trends

Global cross-border capital flows since 2005 first increased on a yearly basis in the run up to the GFC and were then followed by large reductions and high volatility in volumes (Figure 1-14). During the periods leading up to the GFC, global capital flows showed a ladder-type growth, and reached an all-time high in 2007 at USD 24.4 trillion, or 42 percent of global GDP. They shrank sharply in the aftermath of the GFC to a mere USD 3 trillion in 2009 and their share of global GDP plummeted to 5 percent, before a rebound around 2010 with fluctuations. In 2018, their growth was hampered by the rise of protectionism in some countries and downsized to less than a third of the 2007 record, or 7.9 percent of global GDP, followed by a moderate rebound in 2019. Since the onset of the COVID-19 pandemic, large and sudden outflows from the emerging markets have been witnessed amidst elevated global risk aversion, though signs of recovery in inflows begin to show in the second half of 2020.

Figure 1.14 Global Capital Flows: Trends Between 2005—2019



Source: IMF, International Financial Statistics.

Cross-border capital flows in China are influenced by the global capital flow landscape, and follow specific patterns in different stages. Between 2000 and the first half of 2014, China's current account and financial account excluding reserve assets basically maintained a surplus, with quickly rising foreign exchange reserves and huge amount of capital inflows. Large net capital inflows under direct investment, and increasing inflows under portfolio investment, foreign debt and other investments were witnessed during periods before and after the GFC respectively. Between the second half of 2014 and 2016, China's current account gained a surplus, while financial account excluding reserve assets registered a deficit, driving foreign exchange reserves down. In 2017—2019, China's cross-border capital flows remained overall stable, reflecting steady growth in both foreign investment and outbound investment. In the meantime, their trends have been influenced by factors including China-U.S. trade frictions, and the U.S. Federal Reserve's monetary policy adjustments.

Since the beginning of 2020, two-way capital mobility have showed greater vitality while remaining overall stable, underpinned by a sound economic fundamental and the two-way opening-up of the financial market. In 2020, China's current account registered a surplus of USD 274 billion, and the capital and financial account recorded a deficit of USD 105.8 billion; foreign exchange reserves stood at USD 3.22 trillion at year-end, resilient to external shocks.

II. Financial Stability Implications of Cross-border Capital Flows

Relevant literature and practical experiences show that cross-border capital flows can offer benefits under adequate circumstances. These benefits include, first, efficient global allocation of resources by smoothing savings and investment, and diversifying risks; second, increased competiveness and global productivity through technology and corporate governance expertise transfers; third, more sophisticated financial system by increasing the market depth and liquidity of capital recipient countries, and enriching the funding source for the banking system; and fourth, improved business-doing environment through the introduction of enhanced macro-policy and legal frameworks in recipient countries.

These benefits are nevertheless accompanied by risks. The experiences of historic crises show that in the absence of sound financial regulation, large cross-border capital inflows can lead to excessive risk-taking by financial institutions, amplify financial vulnerabilities and macroeconomic volatility, and potentially trigger a crisis when sudden reversals of capital flow happen. Even for open economies with a sophisticated financial market, large and volatile capital flows are also undesirably risky. According to researches by the IMF and other institutions, risks of cross-border capital flow can be transmitted through five channels, namely, credit booms, asset price, unhedged foreign currency exposures, non-core funding of the banking system and interconnectedness, with these channels reinforcing each other through feedback effects.

Credit booms. Large capital inflows can bring temporary credit booms in recipient countries, increase the value of collateral and therefore the capacity of market entities to borrow against collateral, and stimulate further credit expansion. When credit expansion exceeds reasonable limits, macro-leverage will experience excessive growth and vulnerabilities in the economic and financial systems accumulate.

Asset price. Sudden surges in capital inflows tend to put upward pressure on exchange rate and asset price, inducing asset bubbles. A sudden reversal in capital flows could lead to burst of the bubbles, with sharp declines in asset price, reductions in borrowers' net worth and borrowing capacity, and impaired balance sheets of the corporate, household and financial sectors. To repair their balance sheets, market entities may be forced to sell assets and cut investments, which will lead to weaker domestic productive activities and asset valuations, and worse off, fire sales ending up with systemic risks.

Unhedged foreign currency exposures. Foreign currency borrowing by businesses and residents tends to increase under the condition of capital inflows, significantly higher domestic interest rates than global interest rates, and expected local currency appreciation. Once capital flows reverse, a sharp devaluation of the local currency could lead to defaults by unsterilized foreign currency borrowers who are unable to fulfill their repayment obligations, posing risks to financial institutions and undermining the soundness of the financial system.

Non-core funding of the banking system. When external financing conditions are easy and there are large capital inflows, domestic banks tend to finance through non-core liabilities such as cross-border interbank borrowings or foreign currency bonds to lower their financing costs. This could exacerbate maturity and currency mismatches, and when external financing conditions tighten, banks may experience rollover risks or even a run on their wholesale funding.

Interconnectedness. Even if net capital flows are not significantly unbalanced, cross-border capital movements can also lead to systemic risk build-up through amplifying global financial interconnectedness, and cause broader financial instability especially when highly-interconnected large financial institutions get into trouble or disorderly liquidation.

III. IMF's Proposed Policy Approach for Cross-border Capital Flow Management

In order to reap the benefits of cross-border capital flows while managing large, highly volatile flows, the G20 Cannes Summit in 2011 issued the *Coherent Conclusions for the Management of Capital Flows Drawing on Country Experiences*. Based on this document, the IMF has issued since 2012 the *Liberalization* *and Management of Capital Flows: An Institutional View* and other guidance papers, in an effort to introduce a clear and coherent policy framework for cross-border capital flows.

The IMF believes that an ideal capital flow management approach is dependent on the nature of the shock and national specific circumstances, and proposes an integrated policy framework to manage cross-border capital flows, which comprises structural policies, macroeconomic policies, macroprudential measures (MPMs) and capital flow management measures (CFMs) (Table 1.1). Among them, structural policies are used to increase potential economic productivity; macroeconomic policies do not directly regulate cross-border financial activities, but influence capital flows through exchange rates, interest rates and other channels; MPMs are mainly focused on dealing with systemic risks through countercyclical and cross sector adjustments, which may influence capital flows but are not capital flow control-oriented; CFMs are designed to directly change the gross volume or composition of capital flows, which comprises both restrictive measures by residency and restrictive measures that are not residency-based. The latter mainly include measures that are currency-based and other non-financial measures (e.g. investment tax).

Table 1.1 Four Categories of Capital Flow Management Approach Proposed by the IMF

Category	Structural policies	Macroeconomic policies	MPMs	CFMs
Nature of the toolbox	Long term	Mid- and short-term	Mid- and short-term	Mid- and short-term
Implementation target	To increase growth potential of the economy	To realize macro policy goals	To contain systemic risks	To manage capital flows directly
Implementation Context	For selective implementation based on national development needs	For primary use when capital flows pose macroeconomic risks	For primary use when capital flows raise financial stability concerns	For use as part of the policy mix when the room for macroeconomic and macroprudential policies is limited, or these policies require time to take effect
Tools	Industry policies, etc.	Monetary policy, fiscal policy, exchange rate policy, reserve policy, etc.	Broad-based tools, sectoral tools, liquidity tools, structural tools, etc.	Taxes, restrictions, bans, holding period adjustments, compulsory exchange settlements/remittance, etc.

According to the IMF, many macroprudential policy tools are useful in managing capital flow risks. These include, first, broad-based tools such as countercyclical capital buffers, leverage ratio caps, and macroprudential stress tests; second, sectoral tools such as LTV ratios, DSTI ratios, and sectoral capital requirements; third, liquidity tools such as LCR, NSFR, and higher reserve requirements for foreign exchange deposits; and fourth, structural tools such as interbank exposure limits. The IMF did not specify forms of MPMs, as whether a specific measure should be viewed as MPM will depend on whether it is aimed at reducing systemic risks.

The capital flow management policy mix should be employed following a certain sequence and set of principles. First, in the long run, continued structural reform is fundamental to unleashing growth potential of the economy and improving resilience to external shocks; while in the short term, measures against capital fluctuations should be used alongside macroeconomic policy tools and MPMs. Second, capital flows should be primarily handled through macroeconomic policies when they entail macroeconomic risks, and through MPMs when they entail financial stability risks. Third, when macroeconomic policies and MPMs fail to mitigate economic and financial risks from capital flow, CFMs can be activated. CFMs can play a useful role in preventing contagion of capital flow risks and gain valuable time for other policies to take effect particularly when the room for adjusting monetary and fiscal policies is limited as exchange rates and foreign exchange reserves are close to equilibrium; or MPMs fail to contain systemic financial risks. In the meantime, the IMF stressed that CFMs should not substitute for warranted macroeconomic adjustments and should be used in a transparent, targeted, temporary and non-discriminatory manner.

IV. Policy Recommendations

Drawing on past experiences in effectively absorbing cross-border capital flow shocks, the Chinese authorities in 2017 put forward the integrated management framework of "macroprudential management and micro-regulation" in the foreign exchange market. This policy framework is a clear message that opened windows will not be closed, and that capital flow management tools aimed primarily at macroprudential adjustments will be adopted, and transform the micro-regulatory approach. Going forward, this capital flow management framework will be constantly improved, taking into account national circumstances and international best practices, to promote the sound operation of the foreign exchange market, with an aim to preserve financial stability and national economic and financial security.

Establishing a sound macroprudential policy framework for cross-border capital flows. First, the macroprudential management policy toolbox will be diversified to cover banks and other market entities. Regulatory measures targeting key players in the foreign exchange market will be strengthened to contain systemic risks arising from cross-border capital flows. Second, the monitoring, early warning and assessment system for cross-border capital flows will be enhanced, enabled by a forward-looking monitoring and early warning indicator system. Third, macroprudential stress tests on capital flows will be carefully planned and conducted.

Continuously improving the micro-regulation of the foreign exchange market. Efforts will be made to facilitate the transition from an ex-ante approval-based approach to an ongoing supervision during and after the process, and to enhance conduct regulation in the wholesale and retail markets. Following the "risk-based" approach, a microprudential regulatory indicator system that focuses on currency and maturity mismatches will be improved and be complemented by regular on-site inspections.

Inter-agency coordination will be strengthened to improve the integrated management of domestic and foreign currencies, and enhance information sharing among financial authorities.

Further promoting the reform and opening up of the financial sector. First, step up efforts to deepen the supply-side structural reform in the financial sector. Take domestic circulation as the mainstay, with improved capacity of the financial system in supporting the real economy and efficiency of financial resource allocation, to underpin the smooth and orderly flow of cross-border capital in China. Second, continue to promote the two-way opening up of the financial sector. Measures include increasing the capital account convertibility of RMB; improving the policy framework and infrastructure for cross-border use of RMB; facilitating the use of RMB in cross-border trade and investment; deepening the market-oriented exchange rate reform; and maintaining a flexible RMB rate to allow it to play a useful role in adjusting macroeconomy and stabilizing balance of payments.

Enhancing international cooperation in capital flow management. The authorities will strengthen information communication and regulatory coordination with the IMF, the OECD and foreign monetary authorities, and strengthen policy mutual-trust and monetary policy cooperation in order to promote orderly global capital flows and maintain global financial stability.

Special Topic 3 Regulating the Development of the Third Pillar of Pension System

Since 1990s, efforts have been made to establish a multi-tiered and multi-pillared pension system in China, mainly featured with the basic pension as the first and the main pillar, supplemented by the occupational pension scheme as the second pillar and the personal pension as the third pillar. Currently, the first pillar has been established and largely comprehensive, the second pillar has been developing gradually but only covering a limited population, yet the third pillar is still at its launching stage. With the increasing population aging and the accelerating social and economic development, the unbalanced development of the three pillars of the pension system faces challenges in supporting the sustainable social and economic growth, therefore more urgent measures should be devoted to promote the healthy development of the third pillar.

I. International Experiences in Developing the Third Pillar of Pension System

As can be seen from the global practices, in response to the global population aging, the multi-tiered and multi-pillared pension system has been a common policy option for many economies. Despite of the differences in actual operation of the third pillar of pension systems in different countries, the common policy frameworks and practices are as follows:

Firstly, fiscal and tax incentives can be useful. Based on successful international experiences, through tax exemption and deductions, tax incentives can effectively facilitate the development of the third pillar of pension system by encouraging more individuals to participate as well as promoting long-term investments. Typical practices include two models. The first and mainstream model is EET (Exempting, Exempting, Taxing) model under which the contribution to and investment of the pension funds will be exempted from taxation and only withdrawal from the pension funds will be taxed. The second is TEE (Taxing, Exempting, Exempting) model, under which only the contribution process will be taxed, while investment and withdrawal will not be taxed. In U.S. and U.K., tax incentives effectively promoted the development of the third pillar. For example, in U.S., different tax incentives were offered to different types of Individual Retirement Accounts (IRAs), including both the traditional IRA with the widest coverage adopting the EET model and the Roth IRA adopting the TEE model. In U.K., depending on whether registered with the taxation authority or not, the personal pension plans shall be subject to EET or TEE model, and EET model is more commonly seen in practice.

Secondly, the personal pension system should be built on the individual account basis. There are two ways to manage the personal pension plans. The first way is related to developing specific pension financial products, where tax benefits are offered to such products that will further be transmitted to individuals as the purchasers within the given purchase amount. The second way is to set up the dedicated individual accounts for the personal pension purpose, and the contribution to these accounts can enjoy the related tax benefits. As can be shown by international experiences, the latter way has the advantage of more fairness and operational convenience in offering tax benefits, and becomes the preferred option. On the one hand, the contribution, investment and withdrawal are managed within an individual account, where a close-loop on specific individual's funding and information can be formed and the individual can directly benefit from the tax incentives. On the other hand, the account system is more independent and flexible, which is moveable together with job changes of the individual, and can be more easily connected with the second pillar.

Thirdly, the participation is often voluntary. Different from the compulsory first pillar, i.e. the basic pension, voluntary participation has been adopted in personal pension plans in most economies. Participants can enjoy sufficient discretion when deciding whether to participate, the degree to participate (the amount of contribution), the manager of pension funds and the way to withdrawal from the funds.

Fourthly, the eligible products that can be invested in should be diversified. From international practices, the personal pension funds as the third pillar can invest in kinds of financial products provided by the insurers, fund managers and commercial banks. For example, under the U.S. IRAs plans, participants are allowed to invest in financial products in the global financial market, such as wealth management products offered by banks, mutual funds, commercial insurance products and stocks. Investors determine the appropriate financial products to invest for pension purposes based on their own risk appetites, and they assume the related investment returns and risks as a result.

Fifthly, early withdrawal should be allowed under certain conditions. In some countries, individuals are allowed to early withdraw the personal pension funds under certain conditions, such as reaching a certain age or certain participation period, encountering significant difficulties like physical disabilities, incurable diseases and unemployment, etc. The early withdrawal mechanism of personal pension funds helps to alleviate the concern of some population especially with unstable income to participate in the personal pension plans. Meanwhile, measures including relevant tax adjustments or imposing a fee on such early withdrawals could be taken to promote the healthy development and sustainable accumulation of the third pillar pension funds.

II. Status Quo of China's Third Pillar of the Pension System

For a long time, focus has been mainly put on the development of the first and the second pillar of the pension system, while the third pillar was launched late and the development of the multi-tiered pension system was uneven. Currently, an important policy step to develop the third pillar was to introduce personal commercial pension with tax-deferral features (hereinafter referred to as tax-deferral pension). Since May 1 2018, pilot programs on tax-deferral pension have been launched in Shanghai, Fujian province (including Xiamen) and Suzhou Industrial Park, which allow personal expenditures on eligible commercial pension products through personal commercial pension accounts in the pilot programs to be deducted before tax within a given amount, allow the investment returns accrued to personal commercial pension accounts exempt from individual income tax, and individual income tax shall be charged when withdrawals from pension funds occur. As of end-2020, the accumulated insurance premium on the pilot programs on tax-deferral pension amounted to RMB 430 million and covered 49,000 participants, and the outcome is below the market expectation. Several observations from the pilot programs warrant attention and consideration.

First, the effects of tax incentives were limited. Compared to the structure of tax systems in advanced economies that are dominated by direct taxes such as the income tax, our tax system is dominated by indirect taxes such as value-added tax under which the individual income tax is less weighted. Considering investment returns have been exempted from taxation in China, there's little policy space for tax benefits. Besides, the tax benefits are limited under the pilot programs. For example, for those subject to the personal income tax rate of 10 percent, participation in the tax-deferral pension can only save RMB 1200 at most each year. Meanwhile, considering the relatively small number of taxpayers, people with income below the threshold of individual income tax could actually not benefit from the tax relief.

Second, tedious administrative procedures have discouraged the participation. Manyparties are involved in the operation of tax-deferral pension, including the employers of participants, the social security authority, tax authority and insurance companies etc. Before applying for commercial pension, participants need to obtain various administrative documents from various authorities. In the process of tax refund, the procedures can be very tedious, partly because that the individual income tax shall be withheld and remitted by the income paying units. The operational difficulties and limited deduction amount significantly discouraged the participation, especially for those unemployed or self-employed.

In addition, there was high homogeneity in the tax-deferral pension products, due to the fact that tax-deferral pension involved many parties and a number of influencing factors, product design and business lines were complicated, pension management asked for high professionality, and there were some policy constraints in the pilot programs. Going forward, product supply should be explored to be more diversified based on investors' needs.

III. Suggestions for Regulating the Development of the Third Pillar of the Pension System

As the next step, based on the current experiences from the pilot programs launched in 2018, efforts should be devoted to build the personal account-based pension system, under which the accounts should be managed as a close-loop to conduct contribution, investment return accumulation and individual income tax payment, and participants are allowed to voluntarily choose eligible financial products to invest in during the existing period of the accounts. In principle, personal pension funds can only be withdrawn after retirement, yet necessary early withdrawal mechanism should be developed. Authorities should explore more policy options to encourage participation by different groups and guide the long-term investment. Considering the different needs of various groups, the scope of eligible financial products for the investment of the third pillar should be further widened in an orderly manner to include eligible bank wealth management products, deposits, commercial pension and publicly offered funds, etc. At the same time, qualified financial institutions such as banks, fund managers and insurance companies should more actively get involved, based on their own characteristics, in providing appropriate financial products for the third pillar pension purposes. Meanwhile, reform on the commercial pension should be steadily pushed forward by means of, on one hand, being more consistent with existing regulations to stick to the original purposes, unifying the standards for pension financial products and cracking down on those unqualified products; and on the other hand, encouraging more business innovation and pilot programs, so as to foster professional financial products fulfilling the pension purpose effectively.

Special Topic 4 Progress of International Benchmark Interest Rate Reform and Practice in China

The London Interbank Offered Rate, or LIBOR has long been the most widely used benchmark interest rate in the international financial market. In recent years, in the context of the severely impaired market credibility of LIBOR, as a result of a shrinking funding market and multiple quotation manipulation cases, major economies and relevant international organizations have decided to cease using LIBOR and actively promoted reforms on benchmark interest rates. The PBC, drawing on international consensus and best practices, actively participates in the international benchmark reform and implement reform measures in a steady and orderly manner.

I. Backdrop of the International Benchmark Reform

During the 2008 Global Financial Crisis, the unsecured interbank lending market shrank sharply. The trend of LIBOR deviated from the actual financing costs of banks and market liquidity situation, giving rise to potential manipulations. Through investigation, regulators in multiple countries discovered that the LIBOR panel banks had colluded to manipulate their quotations. In June 2012, the regulatory and judicial authorities of the U.S. and the U.K. determined that Barclays had manipulated and misreported its submissions, and many other financial institutions were subsequently implicated and punished.

Major factors leading to the LIBOR manipulation scandal include: first, the LIBOR quotation mechanism is flawed in that it is not linked to real transactions and easy to be manipulated; second, financial institutions can obtain huge profits from derivative transactions by manipulating their LIBOR quotations; third, the lack of adequate financial supervision has allowed banks to manipulate quotations. The LIBOR scandal has severely impaired the market and public credibility of LIBOR, and pushed global regulators to gradually introduce the international benchmark reform.

In order to prevent the reoccurrence of LIBOR quotation manipulation, under the oversight of the FSB, national regulators have carried out drastic reforms on LIBOR and similar interbank offered rates (IBORs). Despite a series of reforms, it is still difficult for LIBOR to regain market-wide recognition. The U.K. Financial Conduct Authority subsequently decided to no longer require panel banks to submit quotations starting the end of 2021, and began to develop benchmark rates based on actual transactions instead. After that, other major advanced economies such as the U.S., euro area, Japan and Switzerland that used LIBOR as their benchmarks also began to turn away from LIBOR and develop alternative benchmarks.

II. Progress in the International Benchmark Reform

1. Selection of Alternative Benchmarks has been Largely Completed

Currently, major advanced economies have largely completed their selection of alternative benchmarks, and emerging economies such as Mexico and Brazil have also followed the example of advanced economies such as the U.S. and U.K. in exploring new benchmarks. Most of these economies choose to use risk-free rates (RFRs) as alternatives to IBOR-type benchmarks. These alternatives are all based on real transactions. In order to ensure a stable transaction foundation, only a single overnight term is selected, and the sample of transaction entities is also more diverse. Most of the alternatives are directly supervised by the central bank to enhance their credibility and benchmark functions.

Table 1.2 Alternative Benchmarks in a Selection of Currencies

Currency	USD	GBP	EUR	CHF	JPY
Alternative	SOFR	SONIA	ESTER	SARON	TONA
Administrator	New York Fed	Bank of England	European Central Bank	SIX Swiss Exchange	Bank of Japan
Secured or not	Yes	No	No	Yes	No
Overnight or not	Yes	Yes	Yes	Yes	Yes

There are two main models for major advanced economies to push forward their benchmark reforms. One is to replace IBOR-type benchmarks with RFRs, such as the case in the U.S. and the U.K.; and the other is to introduce RFRs while allowing multiple benchmarks to coexist, such as the practice in the euro area and Japan.

2. Exploring the Construction of Term Rates

A major challenge for the benchmark reform is to construct the term rates. As RFRs that replace IBORs are all overnight rates, there is still a great market demand for reference rates in various terms, and it is therefore necessary to explore the construction of interest rates in diverse terms based on the overnight rate. Benchmark reform agencies such as the U.S. Alternative Reference Rates Committee (ARRC) have proposed two construction methods, i.e. the backward-looking and the forward-looking method. The former refers to the method of rolling simple interest or compound interest to get the rates of each term based on the real historical RFRs. It is essentially the simple interest or compound interest value of the historical data of RFRs. The latter refers to the method of calculating the interest rates of each term based on the Overnight Index Swaps (OIS) of RFRs or derivatives of RFRs such as futures. It essentially reflects the expectation of the average value of RFRs in the future.

3. Promoting the Benchmark Transition

Another major challenge for international benchmark reform is to push forward the transition of benchmark rates referenced by financial contracts from IBORs to new alternatives. Relevant international organizations have been actively promoting the benchmark transition within their respective mandates.

First, ISDA has introduced the benchmark transition plan for derivatives contracts. After several rounds of public consultation, the ISDA has set out key elements in its detailed plan including the fallback rates, premium adjustment, triggers, transition time and scope of application. Based on differentiated treatments for new and existing contracts, the IBOR Fallbacks Supplement to the 2006 ISDA Definitions shall apply to the newly signed contracts and the ISDA 2020 IBOR Fallbacks Protocol shall be incorporated into existing contracts.

Second, some economies have formulated the transition plan for new spot contracts. The U.S. has made rapid progress in spot benchmark transition. ARRC has drafted fallback protocols of benchmark transition for LIBOR-based floating rate notes, bilateral business loans, syndicated business loans, adjustable-rate mortgages and securitizations. However, the current plan is mainly applicable to newly signed contracts, and the transition of existing contracts is planned to be achieved through legislation or the introduction of synthetic LIBOR.

Third, the IASB has revised the accounting standards. In August 2020, the IASB issued the *Interest Rate Benchmark Reform—Phase 2*, which revised current standards relevant to changes in the basis for determining contractual cash flows of financial assets and financial liabilities and in leasing contracts as well as hedge accounting.

On March 5, 2021, the FCA announced the arrangements on the cessation of LIBOR.

Table 1.3 Dates of the Cease of Panel Bank Submissions for all LIBOR Settings and the Loss of their representativeness

Currency	Settings	Cease to be provided	No Longer to be representative
USD	O/N,12M	30 June, 2023	
	1M, 3M, 6M		30 June, 2023
	1W，2M	31 December, 2021	
GBP	1M, 3M, 6M		31 December, 2021
	O/N,1W,2M,12M	31 December, 2021	
EUR	All settings	31 December, 2021	
JPY	1M, 3M, 6M		31 December, 2021
	O/N,1W,2M,12M	31 December, 2021	
CHF	All settings	31 December, 2021	

III. China's Benchmark Reform: Preparation

In the context of economic globalization and greater opening-up, domestic banks also hold foreign currency exposures, some of which are priced referencing benchmarks such as LIBOR. As of end-2020, 15 major banks have an outstanding LIBOR exposure due after end-2021 of about USD 400 billion. China will draw on experience from international consensus and best practices, and push forward the international benchmark transition work in a cost-effective and efficient manner.

Under the overall guidance of the PBC, the self-regulatory mechanism for market interest rate pricing established the LIBOR Working Group in September 2019 to coordinate exploration and progress of international benchmark reform. The Working Group regularly holds meetings to exchange views on the latest developments of the international benchmark reform; drafts benchmark transition plans for bonds, derivatives, deposits and loans referencing LIBOR; and closely monitors domestic LIBOR exposures and evaluates the impacts of the cessation of LIBOR settings on domestic banks. Overall, LIBOR exposure of domestic banks is limited in volume, short in maturity and high in business concentration. The impacts of LIBOR cessation is limited and risks are manageable.

On August 31, 2020, the PBC issued a white paper entitled *Participating in International Benchmark Reform and Improving China's Benchmark System*, which provides a comprehensive introduction of the international benchmark reform as well as China's participation, a roundup of China's benchmark construction progress, and the overall arrangements for further improving the benchmark system.

In January 2021, the Ministry of Finance issued the *Interpretation of Accounting Standards for Business Enterprises No. 14*, which sets out guidance for accounting treatment of potential changes in the basis for determining contractual cash flows of financial assets and financial liabilities, and in leasing contracts due to the benchmark reform.

IV. China's Benchmark Reform: Transition Roadmap and Timeline

In accordance with the principle of drawing on international consensus and best practices, China will closely follow the progress of international benchmark reform to ensure that contracts referencing new benchmarks are designed and applied, and that existing contracts referencing LIBOR are transited in line with this progress. Meanwhile, efforts will be made to monitor statistics on domestic LIBOR exposures and transition progress on a regular basis, and make dynamic assessment of the impact of LIBOR cessation, so as to promote the work related to the international benchmark reform in a sound and orderly manner.

1. Design and Application of New Benchmarks

First, the calculation methodology of the new benchmark RFRs is explored. The PBC mandates the LIBOR WG to explore rules relating to term rate calculation, interest bearing and payment arrangements, etc. The application plans and proposed applicable scenarios for different calculation rules are also explored. Second, banks are encouraged to make early preparations for the use of new benchmarks. In line with the approach of "early planning, early arrangement and early implementation", the authorities have urged domestic banks to initiate system transformation and contract revision accordingly while closely monitoring international reform developments. Third, banks are guided to launch products referencing the new benchmarks. In April 2020, the China Foreign Exchange Trade System & National Interbank Funding Centre launched derivatives services referencing new benchmarks, facilitating trades in currency swaps and cross-currency interest rate swaps referencing foreign currency rates such as SOFR by participating banks, which helped to explore and expand the application of RFRs in relevant financial products.

2. Exploring the Benchmark Transition of New Contracts

First, the development of fallback protocols in new contracts is in progress, which sets out key elements including the triggers, effective timing, fallback rates, premium adjustment and interest-bearing rules for benchmark transition. The authorities also urged the NAFMII to revise relevant derivatives agreements accordingly. Second, the benchmark transition plan for new contracts will be issued in due course to guide financial institutions to develop their own benchmark transition plans referencing the fallback protocols. Third, policy interpretation and advocacy in various forms have been carried out to facilitate smooth transition.

3. Exploring the Benchmark Transition Plan for Existing Contracts

First, efforts have been made by the authorities to closely follow benchmark transition progress of existing international contracts, while drafting the benchmark transition plan for existing domestic products. Second, domestic institutions will be urged to stop renewing contracts referencing LIBOR in accordance with domestic progress in international benchmark reform. Third, financial institutions will be guided to promptly implement transition requirements, reach supplementary agreements with their clients, and ensure transition of existing contracts once relevant transition plans and supplementary measures are settled.

Chapter II

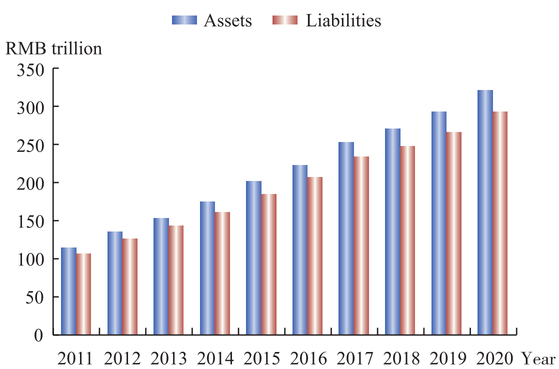
Soundness Assessment of the Financial Sector

Despite the COVID-19 pandemic as well as the complicated economic and financial environment both at home and abroad, China's financial sector maintained sound performance in 2020. Financial institutions expanded steadily in assets and liabilities while their capital adequacy ratio rose steadily and moderately and their profitability remained basically stable. The financial market was generally stable.

I. Soundness Assessment of the Banking Sector

Assets and liabilities grew steadily. At end-2020, total assets of banking institutions registered RMB 319.74 trillion, up by 10.25 percent y-o-y, an acceleration of 2.14 percentage points from the previous year; total liabilities registered RMB 293.11 trillion, up by 10.39 percent y-o-y, an acceleration of 2.70 percentage points from the previous year (Figure 2.1).

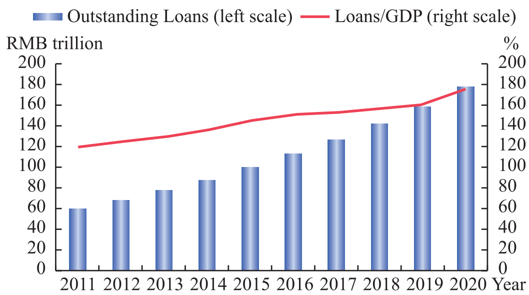
Figure 2.1 Assets and Liabilities of Banking Institutions



Source: The CBIRC.

Deposits and loans continued to expand steadily. At end-2020, total deposits denominated in both domestic and foreign currencies in financial institutions stood at RMB 218.37 trillion, an increase of 10.20 percent y-o-y and an acceleration of 1.63 percentage points from the previous year; outstanding loans denominated in both domestic and foreign currencies by financial institutions stood at RMB 178.4 trillion, an increase of 12.48 percent y-o-y and an acceleration of 0.61 percentage point from the previous year (Figure 2.2).

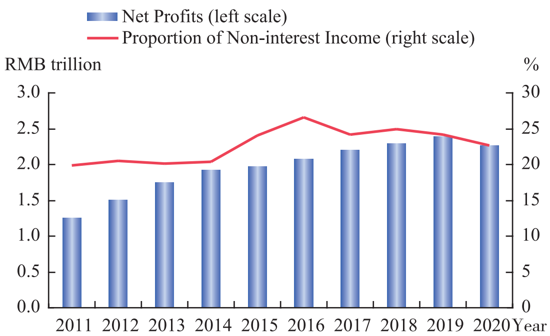
Figure 2.2 RMB Loans by Banking Institutions



Source: The PBC and NBS.

Profits declined while profitability was generally stable. In 2020, banking institutions gained net profits of RMB 2.26 trillion, a decrease of 5.85 percent y-o-y and a deceleration of 10.45 percentage points from 2019. The net interest margin of banking institutions reached 1.98 percent, a decrease of 0.09 percentage point from the previous year. Non-interest income accounted for 22.68 percent of total income, a decrease of 1.55 percentage points y-o-y. At end-2020, the ROA of banking institutions reached 0.75 percent, down by 0.11 percentage point y-o-y; the ROE registered 8.94 percent, down by 1.45 percentage points y-o-y. The overall profitability of banking institutions declined moderately in 2020 compared with the previous year.

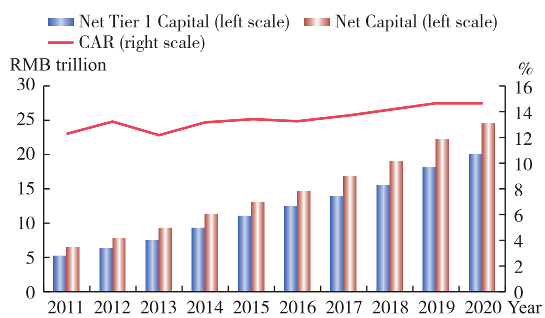
Figure 2.3 Net Profits and Proportion of Non-interest Income of Banking Institutions



Source: The CBIRC.

Capital adequacy level was generally stable. At end-2020, the CET1 ratio of commercial banks reached 10.72 percent, down by 0.23 percentage point y-o-y; the Tier 1 ratio registered 12.04 percent, up by 0.09 percentage point y-o-y; the CAR increased by 0.06 percentage point to 14.70 percent, indicating that the banking sector was well capitalized (Figure 2.4).

Figure 2.4 CAR and Capital Structure of Commercial Banks

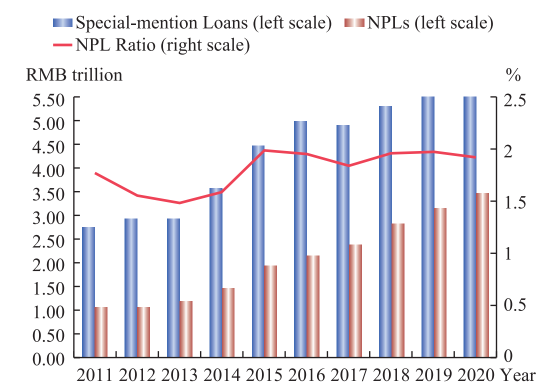


Source: The CBIRC.

The overall liquidity remained in a reasonable and sufficient range. At end-2020, the liquidity ratio of commercial banks registered 58.41 percent, down by 0.05 percentage point y-o-y; the ratio of liquidity gap was 6.11 percent, up by 2.04 percentage points y-o-y; the LCR of commercial banks with assets over RMB 200 billion reached 146.63 percent, down by 0.46 percentage point y-o-y; and the NSFR stood at 122.17 percent, down by 0.75 percentage point y-o-y.

NPLs increased slightly and asset quality faced large downward pressure. At end-2020, the NPLs of banking institutions totaled RMB 3.47 trillion, an increase of RMB 281.6 billion y-o-y; the NPL ratio reached 1.92 percent, up by 0.06 percentage point y-o-y. In particular, NPLs of commercial banks increased by RMB 288.0 billion y-o-y to RMB 2.70 trillion; the NPL ratio of commercial banks increased by 0.02 percentage point y-o-y to 1.84 percent. Special-mention loans of banking institutions stood at RMB 5.62 trillion, up by RMB 36.2 billion or 0.65 percent y-o-y, indicating that asset quality still faced large downward pressure (Figure 2.5). In addition, loans overdue for over 90 days increased by RMB 34.6 billion or 1.34 percent y-o-y to RMB 2.62 trillion, which accounted for 76.38 percent of the total NPLs, down by 4.98 percentage points y-o-y. Banking institutions were more prudent in identifying NPLs.

Figure 2.5 Special-mention Loans and NPLs of Banking Institutions



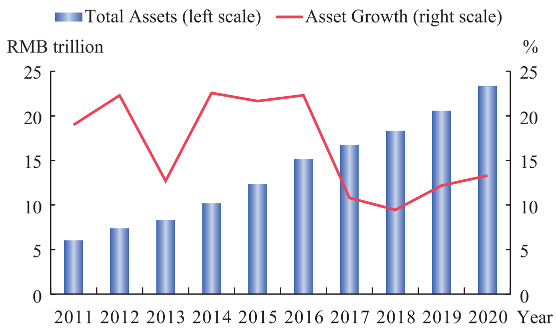
Source: The CBIRC.

Risk coverage of the banking sector was strong. At end-2020, loan loss provisions of banking institutions stood at RMB 6.33 trillion, up by RMB 494.5 billion y-o-y or 8.47 percent; the provision coverage ratio reached 182.23 percent, down by 0.59 percentage point y-o-y; the provision to loan ratio registered 3.49 percent, down by 0.12 percentage point y-o-y.

II. Soundness Assessment of the Insurance Sector

Assets grew steadily, and insurance density and penetration improved. At end-2020, total assets in the insurance sector reached RMB 23.30 trillion, an increase of 13.29 percent y-o-y and an acceleration of 1.11 percentage points from end-2019. Among these, the assets of personal insurance companies registered RMB 19.98 trillion, up by 17.82 percent y-o-y; the assets of property insurance companies registered RMB 2.34 trillion, up by 2.11 percent y-o-y; the assets of reinsurance companies registered RMB 495.6 billion, up by 16.31 percent y-o-y. The insurance density increased by RMB 160 y-o-y to RMB 3206, which was much lower than the world average of USD 809. The insurance penetration increased by 0.15 percentage point to 4.45 percent, lagging far behind the world average of 7.4 percent (Figure 2.6).

Figure 2.6 Total Assets and Asset Growth of the Insurance Sector



Source: The CBIRC.

Market concentration declined slightly. In 2020, the market share of the top five personal insurance companies[①] in terms of premium was 50.65 percent, down by 3.28 percentage points y-o-y. The Herfindahl-Hirschman Index (HHI)[②] for the personal insurance sector was 0.079, a moderate decrease from the previous year. In the property insurance sector, the market share of the top five companies[③] was 73.89 percent, up by 0.11 percentage point y-o-y; the HHI registered 0.1661, which was slightly lower than the previous year.

Asset allocation was generally stable and investment returns increased. At end-2020, funds utilized by the insurance sector stood at RMB 21.68 trillion, an increase of 17.02 percent from end-2019 and an acceleration of 4.11 percentage points y-o-y. In particular, the

① The top five personal insurance companies included China Life, Ping An Life Insurance, China Pacific Life Insurance, New China Life Insurance and Huaxia Life Insurance.

② 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.

③ The top five property insurance companies included PICC Property & Casualty, Ping An Property & Casualty Insurance, China Pacific Property Insurance, China Life Property & Casualty Insurance, and China United Property Insurance.

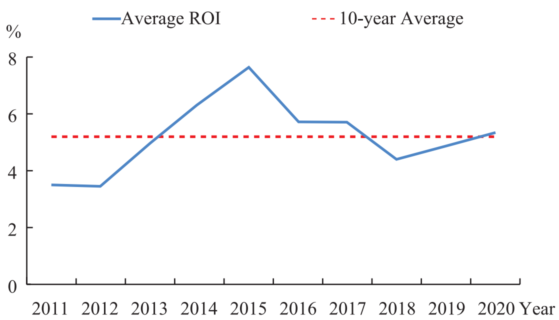
share of bank deposits, stocks and securities investment funds in the total investments declined whereas the share of bonds and other investments went up (Table 2.1). Benefited from the sound performance of stock market, the investment returns of the insurance sector grew by 24.51 percent y-o-y to RMB 1.0987 trillion. The average ROI of insurance funds increased by 0.47 percentage point to 5.41 percent, which was slightly higher than the 10-year average of 5.14 percent (Figure 2.7).

Table 2.1 Utilization of Insurance Funds (as of end-2020)

Investment Structure	Bank Deposits	Bonds	Stocks and Securities Investment Funds	Other Investments
Size (RMB trillion)	2.5973	7.9329	2.9822	8.1677
Proportion (%)	11.98	36.59	13.76	37.67
Y-o-y Change (Percentage Point)	-1.64	2.03	0.61	-1.00

Source: The CBIRC.

Figure 2.7 Average ROI of Insurance Funds

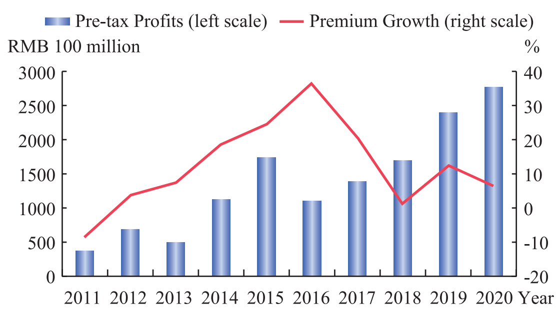


Source: The CBIRC.

Premium of personal insurance companies grew and insurance demand increased further. In 2020, the premium income of personal insurance companies reached RMB 3.1674 trillion, up by 6.90 percent y-o-y, a deceleration of 5.92 percentage points from the previous year (Figure 2.8). Throughout 2020, the surrender rate of personal insurance companies registered 2.39 percent, down by 2.58 percentage points y-o-y. Due to the COVID-19 pandemic, insurance demand went up. In 2020, the original premium income of health insurance grew by 13.38 percent y-o-y to RMB 705.9 billion, overtaking the overall personal insurance sector in terms of growth for three consecutive years.

The pre-tax profits and net profits of personal insurance companies continued to grow. Due to the improvement of the pandemic situation in China, an increase in investment returns and a decline in surrenders and payments, the pre-tax profits of personal insurance companies in 2020 grew by 15.68 percent y-o-y to RMB 277.210 billion (Figure 2.8), and the net profits grew by 4.64 percent y-o-y to RMB 254.182 billion.

Figure 2.8 Pre-tax Profits and Premium Growth of Personal Insurance Companies

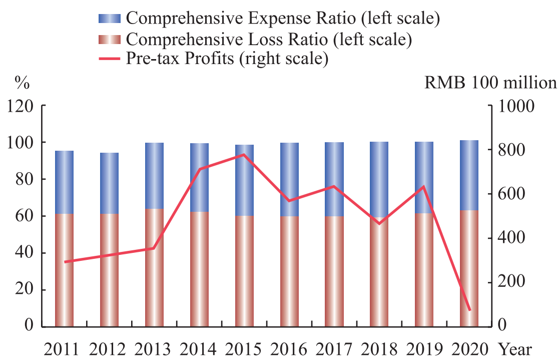


Source: The CBIRC.

The premium of property insurance companies grew moderately and the share of non-auto insurance rose further. In 2020, the premium income of property insurance companies reached RMB 1.36 trillion, an increase of 4.36 percent y-o-y and a deceleration of 6.36 percentage points from the previous year. The effect of the comprehensive reform in auto insurance began to show. The average premium paid for autos declined significantly, and consumers' sense of gain improved. Throughout the year, the premium of auto insurance only increased by 0.69 percent, which was lower than the overall growth rate of the property insurance sector. The share of auto insurance premium in total property insurance premium declined by 2.21 percentage points y-o-y to 60.70 percent. As the demand for non-auto insurance was gradually released and the insurance sector strengthened the cultivation of new growth pillars, the share of non-auto insurance[①] in the property insurance sector had increased for five consecutive years.

The comprehensive cost ratio of property insurance companies increased and profits dropped significantly. In 2020, the comprehensive cost ratio of property insurance companies increased by 0.92 percentage point y-o-y to 100.90 percent, registering an underwriting loss. The comprehensive cost ratio of non-auto insurance was 104.48 percent with an underwriting loss of RMB 18.801 billion. Specifically, due to a large increase in claims and payments, guarantee insurance incurred a big loss. The annual pre-tax profits of property insurance companies in 2020 declined by 88.95 percent y-o-y to RMB 7.010 billion (Figure 2.9), and net loss reached RMB 5.152 billion. The loss was mainly due to an asset impairment loss of RMB 64.860 billion from Tian'an Property Insurance in 2020. Excluding the impact of the asset impairment loss from Tian'an Property Insurance, the annual pre-tax profits of property insurance companies stood at RMB 71.859 billion, an increase of 13.22 percent y-o-y.

Figure 2.9 Underwriting Performance and Pre-tax Profits of Property Insurance Companies



Source: The CBIRC.

The overall solvency of the insurance sector was adequate whereas the corporate governance remained to be improved. At end-2020, the comprehensive solvency adequacy ratio and the core solvency adequacy ratio of insurance companies were 246.3 percent and 234.3 percent respectively, which were far above the minimum regulatory level of 100 percent and 50 percent. In terms of comprehensive risk rating, there were 100 companies rated A and 71 rated B in the fourth quarter of 2020, which were

① Non-auto insurance includes corporate property insurance, household property insurance, engineering insurance, liability insurance, guarantee insurance, agricultural insurance, health insurance, accident insurance, etc.

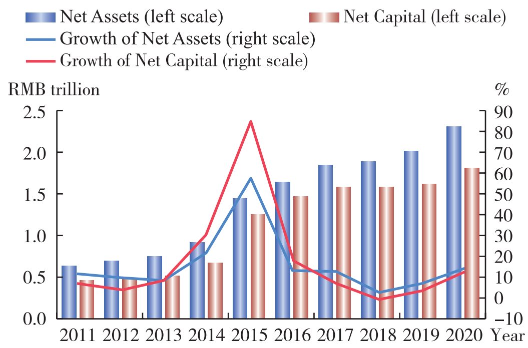
of low risk; there were three companies rated C and three rated D, which either failed to meet the standard for the solvency adequacy ratio or met the standard but carried high risk. Corporate governance was problematic in some insurance companies where shareholders intervened in operation unrestrainedly and there were improper related transactions. Also, the sound operation of some insurance companies was at great risk due to frequent changes of ownership structure, a high proportion of equity pledge, and frequent changes or prolonged vacancies in senior management. In addition, a few insurance companies concealed the relationship of shareholders and had prominent problems such as shareholding entrustment and dormant shareholders.

III. Soundness Assessment of the Securities Sector

1. Profits of Securities Companies Increased Y-o-y, Risk Associated with Stock Pledging Moderated, and Margin Trading and Securities Lending Grew Rapidly

At end-2020, there were 138 securities companies, an increase of 5 from the end of the previous year. Among them, 39 securities companies were listed, up by 4 y-o-y. Securities companies had total assets of RMB 8.90 trillion, an increase of 22.50 percent y-o-y. Net assets registered RMB 2.31 trillion, an increase of 14.10 percent y-o-y. Net capital increased by 12.35 percent y-o-y to RMB 1.82 trillion, achieving positive growth for two consecutive years (Figure 2.10).

Figure 2.10 Net Assets and Net Capital of Securities Companies, 2011-2020

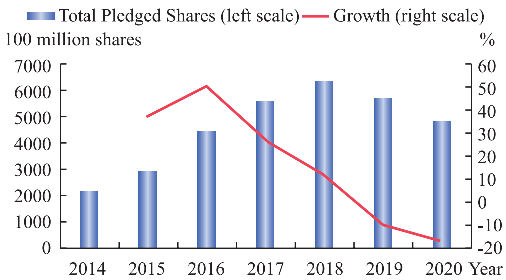


Source: The CSRC.

The performance of securities companies continued to improve. In 2020, the operating revenue of the entire securities sector grew by 24.41 percent y-o-y to RMB 448.479 billion. In particular, securities investment returns (including fair value variation) registered RMB 126.272 billion, up by 3.37 percent y-o-y; net income from securities brokerage business (including leasing of trading seats) registered RMB 116.110 billion, up by 47.42 percent y-o-y; net income from agency sales of financial products registered RMB 13.438 billion, up by 148.76 percent y-o-y; net income from investment consultancy registered RMB 4.803 billion, up by 26.93 percent y-o-y; net income from asset management registered RMB 29.960 billion, up by 8.88 percent y-o-y. The entire securities sector realized net profits of RMB 157.534 billion, up by 27.98 percent y-o-y.

Risks associated with stock pledging decreased significantly. At end-2020, the size of pledged A-shares declined by 15.92 percent y-o-y to 486.5 billion shares, showing a downward trend for two consecutive years (Figure 2.11). In 2020, the A-share market went up, and risks associated with stock pledging declined further.

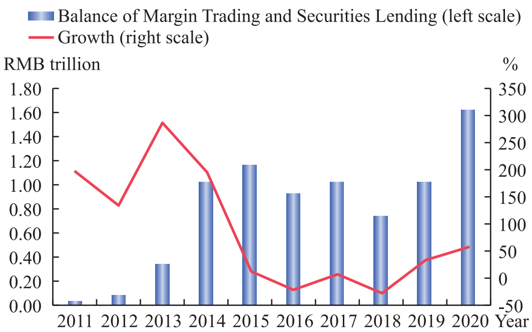
Figure 2.11 Size and Y-o-y Growth of Stock Pledging by Shareholders of Listed Companies



Source: The CSDC.

The balances of margin trading and securities lending grew rapidly. At end-2020, the balance of margin trading and securities lending registered RMB 1.619008 trillion, up by 59.77 percent y-o-y. Among this, the balance of margin trading accounted for 91.54 percent, and the balance of securities lending accounted for 8.46 percent (Figure 2.12). The proportion of margin trading balance to the A-share market value increased by 0.27 percentage point y-o-y to 2.34 percent, which was generally within the normal range.

Figure 2.12 Size and Y-o-y Growth of Margin Trading and Securities Lending in Shanghai Stock Exchange and Shenzhen Stock Exchange



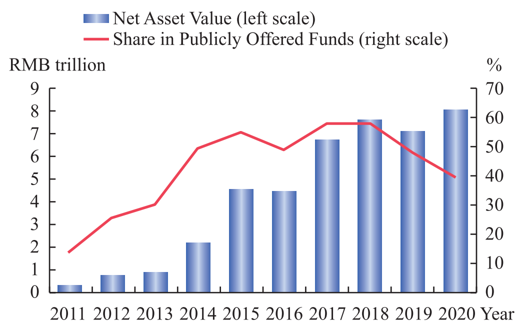
Source: The CSDC.

2. Assets under Management of Fund Management Companies Continued to Grow While the Share of Money Market Funds Kept Declining

At end-2020, there were 132 fund management companies across the country, up by 4 from the end of the previous year. Among these, 44 companies were Sino-foreign joint ventures and 88 were domestic companies. Together, these companies managed RMB 19.85 trillion of publicly offered funds, an increase of 34.39 percent y-o-y. In terms of types, closed-ended funds accounted for 12.90 percent of publicly offered funds, and open-ended funds accounted for 87.10 percent. Among open-ended funds, equity funds accounted for 10.08 percent of the public offered funds, hybrid funds accounted for 21.96 percent, fixed income funds 13.84 percent, money market funds 40.56 percent, and QDII funds 0.65 percent. By end-2020, 24561 private equity fund managers had registered with the Asset Management Association of China, managing 96852 private equity funds. The size of these funds reached RMB 15.97 trillion, up by 16.3 percent y-o-y.

The size of money market funds continued to decline. At end-2020, the net asset value of money market funds reached RMB 8.0521 trillion. As the stock market went up, the share of money market funds in the total publicly offered funds decreased by 8 percentage points y-o-y to 40 percent, marking the second consecutive y-o-y decline (Figure 2.13).

Figure 2.13 Net Asset Value of Money Market Funds and Its Share in Publicly Offered Funds, 2011-2020



Source: The CSRC.

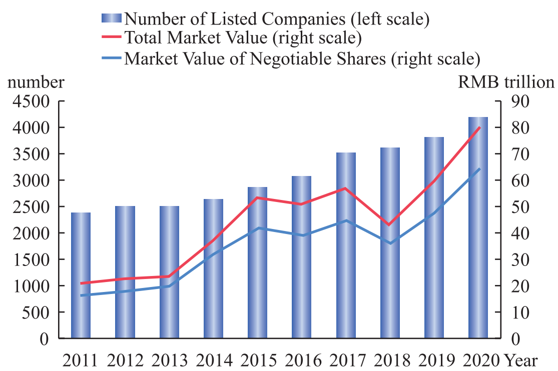
3. Futures Companies Grew Steadily with New Products Coming to Market at An Accelerated Pace

At end-2020, there were 149 futures companies in China, under which there were 86 risk management subsidiaries. Total assets of the futures industry, including those of clients, amounted to about RMB 984.8 billion. Altogether, 90 futures and options were listed. Among these, there were 62 commodity futures, 6 financial futures, 18 commodity options and 4 financial options. In 2020, China's futures market launched 12 futures, including 4 commodity futures - liquefied petroleum gas (LPG), low sulfur fuel oil, polyester staple fiber and bonded cooper - and 8 commodity options - rapeseed meal, LPG, thermal coal, polypropylene (PP), polyvinyl chloride (PVC), linear low-density polyethylene (LLDPE), aluminum and zinc.

4. Market Value Grew Significantly, and the Performance of Listed Companies Diverged Rapidly

At end-2020, there were 4154 companies listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange altogether, an increase of 377 from end-2019. Total market value and that of negotiable shares reached RMB 79.65 trillion and 64.31 trillion respectively, up by 34.33 percent and 33.02 percent y-o-y (Figure 2.14). The market value of negotiable shares accounted for 81.54 percent of total market value, down by 0.80 percentage point y-o-y.

Figure 2.14 Number and Market Value of Listed Companies, 2011-2020



Source: The CSRC.

Performance of listed companies diverged rapidly in2020. As of April 30 2021, 4296 listed companies had disclosed their 2020 annual reports. Of these, 3689 companies (85.87 percent of total) realized profits; 607 companies (14.13 percent of total) incurred losses among which 423 registered losses for the first time whereas 185 had reported losses in a row. Total operating revenue of listed companies that had disclosed annual reports reached RMB 53.37 trillion, up by 2.5 percent y-o-y; and net profits increased by 2.3 percent y-o-y to RMB 3.99 trillion.

5. The Reform and Opening-up of Capital Market Advanced Further and Basic Institutional Arrangements Continued to Improve

The registration-based IPO reform was launched as the pilot in the ChiNext market

and the delisting regime of listed companies was ameliorated. On August 24, 2020, the reform of the ChiNext board and the pilot of registration-based IPO regime were launched, which were aimed to streamline and improve the basic institutional arrangements in all fields and phases, and to better tap the decisive role of the market in resource allocation. Throughout the year, there were 63 companies listed through the registration-based IPO regime on the ChiNext board. In the meantime, efforts were made to sum up experiences of the delisting regime in the STAR market and the ChiNext market, and to establish and improve the normalized delisting regime of 'good in and bad out, survival of the fittest'. In 2020, 31 listed companies were delisted from the market in diverse ways, among which 16 were forced to be delisted, marking a historical record.

Efforts were made to deepen the reform of the NEEQ and to optimize the organic links among the different tiers of the capital market. In 2020, measures to deepen the reform of the NEEQ came into effect. The Select Tier came online in July 2020. A total of 42 new companies completed IPO on the NEEQ and were listed on the Select Tier. The NEEQ formed a progressive market structure of 'Base Tier, Innovation Tier, and Select Tier', and established differentiated institutional arrangements for different market tiers. As the Select Tier played an effective demonstration and leading role, and the Innovation Tier and Base Tier further consolidated their standardization and cultivation functions, the NEEQ can provide full-caliber services for SMEs at different stages of development. The mechanism for trans-board listing was established, which created diversified market channels for the growth of SMEs, and further improved the interconnection within the multi-tiered capital market.

The zero tolerance policy was adopted towards violations of laws and regulations in the securities market, and efforts were made to smooth judicial relief channels for investors. In 2020, with the implementation of the new *Securities Law*, the CSRC further enhanced its investigation and punishment of major securities violations, strictly and promptly cracked down on fraudulent issuances, financial frauds, malicious market manipulation, and insider trading in accordance with the law, and effectively increased the cost of violations. Throughout the year, 116 case clues were transferred and notified to public security organs, up by 103 percent y-o-y; 344 administrative penalties were imposed, up by 16.2 percent y-o-y. Meanwhile, the *Regulations on Issues Concerning Representative Action in Securities Disputes* was issued, further improving the class action system in the securities market. This would strengthen the civil liability for securities violations, reduce investors' cost of right protection, effectively punish violations of laws and regulations in the capital market, and safeguard investors' legitimate rights.

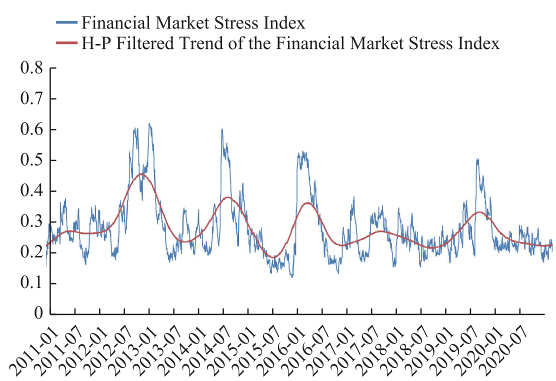
Measures were taken to promote the two-way opening-up of the capital market and enhance the opening-up level. In order to further promote the two-way opening-up of the capital market, efforts were made to support overseas IPOs of domestic companies, and to attract good innovative companies into domestic markets, through issuance of stocks, Chinese Depositary Receipts (CDRs) and bonds. The foreign ownership limit on securities companies, fund management companies and futures companies was removed ahead of schedule. By end-2020, 8 foreign-controlled securities companies, 1 wholly foreign-owned fund company and 1 wholly foreign-owned futures company had been established. In addition, the qualifications as well as regimes for QFII and RQFII were consolidated, the entry threshold for foreign investment into the domestic capital market was lowered, and the investment scope was expanded. Furthermore, efforts were made to improve the bond market trading and settlement system based on international market rules to provide foreign investors with a more friendly and convenient investment environment. In 2020, foreign investment continued to flow into China's capital market in general, and net inflow of foreign capital via the Shanghai-Hong Kong Stock Connect as well as Shenzhen-Hong Kong Stock Connect registered RMB 208.9 billion.

Violations of laws and regulations such as debt evasion were investigated and punished to safeguard the stability of the bond market. In the fourth quarter of 2020, several companies including the Brilliance Auto Group and the Yongcheng Coal and Electricity Holding Group defaulted on their bonds, and investors suspected these companies had engaged in violations of laws and regulations such as debt evasion, triggering volatility in the bond market. Under the unified law enforcement mechanism in the bond market, the PBC, the CSRC and relevant departments immediately investigated and punished the issuers and relevant intermediary agencies, strictly enforced market discipline and maintained the market order. In the meantime, relevant provinces were urged to shoulder territorial responsibilities, to deal with default and risk events based on market principles and rule of law, and to safeguard regional financial stability.

IV. Soundness Assessment of the Financial Market

China's financial market was generally stable. In 2020, stress in the stock market and money market eased compared with the previous year, stress in the bond market rose and stress in the foreign exchange market was stable. The overall financial market stress index stayed at a moderately low level (Figure 2.15).

Figure 2.15 Financial Market Stress Index, 2011-2020

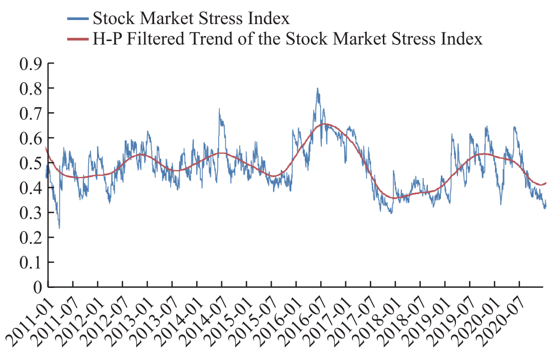


Source: The PBC.

Stock market rose amid lower stress. Throughout 2020, the Shanghai Stock Exchange Composite Index and the Shenzhen Stock Exchange Component Index rose by 13.87 percent and 38.73 percent respectively. Risk associated with stock pledging came down whereas market volatility risk and valuation risk went up. In general, the stress in the A-share market was low in 2020 (Figure 2.16). At end-2020, the static P/E ratios of the Shanghai Composite Index, the Shenzhen Component

Index, the ChiNext Index and the STAR 50 Index registered 16.76, 34.14, 77.25 and 100.93 times respectively.

Figure 2.16 Stock Market Stress Index, 2011-2020

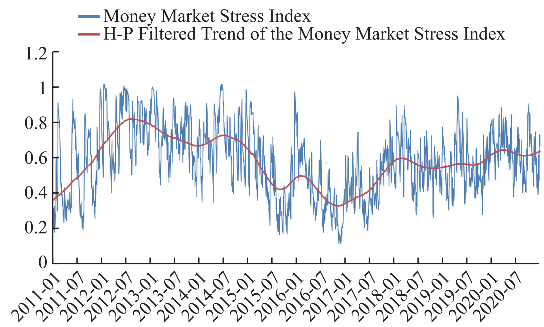


Source: The PBC.

Money market rates declined and market stress moderated compared with the previous year. In 2020, liquidity in the money market was reasonable and sufficient, interest rates came down and the stress eased from the previous year (Figure 2.17). On December 31, 2020, the weighted average of overnight pledged repo rate by depository institutions declined by 85 basis points from the end of the previous year to 1.45 percent; and the weighted average of 7-day pledged repo rate declined by 48 basis points y-o-y to 2.59 percent. The Shanghai Interbank Offered Rates (Shibors) decreased in general. In particular, the overnight Shibor dropped by 60 basis points to 1.09 percent, the 7-day Shibor fell by 36 basis points to 2.38 percent, and the 3-month Shibor decreased by 26 basis points to 2.76 percent.

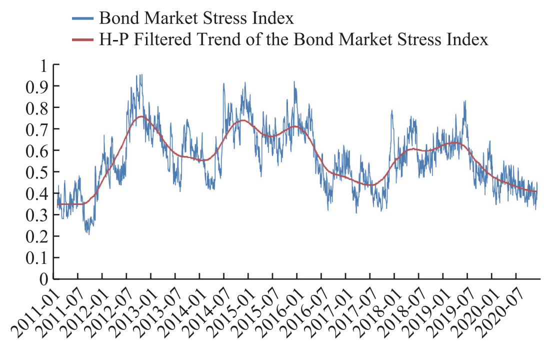
Credit risk in the bond market increased and market stress went up. In 2020, the overall bond market stress increased (Figure 2.18). Among the three components of the bond market stress index, pessimistic expectation of institutional investors edged up in the second half of 2020, credit risk rose rapidly from the fourth quarter on, and fluctuation risk increased moderately compared with the previous year. Specifically, the daily average term spread between 1-year and 10-year government bonds expanded by 15.13 basis points from the previous year to 76.29 basis points. The daily average spread between 1-year AA-rated medium-term notes and 1-year government bonds was 95 basis points, down by 4 basis points y-o-y; and the daily average spread between 5-year AA-rated medium-term notes and 5-year government bonds was 151 basis points, down by 24 basis points y-o-y. The credit risk premium narrowed slightly throughout the year.

Figure 2.17 Money Market Stress Index, 2011-2020



Source: The PBC.

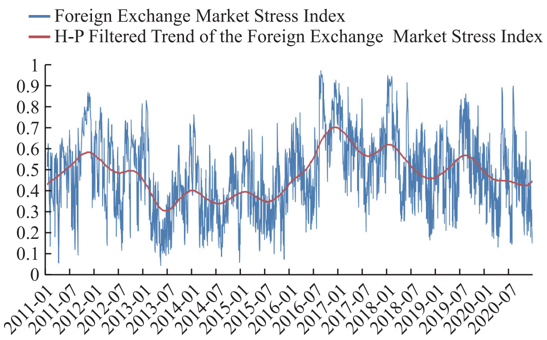
Figure 2.18 Bond Market Stress Index, 2011-2020



Source: The PBC.

The RMB appreciated against the USD and stress in the foreign exchange market was generally stable. In 2020, the RMB appreciated against the USD, the RMB exchange rate against a basket of currencies was basically stable with a wider range of two-side fluctuations, and the foreign exchange market stress index was generally stable (Figure 2.19). At end-2020, the exchange rate of RMB/USD closed at 6.5398 yuan per dollar in the onshore market, appreciating by 4 264 basis points or 6.52 percent y-o-y; and the exchange rate of RMB/ USD closed at 6.5030 yuan per dollar in the offshore market, appreciating by 4 587 basis points or 7.05 percent y-o-y.

Figure 2.19 Foreign Exchange Market Stress Index, 2011-2020



Source: The PBC.

Special Topic 5 The Banking Sector Stress Test

In order to further play the important role of stress testing in risk monitoring and assessment, the PBC stress tested 4015 banking institutions in 2021 to comprehensively assess resilience of the banking system against various "extreme but plausible" adverse shocks.

I. General Description of the Stress Test

Participation of banks. The stress test is designed for a comprehensive "health screening" of the banking system, and covers 4015 banks, consisting of 6 large state-owned commercial banks, 12 joint-stock commercial banks, 133 city commercial banks, 1533 rural commercial banks, 611 rural credit cooperatives, 27 rural cooperative banks, 1631 village and township banks, 19 private banks, 42 foreign banks and 1 direct bank.

Methodology. The stress test includes the solvency test based on macroeconomic scenarios, solvency test based on sensitivity analysis, liquidity stress test and risk contagion stress test. The solvency test based on macroeconomic scenarios targeted 30 large- and medium-sized commercial banks with an asset scale above RMB 800 billion, whose capital adequacy levels at the end of 2021, 2022 and 2023 were tested under adverse macroeconomic shocks from the perspective of both credit and market risks under stress scenarios. Based on the data of tested banks, the PBC developed a transmission model on the linkages between the macro economy and bank credit asset quality, and measured banks' credit impairment losses, and gains or losses from net interest income, from bond valuation and from foreign exchange exposures under stress scenarios. Then the impact on banks' capital adequacy was assessed. The solvency test based on sensitivity analysis assessed the instantaneous adverse impact of the deterioration in the overall and key sector risk profiles on banks' capital adequacy. The liquidity stress test assessed the impact of various liquidity stresses, including policy changes, macroeconomic dynamics and emergent shocks, on banks' cash flow gaps for each maturity period. Risk contagion stress test targeted only 60 banks with an asset scale above RMB 300 billion, and assessed risk contagion among banks and between banks and non-bank financial institutions.

Stress scenarios[①]**.** Three scenarios were designed for the solvency stress test based on macroeconomic scenarios—a mildly adverse scenario, an adverse scenario and a severely adverse scenario. The scenarios were calibrated with macroeconomic factors including GDP

① The stress scenarios were based on projections of macroeconometric models, and should not be interpreted as the PBC's judgments on the macro economy.

growth rate y-o-y (Table 2.2), CPI growth rate, short-term and long-term market interest rates, y-o-y growth rate of total retail sales of consumer goods, y-o-y growth rate of industrial value added, y-o-y growth rate of investment in fixed assets and RMB/USD exchange rate, etc. The solvency stress test based on sensitivity analysis tested the impact of a set of indicators, including NPL ratio of the whole credit portfolio, NPL ratio of specific industries, NPA ratio, loss given default, changes in the bond yield curve, etc. (Table 2.3). Liquidity stress test used a mildly adverse scenario and a severely adverse scenario to set different roll-on rates of in-balance-sheet assets and run-off rates of in-balance-sheet liabilities or contingent liabilities with different maturities of the banks. Under each scenario, a maturity ladder analysis was adopted to calculate the net funding gaps for each single bank. Risk contagion stress test used a mildly adverse scenario, adverse scenario and a severely adverse scenario to assess the bank's risk spillover to other tested banks when it defaults and withdraws its interbank lending (Table 2.4).

Underlying assumptions. The solvency stress test assumes that a bank's asset-liability structure remains unchanged, its provision coverage ratio meets 100 percent, the income tax rate stays at 25 percent, and that its dividend rate is 30 percent as long as its net profit remains positive and its capital adequacy ratios meet regulatory requirements. During the time horizon of the test, macro policy support, resolution of NPLs and external capital replenishment were not taken into consideration. The liquidity stress test assumes that a bank remains as a going-concern, i.e. its relationship with important clients would be undamaged and no major business disruptions would occur. Risk contagious stress test assumes that a bank defaults on its interbank counterparties and withdraws interbank lending. If other tested banks fail the stress test due to the losses on interbank funding during this process, the failing banks will continue to default and withdraw funds until no bank continues to default, and this round of contagion process ends. The above process will be repeated for the remaining banks.

Pass-fail criteria. For the solvency test based on macroeconomic scenarios, a bank would fail the test if its post-stress CET1 ratio falls below 7.5 percent, or if its Tier1 ratio falls below 8.5 percent, or if total CAR falls below 10.5 percent (the 2.5 percent capital conservation buffer requirement included). For the solvency test based on sensitivity analysis, a bank would fail the test if its CAR falls below 10.5 percent after the shock. For the liquidity test, banks should counterbalance their negative funding gaps (where cash outflows exceed cash inflows) by liquidating eligible high-quality liquid assets or by using the eligible high-quality liquid assets as collaterals to obtain liquidity assistance from the PBC. A bank would fail the test if funding gaps remain after it has exhausted all of its eligible high-quality liquid assets. For the risk contagion stress test, a bank would fail the test if its CET1 ratio falls below 5 percent (the 2.5 percent capital conservation buffer requirement excluded) after the shock.

Table 2.2 GDP Growth Rates in the Solvency Test Based on Macroeconomic Scenarios

Year	Mildly Adverse Scenario	Adverse Scenario	Severely Adverse Scenario
2021	7.28%	6.07%	5.12%
2022	4.78%	3.67%	2.80%
2023	4.08%	2.95%	2.08%

Note: Other macro indicators were calibrated by the macro econometric model.

Table 2.3 Scenarios for the Solvency Test Based on Sensitivity Analysis

Risk Exposure	Stress Scenarios
Overall Credit Assets	• Shock 1: NPL ratio up by 100 percent[1] • Shock 2: NPL ratio up by 200 percent • Shock 3: NPL ratio up by 400 percent • Shock 4: 50 percent of special-mention loans converted to NPLs • Shock 5: 100 percent of special-mention loans converted to NPLs
Real Estate Loans	• Shock 1: NPL ratios of real estate development loans[2] and housing purchase loans[3] both up by 5 percentage points[4] • Shock 2: NPL ratio of real estate development loans up by 10 percentage points, and NPL ratio of housing purchase loans up by 7 percentage points • Shock 3: NPL ratio of real estate development loans up by 15 percentage points, and NPL ratio of housing purchase loans up by 10 percentage points
Loans to Micro businesses, SMEs and individual Businesses[5]	• Shock 1: NPL ratio of loans to micro, small- and medium-sized enterprises and personal business up by 100 percent • Shock 2: NPL ratio of loans to micro, small- and medium-sized enterprises and personal business up by 200 percent • Shock 3: NPL ratio of loans to micro, small- and medium-sized enterprises and personal business up by 400 percent
Local Government Debts[6]	• Shock 1: NPA ratio up by 5 percentage points • Shock 2: NPA ratio up by 10 percentage points • Shock 3: NPA ratio up by 15 percentage points
Concentration Risk	• Shock 1: The largest non-financial group client defaults, with a loss given default rate of 60 percent • Shock 2: The three largest non-financial group clients default, with a loss given default rate of 60 percent • Shock 3: The five largest non-financial group clients default, with a loss given default rate of 60 percent
Default of Financial Counterparties	• Shock 1: The largest financial counterparty defaults, with a loss given default rate of 60 percent • Shock 2: The three largest financial counterparties default, with a loss given default rate of 60 percent • Shock 3: The five largest financial counterparties default, with a loss given default rate of 60 percent

(Cont)

Risk Exposure	Stress Scenarios
Investment Losses	• Shock 1: 250 bps parallel upward shift in the yield curves of Treasury bonds and policy financial bonds (including bonds issued by the China Development Bank) • Shock 2: 400 bps parallel upward shift in the yield curves of non-policy financial bonds and interbank negotiable certificates • Shock 3: 400 bps parallel upward shift in the non-financial corporate bond yield curve • Shock 4: 10 percent losses on the notional amount of investment in SPVs • Shock 5: The above four shocks occur simultaneously
Bond Default	• Shock 1: The bond with the largest book value defaults • Shock 2: Top 3 bonds with the largest book value default • Shock 3: Top 5 bonds with the largest book value default • Shock 4: Top 10 bonds with the largest book value default
Credit Risk of Assets of Wealth Management Products Back to the Balance Sheet[7]	• Shock 1: 10 percent losses on the stock assets of wealth management products planned to return back to the balance sheet • Shock 2: 20 percent loss in the stock assets of wealth management products planned to return back to the balance sheet • Shock 3: 30 percent loss in the stock assets of wealth management products planned to return back to the balance sheet

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

2. Real estate development loans include land development loans and housing development loans. Land development loans include land reserve loans to government agencies. Housing development loans include residential housing development loans (including indemnificatory housing), commercial housing development loans and other real estate development loans.

3. Housing purchase loans could be extended to enterprises, governmental organizations and individuals. The enterprise housing purchase loans include commercial housing loans and operating loans for the purpose of property management, while housing purchase loans extended to individuals could be used either for commercial or residential purpose.

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

5. The standards for the classification of SMEs and micro businesses refer to the provisions in the *Notice on Issuing the Provisions on the Classification Standards for Small and Medium-sized Enterprises* published by the Ministry of Industry and Information Technology in 2011.

6. Including investments in local government bonds, loans to government-invested projects, funding to local governments through SPVs (e.g. wealth management products, trust investment schemes, etc.) and other fund raisings that take the local government fiscal revenue as the source of repayment.

7. Assets of wealth management products back to the balance sheet refer to undisposed stock assets of wealth management products as of end-2020 that are planned to return back to the balance sheet before end-2021.

Table 2.4 Scenarios for the Risk Contagion Stress Test

Scenario 1	Potential spillovers are assessed under the assumption that tested banks default separately.
Scenario 2	It is assumed that non-bank banking financial institutions first default, then a tested bank withdraws part of its investment and relevant losses are directly deducted from its CET1 capital. Then potential spillovers are assessed when other tested banks default separately.
Scenario 3	It is assumed that securities and insurance firms first default, then a tested bank withdraws part of its investment and relevant losses are directly deducted from its CET1 capital. Then potential spillovers are assessed when other tested banks default separately.

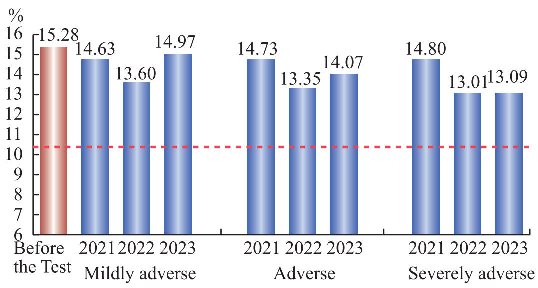
II. Results of the Solvency Stress Test

As of end-2020, the aggregate outstanding loans of 4015 tested banks registered RMB 150.72 trillion, aggregate NPL ratio registered 1.99 percent, and aggregate CAR registered 14.39 percent. Among them, the total outstanding loans of 30 large- and medium-sized banks and 3985 local small- and medium-sized banks registered RMB 114.64 trillion and RMB 36.08 trillion respectively, their aggregate NPL ratios registered 1.51 percent and 3.51 percent respectively, and their aggregate CAR registered 15.28 percent and 12.12 percent respectively.

1. Solvency Stress Test Based on Macroeconomic Scenarios

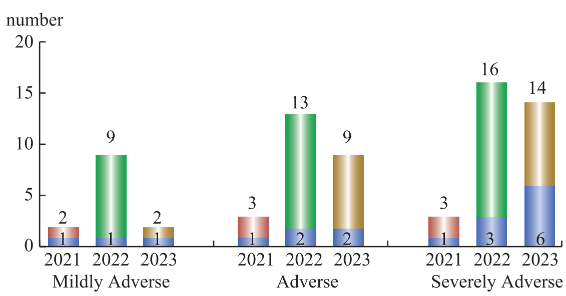
The 30 large- and medium-sized banks remain resilient to shocks as a whole. According to the results of solvency stress test based on macroeconomic scenarios, the 30 large- and medium-sized banks are of relatively strong capital adequacy and sound performance. As of end-2020, the aggregate CAR of 30 banks was 15.28 percent. Under the mildly adverse scenario, their aggregate CAR would fall to 13.60 percent at the end of 2022 and rebound to 14.97 percent at the end of 2023. Under the adverse scenario, their aggregate CAR would fall to 13.35 percent at the end of 2022 and rebound to 14.07 percent at the end of 2023. Under the severely adverse scenario, their aggregate CAR would fall to 13.01 percent at the end of 2022 and rebound to 13.09 percent at the end of 2023. In all the three cases, the aggregate CAR of 30 banks could meet the regulatory hurdle rate of 10.5 percent, which indicates that 30 large- and medium-sized banks are resilient to macroeconomic shocks as a whole (Figure 2.20).

Figure 2.20 Overall CAR Results of the Solvency Stress Test based on Macroeconomic Scenarios



There is a difference in the resilience among 30 banks. Under the mildly adverse, adverse and severely adverse scenarios, 9 banks, 13 banks and 16 banks have failed the test respectively at end-2022. After replenishing capital with profit retention, the number of banks that would fail the test at end-2023 falls to 2, 9 and 14, respectively. The number of banks that would fail the test at end-2022 will fall to 1, 2 and 3 under the mildly adverse, adverse and severely adverse scenarios respectively without considering the 2.5 percent capital conservation buffer requirement (Figure 2.21).

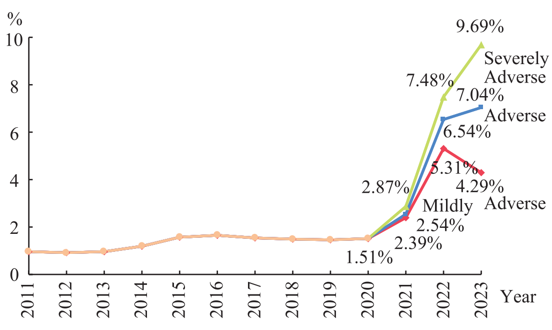
Figure 2.21 Number of Banks that Failed the Solvency Stress Test Based on Macroeconomic Scenarios



Note: The blue column refers to the number of banks that failed the test without considering the capital conservation buffer requirement

Credit risk is the main factor affecting the capital adequacy level of 30 banks. Under the mildly adverse, adverse and severely adverse scenarios, the tested banks would be faced with a deterioration of loan quality and a significant increase of the NPL ratio. As of the end of 2020, the aggregate NPL ratio of the tested banks registered 1.51 percent. Without considering the disposal of NPLs, the NPL ratio would increase to 2.39 percent, 5.31 percent and 4.29 percent at the end of 2021, 2022 and 2023 respectively under the mildly adverse scenario; to 2.54 percent, 6.54 percent and 7.04 percent respectively in the upcoming three consecutive years under the adverse scenario; and to 2.87 percent, 7.48 percent and 9.69 percent respectively under the severely adverse scenario (Figure 2.22). Banks will need to increase loan loss provisioning, significantly affecting their capital adequacy level. The accumulated decrease of CAR in the upcoming three years would be 2.74 percent, 5.17 percent and 7.60 percent under the mildly adverse, adverse and severely adverse scenarios, respectively.

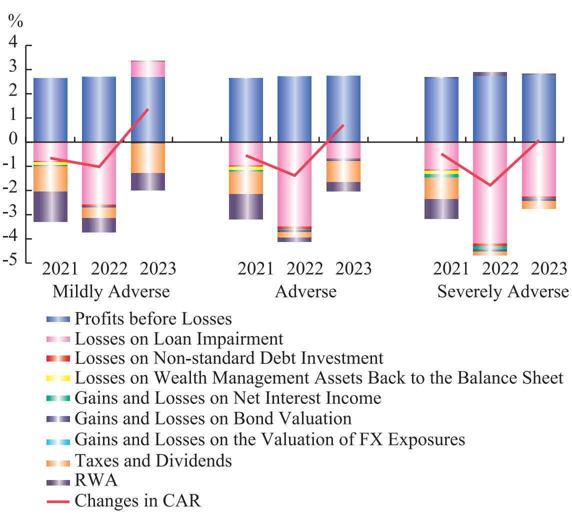
Figure 2.22 NPL Ratio Results of the Solvency Stress Test Based on Macroeconomic Scenarios



The impact of market risk on capital adequacy of 30 banks is limited. Under the severely adverse scenario, as a result of the decline of short-term market interest rates, in the upcoming three years the deposit interest rate would decline by 29 bps cumulatively, interest rates on other interest-bearing liabilities and interest-earning assets would fall by 98 bps cumulatively, and the aggregate CAR would fall by 0.34 percentage point cumulatively due to the decreasing net interest margin of tested banks. Valuation of bonds held by tested banks would decline due to changes of interest rates and widening of the credit spread, and their aggregate CAR would fall by 0.11 percentage point. Changes in foreign exchange rates have little influence on the CAR of tested banks (Figure 2.23).

Adequate provisioning and stable profitability could effectively alleviate the downside pressure on capital adequacy. The aggregate provision coverage ratio of the 30 large- and medium-sized banks was 213 percent at the end of 2020, far above the minimum regulatory requirement. Their average ROA stood at 0.84 percent, higher than the average level of the banking sector. Under the mildly adverse and adverse scenarios, 7 and 4 banks respectively, though failed the test in 2022, are able to keep their capital adequacy levels above the regulatory requirements at end-2023 by replenishing capital using their own profits.

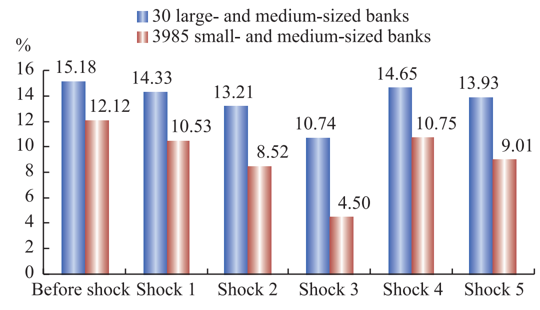
Figure 2.23 Contribution to Changes in the CAR



2. Solvency Stress Test Based on Sensitivity Analysis

The small- and medium-sized banks are less resilient to credit quality deterioration. In the stress test on the risk of overall credit assets, all the 30 large- and medium-sized banks could meet the 10.5 percent total CAR regulatory requirement, showing strong resilience to credit risk. For the 3985 small- and medium-sized banks, if their NPL ratio rises by 100 percent, 200 percent and 400 percent, their aggregate CAR would drop to 10.53 percent, 8.52 percent and 4.5 percent respectively, in which case 1390, 2011 and 2590 banks would fail the test, accounting for 26.78 percent, 44.71 percent and 67.77 percent of the total assets of tested small- and medium-sized banks respectively. If 50 percent and 100 percent of the special-mention loans deteriorate to NPLs, their NPL ratio would rise to 5.97 percent and 8.44 percent respectively, and CAR drop to 10.75 percent and 9.01 percent respectively, in which case 1260 and 1679 banks would fail the test, accounting for 26.23 percent and 35.99 percent of the total assets of the tested banks (Figure 2.24, 2.25, 2.26). The test shows that the current provision and capital adequacy levels of 3985 small- and medium-sized banks could support them to stay resilient to NPL increases by 3.54 percentage points to 7.05 percent, keeping a 100 percent provision coverage ratio and 10.5 percent CAR.

Figure 2.24 Solvency Stress Test on the Risk of Overall Credit Assets Based on Sensitivity Analysis



(NPL ratio up by 100 percent, 200 percent and 400 percent. 50 percent and 100 percent of special-mention loans deteriorate to NPLs)

Figure 2.25 Number of Failing Banks among 30 Large- and Medium-sized Banks

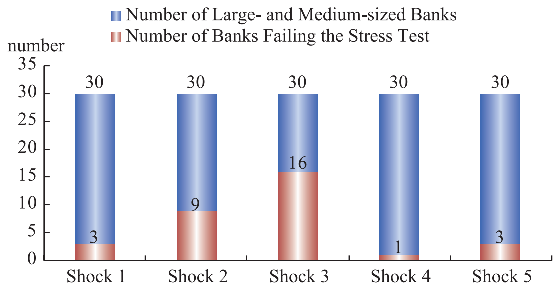
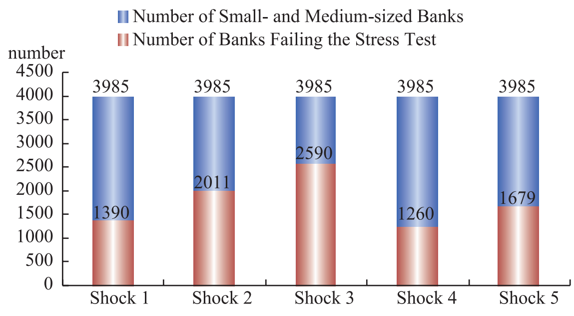


Figure 2.26 Number of Failing Banks among 3985 Small- and Medium-sized Banks

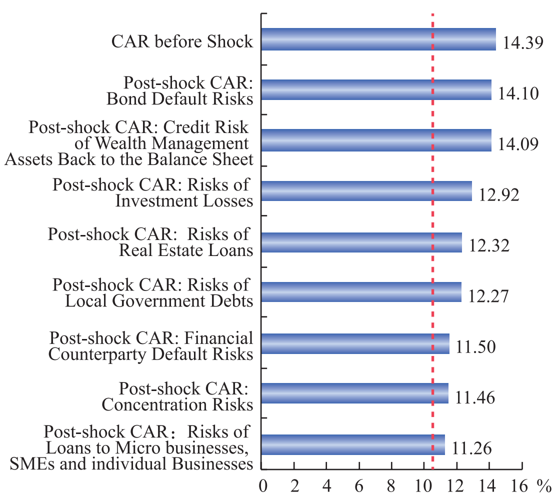


Attention should be paid to risks of loans to micro businesses, SMEs and individual businesses, client concentration, financial counterparties, local government debts and real estate loans, etc. If the NPL ratio of loans to micro businesses, SMEs and individual businesses rises by 400 percent, the aggregate CAR of all the tested banks would fall by 3.13 percentage points to 11.26 percent. If the five largest non-financial group clients or the five largest financial counterparties default with a loss given default rate of 60 percent, the aggregate

CAR would fall by 2.93 percentage points to 11.46 percent, or by 2.89 percentage points to 11.50 percent, respectively. If the NPA ratio related to local government debts rises by 15 percentage points, the aggregate CAR of tested banks would fall by 2.12 percentage points to 12.27 percent. If the NPL ratio of real estate development loans rises by 15 percentage points and the NPL ratio of housing purchase loans rises by 10 percentage points, the aggregate CAR of tested banks would fall by 2.07 percentage points to 12.32 percent (Figure 2.27).

There's limited impact of credit risks of wealth management assets back to the balance sheet and bond default risk on tested banks. If 30 percent of the stock assets of wealth management products planned to return back to the balance sheet incur losses, the aggregate CAR of tested banks would fall by 0.3 percentage point to 14.09 percent. If the top 10 bonds with the largest book value default, the aggregate CAR of tested banks would fall by 0.29 percentage point to 14.10 percent.

Figure 2.27 Results of the Solvency Stress Test Based on Sensitivity Analysis in Key Areas (the most severe shocks)



III. Results of the Liquidity Stress Test

Tested banks are relatively resilient against liquidity shocks. The liquidity stress test was undertaken to assess impacts of stress factors to banks' cash flow gaps on both the asset and liability sides within a 7-day, 30-day and 90-day period respectively. The test results show that the overall liquidity of the tested banks was adequate. 96.51 percent and 92.75 percent of the 4015 tested banks passed the test under the mildly adverse and severely adverse scenarios, up by 1.61 percentage points and 0.88 percentage point from 2020 respectively. Among them, all the 30 large- and medium-sized banks passed the test under the mildly adverse scenario, and 8 failed the test under the severely adverse scenario.

Banks with a heavy reliance on interbank funding are less resilient to liquidity shocks. The test applied a more prudent run-off rate of interbank funds than that of general deposits. According to the test results, banks that failed the test were highly dependent on interbank funding and faced greater liquidity pressures. Great attention should be paid to their asset-liability structures and liquidity risk management.

IV. Results of the Risk Contagion Stress Test

The vast majority of banks have the ability to withstand the default of a single bank, and the default of non-bank banking financial institutions has not significantly increased the interbank risk contagion. When only considering credit defaults among tested banks, 5 of the 60 tested banks would fail the test. If non-bank banking financial institutions default first, resulting in tested banks' losses on interbank investments, and then defaults occur among tested banks, 6 tested banks would fail the test, with only one more failing bank and no more round of contagion compared with the former case.

The default of securities and insurance financial institutions has increased the interbank risk contagion to a certain extent. If securities and insurance financial institutions default first, resulting in tested banks' losses on interbank investments, and then defaults occur among tested banks, 12 tested banks would fail the test, with 7 more failing bank and more rounds of contagion compared with the case where the default of securities and insurance financial institutions are not considered.

Special Topic 6 Capital Replenishment of Small- and Medium-sized Banks via Multiple Channels

Capital is the fundamental base of the business operation of commercial banks, and its adequacy is of great significance to improving banks' financing support to the real economy and risk management ability. The impact of the COVID-19 pandemic has exerted downward pressure on the profitability and asset quality of small- and medium-sized banks, posing the pressing challenge of capital replenishment. In response, the FSDC has held focused meetings on accelerating efforts to support capital replenishment of small- and medium-sized banks through multiple channels; and relevant authorities and local governments have taken a set of measures to implement the agenda made by the FSDC. Positive progress has been made so far.

I. Major Channels for Capital Replenishment of Commercial Banks

Commercial banks naturally feature highly-leveraged operation. In order to protect the interests of depositors and ensure normal operation of banks, the Basel III and domestic regulations both require banks to maintain their capital at a certain level to absorb losses and reduce the probability of bankruptcy in case of a crisis. By the hierarchy of loss absorbency, bank capital is divided into three categories, namely Common Equity Tier 1 (CET 1), Additional Tier 1 and Tier 2. From the perspective of the capital source , there are the endogenous source and exogenous source to replenish capital. Of the two sources, the endogenous one comprises retained earnings and part of excess provisions, and the exogenous one mainly include:

Equity-type instruments for capital replenishment. These mainly include initial public offering (IPO), seasoned equity offering (SEO), placing and issuance of preferred shares. Among them, IPO, SEO and placing will increase a bank's common equity which is included in CET 1 capital. Preferred shares are stocks whose holders are guaranteed prior to the holders of common shares in the payment of pre-defined dividends; and when they are used to replenish capital, they come without compulsory dividend or cumulative dividend payment, and are therefore included in Additional Tier I capital with mandatory conversion clause. In 2014, banks were allowed to issue preferred shares for capital replenishment purpose, and when their CET 1 capital adequacy ratio declined to 5.125 percent or less, preferred shares will be converted to common stocks at the agreed price.

Bond-type instruments for capital replenishment. Based on their maturity, bond-type instruments can be divided into perpetual bond and Tier 2 capital bond. Perpetual bond has no maturity date or its maturity is set as the duration of the issuer, and is included in Additional Tier 1 capital. Since the first successful issuance of perpetual bond by a Chinese bank in January 2019, a total of RMB 128 billion of perpetual bonds have been issued by city commercial banks and rural commercial banks as of end-2020. The maturity of Tier 2 capital bonds is often set as “5+5”, that is, with an added condition that issuers have the right to redeem them at the end of the fifth year, or from the sixth year the amount that can be calculated as capital will decrease from the principal balance on a yearly basis. Its hierarchy in liquidation comes after depositors and general creditors’ claims but before common equity and perpetual bond, and it is included in Tier 2 capital. Based on their loss absorbency mechanism, bond-type instruments can be divided into share convertible and write-down capital replenishment bonds. In the past, capital bonds in China were invariably write-down type, namely when a risk event is triggered, the issuer has the right to write down creditors’ claims, i.e. paying less or no principal and interests without consent of the holders. In January 2021, the first convertible perpetual bond was issued, which could be converted into common equity when a risk event is triggered. This allows creditors to become shareholders under specific circumstances, which is conducive to improving the governance mechanism.

II. Positive Progress in Capital Replenishment of Small- and Medium-sized Banks

Since 2020, the FSDC has held several focused meetings on exploring new approaches to replenish capital of small- and medium-sized banks and developing a long-term mechanism for capital replenishment. Relevant authorities and local governments have taken active actions, and remarkable progress has been made since then in the capital replenishment of small- and medium-sized banks.

First, regulatory authorities have guided and supported local governments’ efforts to supplement bank capital through multiple channels. The CBIRC released, jointly with five other agencies, the work plan for deepening reform and replenishing capital of small- and medium-sized banks. The work plan encouraged local governments to combine their efforts to implement reform and replenish capital of small- and medium-sized banks, introduce investment from the market, and support bank capital replenishment by issuance of local government special bonds and subscription of convertible bonds of small- and medium-sized banks.

Second, local governments have issued special bonds for bank capital replenishment. On July 1, 2020, the executive meeting of the State Council decided to allow local governments to use special bonds to support capital replenishment of small- and medium-sized banks. The Ministry of Finance allocated a RMB 200 billion quota of special bonds to support capital replenishment effort in 20 regions.

Third, regulatory authorities have been promoting the innovation and development of capital instruments. Since 2020, the PBC has actively supported small- and medium-sized banks in issuing perpetual bonds, Tier 2 capital bonds and other innovative capital instruments, with an aim to promote the formation of a virtuous economic and financial cycle featuring market-based support for bank capital replenishment, recovery of credit expansion and stabilization of a sound economic growth.

According to statistics, a total of 80 small- and medium-sized banks have issued more than RMB 200 billion worth of perpetual bonds and Tier 2 capital bonds in 2020, and the number of issuers continues to increase. At the beginning of 2021, the PBC, together with the CBIRC, designed and improved the mechanism for convertible capital bond. Zhejiang Chouzhou Commercial Bank and Ningbo Commercial Bank were granted approval to issue convertible capital bonds in the interbank bond market.

Fourth, regulatory authorities have strengthened policy support for capital instruments. In order to improve the liquidity of perpetual bonds in the secondary market and support the issuance of perpetual bonds by small- and medium-sized banks to supplement their capital, the PBC conducted the market-oriented central bank bills swap (CBS) on a monthly basis, which totalled RMB 61 billion in 2020. The CBIRC revised the *Notice on Issues Related to Insurance Funds Investing in Bank Capital Replenishment Bonds*, which relaxed criteria on issuers whose capital instruments can be invested in by insurance funds, and lifted the bond-specific credit rating standards for investable bonds, with an aim to support the optimization of capital structure by small- and medium-sized banks.

Fifth, a number of banks have supplemented their capital through direct financing. Since 2020, Bohai Bank and Weihai Bank have been listed on H-shares, raising HKD 13.47 billion and 2.83 billion respectively. Xiamen Bank, Bank of Chongqing, Qilu Bank, Bank of Ruifeng and Shanghai Rural Commercial Bank went public on the A-shares with an IPO value of RMB 1.77 billion, 3.76 billion, 2.455 billion, 1.226 billion and 8.584 billion respectively.

III. The Next Step

Positive progress has been made in the capital replenishment of small- and medium-sized banks. Under the influence of the pandemic, however, small- and medium-sized banks will continue to face downward pressure in terms of asset quality and profitability, and a huge demand for capital replenishment. In particular, some small- and medium-sized banks have inadequate qualifications or experiences, and are faced with great difficulties in issuing capital replenishment instruments through market-oriented channels. For the next step, additional measures will be needed to further improve the market environment and supporting policies for bank capital replenishment, support local governments' efforts to issue special bonds for capital replenishment within defined quotas, guide and support small- and medium-sized banks to make full use of existing market channels, explore and develop innovative capital replenishment instruments, and improve the sustainable mechanism for capital replenishment. In the meantime, efforts are also needed to combine the reform and capital replenishment of small- and medium-sized banks, and encourage them to focus on their business positioning, improve governance and strengthen risk management, so as to foster a long-term mechanism for their healthy development.

Special Topic 7 The Stress Test on Liquidity Risk of Publicly Offered Funds

In January, 2021, the PBC conducted its liquidity stress test on publicly offered funds to assess their liquidity risk management capacity under extreme redemption shocks.

I. Stress Test Profile

Sample. 5926 existing publicly offered funds as of end-2020 were selected for the test.

Model. The test was designed to assess the capacity of sample publicly offered funds for meeting redemption needs by observing their liquidity gaps in times of redemption under different liquidity stress scenarios. Net redemption rate was selected as a proxy for liquidity shocks to publicly offered funds and a simulation was made on potential redemption needs under different stress scenarios by using historical subscription and redemption data of different publicly offered funds. Assets held by publicly offered funds were classified into 13 types, each given a weight based on how liquid it is. The net liquidity-weighted assets were calculated for each fund by using their balance sheet data of total liquidity-weighted assets at end-2020 with deduction of liabilities occurring from pledged financing and fees charged in investment activities and daily operation. A fund will be considered to have passed the test if its net liquidity-weighted assets meet redemption needs under stress scenarios.

Stress scenarios. Depending on their investment assets and strategies, publicly offered funds are categorized into 20 types such as stock funds, passive index funds and medium- to long-term bond funds, with varying historical net redemption rates for each fund. Calibrated to its specific subscription and redemption data, each type of funds is tested under two scenarios, i.e. mild and severe redemption shocks, to find out its net redemption rates of a 10 percent and 5 percent confidence level respectively[①] (Table 2.5).

① Due to the rolling sample range, the redemption shocks under various stress scenarios of liquidity stress test of publicly offered funds in 2020 are slightly different from those in 2019.

Table 2.5 Redemption Shocks under Different Stress Scenarios

Type of Funds	Mild stress scenario	Severe stress scenario
	Net redemption rate (%)	Net redemption rate (%)
	VaR (0.1)	VaR (0.05)
Stock funds	31.23	44.42
Passive index funds	31.73	46.23
Enhanced index funds	31.23	46.75
Stock hybrid funds	26.26	38.5
Balanced hybrid funds	13.64	26.04
Bond hybrid funds	38.23	53.81
Flexible asset allocation funds	34.88	53.79
Medium- to long-term bond funds	34.39	54.63
Short-term bond funds	53.33	70.18
Primary bond hybrid funds	38.63	52.39
Secondary bond hybrid funds	37.34	53.12
Passive index bond funds	51.8	69.64
Enhanced index bond funds	14.41	25.29
Money market funds[1]	39.36	56.65
Stock long/short funds	41.85	56.19
Commodity funds	45.21	62.09
International (QDII) stock funds	25.98	42.14
International (QDII) hybrid funds	22.96	35.04
International (QDII) bond funds	27.71	37.95
International (QDII) alternative investment funds	22.36	32.4

1. According to Wind database, by the end of 2020, this is the only secondary category of money market funds in the primary investment category.

II. Results

Stress test results indicate overall strong resilience to liquidity risk in publicly offered funds in China. All sample funds passed the test under the mild stress scenario, remaining the same as the previous year, while 71 funds failed the test under the severe stress scenario, accounting for 1.20 percent of the total, up by 19 funds and 0.32 percentage points y-o-y. Among the funds, passive index bond funds have the highest proportion of failures with the failing rate up by 16.91 percentage points y-o-y (Table 2.6).

Table 2.6 Number and Percentage of Failed Funds

Types of funds	Number of sample funds	Number of failed funds		Failed funds as a percentage of its type (%)	
		Mild	Severe	Mild	Severe
Stock funds	370	0	0	0	0
Passive index funds	703	0	0	0	0
Enhanced index funds	109	0	0	0	0
Stock hybrid funds	1023	0	0	0	0
Balanced hybrid funds	72	0	0	0	0
Bond hybrid funds	300	0	1	0	0.33
Flexible asset allocation funds	1213	0	2	0	0.16
Medium- to long-term bond funds	1221	0	13	0	1.06
Short-term bond funds	122	0	28	0	22.95
Primary bond hybrid funds	66	0	0	0	0
Secondary bond hybrid funds	254	0	10	0	3.94
Passive index bond funds	88	0	17	0	19.32
Enhanced index bond funds	1	0	0	0	0
Money market funds	209	0	0	0	0
Stock long/short funds	19	0	0	0	0
Commodity funds	25	0	0	0	0
International (QDII) stock funds	80	0	0	0	0
International (QDII) hybrid funds	34	0	0	0	0
International (QDII) bond funds	0	0	0	0	0
International (QDII) alternative investment funds	17	0	0	0	0
Total	5926	0	71	0	1.20

Special Topic 8 Regulating the Third-party Internet Platform Deposits

The past few years have seen a surge in retail savings products offered by some banks on third-party Internet platforms against the backdrop of a booming internet-based finance industry. Banks take advantage of the large customer base and rich marketing scenarios provided by the third-party platforms they partner with, and extend services beyond geographical limitation of business. In particular, some small- and medium-sized banks have been increasingly using such deposit products to solicit funds nationwide to alleviate their own liquidity pressure, highlighting potential spillover risks. In response, the CBIRC and PBC jointly issued, in January 2021, a regulatory notice on the third-party platform deposit activities.

I. Third-party Platform Deposit Taking Activities

For deposit accounts offered by banks on a third-party platform, the creditor-debtor relationship remains between depositors and banks, as the platform is only involved in displaying information about deposit products and providing the purchase interface. Generally, the third-party platforms would gather and display such information as partner banks' names, account maturity, minimum purchasing size, interest rates and interest-bearing rules, with the slogans of "deposits within the RMB 500000 insurance coverage fully guaranteed" and "principal and interests guaranteed" displayed in conspicuous places. Such platform deposit products are invariably time deposits for retail customers, 63 percent of which have a 5-year maturity, and offer competitive rates as high as 4.875 percent, reaching the upper limit set by the self-regulatory mechanism for market rate pricing. Nearly half of such products accept an investment size as low as RMB 50 yuan, and feature simplified and quick purchasing experiences. To purchase such products, a customer is simply required to own a type II electronic bank account that is linked to his or her platform account, and would enjoy early withdrawal options. There are no charges for depositors, but certain fees would be paid by banks on the basis of the daily average balance amount of deposits they accept, which is about 0.2 percent -0.5 percent.

The third-party platform deposit products quickly gained popularity with growing volumes. The institutions platforms partner with are mostly small- and medium-sized banks; and some of them are high-risk banks who solicit non-local deposits in an aggressive manner. According to rough estimates, as of end-2020, a total amount of RMB 550 billion funds have been solicited through third-party platforms by about 89 banks, of which 84 are small- and medium-sized ones, registering a 127 percent growth from end-2019. Of this amount, about 50 percent is accepted by high-risk banks, i.e. banks whose ratings were above level 8 by the central bank rating system. To look at the funding resource composition of a high-risk bank, 70 percent of its deposits are non-local deposits attracted through third-party platforms, while its interbank funding decreases from 30 percent of its total liability at end-2019 to 3.2 percent.

II. Problems Arising From the Third-party Platform Deposit Activities

The Internet platforms have acted as deposit agents without approval. The third-party platforms not only engage in information display of deposit products offered by different banks, but also take further control of the product management, data access and customer information by providing the purchase interface. In some cases, large platforms would restrict depositors' access to their accounts for inquiries or transactions via banks' proprietary platforms, such as mobile banking and online banking applications, etc., except via the third-party platforms. In this business model, the platforms have in fact acted as the deposit agents without approval, which is in violation of the *Regulations on the Administration of Savings*.

Local banks operate beyond geographical limits. They partner with third-party platforms to leverage the latter's brand names and customer base to attract depositors and issue loans across regions, which is a departure from their market positioning of serving local needs. In the meantime, they often failed to enhance their own risk management capacity in line with increased risk portfolios. Moreover, banks andplatforms, with the help of technology, even intentionally block customers from regions where banking supervision is strict to escape regulation, instead of identifying and matching customers with their operating regions.

The third-party platform-based deposits would cause confusion in the deposit market. Some platforms would rank partner banks' deposit products by interest rates they offer from high to low, which fueled bidding among banks for deposits and pushed up funding costs. Certain banks would use marketing strategies such as shorter interest payment periods, cash bonus and shopping coupons to actually offer higher rates to better attract depositors. This has violated the rule set by the self-regulatory mechanism for market rate pricing. For instance, for a 5-year deposit product offered by Bank X, the interest rate is as high as 4.1 percent as interests are paid every three months, while the benchmark rate for 3-month time deposits is only 1.1 percent.

The third-party platform-based deposits raise liquidity concerns for small- and medium-sized banks. Such deposit accounts are usually open-ended and interest rate-sensitive; and they enjoy low customer stickiness as most of the customers are from non-local regions. As they are far less stable than deposits placed off-line, this could lead to an overestimation of liquidity indicators such as the liquidity matching rate, high-quality liquidity asset adequacy rate and core liability ratio, and distort the risk profile of participating banks. In addition, reputation risk is more pronounced for such deposit accounts, which means higher chance of bank runs in case of rumors spreading through the Internet.

III. Efforts to Improve Regulation of Deposit-taking Activities in the Market

In January 2021, the CBIRC and PBC jointly issued the *Notice on Matters Concerning the Regulation of the Internet-based Retail Deposits by Commercial Banks*, putting a stop on time deposits and time-demand optional deposits offered by commercial banks via third-party Internet platforms. Commercial banks are prohibited from accepting or renewing such deposits, and those outstanding volumes are subject to winding-down as they mature. So far, the third-party platform-based deposits are no longer available on the market.

For local banks, the PBC, in February 2021, made it clear that they are disallowed to accept or renew non-local deposits via all channels, while those outstanding volumes are subject to winding-down as they mature, in an effort to curb these banks' unsound expansion in recent years, and to urge them to stick to their business positioning of serving local clients. Starting from the first quarter of 2021, information about non-local deposits solicited by local banks will be included in the PBC's MPA program.

Chapter III

Building the Systemic Financial Risk Prevention and Mitigation System

In 2020, the international community continuously improved the macroprudential policy framework, pushed forward the implementation of post-crisis financial regulatory reforms, proactively addressed the shock from the COVID-19 pandemic, and properly introduced countercyclical adjustments. Based on international experiences, China continued to improve the systemic financial risk prevention and mitigation system, strengthened the monitoring and assessment of systemic risks, and enhanced the macro-policy coordination against the backdrop of the COVID-19 pandemic.

I. Progress on the Implementation of International Financial Regulatory Reforms

1. Building More Resilient Financial Institutions

Proactively introducing measures to mitigate the shock from the COVID-19 pandemic. In order to mitigate the influence of the COVID-19 pandemic on the banking sector, the BCBS introduced multi-dimensional supporting measures. As for the implementation of Basel framework, the implementation date of the Basel III standards finalised in December 2017 was deferred by one year to 1 January 2023, the implementation date of the revised G-SIB assessment methodology was deferred by one year to 2022, and evaluation of the implementation of standards by members in 2020 was suspended. As for the capital requirement, the BCBS clarified that sovereign risk weights could be applied to loans with government guarantees against impacts of COVID-19 pandemic, the repayment suspension of loans affected by the COVID-19 pandemic would not be included in the calculation of 90 days overdue, and the loans which were temporarily overdue or accepted public guarantees due to the impacts of COVID-19 pandemic would not be automatically classified as restructured loans. As for the countercyclical adjustment, the BCBS clarified that the capital and liquidity buffer held by banks could be used to absorb losses and support real economy, allowed banks qualified to use expected credit loss model to calculate loan loss provisions to add back 100 percent of the difference between the expected credit loss model outcome and the former model outcome in 2020 and 2021 to their CET1 capital, and the add-back should be deducted from CET1 capital in a linear way in the next three years.

2. Ending "Too Big to Fail"

Updating the list of G-SIBs. In November 2020, the FSB updated the list of G-SIBs based on the end-2019 data. 30 banks were designated as G-SIBs (Table 3.1) and the list was the same as that in 2019. The buckets of specific banks were changed. China Construction Bank moved from bucket 1 to bucket 2, JP Morgan Chase moved from bucket 4 to bucket 3, and Goldman Sachs and Wells Fargo moved from bucket 2 to bucket 1. The designated G-SIBs in the annual updated list in every November will be subject to higher capital buffer requirements 14 months later.

Table 3.1 The Updated List of G-SIBs

Bucket (Higher Capital Buffer Requirements)	G-SIBs in Alphabetical Order Within Each Bucket
5 (3.5%)	(Empty)
4 (2.5%)	(Empty)
3 (2.0%)	Citigroup
	HSBC
	JP Morgan Chase
2 (1.5%)	Bank of America
	Bank of China
	Barclays
	BNP Paribas
	China Construction Bank
	Deutsche Bank
	Industrial and Commercial Bank of China
	Mitsubishi UFJ FG
1 (1.0%)	**Agricultural Bank of China**
	Bank of New York Mellon
	Credit Suisse
	Goldman Sachs
	Groupe BPCE
	Groupe Crédit Agricole
	ING Bank
	Mizuho FG
	Morgan Stanley
	Royal Bank of Canada
	Santander
	Société Générale
	Standard Chartered
	State Street
	Sumitomo Mitsui FG
	Toronto Dominion
	UBS
	UniCredit
	Wells Fargo

Source: *2020 list of global systemically important banks* by the FSB, Nov.2020.

3. Promoting Effective Resolution Regime

Pushing forward the implementation of TLAC requirements steadily. All G-SIBs not headquartered at EMEs have already met or exceeded the 2022 requirements of 18 percent of the RWA and 6.75 percent of the leverage ratio denominator in advance. The TLAC issuance has recovered gradually from the impacts of COVID-19 pandemic in March 2020. In the first half of 2020, about USD 305 billion of TLAC eligible instruments were issued, more than those in the first half of 2018 and 2019. The implementation of internal TLAC requirements was less advanced and approaches to the distribution of TLAC resources within a group differed across jurisdictions. Many G-SIBs began to disclose their TLAC levels while less information about internal TLAC was disclosed.

Promoting the implementation of the *Key Attributes of Effective Resolution Regimes for Financial Institutions.* The implementation status of the *Key Attributes of Effective Resolution Regimes for Financial Institutions* was uneven across sectors. As for the banking sector, almost all G-SIB home and key host jurisdictions have in place comprehensive bank resolution regimes. As for the insurance sector, the FSB published the *Key Attributes Assessment Methodology for the Insurance Sector* in August 2020. However, implementation of resolution reforms was less advanced in the insurance sector in 2020. As for CCPs, authorities have established CMGs and commenced resolution planning for most CCPs identified as systemically important in more than one jurisdiction. However, there remains a lot to do in establishing statutory resolution regimes. In order to facilitate the establishment of the CCP resolution regimes, the FSB published the *Guidance on Financial Resources to Support CCP Resolution and on the Treatment of CCP Equity in Resolution* in November 2020 to guide the CCP resolution authorities to assess the potential gaps of resources in CCP resolution and to allocate losses.

4. Keeping on Monitoring the Shadow Banking System

In December 2020, the FSB published the *Global Monitoring Report on Non-Bank Financial Intermediation 2020* based on the end-2019 data covering 29 jurisdictions. Based on the broad measure, Non-bank Financial Intermediation grew by 8.9 percent y-o-y to USD 200.2 trillion by the end of 2019, accounting for about 49.5 percent of total financial assets in participating jurisdictions. Based on the narrow measure, Non-bank Financial Intermediation grew by 11.1 percent y-o-y to USD 57.1 trillion, accounting for 14.2 percent of total financial assets in corresponding jurisdictions. China had the third largest narrow measure of USD 7.8 trillion, following the U.S. with the largest narrow measure of USD 17.1 trillion and the Euro area with the second largest narrow measure of USD 12 trillion. The proportion of China's narrow measure has kept declining since 2017.

5. Promoting Reforms of OTC Derivatives Markets

The OTC derivatives market reforms progressed slowly in 2020. By the end of September 2020, higher capital requirements for non-centrally cleared derivatives were in force in 23 of the 24 FSB member jurisdictions. 23

jurisdictions had comprehensive trade reporting requirements in force. 17 jurisdictions had in force comprehensive standards for mandatory central clearing requirements. 16 jurisdictions had margin requirements in force for non-centrally cleared derivatives. Platform trading frameworks were in force in 13 jurisdictions. The implementation progress was largely the same as the last year.

6. Others

In order to mitigate the negative impacts of the COVID-19 pandemic in 2020, SSBs deferred the implementation date of some international standards. In order to address the key challenges often faced by cross-border payments including high costs, low speed, limited access and insufficient transparency, the FSB, together with relevant SSBs, developed a roadmap to enhance cross-border payments by promoting the consistent implementation of international standards about cross-border payments, improving direct access to payment systems and exploring the feasibility of new multilateral platforms and arrangements for cross-border payments. The adoption of LEI is further expanded. By the end of 2020, 30 jurisdictions had been authorized to issue LEIs and over 1.77 million entities had received their LEIs.

II. Major Jurisdictions' Practices

1. United States

Monitoring and assessing systemic risks. The FSOC published its annual report in December 2020. The report indicated that the COVID-19 pandemic caused unprecedented shock to global financial system in 2020. Though unconventional policy actions to minimize the effects of the pandemic have been effective in improving market conditions, risks to U.S. financial stability remain elevated compared to 2019 and the outlook for economic recovery depends on the severity and the duration of the ongoing pandemic. Main threats to the U.S. financial system include: there are serious concerns about the sustainability of corporate debt, and the commercial real estate sector is vulnerable to mortgage defaults and declines in valuations; significant structural vulnerabilities remain in the short-term wholesale funding market, and some open-end funds were faced with greater selling pressure in distress; non-bank mortgage companies rely heavily on short-term funding and have limited resources to absorb losses; service interruption of CCPs could cause risks to spread across institutions; the transition from LIBOR to other alternative benchmarks could lead to legal, operational, and economic risks; financial data could not meet the need of effective supervision and internal firm risk management; financial institutions' reliance on information technology, internet platforms and third-party service providers may increase operational risks.

Conducting stress tests. 33 banks participated in the Dodd-Frank Act Stress Tests (DFAST) conducted by the Federal Reserve in 2020, which set severe but plausible scenarios based on the macroeconomic and financial conditions as of end-September, 2020. The test result indicates that 33 banks would experience temporary losses and lower revenues but could continue to lend to creditworthy businesses and households. In aggregate, capital ratios remain well above their required minimum levels. In the severely adverse scenario, a severe global recession occurs, the market pressure rises sharply, the U.S. unemployment rate climbs to a peak of 12.5 percent in the fourth quarter of 2021, real GDP falls 3.25 percent from the end of the third quarter of 2020 to its trough in the fourth quarter of 2021, and equity prices fall more than 30 percent. Under this scenario, the aggregate CET1 ratio of 33 banks declined from 12.2 percent at the end of the second quarter of 2020 to a minimum of 9.6 percent, and the aggregate losses are projected to be USD 629 billion.

Improving the macroprudential regulation framework. In order to mitigate shocks of the COVID-19 pandemic, the regulators undertook a number of actions to support the flow of credit and to ease operational burdens for financial institutions, including encouraging banks to use their capital buffers to provide credit to affected households and firms, as well as temporarily adjusting leverage ratio rules to simplify supplementary leverage ratio requirements for community banks. In addition, regulators also took other policy actions, including publishing rules for determining whether a firm has control of a banking organization, taking the stress test results into consideration when determining banks' capital requirements and simplifying capital rules for large banks, modifying the Volcker Rule to relax restrictions on the investment of banks to hedge funds and private equity funds, finalizing NSFR rules, and prescribing a more stringent regulatory capital treatment for holdings of TLAC debt.

2. EU

Monitoring and assessing systemic risks. The ECB published its *Financial Stability Review* in November 2020. It indicated that shocks of the COVID-19 pandemic continued to dominate the outlook for euro area financial stability. Near-term financial stability risks are contained by massive policy support, but a premature end to schemes could bring challenges. Looking ahead, medium-term vulnerabilities for euro area financial stability have remained elevated and relate to: (i) a mispricing of some asset classes and possible corrections in markets; (ii) growing fragilities in the non-financial private and public sectors; (iii) weaker bank profitability in the light of lower interest rates and expected higher credit losses; and (iv) renewed risk-taking by non-banks, in particular investment funds. The potential for these vulnerabilities to possibly amplify each other further increases the risks to financial stability.

Improving the macroprudential policy framework. In order to mitigate the shocks of the COVID-19 pandemic, many euro area member jurisdictions have reduced the CCyB rates. As of December 2020, only Luxembourg and Slovakia had positive CCyB rates. Some jurisdictions have reduced SyRB rates and capital surcharges for O-SIIs, which could release over EUR 20 billion of CET1 capital of banks to effectively help them absorb losses and provide credit. In addition, some members postponed the introduction of announced macroprudential measures, such as the introduction of capital surcharges on domestic mortgage loan exposures in Netherland.

Monitoring the non-bank financial intermediation. The ESRB published its *EU Non-bank Financial Intermediation Risk Monitor* in October 2020. By the end of 2019, the size of EU non-bank financial intermediation totalled about EUR 45.5 trillion, an increase of 6.7 percent compared with end-2018. The annual increase largely reflects an increase in the value of assets held by investment funds. Risks and potential vulnerabilities in the non-bank financial system include: riskier borrowers are at higher credit risks and their rating is more likely to be downgraded; interest rates are expected to remain low for longer and vulnerabilities may accumulate in investment funds because of their search for yield through investment in assets of longer duration and higher risks with more use of leverage; risk contagion may be amplified due to interconnectedness among banks, insurers and non-bank financial intermediations such as investment funds through credit exposures, ownership structures and common asset exposures; margining practices may increase liquidity risk during the period of high market volatility; there are data gaps when conducting more comprehensive risk assessments, etc.

3. United Kingdom

Monitoring and assessing systemic risks. The FPC published its *Financial Stability Report* in December 2020, which claimed that the COVID-19 pandemic put great pressure on U.K's economic growth. However, U.K's financial system could keep on providing credit to firms and households, reflecting the effectiveness of substantial capital buffer that has been built up since the global financial crisis and the extraordinary policy responses of the U.K authorities. Major banks have sufficient capital, whose CET1 capital ratio has increased to 15.8 percent at end-September, 2020, which is over three times higher than at the start of the global financial crisis. It is estimated that major UK banks can absorb credit losses in the order of GBP 200 billion. The main risks facing the UK financial system include: corporate bankruptcy and debt defaults may rebound; prices of risky assets may be corrected, the risk of "fallen angel[①]" remains elevated in the next one to two years, and the high-yield bond market will face challenges.

Improving the macroprudential policy framework. In order to address the impacts of the COVID-19 pandemic and encourage financial institutions to provide credit support to households and firms, U.K. has adopted a relatively loose macroprudential policy stance. Main measures that have been adopted include: banks are supported to use capital buffers to provide credit; CCyB ratio will be maintained at 0 until at least the fourth quarter of 2021; the 2020 annual stress test - the annual cyclical scenario on major banks is cancelled and the biennial exploratory scenario is suspended; firms' Systemic Risk Buffer rates are maintained at the rate set in December 2019 and will be reviewed in December 2021.

III. China's Practices

In 2020, China continued to enhance the macroprudential regulation regimes and policy framework, strengthen financial regulatory coordination, improve the risk monitoring and identification regime, and proactively adopt a

① Bonds that lose their investment grade status due to downgrades.

number of macroprudential policies.

Further enhancing financial policy planning and coordination. Since 2020, facing the complex and severe challenges from the COVID-19 pandemic, the Financial Stability and Development Committee of the State Council (hereinafter referred to as the FSDC) has been strengthening overall planning and coordination, held 33 plenary meetings and several thematic meetings, decisively adoptedstrong, effective, professional, precise and innovative measures, stabilized market expectations by means of certainty in the systems and policies, and made greater efforts to prevent and address major financial risks. These measures have helped us to take the lead to achieve positive economic growth at minimal costs, and to achieve important progress in financial risk resolution. First, countercyclical adjustment policies were adopted in a timely manner. Based on the principle of "stabilizing expectations, expanding total volume, classifying policies, attaching importance to rollover, and creating new tools", new monetary policy tools that could directly support the real economy were developed to help increase the aggregate, reduce the prices and expand the coverage of money and credit. As a result, positive economic growth was achieved in a relatively short period of time and the mechanism of facilitating finance to serve the real economy was further improved. Second, the critical battle against major financial risks has been put forward under coordination. Efforts were continued to resolve stock risks and prevent incremental risks. Capital replenishment for small- and medium-sized banks was enhanced, prudential regulation on financial innovation was strengthened, and more efforts were made to prevent monopoly and disorderly capital expansion. Third, financial reforms were deepened under coordination. The principle of "institutional establishment, no intervention, and zero tolerance" was determined, the pilot reforms of NEEQ and registration-based IPO on the Chinext were deployed, and great efforts were made to crack down on financial fraud. Reforms of small- and medium-sized banks, development and policy financial institutions were pushed forward. Coordination between central and local financial supervision was strengthened, and the local coordination mechanism under the FSDC Office was established. Fourth, a higher level of opening-up was promoted, with restrictions on the proportion of foreign ownership in the banking, securities, and insurance sectors abolished, and quotas for QFII/ RQFII and limits on RQFII pilot countries and regions removed.

Strengthening the monitoring and assessment of systemic risks. Continuous efforts were made in promoting risk monitoring of banking, securities and insurance sectors as well as financial markets so that financial risks could be identified and appropriate policy responses could be adopted in a timely manner. Stress tests on over 4000 banking financial institutions were conducted and the testing sample was continuously expanding, so as to make timely risk warnings to financial institutions and guide them to operate prudently. Central bank rating of financial institutions was steadily carried out on a quarterly basis, covering more than 4000 financial institutions, so as to evaluate their risk profiles and accurately identify high-risk institutions. A liquidity risk monitoring and reporting mechanism for key banks was established to monitor liquidity status, measure liquidity gaps, and make risk warnings in a timely manner. Stress tests on risks of stock pledging by listed companies' major shareholders and liquidity risks of publicly offered funds were continued, and financial market stress index was used to monitor the risks in the stock, bond, money and foreign exchange markets. Off-site examination and on-site inspection were actively conducted on insurers to closely monitor risk profiles of less solvent insurers with a focus on risks such as inappropriate related party transactions, embezzlement by major shareholders and unstable ownership structures. Risk monitoring on large problem firms was continued and analysis of macroeconomic situation, regional financial risks and trends in specific sectors such as the real estate sector was enhanced.

Proactively addressing the negative impacts of the COVID-19 pandemic and adopting kinds of countercyclical adjustments. First, the PBC and CBIRC jointly issued the *Notice on Establishing the Countercyclical Capital Buffer Mechanism* in September 2020, which clearly announced the establishment of the CCyB mechanism, and set the initial CCyB rate of banking financial institutions at 0 based on the systemic risk assessments and the need of COVID-19 pandemic containment. This mechanism will help to further promote the stable operation of banking financial institutions, enhance the countercyclical adjustments of macroprudential policies, mitigate the negative impacts of procyclical accumulation of financial risks and unexpected shocks, and safeguard the stability of the financial system. Second, the MOF and CBIRC jointly issued the *Notice on Further Implementing Accounting Standards Related to the New Financial Instruments* in December 2020, which allowed non-listed banks, during their implementation of the new financial instrument standards in the first five years, to add back a certain proportion of the decreased CET1 capital due to the increase in loan loss provisions when applying the expected credit loss approach on the first implementation date.

Improving the regulation on financial holding companies. In September 2020, the *Decision on Implementing Access Management of Financial Holding Companies by the State Council* and the *Trial Measures on Regulation of Financial Holding Companies* were published. In April 2021, the *Interim Regulations on Filing-based Management of Financial Holding Companies' Appointment of Directors, Supervisors and Senior Executives* was published. All these policies preliminarily established the regulatory framework of financial holding companies, and clarified that qualified firms shall establish financial holding companies in accordance with the laws and regulations. Following the principle of macroprudential management, the PBC will conduct comprehensive, continuous and penetrating supervision over financial holding companies, strengthen the supervision of key segments such as shareholding structure, corporate governance, comprehensive risk management and related party transactions, so as to promote the legal and compliant operation of financial holding companies, effectively prevent cross-institution, cross-sector and cross-market risk contagion, and improve the quality and efficiency of finance serving the real economy.

Improving the regulation on SIFIs. The PBC and CBIRC jointly published the *Measures* *for the Assessment of Systemically Important Banks* in December 2020, which clarified the approach, indicators, procedure and working mechanism of the assessment of domestic systemically important banks, and marked the establishment of the assessment rule of domestic systemically important banks. In April 2021, the PBC and CBIRC jointly published the *Additional Regulations on Systemically Important Banks (Provisional) (Consultative Document)*, which introduced additional regulatory requirements on capital surcharge, leverage, liquidity, large exposure, corporate governance, RRP, data reporting, etc. For the next step, the PBC, together with the CBIRC, will conduct the assessment and propose the list of domestic systemically important banks, finalise and implement the *Additional Regulations on Systemically Important Banks (Provisional)*. Meanwhile, the development of assessment methodology and regulations of domestic systemically important insurers will be accelerated.

Further improving regulation on asset management activities and facilitating smooth implementation of new rules. First, the transition period of the new regulation on asset management activities was appropriately adjusted, the incentive and constraint mechanism were strengthened, financial institutions were urged to properly adjust their rectification plans and implement them in an orderly manner, and the disposal of assets during the transition period was facilitated. The PBC took the lead in establishing a contact and coordination mechanism for the rectification of asset management activities, strengthened monitoring, analysis and policy coordination, and promoted the implementation of rectification policies of asset management activities. Second, the CBIRC issued a complementary rule, the *Interim Rules on Insurance Asset Management Products*, to refine the regulatory requirements for insurance asset management products and further unify the regulations on similar asset management products. The CBIRC also issued the *Interim Rules on Supervisory Rating of Insurance Asset Management Companies* to implement the supervisory rating for insurance asset management companies and promote their sound operation and high-quality development. Third, off-site supervision kept improving by monitoring the operation of the asset management activities on a monthly basis. In order to address problems like the rebound of some banks' principal-guaranteed wealth management products and the rapid growth of cash management products, timely risk warnings were provided to ensure the effective implementation of the new regulation on asset management activities and its complementary rules. At present, the development of asset management business is characterized by optimized structures and more sustainability. Net value-based products kept growing, fund idling continued to be contained, the proportion of non-standard assets in investment of asset management products dropped to its trough, the proportion of standardised assets like stocks and bonds increased, and the support to the real economy was promoted.

Giving full play to the role of MPA in optimizing the credit structure and facilitating the supply-side structural financial reforms. Since 2020, in accordance with the key tasks deployed at the Central Economic Work Conference, the PBC has further improved the

MPA by increasing the assessment weight of financing to micro- and small-sized businesses, private enterprises and the manufacturing sector, introducing the "use of central bank lending" as a temporary assessment indicator, and improving the assessment of LPR utilization. These measures have guided financial institutions to promote their support for key areas and weak links in the national economy, and facilitated a significant reduction in the comprehensive financing costs of enterprises.

Enhancing the macroprudential policies on cross-border capital flows. First, the PBC reduced the foreign exchange risk reserve ratio for forward foreign exchange sales from 20 percent to 0 in October 2020 considering the sound performance of the foreign exchange market and orderly cross-border capital flows. Second, the quoting banks for the central parity rate of the RMB against the USD have successively and voluntarily reduced the use of the "counter-cyclical factor" in their quotation models, so that the quotation of the central parity becomes more and more transparent, effective and benchmark-like. Third, the macroprudential adjustment parameter for cross-border financing was adjusted when appropriate. The macroprudential adjustment parameter for cross-border financing was adjusted from 1 to 1.25 in March 2020, so as to facilitate domestic institutions, especially SMEs and private enterprises, to make full use of both domestic and overseas funding channels to address their funding difficulties and promote the resumption of work and production. In order to improve the macroprudential management of overall cross-border financing and guide financial institutions to adjust their foreign exchange asset and liability structure based on market-orientated decisions, the macroprudential adjustment parameter for financial institutions' cross-border financing was adjusted from 1.25 to 1 in December 2020. The macroprudential adjustment parameter for cross-border financing of companies was adjusted from 1.25 to 1 in January 2021. Besides, the macroprudential adjustment parameter for domestic companies making overseas loans was also adjusted. According to companies' real business need, the macroprudential adjustment parameter for domestic companies making overseas loans was adjusted from 0.3 to 0.5, so as to facilitate domestic enterprises' overseas investment.

Establishing the real estate loan concentration management system for banking financial institutions. In December 2020, the PBC and CBIRC jointly issued the *Notice on Establishing the Real Estate Loan Concentration Management System for Banking Financial Institutions*, which introduced caps on the shares of financial institutions' real estate loans in total loans and the shares of financial institutions' personal mortgages in total loans. This could help to promote the resilience and stability of the financial system, facilitate the healthy and stable development of the real estate sector, strengthen the internal constraints of banking financial institutions, optimize their credit structures, and improve their ability to serve the real economy.

Continuing to push forward the work on comprehensive financial statistics. First, the national financial basic database was put into use, which indicates the primary establishment of an advanced and complete key infrastructure based on distributed architecture, big data and cloud computing technology and in line with the development direction of big data. Second, the basic financial data statistics regime has been in force. In July 2020, the *Notice of the PBC on Establishing the Basic Financial Data Statistics Regime* was issued, which involves deposits, loans, interbank activities, bonds, equity, SPVs, etc. Third, the comprehensive financial statistics is further deepened. The financial statistical regime for local financial institutions was established and kinds of statistics were undergoing and intensively monitored, including those of asset management products of financial institutions, systemically important banks, financial holding companies, inclusive finance and green loans, etc. Fourth, data analysis facilitates macro-adjustment and risk prevention. It has been gradually realised that all financial institutions, financial infrastructures and financial activities are covered and the macro leverage ratio, shadow banking, social financing costs and loan maturity situations are monitored and analysed. Basic financial data of each transaction is utilized to display the distribution of financial instruments such as loans and bonds in different companies so as to accurately reflect the distribution of financial resources.

Special Topic 9 Significant Progress Made in the Critical Battle Against Major Financial Risks

Forestalling and defusing major risks is one of the three battles designated by the 19th CPC National Congress, and a critical move towards building a well-off society in all aspects. Maintaining financial stability is particularly challenging as the outbreak of the COVID-19 pandemic in 2020 causes severe disruptions to the socio-economic functioning of China and the greater world, and international situation experiences complex changes. In accordance with the decisions and arrangements made by the CPC Central Committee and the State Council, relevant financial authorities together with other parties, under the direction and coordination of the FSDC, have made significant progress in the critical battle against major financial risks. As a result, elevated systemic risk has been curbed, the unsound expansion of the financial sector without channeling sufficient funds to the real economy reversed, and financial risks overall contracted and under control. The steady and sound growth of the financial sector has provided a favorable condition for policy initiatives to effectively counter the pandemic impacts and build a well-off society in all aspects.

I. Achievements in the Critical Battle against Major Financial Risks

1. Continued Rapid Rise of the Macro Leverage Ratio Has Been Subdued

First, keeping monetary supply at an appropriate level. A prudent monetary policy stance has been adopted with an aim to keep overall liquidity at an appropriately adequate level and credit growth at a sound pace. The level of broad money supply (M2) and aggregate financing to the real economy in the past three years has been largely in line with the nominal GDP growth. Second, resolving risks associated with local government implicit debts. A long-standing monitoring system covering all types of local government implicit debts has been established to ensure that outstanding debts are downsized and no new increases are observed. Third, pushing forward the deleveraging of the corporate sector. The asset liability ratio for state-owned enterprises had decreased to 64.0 percent as of end 2020, as a result of strengthened balance sheet constraints and management. For centrally-owned enterprises, a target control management of asset liability ratio for years 2018 to 2020 has been set up on a case-by-case basis, driving down their overall ratio to 64.5 percent as of end 2020. Fourth, curbing the rapid growth of household leverage. In accordance with the principle of "houses for living in, not for speculation", a differentiated housing credit policy has been adopted which aims to support necessary self-occupying needs and suppress speculation in the housing market. As of end 2020, the outstanding housing mortgage loans had increased by 14.6 percent year on year, marking a significant decline from the record high in 2016.

The above measures have effectively kept macro leverage ratios from 2017 to 2019 at around 250 percent, with an annualized average growth significantly slower than the 13.2 percentage points between end-2008 and end-2016. This has helped to reserve adequate policy space for countering the impacts of the pandemic. In 2020, the macro leverage ratio trended up temporarily, reflecting a weaker nominal GDP growth and greater policy supports in the wake of the COVID-19 pandemic, then slowed down in the third quarter, and is projected to be back to a stable growth path.

2. The Resolution of Some High-risk Financial Institutions Has Proceeded in an Orderly Manner

First, risk resolution of the Baoshang Bank proceeded in a prudent and orderly manner. Following the takeover by the PBC and CBIRC in May 2019, the successor Mengshang Bank was formed and opened for business in April 2020. The businesses, assets and liabilities of the former Baoshang Bank were purchased and transferred to Mengshang Bank and Huishang Bank. On February 7, 2021, the Beijing No.1 Intermediate People's Court officially announced the bankruptcy of Baoshang Bank. Second, the risk resolution and reform and restructuring of Bank of Jinzhou is completed. Through the reform and restructuring process, Bank of Jinzhou introduced strategic investors and stopped potential risk spillover to other small- and medium-sized financial institutions. With the completion of its financial restructuring and recapitalization process in July 2020, Bank of Jinzhou was able to be back on its feet and get its business operation back on track. Third, 9 financial institutions formerly controlled by the "Mingtian Group" were taken over.In July 2020, regulators took over Tian'an Property Insurance and other 8 financial institutions in accordance with relevant laws to ensure non-interruption to financial services by maintaining their business operation as usual and to carry out asset and capital verification as well as reform and structuring. Fourth, the key risk resolution targets of China Energy Company Limited, or CEFC, have been completed. In March 2020, the cluster of CEFC entities whose aggregate assets take up over 95 percent of the group was announced insolvent by court ruling, with all debtors compensated fairly in accordance with relevant laws. The CSRC revoked, in accordance with the law, all securities licenses of CEFC Securities who had engaged in unlawful and unauthorized activities, and supported the assumption of its existing businesses by Yongxing Securities. Fifth, the risk resolution of Anbang Group comes to the end. Following the completion of takeover in February 2020 as planned, the new successor Dajia Insurance Group has introduced strategic investors while the former Anbang Group is going through dissolution and liquidation.

3. Risk Related to Shadow Banking Continues to Decrease

A set of regulatory measures have been introduced since 2018, which includes the *Guiding Opinions on Regulating the Asset Management Business of Financial Institutions* (hereinafter referred to as the *Opinions*) and its supporting rules to unify regulatory standards on the asset management business. Measures were also taken to establish the asset management product statistics, and adopt a look-through and activity-based supervisory and regulatory approach. Efforts were also made to ensure that investors could bear their own risk as long as product issuers are acting responsibly. In addition, authorities have set and properly adjusted the transition period for the *Opinions*, and put in place supporting rules and incentives to encourage financial institutions to redress and transform their businesses early. As a result, the share of net-value asset management products has continued to grow, and circulation of funds within the financial sector without financing the real economy is less observed. Asset management products' investment in non-standard assets has dropped to new lows while the investment in standard assets including stocks and bonds increases, channeling more funds to support the real economy. Overall, the shadow banking sector has downsized by about RMB 20 trillion from its peak.

4. Credit Risk in Key Areas Have Been Effectively Mitigated

First, monitoring of the bond market in the issuance and trading processes is enhanced against potential default risks in a proactive manner. Rules for the disposal and disclosure of defaulted corporate bonds are being harmonized, and a market-orientated and law-based framework for corporate debt workout refined. Second, corporate debt risks are effectively addressed by using a combination of tools including debt-to-equity swap, merger and acquisition, judicial reorganization and etc. Third, early planning and response are important to help manage rising volumes of NPLs in the banking sector that could be caused by the pandemic. Authorities have developed a contingency plan for the potential rise in NPLs to support the banking sector's efforts to act early to cope with potential NPL pressure by setting aside enough loss provisioning and accelerating write-offs. In 2020, the banking sector disposed an NPL volume of RMB 3.02 trillion. Fourth, banks, small- and medium-sized ones in particular, are encouraged to look for various sources to replenish their capital. As of end 2020, the Tier 1 ratio of all commercial banks registered 12.04 percent and CAR registered 14.70 percent, up by 0.09 and 0.06 percentage point year-on-year respectively.

5. Financial Order Has Been Comprehensively Straightened

First, the special rectification of Internet finance-associated risks has yielded positive results. All operating P2P lending institutions have been closed. The overhaul in the Internet-based asset management, equity crowd-funding, insurance, crypto-asset trading and foreign exchange trading areas has completed and regular regulation shall apply. Second, illegal and unauthorized financial activities have been cracked down on. Illegal financial activities like illegal fund-raising are strictly dealt with, with a number of long-running and pending cases being addressed. Organized, large-scale OTC margin lending activities in the stock market have been curbed. In the meantime, authorities have kept tough stance against cross-border gambling and underground banks to maintain order in the payment services and foreign exchange markets. Third, significant progress has been made in addressing risks associated with privately-offered funds and unauthorized trading platforms for financial assets. Following the issuance of regulatory rules on privately-offered funds, inter-agency collaboration and efforts at both the central and local levels have been made to downsize volumes of such funds. The cleanup of trading platforms is also well underway. Fourth, measures to tighten up regulation and supervision of big technology firms, and to rectify commercial banks' deposit-taking activities on third-party Internet platforms have been introduced.

6. A Smooth and Orderly Functioning of the Financial Market Has Been Observed

Despite the COVID-19 impacts, the money market, bond market and stock market opened as scheduled after the Spring Festival break in 2020, which is critical in helping to stabilize market sentiment and confidence. Regulatory efforts have been made in improving the fundamental rules in the capital market by following the rule-based, non-intervention and zero-tolerance approach. Throughout 2020, the A-share market has proved to be resilient to external shocks such as huge volatility in the international financial markets, and operated as usual. Overall, it outperformed offshore markets in 2020. Efforts have also been made in improving the foreign exchange market management framework and diversifying the policy toolkit in order to better safeguard stability in the foreign exchange market in the context of a complex and ever-changing environment. The market will continue to play a decisive role in the RMB exchange rate formation regime. A more flexible regime has helped to keep the RMB exchange rate at an adaptive and equilibrium level.

7. Continued Efforts Have Been Made in Putting in Place the Framework for Prevention and Mitigation of Financial Risks

The CCyB has been introduced and set at an initial rate of zero to balance systemic risk prevention and pandemic relief measures. The assessment methodology for systemically important banks has been released, which specifies the assessment methodology, indicators, procedures and framework. The regulatory measureson financial holding companies have been promulgated, requiring non-financial companies to apply for approval from the PBC before establishing FHCs and to accept entry management and on-going supervision. The consolidated regulation of financial infrastructures has contributed to the fostering of a financial infrastructure system that is well-designed, effectively governed, advanced, reliable and resilient. The institutional and organizational setup of the deposit insurance system has been improved to facilitate its function to take prompt corrective actions and its role as a risk resolution platform. A set of rules to monitor the capital flow and regulate the financing activities of major real estate companies, and the real estate loan concentration management system have been introduced, with an aim to promote the healthy development of the real estate market. The comprehensive financial statistics system has been implemented to better serve the systemic risk control measures.

8. The Financial Sector Has Further Opened Up

The pre-establishment national treatment and negative list management system has been implemented, and market access restrictions on foreign banks, insurers and securities companies eased, which allows wholly foreign-owned financial institutions and a widening of their permitted business scope. National treatment is also granted to foreign investments in China's corporate credit reporting, credit rating, bankcard settlements and non-bank payment sectors. In the meantime, the accounting, taxation and trading systems are being improved to support these policies. Following the removal of the investment quota for both QFII and RQFII regimes and the restrictions on jurisdictions participating in the pilot program for RQFII, authorities have combined the two parallel regimes with an improved set of regulatory rules applicable to both QFIIs and RQFIIs, eased the access criterion, expanded the investment scope, and enhanced the custodian regime, in an effort to further open up onshore financial markets to international investors. Drawing on international market rule-making, authorities have improved the domestic framework for bond trading and settlement to create a more foreign investor-friendly and facilitative environment. In September 2020, FTSE Russell announced the inclusion of China government bonds into the FTSE World Government Bond Index (WGBI). Since then, China's government bonds have been or will be incorporated into all three major global bond indexes.

9. The Financial Sector Has Been Increasingly Effective in Financing the Real Economy

First, the transmission of monetary policy has been more effective. As the market-based loan prime rate (LPR) reform continues, the implicit lending rate floor perceived by banks was shattered, allowing the lending rate to maintain low. The lowered interest rates have helped the financial system waive profits of RMB 1.5 trillion in favor of the real economy. Second, structural monetary policy tools have been actively used. The central bank lending and discount tools targeting agro-related areas and small businesses, as well as the pledged supplementary lending tool have supported credit growth in key areas and weak links of the national economy, including micro and small businesses, private enterprises, agro-related areas and poverty alleviation programs. Authorities also injected long-term stable funds into the market to support bank lending to micro and small businesses and private enterprises via TMLF operation. Third, strong relief measures have been taken in response to the COVID-19 pandemic. The central bank injected short-term liquidity of RMB 1.7 trillion into the market following the Spring Festival Holiday to stabilize market expectations. It also lowered the required reserve ratio for three times in 2020 to release longer-term liquidity of RMB 1.75 trillion. The PBC rolled out RMB 300 billion of special central bank lending, RMB 500 billion quota of central bank lending and central bank discounts, and RMB 1 trillion quota of central bank lending and central bank discounts in three rounds, to support pandemic relief-related supply, resumption of work and production, and micro-, small- and medium-sized enterprises (MSMEs). The two monetary policy tools that enable direct support for the real economy, namely loan repayment deferrals by businesses and issuing more unsecured loans, have been carried out. Banks and insurers have been urged to adopt a set of measures, which include loan extension, deferrals, renewals, fee cuts, risk-sharing mechanism, innovative products, simplified procedures and remote financial services, to help MSMEs weather these tough times. Fourth, regulatory assessment and oversight have been strengthened to ensure enough financial support for the real economy. Banks were encouraged to register increases in their inclusive loans for micro and small businesses with a credit line of RMB 10 million and below both in terms of volumes and number of borrowers, out of which the five large banks should register a loan growth rate of more than 40 percent. Banks were also urged to increase credit provision in the form of unsecured loans, first loans, loan renewals, medium- and long-term loans and manufacturing loans to micro and small businesses. A regulatory evaluation initiative has been introduced to urge banks to renovate their internal performance appraisal, resource allocation and risk management processes, and improve the sharing and integration of corporate borrowers' credit information, so that banks are not only certain, willing and able to lend, but also well-performed at lending. Fifth, measures have been taken to vitalize the consumer market, which include tapping the potential of mobile payment in better satisfying consumers' payment needs in public transportation, tourism, catering and accommodation scenarios, launching the pilot program for overseas tourists to use mobile payment conveniently in China in a international-advanced and payment-friendly environment, and promoting the cross-border payment program in the Greater Bay Area so that Hong Kong SAR and Macao SAR residents can pay easily while traveling and shopping in the mainland.

II. Ensuring Normalized Financial Risk Prevention and Mitigation to Contribute to the New Development Paradigm

The complex and ever-changing international situation has posed severe external challenges; uncertainties remain for domestic economic and financial development; identified risks have yet to be dissolved; and financial vulnerabilities are still present. It is against this background that the prevention and mitigation of financial risks will normalize. Going forward, financial authorities will continue to follow the general principle of making steady progress while ensuring stability, and implement risk resolution by the rule of law and in a market-based manner. Financial institutions must be held accountable for taking bail-in measures as the responsibility entity, so as to safeguard the first line of defense in dissolving risks; local governments must take the primary responsibility of resolving local financial risks and maintaining local stability; and financial regulators are responsible for fulfilling their duties and ensuring the effectiveness of their supervisory actions. In the meantime, financial risks must be prevented against in a more forward-looking, holistic and proactive manner, or to make an analogy, curing diseases in a preventative way matters more than curing them ex post. Risk resolution authorities must take into account both financial development and financial safety, with the aim of safeguarding the bottom line of no outbreaks of systemic financial risks.

1. Efforts to Forestall and Dissolve Risks Are to be Continued to Avoid Resurgence

Continued efforts should be made to implement risk resolution plans of those high-risk financial conglomerates and small- and medium-sized financial institutions; closely monitor liquidity risks of financial institutions and guide them to improve liquidity risk management; pay attention to possible spillover of excessive global liquidity to guard against external shocks with enhanced cross-border capital flow monitoring; enhance monitoring of corporate debt defaults, and encourage commercial banks to step up NPL resolution efforts; properly prevent and resolve risks in the bond market, and encourage stakeholders to implement debt workouts in a market- and law-based manner; continue with the rectification of asset management products in the transition period, and enhance policy guidance and regulatory coordination to promote the smooth transition and upgrade of the asset management sector; properly manage risks related to privately-offered funds, and push forward the rectification of financial asset trading platforms and other trading platforms; continue with the risk resolution of existing P2P lending institutions, and crack down on illegal fund-raising and similar illegal financial activities; and improve the prudential regulation and conduct regulation on financial activities carried out by Internet firms.

2. An Improved Risk Monitoring and Early-warning System Is Expected to Help Manage Risks in a Forward-looking Manner

First, the development of an analytical framework for systemic financial risks is in the pipeline, which will enable monitoring of interconnections between financial institutions and enterprises, and identification of those with high vulnerabilities and interconnectedness, so as to forestall cross-sector and cross-region risk contagion. The framework is also expected to improve the monitoring of the real estate market and associated risks, to inform prudential management measures targeting the real estate finance. Second, a macroprudential policy framework that covers major financial activities, institutions, markets and infrastructures will be put in place. Specific measures include improving the supervisory and regulatory framework for SIFIs, introducing and implementing the TLAC rules for G-SIBs, drafting the additional regulatory requirements on D-SIBs, conducting the assessment of D-SIBs and publishing the D-SIB list in due course, and introducing the assessment framework for D-SIIs. Other measures include improving the regulation of FHCs and subjecting them to entry approval and on-going supervision; strengthening the capital flow management regime, especially the monitoring, early-warning and response mechanism, and diversifying the policy toolkit; promoting the establishment of a full-coverage and consolidated financial statistics system, and a comprehensive national financial database.

3. Institutional Improvements Are Key to Building Capacity for Effectively Addressing Financial Risks

First, improving synergy between central and local authorities, as well as inter-agency coordination, to make concerted efforts for risk resolution and to foster a benign financial ecosystem. Local authorities' responsibility of forestalling and dissolving local financial risks must be fulfilled. Micro governance and financial regulation must be better applied to local financial institutions, and efforts should be made to support and guide them to focus on their designated business scope, i.e. to satisfy the financing needs of local customers, SMEs and the wider local economy. Second, facilitating the function of the deposit insurance as the PCA authority and market-based resolution platform. Deposit insurance can play a role in making diagnosis of problem deposit-taking institutions and taking PCAs through more intensive onsite examinations. Third, enhancing the insolvency framework for financial institutions, and enabling their exit in a market- and law-based manner. Fourth, imposing accountability in risk resolution. Persons responsible for causing major financial risks must be held accountable to safeguard against moral hazards. Financial crimes must be dealt with in a tough-handed manner, and corrupted officials in the background must be prosecuted. Fifth, enhancing the legal framework. While amendments to the *Law on the People's Bank of China* and the *Law on Commercial Bank* are still in progress, authorities are also considering drafting the Financial Stability Law.

4. Reform of the Financial System Is to be Furthered to Improve Its Resilience

First, a multi-tiered and differentiated financial entity system with wide customer coverage will be established. The reform agenda of development and policy financial institutions that aim to set clear business boundaries for them will be unswervingly pursued. The reform of city commercial banks and rural credit cooperatives will be deepened, so as to put in place proper incentives and disciplines for their sustainable growth. Small- and medium-sized banks are encouraged to replenish their capital through various channels and improve their corporate governance to enable sound operation. The transition of trust businesses and development of the third pillar of pension system are encouraged. Second, institutional framework for the financial market will be further improved. Reform of the fundamental institutional arrangements of the capital market will be continued to give a more prominent role to direct financing, equity financing especially, and to maintain the steady and sound development of the capital market. The rules in the bond market will be improved, and law enforcement actions against evasion of debt repayment obligations will be enhanced to uphold market discipline. The conduct regulation of the bond market will be reinforced and institutional players in the market will be held accountable as the responsibility entity. An open, diversified and well-functioning foreign exchange market will be pursued to better facilitate trade and investment. Third, market-oriented interest rate reform will be continuously deepened. Authorities will continue to promote the market-based interest rate formation and transmission mechanism, as well as the reform of the RMB rate formation mechanism.

Special Topic 10 Central Bank Rating of Financial Institutions

In the second quarter of 2021, the PBC conducted the Central Bank Rating of Financial Institutions (hereinafter referred to as the Central Bank Rating) on 4400 banking institutions. The rating results are overall stable with controllable risk in the banking industry.

I. Results of the Second Quarter Central Bank Rating in 2021

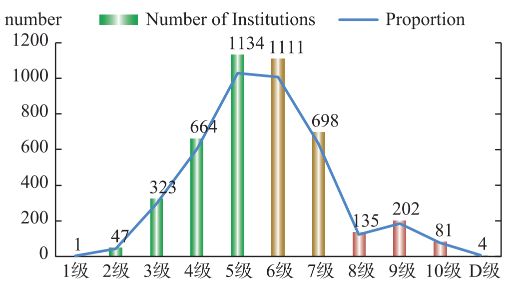
The second quarter rating of 2021 covered 4400 banking institutions, including 24 large banks, 3999 small- and medium-sized banks and 377 non-bank institutions. The rating results span 11 levels, including level 1 to 10 and level D. The higher the level, the riskier the institution is. Level D refers to institutions that go bankrupt, are taken over or revoked. Level 1-5 is the “green zone” and level 6-7 is the “yellow zone”. Institutions rated “green” and “yellow” are identified as safe institutions. Level 8-D is the “red zone”, referring to the high-risk institutions. The rating results are shown in Table 3.2.

Table 3.2 Results of the Second Quarter Rating in 2021

Category	Institution Type	Institution Number	Result
Banks	Development and policy banks	3	1-7 level
	State-owned commercial banks	6	
	Joint-stock banks	12	
	City commercial banks	130	2-10 level
	Rural commercial banks	1559	2-10 level
	Rural cooperative banks	27	5-10 level
	Rural credit cooperatives	582	2-10 level
	Village and township banks	1642	2-10 level
	Private banks and others	20	3-7 level
	Foreign banks	42	3-7 level
	Subtotal	**4023**	-
Non-bank Institutions	Finance companies of corporate groups	256	3-D level
	Auto financing companies	25	3-10 level
	Financial leasing companies	68	3-10 level
	Consumer finance companies	28	3-7 level
	Subtotal	**377**	-
Total		**4400**	-

A total of 3978 institutions were rated safe, accounting for 98.6 percent of the total assets. 2169 institutions were rated "green", with an asset size of RMB 298 trillion, accounting for 90.4 percent of the total assets; 1809 institutions were rated "yellow", with an asset size of RMB 27 trillion, accounting for 8.2 percent of the total; 422 institutions were rated "red", with an asset size of RMB 4.6 trillion, accounting for 1.4 percent of the total (Figure 3.1). In general, the operation of our banking institutions is sound and risks are overall controllable.

Figure 3.1 Distribution of the Second Quarter Rating Results of 2021



Source: The PBC.

By institution type, large banks were rated with better results, while some rural small- and medium-sized institutions were relatively riskier. Among the large banks, 1 was rated level 1, 12 were rated level 2, 8 were rated level 3, 2 were rated level 4 and 1 was rated level 7. Among small- and medium-sized banks, foreign banks and private banks were rated with better results, with 93 percent and 65 percent rated "green" respectively, and no high-risk institutions. City commercial banks followed, with 73 percent rated "green" and 10 percent as high-risk institutions. Rural cooperative institutions (including rural commercial banks, rural cooperative banks, and rural credit cooperatives) and village and township banks were rated worst, with 271 and 122 institutions identified as high-risk institutions respectively, accounting for 93 percent of total high-risk institutions.

Broken down by region, existing risks in most provinces have been dissolved and regional financial ecology has been optimized. There's no high-risk institution in regions such as Zhejiang, Fujian, Jiangxi and Shanghai. In Guangdong, Jiangsu, Hunan and Anhui, over 60 percent of institutions were rated "green". High-risk institutions in 19 provinces and cities remain in single digits. There are comparatively large number of high-risk institutions in Liaoning, Gansu, Inner Mongolia, Henan, Shanxi, Jilin and Heilongjiang.

II. Application of Results of Central Bank Rating

Early corrective measures are taken on the basis of rating results to take more initiative in risk prevention. The PBC adopted various early corrective measures such as "one-on-one" notifications, inquiries with senior executives, issuing risk reminders and rating opinions, so as to raise their consciousness and initiative of risk prevention. A total of 1996 inquiries were carried out with 748 institutions nationwide since 2018, and 2417 risk reminders were issued to 970 institutions.

The rating results are fully applied when the PBC is performing its duties, so as to make policies more targeted. Currently, the rating results are fully utilized in the determination of the differentiated deposit insurance premium, the issuance of unsecured inclusive loans to micro- and small-sized enterprises, the approval of bond issuance by financial institutions, the Macroprudential Assessment program, the approval of central bank credit lines, the bidding for cash management of the state treasury, etc., so that the rating results could play a role in effectively promoting financial institutions to operate prudentially.

Rating results are shared with regulatory authorities and local governments to increase the synergy of risk monitoring and resolution. The PBC regularly informs local governments and financial regulatory authorities of the central bank rating results and specific conditions of high-risk financial institutions, so as to promote the integration of risk information and the earlier adoption of supervisory actions, and improve the effectiveness of risk prevention and resolution.

The application of the central bank rating is expanded in areas including market behaviour supervision while application scenarios are enriched. The PBC and the CSRC established a communication mechanism to provide reference opinions, based on the central bank rating, on major issues such as bank listing, capital increase and new share issuance. At the same time, the rating results also provide reference to the bidding for management of local fiscal funds.

Special Topic 11 Establishment of the Countercyclical Capital Buffer Mechanism in China

In September 2020, the PBC and CBIRC jointly issued the *Notice on Establishing the Mechanism of Countercyclical Capital Buffer*, in an effort to make more concrete the two-pillared regulatory framework of monetary policy and macroprudential policy and develop a macroprudential policy system that is better aligned with international standards. According to the notice, the countercyclical capital buffer (CCyB) for the banking financial institutions was set at an initial rate of zero. The PBC and CBIRC will assess and adjust specific requirements for countercyclical capital buffer at regular intervals, based on macroeconomic and financial conditions, macro leverage level, the soundness of the banking sector and the build-up of systemic financial risks. In the meantime, constant efforts will be made to improve the CCyB mechanism to enhance the countercyclical adjustment function of capital regulation in urging banking institutions to operate in a prudent manner.

I. The Need for Establishing a CCyB Mechanism

The experience of the 2008 Global Financial Crisis shows that during economic and financial upturns, commercial banks have a strong impulse to lend and relax their lending standards. This could lead to the procyclical build-up of systemic financial risks, which the old version of regulatory framework on bank capital may be inadequate to deal with. During economic and financial downturns, banks may sustain huge asset losses and rapid consumption of their capital to absorb such losses. In consequence, the economy may be crippled with the vicious circle of significantly slower credit growth, further declining economy, mounting bad loans in the banking sector and continued credit squeeze. Therefore, it is necessary to introduce the CCyB mechanism as part of the updated commercial bank capital regulatory framework.

It is based on the above considerations that the BCBS published *A Global Regulatory Framework for More Resilient Banks and Banking Systems* in December 2010, which introduced for the first time the concept of CCyB as an important part of the Basel III standards. Meanwhile, the BCBS also published *the Guidance for National Authorities Operating the Countercyclical Capital Buffer,* which set out the countercyclical capital buffer requirements that national authorities should implement as an additional capital requirement on commercial banks, i.e., to set the buffer on top of the minimum capital requirement within the range of zero to 2.5 percent of risk weighted assets. Banks must meet this buffer with CET1 capital. The BCBS recommends that the CCyB mechanism be phased in from 1 January 2016. As of end 2020, a total of 27 member jurisdictions, including China, have put in place the buffer mechanism.

The BCBS recommends that national authorities in each jurisdiction monitor credit growth and other indicators, make assessments as to the extent of the build-up of system-wide risks, and determine whether a buffer requirement should be imposed or adjusted based on this assessment. Specifically, when credit growth is excessive and system-wide risks accumulate rapidly, the buffer should increase as a cushion available to a bank to absorb potential losses in an outbreak of financial risks, and decrease when credit growth declines and system-wide risks subsides. When systemic financial risks strike and the financial system experiences great pressure, the capital buffer should be released and used to support commercial banks to continue lending to the real economy and help avoid a deeper recession.

II. Experiences of Implementing CCyB in Other Jurisdictions

The following features are observed from the practices of jurisdictions that have used the CCyB:

First, central banks are usually responsible for implementing CCyB. In most jurisdictions, this responsibility is assigned to central banks, including in the US, Spain and Belgium where the board of governors of the central banks decide on the buffer requirements. In some other jurisdictions, internal departments of the central banks take this responsibility, as in the UK where the buffer requirements are decided by the Financial Policy Committee, and in Iceland the Financial Stability Committee. Where central banks do not have the final say on the buffer policy, they are usually deeply involved in decision-making processes, as in Switzerland where the Federal Council decides on buffer requirements, but the Swiss National Bank has the power to advise.

Second, the credit/GDP gap is widely used as a common reference guide in calibrating CCyB rates. The BCBS recommends the use of credit/GDP gap as an important reference point in formulating buffer decisions. Based on this core guide and their national realities, member jurisdictions have established a reference guide system for assessing and deciding on CCyB rates, which mainly takes into account the macroeconomic imbalances, sectoral indebtedness, soundness of the banking sector, and financial market- and real estate sector-related indicators.

Third, stress testing is often used to inform the CCyB decision-making. The Bank of England's Financial Policy Committee, when making CCyB decisions, will take into account the annual stress test results of the UK banking system, which reveal information on the adequacy of banks' capital cushion and resilience of banks to shocks. If stress tests point to inadequate buffer against potential shocks, then the Financial Policy Committee will consider raising the CCyB requirement.

Fourth, some jurisdictions have implemented sectoral CCyBs. Authorities in these jurisdictions would require financial institutions to hold additional capital buffer in proportion to their high-risk sector assets to curb risk accumulation in these sectors. For instance, the Swiss Federal Council impose a specific CCyB requirement of 1 percent for the real estate sector in February 2013 to guard against bank exposure risks associated with mortgage loans, which was subsequently increased to 2 percent in January 2014.

From practical experiences, CCyB has been useful in improving the resilience and soundness of the financial system by redressing the procyclical credit growth in the banking sector in a relatively direct way. These benefits, together with its clear and easy-to-understand operating framework, have made CCyB one of the most frequently used and representative macroprudential policy tools by national authorities. The UK, for instance, has increased its CCyB requirements four times in March 2016, June and November 2017 and December 2019 respectively to strengthen the resilience of the financial system. In response to the outbreak of the COVID-19 pandemic, major economies have released the countercyclical capital buffer in a timely manner to cushion against this sudden shock. Among them, the UK, Germany, France, Sweden, Ireland, Lithuania, Iceland, Belgium and Denmark have reduced the ratio for countercyclical capital buffer to zero, while Norway, the Czech Republic and HK SAR Lowered it to 1 percent.

III. Practices in Introducing the CCyB Mechanism in China

The *Guidance on the Implementation of New Regulatory Standards for the Banking Sector in China*, issued in 2011, proposes "the introduction of a countercyclical capital regulatory framework, which will be consisted of a 2.5 percent capital conservation buffer and a countercyclical capital buffer between zero to 2.5 percent". The *Capital Rules for Commercial Banks (Provisional)* issued in 2013 states that "under specific circumstances, commercial banks should hold an amount of countercyclical capital above the minimum capital and capital conservation buffer requirements. The countercyclical capital requirement is set within a range between zero to 2.5 percent of risk weighted assets, and consists of CET1 capital", and that "rules for setting aside and applying the countercyclical capital shall be formulated separately".

In September 2020, the PBC and CBIRC jointly issued the *Notice on Establishing the Mechanism of Countercyclical Capital Buffer*, which officially announced the implementation of CCyB for the banking sector in China. The Notice details the provision method, coverage and assessment mechanism of the buffer. According to it, banking financial institutions are required to hold a CCyB of CET1 capital above the minimum capital requirements. Meanwhile, the initial CCyB rate is set at zero based on systemic financial risk assessments and pandemic containment needs. In the future, authorities will assess the buffer requirements on an annual basis and may adjust them as needed to forestall systemic financial risks under special circumstances. The authorities' decisions will be informed by the macroeconomic and financial developments, macro leverage level, resilience of the banking sector and other factors.

The introduction of the CCyB mechanism in China is an important step in improving the macroprudential policy framework and diversifying the macroprudential policy toolbox. It is expected to further promote the sound operation of banking financial institutions, enhance countercyclical adjustments of macroprudential policy measures, and cushion the negative effects of procyclical build-up and sudden shocks of financial risks, with the aim to contribute to the stable functioning of the financial system in China.

Special Topic 12 Implementation of Real Estate Loan Concentration Management

In order to implement the decision and deployment of the 19th CPC National Congress on "improving the two-pillar management framework of monetary policy and macroprudential policy", the PBC, together with relevant authorities, work to establish and improve China's macroprudential policy framework, and take real estate finance as a key area of macroprudential management to guard against potential systemic financial risks. In December 2020, the PBC and CBIRC jointly issued the *Notice on Establishing the Real Estate Loan Concentration Management System for Banking Financial Institutions*, in the effort to build a real estate loan concentration management system to improve China's macroprudential management system and improve the long-term management mechanism of real estate finance.

I. Implication of Implementing Real Estate Loan Concentration Management

Real estate loan concentration management is a concrete measure to improve China's macroprudential policy system, which is conducive to improving the robustness of the financial system. Real estate is closely related to people's livelihood and development, and plays an important role in the national economy. Many economies take the prevention of real estate market risks as an important part of macroprudential management. According to the IMF statistics in 2018, at least 39 countries included the DSTI ratio into their macroprudential policy toolbox, and it is more common to use LTV ratio to manage real estate financial risks. Some economies also controlled real estate loan growth by measures such as adjusting the countercyclical capital buffer, real estate loan risk weights and risk exposure restrictions. From practical experience, these prudential tools achieved some results. Previously, China has fully used the minimum down payment ratio (equivalent to LTV) and other demand-side tools, but the use of supply-side tools is not sufficient. Real estate loan concentration management, as a supply-side macroprudential policy tool, sets caps on the proportion of real estate loans of banking financing institutions to their total loans, so as to prevent excessive fund flows to the real estate sector and to significantly improve the robustness of the financial system to respond to real estate market fluctuations.

Real estate loan concentration management is an important measure to implement the prudential management system of real estate finance, which is conducive to promoting the steady and healthy development of the real estate market. The real estate loan concentration management system, released after strict and regulated governance process featured with adequate communication with the market, open and transparent rules, can fundamentally rectify banks' expectations, and guide them to adjust middle- and long-term business strategies and credit structures according to the need of systemic financial risk prevention and real estate market situation, so as to promote the stable and healthy development of the real estate market, and to guard against potential systemic risks, making it an important measure to implement the prudential management system of real estate finance.

Real estate loan concentration management facilitates financial supply-side structural reform and helps to guide financial resources to flow from the real estate sector to the real economy. Real estate loan concentration management is an important measure of financial supply-side structural reform, and is conducive to curbing real estate credit glut, promote banking financial institutions to reasonably adjust credit structures, and turn credit resources more to manufacturing, science and technology and other essential areas of economic and social development and to weak links such as micro and small businesses, agriculture, farmers and rural areas, so as to improve the ability to serve the real economy.

Real estate loan concentration management is conducive to inhibiting the leverage level of the household sector. Housing loans are an important part of household liabilities. The concentration management system of real estate loans puts forward caps on the proportion of personal housing loans issued by banking financial institutions to total loans, which helps to curb the excessively rapid increase of household leverage ratio from the side of capital supply and to prevent potential systemic risks.

II. Major Components of Real Estate Loan Concentration Management

Real estate loan concentration management refers to the requirement that, for any banking financial institution, the proportion of its real estate loans and personal housing loans shall not be higher than the corresponding ceilings stipulated by the PBC and CBIRC. Banking financial institutions that have exceeded the requirements will be granted a certain transition period for business adjustment. For some banking financial institutions with excessively concentrated real estate loans who have real difficulty in meeting the concentration requirements during the transition period, the transition period may be appropriately extended under certain conditions upon application.

A tiered approach to manage real estate loan concentration. Based on asset size and type, banking financial institutions are divided into five tiers: large banks, medium-sized banks, small-sized banks (including rural cooperatives and private banks in large- and medium-sized cities and urban areas), county-level rural cooperatives and village and township banks. Each tier is set with a cap ranging from 40% to 12.5% (Table 3.3). Caps are decided based on full consideration of the actual operating conditions of different types of banks.

Table 3.3 Real Estate Loan Concentration Management Requirements

Bank Tiers	Ceiling of real estate loan proportion	Ceiling of personal housing loan proportion
Tier 1: large banks		
Industrial and Commercial Bank of China China Construction Bank Agricultural Bank of China Bank of China China Development Bank Bank of Communications Postal Savings Bank of China	40%	32.5%
Tier 2: medium-sized banks		
China Merchants Bank Agricultural Development Bank of China Shanghai Pudong Development Bank China CITIC Bank Industrial Bank China Minsheng Bank China Everbright Bank Huaxia Bank The Export-Import Bank of China China Guangfa Bank Pingan Bank Bank of Beijing Bank of Shanghai Bank of Jiangsu Evergrowing Bank China Zheshang Bank China Bohai Bank	27.5%	20%
Tier 3: small-sized banks and non county-level rural cooperatives[1]		
City commercial banks[2], private banks Rural cooperatives in large- and medium-sized cities and urban areas	22.5%	17.5%
Tier 4: county-level rural cooperatives		
County-level rural cooperatives	17.5%	12.5%
Tier 5: village and township banks		
Village and township banks	12.5%	7.5%

Note: 1. Rural cooperatives include rural commercial banks, rural cooperative banks and rural credit cooperatives.
2. Excluding city commercial banks in Tier 2.

Reflecting regional differences. For local legal–person banks operating within certain areas, the PBC branch offices at or above the sub-provincial level, together with the CBIRC local offices will, based on full consideration, determine reasonable requirements for real estate loan concentration management applicable to local Tier-3, Tier-4 and Tier-5 banking institutions, provided the requirements are within 2.5 percentage points above or below the baseline figures for the corresponding tiers. This process will be supervised and administered by the PBC and CBIRC.

Setting a transition period. In order to promote the banking financial institutions that exceed the concentration management requirements to steadily adjust their businesses and to avoid shocks on the existing real estate loan business, the management system has set a transition period according to different situations. At the end of the transition period, a banking financial institution that fails to meet the requirements of concentration due to objective reasons may, according to the actual situation, apply for an extension. An extension of appropriate length may be granted if it is deemed reasonable after evaluated by the PBC and the CBIRC, or by the relevant local PBC branch office and the local CBIRC office.

Clarifying binding measures. Banking financial institutions that exceed the concentration requirements should, according to their own realities, develop transitional business adjustment plans and report them to the PBC and CBIRC, or to the local PBC branch officesand the local CBIRC offices, and should also report on implementation of the plans on a quarterly basis. Banking financial institutions that meet the management requirements should steadily carry out real estate loan-related businesses, and keep their proportion of real estate loans and the proportion of personal housing loans basically stable. For banking financial institutions that do not comply with the management requirements, the PBC and CBIRC will take corrective measures such as imposing additional capital requirements and adjusting the risk weighting of real estate assets.

Establishing a long-term adjustment mechanism. The PBC and the CBIRC will take into account factors including the business development of banking financial institutions and systemic financial risks related to the real estate sector, and adjust the scope of applicable institutions, tiers setting standards, management requirements and statistical caliber of relevant indicators as needed. To support the implementation of the new regulation on asset management, the real estate loans that are brought back to the balance sheet during the transition period of the new regulation on asset management (before the end of 2021) are not included in the statistical scope.

III. Implementing Real Estate Loan Concentration Management on a Constant Basis

After the release of the real estate loan concentration management system, the PBC branch offices and CBIRC local offices have determined the real estate loan concentration requirements for the legal–person banks within their jurisdictions after having fully considered the local economic development, real estate sector situation and the realities of different types of banking financial institutions. At the same time, for banking financial institutions that have exceeded the management requirements, the the PBC, the CBIRC, the PBC branch offices and CBIRC local offices, based on comprehensive consideration of the actual situation of the banking financial institutions, have guided them to develop adjustment plans during the transition period, and required them to make reasonable choices for business adjustment approaches and make reasonable distribution of business adjustment scale year by year, so as to ensure steady and orderly adjustment. At present, real estate loan concentration management is implemented on a constant basis. The PBC, together with the CBIRC, will continue to conduct daily monitoring of real estate loan concentration of banking financial institutions, promote banks with excessive concentration to meet the adjustment targets in an orderly manner according to their adjustment plans during transition period, and improve real estate loan concentration management with practical experiences, so as to promote the healthy development of the real estate sector.

Special Topic 13 Prudently Resolving Risks of the Baoshang Bank in Accordance with Relevant Laws

On May 24, 2019, the PBC and CBIRC announced that the Baoshang Bank was taken over in accordance with relevant laws and regulations due to its serious credit risks, so as to protect the legitimate rights and interests of depositors and other clients. When preventing systemic risks, the PBC and CBIRC have spent one and a half years to successfully and properly resolve the financial risks of the Baoshang Bank by adhering to the principles of market-orientation, preventing moral hazard and promoting the takeover of the Baoshang Bank in strict accordance with relevant laws and regulations.

I. Causes of the Baoshang Bank's Risks

The profile of Baoshang Bank. The Baoshang Bank, formerly known as Baotou Commercial Bank, was established in December 1998 and was renamed Baoshang Bank in September 2007. It has established 18 first-level branches in Inner Mongolia Autonomous Region, Beijing, Chengdu, Shenzhen, Ningbo and other places with 10171 employees. Since the establishment of the Beijing branch in 2011, the senior management and core departments of the Baoshang Bank have successively moved to Beijing, and a large number of employees have been hired in Beijing. Beijing has become the de facto headquarter of the Baoshang Bank.

The Mingtian Group[①] held a controlling stake of and borrowed a large amount of money from the Baoshang Bank. Since 1998, the Mingtian Group had been continuously increasing its shareholding in the Baoshang Bank through capital injection, share transfer and other methods. As of the end of May 2019, 35 companies within the Mingtian Group held a total of 4.223 billion shares, accounting for 89.27 percent of the total shares. During the period of controlling the Baoshang Bank, the Mingtian Group made up fictitious business to borrow over RMB 150 billion from the Baoshang Bank, accounting for nearly 30 percent of its total assets, by kinds of transactions such as receivable investment, corporate loans and wealth management products, etc. These funds were occupied by the Mingtian Group for a long time and could not be repaid, which severely eroded the profit and asset quality of the Baoshang Bank.

The shareholders of the Mingtian Group attempted to restructure Baoshang Bank several times, but ended in failure. Since

① The Mingtian Group refers to the Mingtian Holding Co. Ltd. and other shell companies, together with the dozens of listed companies and financial institutions that are controlled by them.

2017, the Baoshang Bank's risks have gradually been exposed and its operations have become unsustainable. The major shareholder of the Mingtian Group tried to invite a number of private enterprises and local state-owned enterprises to participate in the strategic restructuring of the Baoshang Bank. However, some strategic investors obviously did not have the qualifications to become shareholders of commercial banks, and others were hesitant after realizing the status of Baoshang Bank's assets. Thus, it was difficult to make substantial progress in restructuring. The Baoshang Bank continued to be affected by the stigma effect of the Mingtian Group, and its external financing conditions continued to deteriorate. It could barely maintain liquidity through methods such as attracting deposits by increasing interest rates.

II. Challenges and Considerations in Resolving Baoshang Bank

As of May 2019, the total assets of Baoshang Bank registered approximately RMB 550 billion, ranking among the top 50 domestic banks, and its liabilities registered approximately RMB 520 billion. Since 2018, the Mingtian Group has repaid nothing to the Baoshang Bank, and all the borrowings have become non-performing assets. In addition, credit rating companies adjusted the outlook of Baoshang Bank's rating from stable to negative, which caused suspicion in the interbank market. As a result, its financing costs continued to rise, and its capacity to borrow in the interbank market fell sharply, leading to severely insufficient capital positions and liquidity risks that were on the verge of outbreak.

The biggest challenge of taking over the Baoshang Bank is to properly handle stakeholder risks and prevent risk spillover, so as to avoid causing systemic risks. As of May 2019, the number of Baoshang Bank's clients registered approximately 4.7316 million, consisting of 4.6677 million individual clients and 63,600 corporate and financial institution clients. These clients are of large number and spread all over the country. Once the debt cannot be repaid, it is very easy to trigger chain reactions such as bank runs, which could result in social instability. Meanwhile, the Baoshang Bank's interbank liabilities registered over RMB 300 billion, involving about 700 counterparties across the country. If the Bank default on any of these liabilities, it may cause liquidity risks to counterparties, trigger a chain reaction and panic in the interbank market, and have a serious impact on the stability of the financial market.

In order to prudently respond to the above challenges and risks, protect the rights and interests of creditors to the greatest extent possible, and ensure the continuity of Baoshang Bank's financial services, the PBC and CBIRC proposed a resolution plan that a new bank would be established during the administrative takeover to undertake the assets and liabilities in market prices, and the Baoshang Bank would end up with bankruptcy and liquidation. Unsecured creditors' claims and shareholders' shares would be retained in Baoshang Bank, and would absorb part of the operating losses in accordance with relevant laws during the phase of bankruptcy and liquidation.

III. Implementation of Risk Resolution

In accordance with the *Law of the People's*

Republic of China on the People's Bank of China, *Law on Banking Regulation and Supervision* and *Law on Commercial Banks*, the Baoshang Bank has actually triggered the statutory takeover criteria that "a credit crisis has occurred or may occur, which seriously affects the legitimate rights and interests of depositors and other clients". On May 24, 2019, the PBC and CBIRC jointly took over the Baoshang Bank. During the takeover, the following work was carried out:

Prudently promoting the protection and acquisition of creditors' claims. Baoshang Bank had a high proportion of small- and medium-sized investors and interbank liabilities, and engaged in financial products seriously violating regulations such as fake structured deposits and fake agreement deposits. To this end, various measures were taken to protect creditors' claims. First, an inter-agency coordination mechanism for protecting creditors' claims was established to provide differentiated protection to claims with different scales based on claims' nature and legal attributes according to the *Law on Commercial Banks* and *Deposit Insurance Regulations*. Second, a joint mechanism composed of five authorities was established for the verification and acquisition of creditors' claims and the interpretation and publicity of creditors' claims protection policy and the signing of acquisition agreements were carried out. Third, relevant financial infrastructures were mobilized to explore and develop measures to ensure the normal circulation and transactions of relevant financial products. Through the concerted efforts of relevant parties, claims below RMB 50 million were fully guaranteed and large-value claims above RMB 50 million were partially guaranteed in accordance with relevant laws. Nearly 90 percent of claims were guaranteed and the Tier 2 capital bonds were written down. While fully protecting the legitimate rights and interests of creditors' claims, the expectation of implicit guarantee was broken and market discipline was strengthened, which would help guide the healthy development of financial institutions and promote the sound operation of the financial market.

Getting a clear picture of the risk profile and promoting the reform and restructuring. The result of asset and capital verification showed that, as of the takeover date of May 24, 2019, the Baoshang Bank was insolvent with an asset gap of RMB 220 billion. The PBC, together with the CBIRC and the local government of Inner Mongolia Autonomous Region, proposed an implementation plan. First, a new bank was established. The Deposit Insurance Fund Management Co., Ltd., together with CCB Investment (a wholly owned subsidiary of CCB), Huishang Bank and 8 sponsors in the Inner Mongolia Autonomous Region, including the fiscal authority of Inner Mongolia Autonomous Region, initiated the establishment of Mengshang Bank to undertake the Baoshang Bank's assets, liabilities and relevant businesses in the Inner Mongolia Autonomous Region, so as to serve the economic and social development of the Inner Mongolia Autonomous Region. The Mengshang Bank will no longer conduct cross-regional operations. Second, the assets, liabilities and businesses of 4 branches of Baoshang Bank outside the Inner Mongolia Autonomous Region were evaluated and sold to Huishang Bank as a whole.

Applying for bankruptcy and liquidation in

accordance with relevant laws. The reform and restructuring of Baoshang Bank has been implemented steadily. The Mengshang Bank and Huishang Bank, which have acquired and undertook Baoshang Bank's businesses, have sufficient capital and operate soundly. According to the *Law on Commercial Banks*, *Law on Enterprise Bankruptcy* and the *Measures for the Implementation of Administrative Licensing Issues for Chinese Commercial Banks*, in view of the serious insolvency of Baoshang Bank and its inability to repay its due debts, the takeover team, on behalf of Baoshang Bank, filed a bankruptcy petition with the CBIRC and obtain administrative permission to enter the bankruptcy procedures. On November 23, 2020, Beijing No. 1 Intermediate People's Court ruled to accept the bankruptcy and liquidation petition of Baoshang Bank, and appointed Baoshang Bank's liquidation team as the administrator. On February 7, 2021, the Beijing No. 1 Intermediate People's Court issued its ruling on Baoshang Bank's bankruptcy, and the resolution of Baoshang Bank was basically completed.

Imposing accountability in a tough-handed manner. There're often shocking corruption and crimes behind financial risks. The financial risks of Baoshang Bank have caused huge losses to the country, and personnel violating laws and regulations shall pay for the high cost of resolution. During the takeover, the case clues transferred by the takeover team of Baoshang Bank to relevant authorities involved over 100 people. Under the joint actions of the discipline inspection and supervision authority and the public security authority, the corruption cases involving financial supervisory officials of the Baoshang Bank have gradually come to light. The Mingtian Group and the senior management of Baoshang Bank involved in such cases will also be punished by law.

IV. Implication of the Resolution of Baoshang Bank

Adhering to the principle of rule of law and market-orientation, the PBC, together with other relevant authorities such as the CBIRC, have fully protected the legitimate rights and interests of depositors and other creditors, effectively prevented moral hazard, advanced the risk resolution of Baoshang Bank in a prudent and orderly manner, minimized the resolution costs, kept the bottom line of no outbreak of systemic risks and explored a feasible market-orientated path for commercial banks to exit the market. The resolution of Baoshang Bank is conducive to strengthening market discipline, preventing and dissolving potential financial risks, and promoting the healthy development of financial institutions. Meanwhile, the failure of Baoshang Bank reflects the its crumbled internal corporate governance, problematic corporate culture, radical business strategy and external regulatory capture, which are all soils for breeding risks. It is necessary to learn from the risk causes of Baoshang Bank, improve the long-term mechanism to prevent and dissolve financial risks, respond to identified risks as early as possible when they have not become significant, and effectively prevent and address the financial risks of small- and medium-sized banks in a timely manner.

1. Implication for Resolving the Risks of Small- and Medium-sized Banks

Adhering to the principle of rule of law to push forward the risk resolution in full

accordance with relevant laws and regulations. It can be learned from the case of the Baoshang Bank that commercial banks conduct a wide range of businesses, have complicated creditor and debt relations, and are subject to various laws and regulations. In accordance with the principle of rule of law, the disposal of assets and liabilities in strict accordance with laws and regulations is conducive to defining responsibilities, clarifying loss allocation, speeding up the process of risk resolution, earnestly enhancing market discipline, and effectively ensuring the healthy and benign operation of the financial market. Meanwhile, it is conducive to safeguarding the legitimate rights and interests of clients and investors, and avoiding social risks arising from the resolution of financial risks.

Resolutely preventing systemic risks and safeguarding financial stability. The business of commercial banks involves many stakeholders and could result in significant risk spillovers. If they are not handled prudently, systemic financial risks may arise. During the risk resolution process of Baoshang Bank, the deposit insurance fund and the central bank provided financial support to maintain Baoshang Bank's business continuity through purchase and assumption, and protected the legitimate rights and interests of depositors and other clients to the greatest extent possible. Measures were also explored to ensure the normal circulation and transaction of relevant financial products so as to effectively maintain the sound operation of the financial market and prevent risks from spilling over and spreading.

Effectively preventing moral hazard and strictly enforcing market discipline. The causes of Baoshang Bank's risks are not only the malicious fund embezzlement and illegal operations by the original shareholders and senior management, as well as the regulatory capture or "cats in collusion with mouses", but also the imprudent operation of market investors due to their blind faith in licenses and size. During the risk resolution process of Baoshang Bank, equity of illegal shareholders was written off in accordance with relevant laws, illegal businesses were resolutely corrected and punished, corrupted supervisors who violated laws and disciplines and accepted bribes were investigated and prosecuted, and senior managers who had neglected their duties and operated in violation of regulations were held accountable. Claims with large value and asset management products of investors were partially protected. Thus, illegal activities and violation of disciplines as well as corruption and bribery were punished, and the imprudent and illegal operations of large creditors with large-value claims were brought to losses, so as to effectively prevent moral hazard and strengthen market discipline.

Adhering to the principle of market-orientation and striving to minimize costs. The main purpose of risk resolution is to achieve disposal of financial risks in a targeted way and maintain financial stability at a minimum cost. In the risk resolution process of Baoshang Bank, relevant measures were used to allocate losses, minimize costs of risk resolution and reduce losses on public funds to the greatest extent, including the disposal of assets, liabilities and businesses through market-based bidding, partial guarantee for large creditors, write-down of Tier 2 capital bonds, write-off of original shareholders' equity, and subsequent introduction of strategic investors, etc.

Clarifying responsibilities for financial risk

resolution and ensuring the efficient and orderly functioning of resolution procedures. Through establishing an accountability system with clear responsibility allocation and incentives of joint efforts, it is clarified that financial institutions and their shareholders should bear the main responsibility for risk resolution, local governments should be held responsiblefor resolution of local risks, and financial regulators should enhance their mandates of supervision and resolution of financial risks in their corresponding financial sectors. It is important to give full play to the role of the PBC of monitoring market, maintaining reasonable and sufficient market liquidity and safeguarding market stability, so as to help to address risks in a rapid and efficient manner.

Giving full play to the role of deposit insurance as a risk resolution platform, and establishing and improving the market-based exit mechanism. Baoshang Bank is the first problem bank to be resolved through purchase and assumption model since the establishment of the deposit insurance system. The Deposit Insurance Fund Management Co., Ltd. provided financial support to facilitate the acquisition of Baoshang Bank's assets and liabilities by participating in the establishment of the Mengshang Bank and acquisition of domestic shares of Huishang Bank. For the next step, internationally common practices could be referred to, to appropriately expand the scope of use of deposit insurance funds, further define and improve relevant financial support methods as well as implementation of takeover and liquidation, and promote the establishment and improvement of a market-oriented exit mechanism for financial institutions.

2. Implication for the Prevention of Risks of Small- and Medium-sized Banks

Regulating the corporate governance of small- and medium-sized banks and improving their risk prevention mechanism. First, it is necessary to strengthen the leadership of the local party committee over small- and medium-sized banks, and strengthen the supervisory mechanism including discipline inspection and supervision. Small- and medium-sized banks should strengthen their party building and corporate culture, give full play to the leadership role of the party organizations in "deciding on the development direction, managing the overall situation, and ensuring implementation", leverage party committees' advantages in ideological and political work and in leading the party members and staff properly, and continue to improve the modern financial enterprise system. Second, it is necessary to hold financial institutions responsible for preventing financial risks, by strengthening education and conduct restraints on financial institutions and their shareholders, enhancing awareness of law-abiding, integrity and accountability, and urging shareholders to exercise their rights in accordance with laws and regulations and to assume their responsibilities as shareholders. Third, it is necessary to establish a diversified ownership structure, further improve the decision-making mechanism and procedures for important issues, and enhance the effectiveness of corporate governance. Small- and medium-sized banks should actively explore the best options for their ownership structures in light of their own realities and regional characteristics. They should not only prevent the control by problematic shareholders resulting from "one share dominance", but also avoid the "owners' absence" and internal control due to the decentralization of ownership.

Continuing to improve the modern financial regulatory system and build a strong line of defense for financial security. Financial regulation is the first line of defense of the financial safety net. Financial regulators must improve microprudential regulation with capital constraints as its core. First, equity management and shareholder qualification management of commercial banks shall be strengthened under the principle of ownership penetration in order to avoid shareholders with potential problems. Problem shareholders that endanger the sound operation of commercial banks shall be well punished to increase the cost of violations. Second, a prudent regulatory mechanism for financial innovation shall be established to better understand the service model, business nature and risk mechanism of financial innovation, improve corresponding regulations, strengthen anti-monopoly and prevent the disorderly expansion of capital. Third, RegTech shall be vigorously developed by comprehensively adopting technologies such as big data to look through the multi-tiered embedding of businesses and risk contagion, and accurately grasp the essence of financial risks. Fourth, efforts should be made to cultivate a supervisory spirit ofdiligence, determination, professionalism and strict accountability, so as to form a supervision atmosphere with proper incentives.

Improving the prompt corrective mechanism of deposit insurance and laying a solid financial safety net. The deposit insurance and regulators shall have an appropriate division of mandates with respective focuses and mutual complements, so as to promote the early identification, reporting, warning and resolution of risks. In response to the problems of some high-risk small- and medium-sized banks, on the basis of strengthening risk monitoring and inspection, prompt corrective measures such as capital replenishment, controlling of asset growth and major transactions and reducing leverage should be taken in accordance with relevant laws to resolve risks in a timely manner.

Special Topic 14 Regulatory Concerns and Resolution of Illicitly Controlled Financial Institutions

As revealed by recent risk resolution cases of high-risk financial institutions, one of the major sources of financial risks comes from the activities of majority shareholders and actual controllers, who hollow out the financial institutions by virtue of their illicit control over them and circumvention of regulatory rules. In some cases, as the problem shareholders and actual controllers purposely used a "covert and distributed" controlling structure to lurk in the dark, the financial institutions they control had become heavily in trouble before they went through a difficult resolution process. In response, efforts should be made to increase the regulatory efficiency, and improve the legal framework and practices in this regard.

I. Major Problems Arising from the Illicit Control of Financial Institutions

Financial institutions are capital-intensive, therefore holding shares of or controlling them gives easy access to financing. It has been repeatedly witnessed in the financial industry here and abroad where shareholders or actual controllers illicitly hold shares or control financial institutions to obtain funds, and end up with accumulated financial risks.

Gaining control of financial institutions by circumventing regulation. Problem shareholders or ill-motivated actual controllers would often conceal their actual controlling structure, or falsify their financial data and capital contribution, to appear qualified as shareholders. As existing regulatory means fail to see through in a timely and effective way, they successfully gain access to financial institutions. Regulatory capture is yet another cause for their control. For instance, in the Mingtian Group case, its actual controller was able to hold 89 percent of Baoshang Bank's shares through distributed shareholding on behalf of over 40 vehicle entities and capture of local regulators; and in the Anbang Group case, its actual controller took control of the conglomerate by fudging and fiddling with contribution of capital and financial data.

Failing of corporate governance and internal control. Problem shareholders and actual controllers would deliberately bypass and sidestep corporate governance and internal control mechanism by letting their agents control key positions in the institution or by developing special decision-making processes. For instance, in the Mingtian Group-controlled Baoshang Bank, the Party committee, board of directors, and the board of supervisors all gave way to its chair of the board, who acted as agent of the majority shareholder Mingtian Group and overrode internal rules. For a long time, the culture of non-compliance was prevalent in Baoshang Bank, where the chair of the board alone had a say and internal rules and regulations were replaced with his instructions or decisions.

Hollowing out financial institutions with related transactions. Problem shareholders take control over the financial institution through illicit means in order to turn it into a cash machine and draw cash without restrictions. In practice, problem shareholders or actual controllers have been found to occupy an overwhelming share of a financial institution's funds through direct loans, equity pledges, wealth management products, trust plans, or insurance investment contracts. To see through, the amount of financing far exceeds regulatory indicators required for bank equity capital, and loan concentration ratio. Such illicit activities have led to accumulated risks in financial institutions such as Baoshang Bank and Huaxia Life Insurance, and are also found in some high-risk rural financial institutions.

Bringing challenges to defusing long hidden risks. To illicitly control financial institutions, problem shareholders usually resort to covert means, which has left potential risks blurred and undiscovered. For some, their way to cover up risks is to expand, as if the outbreak of risks could be indefinitely delayed as long as liquidity flows in. The fact, however, is that once asset deterioration accelerates, the old trick of "borrowing money to repay loans" would become hardly sustainable that their crisis would erupt and even spread through interbank linkages, posing a difficult challenge to subsequent risk resolution. In the case of Baoshang Bank, its liquidity remained tight and fragile as its actual controller Mingtian Group had occupied over RMB 150 billion of funds. To avoid a stop in liquidity, the bank resorted to increasing financing from the interbank market, and had a share of interbank liability at over 50 percent of its total liabilities and number of counterparties involving more than 400 small- and medium-sized financial institutions. It was only after the financial regulatory authorities took it over in a decisive manner that the contagion of risks was avoided.

II. Causes and Resolution Challenges

Problem shareholders of financial institutions are ill-motivated. Non-financial enterprises have the incentive to invest in and control financial institutions to earn considerable investment profits or gain easy access to financing, given that the financial industry is capital-intensive with high profit margin. In general, stricter regulatory requirements, including shareholder qualifications, shareholding ratios, restrictions on related transactions, and loan concentration ratios, apply to the financial sector as it involves the mass population, the principal-agent problem and is vulnerable to risks. However, in order to circumvent these regulatory requirements, a small proportion of ill-motivated shareholders and actual controllers have deliberately used a "covert and distributed" holding structure to illicitly take control of financial institutions, and further tampered with business operations of these institutions to satisfy their own needs.

Effectiveness of financial regulation needs to be further improved. In recent years, financial regulatory authorities have developed or amended equity management rules for banks, securities firms, and insurers, in an effort to strengthen regulation over shareholders and actual controllers of financial institutions. Still, these regulatory rules are more targeted to direct shareholders and their qualifications, and lack adequate review of qualifications in a look-through approach. Equity pledges, transfers and increases by indirect shareholders are in dire need of regulation. Meanwhile, the inadequate regulatory tools and technological support regulatory authorities have make it hard to see through those hidden shareholders and actual controllers who control a financial institution through several even dozens of seemingly unrelated companies.

The financial regulatory authorities lack necessary resolution powers. Major shareholders and actual controllers, as the owners of financial institutions, are primarily responsible for resolving risks. For institutions in resolution, their shareholders should be the first to bear losses and resolution costs. International best practices in this regard recommend that the resolution authority should have the power to write down equities or other capital instruments of the financial institutions in resolution. However, China's current legal framework does not support such power; and unless in insolvency proceedings, adjustments of shareholders' equities cannot be enforced. At the administrative resolution stage, financial authorities may order equity transfers, but only in a non-binding manner.

Judicial practices need to be further explored. Problem actual controllers can take invisible control over multiple financial institutions through the "covert and distributed" structure, posing severe regulatory and judicial challenges. In some cases, the "covert and distributed" structure may involve several thousands of shell companies and agents, who hold shares on behalf of the actual controllers. The shareholding relationship among shell companies is isolated; interconnection between the agents and actual controllers are hidden; and assets and liabilities of each company are separated from each other. In a legal sense, each vehicle entity is an independent legal person, making it difficult to pinpoint the core company in terms of equity structure and to ask solvent companies to perform repayment obligations for the indebted ones. This facilitates the hiding of assets and evasion of repayment obligations, but increases resolution costs. Theoretically, Article 20 of the *Company Law* can be useful in dealing with such holding structure by denying the independence of legal personality of the related enterprises, so that problem shareholders and their covert controlled group are subject to the combined bankruptcy process, and that all of their assets can be taken to repay their debts fairly. China's judicial authorities have gained practical experiences in combined bankruptcy of related enterprises, but specific rules and standards are still lacking to take problem shareholders and actual controllers accountable.

III. Policy Recommendations

Imposing strict shareholder qualification rules and on-going supervision. Further efforts need to be made to strengthen review of shareholders' qualifications in a see-through manner, impose stricter examination of the controlling shareholders and actual controllers, and tighten access to shareholding, with an aim to make concrete the qualification rules required for shareholders, i.e. "strong capital position, good corporate governance, clear holding structure, qualified management expertise, sound financial condition, and adequate liabilities/assets ratios and leverage ratios". Authorities also need to ensure the capital quality of financial institutions, regulate equity pledging and transfer activities of shareholders, especially indirect shareholders, and crack down on illegal activities including false capital contributions and shareholding funded by loans. In addition, data barriers need to be removed to establish an effective surveillance system for financial equity investment and related transactions, and technologies such as artificial intelligence and big data can be better employed to see through the covert holding structure.

Exploring equity write-downs in risk resolution. The FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions* offers a sum-up of international best practices regarding risk resolution of financial institutions. It specifies that resolution authorities should be empowered to urge financial institutions to carry out bail-in within resolution through equity or other capital instrument write-downs in a manner that respects the hierarchy of claims in liquidation. Drawing on international standards, it is recommended that the amending *Commercial Bank Law* and other related laws specify that the resolution authorities have the power within resolution to write down or write off equity of the troubled financial institution, in order to ensure its shareholders are taken accountable for resolution costs.

Further promoting the judicial practice of combined bankruptcy. For the benefit of the fair treatment of claims in liquidation and interests of creditors, it is recommended that the *Enterprise Bankruptcy Law* add criterion for imposing combined bankruptcy to its amendments, to facilitate the development of corresponding judicial policies and further judicial practices in this regard. In particular, considering the unique characteristics of financial institutions' equity, enhanced collaboration between financial and judicial authorities is needed when dealing with such bankruptcy cases by the rule of law.

Special Topic 15 Building a More Strict and Regulated Lender of Last Resort Regime

When financial institutions such as banks are faced with liquidity risks, and other financial institutions are unable or unwilling to help, the central bank performs the role as the lender of last resort (hereinafter referred to as LLR) in a timely manner in order to prevent financial risks. As an important part of China's financial safety net, the LLR mandate of the PBC has played an important roll in preventing financial risks. For the next steps, efforts are needed to further improve the institutional framework based on resolution practices, and promote the establishment of a more strict and regulated LLR regime.

I. LLR: Theory and Practice

The concept of the LLR was first put forward by Francis Baring, who, in his *Observations on the Establishment of the Bank of England* in 1797, referred to the act of the Bank of England in providing loans for banks that were in crisis but remain solvent as a "last resort". Henry Thornton and Walter Bagehot based their works on this concept and proposed the fundamental principles of the classical LLR theory. This theory has since undergone profound evolution with the development of the financial system and emergence of several financial crises. The main idea is that when financial institutions such as banks or the financial market faces an abnormally high demand for liquidity under adverse shocks and this demand cannot be met by any other means available, a LLR shall provide liquidity support.

Banks are institutions that operate risks. Liquidity risk of a single bank may lead to its own failure and even cause a system-wide financial crisis. For one, the business characteristics of banks lead to frequent runs. Banks operate with high leverage, with their liabilities more liquid than assets. This liquidity mismatch between asset and liability means that in case of a bank run, the bank, without external assistance, will need to resort to asset sales or even fire sales to meet its liquidity demand, and this behavior may further accelerate a panic run and push the bank to the verge of bankruptcy in a worst case scenario. For another, risks of individual institutions may spread through the financial system through interconnectedness, and give rise to systemic risks. Even solvent financial institutions may encounter liquidity shortage due to information asymmetry and market dysfunction, and concerns that other market participants hold about counterparty credit risk may further trigger large-scale runs and fire sales. In the absence of public intervention, market panic may spread quickly and lead to money market-wide liquidity shortage and huge asset price fluctuations. In such a vicious circle, an individual risk evolves into a systemic one, with key financial functions interrupted and the real economy damaged.

During a crisis, the failure of conventional financing mechanism and channels would enable an individual risk to easily transmit through the entire financial system. Considering the severe consequences of a systemic risk, it is particularly important to establish an effective crisis response mechanism. The LLR, by providing timely liquidity support for financial institutions in distress and ensuring liquidity provision to the financial system, can effectively prevent an individual risk from spreading into a systemic one, and serve as an important backstop for financial stability. In the meantime, to mitigate moral hazards, the LLR will need to have a set of binding rules on recipients, loan terms and interest rates, and apply "constructive ambiguity" and punitive measures as necessary to urge financial institutions to act in a prudent manner.

In practice, to effectively prevent and defuse systemic risks, many countries have established the LLR regime as a key policy measure for crisis response and management. In the late 19th century, the Bank of England provided emergency aid for other banks in a timely manner, effectively preventing the U.K. from frequent financial crises. In the 1930s, the Federal Bank of Australia on the one hand provided financial support for distressed institutions, and on the other stabilized public confidence in the financial system through public announcements, which effectively maintained financial stability. During the 2008 Global Financial Crisis, the U.S. Federal Reserve provided emergency assistance for financial institutions including Bear Stearns, the American International Group and the Bank of America to prevent systemic risks caused by the collapse of systemically important financial institutions. Meanwhile, in order to ease liquidity squeeze, the U.S. Federal Reserve and the European Central Bank purchased commercial bills and covered bonds respectively to provide liquidity support for key markets. During the COVID-19 pandemic, central banks further innovated their policy toolbox and expanded the scope of assistance. The U.S. Federal Reserve and the European Central Bank introduced the PMCCF and PEPP respectively to purchase corporate bonds and other private sector assets directly through the primary market.

In recent years, international organizations and major economies have worked to develop further rules on the funding source in risk resolution and its hierarchy in use, in an effort to ensure safety of public funds and effectively minimize moral hazards. In 2011, the FSB issued the *Key Attributes of Effective Resolution Regimes for Financial Institutions*, suggesting that instead of relying solely on public funds, resolution authorities should first make use of deposit insurance or resolution funds raised beforehand, or have a funding mechanism with ex post recovery from the industry to make up for losses in public funds. In 2016, in its *Guiding Principles on the Temporary Funding Needed to Support the Orderly Resolution of a Global Systemically Important Bank ("G-SIB")*, the FSB further elaborated on the principle that private source of funding should be relied upon as a first choice, and that public sector funds should be used as a backstop funding source to minimize moral hazards. The U.K. *Banking Act 2009* introduced a special resolution regime for banking institutions, including arrangements for the source and use of resolution funds: first, bail-in funds, with shareholders and unsecured creditors bearing losses; second, the deposit insurance fund, absorbing losses within the amount needed for direct payout; third, National Loans Fund within the HM Treasury, used for nationalization of problem financial institutions and provision of emergency loans for banks and other financial institutions; and fourth, the Bank of England, providing necessary financial support to ensure continuity of key businesses and services, including funding for the operation of bridge banks. In 2011, the U.S. promulgated the *Dodd-Frank Wall Street Reform and Consumer Protection Act*, which established the orderly liquidation framework for systemically important financial institutions, and defined the funding and loss-sharing arrangements for financial risk resolution. An orderly liquidation fund will be established in the U.S. Treasury, and the FDIC may issue obligations to the US Treasury for the resolution of systemically important financial institutions. In addition, to ensure safety of public funds, shareholders and unsecured creditors should first bear the losses if the proceeds of the liquidation cannot fully cover the Treasury borrowing, and then the FDIC should meet its repayment obligation within 5 years by charging systemically important financial institutions with total consolidated assets equal to or greater than USD 50 billion.

II. The Important Role of the Central Bank as LLR in Financial Risk Prevention in China

One of the important mandates of the PBC is to prevent and defuse financial risks and to maintain financial stability. Since the reform and opening-up, China's financial sector has played an essential role in supporting the transformation of the economic system and promoting economic growth. But in the meantime, it faces accumulated risks. In different episodes of risk resolution, the PBC has based its decision on the phased characteristics and focal issues of China's economic and social development in different stages, and played an effective role as LLR. It used central bank funds to resolve financial risk and support reforms in key areas, while optimized the financial risk prevention and resolution framework and the LLR regime to make it in line with China's reality. Remarkable achievements have been made.

First, the PBC has provided liquidity support for financial institutions in a timely manner to ease their liquidity pressure. The *Law on the People's Bank of China* mandates the PBC with the legal function of conducting central bank discount with banking financial institutions and providing loans to commercial banks. Based on economic and financial developments and changes in the market environment, the PBC has given full play to its role as LLR by strengthening monitoring and management of financial institution's liquidity risks, and providing liquidity support for certain institutions that are solvent but in temporary liquidity distress through a variety of policy tools, so as to help financial institutions ease their repayment pressure, restore their credibility, maintain continuity of financial services and prevent the deterioration of liquidity risks. At the same time, the PBC injected liquidity into the market in a timely manner through open market operations to strengthen liquidity marginal adjustment, respond to various shocks in a timely manner, stabilize market confidence and maintain stability of the financial system.

Second, the PBC has effectively resolved risks of financial institutions and promoted reforms in key financial areas. In the 1990s, China's economic system was in a period of transition, where various investor protection systems were vacant, the legal framework in the financial sector was inadequate, and the financial sector was exposed to a string of accumulated risks. Considering the specific characteristics of financial risks during transitional period and stages of economic and social development, the PBC gave full play to its role as LLR and worked together with relevant authorities to properly resolve the risks of Delong Group, orderly defuse risks of highly risky small- and medium-sized financial institutions, promote consolidated rectification of securities companies and rulemaking on debt repayment for individual creditors, protect the legitimate rights and interests of small- and medium-sized investors, and effectively safeguard the financial market order and social stability. At the same time, following the principle of "proper mechanism established when central bank money spent" and positive incentives, the PBC promoted reforms in key financial areas and key links including reforms of large state-owned commercial banks and rural credit cooperatives, introduction of the deposit insurance system and investor protection systems for securities firms, futures and insurers, with an aim to build a long-term mechanism for maintaining financial stability.

Third, the PBC has made constant efforts to improve the LLR regime and ensure the success of the critical battle against major financial risks. In fighting the battle, the PBC has, in accordance with the fundamental policy of "maintaining overall stability, proceeding in a coordinated manner, adopting differentiated policies and defusing risks in a targeted and calibrated manner" and relevant arrangements, managed to push forward high-risk financial institution resolution with best available strategies, with an aim to avoid systemic risk caused by the disorderly collapses of financial institutions. Take the risk resolution of Baoshang Bank as an example, in May 2019, Baoshang Bank was taken over by the PBC and CBIRC in accordance with relevant regulations. In order to prevent potential bank run and volatility in the financial market, the authorities, first of all, provided proper guarantees for individual and institutional claims with financings from the deposit insurance fund and the PBC; and then pushed forward the reform and restructuring of the bank through its acquisition by a newly established bank. These efforts has on one hand protected the legitimate rights and interests of depositors and customers to the maximum degree and preserved overall social stability, and on the other, adhered to market disciplines and removed implicit guarantees in an orderly manner, which contributed to reasonable risk pricing. In the meantime, the PBC also provided Standing Lending Facility to Baoshang Bank to ensure its liquidity safety.

III. Building a More Strict and Regulated LLR Regime

During past risk resolutions, the PBC, upon approval of the State Council, provided funding support to financial risk resolution and played the important role as LLR. However, China's LLR regime as a whole still needs to be further improved. In the past, due to the lack of various investor protection systems, the PBC passively assumed part of the costs incurred by risk resolution and reforms in the financial sector for the purpose of maintaining financial and social stability, and this overly broad role of LLR was susceptible to moral hazards. Financial institutions and local governments have repeatedly bargained with the PBC on the conditions of using central bank funds. The PBC, while assuming the LLR responsibilities, does not enjoy correspondent rights as it has no authority of oversight on institutions using central bank money to generate enough binding effect. As a next step, the PBC as the LLR will, drawing on international best practices and own practical experiences in resolution, continue its efforts to improve institutional arrangements for the LLR regime, so as to effectively address moral hazards while safeguarding the bottom line of no outbreaks of systemic financial risks.

Ensuring that each party assumes its due responsibilities in risk resolution to minimize moral hazards. First, financial institutions and their shareholders should assume the primary responsibility for risk prevention and resolution. Financial institutions should first resolve their risks with own funds or funds financed through the market, while timely action should be taken by their shareholders and actual controllers to replenish capital and bear losses, and by creditors to bear the costs of risk resolution. Second, local governments should assume the responsibility of resolving local financial risks and the primary responsibility of maintaining local stability by using local fiscal funds to finance risk resolution and maintaining a sound local financial eco-system. Third, the deposit insurance fund and various investor protection funds play their respective roles in the risk resolution of financial institutions in different sectors based on their statutory mandates by providing financial support or compensating investor losses as necessary. Fourth, under the condition that financing gaps remain after all parties have exhausted their financing means, the PBC, on the premise of effectively limiting moral hazards and ensuring safety of central bank money, may provide financing support in order to prevent a system-wide contagion.

Accurately determining the nature of risks and specifying criterion for using central bank funds. First, strengthen risk monitoring and assessment to accurately distinguish between illiquidity and insolvency. In principle, the central bank shall lend only to financial institutions in liquidity distress. Second, improve the framework for systemic risk analysis. When an individual risk may potentially evolve into a systemic one, the central bank can, in principle, provide necessary assistance for the purpose of maintaining financial stability. Third, proper guarantees, such as eligible collaterals in full amount by relevant institutions, should strictly apply for central bank lending.

Reinforcing oversight and intervention to ensure safety of central bank funds. Strengthened oversight and intervention is a must for LLR assistance. The PBC's role as LLR should be strengthened in terms of its oversight authority over institutions covered by central bank assistance through the revision of the *Law on the People's Bank of China* and other relevant laws and regulations by introducing measures including activity limits, dividend payment restrictions, asset transfer restrictions, capital replenishment within a given period, equity transfer orders or bans on shareholders, management replacement and other measures designed for improving corporate governance and risk control, in order to establish a LLR regime featuring compatibility between rights and responsibilities, and ensure safety of central bank funds.

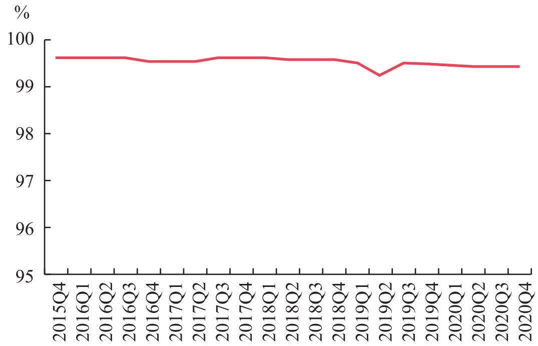
Special Topic 16 Notable Results of the Implementation of China's Deposit Insurance System

With enactment of the *Deposit Insurance Regulations* (hereinafter referred to as the *Regulations*) on 1 May, 2015, the deposit insurance system was formally established in China. Overall, the deposit insurance system was launched and operated in a stable and orderly way, with its core roles gradually fulfilled and achieving a series of active outcomes.

I. Deposit Insurance Coverage Remains high, and the Share of Deposits of Small- and Medium-sized Banks in Total Deposits Registers A Stable Increase

As of end-2020, a total of 4024 financial institutions had completed their application procedure to be insured according to relevant requirements, with deposit insurance coverage basics[①] amounting to RMB 190.3 trillion and the insured deposits[②] amounting to RMB 80.3 trillion. The maximum balance to be insured is RMB 500000 per depositor per bank, which can provide full guarantee for 99.4 percent of depositors (Figure 3.2). This stable coverage helps protect depositors effectively and enhance public confidence in the banking sector.

Figure 3.2 Changes of the Depositor Coverage Ratio



The deposit insurance system is conducive to enhancing the credit of small- and medium-sized banks, therefore creating a level playing field for large-, medium- and small-sized banks[③]. After the enactment of the *Regulations*, the deposit market shares of large-, medium- and small-sized banks remain stable. As of end-2020, the total deposits of small- and medium-sized banks amounted to RMB 105.8 trillion, accounting for 51.3 percent of the total deposits of all the banks, up by 60.5 percent

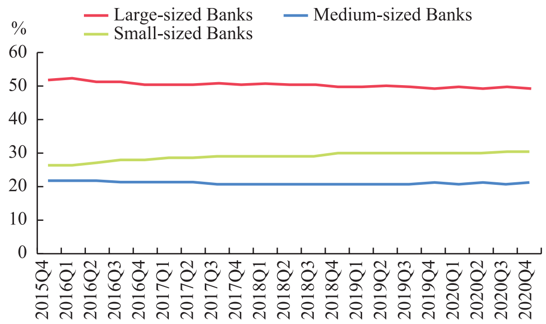
① Deposit insurance coverage basics: According to the Article 4 of the *Regulations,* the deposit insurance coverage basics consist of RMB and foreign currency deposits in insured institutions excluding deposits from other financial institutions, senior managers of the insured institutions themselves, and other deposits that the deposit insurance fund management authority determined not to be insured.

② Insured deposits: The part, within the upper limit to be insured, of the total balance (including principal and interests) of all insured deposit accounts owned by the same person at the same bank.

③ Large-sized banks include Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, China Development Bank, Bank of Communications and Postal Savings Bank of China. Medium-sized banks include policy banks, 9 joint-stock commercial banks including China Merchants Bank, Bank of Beijing, Bank of Shanghai and Bank of Jiangsu. Small-sized banks include Evergrowing Bank, China Zheshang Bank, China Bohai Bank, other city commercial banks, rural commercial banks and cooperative banks, rural credit cooperatives, private banks, village and township banks and foreign banks.

and 3.2 percentage points respectively, compared with those upon the *Regulations* enactment . Specifically, the deposits of small-sized banks accounted for 30.5 percent of total deposits, up by 4.1 percentage points (Figure 3.3).

Figure 3.3 Changes of Deposit Market Shares of Large-, Medium- and Small-sized Banks



II. Promoting the Public Understanding of Deposit Insurance Through Proactive Propagation Campaigns

Utilizing the deposit insurance signage in an orderly way. It is a global practice to use the deposit insurance signage in implementation of the deposit insurance system. The PBC authorized the insured financial institutions to use deposit insurance signage on 28 November, 2020. The signage is designed by the PBC, with elements including the image for China's deposit insurance, the Chinese and English versions of "deposit insurance", the statements that "The RMB and foreign currency deposits are insured according to the *Deposit Insurance Regulations*" and "The signage is authorized by the PBC", etc. The deposit insurance signage has been registered with the China National Intellectual Property Administration and has enjoyed the official protection. As of end-2020, the deposit insurance signage had been correctly put in place in all the conspicuous positions of 225 thousand branches of 4024 insured financial institutions. The market reacted positively to utilization of the deposit insurance signage, with financial institutions operating soundly, and public understanding in deposit insurance and confidence in the banking sector further enhanced.

Continuing to proactively push forward the propagation campaigns on deposit insurance. The PBC guides its branches as well as insured financial institutions to continuously popularize knowledge on deposit insurance, with the focus on remote rural areas and areas at county level, using various channels to conduct targeted publicity including newspaper, TV, broadcasting, short messages and WeChat, etc. As the major entities responsible for publicity, insured financial institutions incorporate the deposit insurance publicity programs into various business lines, and proactively conduct publicity in counties, communities, enterprises, government departments and campuses. According to statistics, as of end-July 2020, about 118 million publicity materials, 62 million public service short messages and 2.747 million WeChat messages had been sent out to the public by the PBC and insured financial institutions, and about 1.606 million persons had been trained for the deposit insurance purposes.

III. The Risk-based Differentiated Deposit Insurance Premium System Operates Well, Playing An Increasing Role in Risk Containment and Correction

Since 2016, the deposit insurance management authority has adopted the rating program for financial institutions, which combines the quantitative and qualitative risk assessment, to assess their risk profiles and determine their deposit insurance premiums. Factors considered in the rating program include capital adequacy, asset quality, liquidity, risk management and corporate governance, aiming to capture the operation and risk profile of financial institutions in an objective and accurate way. Risky financial institutions shall be subject to higher premium rates while safer ones shall be subject to lower rates, which helps to create positive incentives by rewarding the good ones while punishing the bad, and promote the prudential operation of financial institutions with market-orientated tools. Generally, the differentiated deposit insurance premium system, featured with open, objective and transparent risk assessments, operates well and stably, reflects the real risk profiles of insured financial institutions and plays an active role in guiding them to operate prudently and mitigate risks.

IV. The Deposit Insurance System Actively Plays Its Role in Prompt Corrections, Timely Risk Identification and Warning, as well as Effective Risk Resolution

Since 2017, the deposit insurance management authority has been actively exploring the way to fulfill its prompt corrective mandates based on the rating system for financial institutions, by timely risk identification and information sharing with local governments and relevant regulatory authorities, so as to make relevant parties accountable for their own duties and facilitate the early identification, reporting and resolution of risks. Firstly, the deposit insurance management authority takes measures to ensure that high-risk financial institutions must be held accountable for addressing their own risks, and constraints over these high-risk institutions and their shareholders shall be enhanced. For a few critically under-capitalized insured financial institutions, the deposit insurance management authority will issue the prompt corrective action letter to require them to develop capital restoration plans and replenish capital within a given period. Secondly, the deposit insurance management authority shares risk information of rural credit cooperatives with provincial governments in a timely manner, and clarifies that local governments should be in the first place to manage and address these risks. The deposit insurance management authority shares information on significant risk issues related to rural credit cooperatives identified in risk monitoring with provincial governments in a timely manner, and proposes clear risk mitigation suggestions so as to push forward local governments to lead in the development of risk resolution plans and effectively address the risks of problem institutions. Thirdly, the deposit insurance management authority holds the main founder banks accountable for the risk resolution of their affiliated village and township banks. For those high-risk village and township banks, the deposit insurance management authority holds their main founder banks accountable by requiring them to inject capital, adjust senior management, provide liquidity backstop and support NPL disposal with the aim to improve the management and operation of these village and township banks and enhance their capital adequacy . Fourthly, the deposit insurance management authority strengthens information sharing and coordination with relevant regulatory authorities. The joint policy discussion and coordination mechanism has been established to continuously strengthen the communication with and risk information sharing to regulatory authorities while the deposit insurance management authority identifies risks based on supervisory information of insured institutions. Under the joint efforts by the PBC, the regulatory authority and deposit insurance management authority, as of end-2020, about 635 insured financial institutions had been taken prompt corrective actions on, among which 353 financial institutions' risks had been preliminarily addressed.

Meanwhile, the deposit insurance system has gradually functioned as a risk resolution platform during the risk resolution of small- and medium-sized banks. In the risk resolution of Baoshang Bank, the deposit insurance fund and PBC provided funding to protect the legal interests of depositors and all types of clients, offering full guarantee for 5.2 million depositors, 25000 SMEs and institutional creditors with exposure below RMB 50 million, as well as offering partial guarantee for institutional creditors with exposure exceeding RMB 50 million. Such practice not only protected the rights and interests of depositors and other creditors, but also strengthened market discipline. The deposit insurance fund facilitated the purchase and assumption transactions, helping to maintain continuity of Baoshang Bank's key business, and safeguard the stability of the financial market.

Special Topic 17 Improving the Financial Consumer Protection Mechanism

Since the 19th National Congress of the CPC, for the purpose of protecting the long-term and fundamental interests of financial consumers, the PBC, CBIRC and CSRC actively utilized the beforehand prevention function of financial consumer protection to prevent and control systemic financial risks, gradually constructed the financial consumer protection mechanism with Chinese characteristics, and stay true to the original aspiration and mission of finance for serving people.

I. The Importance of Financial Consumer Protection

Financial consumer protection refers to that regulatory authorities regulate and manage financial institutions' behaviours by making rules or guidance on anti-fraud and deception, protection of consumers' financial information, information disclosure, consumption disputes resolution and advertising practice, and establishing the on-site inspection and off-site examination system, so as to reduce risks and hazards that consumers face when buying financial products or accepting financial services. Improving financial consumer protection helps maintain financial market disciplines, boost confidence of financial consumers and safeguard stability of the financial market.

Protecting the legitimate rights and interests of financial consumers helps prevent financial risks. Due to information asymmetry and lack of financial knowledge, financial consumers are at a disadvantage in trading and face challenges such as mis-selling and financial fraud or deception. The 2008 Global Financial Crisis revealed that inadequate protection of financial consumers was a major factor leading to systemic financial risks. The trigger of the crisis was that banks lowered lending standards and issued mortgages to financial consumers who may not be able to repay their loans. Then, the mortgages were packaged into complicated derivatives through securitization, and without full risk disclosure, the derivatives were sold to another group of financial consumers with mismatched risk-taking abilities. Improving financial consumer protection, accurately detecting infringement of financial consumers' rights and interests in time and properly handling the problems help prevent financial risks.

Protecting the legitimate rights and interests of financial consumers helps them establish rational investment awareness. Due to lack of trading experience and limited cognitive abilities, it is difficult for some financial consumers to accurately assess risks of financial products with complex structures, resulting in herd behaviour and anchoring effect. By means of financial education, financial consumer protection helps consumers increase financial knowledge, establish rational investment awareness and enhance capacity to protect their own rights. It can also reduce possibilities of financial institutions to distort market competition and impair the legitimate rights and interests of financial consumers.

Protecting the legitimate rights and interests of financial consumers is an objective requirement of the age of Fintech. The deep integration of technology and finance in recent years has generated profound effects on financial markets, financial institutions and financial business models. As new financial businesses are thriving, cross-cutting financial products and services keep increasing. As the result, the risk of cross-sector, cross-market and cross-region transmission of financial risks also increases, financial consumers face more serious problems of information asymmetry, information leakage and information scams, the number of financial consumption disputes rises and financial crimes that involve the public occur occasionally, which harms the economic, financial and social stability. Therefore, enhancing the protection of financial consumer rights is the objective requirement for prevention and resolution of financial risks at the new development stage.

II. Financial Consumer Protection Made Great Progress

In recent years, the PBC coordinated establishment of the basic financial consumer protection mechanism, made active efforts to publicize financial knowledge and promote financial education, introduced and improved the diversified financial dispute resolution mechanism, strengthened supervision and examination of financial consumer protection and enhanced regulation on financial advertisement. Financial consumer protection made great progress.

1. Coordinating Establishment of the Financial Consumer Protection Mechanism

Developing a grid of coordination mechanisms of financial consumer protection. On the one hand, the PBC, together with CBIRC and CSRC, continued to deepen horizontally coordination of financial consumer (investor) protection by establishing and improving the coordination mechanism of financial consumer protection among the three authorities. One the other hand, the PBC integrated the requirement of coordinating financial consumer protection into the local coordination mechanism under the Office of Financial Stability and Development Committee, enhanced the vertical coordination of financial consumer protection between the central and local financial authorities, and strengthened the central and local coordination on regulating financial advertisement and handling financial consumer complaints.

Improving the legal system of financial consumer protection. The PBC published the *Implementation Measures for Financial Consumer Protection* (hereafter referred to as the *Implementation Measures*) in 2020 to regulate eight legitimate rights of financial consumers and operations of financial institutions, effectively solving the problem of low costs of breaking laws and rules in the area of financial consumer protection and helping financial consumers protect their rights through legal and proper channels. In addition, branches of the PBC actively participated in local legislation work, continuously improving the systematic level of the basic financial consumer protection mechanism.

Actively promoting the establishment of standards in financial consumer protection. Since 2018, the PBC and CBIRC jointly published complaint categorization standards for banking financial institutions, oversaw and guided banking financial institutions to implement the standards comprehensively, and established a unified statistical and reporting system of complaints. Meanwhile, active measures were taken to promote the development of complaint categorization standards for non-bank payment institutions and start pilot projects in some non-bank payment institutions. Efforts were also continued to develop standards in financial consumer complaint categorization and financial consumer protection environment assessment.

2. Establishing and Improving the Beforehand Prevention and Control System

Improving the Consumer Financial Literacy Survey. For the purpose of exactly understanding financial literacy of consumers and weakness in financial education, and assessing effectiveness of financial education, the PBC started to conduct the Consumer Financial Literacy Survey nationwide (excluding Hongkong, Macao and Taiwan) biennially since 2017, and developed a map of Chinese consumers' financial literacy and financial behaviours. In 2020, the PBC revised the questionnaire of the Consumer Financial Literacy Survey. The next round survey is planned to be conducted in 2021.

Enhancing monitoring and management of financial advertisements. By utilizing the monitoring and management system of financial advertisements, the PBC strengthened identification of illegal financial advertisements. By the end of 2020, the number of financial marketing clues amounted to 12356, the number of illegal financial marketing information that was cleared reached 3520, and the number of inquiries with relevant parties responsible for illegal financial marketing was 1416. Clues related to illegal financial activities were transferred to relevant authorities for further investigation and resolution. During the pandemic, the number of financial advertisements related to COVID-19 that were monitored by the system was 3127, among which 68 were identified as improper advertising. The PBC developed a WeChat mini program for taking photos of and reporting outdoor and print financial advertisements conveniently. More than 120 thousands of financial professionals have used the program to help monitor illegal financial advertisements and the number of useful clues collected reached 5235.

Introducing and improving a diversified financial disputesresolution mechanism. In 2020, the PBC carried out the *Opinions on Comprehensively Promoting the Development of a Diversified Mechanism for Resolving Financial Disputes*, opened and smoothed channels for financial consumers to file complaints, and supported pandemic containment, economic reopening as well as social harmony and stability by holding financial institutions accountable for principal responsibilities in handling complaints.

The number of financial consumers' complaints received by the PBC in 2020 amounted to 64171, 97.69 percent of which were solved. Under the instruction of the PBC, financial dispute mediation organizations resolved 15211 disputes in total, among which 11524 were settled. About ten thousands of disputes were resolved online, providing financial consumers with economic, convenient, professional and efficient non-contact dispute mediation services.

Establishing and improving the statistical and monitoring system of financial consumer complaints (hereafter referred to as the statistical and monitoring system). The statistical and monitoring system came online for a trial operation in January, 2020. By the end of 2020, there had been more than 3900 banking financial institutions connected to the statistical and monitoring system and reporting complaint data. By improving the monitoring, analysis and utilization of complaint data, the statistical and monitoring system tried to detect, warn about and resolve common problems and risks in the industry in a timely manner, so as to increase sensitivity, accuracy and timeliness of beforehand prevention of major financial risks.

3. Cracking Down on Illegal Behaviours that Harm Consumer Rights

In recent years, the PBC enforced the combination of hard crack-down and soft regulation to punish illegal activities that do harm to financial consumer rights. On the one hand, based on law enforcement inspections, the PBC promoted financial institutions to fulfill their legal obligations of protecting financial consumer rights. Special investigation was conducted in 2020. Actions that harmed consumer financial information security and financial institutions or relevant persons who should take responsibilities for searching or revealing clients' information illegally were punished rigorously. On the other hand, the PBC steadily promoted financial institutions to conduct assessments of financial consumer protection, enhanced coordination on assessments with CBIRC, and improved the standardization and formalization of assessments.

III. Principles and Focuses for the Next Step

The PBC will keep improving the financial consumer protection system, and making good use of the fundamental role of financial consumer protection as the "shock absorber" and "pressure relief valve", so as to lay a solid micro foundation for financial stability.

Further improve the financial consumer protection mechanism and system. The PBC will continue to study and explore on special legislation on financial consumer protection, develop supporting policies relevant to the *Implementation Measures* and specify regulatory standards.

Promote financial education and enhance financial consumption dispute resolution. The PBC will publicize financial knowledge in various forms, and continue to conduct the nationwide Consumer Financial Literacy Survey. Active efforts will be made to promote informatization of complaint management, regulate management of financial consumer complaints, hold financial institutions accountable for principal responsibilities in handling complaints, and improve the diversified financial dispute resolution mechanism.

Regulate marketing, advertising and information disclosure of financial institutions. The PBC will improve the mechanism and system of behaviour supervision on financial marketing and advertising, improve the smart and efficient monitoring system of financial advertisements, and increaseself-discipline awareness of the financial marketing and advertising industry. Based on integrated law enforcement inspections and supplemented by special investigations and administrative inquiries, the PBC will promote law enforcement in financial consumer protection, focusing on key areas such as information disclosure, protection of consumers' financial information as well as financial marketing and advertising, and improve supervisory tools with digital technology. It will also strengthen the assessments of financial consumer protection and communication of assessment results, and expand the application of assessment results.

Appendix

Statistics

Table 1 Selected Economic Indicators

Items	2016	2017	2018	2019	2020
Gross Domestic Product (RMB 100 million)	746 395	832 036	919 281	986 515	1015 986
Value-added of Industry (RMB 100 million)	245 406	275 119	301 089	311 859	313 071
Total Investment in Fixed Assets in the Whole Country (RMB 100 million)	606 466	641 238	645 675	560 874	527 270
Retail Sales of Consumer Goods (RMB 100 million)	315 806	347 327	377 783	408 017	391 981
Exports & Imports (RMB 100 million)	243 386	278 099	305 010	315 627	321 557
Exports	138 419	153 309	164 129	172 374	179 326
Imports	104 967	124 790	140 881	143 254	142 231
Balance	33 452	28 520	23 247	29 120	37 096
Value of Foreign Direct Investment Actually Utilized (USD 100 million)	1 260	1 310	1 350	1 381	1 444
Foreign Exchange Reserves (USD 100 million)	30 105	31 399	30 727	31 079	32 165
Consumer Price Index (previous year=100)	102.0	101.6	102.1	102.9	102.5
Fiscal Revenue (RMB 100 million)	159 605	172 593	183 360	190 390	182 895
Fiscal Expenditure (RMB 100 million)	187 755	203 085	220 904	238 858	245 588
Per Capita Urban Household Disposable Income (RMB)	33 616	36 396	39 251	42 359	43 834
Per Capita Rural Household Disposable Income (RMB)	12 363	13 432	14 617	16 021	17 131
Urban Employed Persons (million)	420.5	432.1	442.9	452.5	462.7
Registered Unemployment Rate in Urban Areas (%)	4.0	3.9	3.8	3.6	4.2
Total Population (million)	1 392.3	1 400.1	14 05.4	1 410.1	1 411.8

Note: ① GDP from 2016 to 2019 is verified and final, and GDP in 2020 is preliminary.

② In accordance with China's regulations on GDP data revision and international practices, systematic revisions are made on the GDP figures for 2018 and previous years with data from the fourth national economic census.

Source: The NBS.

Table 2 Selected Financial Indicators (1)

(Year-end Balance)

(RMB 100 million)

Items	2016	2017	2018	2019	2020
Money & Quasi-money (M_2)	1550 066.7	1690 235.3	1826 744.2	1986 488.8	2186 795.9
Money (M_1)	486 557.2	543 790.1	551 685.9	576 009.2	625 581.0
Currency in Circulation (M_0)	68 303.9	70 645.6	73 208.4	77 189.5	84 314.5
Total Deposits with Financial Institutions	1505 863.8	1641 044.2	1775 225.7	1928 785.3	2125 720.9
Household Deposits	569 149.3	595 972.6	631 202.4	697 395.4	809 051.1
Non-financial Enterprise Deposits	502 178.4	542 404.6	562 976.2	595 365.0	660 180.2
Total Lending by Financial Institutions	1066 040.1	1201 321.0	1362 966.7	1531 123.2	1727 452.1

Source: The PBC.

Table 3 Selected Financial Indicators (2)

(Growth Rates)

(percent)

Items	2016	2017	2018	2019	2020
Money & Quasi-money (M_2)	11.3	8.1	8.1	8.7	10.1
Money (M_1)	21.4	11.8	1.5	4.4	8.6
Currency in Circulation (M_0)	8.1	3.4	3.6	5.4	9.2
Total Deposits with Financial Institutions	11.0	9.0	8.2	8.7	10.2
Household Deposits	8.2	4.7	5.9	10.5	16.0
Non-financial Enterprise Deposits	16.7	8.0	3.8	5.8	10.9
Total Lending by Financial Institutions	13.5	12.7	13.5	12.3	12.8

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

Table 4 International Liquidity

(USD million)

Items	2016	2017	2018	2019	2020
Total Reserves (minus gold)	3029 775	3158 877	3091 881	3127 493	3238 782
Special Drawing Rights (SDRs)	9 661	10 981	10 690	11 126	11 495
IMF Reserve Position	9 597	7 947	8 479	8 444	10 765
Foreign Exchange	3010 517	3139 949	3072 712	3107 924	3216 522
Gold (1 million ounces)	59.24	59.24	59.56	62.64	63
Gold (national valuation)	67 878	76 473	76 331	95 406	118 246
Foreign Liabilities of Other Depository Corporations	182 683	313 413	304 431	241 046	255 007

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)
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
2016	5 924	30 105.2	-9.6
2017	5 924	31 399.5	4.3
2018	5 956	30 727.1	-2.1
2019	6 264	31 079.2	1.1
2020	6 264	32 165.2	3.5

Source: The PBC.

Table 6 Assets of China’s Financial Sector

(December 31, 2020)

(RMB trillion)

Type of Financial Institutions	Assets
Financial Sector	391.96
Central Bank	38.77
Banking Financial Institutions	319.74
Securities Financial Institutions	10.15
Insurance Financial Institutions	23.30

Note: Banking institutions refer to legal entities (also covering overseas branches), excluding the central bank.Securities institutions include securities companies, futures companies and fund companies. The total assets of securities companies and futures companies include both their own assets and clients’ assets. Insurance institutions include property insurance companies, personal insurance companies, reinsurance companies, insurance group companies and insurance asset management companies.
Source: The PBC, CBIRC and CSRC.

Table 7 Depository Corporations Survey in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Net Foreign Assets	262 342.17	266 549.11	269 648.15	269 522.17
Domestic Credits	2288 671.88	2351 762.00	2406 930.95	2440 004.58
Claims on Government(net)	305 249.10	314 981.13	331 230.85	340 193.67
Claims on Non-financial Sectors	1718 472.52	1774 684.78	1825 816.40	1853 490.30
Claims on Other Financial Sectors	264 950.26	262 096.09	249 883.70	246 320.60
Money & Quasi-Money	2080 923.41	2134 948.66	2164 084.80	2186 795.89
Money	575 050.29	604 317.97	602 312.12	625 580.99
Currency in Circulation	83 022.21	79 459.41	82 370.87	84 314.53
Corporate Demand Deposits	492 028.08	524 858.56	519 941.25	541 266.46
Quasi-Money	1505 873.12	1530 630.69	1561 772.69	1561 214.90
Corporate Time Deposits	390 274.95	399 039.85	407 659.25	383 837.34
Personal Deposits	884 279.26	903 187.93	919 507.05	932 966.35
Other Deposits	231 318.92	228 402.91	234 606.39	244 411.22
Deposits Excluded from Broad Money	49 279.73	50 241.03	52 849.76	53 519.40
Bonds	282 406.48	289 588.47	307 571.96	312 180.25
Paid-in Capital	66 430.96	68 418.68	70 797.11	73 565.84
Other Items (net)	71 973.47	75 114.28	81 275.47	83 465.37

Source: The PBC.

Table 8 Balance Sheet of Monetary Authority in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	218 315.78	218 332.59	218 213.05	218 039.98
Foreign Exchange	212 079.04	211 742.47	211 625.40	211 308.10
Monetary Gold	2 855.63	2 855.63	2 855.63	2 855.63
Other Foreign Asstes	3 381.11	3 734.49	3 732.02	3 876.25
Claims on Government	15 250.24	15 250.24	15 250.24	15 250.24
Of Which: Central Government	15 250.24	15 250.24	15 250.24	15 250.24
Claims on Other Depository Corporations	113 014.34	111 618.60	123 619.62	133 355.47
Claims on Other Financial Corporations	4 734.95	4 747.46	4 741.61	4 447.14
Claims on Non-financial Sector	0.00	0.00	0.00	0.00
Other Assets	14 059.42	13 982.40	12 903.17	16 582.70
Total Assets	**365 374.74**	**363 931.30**	**374 727.69**	**387 675.54**
Reserve Money	317 806.72	308 338.55	315 643.28	330 428.14
Currency Issue	90 750.94	85 413.10	88 063.47	89 823.29
Deposits of Financial Corporations	212 680.93	207 202.69	209 650.34	222 906.08
Deposits of Other Depository Corporations	212 680.93	207 202.69	209 650.34	222 906.08
Deposits of Other Financial Corporations	0.00	0.00	0.00	0.00
Deposits of Non-financial Corporations	14 374.85	15 722.76	17 929.48	17 698.77
Deposits of Financial Corporations Excluded from Reserve Money	5 016.28	4 749.82	5 292.63	4 881.82
Bond Issue	985.00	950.00	950.00	900.00
Foreign Liabilities	1 896.22	1 198.45	1 080.69	929.67
Deposits of Government	30 775.31	38 252.64	39 774.34	38 681.53
Own Capital	219.75	219.75	219.75	219.75
Other Liabilities	8 675.46	10 222.08	11 767.00	11 634.63
Total Liabilities	**365 374.74**	**363 931.30**	**374 727.69**	**387 675.54**

Source: The PBC.

Table 9 Balance Sheet of Other Depository Corporations in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	64 484.14	67 183.74	69 990.70	69 050.84
Reserve Assets	224 365.39	217 384.93	219 441.36	232 330.79
Deposits with Central Bank	216 636.65	211 431.23	213 748.76	226 822.03
Cash in Vault	7 728.74	5 953.69	5 692.60	5 508.75
Claims on Government	320 774.17	337 983.53	355 754.94	363 624.95
Of Which: Central Government	320 774.17	337 983.53	355 754.94	363 624.95
Claims on Central Bank	0.00	0.00	6.17	6.17
Claims on Other Depository Corporations	304 461.06	307 125.89	311 280.51	309 122.76
Claims on Other Financial Corporations	260 215.31	257 348.62	245 142.09	241 873.46
Claims on Non-financial Corporations	1 159 862.59	1 192 614.55	1 218 410.76	1 229 057.23
Claims on Other Resident Sectors	558 609.93	582 070.23	607 405.65	624 433.07
Other Assets	115 285.23	121 668.53	121 551.23	120 489.84
Total Assets	**3 008 057.81**	**3 083 380.02**	**3 148 983.40**	**3 189 989.11**
Liabilities to Non-financial Institutions and Households	1 885 969.25	1 948 426.34	1 976 994.74	1 987 799.10
Deposits Included in Broad Money	1 766 582.29	1 827 086.34	1 847 107.55	1 858 070.14
Corporate Demand Deposits	492 028.08	524 858.56	519 941.25	541 266.46
Corporate Time Deposits	390 274.95	399 039.85	407 659.25	383 837.34
Personal Deposits	884 279.26	903 187.93	919 507.05	932 966.35
Deposits Excluded from Broad Money	49 279.73	50 241.03	52 849.76	53 519.40
Transferable Deposits	15 202.49	16 798.53	19 161.80	21 941.94
Other Deposits	34 077.24	33 442.50	33 687.96	31 577.46
Other Liabilities	70 107.22	71 098.98	77 037.43	76 209.56
Liabilities to Central Bank	109 647.99	112 609.47	119 562.53	129 521.32
Liabilities to Other Depository Corporations	118 730.74	116 114.15	110 277.61	115 915.91
Liabilities to Other Financial Corporations	195 538.38	192 415.61	204 214.90	209 083.25
Of Which: Deposits Included in Broad Money	191 193.15	188 016.89	199 085.25	205 279.04
Foreign Liabilities	18 561.53	17 768.76	17 474.91	16 638.97
Bond Issue	282 406.48	289 588.47	307 571.96	312 180.25
Paid-in Capital	66 211.21	68 198.92	70 577.36	73 346.09
Other Liabilities	330 992.22	338 258.29	342 309.41	345 504.21
Total Liabilities	**3 008 057.81**	**3 083 380.02**	**3 148 983.40**	**3 189 989.11**

Source: The PBC.

Table 10 Balance Sheet of Chinese-funded Large Banks in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	33 157.44	33 900.48	36 751.00	35 302.07
Reserve Assets	116 894.76	108 889.98	110 309.63	113 839.90
Deposits with Central Bank	112 898.92	105 947.81	107 596.67	111 177.42
Cash in Vault	3 995.84	2 942.17	2 712.96	2 662.47
Claims on Government	197 849.92	205 992.41	217 283.96	217 998.60
Of Which: Central Government	197 849.92	205 992.41	217 283.96	217 998.60
Claims on Central Bank	0.00	0.00	0.00	0.00
Claims on Other Depository Corporations	114 136.52	114 632.76	112 655.08	108 597.44
Claims on Other Financial Corporations	68 377.02	66 055.33	62 433.21	60 305.48
Claims on Non-financial Corporations	568 502.15	581 121.19	595 056.01	594 802.88
Claims on Other Resident Sectors	277 069.44	288 410.22	298 863.66	305 838.31
Other Assets	52 508.88	56 804.76	57 135.29	54 583.98
Total Assets	**1 428 496.13**	**1 455 807.14**	**1 490 487.83**	**1 491 268.67**
Liabilities to Non-financial Institutions and Households	953 871.79	978 032.42	998 825.62	985 191.69
Deposits Included in Broad Money	866 580.74	887 989.31	902 286.44	892 571.31
Corporate Demand Deposits	240 938.81	252 207.84	249 625.90	250 189.73
Corporate Time Deposits	137 020.20	140 539.54	149 069.85	136 502.22
Personal Deposits	488 621.72	495 241.94	503 590.69	505 879.35
Deposits Excluded from Broad Money	24 952.21	26 041.27	27 491.94	26 449.90
Transferable Deposits	7 326.00	7 786.37	8 978.55	9 544.94
Other Deposits	17 626.22	18 254.90	18 513.39	16 904.96
Other Liabilities	62 338.84	64 001.84	69 047.24	66 170.49
Liabilities to Central Bank	52 966.17	54 723.06	56 597.32	57 687.48
Liabilities to Other Depository Corporations	31 747.12	25 902.79	21 162.92	26 920.05
Liabilities to Other Financial Corporations	79 298.88	75 949.04	80 781.25	82 113.47
Of Which: Deposits Included in Broad Money	77 594.70	74 477.09	79 325.31	80 651.78
Foreign Liabilities	5 994.26	6 013.03	6 242.17	6 432.25
Bond Issue	121 255.30	125 544.52	134 117.49	135 748.33
Paid-in Capital	27 535.37	28 782.98	29 525.34	29 581.65
Other Liabilities	155 827.24	160 859.31	163 235.72	167 593.76
Total Liabilities	**1 428 496.13**	**1 455 807.14**	**1 490 487.83**	**1 491 268.67**

Source: The PBC.

Table 11 Balance Sheet of Chinese-funded Medium-Sized Banks in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	26 464.34	27 852.41	27 408.73	27 381.75
Reserve Assets	35 071.78	38 061.37	37 011.06	38 412.01
Deposits with Central Bank	34 417.42	37 551.73	36 534.23	37 925.89
Cash in Vault	654.36	509.64	476.83	486.12
Claims on Government	66 926.89	70 351.79	72 234.32	74 432.87
Of Which: Central Government	66 926.89	70 351.79	72 234.32	74 432.87
Claims on Central Bank	0.00	0.00	0.00	0.00
Claims on Other Depository Corporations	41 502.95	40 177.24	43 509.74	41 322.24
Claims on Other Financial Corporations	92 841.68	94 401.50	90 230.04	91 603.75
Claims on Non-financial Corporations	281 922.40	290 139.00	294 600.30	298 540.07
Claims on Other Resident Sectors	134 330.58	139 355.61	146 109.37	150 880.60
Other Assets	20 587.01	20 978.51	21 195.53	21 915.63
Total Assets	**699 647.65**	**721 317.43**	**732 299.11**	**744 488.91**
Liabilities to Non-financial Institutions and Households	334 296.57	347 635.82	344 403.32	347 617.39
Deposits Included in Broad Money	315 465.92	329 398.94	325 145.92	326 483.64
Corporate Demand Deposits	110 615.17	120 417.03	120 167.49	126 363.14
Corporate Time Deposits	127 375.63	128 614.46	126 127.25	118 874.32
Personal Deposits	77 475.13	80 367.44	78 851.17	81 246.19
Deposits Excluded from Broad Money	14 911.18	14 594.06	15 391.64	16 365.06
Transferable Deposits	4 442.43	4 975.58	6 026.11	7 273.58
Other Deposits	10 468.75	9 618.48	9 365.52	9 091.47
Other Liabilities	3 919.47	3 642.82	3 865.77	4 768.69
Liabilities to Central Bank	39 978.04	38 057.19	39 175.43	42 300.52
Liabilities to Other Depository Corporations	37 387.31	40 504.52	38 007.75	38 744.30
Liabilities to Other Financial Corporations	73 350.42	73 856.06	80 542.39	83 304.80
Of Which: Deposits Included in Broad Money	72 752.57	72 995.98	79 620.49	82 765.14
Foreign Liabilities	6 386.61	6 467.39	6 007.43	5 094.80
Bond Issue	122 559.48	127 383.32	136 647.89	140 070.20
Paid-in Capital	9 838.07	10 038.09	10 935.57	12 240.71
Other Liabilities	75 851.15	77 375.05	76 579.34	75 116.20
Total Liabilities	**699 647.65**	**721 317.43**	**732 299.11**	**744 488.91**

Source: The PBC.

Table 12 Balance Sheet of Chinese-funded Small Banks in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	1 951.85	2 383.16	2 550.54	3 078.72
Reserve Assets	57 778.64	56 809.85	58 074.87	64 114.27
Deposits with Central Bank	55 143.22	54 667.04	55 940.82	62 054.37
Cash in Vault	2 635.42	2 142.81	2 134.05	2 059.90
Claims on Government	49 685.10	55 081.28	59 448.39	63 444.50
Of Which: Central Government	49 685.10	55 081.28	59 448.39	63 444.50
Claims on Central Bank	0.00	0.00	0.00	6.17
Claims on Other Depository Corporations	101 734.81	105 005.43	109 891.02	108 370.66
Claims on Other Financial Corporations	90 650.76	87 818.87	82 618.17	78 919.65
Claims on Non-financial Corporations	251 022.19	262 239.50	268 726.89	273 958.43
Claims on Other Resident Sectors	129 592.36	136 545.91	144 654.72	150 345.78
Other Assets	25 007.91	26 823.68	26 497.16	27 301.74
Total Assets	**707 423.63**	**732 707.69**	**752 461.74**	**769 539.91**
Liabilities to Non-financial Institutions and Households	485 349.63	507 468.81	519 815.78	528 720.91
Deposits Included in Broad Money	478 643.74	500 897.39	512 890.78	521 157.98
Corporate Demand Deposits	104 738.33	113 279.78	115 377.73	118 138.45
Corporate Time Deposits	93 003.52	96 532.61	96 862.89	92 853.20
Personal Deposits	280 901.89	291 084.99	300 650.16	310 166.33
Deposits Excluded from Broad Money	4 483.70	4 461.24	4 673.18	4 867.82
Transferable Deposits	995.72	1 182.68	1 324.07	1 590.70
Other Deposits	3 487.98	3 278.56	3 349.11	3 277.12
Other Liabilities	2 222.19	2 110.18	2 251.82	2 695.10
Liabilities to Central Bank	15 775.14	18 768.48	22 308.34	27 800.90
Liabilities to Other Depository Corporations	37 436.69	38 671.55	39 523.66	39 461.51
Liabilities to Other Financial Corporations	40 815.26	40 659.74	40 877.55	41 634.31
Of Which: Deposits Included in Broad Money	39 211.54	39 041.45	38 789.05	40 394.11
Foreign Liabilities	979.36	864.52	836.37	769.46
Bond Issue	37 591.87	35 587.77	35 825.32	35 465.56
Paid-in Capital	19 286.68	19 702.12	20 179.86	21 444.32
Other Liabilities	70 189.01	70 984.70	73 094.86	74 242.95
Total Liabilities	**707 423.63**	**732 707.69**	**752 461.74**	**769 539.91**

Source: The PBC.

Table 13 Balance Sheet of Foreign-funded Banks in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	2 673.22	2 810.68	3 075.21	3 091.26
Reserve Assets	2 947.66	3 113.00	2 949.85	3 202.51
Deposits with Central Bank	2 943.45	3 109.24	2 946.34	3 199.28
Cash in Vault	4.21	3.77	3.51	3.23
Claims on Government	4 089.15	4 023.48	4 149.56	4 806.17
Of Which: Central Government	4 089.15	4 023.48	4 149.56	4 806.17
Claims on Central Bank	0.00	0.00	0.00	0.00
Claims on Other Depository Corporations	4 797.56	4 296.98	4 499.94	4 738.52
Claims on Other Financial Corporations	3 727.51	3 668.68	3 753.09	4 395.40
Claims on Non-financial Corporations	13 108.27	12 982.95	13 169.35	13 298.72
Claims on Other Resident Sectors	1 685.30	1 708.24	1 779.26	1 872.50
Other Assets	13 326.28	13 175.84	12 794.78	12 452.47
Total Assets	**46 354.95**	**45 779.87**	**46 171.03**	**47 857.57**
Liabilities to Non-financial Institutions and Households	19 032.60	19 246.58	19 952.16	22 026.05
Deposits Included in Broad Money	13 522.71	13 896.00	14 108.49	15 504.57
Corporate Demand Deposits	4 587.27	4 866.91	4 364.14	5 743.60
Corporate Time Deposits	7 576.28	7 642.56	8 396.12	8 361.52
Personal Deposits	1 359.16	1 386.53	1 348.23	1 399.45
Deposits Excluded from Broad Money	3 982.69	4 092.30	4 056.36	4 084.12
Transferable Deposits	1 841.45	2 155.97	2 122.49	2 325.46
Other Deposits	2 141.24	1 936.34	1 933.87	1 758.66
Other Liabilities	1 527.20	1 258.28	1 787.30	2 437.35
Liabilities to Central Bank	64.72	73.98	296.14	421.80
Liabilities to Other Depository Corporations	2 301.97	2 523.55	2 537.95	2 256.73
Liabilities to Other Financial Corporations	1 442.10	1 317.87	1 285.80	1 402.92
Of Which: Deposits Included in Broad Money	1 313.12	1 181.47	1 111.56	1 204.80
Foreign Liabilities	5 197.12	4 422.57	4 388.02	4 341.57
Bond Issue	988.26	965.82	903.58	845.42
Paid-in Capital	1 983.34	1 988.30	1 986.26	1 999.09
Other Liabilities	15 344.83	15 241.19	14 821.13	14 563.99
Total Liabilities	**46 354.95**	**45 779.87**	**46 171.03**	**47 857.57**

Source: The PBC.

Table 14 Balance Sheet of Rural Credit Cooperatives in 2020

(Quarter-end Balance)

(RMB 100 million)

Items	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Foreign Assets	4.71	4.75	4.51	4.49
Reserve Assets	8 267.17	7 311.18	7 926.54	8 862.89
Deposits with Central Bank	7 828.28	6 955.90	7 563.31	8 565.89
Cash in Vault	438.88	355.28	363.23	297.00
Claims on Government	2 067.91	2 314.03	2 363.68	2 692.92
Of Which: Central Government	2 067.91	2 314.03	2 363.68	2 692.92
Claims on Central Bank	0.00	0.00	6.17	0.00
Claims on Other Depository Corporations	18 698.39	17 701.02	18 094.28	16 058.76
Claims on Other Financial Corporations	950.60	939.08	1 479.05	1 118.66
Claims on Non-financial Corporations	14 269.69	14 036.33	13 773.99	13 052.93
Claims on Other Resident Sectors	14 705.13	14 815.82	14 741.73	14 149.31
Other Assets	3 218.32	3 272.07	3 340.72	3 404.54
Total Assets	**62 181.91**	**60 394.28**	**61 730.65**	**59 344.49**
Liabilities to Non-financial Institutions and Households	43 665.76	42 837.31	42 849.44	41 287.91
Deposits Included in Broad Money	43 579.93	42 764.74	42 778.62	41 168.20
Corporate Demand Deposits	6 378.96	6 339.14	6 425.03	5 697.44
Corporate Time Deposits	1 287.62	1 326.34	1 294.07	1 202.72
Personal Deposits	35 913.35	35 099.25	35 059.52	34 268.03
Deposits Excluded from Broad Money	0.23	0.48	0.45	1.00
Transferable Deposits	0.21	0.47	0.44	0.99
Other Deposits	0.02	0.01	0.01	0.01
Other Liabilities	85.60	72.09	70.36	118.71
Liabilities to Central Bank	573.33	682.47	805.82	940.51
Liabilities to Other Depository Corporations	8 455.46	7 432.45	7 905.75	7 646.92
Liabilities to Other Financial Corporations	222.29	263.58	293.24	318.60
Of Which: Deposits Included in Broad Money	101.53	91.35	73.18	56.56
Foreign Liabilities	0.89	0.93	0.92	0.90
Bond Issue	1.57	6.55	17.45	8.25
Paid-in Capital	1 374.95	1 343.69	1 318.81	1 305.95
Other Liabilities	7 887.65	7 827.31	8 539.22	7 835.45
Total Liabilities	**62 181.91**	**60 394.28**	**61 730.65**	**59 344.49**

Source: The PBC.

Table 15 Statistics of Securities Market

Year	2015	2016	2017	2018	2019	2020
Number of Domestic Listed Companies (A shares, B shares)	2 827	3 052	3 485	3 584	3 777	4 154
Number of Domestic Listed Foreign Investment Shares (B shares)	101	100	100	99	97	93
Number of Overseas Listed Companies (H shares)	229	241	252	267	284	291
Total Issued Shares (100 million shares)	43 024	48 750	53 747	57 581	61 720	65 526
Of Which: Negotiable Shares (100 million shares)	37 043	41 136	45 045	49 048	52 488	56 375
Total Market Capitalization of Shares (RMB 100 million)	531 463	507 686	567 086	434 924	592 935	796 487
Of Which: Negotiable Shares (RMB 100 million)	417 881	393 402	449 298	353 794	483 461	643 096
Trading Volume of Shares (100 million shares)	171 039.47	95 525.43	87 780.84	82 037.25	126 624.29	167 451.86
Turnover of Shares (RMB 100 million)	2 550 541.31	1 277 680.32	1 124 625.11	901 739.40	1 274 158.81	2 068 252.53
Shanghai Composite Index (close)	3 539.18	3 103.64	3 307.17	2 493.90	3 050.12	3 473.07
Shenzhen Composite Index (close)	2 308.91	1 969.11	1 899.34	1 267.87	1 722.95	2 329.37
Number of Investor Accounts (10 thousand)	9 910.54	11 811.04	13 398.29	14 650.44	15 975.24	17 777.49
Average P/E Ratio						
Shanghai	17.6	15.9	16.3	12.5	14.3	16.1
Shenzhen	52.8	41.2	36.2	20.0	26.2	33.5
Average Turnover Rate (%)						
Shanghai	489.6	158.4	180.5	150.9	193.4	258.8
Shenzhen	825.7	541.8	412.9	356.9	454.9	555.8
Government Bond Issuance (RMB 100 million)	59 408	91 086	83 513	78 278	85 187	135 293
Corporate Credit Bond Issuance (RMB 100 million)	67 205	82 242	56 352	77 905	107 058	142 012
Turnover of Outright Government Bond Purchase in the Interbank Market (RMB 100 million)	99 296	126 130	131 269	190 695	347 883	467 069
Turnover of Government Bond Repo in the Interbank Market (RMB 100 million)	1 589 806	1 757 356	1 913 543	2 144 206	2 694 737	3 031 178
Number of Securities Investment Funds	2 723	3 873	4 848	5 580	6 111	7 237
Total Net Asset Value of Securities Investment Funds (RMB 100 million)	83 971.83	91 595.16	115 989.13	130 339.08	147 672.51	198 519.33
Turnover of Securities Investment Funds Listed on Exchanges (RMB 100 million)	152 684.59	111 444.32	98 051.89	102 704.59	91 679.38	136 238.64
Trading Volume of Futures (10 thousand lots)	357 802	413 782	307 106	301 070	392 157	602 735
Turnover of Futures (RMB 100 million)	5 542 347	1 956 344	1 878 951	2 108 057	2 905 856	4 373 005

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, %)

Year	GDP	Market Capitalization	Ratio of Market Captialization to GDP (percent)	GDP	Negotiable Market Capitalization	Ratio of Negotiable Market Captialization to GDP (percent)
2002	120 333	38 339	31.85	120 333	12 487	10.38
2003	135 823	42 478	31.26	135 823	13 185	9.70
2004	159 878	37 081	23.18	159 878	11 701	7.31
2005	183 868	32 446	17.64	183 868	10 638	5.78
2006	211 923	89 441	42.19	211 923	25 021	11.80
2007	249 530	327 291	131.10	249 530	93 141	37.30
2008	300 670	121 541	40.36	300 670	45 303	15.04
2009	335 353	244 104	72.74	335 353	151 342	45.10
2010	397 983	265 423	66.69	397 983	193 110	48.52
2011	471 564	214 758	45.54	471 564	164 921	34.97
2012	519 322	230 358	44.36	519 322	181 658	34.98
2013	568 845	239 077	42.03	568 845	199 580	35.09
2014	636 463	372 547	58.53	636 463	315 624	49.59
2015	676 708	531 463	78.51	676 708	417 881	61.76
2016	744 127	507 686	68.30	744 127	393 402	52.85
2017	827 122	567 086	68.56	827 122	449 298	54.32
2018	900 309	434 924	48.31	900 309	353 794	39.30
2019	990 865	592 935	59.84	990 865	483 461	48.79
2020	1 015 986	797 238	78.47	1 015 986	643 605	63.35

Source: The NBS, the CSRC.

Table 17 Ratio of Domestic Stock Financing to Total Lending Increment

(RMB 100 million, %)

Year	Domestic Stock Financing	Total Lending Increment	Ratio (percent)
2002	720.05	18 475.01	3.90
2003	665.51	27 651.67	2.41
2004	650.53	22 648.06	2.87
2005	339.03	23 543.82	1.44
2006	2 374.50	31 809.19	7.46
2007	7 814.74	36 322.51	21.51
2008	3 312.39	49 041.23	6.75
2009	4 834.34	95 941.63	5.04
2010	9 799.80	79 450.29	12.33
2011	7 154.43	74 715.39	9.58
2012	4 542.40	82 037.63	5.54
2013	4 131.46	88 916.22	4.65
2014	8 498.26	97 815.77	8.69
2015	16 361.62	117 238.60	13.96
2016	20 297.39	126 496.23	16.05
2017	15 534.98	135 277.81	11.48
2018	11 377.88	161 704.90	7.04
2019	12 538.82	168 144.09	7.46
2020	14 221.58	196 340.43	7.24

Notes: ① Since 2015, the item “Total Lending” includes loans offered by banking institutions to non-bank financial institutions.
② The amount of domestic stock financing does not include the amount of convertible bonds that have been converted into stocks.
Source: Calculated on the basis of data from the CSRC and the PBC.

Table 18 Statistics of Stock Market

Year		2014	2015	2016	2017	2018	2019	2020
Number of Domestic Listed Companies (A shares, B shares)		2 613	2 827	3 052	3 485	3 584	3 777	4 154
Of Which: ST Companies		44	51	62	64	57	137	218
SME Board		732	776	822	903	922	943	994
ChiNext		406	492	570	710	739	791	892
Number of Domestic Listed Foreign Investment Shares (B shares)		104	101	100	100	99	97	20
Of Which: ST Companies		3	0	4	4	1	4	4
Total Issued Shares (100 million shares)		36 795.10	43 024.14	48 750.29	53 746.67	57 581.03	61 719.92	65 455.94
Of Which: SME Board		3 470.59	4 853.94	6 423.69	7 612.24	8 360.10	9 322.12	9 923.58
ChiNext		1 077.26	1 840.45	2 630.61	3 258.49	3 728.17	4 097.11	4 510.43
Total Market Capitalization of Shares (RMB 100 million)		372 546.96	531 462.70	507 685.88	567 086.08	434 924.03	592 934.57	797 238.18
Of Which: SME Board		51 058.20	103 950.47	98 113.98	103 992.02	70 122.00	98 681.32	135 377.58
ChiNext		21 850.95	55 916.25	52 254.50	51 288.81	40 459.59	61 347.62	109 338.54
Market Capitalization of Negotiable Shares (RMB 100 million)		315 624.31	417 880.76	393 401.67	449 298.14	353 794.20	483 461.26	643 605.30
Of Which: SME Board		36 017.99	69 737.04	64 088.77	71 155.07	50 478.88	73 661.29	106 105.00
ChiNext		13 072.90	32 078.68	30 536.90	30 494.77	24 542.95	40 231.74	69 630.42
Volume (100 million shares)	Total	73 383.09	171 039.47	95 525.43	87 780.84	82 037.25	126 624.29	167 451.86
	Daily Average	301.04	700.98	388.08	359.76	337.60	518.95	689.10
	SME Board	11 313.55	25 409.95	20 578.13	17 409.44	18 286.37	31 971.44	42 243.89
	ChiNext	4 035.30	9 938.88	9 509.90	8 829.88	11 642.30	19 009.23	30 218.85

(Cont)

Year		2014	2015	2016	2017	2018	2019	2020
Turnover (RMB 100 million)	Total	743 912.98	2 550 541.31	1 273 844.74	1 124 625.11	901 739.40	1 274 158.81	2 068 252.53
	Daily Average	3 036.38	10 453.04	5 220.68	4 609.12	3 710.86	5 221.96	8 511.33
	SME Board	152 166.57	497 556.18	344 164.94	259 879.80	203 625.83	310 656.51	501 795.70
	ChiNext	78 041.34	285 352.81	216 831.62	165 521.59	158 862.19	231 604.19	466 722.99
Average Turnover Rate (%)	Shanghai	242.01	489.63	158.43	180.47	150.91	193.44	99.34
	Shenzhen	471.99	825.65	541.76	412.88	356.92	454.90	200.00
Average P/E Ratio	Shanghai	15.99	17.63	15.94	16.30	12.49	14.26	16.76
	Shenzhen	41.91	52.75	41.21	36.21	20.00	26.15	34.51
	SME Board	41.06	68.06	50.35	45.56	21.04	28.47	35.81
	ChiNext	64.51	109.01	73.21	51.39	32.78	47.01	64.91
Shanghai Composite Index	Open	2 112.13	3 258.63	3 536.59	3 105.31	3 314.03	2 497.88	3 066.34
	Highest	3 239.36	5 178.19	3 538.69	3 450.50	3 587.03	3 288.45	3 474.92
	Date	2014/12/31	2015/6/12	2016/1/4	2017/11/14	2018/1/29	2019/4/8	2020/12/31
	Lowest	1 974.38	2 850.71	2 638.30	3 016.53	2 449.20	2 440.91	2 646.80
	Date	2014/3/12	2015/8/26	2016/1/27	2017/5/11	2018/10/19	2019/1/4	2020/3/19
	Close	3 234.68	3 539.18	3 103.64	3 307.17	2 493.90	3 050.12	3 473.07
Shenzhen Composite Index	Open	1 055.88	1 419.44	2 304.48	1 972.55	1 903.49	1 270.50	1 734.63
	Highest	1 504.48	3 156.96	2 304.49	2 054.02	1 966.15	1 799.10	2 340.89
	Date	2014/12/16	2015/6/12	2016/1/4	2017/3/17	2018/1/25	2019/4/8	2020/11/9
	Lowest	1 004.93	1 408.99	1 618.12	1 753.53	1 212.23	1 231.83	1 552.96
	Date	2014/4/29	2015/1/5	2016/1/27	2017/6/2	2018/10/19	2019/1/4	2020/2/4
	Close	1 415.19	2 308.91	1 969.11	1 899.34	1 267.87	1 722.95	2 329.37

Source: The CSRC, Shanghai Stock Exchange and Shenzhen Stock Exchange.

Table 19 Summary of China's Bond Issuance

(RMB 100 million)

Year	Government Bonds			Financial Bonds			Corporate Credit Bonds		
	Issuance	Redemption	Outstanding	Issuance	Redemption	Outstanding	Issuance	Redemption	Outstanding
2000	4 657	2 179	13 020				83		862
2001	4 884	2 286	15 618				147		
2002	5 934	2 216	19 336				325		
2003	6 280	2 756	22 604				358		
2004	6 924	3 750	25 778				327		
2005	7 042	4 046	28 774				2 047	37	
2006	8 883	6 209	31 449				3 938	1 672	
2007	23 139	5 847	48 741				5 181	2 881	7 683
2008	8 558	7 531	49 768				8 723	3 278	13 251
2009	17 927	9 745	57 950				16 599	4 309	25 541
2010	19 778	10 043	67 685				16 094	5 099	36 318
2011	17 100	10 959	75 832	23 491	7 683	75 748	23 548	10 326	49 095
2012	16 154	9 464	82 522	26 202	8 588	93 362	37 365	8 750	77 710
2013	20 230	8 996	95 471	26 310	13 306	105 772	36 784	18 673	93 242
2014	21 747	10 365	107 275	36 552	19 345	125 489	51 516	27 388	116 214
2015	59 408	12 803	154 524	102 095	53 852	184 596	67 205	39 757	144 329
2016	91 086	19 709	225 734	182 152	125 677	236 499	82 242	61 139	175 180
2017	83 513	27 567	281 538	258 056	216 410	278 301	56 352	52 378	183 252
2018	78 278	29 875	330 069	274 056	229 047	322 585	77 905	51 561	205 603
2019	85 187	37 175	377 273	259 360	217 335	364 622	107 058	74 064	246 176
2020	135 293	51 408	460 911	291 539	239 860	415 080	142 012	95 558	289 472

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; financial bonds issued by asset management companies; and interbank negotiable certificates of deposit.

② Due 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

(RMB 100 million, %)

Items	2014	Growth (y-o-y) (percent)	2015	Growth (y-o-y) (percent)	2016	Growth (y-o-y) (percent)	2017	Growth (y-o-y) (percent)	2018	Growth (y-o-y) (percent)	2019	Growth (y-o-y) (percent)	2020	Growth (y-o-y) (percent)
Premium Income	20 234.81	17.49	24 282.52	20.00	30 959.10	27.50	36 581.01	18.16	38 016.62	3.92	42 644.75	12.17	45 257.33	6.13
1.Property Insurance	7 203.38	15.95	7 994.97	10.99	8 724.50	9.12	9 834.66	12.72	10 770.08	9.51	11 649.47	8.17	11 928.58	2.40
2.Personal Accident Insurance	542.57	17.61	635.56	17.14	749.89	17.99	901.32	20.19	1 075.55	19.33	1 175.16	9.26	1 174.11	- 0.09
3.Health Insurance	1 587.18	41.27	2 410.47	51.87	4 042.50	67.71	4 389.46	8.58	5 448.13	24.12	7 065.98	29.70	8 172.71	15.66
4.Life Insurance	10 901.69	15.67	13 241.52	21.46	17 442.22	31.72	21 455.57	23.01	20 722.86	- 3.41	22 754.14	9.80	23 981.92	5.40
Claims and Payments	7 216.21	16.15	8 674.14	20.20	10 512.89	21.20	11 180.79	6.35	12 297.87	9.99	12 893.97	4.85	13 907.10	7.86
1.Property Insurance	3 788.21	10.15	4 194.17	10.72	4 726.18	12.68	5 087.45	7.64	5 897.32	15.92	6 501.62	10.25	6 954.79	6.97
2.Personal Accident Insurance	128.42	17.27	151.84	18.24	183.01	20.53	223.69	22.23	267.70	19.68	297.66	11.19	316.04	6.17
3.Health Insurance	571.16	38.92	762.97	33.58	1 000.75	31.17	1 294.77	29.38	1 744.34	34.72	2 351.48	34.81	2 921.16	24.23
4.Life Insurance	2 728.43	21.09	3 565.17	30.67	4 602.95	29.11	4 574.89	- 0.61	4 388.52	- 4.07	3 743.21	- 14.70	3 715.11	- 0.75
Operating Expenses	2 795.79	13.67	3 336.72	19.35	3 895.52	16.75	4 288.06	10.08	4 717.73	10.02	5 490.57	16.38	5 728.05	4.33
Bank Deposits	25 233.44	11.45	24 349.67	- 3.50	24 844.21	2.03	19 274.07	- 22.42	24 363.50	26.41	25 227.42	3.55	25 973.45	2.96
Investment	66 997.41	23.54	87 445.81	30.52	109 066.46	24.72	129 932.14	19.13	139 724.88	7.54	120 618.47	- 13.67	190 827.68	58.21
Of Which: Government Bonds	5 009.88	4.88	5 831.12	16.39	7 796.24	33.70	10 167.99	30.42	14 027.62	37.96	20 672.01	47.37	32 069.60	55.14
Securities Investment Funds	4 714.28	31.85	8 856.50	87.87	8 554.46	- 3.41	7 524.77	- 12.04	8 650.55	14.96	9 423.29	8.93	11 040.41	17.16
Total Assets	101 591.47	22.57	123 597.76	21.66	151 169.16	22.31	167 489.37	10.80	183 308.92	9.45	205 644.92	12.18	232 984.30	13.29

Notes: ① Data of premium income, claims and payments and operating expenses are data for the year.
② Data of bank deposits, investment and total assets are data of the year–end balance.
Source: The CBIRC and the former CIRC.

Table 21 The Structure of Non-life Insurance Premium Income, 2016-2020

(RMB 100 million, %)

Insurance Lines	2016	Proportion (percent)	2017	Proportion (percent)	2018	Proportion (percent)	2019	Proportion (percent)	2020	Proportion (percent)
Automobile Insurance	6 834.55	73.76	7 521.07	63.98	7 834.02	66.64	8 188.32	62.91	8 244.75	60.70
Enterprise Property Insurance	381.54	4.12	392.10	3.34	423.11	3.60	464.10	3.57	490.26	3.61
Cargo Transportation Insurance	85.46	0.92	100.19	0.85	121.11	1.03	130.12	1.00	135.96	1.00
Accident Insurance	247.69	2.67	312.66	2.66	416.60	3.54	526.57	4.05	540.90	3.98
Liability Insurance	362.35	3.91	451.27	3.84	590.79	5.03	753.30	5.79	901.13	6.63
Others	1 354.60	14.62	1 764.09	15.01	2 370.06	20.16	2 953.92	22.69	3 270.69	24.08
Total	9 266.17	100.00	10 541.38	89.67	11 755.69	100.00	13 016.33	100.00	13 583.69	100.00

Source: The CBIRC, the former CIRC.

Table 22 The Structure of Life Insurance Premium Income, 2016-2020

(RMB 100 million, %)

Insurance Lines	2016	Proportion (percent)	2017	Proportion (percent)	2018	Proportion (percent)	2019	Proportion (percent)	2020	Proportion (percent)
Life Insurance	17 442.09	80.40	21 455.49	82.40	20 722.80	78.91	22 754.14	76.80	23 981.92	75.97
Of Which: Common Life Insurance	10 451.65	48.18	12 936.48	49.68	9 120.97	34.73	10 473.62	35.35	12 545.94	39.74
Participating Insurance	6 879.77	31.71	8 403.20	32.27	11 489.15	43.75	12 166.97	41.07	11 327.18	35.88
Unit-linked Insurance	3.85	0.02	3.91	0.02	4.12	0.02	4.40	0.01	4.33	0.01
Accident Insurance	502.20	2.32	588.66	2.26	658.95	2.51	648.60	2.19	633.21	2.01
Health Insurance	3 748.51	17.28	3 995.40	15.34	4 879.12	18.58	6 225.68	21.01	7 058.50	22.36
Total	21 692.81	100.00	26 039.55	100.00	26 260.87	100.00	29 628.42	100.00	31 569.16	100.00

Source: The CBIRC, the former CIRC.

Table 23 Insurance Premium Income of China's Different Regions in 2020

(RMB 100 million)

Regions	Insurance Premium Income	Property Insurance	Life Insurance	Accident Insurance	Health Insurance
Total	45 257	11 929	23 982	1 174	8173
Guangdong	4 199	1 010	2 368	128	694
Jiangsu	4 015	993	2 348	87	586
Shandong	2 972	686	1 614	62	609
Henan	2 506	571	1 368	53	515
Zhejiang	2 477	766	1 281	62	369
Sichuan	2 274	548	1 258	58	409
Beijing	2 303	441	1 334	66	462
Hebei	2 089	592	1 102	40	355
Hubei	1 854	370	1 095	42	347
Shanghai	1 865	509	1 000	75	281
Hunan	1 513	409	761	40	304
Shenzhen	1 454	363	695	47	348
Anhui	1 404	471	657	35	241
Shaanxi	1 103	238	666	24	174
Heilongjiang	987	210	528	18	231
Fujian	1 006	261	506	29	210
Liaoning	970	300	485	21	164
Chongqing	988	230	539	27	191
Shanxi	933	238	517	21	157
Jiangxi	928	277	446	25	180
Yunnan	756	296	286	26	149
Inner Mongolia	740	217	360	16	148
Jilin	710	188	354	15	153
Guangxi	734	233	326	28	147
Xinjiang	682	235	299	18	130
Tianjin	672	164	382	20	106
Guizhou	512	225	183	19	84
Qingdao	511	141	260	11	100
Gansu	485	144	238	14	89
Ningbo	391	174	162	10	45
Dalian	369	86	221	8	54
Xiamen	236	76	114	7	39
Hainan	206	72	89	7	38
Ningxia	211	68	97	6	40
Qinghai	104	44	40	3	17
Tibet	40	27	5	3	4
Group and Head Office Level	61	53	0	3	5

Note: Data of “Group and Head Office Level” refer to the premium income earned by the group and head office, which are not reflected in any region’s data.
Source: The CBIRC.

Table 24 Transactions of Payment Systems

(10 thousand transactions, RMB 100 million)

Items/Year	2016		2017		2018		2019		2020	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
HVPS	82 566.97	36 162 984.12	93 208.70	37 318 633.92	107 310.73	43 534 782.76	109 420.65	49 507 235.60	51 238.59	56 477 315.84
BEPS	234 830.13	309 131.24	252 753.84	331 445.29	218 279.40	355 326.99	262 747.64	605 762.37	345 847.09	1 468 749.46
IBPS	445 314.80	374 610.10	846 427.92	617 200.49	1 209 784.49	890 544.71	1 401 083.51	1 107 671.35	1 562 428.52	2 034 909.53
ACH	37 246.57	1 308 049.55	35 902.76	1 308 500.57	35 488.89	1 120 284.71	28 222.42	818 879.01	7 024.12	85 366.42
CFXPS	198.58	54 732.23	201.66	67 456.07	213.52	83 267.58	220.26	85 351.07	266.45	102 710.32
CIPS	63.61	43 617.74	125.90	145 539.58	144.24	264 463.17	188.43	339 255.39	220.49	452 719.17
Intra-bank Payment Systems of Banking Financial Institutions	2 583 027.85	12 154 693.66	3 231 336.24	13 336 885.70	3 669 527.73	13 320 871.21	1 646 891.13	12 186 942.70	1 691 863.67	15 883 193.10
Interbank Bankcard Payment System	2 376 180.09	670 694.00	2 934 772.13	938 491.66	3 551 388.83	1 202 916.18	13 517 472.61	1 736 037.62	15 056 000.29	1 921 845.97
NetsUnion Clearing Platform	—	—	—	—	12 847 693.77	579 065.80	39 754 200.00	2 598 422.78	54 316 848.16	3 488 636.29
City Commercial Banks Draft Processing System and Payment&Clearing System	—	—	—	—	6 295.78	5 882.82	477.20	7 320.89	755.90	11 004.03
Rural Credit Banks Payment &Clearing Systerm	—	—	—	—	59 778.84	30 285.70	130 239.91	29 284.94	173 805.52	26 442.46

Notes: ① According to the requirement of the PBC on "breaking the direct connection between the third–party payment institutions and commercial banks", all third–party payment institutions have connected to the system of UnionPay or NetsUnion. The transaction volume between commercial banks and payment institutions is no longer included in that through the intra–bank systems, and transaction volume between the City Commercial Banks Clearing Co.,Ltd. as well as members of the Rural Credit Banks Funds Clearing Center and third–party payment institutions is no longer included in that through the city commercial banks payment and clearing system and rural credit banks payment and clearing system.

② Since 2018, the statistical standard of item "Interbank Bankcard Payment System" has been adjusted. First, online payments involving bank accounts initiated by payment institutions and processed through the interbank bankcard payment system are added; second, the number of transactions only includes transactions of capital clearing, and inquiries, account verification and other non–capital clearing transactions are excluded.

Source: The PBC.

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