



# PEOPLE'S REPUBLIC OF CHINA

## FINANCIAL SECTOR ASSESSMENT PROGRAM

April 2025

### FINANCIAL SYSTEM STABILITY ASSESSMENT—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE PEOPLE'S REPUBLIC OF CHINA

In the context of the People's Republic of China's Financial System Stability Assessment, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its April 4, 2025, consideration of the FSSA.
- The **Financial System Stability Assessment** (FSSA) for the People's Republic of China, prepared by a staff team of the IMF for the Executive Board's consideration on April 4, 2025. This report is based on the work of an IMF Financial Sector Assessment Program (FSAP) mission to the People's Republic of China during July 19 to 25, 2023, January 16 to February 5, 2024, April 9 to 26, 2024, and September 11 to 30, 2024. The FSSA report was completed on February 4, 2025.
- A **Statement by the Executive Director** for the People's Republic of China.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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## IMF Executive Board Concludes 2024 Financial System Stability Assessment with the People's Republic of China

FOR IMMEDIATE RELEASE

**Washington, DC – April 4, 2025:** The Executive Board of the International Monetary Fund (IMF) concluded the 2024 Financial System Stability Assessment<sup>1</sup> (FSSA) with The People's Republic of China.

The FSSA found that since the last FSAP in 2017, the authorities have made notable progress in strengthening financial supervision and regulation, continuously implementing international regulatory standards, and enhancing systemic risk monitoring. Due to regulatory reforms they also made important reductions, in risks arising from non-bank financial institutions.

While bank capital and liquidity levels appear adequate overall, the FSAP concluded that financial stability risks are elevated. Rising vulnerabilities from the property sector downturn and widening strains in highly leveraged local government financial vehicles (LGFV) warrant attention as declining economic growth could affect credit portfolio quality and accommodative monetary policy is weakening banks' organic profitability, with smaller banks—particularly those with riskier business models—being more vulnerable.

The relatively larger capital and liquidity buffers of the largest banks and the availability of fiscal buffers for targeted interventions have thus far helped contain risks, but further steps remain necessary to strengthen the financial stability framework and pursue a more comprehensive solution to address the LGFV debt overhang. The authorities have enacted a number of measures to address the property downturn and LGFV financial stress, many of which were introduced after the FSAP took place, aimed at containing the impact of these risks.

Continued enhancement of regulation and supervision will ensure regulatory frameworks remain commensurate with the scale and complexity of the financial system—which will require additional resources and a further strengthening of analytical capacity. While the authorities have taken steps to address banking system weaknesses, the current crisis management framework does not adequately support the full range of options needed to manage systemic distress. Efforts to further strengthening the draft Financial Stability Law, designate an independent and properly resourced lead resolution authority, build greater crisis management capabilities and introduce an effective emergency liquidity assistance framework remain a priority.

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<sup>1</sup> The Financial Sector Assessment Program (FSAP), established in 1999, is a comprehensive and in-depth assessment of a country's financial sector. FSAPs provide input for Article IV consultations and thus enhance Fund surveillance. FSAPs are mandatory for the 47 jurisdictions with systemically important financial sectors and otherwise conducted upon request from member economies. The key findings of an FSAP are summarized in a Financial System Stability Assessment (FSSA).

## Executive Board Assessment<sup>2</sup>

Executive Directors broadly agreed with the analysis and recommendations of the Financial System Stability Assessment (FSSA) for China. They commended the authorities' significant progress since the 2017 FSAP, particularly to strengthen financial sector oversight and regulation, operationalize the macroprudential framework, and rein in risks in the nonbank financial intermediary sector. While noting the financial system's resilience to recent shocks, Directors encouraged the authorities to continue implementing the FSSA recommendations, particularly to further strengthen risk-based supervision, financial regulation, and systemic risk monitoring.

Directors were broadly reassured by the stress test findings that the banking system would remain resilient in an adverse scenario. At the same time, they stressed the need to strengthen data quality, granularity, collection, and accessibility to further enhance systemic risk assessment. Directors recommended close monitoring of mid-size and smaller banks, as they would be more vulnerable to shocks, and additional scrutiny from supervisors of some bank business models. They also underscored the need to further address risks from the ongoing property sector adjustment and local government financing vehicles, and positively assessed the various measures recently taken by the authorities in this respect.

Directors called for continued efforts to further strengthen risk-based supervision, boost supervisory resources and independence, cultivate specialist skills, and enhance inter-agency cooperation. They encouraged the authorities to continue enhancing their capacity to monitor the build-up of financial sector and systemic vulnerabilities and to strengthen crisis management and resolution frameworks in line with international best practices.

Directors commended the authorities for being at the forefront of green finance and encouraged them to continue bolstering their capacity to analyze climate risks. They also welcomed the advances on financial inclusion and looked forward to further progress in this area.

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.IMF.org/external/np/sec/misc/qualifiers.htm>.



# PEOPLE'S REPUBLIC OF CHINA

## FINANCIAL SYSTEM STABILITY ASSESSMENT

### KEY ISSUES

**Context:** China's investment-led high growth model has given way to more moderate growth amid an unresolved property sector adjustment and an overhang of local government financing vehicle (LGFV) debt.

**Findings:** Financial stability risks are elevated and rising, as compared to the 2017 FSAP, as asset quality deteriorates and bank profitability declines. The largest banks are well capitalized and liquid, and appear resilient to shock, but mid-sized and smaller banks appear more vulnerable. The property sector downturn and LGFV debt pose risks, while loss deferral practices reduce transparency and may veil losses. Progress in strengthening supervision and regulation since the 2017 FSAP has been uneven, financial stability frameworks are not fully commensurate with the system's scale and complexity, and the transition to market-based pricing has stalled. While the authorities have taken steps to address banking system weaknesses, the current crisis management framework does not adequately support the full range of options needed to manage systemic distress.

**Policies:** Shoring up supervisory capacity and scrutiny—including via better use of risk analytics and closing data gaps—and strengthening crisis management frameworks and capacity will be critical to safeguard financial stability as the property sector downturn plays out and LGFV debt problems are resolved. Timely loss recognition will improve transparency and move the system toward more efficient resource allocation.

February 4, 2025

Approved By  
**May Khamis and Thomas Helbling**

Prepared By  
**Monetary and Capital Markets Department**

This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited the People's Republic of China during July 19 to 25, 2023, January 16 to February 5, 2024, April 9 to 26, 2024, and September 11 to 30, 2024.

- The FSAP team was led by Jennifer Elliott (IMF) and Erik Feyen (World Bank) and included Dimitrios Laliotis and Constant Verkoren (IMF deputy mission chiefs), Marius Vismantas (World Bank deputy mission chief), Parma Bains, Hee Kyong Chon, Jose Garrido, Grace Jackson, Phakawa Jeasakul, Sujan Lamichhane, Estelle Liu, Istvan Mak, Apostolos Panagiotopoulos, Jaime Ponce, Raadhika Vishvesh, Wei Sun (all IMF staff), Thomas Boemio, Carsten Detken, Jennifer Long, and Lyndon Nelson (IMF external experts); Alex Berg, Buddy Buruku, Ana Carvajal, Pierre-Laurent Chatain, Dorothee Delort, Nepomuk Dunz, Ivor Istuk, Andres Martinez, Will Paterson, Danita Pattemore, Martijn Regelink, Swee Ee Ang, Simon Walley, Jing Zhao, and Shichao Zhou (all World Bank staff) and Franklin Allen, Antonio Carrascosa, Ivan Luis Goncalves de Oliveira Lima, Jane O'Doherty, and Craig Thorburn (World Bank external experts). Sihem Benamara, Qiqi Fang, Chenming Li, and Evelyn Schimpf provided editorial, research, and logistical assistance.
- The mission met with key officials from regulatory and government agencies, including the People's Bank of China (PBC), National Financial Regulatory Administration (NFRA), China Securities Regulatory Commission (CSRC), Ministry of Finance (MOF), China Deposit Insurance Corporation (CDIC), and Supreme People's Court as well as representatives from financial institutions, and other stakeholders. The authorities were open and engaged in discussions with the team and generous with their time and knowledge. They persevered in providing the team with confidential supervisory data that provided unique insights to the FSAP, which was greatly appreciated. The team also thanks the authorities for their warm hospitality.
- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- The People's Republic of China is deemed by the Fund to have a systemically important financial sector according to Mandatory Financial Stability Assessments Under the Financial Sector Assessment Program—Update (11/18/2013), and the stability assessment under this FSAP is part of bilateral surveillance under Article IV of the Fund's Articles of Agreement. The previous FSAP was completed in [2017](#).
- This report was prepared by Jennifer Elliott, Dimitrios Laliotis, Constant Verkoren and the IMF FSAP team for the People's Republic of China.

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## Glossary

AMC	Asset Management Company
AML/CFT	Anti-Money Laundering/Countering the Financing of Terrorism
AMLB	Anti-Money Laundering Bureau
BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principles
CBIRC	China Banking and Insurance Regulatory Commission
CCoB	Capital Conservation Buffer
CCP	Central Counterparty
CCyB	Counter-Cyclical Capital Buffer
CDB	China Development Bank
CDD	Customer Due Diligence
CDIC	China Deposit Insurance Corporation
CET1	Common Equity Tier 1
CFC	Central Financial Commission
CGB	Central Government Bond
CIS	Collective Investment Scheme
CRA	Credit Rating Agency
CRC	Credit Reference Center
CRC	Credit Risk Charges
CRE	Commercial Real Estate
CSRC	China Securities Regulatory Commission
DIF	Deposit Insurance Fund
D-SIB	Domestic Systemically Important Bank
D-SII	Domestic Systemically Important Insurers
DSTI	Debt Service-to-Income
DVP	Delivery Versus Payment
EBL	Enterprise Bankruptcy Law
ELA	Emergency Liquidity Assistance
EWS	Early Warning System
FATF	Financial Action Task Force
FHC	Financial Holding Company
FMI	Financial Market Infrastructure
FSA	Financial Sector Assessment
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSDC	Financial Stability and Development Committee
FSGF	Financial Stability Guarantee Fund
FSL	Financial Stability Law
FSSA	Financial System Stability Assessment

GDP	Gross Domestic Product
GHG	Green House Gases
G-SIB	Global Systemically Important Bank
HQLA	High Quality Liquid Assets
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Process
ICP	Insurance Core Principles
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IRB	Internal Rating Based
KA	Key Attributes
LAC	Loss Absorbing Capacity
LCR	Liquidity Coverage Ratio
LGB	Local Government Bond
LGD	Loss Given Default
LGFV	Local Government Financing Vehicles
LTI	Loan-to-Income
LTV	Loan-to-Value
MCM	Monetary and Capital Markets Department, IMF
MEE	Ministry of Ecology and Environment
ML	Money Laundering
MoF	Ministry of Finance
MoU	Memorandum of Understanding
MPA	Macroprudential Assessment
MSE	Micro and Small Enterprises
MSME	Micro, Small, and Medium-Sized Enterprises
NBFI	Non-bank Financial Intermediary
NCD	Negotiable Certificate of Deposit
NFES	National Financial Education Strategy
NFRA	National Financial Regulatory Administration
NGFS	Network for Greening the Financial System
NPL	Nonperforming Loan
NPS	National Payment System
NRA	National Risk Assessment
NSFR	Net Stable Funding Ratio
PBB	Policy Bank Bond
PBC	People's Bank of China
PCG	Partial Credit Guarantee
PD	Probability of Default
PEP	Politically Exposed Persons
PFMI	Principles for Financial Market Infrastructures
PSP	Payment Services Provider

RAM	Risk Assessment Matrix
ROA	Return on Assets
RRP	Recovery and Resolution Planning
RWA	Risk-Weighted Assets
SDG	Sustainable Development Goals
SME	Small and Medium-sized Enterprises
SOE	State-Owned Enterprises
SSF	Social Security Fund
STeM	Stress Testing Matrix
TF	Terrorist Financing
TLAC	Total Loss Absorbing Capacity
WEO	World Economic Outlook
WMP	Wealth Management Product

## EXECUTIVE SUMMARY

### **After years of financial deepening and growth, China's financial system is at a turning point.**

The system has grown faster than the economy to over 450 percent of GDP, with banks dominant. Capital markets have grown deeper and more liquid since the 2017 Financial Sector Assessment Program (FSAP),<sup>1</sup> and there is a sizeable asset management sector. The system is largely government-controlled and highly interconnected, although direct linkages to global financial markets remain limited. Legal, regulatory, and supervisory reforms initiated since 2017 have progressed—including via the recent creation of the National Financial Regulatory Administration (NFRA) which has oversight responsibility for banks, insurers, and other financial institutions.

### **That said, financial stability risks are elevated and rising, as compared to the 2017 FSAP.**

Financial risks related to local government financing vehicles (LGFV) and the property sectors—flagged in the 2017 FSAP—are materializing, with a property downturn and widening strains on highly leveraged LGFV already having a negative impact on financial institutions. Smaller banks with riskier business models have encountered difficulties, signaling a manifestation of risks. The relatively larger capital and liquidity buffers of the largest banks and the availability of fiscal buffers for targeted interventions have thus far helped contain risks, but mounting risks call for a more comprehensive approach.

**More timely loss recognition and greater reliance on market price signals would improve risk pricing and reinforce confidence.** Nonperforming loan ratios have remained broadly stable, as banks remain focused on write-offs and less transparent asset disposals to asset management companies (AMCs). However, forbearance measures and continued reliance on implicit government support increases the proportion of legacy asset, while risking mispricing and credit loss deferral. With some notable exceptions, weak banks are addressed via consolidations that may not address underlying fragilities. In addition, government-owned institutions and funds are used to support as 'buyers of last resort' and intervene in financial markets to support asset prices. For example, analysis based on publicly available data suggests that an LGFV restructuring strategy predicated on interest rate relief has serious implications for bank earnings and future lending capacity, while at the same time failing to restore LGFV repayment capacity. The need to address the buildup of loss-making assets is reaching a critical juncture where relying on temporary or partial solutions will only serve to further exacerbate the misallocation of capital, mispricing of risk in the financial sector and elsewhere in the economy and the gradual build-up of veiled losses that will have macroeconomic implications.

**Bank capital and liquidity levels appear adequate in aggregate, but rising vulnerabilities warrant attention.** Slower economic growth compared with past decades will affect credit quality, while accommodative monetary policy and directed lending are weakening banks' organic profitability. Smaller banks are more vulnerable than larger peers, given lower capital buffers, higher funding costs, declining net interest income, and increased concentration risks. Stress testing of a sample of the 55 largest banks suggests that in aggregate, capital ratios remain above minimum

<sup>1</sup> [People's Republic of China: Financial System Stability Assessment-Press Release and Statement by the Executive Director for People's Republic of China.](#)

hurdle rates even in a severe downside scenario, albeit with significant dispersion across the sample. Some bank business models appear particularly vulnerable, with several banks breaching regulatory minima in the adverse scenario—even though shortfalls are manageable. Risks from nonbanks have declined since 2017 due to regulatory reform. However, because non-bank financial intermediaries (NBFI) are highly interconnected with banks through ownership, common asset holdings, and substantial funding linkages, redemption shocks could cascade across sectors. More granular analysis by the authorities, using non-public data, would be advantageous as data constraints—for example a lack of data on the distribution of exposures to LGFV risk across banks—placed limitations on the analytical work conducted by the FSAP. Data gaps limited the scope and depth of the systemic risk assessment as the FSAP team did not get access to granular data on many key balance sheet items and exposures.

**Regulation and supervision warrant further strengthening, particularly given elevated risks.**

Supervisors have limited autonomy with evident tension between stability and growth objectives calling for a sharpening of mandates and greater interagency coordination. There are notable weaknesses in headcount, skills, tools, methodologies, and an immediate need for additional capacity for risk analysis. Furthering the ongoing transition towards a more risk-based approach to supervision—including for NBFI—will promote supervisory effectiveness, while strengthening conglomerate supervision can help mitigate cross-sectoral risks. Bank capital requirements should be more tailored to individual bank risk profiles, including through active use of the Basel Pillar 2 framework. Addressing deficiencies in asset classification; supervisory data collection, sharing among regulators, and analysis; and risk monitoring—along with critical disclosure gaps for financial institutions is warranted. Regulatory forbearance and asset classification exceptions should be phased out. Strengthening of systemic risk monitoring and an analysis to underpin supervisory, macroprudential and financial stability policy actions remains a key priority. Further tightening regulation for payment services providers is advisable, with greater differentiation of regulatory standards across risk profiles. The authorities should ensure a proper balance between enabling price formation and managing market volatility and continue to reduce persistent perceptions of implicit guarantees.

**Establishing a comprehensive bank resolution framework and buttressing the insolvency and debt resolution system remain priorities.** Progress since 2017 has been insufficient, with the current financial safety net remaining fragmented, prone to inefficient decision-making, largely reliant on public funding, and not equipped to deal with systemic distress. Strengthening the draft Financial Stability Law, designating an independent and properly resourced lead resolution authority, building greater crisis management capabilities and the introduction of an effective emergency liquidity assistance framework, are necessary. The corporate restructuring and insolvency framework should be further modernized and aligned with international standards to handle the overhang of distressed debt, including from the LGFV and property sectors.

**While financial inclusion is high and access to finance has increased, the authorities should continue their efforts to reduce the financing gap for micro, small and medium-sized enterprises (MSME)—while ensuring adequate risk pricing.** Account penetration, savings, and use of payment services is generally very high, but credit constraints for MSME appear to persist.

Efficiently leveraging targeted interventions, including partial credit guarantee schemes, can help support MSME lending while ensuring adequate risk pricing.

**China has been at the forefront of green finance and must now increase focus on climate-related financial sector risks and enhance coordination, data, and capacity.** Risk analysis suggests that the impact of transitioning to a green economy would be limited for banks, but balance sheets are exposed to rising physical risks. Regulators should bolster capacity for climate risk understanding and oversight and improve coordination to enhance efficiency and improve the climate information framework.

**Table 1. China: FSAP Key Recommendations<sup>1</sup>**

Topic	Agency	Priority	Timing <sup>2</sup>
<b>Cross-cutting</b>			
1. Design and implement a medium-term comprehensive plan to address financial stability risks associated with LGFV debt overhang.	Multiple	High	I
2. Take decisive steps to fully recognize expected losses on balance sheets of financial institutions and continue to move toward market-based pricing of financial assets.	Multiple	High	I
<b>Systemic Risk Analysis</b>			
3. Strengthen analytical and stress testing capacity, supported by more granular data and specialist staff, to comprehensively analyze bank specific and system-wide risks including those from concentrations of exposures including LGFV debt; ensure sufficient scrutiny of banks' internal risk models. (¶22, 50, 52)	NFRA, PBC	High	ST
4. Closely monitor the growth of exposures to non-viable entities in bank balance sheets; assess macrofinancial risks stemming from delayed loss recognition; and switch to a forward-looking approach in assessing systemic risks. (¶22, 49, 53)	NFRA, PBC	High	I
5. Enhance analytical capacity for comprehensive and granular analysis of climate-related risks in the financial system, aided by improved data collection and strengthened collaboration with climate-relevant government and research agencies. (¶47)	NFRA, PBC	Medium	MT
<b>Macroprudential Policy Framework</b>			
6. Further strengthen systemic risk monitoring by creating a stress event dataset, back-testing indicator properties and deriving data-based thresholds for policy actions and enhance coordination by establishing a Macroprudential Policy Committee to include key agencies. (¶50)	PBC	Medium	MT
<sup>1</sup> Responsible agencies are added in alphabetical order. <sup>2</sup> "I-Immediate" is within one year; "ST-short-term" is 1–3 years; and "MT-medium-term" is 3–5 years.			

**Table 1. China: FSAP Key Recommendations (Continued)**

<b>Financial Sector Oversight</b>			
<i>Cross-cutting Issues</i>			
7. Expand NFRA's autonomy over resources and strengthen staffing, particularly at head office—informed by a bottom-up analysis—to meet new challenges, accommodate increased responsibilities, and strengthen supervisory intensity. (¶152)	NFRA	High	ST
8. Clearly communicate and ensure the primacy of the NFRA's safety and soundness objective, as compared to developmental objectives. (¶152)	CSRC, NFRA	High	ST
9. Strengthen data validation and broaden the perimeter of horizontal risk analysis; continue developing technical skills to support supervisory risk assessments and centralize expertise through the establishment of dedicated risk teams. (¶152, 53)	NFRA	Medium	ST
<i>Banking</i>			
10. Enhance the effectiveness of the Supervisory Review Process to address institution-specific risks and risks not covered under Pillar 1; tailor bank capital requirements to individual risk profiles through more active use of Pillar 2. (¶151)	NFRA	Medium	ST
11. Enhance transparency by making granular information on banks' financial soundness—including prudential ratios, metrics on credit portfolio quality, profitability and liquidity metrics—publicly available. (¶154)	NFRA, PBC	High	MT
12. Intensify oversight of smaller and high-risk banks (¶155, 22)	NFRA	High	ST
13. Strengthen oversight of bank and banking group shareholders and reduce the limit on aggregate related-party exposures. (¶155)	NFRA	Medium	ST
<i>Securities and Derivatives Market</i>			
14. Ensure price-stabilization measures do not undermine the credibility of price formation including by closely monitoring use of market-wide circuit breakers and enhancing communication on the rationale for any intervention in the equity market. (¶158)	CSRC	Medium	ST
<i>Insurance</i>			
15. Continue addressing transitional issues (e.g., C-ROSS-II); refine supervisory assessment methods and skills regarding corporate governance; provide guidance on insurer stress tests. (¶159)	NFRA	High	ST
<i>NBFI</i>			
16. Designate a lead authority to coordinate comprehensive risk assessments, aided by intensified market surveillance, while leaving the responsibilities and autonomy of the sectoral agencies intact. (¶161)	CFC, CSRC, NFRA, PBC	High	ST

**Table 1. China: FSAP Key Recommendations (Continued)**

<i>Big Tech</i>			
17. Strengthen rules addressing risks specific to systemically important payment service providers (PSPs), introduce tiered prudential requirements for PSPs, and a framework for monitoring BigTech activities on a consolidated basis. (¶62, 63)	PBC	Medium	ST
<i>Systemic Liquidity Management</i>			
18. Further optimize the reserve requirement framework by aligning its tenor with the OMOs and optimizing the penalty schedule for reserve shortfalls. (¶66)	PBC	Medium	MT
19. Strengthen the collateral framework by revising the eligibility criteria, introducing robust valuation methodologies, and applying conservative haircuts. (¶66)	PBC	High	ST
<i>AML/CFT</i>			
20. Finalize and enact amendments to the Anti-Money Laundering Law. (¶68)	PBC	Medium	ST
21. Continue to strengthen the beneficial ownership regime, including by fully operationalizing the register and publication of information. (¶70)	PBC	Medium	ST
<b>Financial Safety Nets, Crisis Management, and Corporate Insolvency</b>			
<i>Financial Safety Nets and Crisis Management</i>			
22. Further refine and enact the draft Financial Stability Law to introduce an effective resolution regime, duly aligned with international good practice. (¶72)	CDIC, NFRA, PBC	High	I
23. Designate and operationalize a dedicated lead resolution authority and clarify the role of the Central Financial Committee (CFC), with the aim to further centralize resolution functions. (¶73)	CDIC, NFRA, PBC	High	ST
24. Extend LAC requirements to, at least, all D-SIBs and reconsider (or at least cap) reliance on DIF resources as a discount on TLAC requirements. (¶75)	CDIC, NFRA, PBC	Medium	MT
25. Adopt regulations governing the FSGF, including funding target, governance, contributions, usage, and public backstops. (¶75)	CDIC, MOF, NFRA, PBC	Medium	ST
26. Limit the use of DIF resources to insured deposit payouts and contributions to transfer strategies on a 'least cost' basis; and increase industry contributions to the DIF. (¶76)	CDIC	High	I
27. Design and implement a dedicated framework for the provision of emergency liquidity assistance, duly aligned with international best practices. (¶66)	PBC	High	ST
<i>Corporate Insolvency</i>			
28. Increase capacity and expertise of courts and establish comprehensive regulation of insolvency administrators. (¶77)	NPC, SPC	Medium	MT

**Table 1. FSAP Key Recommendations** (Concluded)

29. Update the Enterprise Bankruptcy Law, with amendments (among others) regulating the pre-reorganization procedure, amending reorganization provisions according to international standards, and introducing provisions for group and cross-border insolvency. (¶179, 80)	NPC	High	ST
30. Strengthen the supervision and regulation of AMCs while increasing their transparency by publicly disclosing basic data such as sale prices and recovery rates. (¶181)	NFRA	High	MT
<i>Financial Sector Development</i>			
31. Revise the definition of “financial inclusion MSE” to be based on objective criteria and phase out policies based on lending targets and reduced credit spreads for MSME loans. (¶182)	MOF, NFRA, PBC	High	ST
32. Adhere to market-oriented and rule-based reforms to support long-term capital development objectives. (¶182)	CSRC, exchanges NFRA PBC	High	ST
33. Enhance climate risk disclosure standards and guidance; further harmonize national taxonomies. (¶182)	CSRC, MOF, MEE, NDRC, NFRA, PBC	High	MT

## INTRODUCTION

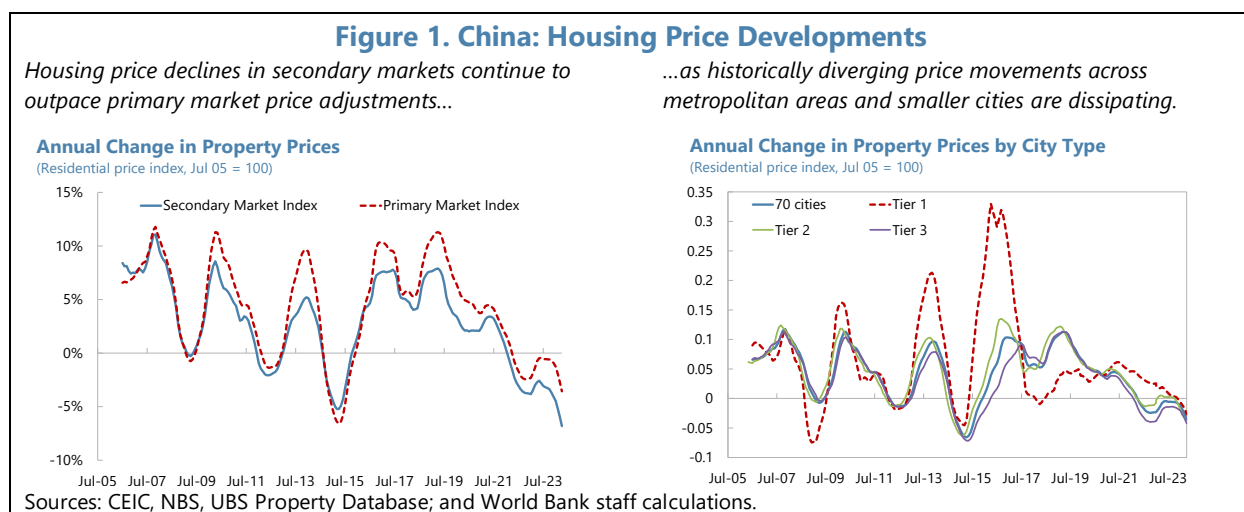
**1. This report presents a comprehensive assessment of financial stability in China but is weighted toward the analysis of the rising risks in the financial sector—the biggest change since the last FSAP in 2017.** Progress has been made by the authorities in implementing recommendations of the 2017 FSAP, although more progress is called for as many findings and recommendations—particularly in financial supervision and crisis management framework—remain relevant. Detailed recommendations to improve the risk mitigation framework were provided to the authorities in various supporting technical notes but their findings are necessarily truncated here due to space constraints.

## BACKGROUND

### A. Macroeconomic Context

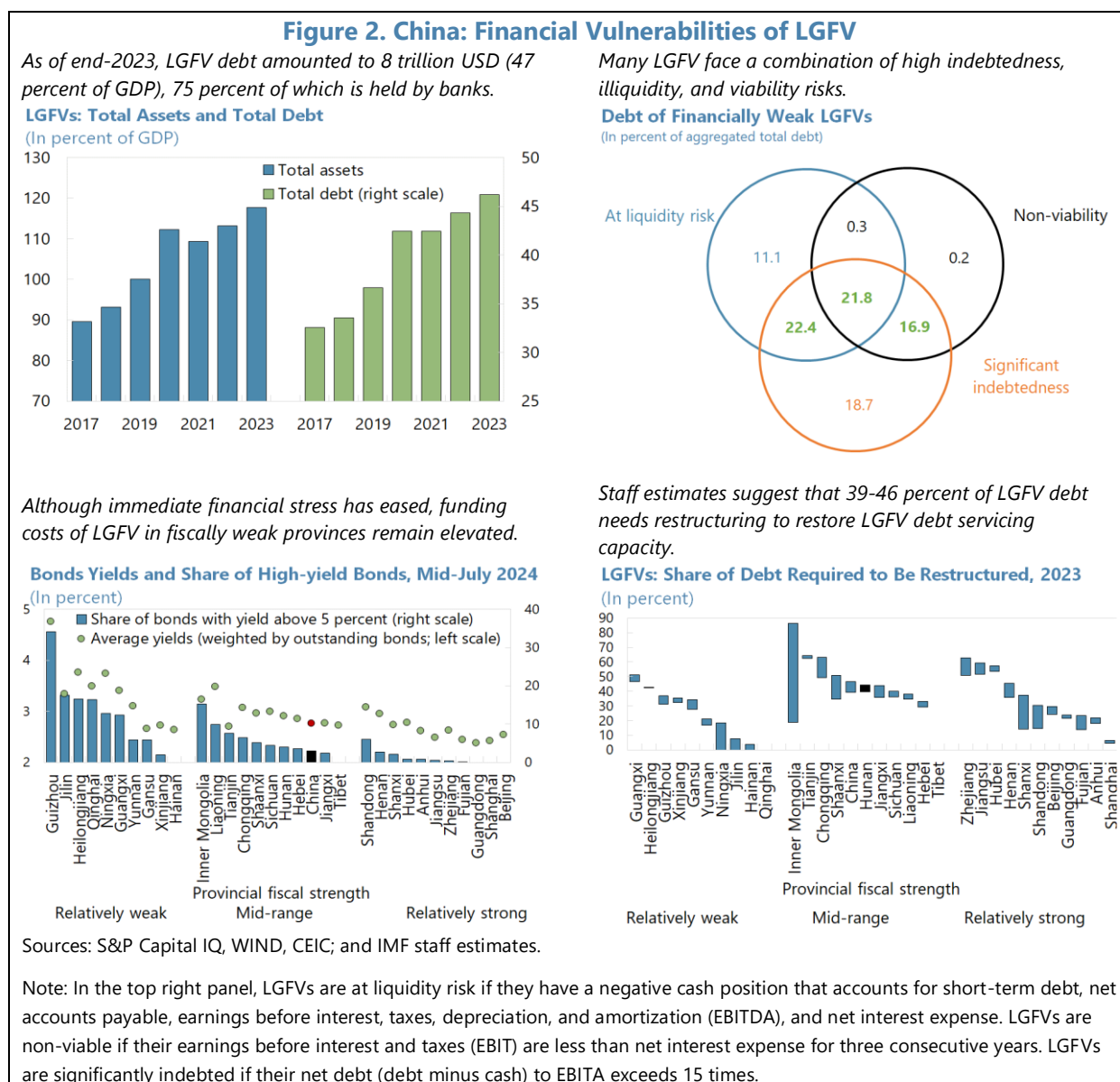
**2. China's growth is facing downward pressures.** Drivers of past rapid growth have weakened, and medium-term prospects are expected to remain below pre-pandemic levels (Annex 1, Figure 1, chart 1). Inflation has trended down, and monetary policy is accommodative, amid continued economic slack, with risks of sustained disinflation emerging (Annex I, Figure 1, chart 2).<sup>2</sup>

**3. The property sector is experiencing the deepest correction in recent history, with profound macrofinancial implications.** Primary market sales plummeted in 2021, causing large property developer defaults, and sales remain sluggish (Annex I, Figure 1, chart 3)—although falling secondary market prices have supported transaction volumes (Figure 1). A longer-than-expected adjustment period in the property sector poses risks to investment and mortgage credit growth, while credit losses and interest margin pressures may erode financial institutions' health.



<sup>2</sup> Also see [Staff Report for the 2024 Article IV Consultation](#).

**4. The property sector slump has materially weakened local public finances and local government financing vehicles (LGFV), with potential spillovers to the financial system, especially in economically weaker regions.** LGFV are a broad set of state-owned enterprises used to raise financing for local public works, infrastructure, and commercial activities; they evolved due to constraints in local government direct financing. LGFV are heavily financed through debt issuance and local government sale of property. As of end-2023, outstanding LGFV debt was equivalent to 46 percent of GDP.<sup>3</sup> In part due to the plummet in property sales, many LGFV have experienced financing strains and erosion of their debt servicing capacity (Figure 2, charts 2 and 3). Amidst uncertainty about the fair valuation of financial institution's holdings of these debt instruments and concerns that provisions may not fully reflect forward-looking credit losses, a wave of LGFV debt defaults constitutes a serious risk to financial stability.



<sup>3</sup> Based on a sample of about 3,700 bond-issuing LGFVs according to the WIND database.

**5. Credit demand has remained weak post-pandemic, despite monetary easing.** The authorities have cut interest rates and required reserve ratios; encouraged lending to government-white listed projects; and directed low-cost lending to priority sectors (Annex I, Figure 2, chart 4).<sup>4</sup> Despite these measures credit growth has been weak (Annex I, Figure 2, chart 2) as households continue to prepay mortgages, and corporate borrowing has decelerated.

**6. Household and corporate balance sheets appear healthy, but real estate exposures and the steep rise in lending to small and medium-sized enterprises (SME) present risks.** Household debt to financial entities comprised around nine percent of total system assets, and savings accounted for almost 32 percent of disposable income in 2023. Real assets represent a large share of household wealth. Bank credit to nonfinancial corporates (including LGFV) amounted to 134 percent of GDP in 2023, with corporate leverage rising marginally since 2020 to around 38 percent. Bank lending to micro and small enterprises (SME), which may present future risks, rose steeply to 12 percent of total bank loans in 2023.

## B. Financial Sector Structure and Performance

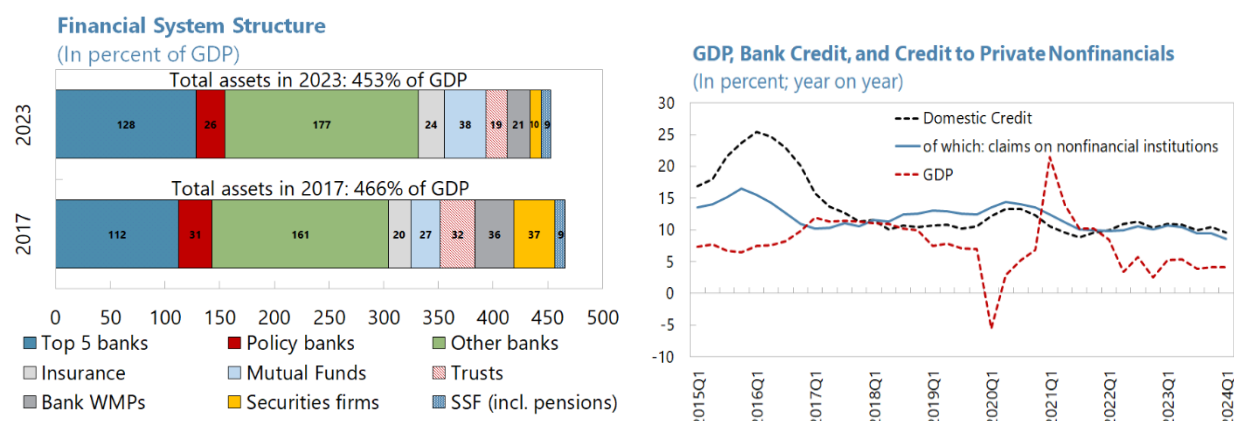
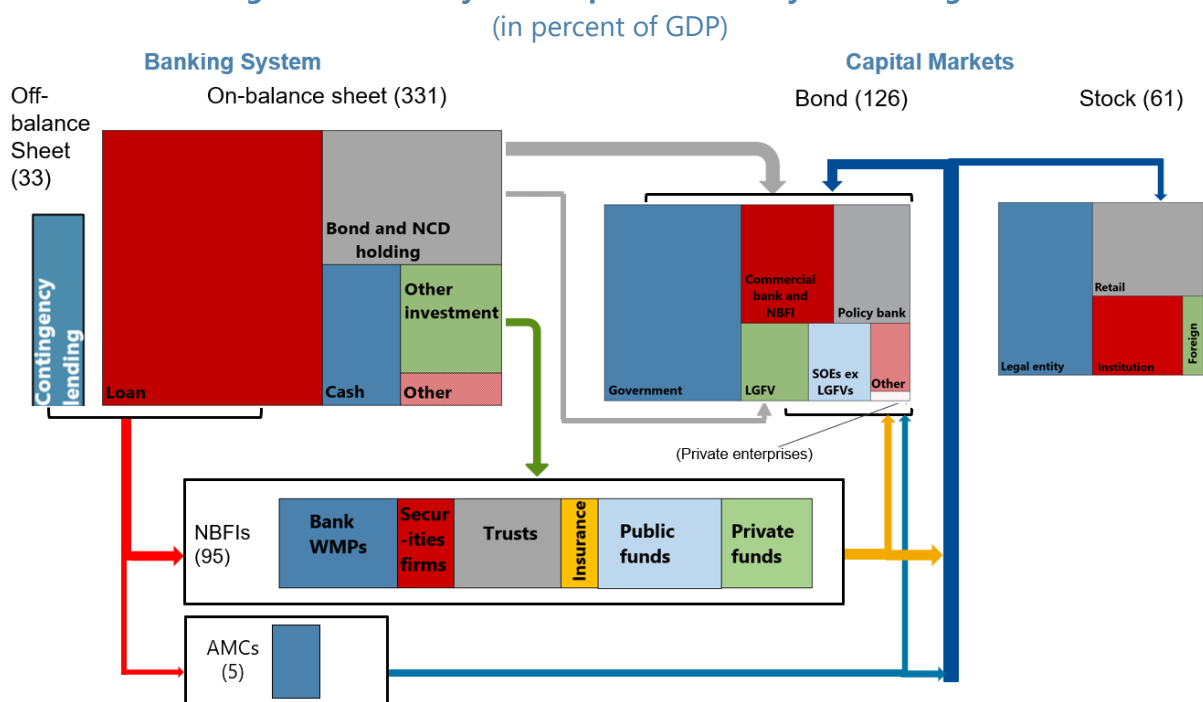
**7. China's financial system—one of the largest in the world—remains bank-centric, largely government-controlled, and highly interconnected.**<sup>5</sup> The relative importance of the banking sector has increased slightly since 2017, while regulatory and reform measures have stalled the growth of the nonbank sector, especially NBFIs (Figure 3, chart 1) reducing a source of risk cited in 2017. The banking sector is dominated by five state-owned global systemically important banks (G-SIBs) and one other large bank, together accounting for around 42 percent of total banking system assets<sup>6</sup>, but also includes medium-sized (joint-stock and city commercial banks, 30 percent of bank assets), and smaller banks (rural commercial banks and village/county banks, 12 percent of bank assets) (Figure 5). Loans are 50–60 percent of total assets (Figure 6, chart 1), followed by investment in securities (20–30 percent).<sup>7</sup> About 70 percent of debt securities held by banks are booked at amortized cost (not subject to mark-to-market valuation). Banks are predominantly funded by deposits (Figure 6, chart 2). Most financial institutions are directly or indirectly majority state-owned and with crossholdings by central and local governments, state-owned enterprises (SOE), and financial institutions, producing a complex and highly interconnected sector. Cross-border exposures are limited, although Chinese banks play a leading role in various smaller markets.

<sup>4</sup> In the latter half of 2024, the Chinese authorities announced additional policy measures that seek to boost demand and strengthen confidence. These include further monetary policy loosening, additional support for the property and financial sectors, and steps to address 'hidden' debt of local government, including through debt refinancing. As these measures were only announced recently and implementation details are limited, the FSSA cannot provide an assessment of their effectiveness.

<sup>5</sup> Also see Annex I, Figure 6 for a peer group comparison of key features of the financial system.

<sup>6</sup> Bank of China, Industrial and Commercial Bank of China, Agricultural Bank of China, China Construction Bank and Bank of Communications.

<sup>7</sup> A single-source official breakdown of bank lending by corporate segment (e.g., corporate, LGFV, SME, MSME) was not made available to the FSAP.

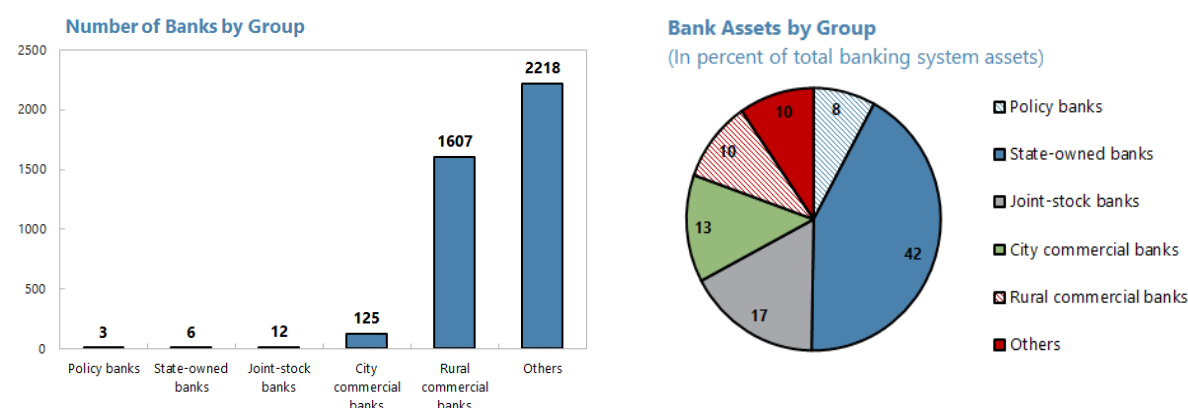
**Figure 3. China: Financial System Structure and Domestic Credit****Figure 4. China: Stylized Map of Financial System Linkages**

Sources: IMF staff estimates.

Notes: AMC = financial asset management companies; NBFIs=non-bank financial intermediaries; LGFV=local government financing vehicles; SOE=state-owned enterprises; NCD=negotiable certificate of deposit; Securities firms=securities companies, futures companies, fund companies and their subsidiaries.

Off-balance sheet exposures include credit lines, guarantees, and wealth management products (WMP) issued by banks that have not established dedicated subsidiaries. The on-balance sheet "other investment" category includes bank investment in asset management products.

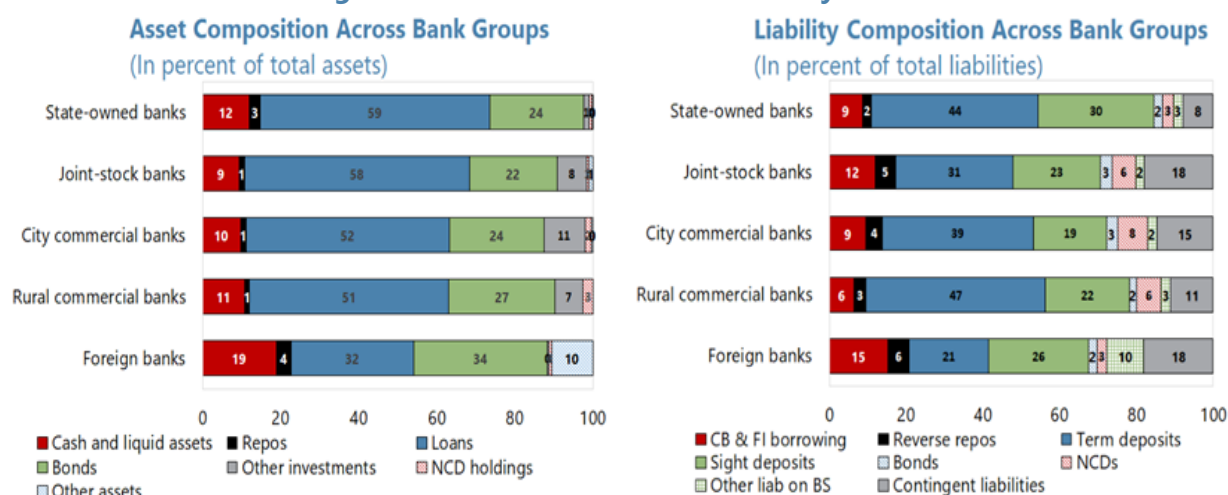
Arrows represents the flow of funds. The arrows' size is only indicative of the relative magnitude of the flows (based on staff estimates as of end-2023) and should not be directly compared.

**Figure 5. China: Bank Groups and Asset Sizes**

Sources: NFRA, CEIC; and IMF staff calculations.

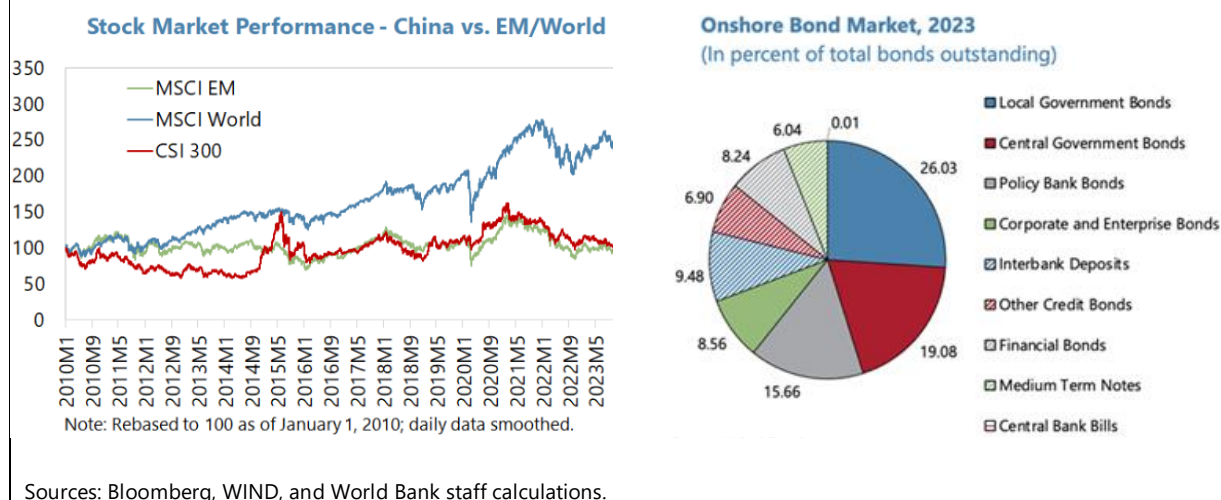
Note: The state-owned and joint-stock commercial banks operate nationwide and have preferential access to SOE and large corporate clients. City and rural commercial banks mainly serve local businesses and are more exposed to LGFV and small and medium-sized enterprises (SMEs) in relative terms; smaller banks serve small companies and local populations. Asset size numbers for policy banks and rural commercial banks are as of 2022, no 2023 figures are available.

Other institutions include rural financial institutions, village banks and other financial institutions.

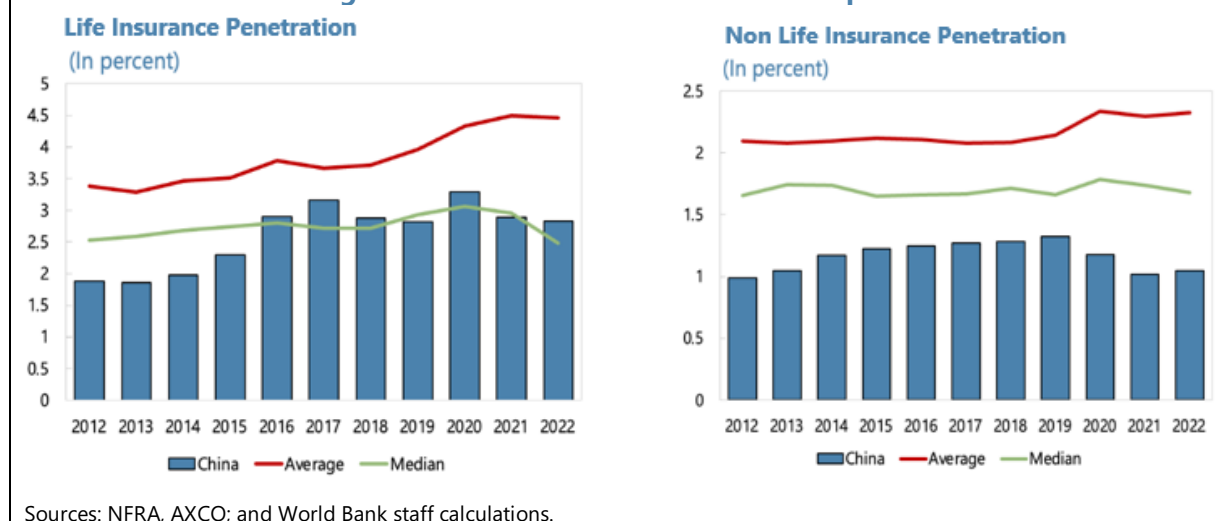
**Figure 6. China: Bank Asset and Liability Structure**

Sources: CEIC; and IMF staff calculations (based on the FSAP's stress testing sample).

**8. China's capital markets are among the largest in the world, but the investor base remains relatively small.** The bond and equity markets stand at 126 and 61 percent of GDP respectively (Figure 4). Forty-three percent of outstanding corporate bonds are issued by LGFV and SOE account for more than 90 percent of recent new issuance. Key institutional investors, pension funds (10 percent of GDP) and insurance companies (24 percent of GDP), are relatively small. Market perception of implicit government guarantees may still be reflected in tight credit spreads. Since the 2017 FSAP, progress has been made with dual listings of equities, corporate bonds issuance outside China, and broader access to the Chinese mainland markets via Hong Kong SAR. However, strict capital controls result in domestic financial savings being channeled primarily to domestic assets.

**Figure 7. China: Capital Market Developments**

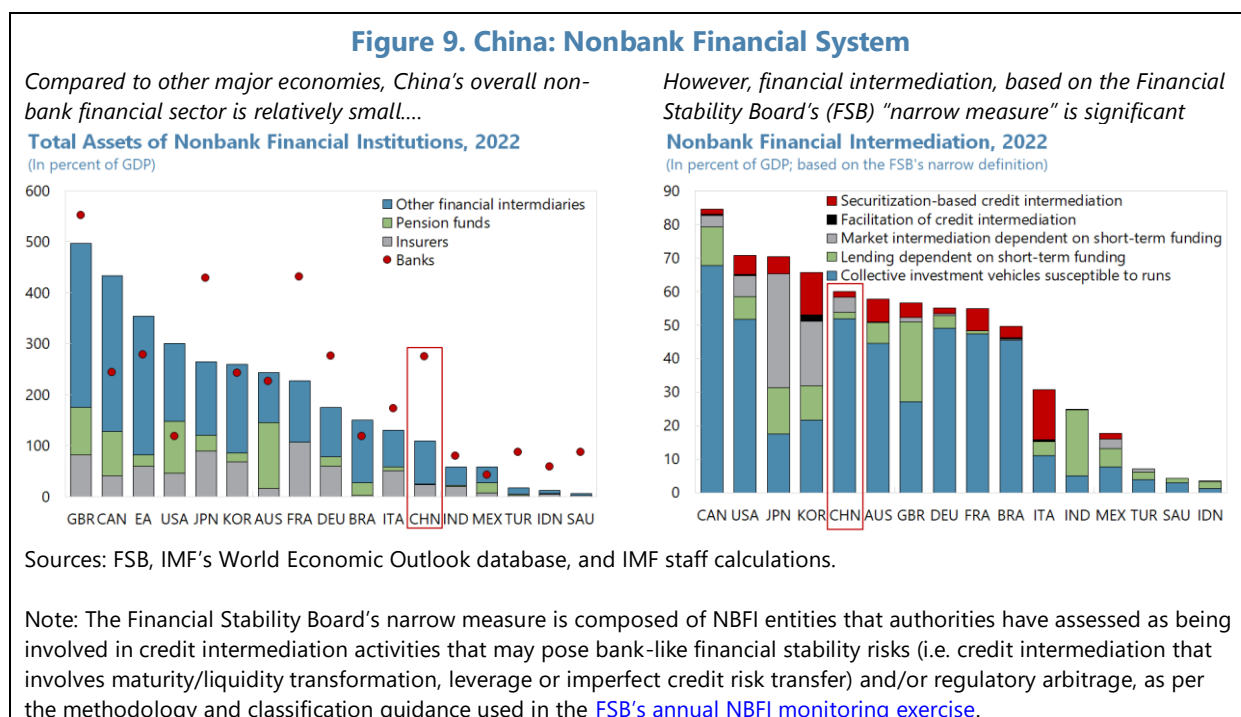
**9. The insurance sector—the second largest in the world by value—is not yet fully developed.** The sector makes up about 5 percent of China's financial system (Figure 4). Total premium for 2023 was over US\$730 billion but life insurance penetration, at 4.1 percent, is consistent with a market that is still developing (Figure 8).<sup>8</sup> The sector's product range is comprehensive but oriented toward traditional life insurance savings products.

**Figure 8. China: Insurance Sector Developments**

**10. Nonbank financial intermediaries are large and interconnected and focused on asset management.** Total assets under management are estimated at 95 percent of GDP (down from 130 percent of GDP in 2017), positioning China as one of the four largest asset management markets in the world (Figure 4 and Figure 9). Bank-managed wealth management products (WMPs), public and private investment funds, and trusts all compete for corporate and household savings. There are

<sup>8</sup> Insurance penetration, a common measure of sector development, is defined as total premium as a percentage of GDP.

strong interlinkages with the rest of the financial system through common assets and cross-ownership, with investments largely comprised of bonds—including those issued by financial institutions, LGFVs and AMCs.



### 11. China has one of the largest climate finance markets in the world in US dollar terms.

Green lending represents 12 percent of all bank loans<sup>9</sup> with about US\$270 billion in outstanding green bonds in the corporate market. Green investment funds account for 1.4 percent of managed assets.

### 12. Digital finance is well-advanced with larger technology companies playing a central role.

In particular, the use of mobile payments is widespread with a few very large technology companies that provide financial services ("BigTech") having become systemically important.<sup>10</sup>

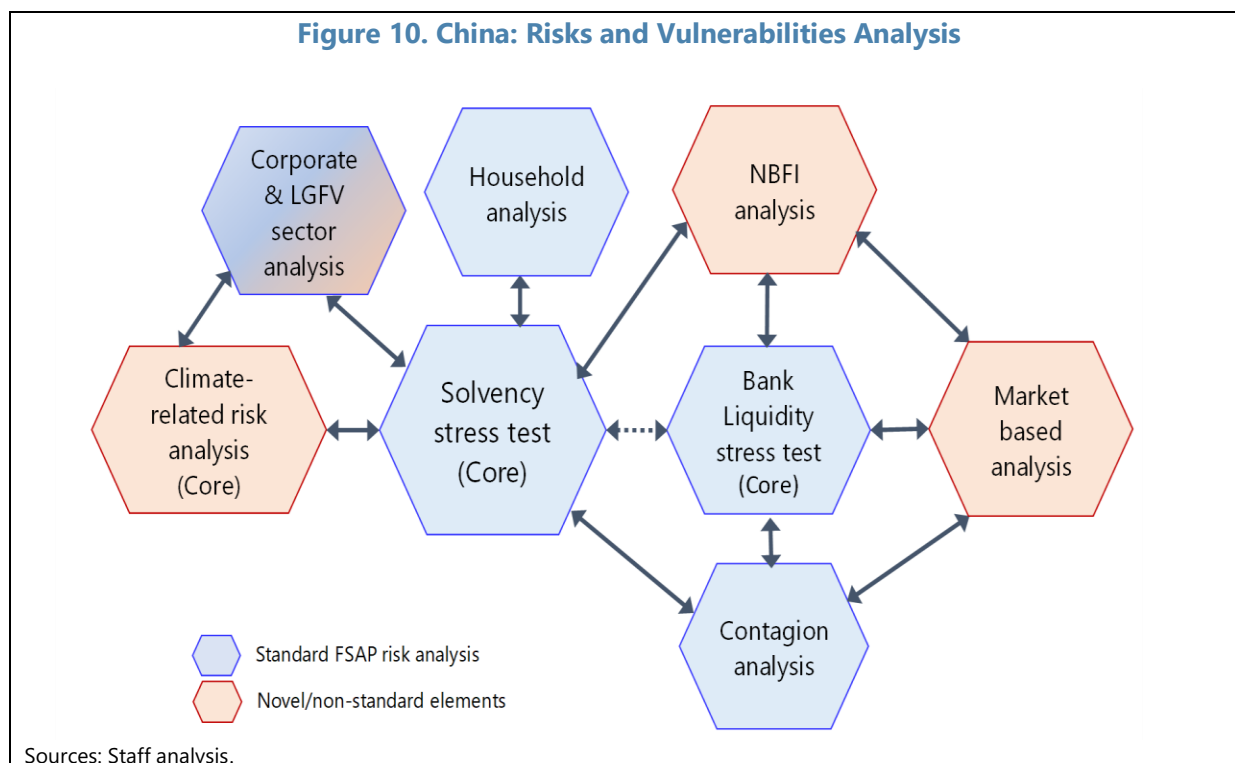
## SYSTEMIC RISK ASSESSMENT

### 13. The resilience of China's financial system to severe but plausible shocks was assessed by the FSAP using five core exercises.

Solvency and liquidity stress testing and climate risk analysis were supplemented by interconnectedness (contagion) analysis and targeted risk assessments for specific sectors (NBFI, LGFV, households and corporates) (Figure 10). This comprehensive set of analytical work (see Annex III for technical details) explores the possible effects of the realization of the risks set out in the Risk Assessment Matrix (RAM) (Annex II).

<sup>9</sup> Data as of end-2023.

<sup>10</sup> Use of digital payments is almost universal, with 97 percent of account owners having made or received payments via digital channels (latest available data for 2021).

**Figure 10. China: Risks and Vulnerabilities Analysis**

**14. The risks and vulnerabilities analyses are broader and more comprehensive than those assessed in the 2017 FSAP but data gaps continue to limit the scope and depth of the systemic risk assessment as the FSAP team did not get access to granular data on many key balance sheet items and exposures.** The authorities provided the FSAP team with (confidential) supervisory data for the 55 largest banks (assets > US\$70 billion) for solvency stress tests and for 111 banks (assets > US\$30 billion) for liquidity and interconnectedness analysis.<sup>11</sup> However, systemic analysis of risk in small banks (many of which are considered the most vulnerable) was hampered by lack of publicly available data and access to supervisory data. In addition, the authorities did not share institution-specific exposures to LGFV and property developers—which present the most acute conjunctural risk. To complement the FSAP’s stress testing work, the FSAP team conducted additional sensitivity analyses and, where possible, complemented information from supervisory returns with publicly available data.<sup>12</sup>

## A. Financial Sector Vulnerabilities and Risks

**15. Analysis of the largest 55 banks—close to 80 percent of banking sector assets—suggests that this segment of China’s banking system is well-capitalized and has ample liquidity buffers, though the data made available may mask underlying vulnerabilities (Annex I, Figures 3 and 4), including:**

<sup>11</sup> The systemic risk assessment in the 2017 FSAP for China was based on stress tests for 33 banks, using publicly available in addition to data requested for this purpose directly from banks and provided by the authorities.

<sup>12</sup> Other areas of analysis in the FSAP also faced data and information gaps that were addressed, as much as possible, by relying on publicly available information.

- *Asset quality:* NPL ratios have remained broadly stable and below 2 percent for several years (Table 3), but balance sheets are opaque, with weak public disclosure on NPL inflows and loss-deferral practices (including foremost through the use of preemptive transactions, regulatory forbearance, and disposal of NPLs to AMCs at potentially inflated prices).<sup>13</sup>
- *Performance:* Relative to international peers, capitalization is lagging, along with low return on assets (ROA) and a high reliance on interest income.
- *Regulatory capital.* In aggregate, about 70 percent of regulatory capital is comprised of Common Equity Tier 1 (CET1). Higher-yielding but lower quality Tier 2 capital, 20 percent of capital, is relatively high in comparison to other jurisdictions.
- *Risk-weighted assets (RWA) density.* RWA for credit risk represent over 90 percent of total RWA, while market risk RWA are minimal. While the FSAP team has received limited data on RWA breakdown and regulatory parameters, the team did observe RWA density for credit risk (credit RWA as a share of total assets) as being rather low for the five largest banks, which follow the internal ratings-based (IRB) approach.
- *Bond holdings.* Smaller banks hold relatively large bond portfolios that are exposed to fair value changes. While an “amortized cost” accounting classification avoids potential mark-to-market valuation adjustments, unrecognized losses would crystalize if the bonds would suddenly need to be sold.
- *Investments.* Joint-stock and city commercial banks’ hold more than 10 percent of their assets in “other investment,” which, at least in part, funds risky asset classes via non-bank financial intermediaries.
- *Liquidity.* Joint-stock and city commercial banks rely more on wholesale and interbank funding which present greater run risks; they also have a larger share of contingent liabilities (credit and liquidity lines to customers), which could be tapped during liquidity distress.
- *Profitability.* Joint-stock and city commercial banks show the lowest profitability, despite their relatively riskier business model. Incorrect pricing of risk may make these banking segments more vulnerable to a rise in impairments for problem loans (which might materialize even under the baseline scenario), as net interest income (NII) may be insufficient to absorb losses. The differences in available capital buffers across the group may further amplify such risks as some banks experience greater difficulties and may cause second-round effects at the regional level due to macrofinancial linkages.
- *Smaller banks:* A number of the smaller banks in the group are fragile, with lower capital ratios, declining profitability, and elevated asset quality risks.

<sup>13</sup> Four national AMCs were established in the late 1990s to absorb sizeable NPLs from the largest banks, with 59 other AMCs in operation. There is very limited information about transfer prices and secondary market sales by AMCs.

## B. Macrofinancial Scenarios

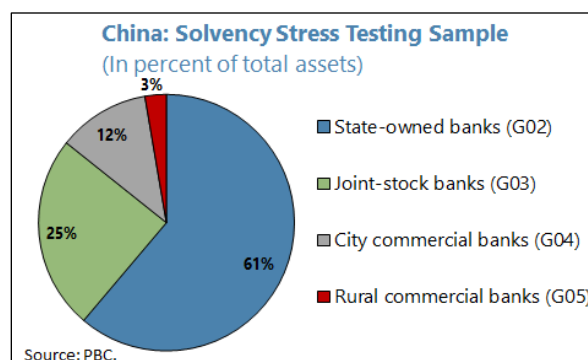
**16. The FSAP's systemic risk analysis is underpinned by a three-year baseline and adverse scenario (Annex I, Figure 5).** The baseline scenario aligns with the IMF's April 2024 World Economic Outlook (WEO), while the adverse scenario reflects the key risks identified in the RAM—including an abrupt economic slowdown and commodity price volatility (global risks); and a deepening in the property sector slowdown and balance sheet recession (domestic risks). Under the adverse scenario, the two-year cumulative real GDP growth path for China deviates -8.2 percentage points from the baseline (2.5 times the standard deviation from the two-year historical mean). The scenario also incorporates the risk of a stagflationary environment where global oil market disruptions lead to negative supply shocks and rising consumer prices.

## C. Risk Analysis

### Solvency Stress Tests

**17. Overall, the results of the stress test suggest that the top segment of China's banking system would be resilient to severe macrofinancial shocks.**<sup>14</sup> Under the baseline

scenario, the aggregate CET1 capital ratio shows an upward trend—rising to 11.9 percent of total RWA by 2026 (up from 10.7 percent in 2023)—reflecting low credit impairments and increased revenue from the small projected increase in interest rates (Figure 11). All banks in the sample meet the minimum CET1 requirement of five percent, although three (two in G03 and one in G04) do not meet their Pillar 1 capital requirements.<sup>15</sup>

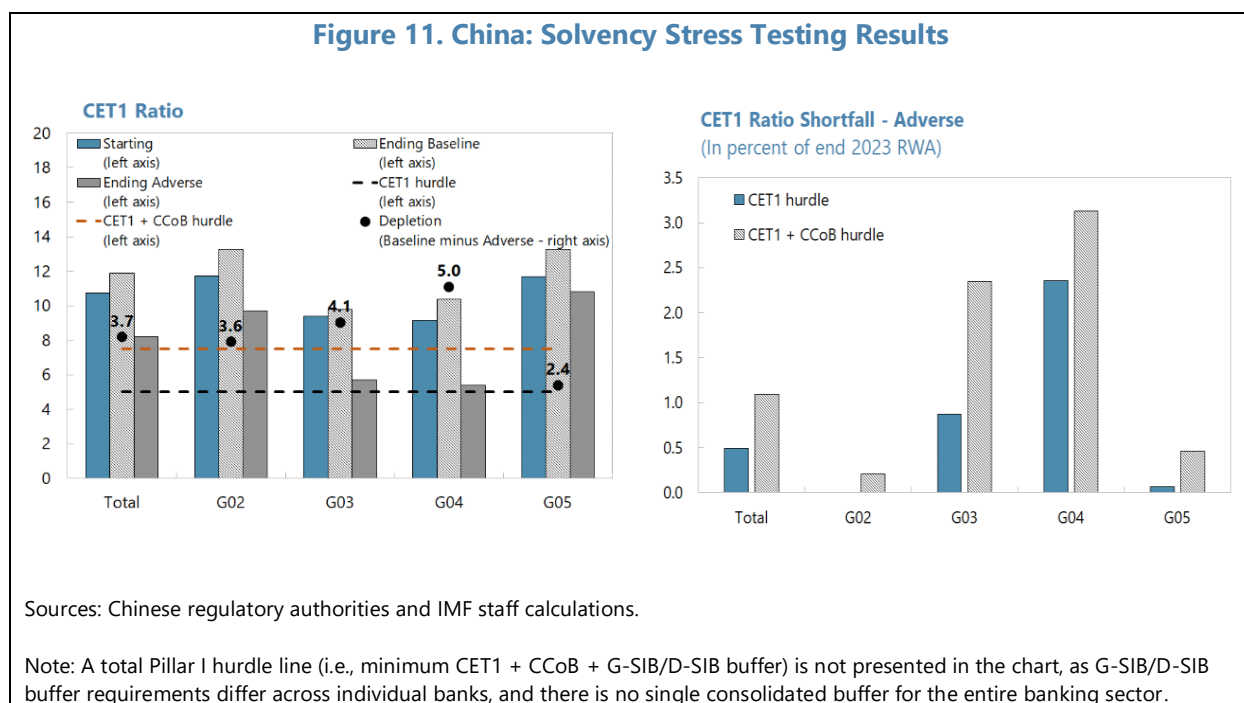


**18. In the adverse scenario, capital (CET1) falls by 3.7 percentage points relative to the baseline path for the sample as a whole and declines to 8.2 percent by end-2026.** G02 banks are the main drivers of the aggregate result, with an aggregate CET1 ratio of 9.7 percent by 2026. They remain profitable in the final two years of the scenario, with their capital depletion rate primarily driven by a 22.8 percent increase in their IRB RWA, because of a sharp increase in the projected probability of default (PD) of borrowers. Other banking groups experience significant capital erosion,

<sup>14</sup> Using the NFRA's classification, the sample of 55 banks is comprised of six state-owned banks (G02); 12 joint-stock banks (G03); 28 city-commercial banks (G04); eight rural commercial banks (G05); and one international bank (allocated to G04). Five of the G02 banks use foundation IRB approaches for credit risk charges (CRC), while all other banks follow the standardized approach; all banks use the standardized approach for market risk charges and operational risk charges.

<sup>15</sup> Full Pillar 1 capital requirements are defined as the minimum CET1 capital requirements including the capital conservation buffer and D-SIB/G-SIB buffer. Since the authorities did not provide D-SIB buffers for individual banks, the analysis is based on the assumption that the four largest banks have a G-SIB buffer requirement of 1.5 percent, the next two banks from G02 a G-SIB/D-SIB buffer requirement of 1 percent and the remaining 14 D-SIBs a D-SIB buffer requirement of 0.5 percent.

up to five percent for G04 banks (which see their aggregate CET1 ratio drop to 5.4 percent). G03, G04 and G05 banks all incur losses throughout the adverse scenario, primarily driven by elevated credit impairments and partially offset by more benign interest income paths (Annex I, Figure 7).



**19. The overall CET1 shortfall against regulatory minima for the banks in the sample in the adverse scenario is modest, although capitalization cost would be much higher to bring back the banking sector to the initial capital level.** Twelve of 55 banks fail to meet their minimum CET1 ratio requirements (five in G03, six in G04, and one in G05), and 31 banks fail to meet their full Pillar I capital requirements (four in G02, 11 in G03, 14 in G04, and two in G05)—reflecting low capital position at the onset of the scenario and high credit impairments. By the end of 2026, the total CET1 shortfall amounts to 0.5 percent of RWA for minimum CET1 requirements and 1.8 percent for Pillar I requirements (or 0.7 and 2.5 percent of China's GDP respectively). The cost to bring back the CET1 and total capital ratios of the banking sector to their initial levels would be about 3.9 percent of China's GDP. Relative to each group's combined RWA, the total Pillar I shortfall represents 0 percent and 1 percent for G02, 0.9 percent and 2.8 percent for G03, 2.2 percent and 3.1 percent for G04, and 0.1 percent and 0.5 percent for G05. The results thus confirm that banks in G03 and G04 are the most vulnerable under adverse shocks.

**20. The solvency stress test exercise also demonstrates the following:**

- **Credit impairments significantly affect bank profitability in the adverse scenario.** Three-year cumulative credit impairments amount to 5.6 percent of starting RWA for the sample as a whole and are distributed relatively evenly across the three years, although the pace of increase varies depending on historical NPL growth and provisioning levels within individual banks' portfolios (Annex I, Figure 7, and Figure 8).

- **The rise in policy interest rate embedded in the adverse scenario enables banks to maintain NII at levels comparable to the baseline.** This is primarily driven by G02 banks, whose NII is even higher in the adverse scenario than in the baseline NII (7.4 percent versus 7 percent, respectively).
- **Market risk losses are pronounced during the first year of the adverse scenario but reverse in subsequent years.** While these losses negatively impact profitability and capital, their overall effect on bank solvency is minimal, contributing just 0.1 percent to the results.

**21. The solvency stress test results provide valuable insights on the impact of severe adverse shocks on smaller banks.** While publicly available data is available for a larger group of city and rural commercial banks, there is no information available in the public domain for a large number of the smaller village and township banks and rural credit cooperatives. However, by extrapolating the results for smaller banks in the sample and using the capital depletion rates for each group of banks in the solvency stress test as an anchoring measure, a simple sensitivity analysis that applies similar capital depletion rates to smaller banks following a shock suggest that a much larger number of banks would face capital shortfalls due to their low starting capital levels, weaker asset quality and subdued profitability. Stress in small banks—as has been experienced in some regions in China—has the potential to generate (localized) confidence shocks, exacerbated by similarities across business models and balance sheet composition.

**22. The conclusions that can be drawn from the stress tests are subject to several limitations.** First, the lack of granular, bank-specific data has limited the precision of credit risk assessments, particularly the segmentation of credit exposures and provisioning across different loan book segments. Second, the absence of detailed IFRS 9 staging data and the lack of granular information on the proportion of lending that is secured by real-estate collateral and their respective loan-to-value distributions has complicated the FSAP team's ability to model credit risk parameter paths and the transition of loans through different stages—potentially underestimating risks. And third, the absence of detailed interest rate data across different asset and liability maturity ladders has made the modeling of net interest income challenging. These limitations underscore the importance of improved data collection and data sharing to enhance the usefulness of the authorities' own stress tests.

**23. To complement the scenario analysis just described, the team estimated the possible impact on banks of a negative aggregate demand shock.** Concretely, the FSAP team assumed a negative aggregate demand shock that would create deflationary pressures and a significant drop in property prices and elicit a monetary policy response. The results from the exercise suggest that over a three-year horizon, the capital depletion and, consequently, the ROA in such a scenario would be of similar magnitude to the depletion found in the detailed solvency stress test. Because the real GDP path remains broadly similar to the adverse scenario, differences in the complementary analysis are limited to differences in the nominal interest rate paths. The larger pressure on banks' NII due to the low-interest rate environment is partially offset by less severe credit impairments, as deflation and lower interest rates tend to reduce credit risk. A positive impact from debt securities revaluation,

driven by the lower risk-free rate, further mitigates the stress.<sup>16</sup> While the similarity of this result to the adverse scenario of the FSAP's solvency stress test is notable, the results should be treated with some caution. A prolonged contraction in aggregate demand could have more lasting effects on borrower balance sheets and misallocation of capital. Combined with uncertainty of policy response effectiveness, this may have a deeper scarring effect for the financial system and the broader economy. Therefore, the results obtained should only be viewed as illustrative and not as encompassing all the possible macroeconomic outcomes.

## Liquidity Stress Tests

**24. Three liquidity analyses assessed banks' resilience against funding and market liquidity shocks using a sample of 111 banks, representing 87 percent of commercial bank assets.** All the banks in this sample are subject to mandatory liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) reporting.

**25. Under the baseline scenario all banks meet the LCR requirement, but some seem more vulnerable to sudden deposit withdrawals, although the overall results may overstate riskiness of deposits of SOEs.** Three scenarios encompassing higher retail and wholesale deposit withdrawals, separately as well as in combination, were compared to a baseline based on regulatory parameters. On aggregate, the large state-owned and -joint-stock banks tend to have lower LCRs as of end-2023. (Annex I, Figure 9, chart 3). In the retail scenario, with milder deposit withdrawals, the large banks show resilience, but some city and rural commercial banks fall below the regulatory requirement (Annex I, Figure 9, chart 4). Some large banks start to erode liquidity buffers when higher run-offs apply to the wholesale and combined scenarios because they rely more on deposits from corporate and financial entities, most of which are reported as "unstable" or "non-operational" under all regulatory and stress scenarios. The large share of this category of deposits drives the LCR stress test results and may overstate the actual riskiness of deposits, because a sizeable portion are deposits of large state-owned enterprises, which are generally stable. Additionally, term deposits are reported as "non-stable" because they can be withdrawn with a small interest penalty but in practice are remarkably stable. The large share of deposits labeled "unstable" and "non-operational" could reflect banks' conservative compliance with regulation and tends to bias modeling efforts.

**26. The cash-flow analysis yields a more realistic measure of liquidity risk in China's banking system as it is based on scenarios that incorporate country-specific characteristics.**

The analysis estimates the liquidity shortfall across five maturity buckets conditional on scenarios customized to domestic market structural characteristics featuring: (i) higher stability of the term deposits; (ii) higher run-off rates for credit and liquidity lines to customers; (iii) system-wide outflows anchored to approximately 20 percent of total liabilities over a one year period; and (iv) the inclusion of all unencumbered high quality liquid assets (HQLA), not restricted by any cap. Under the adverse

<sup>16</sup> The FSAP team was not able to present and discuss numerical results to fully document the analysis as the authorities were of the view that the additional sensitivity analysis results were outside of the agreement reached with staff on the use of confidential data in the FSAP.

scenario, several joint-stock and city commercial banks experience small liquidity shortfalls beyond one month, due to their material contingent liabilities (Annex I, Figure 10, chart 3).

**27. Reported NSFRs show that the 111 banks in the sample have sufficiently stable funding sources on average, although there is heterogeneity across the various clusters (Annex I, Figure 11).** All banking groups meet the regulatory requirement of 100 percent, but the joint-stock banks have lower NSFRs, since they tend to rely more heavily on short-term and less stable wholesale deposits.

### Contagion and Interconnectedness Analysis

**28. The FSAP analyzed interconnectedness and contagion by applying the [Espinosa-Sole](#)<sup>17</sup> framework to domestic bilateral exposures among 111 banks.** Interbank loans, deposits, repos, derivatives, certificate of deposits and bond holdings underpin the banking network. Large banks tend to be more contagious, but other groups of banks appear to be similarly vulnerable. The hypothetical failure of a state-owned or joint-stock bank tends to have a larger impact on other institutions, because its exposure is proportionally large for its counterparties (Annex I, Figure 12, chart 3).

**29. The results from the exercise are likely to underestimate the interconnectedness of China's financial system.** A financial network based on 111 banks is only a fraction of China's financial system comprising over 4000 banks and hundreds of NBFIs. The interbank exposures captured in this analysis represent less than 10 percent of the total inferred from banks' balance sheets information shared with the FSAP (Annex I, Figure 12, chart 2). For this reason, interconnection analysis results should be interpreted with caution and the impact should be viewed as a lower bound of the overall contagion.

**30. Three cross-sectoral exercises based on publicly available data supplement the interconnectedness and contagion analysis.** The first exercise uses co-movement of PDs of 119 publicly listed banks, securities firms, and investment companies to build a financial network and quantifies the credit loss by direct creditors and contagion losses to the wider financial system caused by individual entity failures.<sup>18</sup> The second exercise conducts two econometric analyses to identify the fiscal and financial factors influencing the funding costs of the LGFV and regional banks in the 31 provinces of the Chinese mainland. The third exercise estimates the macrofinancial feedback effects among three real estate sectors, five financial sectors, and three macroeconomic variables with a parsimonious VAR model<sup>19</sup> and measures the impact over time of an idiosyncratic shock to the variable of interest.

<sup>17</sup> Espinosa-Vega, M., and J. Sole, 2010. "Cross-Border Financial Surveillance: A Network Perspective," IMF Working Paper No 10/105

<sup>18</sup> Sun, W., 2020, "Covid, Credit, and Contagion Risks to ASEAN+3 Financial Systems," AMRO Analytical Note

<sup>19</sup> Duan, J.-C., 2024, "Stable Combinatorially-Optimized Features Selection via Sequential Monte Carlo," National University of Singapore Working Paper.

**31. Small financial intermediaries are highly connected with the wider financial system and their failure could cause significant impact (Annex I, Figure 13).** The hypothetical failure of big banks incurs heavy losses to their creditors due to the sheer size of the liabilities. Some joint-stock banks, smaller city commercial banks and securities firms cause material contagion loss likely because they actively engage in financial market transactions with various market participants.

**32. The nexus between regional governments and financial institutions varies in form and strength across provinces.** Empirical results suggest that a stronger fiscal position, including via general budget and land sales, of a provincial government supports cheaper LGFV funding, possibly due to the perception of an implicit guarantee in servicing the debt. Some provinces are associated with higher risk premia, which could reflect the track record to service debt obligations by the LGFVs in the locality and governments' ability and willingness to influence their operations and market pricing. The health of regional banks significantly affects the LGFV financing costs, likely due to their dominant funding role or prevailing market perceptions. LGFV soundness also affects local banks' financing burden (Annex I, Figure 14).

**33. The property and regional financial sectors are closely interconnected, and the property price plays a key role in transmitting shocks.** Distress of privately-owned developers, as measured by their PDs, will later be experienced by the state-owned developers and financial institutions, likely because any default would force the recognition of losses for defaulted real estate exposures. Distress in one group of financial institutions tends to spillover to others, as well as to developers, likely due to the risk of funding shortfalls. Declining property prices significantly weaken the profitability of developers and dampen confidence, discourage real estate investment, and weaken the macroeconomic prospect (Annex I, Figure 15).

### Local Government Financing Vehicles

**34. A sizeable portion of LGFVs is highly leveraged, exhibit a structurally weak debt-servicing capacity, and/or face material liquidity risk (Annex I, Figure 16).** The analysis shows that in order to meet their financial obligations, financially weak LGFVs require financial support from local governments, otherwise those debt obligations must be restructured. The unsustainable LGFV debt level leads to elevates risks for banks, which hold 75 percent of LGFV debt, nonbank financial institutions, and other holders of LGFV debt. Resolving the overhang of LGFV debt will be a lengthy and complex undertaking with a potential burden on the banking system, analyzed below.

**35. The potential impact of three possible debt relief strategies—encompassing interest reductions, additional financial support from creditors and/or local governments, and repayment extensions.** The impact on the two most important holders of LGFV debt (banks and asset management products) was analyzed using publicly available data.<sup>20</sup> The exercise is largely illustrative as rendering LGFV debt sustainable in the long term requires a comprehensive, multi-year solution given their variety of business models and governance arrangements, as well as complex macro-fiscal-financial interconnections. The lack of data on holdings of LGFV debt by entity also

<sup>20</sup> Based on a sample of about 400 banks (95 percent of banking sector assets), using the WIND database.

constrains the scope of the exercise and, therefore, the quantitative impact assessment should be interpreted with caution. Results from the exercise suggest that:

- LGFVs require significant financial relief to restore their debt-servicing capacity, implying considerable costs to creditors and/or local governments.<sup>21</sup> LGFVs may require up to US\$38 billion per year of interest reductions, or additional financial support (e.g., debt write-downs or debt swaps).
- Support needed to restore debt-servicing capacity where debt is perpetually rolled over (but not reduced) could require debt relief up to US\$1.24 trillion (or approximately 7 percent of GDP).
- If debt service was to include principal repayments, costs would be larger (Annex I, Figure 17).
- Repayment extensions can provide some relief but do not fundamentally address the underlying problems.

**36. If banks were to bear the full burden of LGFV debt relief, the impact on their capital and income could be sizeable—especially for some local banks.** Concretely, based on the FSAP's assumed bank exposure to LGFV debt (US\$6 trillion, mostly in the form of loans), any combinations of interest reductions and principal write-downs calibrated to restore LGFVs' debt-servicing capacity could generate considerable losses to banks, with a commensurate negative impact on capital, including for some D-SIBs. In an extreme case where banks face a full write-down of unsustainable debt and no interest rate relief is assumed, the capital depletion for the sampled banks could reach around 2.9 percentage points. Even when the financial relief takes only the form of interest reduction, the resulting impact on bank profitability could be substantial especially for some local banks (Annex I, Figures 18 and 19).

**37. LGFV debt restructuring could also generate losses for asset management products.** Based on public disclosure data, this exercise estimates that certain asset management products (i.e., plans managed by intermediaries, trust products and bank WMPs) have relatively large exposures to LGFV debt in comparison to their total assets under management (Figure 12). LGFV debt restructuring could induce valuation losses, which in turn could trigger large-scale redemptions on some asset management products and disruptions in corporate bond and repo markets (Figure 12, charts 3 and 4). Importantly, LGFV restructuring could weaken market perception of future government support, triggering a repricing of LGFV funding spreads. Such risk-repricing could spill over from LGFV to banks, especially banks in provinces with weak fiscal positions, as illustrated in interconnectedness analysis above.

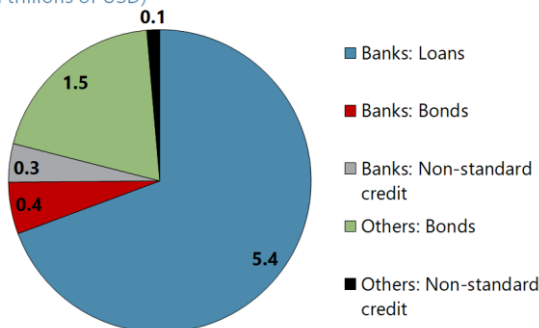
<sup>21</sup> The exercise assumes that LGFVs whose earnings before interest and taxes during 2021–2023 are insufficient to cover interest expenses, based on current funding costs, would be subject to debt restructuring.

**Figure 12. China: Illustrative Impact of LGFV Restructuring**

Banks are estimated to hold 75 percent of LGFV debt, while asset management products hold another 16 percent.

#### Financial System: Exposure to LGFVs

(In trillions of USD)

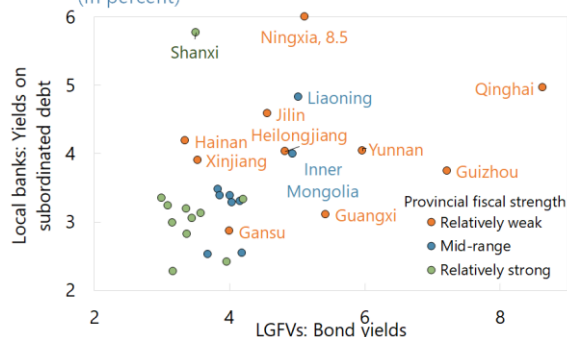


Given the magnitude of the problem, analysis suggests steps to ensure LGFV debt sustainability poses risks to bank balance sheets....

High LGFV funding costs have spilled over to bank funding costs, creating divergent conditions across regions

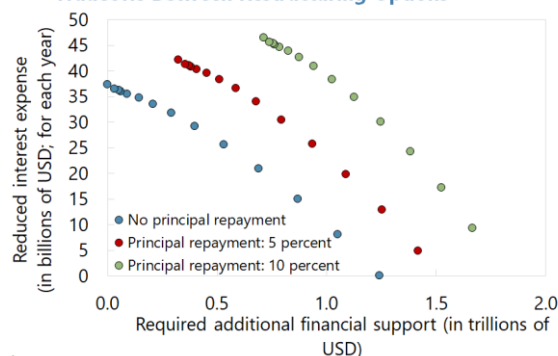
#### China's Provinces: Funding Costs of LGFVs and Local Banks, Mid-July 2024

(In percent)



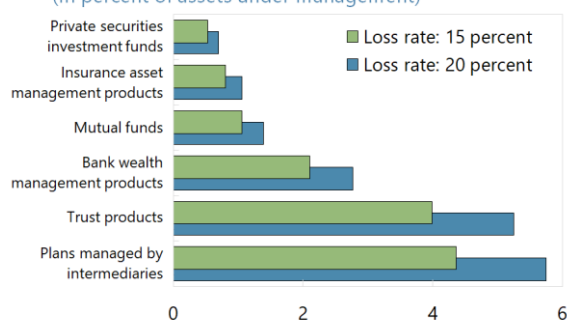
...and asset management products.

#### Illustrative Impact of LGFV Debt Restructuring: Tradeoffs Between Restructuring Options



#### Asset Management Products: Estimated Losses Due to LGFV Debt Exposure

(In percent of assets under management)

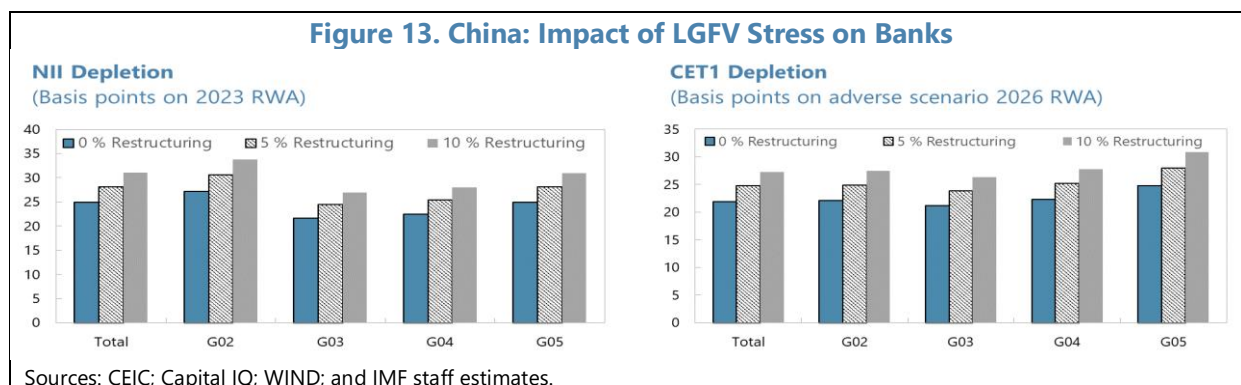


Sources: CEIC, S&P Capital IQ, WIND, Association reports, and IMF staff estimates.

Note: In the bottom left panel, the debt restructuring exercise considers three stylized options—interest reduction, additional financial support required to restore LGFVs' debt-servicing capacity, and repayment extension. More specifically, blue dots show the amount of required additional financial support, which could come from local governments and/or creditors (i.e., principal write-downs) for a given amount of interest reduction. The red and green dots consider an additional dimension of principal repayment (assuming an annual amortization of 5 and 10 percent, respectively), thus accounting for additional effects of larger interest income losses due to falling debt principal and larger additional financial support required to meet principal repayment up to three years. The analysis is based on publicly available data. The analysis covers a sample of about 3,700 bond-issuing LGFVs, and a sample of about 400 banks that account for about 95 percent of banking sector assets. In the bottom right panel, the analysis estimates losses of each major type of asset management products, using publicly available data, in two steps. First, the analysis estimates asset management products' exposure to LGFV debt, mainly in the form of LGFV bonds, assuming a proportional share of LGFV bonds in total corporate credit bonds. Second, the analysis assumes a range of loss rates that are consistent with the required debt write-downs to restore LGFVs' debt-servicing capacity, ignoring the creditor hierarchy. The analysis similarly covers a sample of about 3,700 bond-issuing LGFVs.

**38. The results of the illustrative LGFV exercise were added as an overlay to the banking solvency exercise.** In the scenario considered, banks reduce the interest earned on their exposures to LGFVs under three stylized principal repayment schedules of perpetual roll-over and over 10 and

20 years.<sup>22</sup> The sensitivity analysis applied the interest rate reduction in each scenario and calculated the interest income loss for banks. This scenario assesses the effect on banks' profitability from actions aimed at reducing LGFV debt obligations, providing further insights into the resilience of the banking sector under more extreme conditions.<sup>23</sup> Figure 13 shows that the additional impact on banks' NII over year 2023 RWA from the LGFV interest rate reduction would range from 25 to 31 basis points, subject to restructuring assumptions (lefthand-side chart). The respective impact on CET1 ranges from 11 to 27 basis points (righthand-side chart).<sup>24</sup>



## Corporates

**39. Indicators on corporate performance show a mixed picture.** Corporate debt in China is high relative to comparator countries and has increased significantly over the last decade to 134 percent of GDP in 2022.<sup>25</sup> At the same time, aggregate solvency indicators point to sound balance sheet fundamentals, with a relatively low aggregate long-term debt ratio (< 30 percent of corporate assets) and a relatively small increase in overall leverage levels. (Annex I, Figure 20).

**40. The FSAP analyzed corporate performance—complementing conventional bank solvency and liquidity stress testing.** Using firm balance sheet data for 11,300 firms for which financial statement data are available, covering a 10-year period (2013–2023), the FSAP analyzed the financial strengths and vulnerabilities of corporate entities from eleven different economic sectors, including healthcare, consumer goods, utilities, and real estate.<sup>26</sup> Estimation of firm-level PDs and an aggregate PD path under different macroeconomic environments were obtained using a survival model (Annex I, Figure 21).

**41. A solvency sensitivity analysis was conducted to estimate the potential impact of increasing the share of SME lending in banks' credit portfolios and found the impact of such**

<sup>22</sup> The restructuring options correspond to three scenarios representing the roll-over of existing debt or the repayment of that debt over ten or twenty years.

<sup>23</sup> Because data on individual bank holders of LGFV was not made available to the FSAP, the results presented in Figure 13 should be taken as approximate where the LGFV overlay is applied to group results in the solvency stress test.

<sup>24</sup> The result does not include any impact of any debt write-down that might be required to bring back the debt servicing capacity of weaker LGFV to sustainable levels.

<sup>25</sup> Even when excluding LGFV debt, the figure remains high at 82 percent of GDP.

<sup>26</sup> Data obtained from Capital IQ.

**increasing these exposures material under stressed conditions.** Banks have increased their exposure to SMEs substantially since 2021 and are expected to continue this trend. The portfolio-wide PD from the main banking solvency stress test was used, followed by a conditional PD estimation for corporate lending using a Bayesian approach. The corporate PD is split into large corporates and SMEs, with the large corporate PD derived from the survival analysis model mentioned above. The analysis suggests that the credit risk profile of the corporate portfolio might be shifted materially as the composition of the corporate loan book changes toward SME. This reveals an important source of forward-looking risk that may not be captured in the historical data.<sup>27</sup> Cumulative total credit losses as a proportion of RWA are projected to rise by approximately 20 basis points for every 10 percent increase in SME lending under the baseline scenario; in the adverse scenario would be one percentage point higher. The results point to a significant sensitivity of credit risk in the banking sector to changes in SME exposure.

## Households

**42. Households' financial health appears strong overall, but risks are mounting for certain highly indebted segments within the sample.** Household debt has surged over the past two decades to 63.7 percent of GDP by end-2023. Mortgage loans are the main driver and now account for about half of all household debt. The overall debt-to-assets for households is relatively low at around 9.1 percent, with an average debt service-to-income ratio (DSR) of 18.4 percent.<sup>28</sup> Debt distribution is highly uneven, with 20 percent of households holding 60 percent of the total debt. Around 35 percent of total debt is held by households with a DSR over 40 percent, and 12.8 percent of total debt is held by those with a DSR over 60 percent. Recent mortgage prepayments have further concentrated debt among the highly indebted households. Aggregate loan-to-value ratios remain prudent, suggesting that vulnerabilities to housing price shocks may not be large (Annex I, Figure 22).

## Climate-Related Financial Risks

**43. The FSAP assessed climate-related financial risks stemming from transition and physical risks.**<sup>29</sup> China faces significant transition risks as the world's largest greenhouse gas emitter (30 percent of global CO<sub>2</sub> emissions in 2021) (Annex I, Figure 23). China is highly exposed to economic damage from natural hazards such as floods, typhoons, and extreme temperatures, as the probability and intensity of climate events is expected to increase.<sup>30</sup>

**44. Transition risk analysis followed an integrated micro-macro approach<sup>31</sup> with high sectoral granularity (26 economic sub-sectors).** In addition to a "current policies" baseline

<sup>27</sup> The FSAP is not able to convey any numerical results to fully document the described analysis as the authorities were of the view that extraction of quantitative results would be outside of the agreement to share confidential data.

<sup>28</sup> Figures are derived from the 2019 PBC Survey on Urban Household Assets and Liabilities in China, which may not fully capture more recent developments.

<sup>29</sup> The interpretation of climate risk analysis results is subject to important caveats stemming from data gaps and limitations and modeling complexities, reflecting uncertainty in climate change projections. As such, results from climate risk analysis should be interpreted with care.

<sup>30</sup> The FSAP team did not have access to bank-specific data for physical risk analysis purposes.

<sup>31</sup> See Tobias Adrian et al "Approaches to Climate Risk Analysis in FSAPs," IMF Staff Climate Note 2022/005.

scenario, the FSAP explored three different climate policy scenarios via a global macro-econometric model, i.e., (i) “orderly” (reflecting China’s planned energy efficiency program); (ii) “disorderly” (including accelerated decarbonization efforts in China); and (iii) “disorderly-global” (incorporating accelerated transition efforts at a global level) (Annex I, Figure 24).<sup>32</sup> These scenarios were used to generate multi-year projections of firm-level vulnerability indicators that were subsequently translated into sectoral PD paths, with market valuation risks for corporate securities anchored to credit spread shocks.

**45. The analysis points to non-trivial but manageable losses associated with transition risks.** The estimated impact of climate transition risks on bank capital by 2040 is less than 1 percent of total RWA in the orderly scenario, and about 9 percent of total RWA in the disorderly-global scenario, relative to baseline. With banks having relatively modest exposures to sectors directly impacted by transition risk (Annex I, Figure 25),<sup>33</sup> the banking system appears able to support a rapid transition to a low carbon economy if China pursues its ambitious climate goals in an orderly manner.

**46. The physical risk analysis assessed the impact of floods and typhoons, as they can have a significant impact on the economy.** The analysis considered a scenario based on historical conditions, and a climate change scenario that provides projections of intensity and frequency of these hazards across provinces of the Chinese mainland (Annex I, Figure 26).<sup>34</sup>

**47. The analysis suggests that climate risk in China can induce a significant increase in the economic and financial tail risks, relative to historical distributions.** The largest increases in probability of potential economic damages and associated credit and market risks are concentrated along eastern regions—which also account for over 26 percent of GDP (Annex I, Figures 27 and 28). The results highlight that history may not be a good guide for understanding highly non-linear and potentially devastating future effects of climate change. Enhanced analytical capacity, more granular analysis and improved data collection and collaboration will help the authorities monitor this evolving risk.

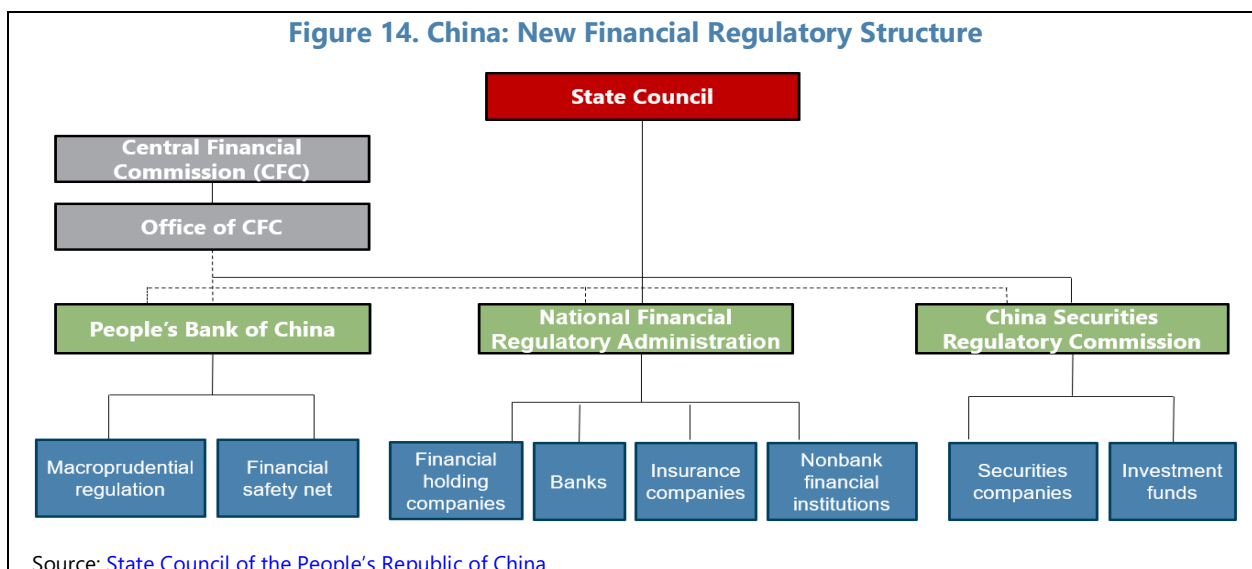
## FINANCIAL SECTOR OVERSIGHT

**48. The authorities overhauled the regulatory structure in 2023, seeking to ensure that financial risks are tackled more comprehensively (Figure 14).** The overhaul created the NFRA, which was given the previous responsibilities of the China Banking and Insurance Regulatory Commission and took over responsibility for financial holding company (FHC) supervision and investor protection; staff were transferred from the PBC’s regional offices bolstering its resources. The new Central Financial Commission (CFC) is the Chinese Communist Party Central Committee’s decision-making and coordinating body in the financial sector.

<sup>32</sup> The FSAP’s scenarios are consistent with China’s 2030/2060 climate goals and are broadly aligned with the scenario narratives developed by the Network for Greening the Financial System (NGFS).

<sup>33</sup> Indirect (general equilibrium) effects could be larger.

<sup>34</sup> The analysis pertained to 31 provinces of the Chinese mainland. Data was obtained from the private data vendor Jupiter Intelligence.

**Figure 14. China: New Financial Regulatory Structure**

## A. System-Wide Oversight and Macroprudential Policies

**49. Significant progress has been made in operationalizing the macroprudential framework since 2017.** The planned Macroprudential Policy Committee has the potential to improve policy formulation but arrangements for interagency cooperation—including data-sharing and joint analysis—should be strengthened. Interaction with other policy areas (e.g., microprudential supervision, monetary policy, fiscal policy) also warrants further consideration.

**50. Further efforts are needed to strengthen systemic risk monitoring.** To better inform policy discussions on risk mitigants, developing a more sophisticated stress testing framework—incorporating advanced modeling techniques, diverse risk scenarios and robust and granular data integration—and building greater analytical capacity, notably within the PBC, remains a key priority. Furthermore, to enhance the effectiveness of macroprudential policy, the authorities should improve the analytical and empirical underpinnings of risk indicators and models, develop policy guides, conduct more frequent back-testing and increasing transparency to better inform market participants, the introduction of a positive/positive-neutral countercyclical buffer (CCyB) and concentration limits for highly indebted companies should be considered.<sup>35</sup>

## B. Supervision and Regulation

### Banking

**51. Notwithstanding important gains since the 2017 FSAP, banking regulation and supervision warrants further strengthening, commensurate with the banking system's scale and complexity.** Implementation of the Basel III framework, together with strengthened rules for asset classification, consolidated supervision, and related party transactions have helped underpin a significant shift towards more risk-based supervision. To bolster bank resilience, capital requirements

<sup>35</sup> See [Decision](#) of the Haut Conseil de Stabilité Financière (French Macroprudential Policy Authority), issued in May 2018, and [Technical Note on Macroprudential Policy](#) Framework and Tools, prepared for the 2019 France FSAP.

should be further tailored to institution-specific risk profiles, including through active use of the Pillar 2 framework—which is also needed to better capture risks not covered under Pillar 1 of the Basel framework (e.g., interest rate risk in banking book and concentration risk). Conducting a round of thematic reviews on stress testing models of banks would also contribute to a more proactive and effective Pillar 2 framework. FHC rules should also be further enhanced, notably by developing rating methodologies and a more complete set of prudential requirements.

**52. Greater independence of the NFRA and a clear prioritization of its safety and soundness mandate would enhance the agency's credibility and effectiveness.**

Lack of operational independence and the inability to prioritize stability over financial sector development were identified in 2017 as key issues for the NFRA's predecessor and these findings remain broadly applicable. To ensure the NFRA can effectively discharge its financial soundness mandate, it should have more resources. A significant staffing increase seems necessary to strengthen oversight of regional offices, increase the depth of onsite inspections, allow more thorough horizontal data analysis and risk oversight, and meet additional demands arising from new responsibilities (FHC supervision, and investor protection). Further efforts are needed to cultivate specialized skills in key risk areas and technical fields like stress testing and model validation. A thorough review of staffing levels, competencies, and developmental plans will be pivotal to the long-term success of the new agency.

**53. The NFRA utilizes a comprehensive set of supervisory tools, but there is room to increase supervisory intensity and horizontal analysis.** Following refinements of the internal supervisory rating system, supervision should be intensified for banks rated high or medium-high risk, with supervisory expectations communicated more effectively to foster a stronger risk culture. Particularly, in the current conjuncture, the authorities should gather more detailed information on the status of exposures to LGFV and property developers, conduct quantitative analyses (stress testing and sensitivity analysis), and ensure that residual forbearance measures are not further extended. Greater use of thematic reviews can better identify systemwide risks and enable supervisors to benchmark institutions more comprehensively—with the aim to reinforce the feedback loop of analysis, supervision, and rulemaking.

**54. Enhancing transparency by providing stakeholders with clear and accessible information will be imperative in underpinning market confidence.** Greater transparency of banks' financial conditions beyond the largest banks, is needed, to enhance stakeholders' ability to make well-informed assessments of banks. Centralizing and making publicly available key information on banks' financial statements and regulatory indicators would bring China in line with international good practice, while improving disclosure, accounting, and auditing requirements can help increase market discipline. Progress in these important areas since the 2017 FSAP has been slow.

**55. Supervision of smaller banks requires close attention.** Smaller banks have greater credit quality concerns, less diversified funding profiles and weaker profitability. Consolidation strategies for weak banks and increased support from local governments have focused attention on these banks. Enhanced risk analyses, aided by improved data quality, is key for strengthening supervisory

oversight with particular attention to be paid to liquidity management and funding profiles. Continued emphasis on banks' risk cultures and governance practices, including by enhancing fit and proper assessments, reducing ownership opacity, and tightening limits for related-party exposures is essential. Weak institutions should be resolved rather than amalgamated into larger institutions and supervisors should assess merger proposals, focusing on the business model and financial soundness of combined entities, via forward-looking analysis, with emphasis on long-term viability.

## Securities and Derivatives Markets

**56. The regulatory framework for securities and derivatives markets has been materially enhanced in recent years but some room for further improvement remains.** The 2019 Securities Law and 2022 Futures and Derivatives Law have provided greater legal certainty, improved disclosure standards and improved corporate governance requirements. Primary markets have successfully moved to a registration-based regime, and new mechanisms to support investor rights are starting to bear fruit. Many G20 post-GFC over-the-counter derivatives reforms are in place. Robust supervision of issuers, credit rating agencies, sponsor institutions, auditors, and law firms, combined with robust enforcement, remains critical; and the CSRC should more clearly delineate its role from that of China's stock exchanges.

**57. Various market-opening initiatives have been put in place or expanded since the 2017 FSAP.** Connect programs for bonds, swaps, repos, and equities were launched and schemes enabling direct participation by qualified international investors in the Chinese mainland markets were introduced. As further initiatives are planned, authorities in the Chinese mainland, Hong Kong SAR and elsewhere will need to continue their careful review of new schemes, prior to their launch, to ensure that risks can be robustly managed and reliable legal remedies are available.

**58. Secondary trading systems have proven largely resilient, and regulations have been adapted to allow for new forms of trading while incorporating lessons learned in the management of market volatility.** Robust business continuity requirements and specialist supervision of operational resilience are in place, and exchanges have so far generally avoided the system disruptions observed in many other jurisdictions. However, the system of market-wide price bands and stock-specific volatility halts that has replaced market-wide circuit-breakers should be kept under close monitoring to ensure a proper balance between enabling price formation and managing market volatility. The rationale for any intervention in equity markets needs to be clearly explained and such measure should be limited to those which do not unduly impede price formation. Care needs to be taken so that measures to stabilize the market do not undermine the credibility of law- and market-based reforms and the functioning of equity markets.

## Insurance

**59. Regulatory reforms have strengthened operational practices, although there are some remaining implementation issues.** Since the 2017 FSAP, regulation and supervision have been enhanced, with greater emphasis on capital, risk management and governance. Efforts to transition to more risk-based supervision should be continued, including further developing onsite supervision

skills and corporate governance assessments. Finalizing the transition to full observance of new prudential standards (C-ROSS-II) are important. NFRA should ensure that insurers link the risk management process more closely to business strategies, plans, and operational processes, including through stress testing. As the NFRA fully absorbs staff transferred from the PBC's regional offices, further efforts to strengthen data analytics and modelling capacity remain a priority. Promoting insurance of mortgage collateral and other personal lending (e.g., vehicle loans) would add stability benefits.

## Nonbank Financial Credit Intermediation

**60. Risks arising from the significant growth in the nonbank financial intermediary (NBFI) sector observed in the 2017 FSAP have been reined in, thanks to proactive measures taken by the authorities.** Notably, the 2018 reform of the asset management sector—which sought to align the regulatory framework across different products and address other problems such as implicit guarantees on investment returns, asset pooling practices and opaque multi-layer investments—played a crucial role in reducing the linkages between NBFIs and the banking sector. Despite this, recent episodes of heightened risk in trust companies, increased redemptions in mutual funds, and pressure on WMPs serve as a reminder of the need for continued vigilance.

**61. Oversight of the NBFI sector should be further enhanced, particularly given the current risk landscape.** Regulation is compliance-based and fragmented across the PBC, NFRA, and CSRC, depending on the category of institution. Oversight would be enhanced by fostering increased collaboration, coupled with a greater use of risk-based approaches to supervision. Such measures should pave the way for the development and implementation of a more comprehensive system-wide approach to activities and enable more timely responses to mounting distress. In particular, further attention should be given to the mitigation of vulnerabilities arising from liquidity risk and increased redemptions in some NBFIs.

## BigTech

**62. While individual activities of BigTech are regulated by relevant agencies, further work is needed to allow the regulatory framework to comprehensively capture and mitigate stability risks related to payment services.** Different authorities regulate and supervise financial activities conducted by subsidiaries of BigTech according to their respective statutory mandate—payment services by the PBC, digital microfinance, digital banking, and digital insurance by the NFRA, and investment activities by the CSRC. The PBC coordinates the overall approach. Payment institutions under BigTechs are required to keep clients' funds with the PBC and clear transactions through payment systems, NetsUnion and China UnionPay. The authorities are encouraged to pursue greater differentiation between systemic BigTechs and non-systemic nonbank payment service providers (PSPs) and adopt a framework to manage the risks arising from BigTech on an enterprise-wide basis including tiered prudential requirements. This could be done through the existing FHC regime. Consideration should be given to the introduction of standardized training for supervisors on digital technologies.

**63. Designating a clear regulatory lead entity is also essential to monitor financial interconnections between BigTech and incumbent financial institutions.** Notwithstanding the transfer of FHC supervision to the NFRA, strengthened interagency coordination remains necessary to capture the cross-sectoral risks associated with BigTech entities, with a coordination role being assigned to the agency in charge of the largest or most systemically important activities within each BigTech group.

### Financial Market Infrastructures

**64. China has taken measures to ensure the robustness and resilience (including cyber resilience) of financial market infrastructures (FMI).** In recent years the PBC and CSRC have strengthened their inspection model and disaster recovery, emergency response and business continuity requirements, and implemented business continuity stress tests with non-bank payment institutions. Development of recovery and resolution plans for critical FMI and enhancing the risk management framework of the large-value payment system and the Shanghai Clearing House (recommended in the 2017 FSAP) remain priorities.

### C. Systemic Liquidity Management

**65. Liquidity intermediation in the Chinese interbank money market benefits from effective regulation and robust infrastructure.** The market is primarily driven by overnight general collateral pledged repo transactions, with minimal unsecured lending and title-transfer special repo activity. Central clearing enhances market liquidity and stability. NBFIs act as net borrowers to leverage their positions, constrained by regulatory limits and the absence of re-hypothecation.

**66. Systemic liquidity management is in a transitory phase as the PBC shifts from a quantity-based to a price-based framework.** As the PBC aligns its instruments with interest-rate-based monetary policy framework, it should aim less at managing liquidity risk from the banking system in normal times and focus its liquidity risk management efforts on providing an efficient backstop to the market in times of liquidity stress. Flexibility in the reserve requirement framework should also be pursued. The PBC's role as lender-of-last-resort involves easing reserve requirements upon request, which is inefficient and should be replaced with a dedicated emergency liquidity assistance (ELA) framework. Risk mitigation measures related to both normal and emergency liquidity provisions should be enhanced, particularly regarding collateral valuation and haircuts in open market operations and re-lending facilities to safeguard the PBC's balance sheet.

**67. The interbank bond market operates effectively, though trading is concentrated in a few liquid instruments.** A collaboration between the MOF and the PBC ensures liquidity for near-maturity off-the-run series, although in lesser amounts. The PBC has started selling long-term government bonds while simultaneously purchasing short-term securities to mitigate speculation at the long end of the curve. To address potential market stress, authorities should proactively design timely and targeted support programs, specifically tailored to address stress from the NBF sector since the sector plays a large role in the market but is not covered by the existing framework.

## D. Financial Integrity

**68. The authorities' efforts to strengthen the AML/CFT framework in recent years should be reinforced with the enactment of amendments to the Anti-Money Laundering Law.** The amendments include important updates to address key ML/TF risks, including via increased penalties violations and establishing the legal basis for the beneficial ownership regime. Coverage of domestic PEP in the AML/CFT framework (highlighted in the 2017 FSAP) remains insufficient, and the authorities are advised to deepen their understanding of corruption-related risks.

**69. While the quality of banks' preventive measures has improved, efforts to strengthen risk-based AML/CFT supervision should continue.** Broadening the range of sanctioning options and deepening the understanding of the nexus between financial integrity and financial stability are important. Greater centralization through the AMLB Head Office would strengthen the operational structure, sustain high-quality supervision, produce more consistent risk assessments, and facilitate inter-agency collaboration in connection with fit and proper tests.

**70. The authorities have made progress enhancing the beneficial ownership regime.** A centralized registry system has been established, although the system is not yet fully operational. Benefits associated with public access to beneficial ownership information should also be considered.

## FINANCIAL SAFETY NET, CRISIS MANAGEMENT, AND DISTRESSED ASSETS

### A. Financial Safety Net and Crisis Management

**71. China has made improvements to its financial safety net since the 2017 FSAP.** Recovery and resolution planning (RRP) has been improved, the Total Loss-Absorbing Capacity (TLAC) requirements have been introduced for the G-SIBs, and a new Financial Stability Guarantee Fund (FSGF) has been established as a backstop for systemic risks. The authorities have also started using transfer strategies in recent episodes of failed entities, with some loss allocation to creditors when liquidating the remaining assets.

**72. Notwithstanding this progress, China's crisis management framework is incomplete and remains mired in unpredictable and inefficient decision-making, de facto reliant on public funding, and is not commensurate with rising risks.** Crisis-management related powers remain dispersed among central and local authorities with no designated (lead) resolution authority. Weak financial institutions are often intervened before an official non-viability determination, with the aim to broker a restructuring whereby the pervasive presence of the state in the financial sector is leveraged to distribute and absorb losses. These interventions are typically driven by social or developmental objectives, often involve the use of government resources and lack transparency. The draft Financial Stability Law (FSL) should be further strengthened to ensure full alignment with international standards. Critical components still missing include (i) unambiguous non-viability triggers; (ii) strict conditions around the use of temporary public funding to facilitate resolution; (iii) well-defined mandates and powers for central and local authorities; and (iv) enhanced legal

protection for officials or agents implementing crisis-related measures. Introducing a comprehensive resolution regime via the adoption of the FSL would pave the way for further steps to strengthen financial sector resilience (Figure 15).

**73. The institutional framework requires an overhaul around a designated resolution authority.** Crisis-management related powers are scattered, ill-defined, and subject to decisions of political bodies. To overcome these problems the authorities should take the following steps:

- *First*, a lead resolution authority should be designated/established with operational autonomy and the necessary human and financial resources to design, trigger and implement resolution strategies. This authority could be placed in a standalone entity or in an independent unit within an existing agency.<sup>36</sup> The authority should initially focus on banks whose (collective) failure could have systemic implications, including through confidence shocks. In due course the mandate should be broadened to encompass NBFI.
- *Second*, the role of the CFC in crisis management should be clarified, and inter-agency coordination mechanisms should be strengthened through a dedicated operational committee.
- *Third*, the number of staff dedicated to and specialized in crisis management should be increased to match the size and complexity of the sector.
- *Fourth*, an interagency work plan for enhancing crisis preparedness should be developed.

**74. Implementation of an RRP framework marks a commendable effort but remains hindered by the lack of a resolution regime.** During this transition phase, the work should focus on exploring an extension of RRP scope to all institutions; developing policy guidance and prioritizing banks' preparatory work to implement resolution strategies.

**75. Existing resolution funding mechanisms require significant adjustments to restrict the use of official support.** While the implementation of binding TLAC requirements for the G-SIBs is welcome, the authorities should (i) extend loss absorption requirements to all domestic systemically important banks to enable more effective use of the bail-in powers that will be introduced in the legal framework via the FSL, with the aim to allow for greater burden-sharing with uninsured and unsecured creditors; and (ii) reconsider (or at least cap) reliance on resources from the Deposit Insurance Fund (DIF) as a de facto discount on TLAC requirements.<sup>37</sup> The FSL should explicitly define

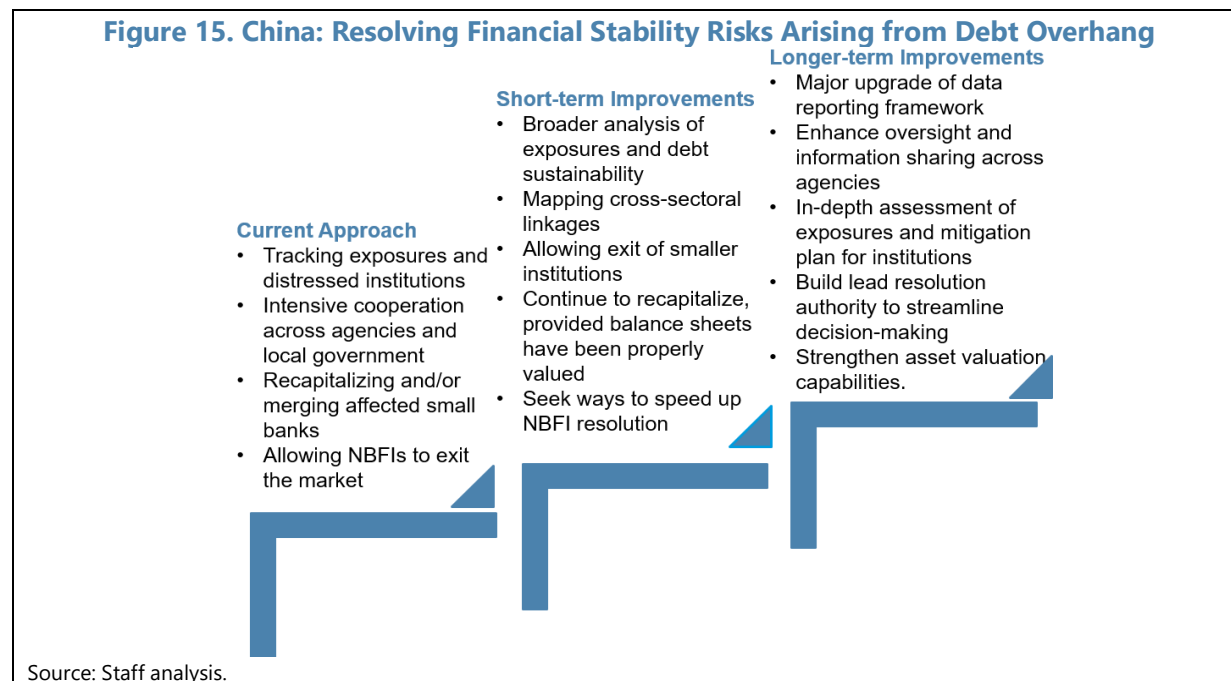
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<sup>36</sup> In practice, bank resolution and deposit insurance functions are intertwined, with similar challenges for the design and functioning of their governance arrangements—including a need for decision-making structures that enable rapid decisions under stressed conditions, with robust safeguards to prevent undue political or industry interference and robust accountability frameworks. Combining the two functions, subject to robust safeguards that seek to address potential tensions (e.g., on the utilization of deposit insurance resources in a resolution context) can yield synergies, also considering the need for close interaction in case of bank failures.

<sup>37</sup> The [FSB's TLAC Term sheet](#), published in November 2015, allows for a reduction of TLAC requirements whenever these are credible ex ante commitments, prefunded by the industry, to recapitalize a G-SIB in resolution. Considering that current funding levels of the DIF are well below the target and ex ante recapitalization commitments are not clearly articulated, reliance on this provision to effectively reduce TLAC requirements may run counter to ongoing efforts to establish adequate LAC.

public support as a last-resort source of funding. The FSGF needs transparent governance rules, collection criteria, and usage triggers.

**76. Extensive use of DIF resources has eroded available funding, which now must be strengthened.** Use of DIF resources should be strictly limited to insured deposit payouts and contributions to transfer strategies, subject to a least-cost test. Annual contributions should be increased to allow the DIF to bridge the substantial gap to target level of 1.5 percent of covered deposits.<sup>38</sup> An explicit government backstop, in line with international good practices, would enhance resilience of the DIF.



## B. Corporate Insolvency and Distressed Asset Resolution

**77. China's restructuring and insolvency system is increasingly used to resolve distressed corporates, but its use is not yet significant compared to the size of the economy.** In recent years, insolvency cases have increased and the institutional framework for insolvency and debt resolution has been strengthened through increasing judicial specialization, strengthening the insolvency administrator profession, and leveraging technological tools. Areas for improvement include increasing the capacity of judges, introducing comprehensive regulation of insolvency administrators and pursuing further integration between national and local IT platforms. The ongoing reform of the Enterprise Bankruptcy Law (EBL) offers an important opportunity to improve the insolvency regime, and subsequently update related tax rules.

**78. While the registration and enforcement of collateral has improved considerably in the last five years, further refinements would improve efficiency.** Registries are digitalized, fast, and generally accessible to the public but the enforcement of security rights in the Civil Procedure Law

<sup>38</sup> As of end-2023, the DIF's balance was US\$8.8 billion (down from US\$17 billion at end-2019), well below its target level of around US\$224 billion.

would be improved by an expedited channel for resolving such objections. The tax administration should register its claims to enjoy priority security over future security interests.

**79. Restructuring practices have deepened considerably and the restructuring toolbox has been expanded.** Opportunities for further convergence with international practices remain—e.g., introducing a standstill of creditor actions, addressing conflicts of interest, and providing priority for additional financing—and committees would be more effective if they were to operate under strict time limits. Pre-reorganization procedures that function as a bridge between informal restructuring and judicial reorganization should be explicitly recognized.

**80. Liquidation and reorganization proceedings could be further enhanced.** The liquidation process is widely used and has benefited considerably from the agility and transparency of online auction platforms. The lack of a temporary stay of enforcement actions, which impedes a going-concern sale of the debtors' assets should be addressed. The authorities can substantially improve reorganization—which is used for insolvency of large companies—by streamlining commencement standards, creating incentives for the use of reorganization, strengthening rules for the treatment of contracts and post-commencement financing, and enforcing the hierarchy of creditor and shareholder claims in the approval of plans.

**81. Increased oversight and transparency of AMCs could further strengthen the market for distressed loans.** National and local AMCs are the only entities permitted to purchase NPLs from banks in the primary market. Data on sale prices to AMCs and AMC recovery rates are not publicly available. This makes it difficult to assess how effective AMCs are in resolving the distressed debt they hold and gauge the efficacy of price formation—with prudent valuations being critically important to ensure market functioning and curb moral hazard. Strengthening supervision and transparency of AMCs and opening the primary market to purchasers beyond AMCs would enhance the market for distressed loans.

## FINANCIAL DEVELOPMENT

**82. Following major advances in financial inclusion, the authorities should focus on supporting commercial viability of financial products, and additionality of policy interventions.**<sup>39</sup> Account penetration, savings, and use of payment services is generally very high, but some segments such as the elderly and new urban residents lag behind. Estimates suggest that up to 17 percent of all MSME continue to face a finance gap notwithstanding recent growth in lending suggesting a need to refocus efforts.<sup>40</sup> The authorities should consider transitioning their role from directly guiding financial service providers and advance a capital markets development strategy that includes a rigorous monitoring and evaluation framework, a focus on improving data availability, a commitment to enhance market transparency and price formation, removal of perceptions of guarantee and the more frequent use of exit channels to reduce distortions and

<sup>39</sup> Financial development findings and recommendations arising from the FSAP are covered more extensively in the forthcoming World Bank Financial Sector Assessment report.

<sup>40</sup> MSME Finance Gap, Assessment of the shortfalls and opportunities in financing micro, small and medium enterprise in emerging markets, Mahina Khanna et al, World Bank, IFC, SME Forum, 2017. Micro and small and medium-sized enterprises (MSME) are a subset of SMEs used by the authorities for financial inclusion-based lending.

ensure priorities are effectively implemented. There is scope to improve the climate information framework, also to prevent “greenwashing,” including by enhancing disclosure standards, strengthening green finance taxonomies, and promoting emission data collection and dissemination.

## AUTHORITIES' VIEWS

**83. The authorities appreciated the comprehensive and constructive nature of the FSAP and welcomed the frank exchange of views.** They noted that the Chinese financial sector has continued to perform well and remains resilient despite numerous global shocks and the stability of the sector is evident in low levels of non-performing loans, satisfactory capital, with enhanced corporate governance and comprehensive risk management. The FSAP stress tests attest that even under an extreme shock, the capital shortfall in the banking sector would be modest and manageable. The authorities have taken proactive and effective measures to mitigate and resolve risks as they arise. The authorities appreciated the opportunity of the FSAP to revisit progress made since the 2017 FSAP engagement and consider further room for improvement.

**84. The authorities believe that the FSAP underplays the ongoing mitigation of financial stability risks, and are of the view that those risks were largely contained by end-2024.** The Central Financial Work Conference, held in October 2023, highlighted the importance of effectively preventing and resolving financial risks. The authorities have taken a multi-pronged and coordinated effort to address these risks, which include countercyclical measures to provide fiscal and monetary support addressing the property sector, etc. Further, they note that one of the measures to manage losses and risks in the system is the use of non-performing asset disposal, which has continued to be effective. The authorities also noted that the LGFV debt in the FSAP is inconsistent with their data and overstates relevant risks. The staff analysis of LGFV debt impact, as well as analysis of interconnectedness based on market data, should be treated with caution since these are based on assumptions that oversimplify the real-life situation and do not consider local government support and asset sales. The authorities emphasize that policy packages introduced in September 2024 have helped further contain financial stability risks.

**85. The authorities welcomed the assessments of the regulatory and supervisory frameworks, including the recognition of the progress made since 2017 and reiterated their commitment to continuously align the framework with evolving international best practices and to uphold market-oriented and law-based principles.** As the FSAP shows, the authorities have made steady progress since 2017 in deepening financial supervision through improvements to regulatory ratings, on-site inspections and off-site reporting and governance standards, creating a financial holding company regulatory regime, reducing risks in the nonbank sector by unifying regulation of asset management, developing an insurance insolvency framework, developing a macroprudential framework and embedding international standards (e.g., Basel III, over-the-counter derivatives reforms). While the authorities agree that it is critical to continuously improve the framework in order to keep up with developments, they believe that the FSAP should take greater account of the current stage of the Chinese system when assessing the mandate and role of the regulatory agencies. The authorities noted that regulatory and supervisory authorities are

empowered to act decisively and independently in fulfilling their mandates and further that the primary objective is to maintain financial stability, and to balance economic development and financial stability is also an important task, which is consensus in many countries. Finally, the authorities noted that the forthcoming Financial Stability Law will provide the framework for bank resolution and management of systemic crises.

**Table 2. China: Selected Economic Indicators, 2022–2030**  
(Percent change, unless otherwise indicated)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Projections										
	(Annual percentage change, unless otherwise indicated)										
NATIONAL ACCOUNTS											
Real GDP (base=2015)	2.2	8.4	3.0	5.2	4.8	4.6	4.5	4.2	3.8	3.5	3.4
Total domestic demand	1.7	6.8	2.8	6.1	4.1	4.4	4.5	4.3	3.9	3.7	3.6
Consumption	-0.3	9.0	2.3	8.0	4.2	4.1	4.4	4.2	4.0	3.8	3.7
Fixed investment	3.4	3.2	3.2	4.9	6.6	4.5	3.7	3.8	3.7	3.4	3.3
Net exports (contribution)	0.6	1.8	0.3	-0.6	0.9	0.4	0.2	0.1	0.1	0.0	0.0
Total capital formation (percent of GDP)	42.9	43.3	43.2	41.6	41.1	41.2	41.1	41.2	41.2	41.2	41.2
Gross national saving (percent of GDP) 1/	44.5	45.3	45.7	43.0	43.2	42.8	42.8	42.8	42.7	42.5	42.5
Output gap estimate	-4.0	-1.1	-2.8	-2.0	-1.5	-1.0	-0.6	-0.3	-0.2	-0.1	0.0
LABOR MARKET											
Urban unemployment rate (year-end) 2/	5.2	5.2	5.1	5.5	5.2	...	...	...	...	...	...
PRICES											
Consumer prices (average)	2.5	0.9	2.0	0.2	0.3	0.8	1.3	1.7	1.8	1.9	2.0
Consumer prices (end of period)	0.3	1.5	1.8	-0.2	0.4	1.1	1.5	1.8	1.8	1.9	2.0
GDP Deflator	1.3	3.0	2.0	-0.6	-1.7	-0.5	1.2	1.6	1.9	1.9	1.9
FINANCIAL											
7-day repo rate (percent)	3.0	2.7	2.2	2.3	1.9	...	...	...	...	...	...
10 year government bond rate (percent)	3.7	3.2	3.0	3.1	2.8	...	...	...	...	...	...
MACRO-FINANCIAL											
Total social financing	13.3	10.3	9.6	9.8	8.0	7.5	7.5	7.4	7.4	7.3	7.3
In percent of GDP	278	274	286	301	315.1	325.5	330.9	335.8	341.4	347.3	353.7
Total nonfinancial sector debt 3/	13.2	10.4	9.7	10.1	8.1	7.8	7.7	7.5	7.5	7.3	7.3
In percent of GDP	278	275	287	302	317.0	328.3	334.4	339.7	345.4	351.5	357.9
Domestic credit to the private sector	10.8	8.4	8.1	8.6	6.2	6.2	6.5	6.7	6.8	6.8	6.9
In percent of GDP	173	168	173	180	185.6	189.3	190.6	192.1	194.1	196.6	199.4
Household debt (percent of GDP)	61.6	62.1	62.3	63.7	64.5	63.8	63.5	63.2	63.0	62.9	62.9
Non-financial corporate domestic debt (percent of GDP)	112	106	111	116	121.1	125.5	127.1	128.9	131.1	133.7	136.5
GENERAL BUDGETARY GOVERNMENT (Percent of GDP)											
Net lending/borrowing 4/	-9.7	-6.0	-7.5	-6.9	-7.9	-8.3	-8.2	-7.7	-7.8	-7.8	-7.8
Revenue	25.7	26.6	26.0	26.8	26.8	27.0	27.2	27.4	27.5	27.6	27.7
Additional financing from land sales	2.5	2.3	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Expenditure	35.4	32.7	33.5	33.7	34.7	35.3	35.4	35.1	35.3	35.4	35.5
Debt	45.4	46.9	50.7	56.3	63.3	71.0	76.3	79.9	83.6	86.9	90.2
Structural balance	-8.6	-5.7	-6.8	-6.4	-7.5	-8.1	-8.0	-7.6	-7.7	-7.8	-7.8
BALANCE OF PAYMENTS (Percent of GDP)											
Current account balance	1.7	2.0	2.5	1.4	2.1	2.0	1.9	1.8	1.7	1.5	1.5
Trade balance	3.4	3.2	3.7	3.3	4.2	4.1	4.1	4.1	4.0	3.9	3.9
Services balance	-1.0	-0.6	-0.5	-1.2	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9	-2.0
Net international investment position	15.4	12.3	13.6	16.4	18.2	19.2	19.9	20.6	21.1	21.5	21.8
Gross official reserves (billions of U.S. dollars)	3,357	3,427	3,307	3,450	3,749	4,075	4,216	4,403	4,604	4,801	5,012
MEMORANDUM ITEMS											
Nominal GDP (billions of RMB) 5/	102,563	114,528	120,247	125,798	129,584	134,907	142,687	151,041	159,641	168,416	177,481
Augmented debt (percent of GDP) 6/	98.8	100.8	108.3	117.1	126.4	134.0	138.8	142.5	146.2	149.8	153.4
Augmented net lending/borrowing (percent of GDP) 6/	-17.0	-12.1	-13.8	-12.6	-13.1	-13.2	-12.6	-11.8	-11.6	-11.4	-11.2
Change in Augmented Cyclically-Adjusted Primary Balance 7/	-2.5	3.6	-1.0	0.9	-0.6	0.1	0.7	1.0	0.4	0.5	0.3

Sources: Bloomberg; CEIC Data Company Limited; IMF International Financial Statistics database; and IMF staff estimates and projections.

1/ 2024 GDP will be revised to match official revisions once full official data are released.

2/ Surveyed unemployment rate.

3/ Includes government funds.

4/ Adjustments are made to the authorities' fiscal budgetary balances to reflect consolidated general budgetary government balance, including government-managed funds, state-administered SOE funds, adjustment to the stabilization fund, and social security fund.

5/ Expenditure side nominal GDP.

6/ The augmented balance expands the perimeter of government to include government-guided funds and the activity of local government financing vehicles (LGFVs).

7/ In percent of potential GDP.

**Table 3. China: Financial Soundness Indicators**

	2018	2019	2020	2021	2022	2023	2024Q2
Regulatory capital to risk-weighted assets	14.2	14.6	14.7	15.1	15.2	15.1	15.5
Tier 1 capital to risk-weighted assets	11.6	11.9	12.0	12.4	12.3	12.1	12.4
Nonperforming loans net of provisions to capital	-9.2	-9.3	-9.3	-10.1	-10.7	-10.4	-10.7
Nonperforming loans to total gross loans	1.8	1.9	1.8	1.7	1.6	1.6	1.6
Return on assets	0.9	0.9	0.8	0.8	0.8	0.7	0.7
Return on equity	11.7	11.0	9.5	9.6	9.3	8.9	8.9
Interest margin to gross income	77.9	78.1	79.0	80.2	79.5	79.4	N/A
Noninterest expenses to gross income	30.8	31.7	31.2	32.1	30.0	31.6	N/A
Liquid assets to total assets	23.8	24.6	24.5	24.7	24.3	24.1	N/A

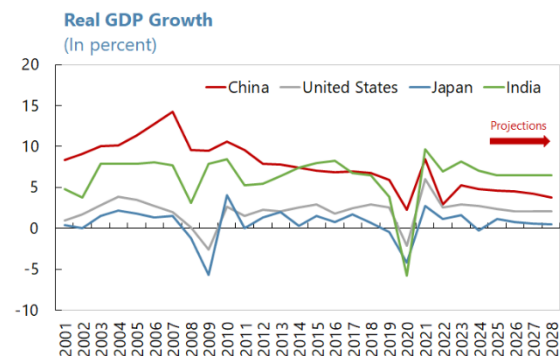
Source: IMF's Financial Soundness Indicators database, Haver Analytics; and IMF staff calculations.

Note: Data for the last three FSI indicators in 2022 and 2023 is as of Q3, no Q4 data is available. N/A indicates the data is not available for the period.

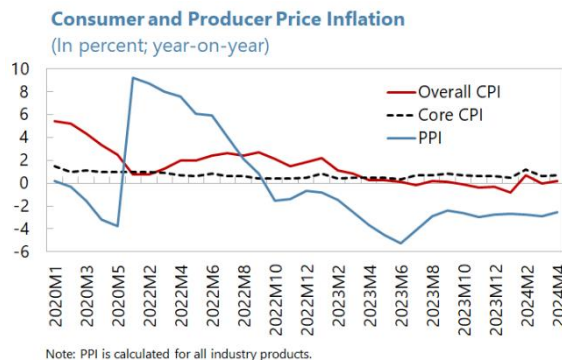
## Annex I. Economic and Financial Sector Indicators and Analysis

Annex I. Figure 1. Macroeconomic Developments

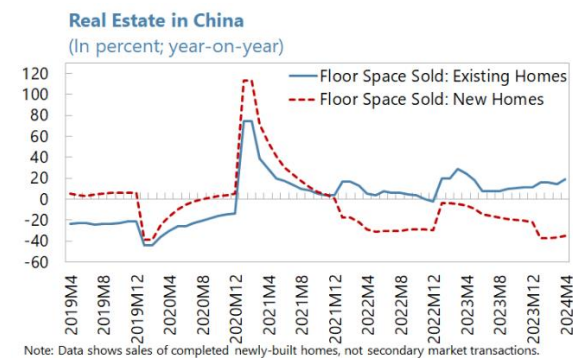
GDP is moderating....



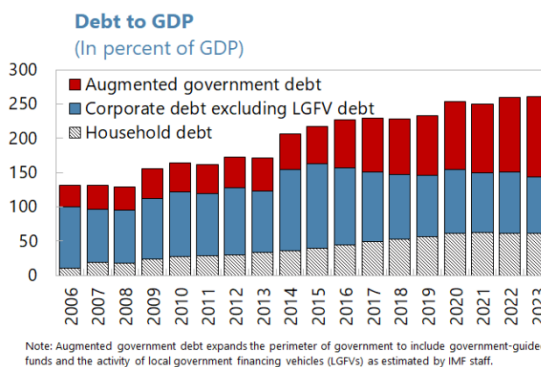
...with risks of disinflation.



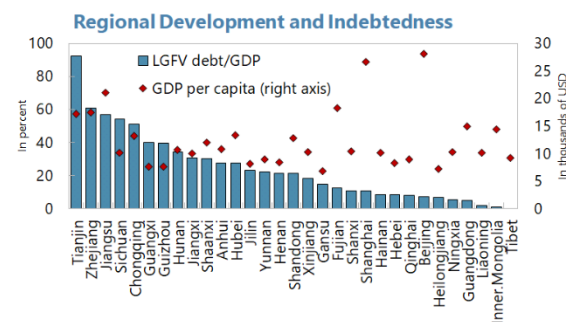
Property sales have plummeted in the primary market with some price adjustment, while prices in the secondary market have plunged....



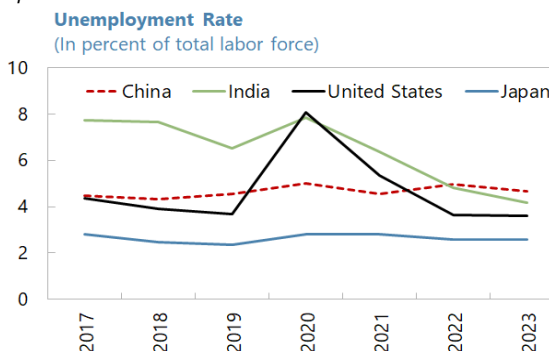
...and local government indebtedness has climbed as land sales dry up.



There are visible regional disparities in economic development and indebtedness...



...and unemployment rates are failing to come down post pandemic.

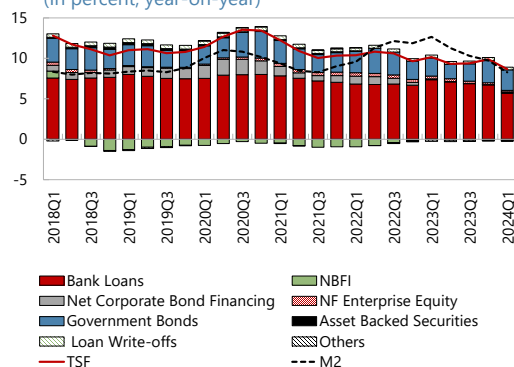


Sources: IMF's World Economic Outlook database, WIND, CEIC, IMF's Global Debt database, National Bureau of Statistics China, Haver Analytics, ILO estimates from the World Bank database; and IMF staff calculations.

## Annex I. Figure 2. Credit Developments

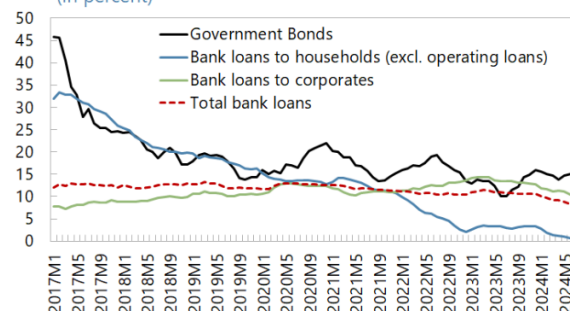
Total social financing (credit) growth is lower than pre-COVID...

**Contribution to TSF Growth and M2 Growth**  
(In percent; year-on-year)



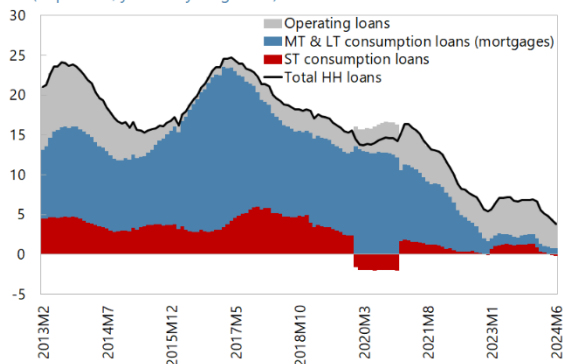
...and credit to households has fallen short.

**Growth Rates of Selected Types of Credit**  
(In percent)



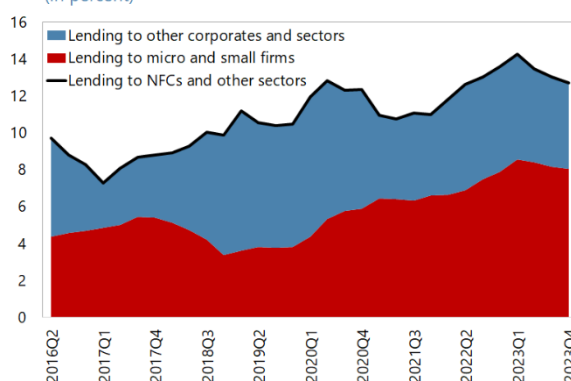
Mortgage credit growth, a major driver of lending in recent years, has steadily decelerated...

**Contribution to Growth of Household Loans**  
(In percent; year-on-year growth)



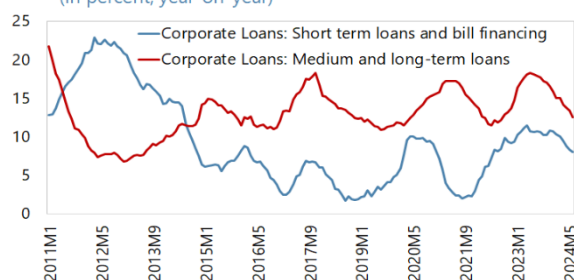
...and lending to small firms, largely driven by mandate, continued to be a major source of lending growth.

**Contributions to Growth of Nonfinancial Corporate (NFC) Loans**  
(In percent)



Medium term credit growth picked up after the re-opening but more recently dampened.

**Growth Rates of Bank Loans by Borrower and Tenor**  
(In percent; year-on-year)

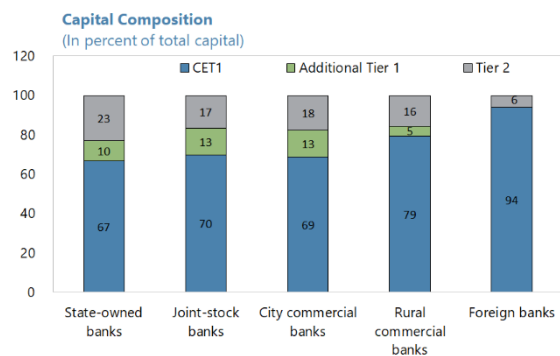


Note: Corporate loans include loans to nonfinancial enterprises, government agencies and organizations.

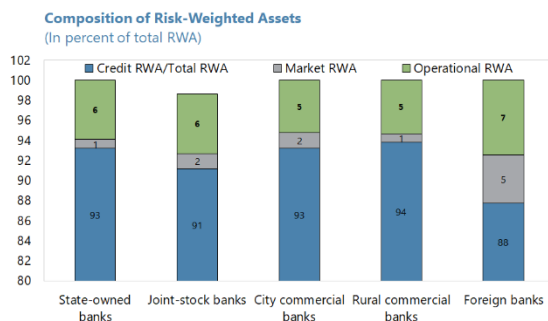
Sources: Haver Analytics, CEIC, and IMF staff calculations.

## Annex I. Figure 3. Capital Composition

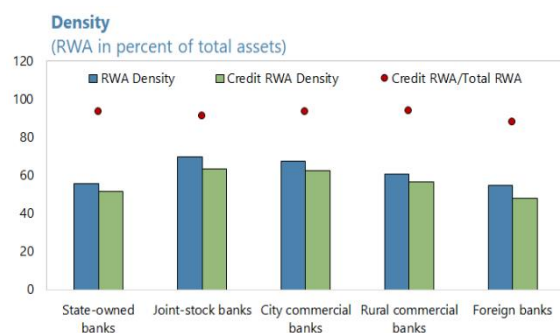
*Banks have lower shares of additional Tier I capital relative to Tier II capital....*



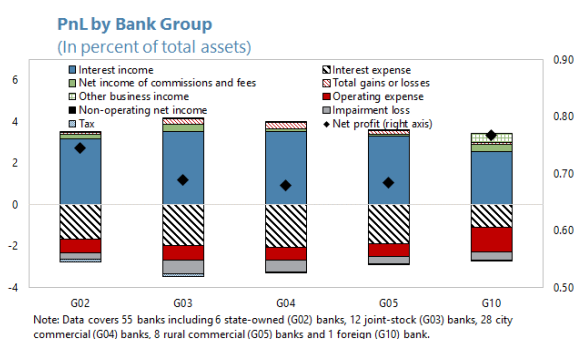
*....and a high share of credit risk-weighted assets...*



*...with state-owned banks having a lower credit RWA density...*



*...and joint-stock banks and city commercial banks having lower profitability relative to other bank groups.*

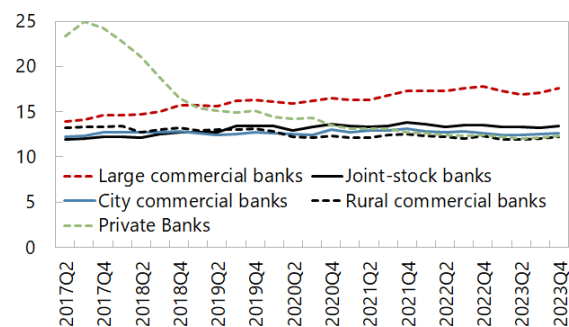


Sources: Chinese regulatory authorities and IMF staff calculations.

### Annex I. Figure 4. Financial Stability Indicators of Commercial Banks

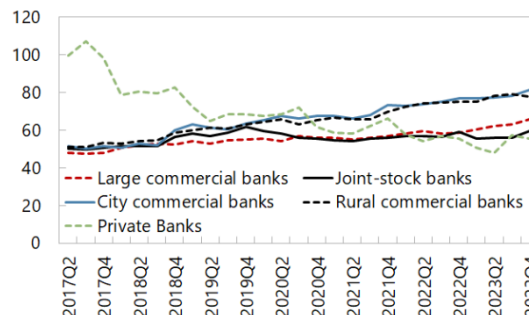
Banks meet regulatory requirement....

**Capital Adequacy Ratio (CAR)**



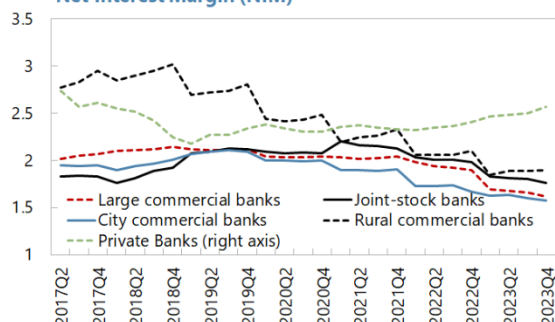
....and appear liquid across bank groups.

**Current Ratio**



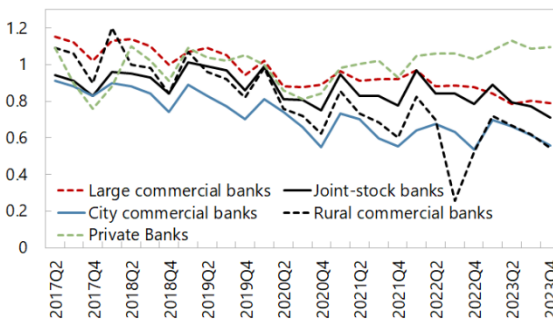
However, net interest margin has been compressed....

**Net Interest Margin (NIM)**



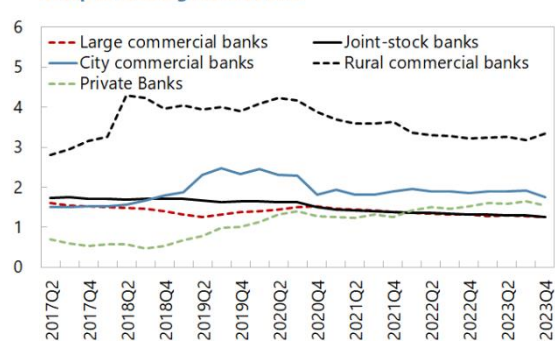
....and return on assets has fallen.

**Return on Assets**



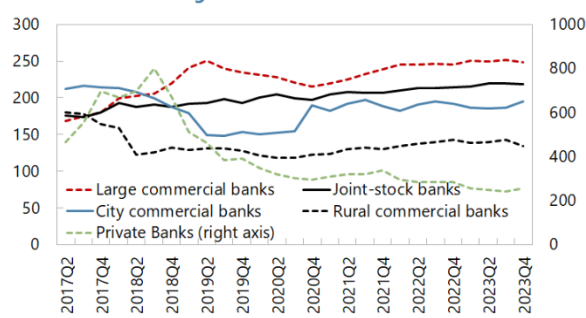
Reported nonperforming loans remain low...

**Nonperforming Loans Ratio**



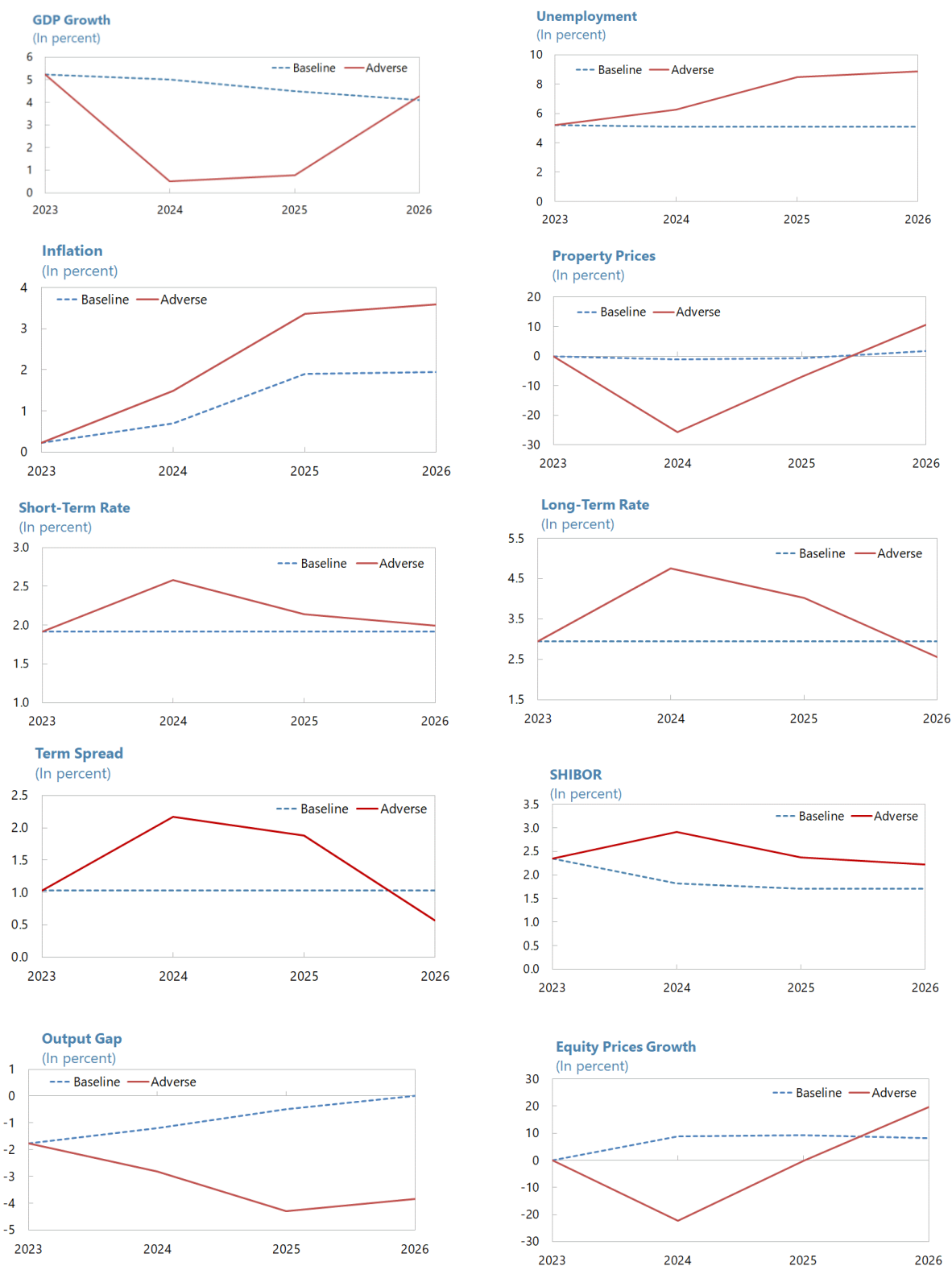
....and adequately provisioned across bank groups.

**Provision Coverage Ratio**



Sources: WIND, EDB, Haver Analytics, and IMF staff calculations.

Annex I. Figure 5. Macroeconomic Scenarios

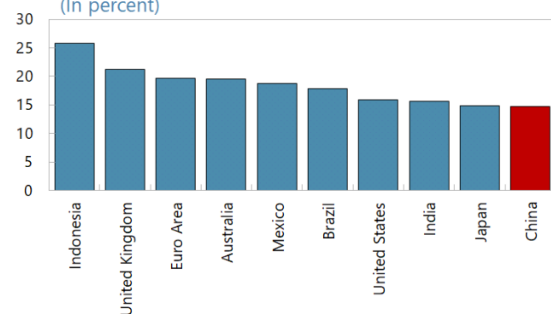


Sources: IMF's Global Macroeconomic Model, and IMF's World Economic Outlook database.

## Annex I. Figure 6. China And Selected Countries: Key Financial Soundness Indicators

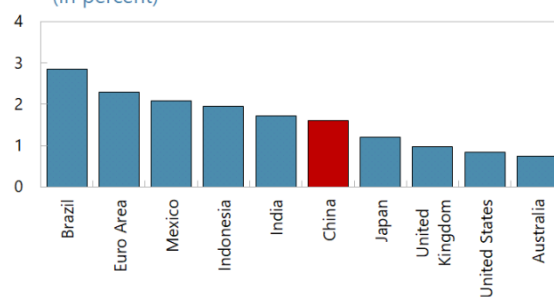
China's banking sector is well capitalized on average, but less so compared to its peers.

**Regulatory Capital to Risk-Weighted Assets**  
(In percent)



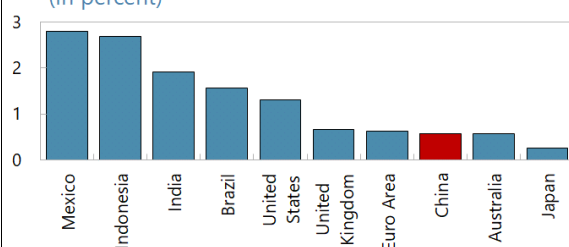
NPLs are low at 1.6 percent...

**Non-Performing Loans to Total Gross Loans**  
(In percent)



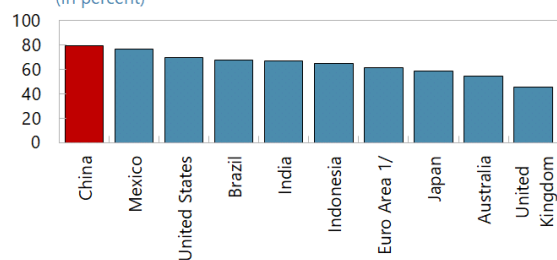
... but return on assets remains quite low...

**Return on Assets**  
(In percent)



...and is largely dependent on interest income.

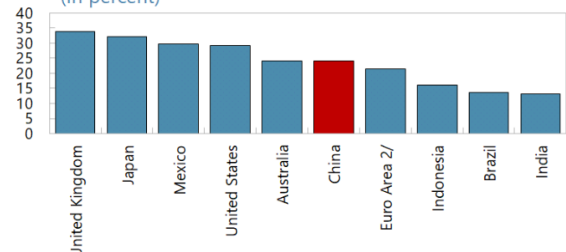
**Interest Margin to Gross Income**  
(In percent)



1/ Reported as net interest income to operating income by the ECB.

Banks' share of liquid assets remains high on average...

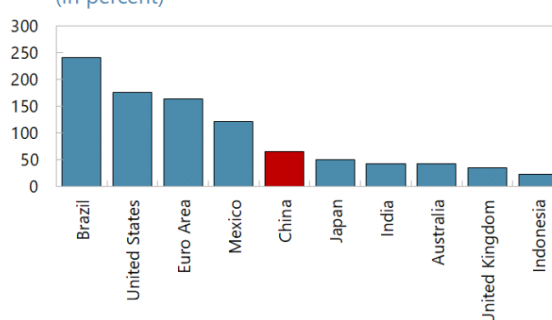
**Liquid Assets to Total Assets**  
(In percent)



2/ Refers to an asset weighted proxy calculated using 2023Q4 FSI country metrics for 13 countries (for which FSI data are available for the specific reference date). Asset weights are calculated using 2023Q4 data from the ECB. Weighted average calculated with underlying data from the IMF's FSI database and ECB's Banking Supervisory Statistics report.

...and covers 65 percent of short-term liabilities.

**Liquid Assets to Short Term Liabilities**  
(In percent)

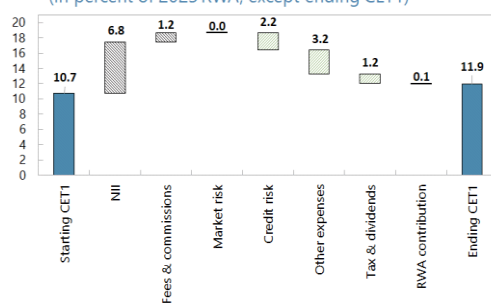


Sources: IMF's Financial Stability Indicators database and ECB's Supervisory Banking Statistics database.

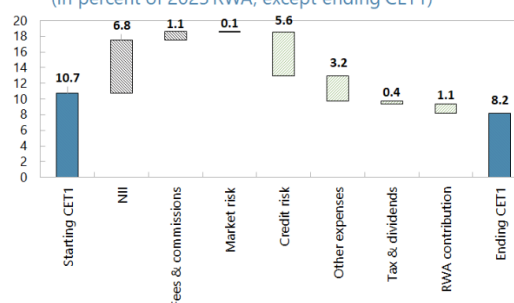
Note: Data for Japan and China are as of 2023Q3 except for Chart 3 which shows 2022Q3 data for China; data for Australia is as of 2023Q1 except for Chart 4 which shows 2022Q4 data. Data for the U.K. in Charts 5 and 6 is as of 2022Q4. In all other cases, data is as of 2023Q4.

**Annex I. Figure 7. Solvency Stress Test Results: Changes in Bank Capital****Capital Ratio - Baseline - Total**

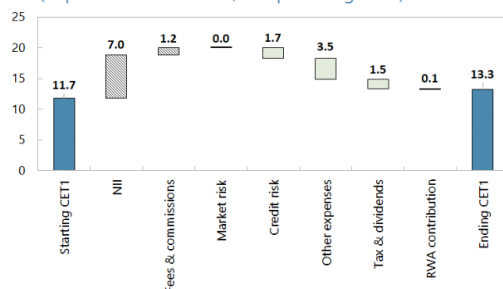
(In percent of 2023 RWA, except ending CET1)

**Capital Ratio - Adverse - Total**

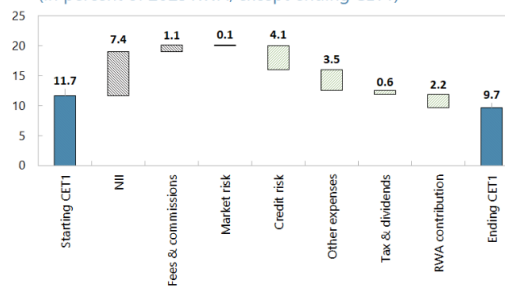
(In percent of 2023 RWA, except ending CET1)

**Capital Ratio - Baseline - G02**

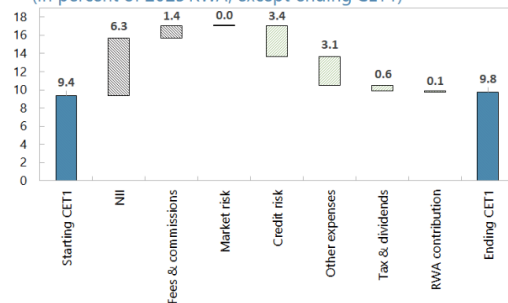
(In percent of 2023 RWA, except ending CET1)

**Capital Ratio - Adverse - G02**

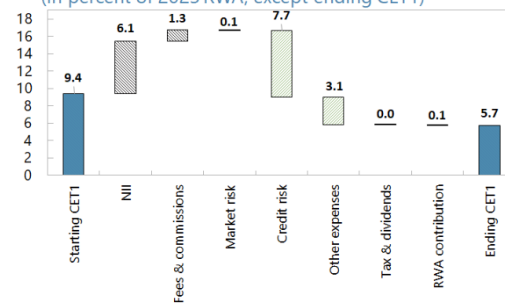
(In percent of 2023 RWA, except ending CET1)

**Capital Ratio - Baseline - G03**

(In percent of 2023 RWA, except ending CET1)

**Capital Ratio - Adverse - G03**

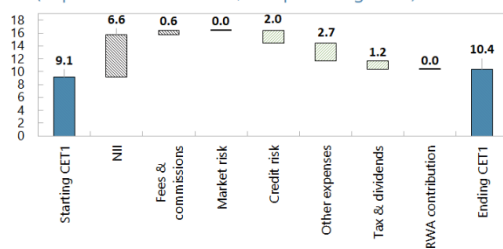
(In percent of 2023 RWA, except ending CET1)



### Annex I. Figure 7. Solvency Stress Test Results: Changes in Bank Capital (Concluded)

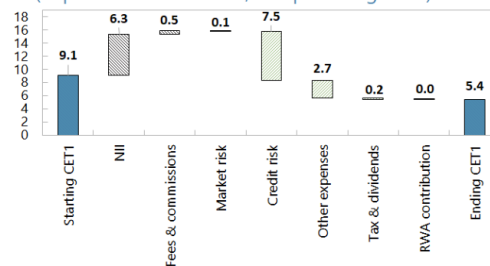
#### Capital Ratio - Baseline - G04

(In percent of 2023 RWA, except ending CET1)



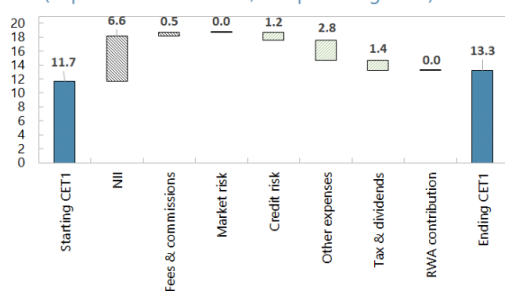
#### Capital Ratio - Adverse - G04

(In percent of 2023 RWA, except ending CET1)



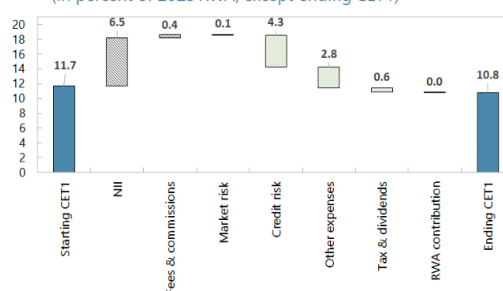
#### Capital Ratio - Baseline - G05

(In percent of 2023 RWA, except ending CET1)



#### Capital Ratio - Adverse - G05

(In percent of 2023 RWA, except ending CET1)

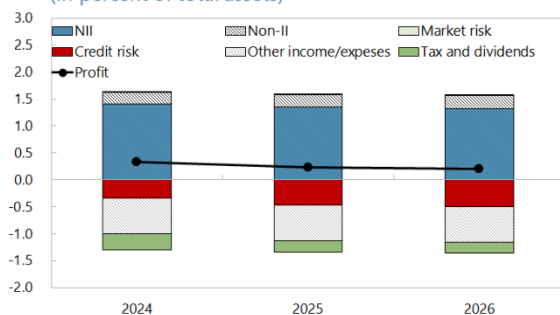


Sources: Chinese regulatory authorities and IMF staff calculations.

Annex I. Figure 8. Solvency Stress Test Results: Profitability

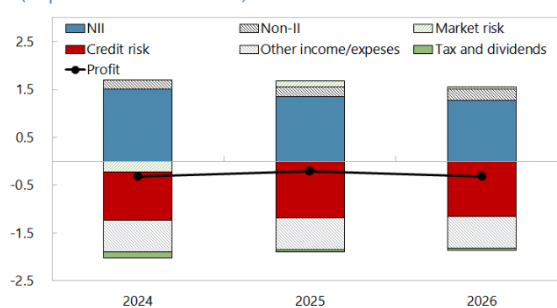
## Contribution to Profit - Baseline - Total

(In percent of total assets)



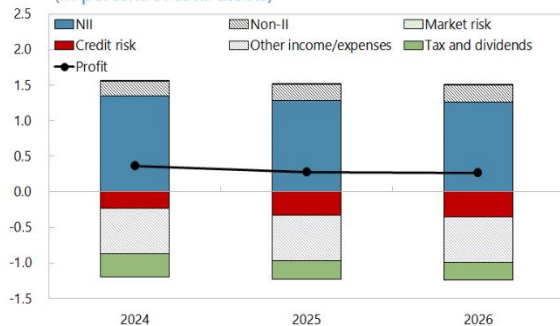
## Contribution to Profit - Adverse - Total

(In percent of total assets)



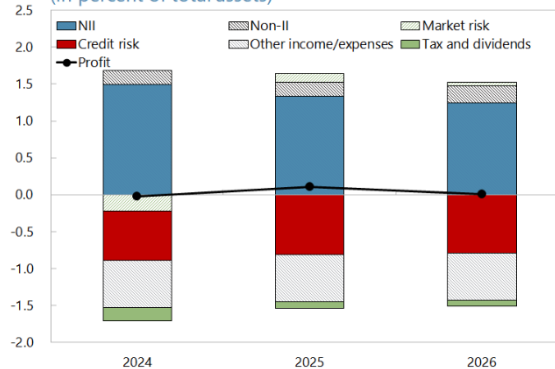
## Contribution to Profit - Baseline - G02

(In percent of total assets)



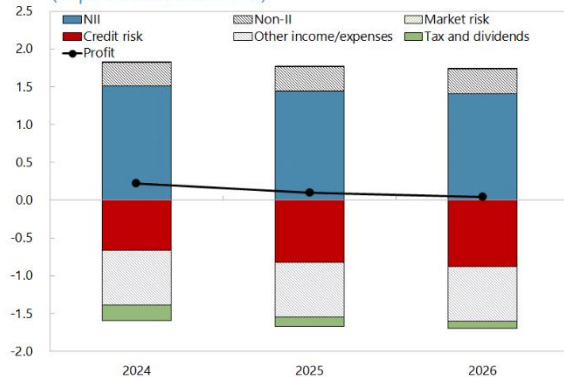
## Contribution to Profit - Adverse - G02

(In percent of total assets)



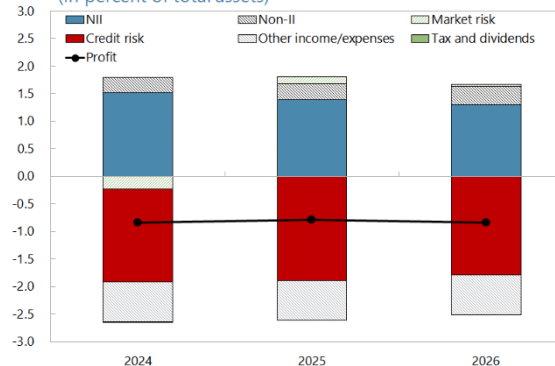
## Contribution to Profit - Baseline - G03

(In percent of total assets)

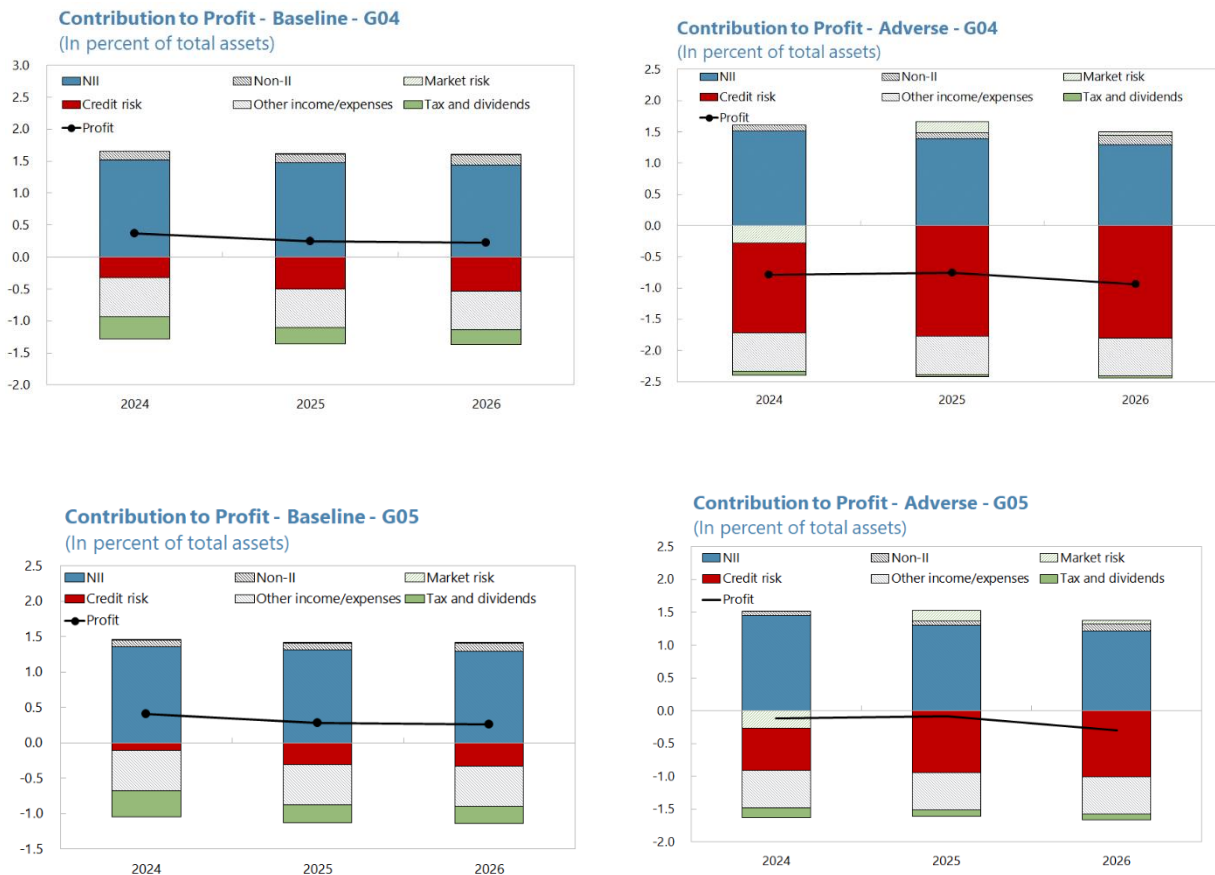


## Contribution to Profit - Adverse - G03

(In percent of total assets)



### Annex I. Figure 8. Solvency Stress Test Results: Profitability (Concluded)

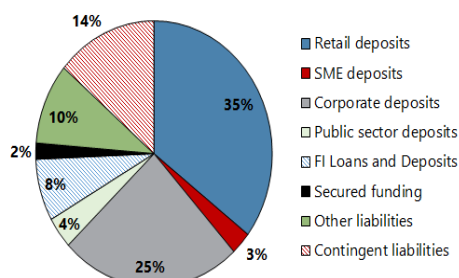


Sources: Chinese regulatory authorities and IMF staff calculations.

## Annex I. Figure 9. Liquidity Coverage Ratio Analysis Results

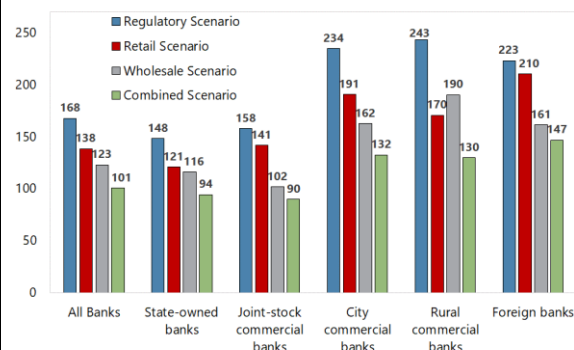
Banks are predominantly funded by deposits...

LCR: Breakdown of Liabilities



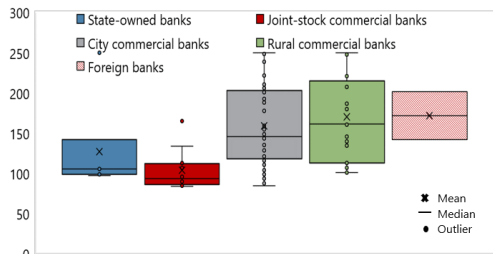
All banks meet the regulatory requirement under the baseline scenario, but state-owned and joint-stock banks start with lower values...

LCR by Bank Group for Different Scenarios



Several joint-stock banks fail the wholesale scenario because they rely more on corporate and institutional deposits.

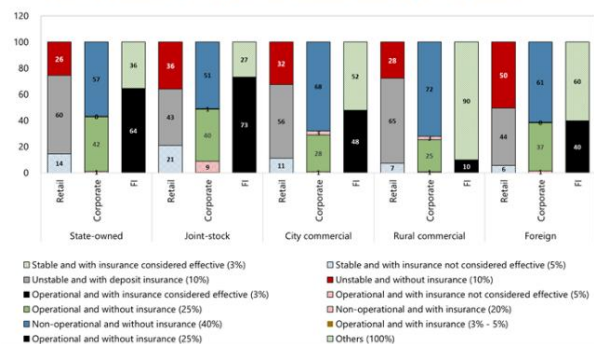
LCR Distribution: Wholesale Scenario



...which are largely reported as "unstable" or "non-operational".

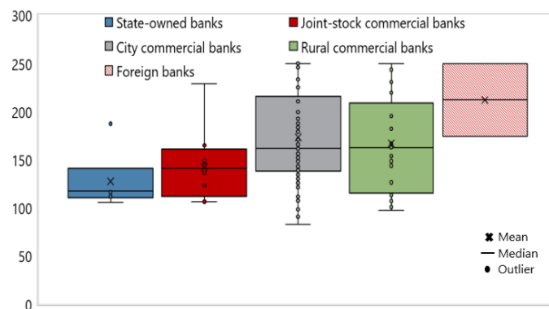
LCR: Distribution of Deposits Across Bank Groups

(Percent of deposits; figures in parentheses indicate outflow weights in regulation)



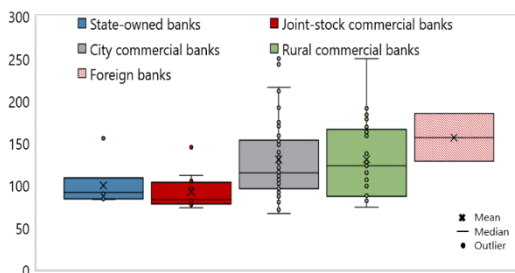
...banks fare relatively well in the retail scenario, but several city commercial banks fail due to low starting value and concentrated retail deposits.

LCR Distribution: Retail Scenario



...more banks fail when retail and wholesale depositor run simultaneously.

LCR Distribution: Combined Scenario

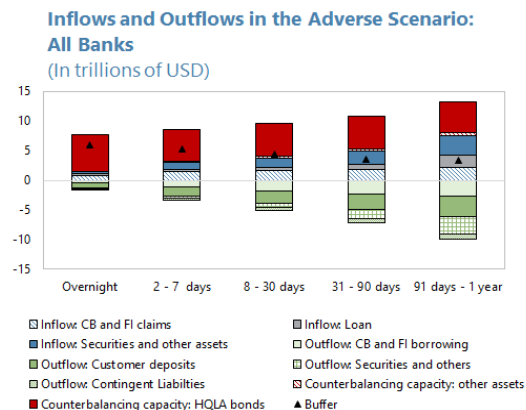
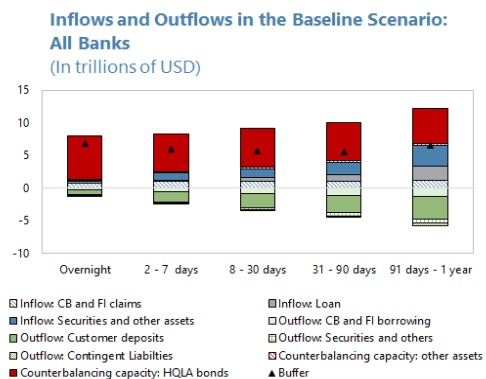


Sources: Chinese regulatory authorities and IMF staff calculations.

## Annex I. Figure 10. Cash Flow Analysis Results

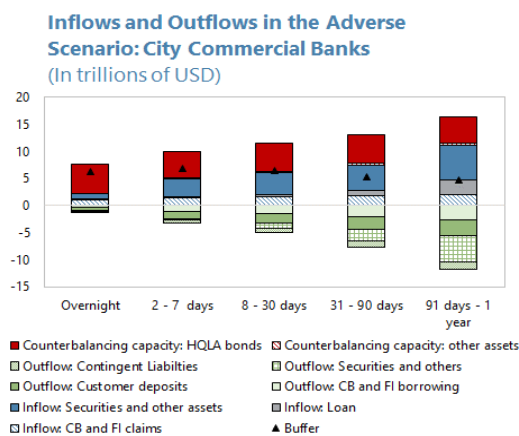
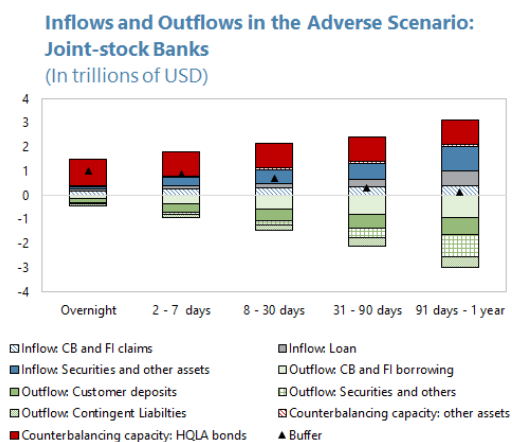
The system has sufficient liquidity buffer under the baseline scenario...

...it also remains relatively liquidity under the adverse shocks...



However, several joint stock banks could experience liquidity shortfall due to their larger contingent liabilities and the associated higher run risk...

...while joint-stock banks fare well as a group, but some individual banks experience liquidity shortfall in the adverse scenario.

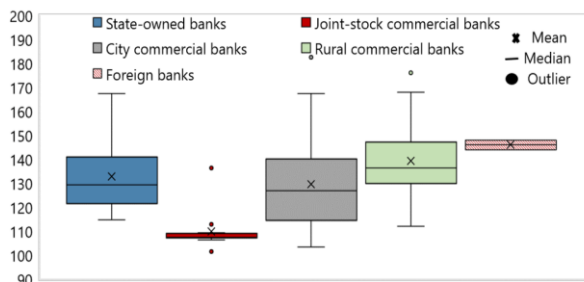


Sources: Chinese regulatory authorities and IMF staff calculations.

## Annex I. Figure 11. NSFR Analysis Results

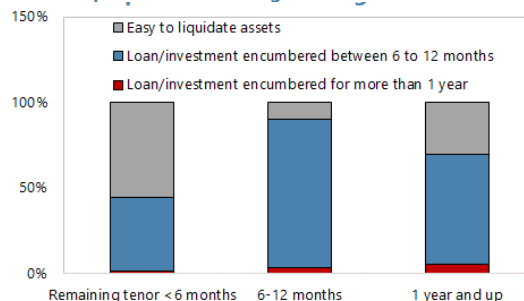
All banks meet NSFR requirement, although joint-stock banks show relatively lower ratios.

NSFR by Bank Group



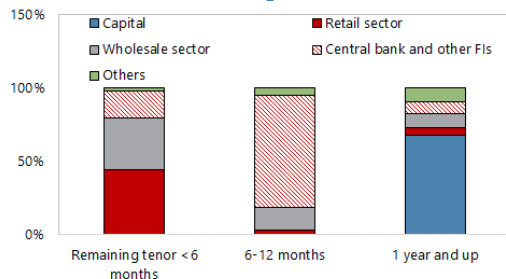
All banks require similar mix of funding for their credit extension and investment activities...

Required Stable Funding: All banks



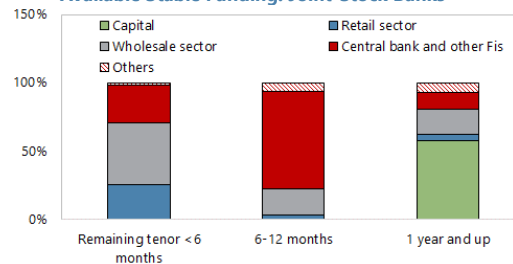
...longer term funding is mostly provided by the wholesale sector, while retail sector dominates in short term funding...

Available Stable Funding: All Banks



...however, Joint-stock banks rely more heavily on short-term wholesale deposits.

Available Stable Funding: Joint-Stock Banks

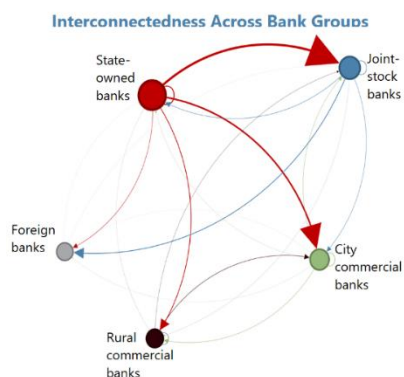


Sources: Chinese regulatory authorities and IMF staff calculations.

## Annex I. Figure 12. Interconnectedness and Contagion Analysis Results

Exposures of state-owned and joint stock banks are proportionately larger to the smaller banks...

...while the interbank exposures captured in this analysis is limited compared to the bank balance sheet.

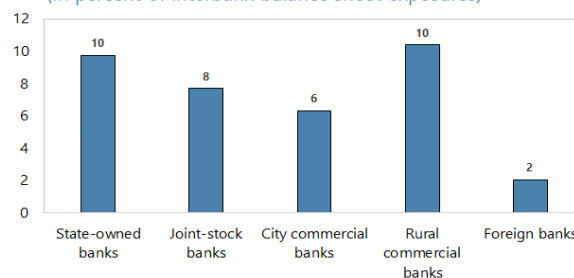


Note: Bubble size indicates bank group asset size. Bubble and edge colours indicate bank groups.

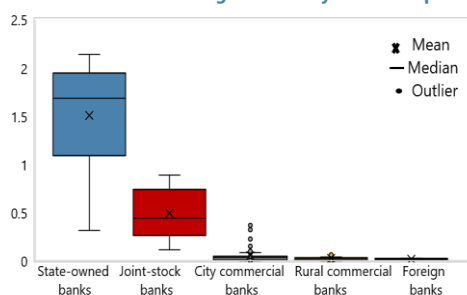
State-owned and joint stock banks tend to be more contagious due to the sheer size of exposures to the smaller banks based on the data available...

...while all bank groups appear similarly vulnerable, which could be influenced by the incomplete data coverage of the financial system.

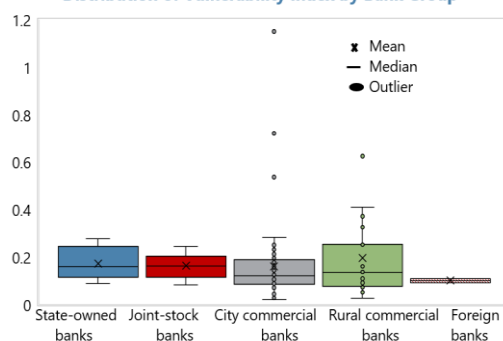
**Large Interbank Exposures**  
(In percent of interbank balance sheet exposures)



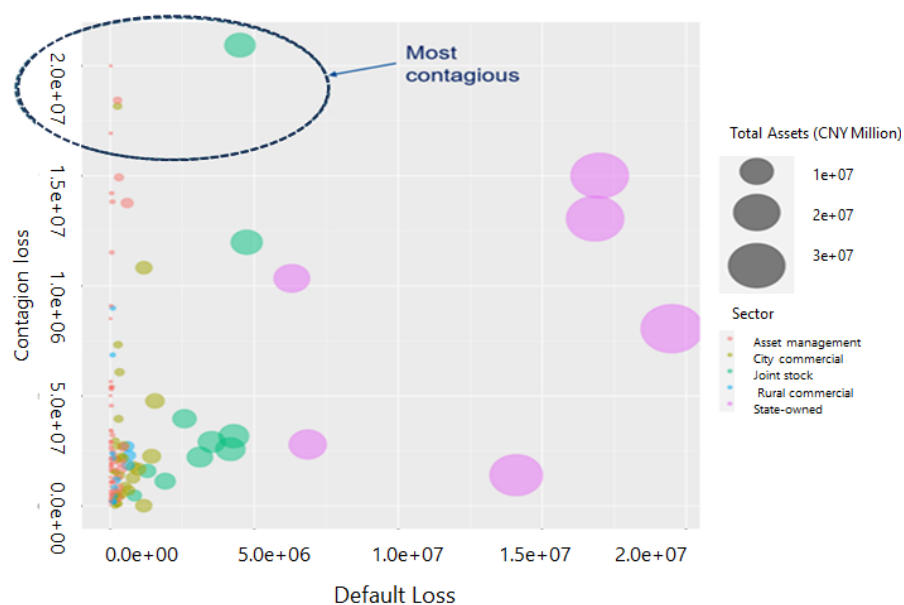
**Distribution of Contagion Index by Bank Group**



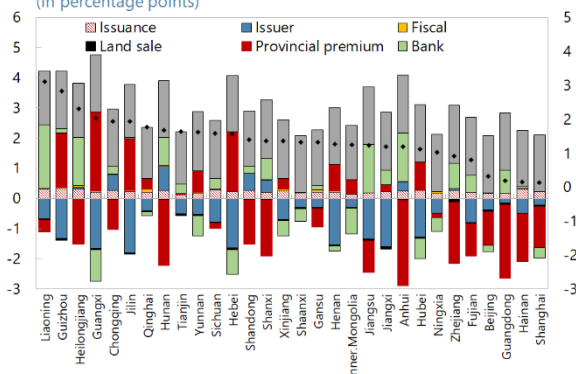
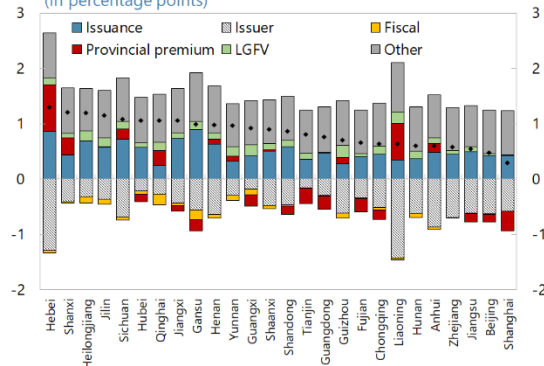
**Distribution of Vulnerability Index by Bank Group**



Sources: Chinese regulatory authorities and IMF staff calculations.

**Annex I. Figure 13. “Too-Big-to-Fail” vs “Too-Interconnected-to-Fail”**

Sources: Credit Research Initiative, National University of Singapore. See “NUS Credit Research Initiative Technical Report, 2023 Update 1,” 2023 and “Covid, Credit, and Contagion Risks to ASEAN+3 Financial Systems”, Wei Sun, AMRO Analytical Note, 2020

**Annex I. Figure 14. Fiscal and Financial Determinants of LGFV/Bank Financing Cost****Decomposition of Credit Spread of LGFV Bonds**  
(In percentage points)**Decomposition of Credit Spread of Bank Subordinate Bonds**  
(In percentage points)

Sources: WIND; and IMF staff estimates.

Notes: In Chart 1: Issuance=tenor and amount; Issuer=return on asset, interest coverage ratio, issuer's credit rating, issuer fixed effects; Fiscal=fiscal surplus; Land sale = Land sale/GDP; Provincial premium=province fixed effects; Bank=non-performing loan ratio; Other=GDP growth, reverse repo rate among depository institutions.

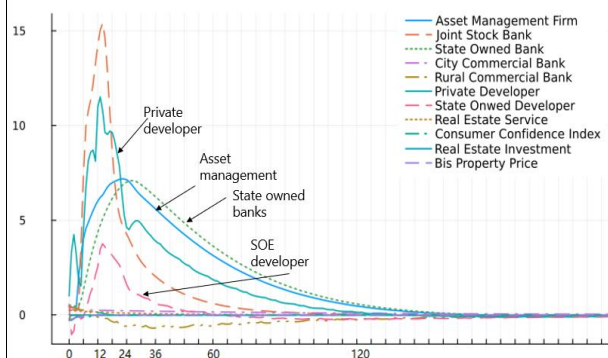
In Chart 2: Issuance=tenor, amount, bond type (i.e., if issuance is for financing small and micro, agricultural, green enterprises, or used as perpetual bonds); Issuer=capital adequacy ratio, return on equity, issuer's credit rating, bank type (i.e., if city or rural commercial); Fiscal=fiscal surplus; Provincial premium=province fixed effects; LGFV=credit spread averaged across issuers; Other=GDP growth, reverse repo rate among depository institutions.

### Annex I. Figure 15. Impulse Response to Idiosyncratic Shocks

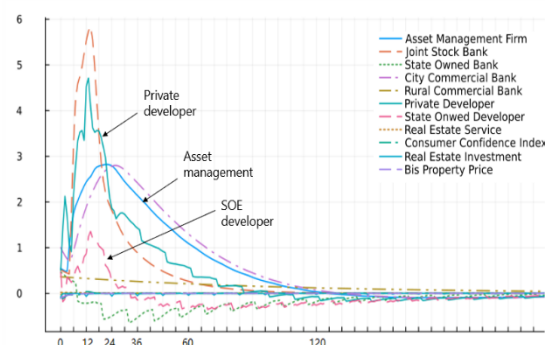
*PDs of both public developers and financial institutions increase after shock hits private developers.*

*Stress of city commercial banks negatively affects other banking sectors and securities firms.*

**Impulse Response: 1bps increase in PD of private developer**  
(Y axis: PD in basis point and macro in ppt; X axis: month)



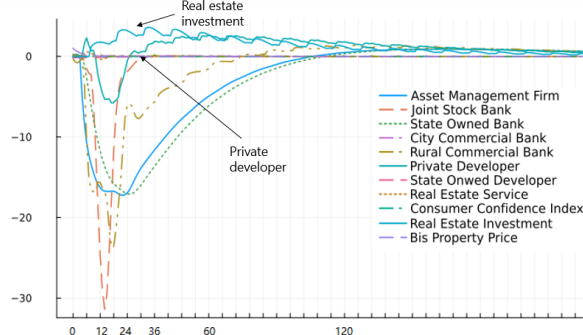
**Impulse Response: 1bps increase in PD of city commercial bank**  
(Y axis: PD in basis point and macro in ppt; X axis: month)



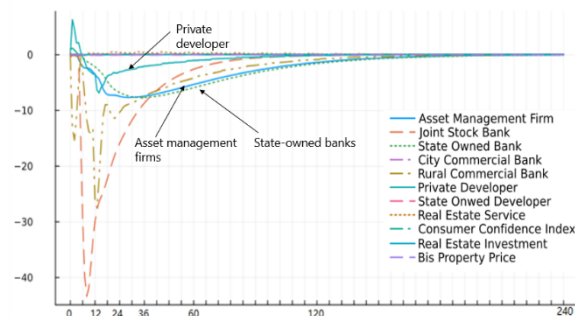
*Rising property prices decrease stress of developers and banks. They also increase real estate investment, and to a lesser extent confidence.*

*Rising consumer confidence supports private developers and financial sector health.*

**Impulse Response: 1ppt increase in property price**  
(Y axis: PD in basis point and macro in ppt; X axis: month)



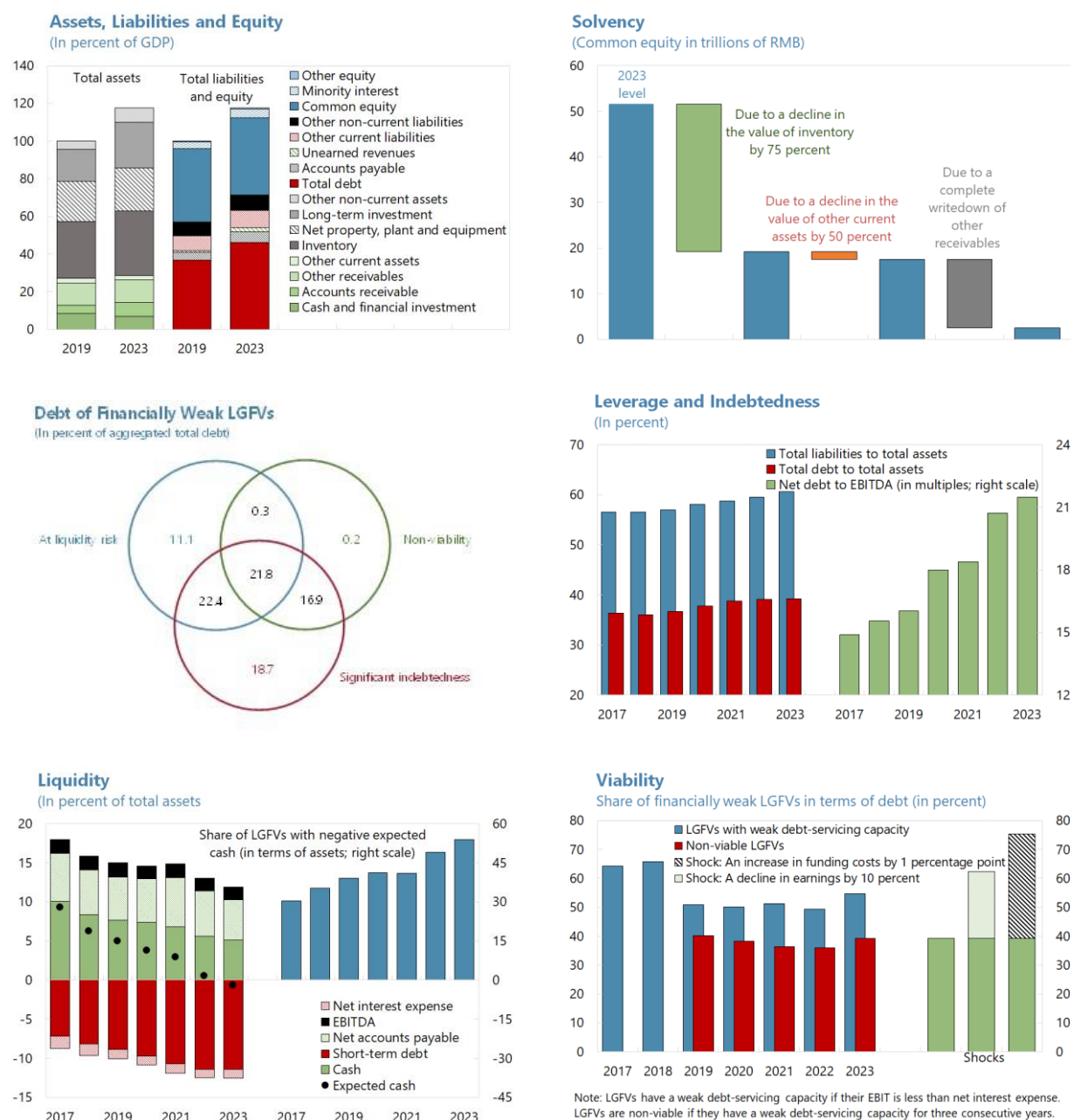
**Impulse Response: 1ppt increase in consumer confidence index**  
(Y axis: PD in basis point and macro in ppt; X axis: month)



Sources: National University of Singapore, and IMF staff calculations.

Note: Macro variables include consumer confidence index, growth in real estate investment and property prices. The prescribed shock to them is defined as 1 percentage point and the impulse response is demonstrated in the same unit. By contrast, the unit of shock to and response of real estate and financial sectors is 1 basis point.

Annex I. Figure 16. LGFVs' Financial Vulnerabilities

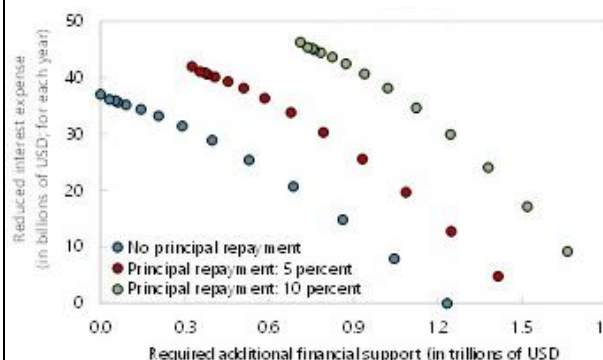


Sources: S&P Capital IQ, WIND; and IMF staff estimates.

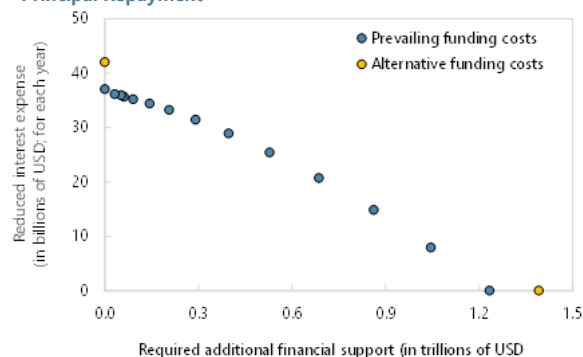
Note: In the middle-left panel, LGFVs are at liquidity risk if they have a negative cash position that accounts for short-term debt, net accounts payable, earnings before interest, taxes, depreciation, and amortization (EBITDA), and net interest expense. LGFVs are non-viable if their earnings before interest and taxes (EBIT) are less than net interest expense for three consecutive years. LGFVs are significantly indebted if their net debt (debt minus cash) to EBITA exceeds 15 times.

### Annex I. Figure 17. Illustrative Impact of LGFV Debt Restructuring

**Illustrative Impact of LGFV Debt Restructuring:  
Tradeoffs Between Restructuring Options**



**Illustrative Impact Related to Debt Restructuring Under No  
Principal Repayment**

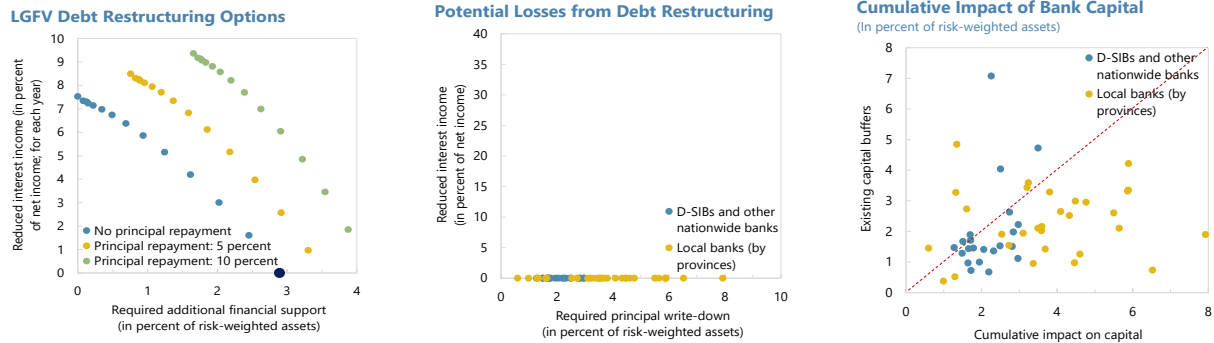


Sources: CEIC, S&P Capital IQ, WIND, and IMF staff estimates.

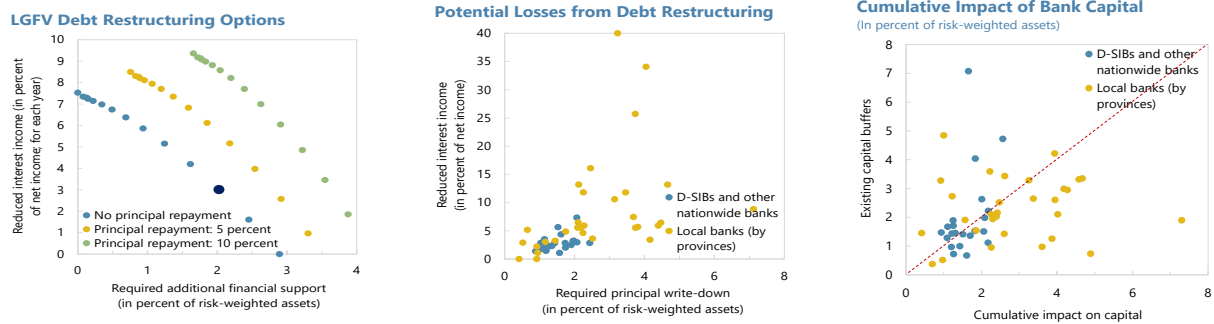
Note: The debt restructuring exercise considers three stylized options—interest reduction, additional financial support required to restore LGFVs' debt-servicing capacity, and repayment extension. In the left panel, blue dots show the amount of required additional financial support, which could come from local governments and/or creditors (i.e., principal write-downs) for a given amount of interest reduction. The red and green dots consider an additional dimension of principal repayment (assuming an annual amortization of 5 and 10 percent, respectively), thus accounting for additional effects of larger interest income losses due to falling debt principal and larger additional financial support required to meet principal repayment up to three years. In the right panel, yellow dots show scenarios with alternative (higher) funding costs, which assume a minimum funding cost at 3 percent plus premiums for LGFVs in certain provinces. The analysis is based on publicly available data. The analysis covers a sample of about 3,700 bond-issuing LGFVs.

## Annex I. Figure 18. Impact of LGFV Debt Restructuring on Banks under No Principal Repayment

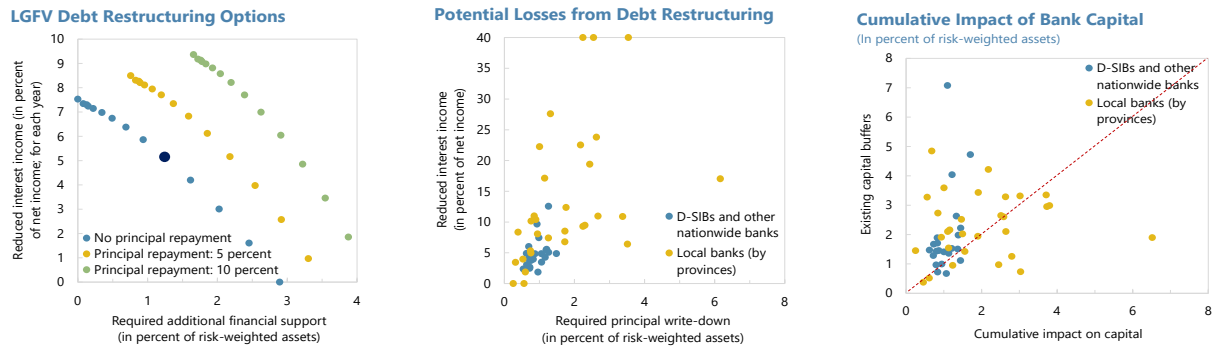
Scenario: No interest reduction; no principal repayment.



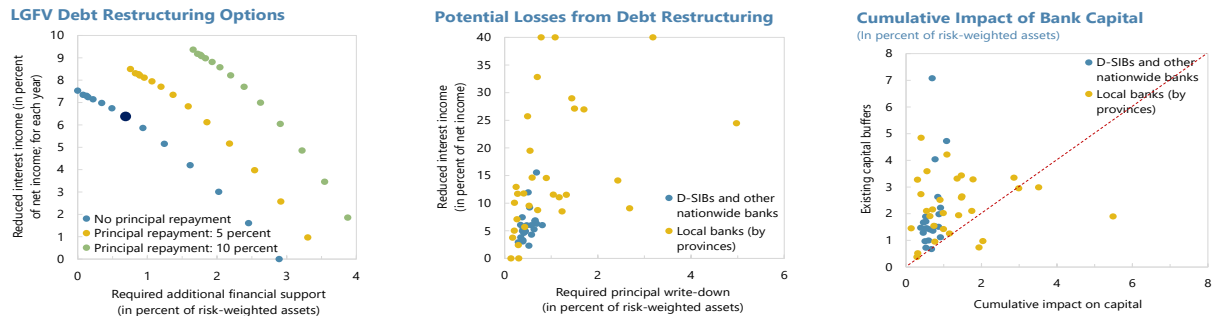
Scenario: Interest rate reduction up to 0.5 percent; no principal repayment.



Scenario: Interest rate reduction up to 1 percent; no principal repayment.

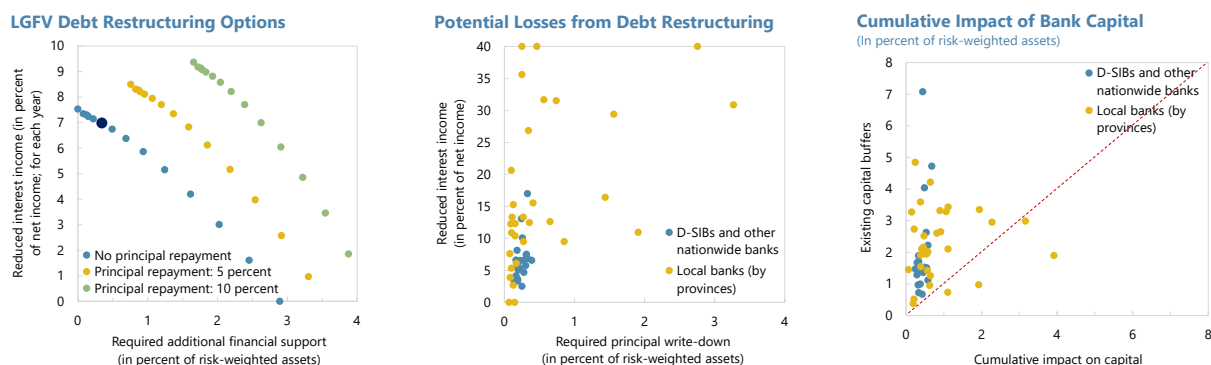


Scenario: Interest rate reduction up to 1.5 percent; no principal repayment.

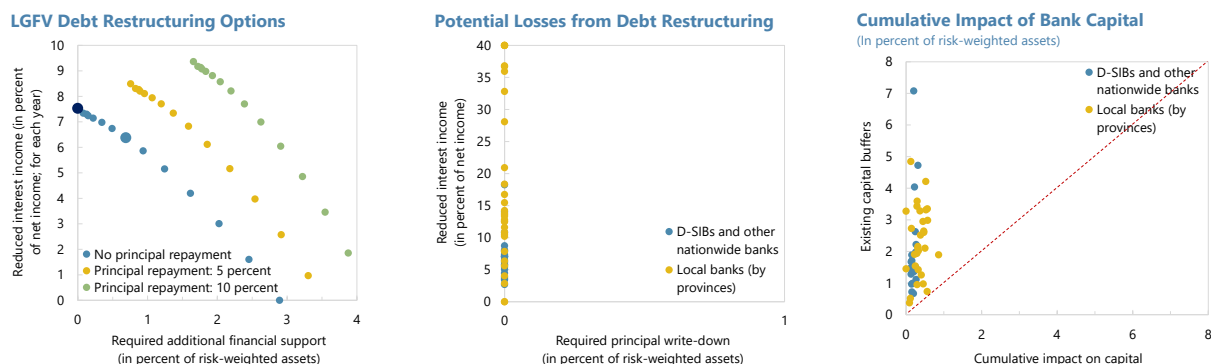


### Annex I. Figure 18. Impact of LGFV Debt Restructuring on Banks under No Principal Repayment (Concluded)

Scenario: Interest rate reduction up to 2 percent; no principal repayment.



Scenario: Interest rate reduction to fully restore LGFVs' debt-servicing capacity; no principal repayment.

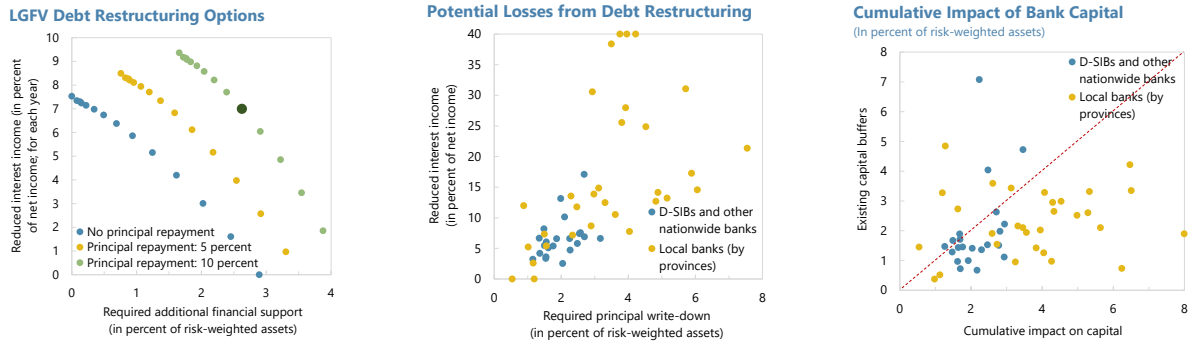


Sources: CEIC; S&P Capital IQ; WIND; and IMF staff estimates.

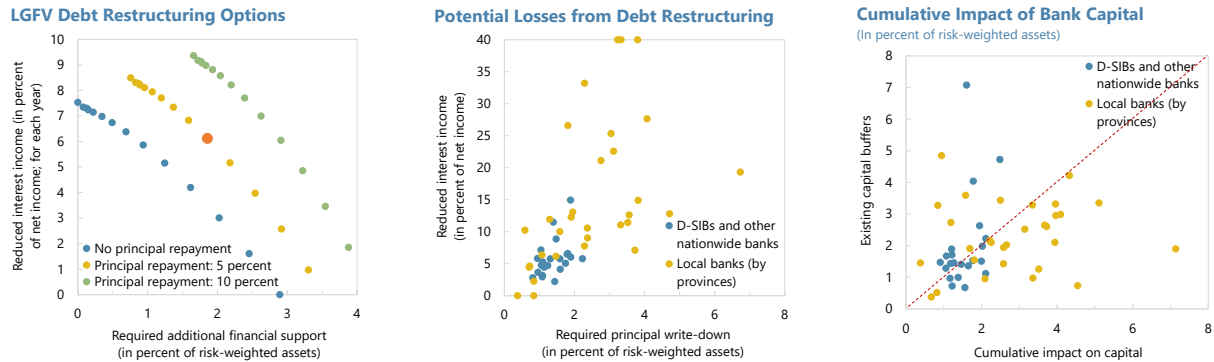
Note: The debt restructuring exercise considers three stylized options—interest reduction, additional financial support required to restore LGFVs' debt-servicing capacity, and repayment extension. For charts in the left panel, the larger dot specifies the scenario (showing the aggregate impact), and charts in the middle and right panels show the corresponding impacts for individual banks (or groups of individual banks). More specifically, in the left panel, blue dots show the amount of required additional financial support, which could come from local governments and/or creditors (i.e., principal write-downs) for a given amount of interest reduction. The yellow and green dots consider an additional dimension of principal repayment (assuming an annual amortization of 5 and 10 percent, respectively), thus accounting for additional effects of larger interest income losses due to falling debt principal and larger additional financial support required to meet principal repayment up to three years. However, for charts in the middle and right panels, the exercise assumes that the required additional financial support totally takes the forms of principal write-downs. The analysis is based on publicly available data. The analysis covers a sample of about 3,700 bond-issuing LGFVs, and a sample of about 400 banks that account for about 95 percent of banking sector assets.

## Annex I. Figure 19. Impact of LGFV Debt Restructuring on Banks to Illustrate Repayment Extension

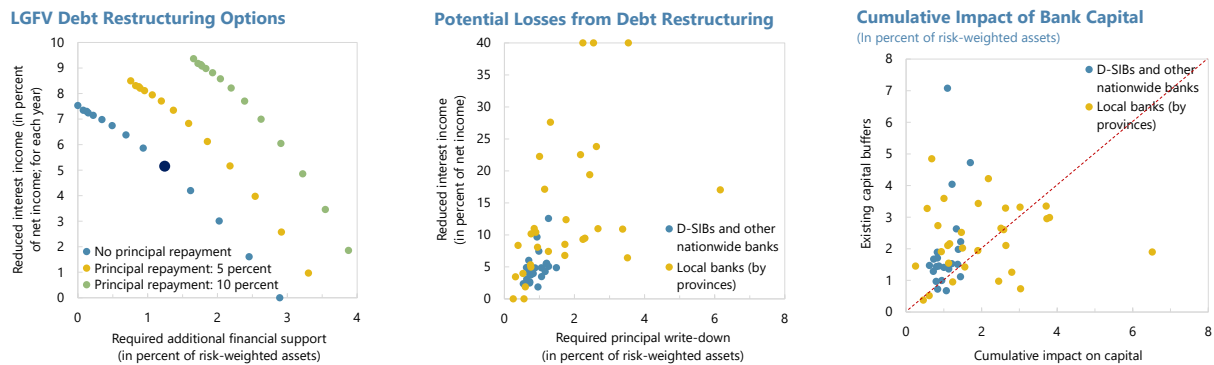
Scenario: Interest rate reduction up to 1 percent; principal repayment at 10 percent of outstanding debt.



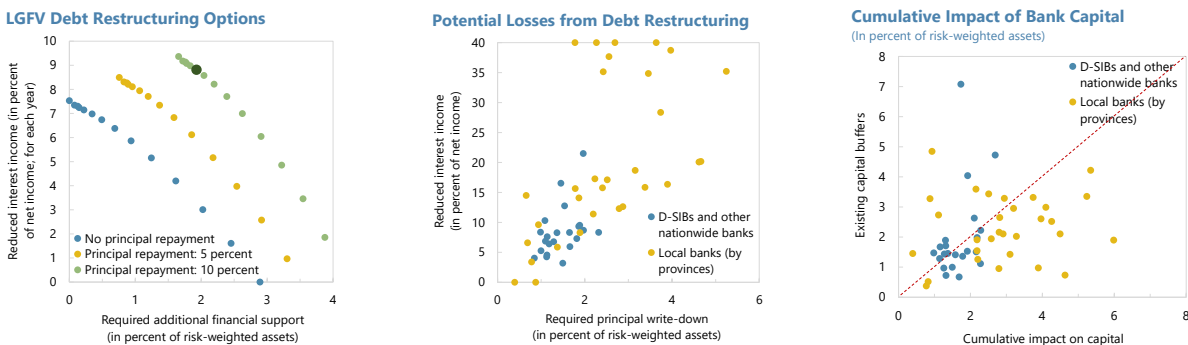
Scenario: Interest rate reduction up to 1 percent; principal repayment at 5 percent of outstanding debt.



Scenario: Interest rate reduction up to 1 percent; no principal repayment.

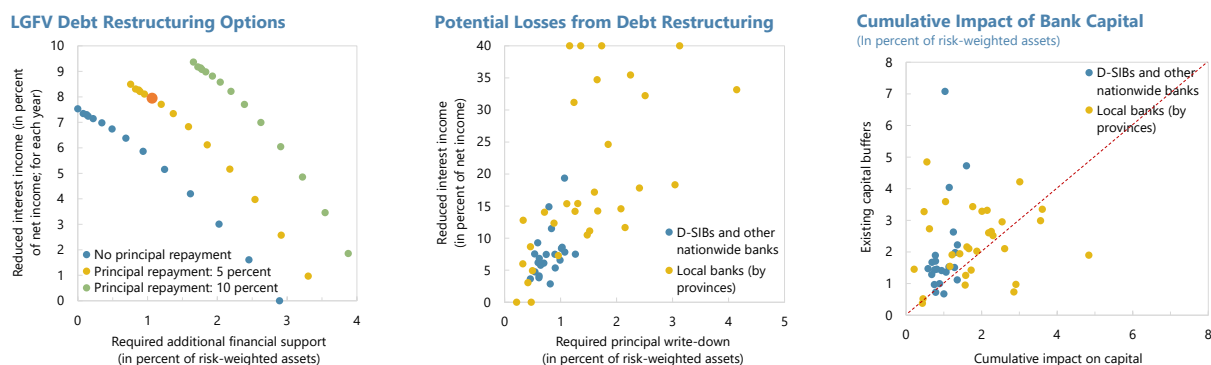


Scenario: Interest rate reduction up to 2 percent; principal repayment at 10 percent of outstanding debt.

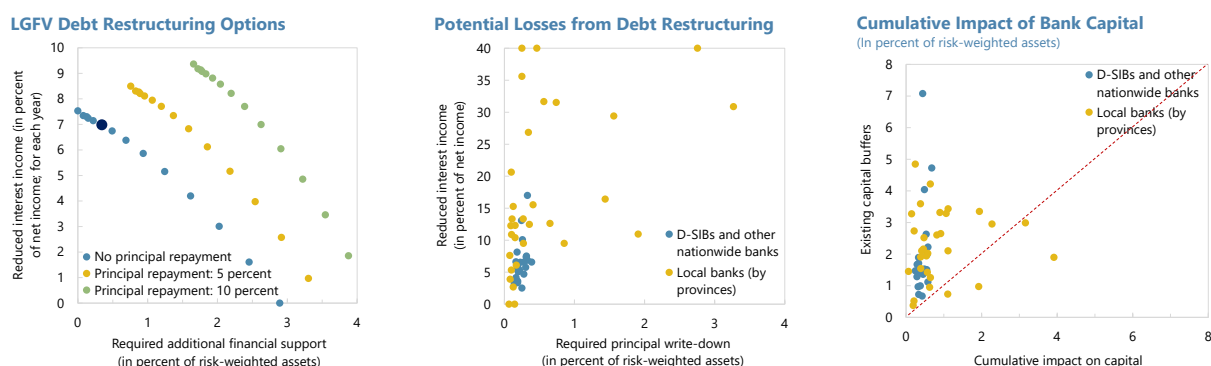


## Annex I. Figure 19. Impact of LGFV Debt Restructuring on Banks to Illustrate Repayment Extension (Concluded)

Scenario: Interest rate reduction up to 2 percent; principal repayment at 5 percent of outstanding debt.



Scenario: Interest rate reduction up to 2 percent; no principal repayment.

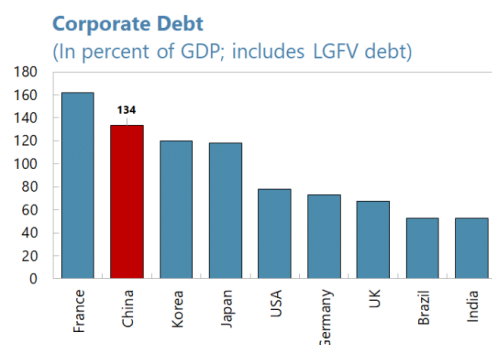


Sources: CEIC; S&P Capital IQ; WIND; and IMF staff estimates.

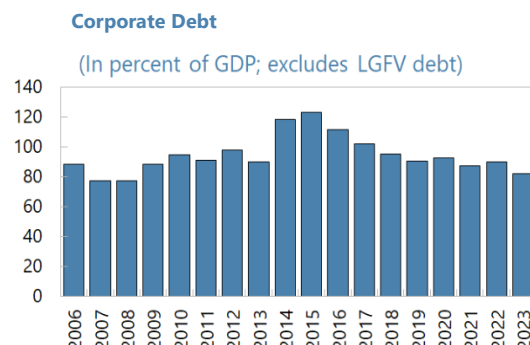
Note: The debt restructuring exercise considers three stylized options—interest reduction, additional financial support required to restore LGFVs' debt-servicing capacity, and repayment extension. For charts in the left panel, the larger dot specifies the scenario (showing the aggregate impact), and charts in the middle and right panels show the corresponding impacts for individual banks (or groups of individual banks). More specifically, in the left panel, blue dots show the amount of required additional financial support, which could come from local governments and/or creditors (i.e., principal write-downs) for a given amount of interest reduction. The yellow and green dots consider an additional dimension of principal repayment (assuming an annual amortization of 5 and 10 percent, respectively), thus accounting for additional effects of larger interest income losses due to falling debt principal and larger additional financial support required to meet principal repayment up to three years. However, for charts in the middle and right panels, the exercise assumes that the required additional financial support totally takes the forms of principal write-downs. The analysis is based on publicly available data. The analysis covers a sample of about 3,700 bond-issuing LGFVs, and a sample of about 400 banks that account for about 95 percent of banking sector assets.

## Annex I. Figure 20. Corporate Debt and Performance Indicators

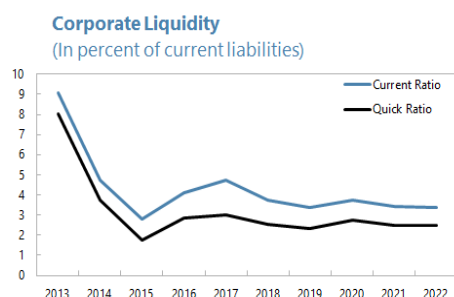
Corporate debt in China is high relative to peers...



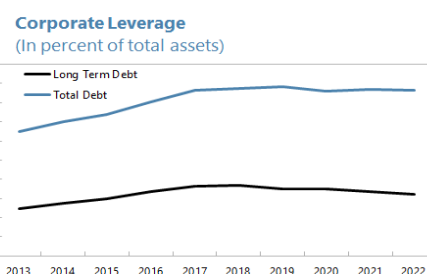
...even after excluding LGFV debt.



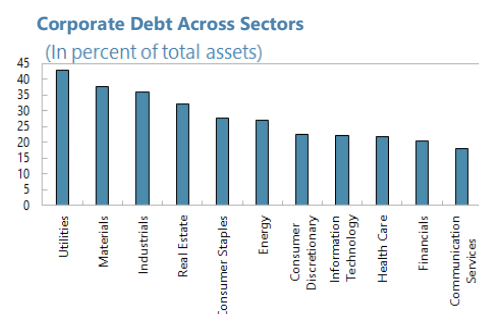
Liquidity has declined but remains broadly stable...



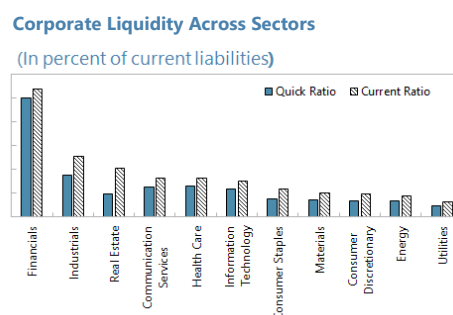
...and corporate leverage has increased gradually but remains low on average, under 30 percent of firm assets.



...with variation in debt...



...and liquidity across industry sectors.



Sources: S&P Capital IQ; IMF's Global Debt database, IMF's World Economic Outlook database, and IMF staff calculations.

Note: Figures in charts 2 through 4 are averages computed across a sample of 11,300 firms.

## Annex I. Figure 21. Corporate PD Estimates Across Data Samples

Firm-specific, sector-specific, and macro-financial variables were used in the regression.

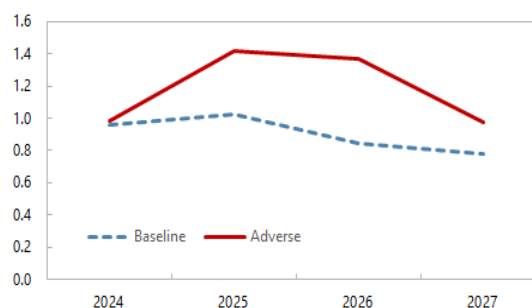
### List of Explanatory Variables Used in the Corporate Analysis

Firm financial indicators	Macrofinancial variables
EDF	Output Gap
ROA	Term Spread
Equity in percent of total assets	
Current assets in percent of total assets	
Total assets	
<b>Sector Categories</b>	
Consumer Discretionary	
Consumer Staples	
Energy	
Financials	
Health Care	
Industrials	
Information Technology	
Materials	
Real Estate	
Utilities	

Dropping financial firms did not change the PD path much. ...

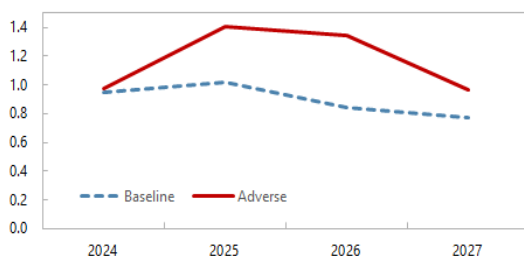
The model indicated a non-trivial increase in corporate risk, particularly in the initial three years after the shock occurs.

### Corporate PD Paths: All Firms



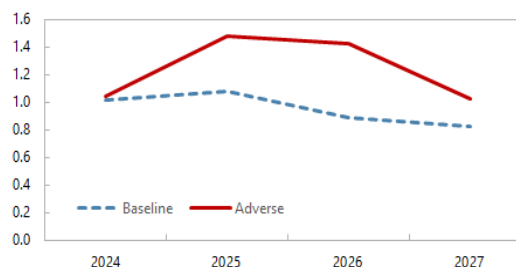
...and excluding LGFVs raised PD paths slightly in the adverse and baseline scenarios.

### Corporate PD Paths: Nonfinancial Corporates



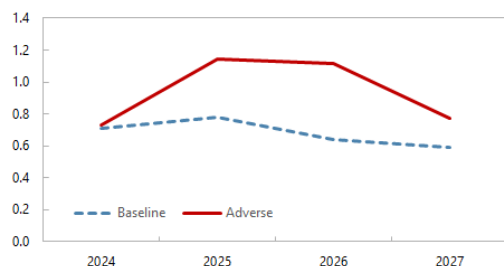
Including only LGFV firms marginally lowered PD paths in the adverse and baseline...

### Corporate PD Paths: Corporates Excluding LGFVs

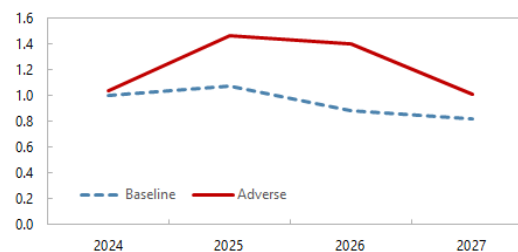


...and excluding LGFVs and financial firms yielded results similar to the full sample results, with higher PD paths.

### Corporate PD Paths: LGFVs



### Corporate PD Paths: Corporates Excluding LGFVs and Financial Corporates



Source: IMF staff calculations.

## Annex I. Figure 22. Household Sector

After two decades of rapid growth, China's household debt has surged to levels comparable to advanced economies, with mortgages making up half of total debt.

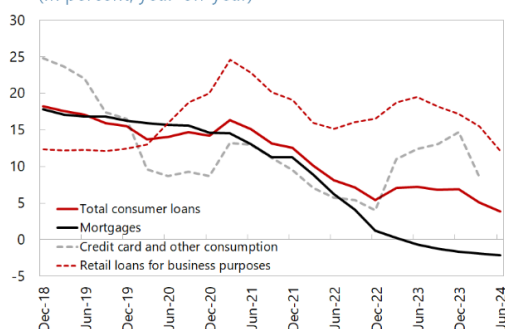
Younger demographics are more likely to have debt, while high-income earners hold the majority.

**Household Debt-to-GDP Ratio and Mortgage Share of Debt, 2022**

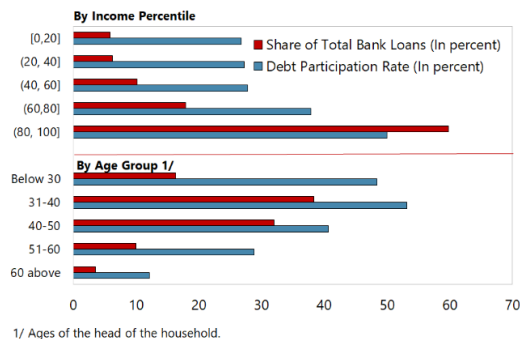


Recently, household debt growth slowed sharply, with mortgage loans declining.

**Growth Rates of Household Bank Loans by Type**  
(In percent, year-on-year)

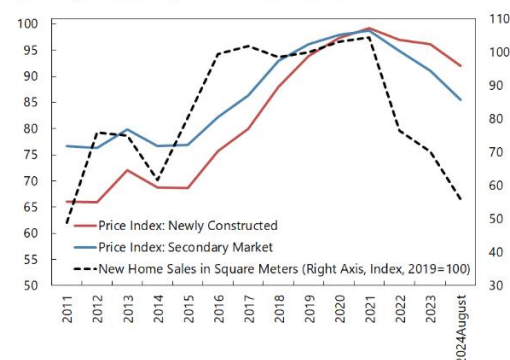


**Chinese Household Debt Distribution**



This coincides with a sharp adjustment in the real estate market.

**Housing Prices and New Home Sales**



Sources: National Bureau of Statistics, CEIC, IMF staff calculations, China Household Finance Survey (CHFS, 2019).

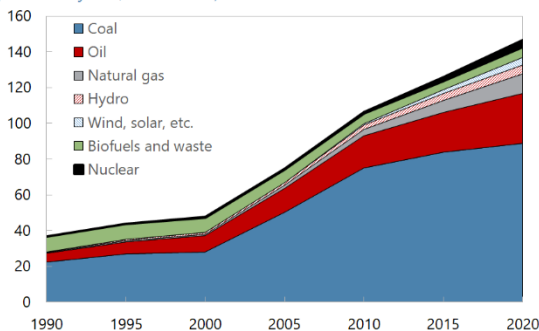
## Annex I. Figure 23. Overview Of Transition and Physical Risks and Climate Risk Analysis Framework

Coal and Oil & Gas dominate the energy supply ecosystem...

...while floods and storms/cyclones occur more frequently.

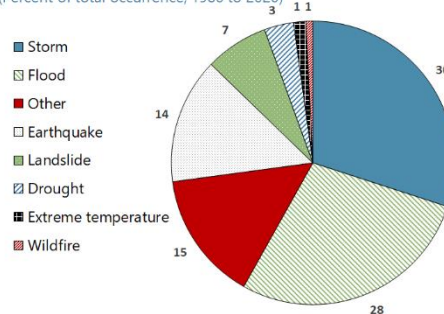
### Sources of Energy Supply in China

(Million Terajoules, 1990 to 2020)

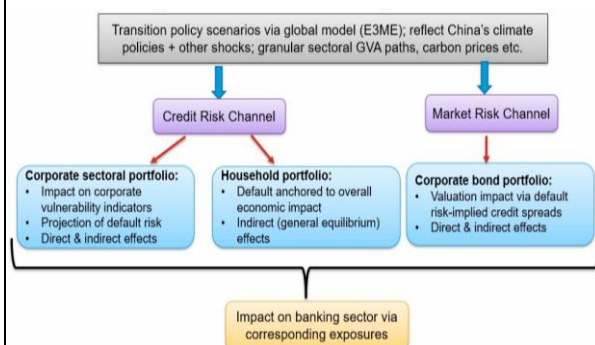


### Average Annual Natural Hazards Occurrence in China

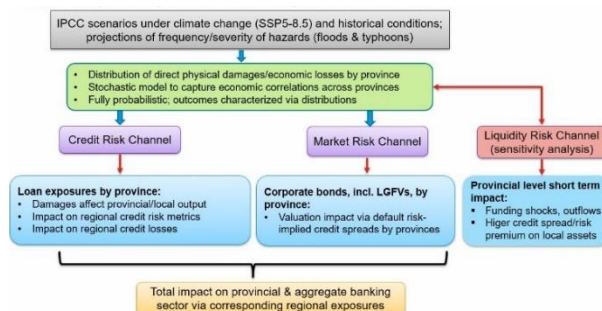
(Percent of total occurrence, 1980 to 2020)



### Summary of Transition Risk Analysis Framework



### Summary of Physical Risk Analysis Framework



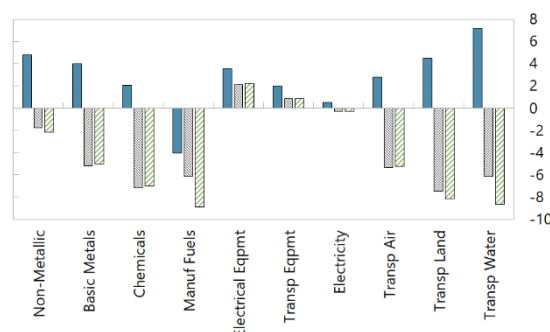
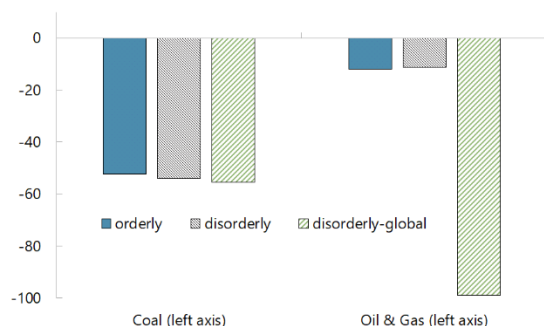
Sources: IEA World Energy Balances, World Bank, Climate Change Knowledge Portal.

## Annex I. Figure 24. Transition Scenarios and Default Risks Across Selected Economic Sub-Sectors

Coal and Oil & Gas sectors see largest output decline by 2040...

... while some subsectors like electrical and transportation equipments see positive impact

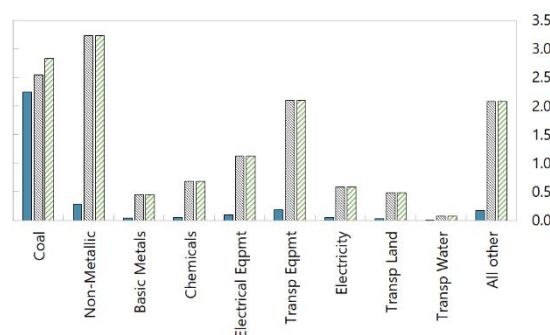
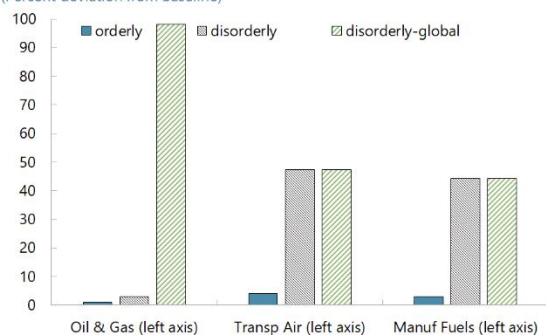
**Sectoral Output Under Transition Scenarios**  
(Percent deviation from baseline in 2040)



Oil & Gas, air transportation, and fuel manufacturing see large increase in default risks under disorderly scenario..

...and the all other corporate portfolio sees non-trivial default risk due to indirect effects of transition

**Sectoral PDs Under Transition Scenarios**  
(Percent deviation from baseline)



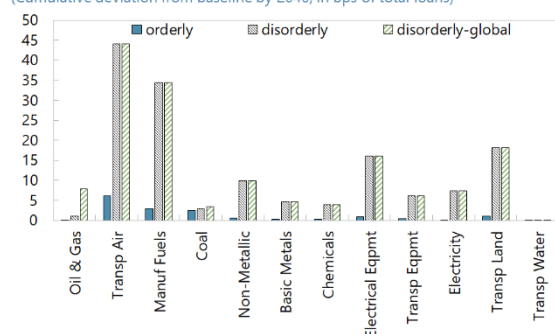
Sources: World Bank and IMF staff calculations.

## Annex I. Figure 25. Impact On Banking Sector Under Different Transition Scenarios

Credit losses are notable in few sub-sectors...

### Credit Losses by Granular Sectors

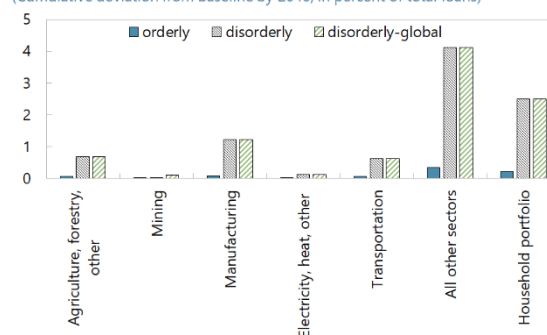
(Cumulative deviation from baseline by 2040, in bps of total loans)



...while also being relatively large in residual corporate segment and household portfolio due to indirect effects of transition

### Credit Losses by High Level Sectors+Household Portfolio

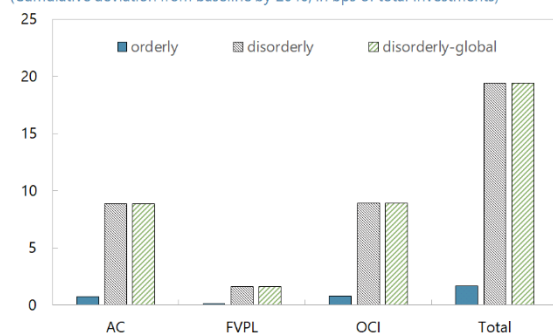
(Cumulative deviation from baseline by 2040, in percent of total loans)



Market valuation losses are small across portfolios.

### Market Losses for Corporate Bonds by Portfolio Type

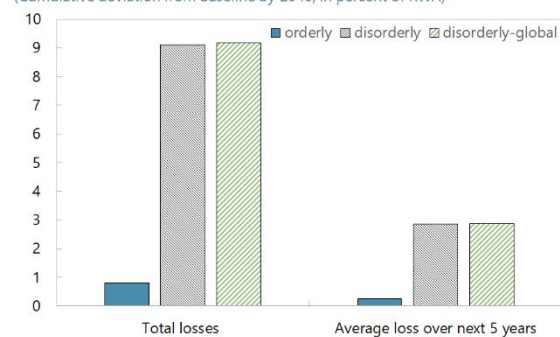
(Cumulative deviation from baseline by 2040, in bps of total investments)



...total losses in banking sector is driven by credit losses and is non-trivial but manageable.

### Total Capital Impact of Credit and Market Losses

(Cumulative deviation from baseline by 2040, in percent of RWA)



Sources: Chinese regulatory authorities and IMF staff calculations.

### Annex I. Figure 26. Severity Of Climate Change and Potential Damages Across Provinces of the Chinese Mainland

*Severity of flood would rise significantly under climate change...*

**1-in-100 year Flood Depth under SSP5-8.5 by 2050**



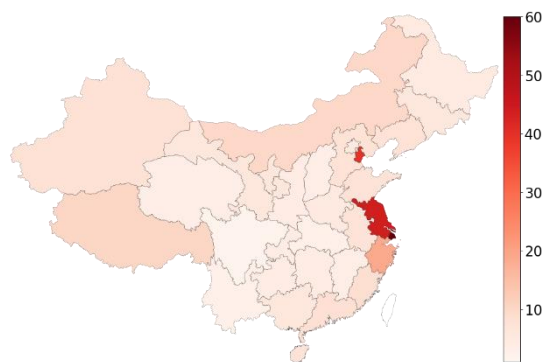
*...so would wind intensity along the coastal provinces*

**1-in-100 year Wind Speed under SSP5-8.5 by 2050**



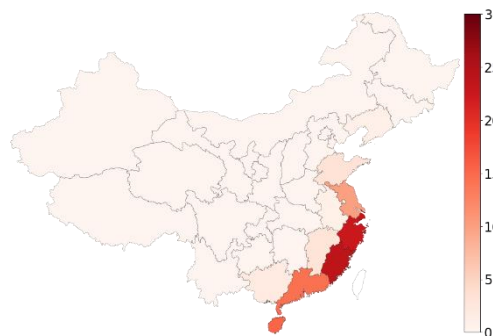
*Average damage from flood is heterogeneous across regions...*

**Average Damage Rate from 1-in-100 year Flood under SSP5-8.5 by 2050**



*...while damages from wind is concentrated along coastal regions.*

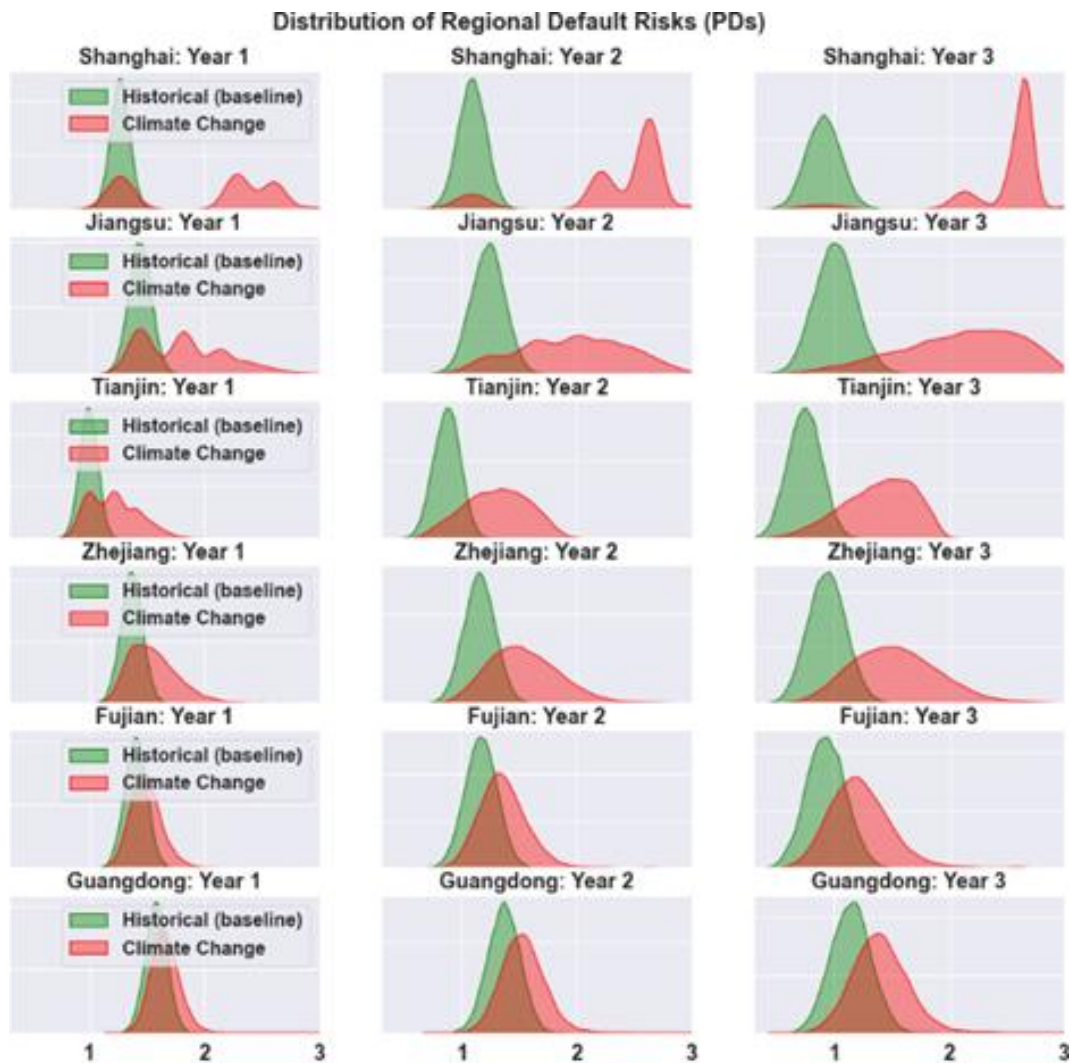
**Average Damage Rate from 1-in-100 year Wind Speed under SSP5-8.5 by 2050**



Source: IMF staff calculations.

**Annex I. Figure 27. Severity Of Climate Change and Potential Damages Across Provinces of the Chinese Mainland**

*Jiangsu, Shanghai, Tianjin provinces face large increase in probability of default risks due to climate related damages...*



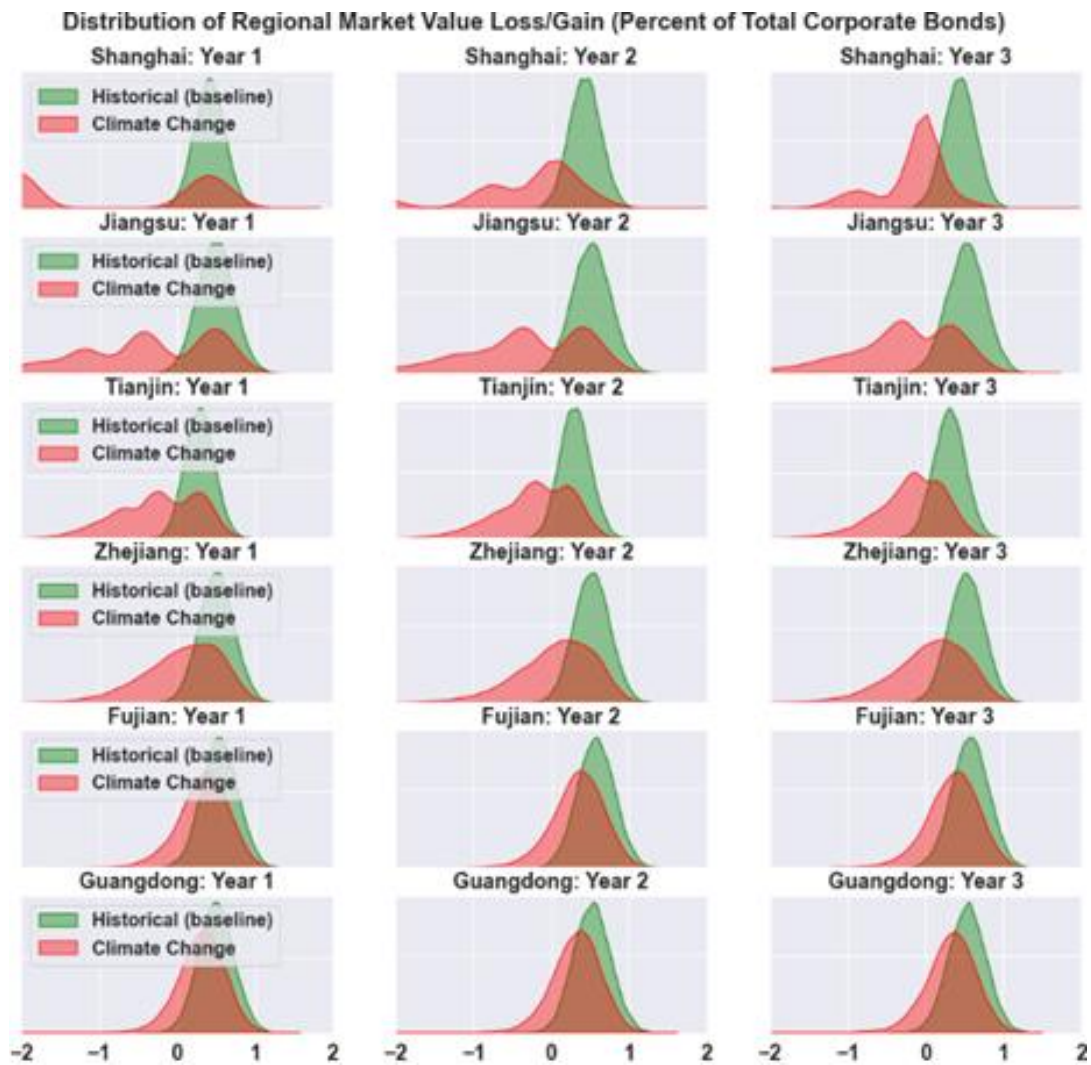
### Annex I. Figure 27. Severity Of Climate Change and Potential Damages Across Provinces of the Chinese Mainland (Continued)

...and consequently, higher probability of large credit losses.



**Annex I. Figure 27. Severity Of Climate Change and Potential Damages Across Provinces of the Chinese Mainland (Continued)**

*Probability of market losses are also pronounced across provinces.*



# Annex I. Figure 27. Severity Of Climate Change and Potential Damages Across Provinces of the Chinese Mainland (Concluded)

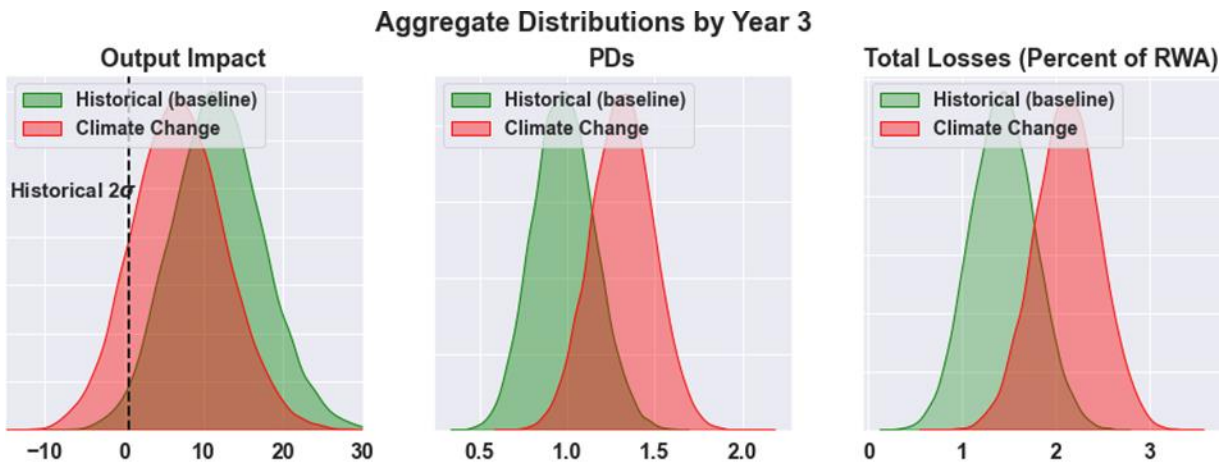
*Probability of total impact on capital increases materially.*



Source: IMF staff calculations.

**Annex I. Figure 28. Climate Change Impact: Distributions Of Output, PDs, and Total Losses**

*Climate change can generate materially higher tail probability of economic losses and financial sector losses.*



Source: IMF staff calculations.

## Annex II. Risk Assessment Matrix<sup>1</sup>

Sources of Risks	Overall Level of Concern	
	Relative Likelihood	Impact
<b>Global Conjunctural Risks</b>		
<b>Intensification of regional conflict(s) and deepening geoeconomic fragmentation.</b>	<b>High</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• Rapid reconfiguration of trade and FDI, supply disruptions for key industrial and technology products, technological and payments systems fragmentation, a fracturing of international monetary and financial systems.</li> <li>• Escalation of interventionist and protectionist policies. Trade restrictions further disrupt global supply chains, reduce trade volumes, and increase uncertainty, negatively impacting international trade and economic growth.</li> <li>• Higher cost of import and barrier for export. Weaker confidence and investment. Financial inflows reverse. Drop in medium-term economic growth prospects.</li> </ul>
<b>Abrupt global slowdown.</b>	<b>Medium</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• Global and idiosyncratic risk factors cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and market fragmentation triggering sudden stops in EMDEs.</li> <li>• Persistent contraction in the property sector weighs on private demand, further amplifies local government fiscal strains, and results in disinflationary pressures and adverse macro-financial feedback loops.</li> <li>• Sharp drop in external demand due to weakened outlook in key markets leads to contraction of exports. Financial inflows reverse weakening investment and damaging consumer sentiment. A risk-off sentiment arises, and valuation of assets sharply falls.</li> <li>• Employment and consumer spending weakens, credit and investment contracts and deflationary pressure strengthens.</li> </ul>
<b>Commodity price volatility.</b>	<b>High</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>• A succession of trade and supply disruptions (e.g., due to conflicts, export restrictions, and OPEC+ decisions) and demand fluctuations causes recurrent commodity price volatility.</li> <li>• High inflation due to higher food and energy prices. External and domestic demand slow down, rising uncertainty for manufacturing production, and declining economic output.</li> </ul>
<b>Systemic financial instability.</b>	<b>Medium</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• Risk-off sentiment surges, risk premia swings, and domestic risky assets are repriced amid economic slowdown and policy shifts. Valuation losses and margin compression trigger bank insolvencies and cause severe market dislocations.</li> <li>• Higher investor scrutiny towards financial institutions. Funding withdraws from riskier and weaker banks and NBFIs and solvency and liquidity conditions deteriorate for some financial sector segments.</li> </ul>

<sup>1</sup> The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenarios highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Sources of Risks	Overall Level of Concern	
	Relative Likelihood	Impact
<b>Global Structural Risks</b>		
<b>Climate risk.</b>	<b>Medium</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>China is vulnerable to various physical climate risks particularly flooding and cyclones. Economic damages/losses of physical assets, deterioration of corporates and households' financial conditions, collateral devaluation, supply disruptions and productivity loss.</li> <li>Disorderly shift to net-zero emissions and climate policy uncertainty cause supply disruptions, stranded assets, market volatility, and subdued investment and growth while disproportionately impacting profits of carbon-intensive sectors, increasing their credit risks.</li> </ul>
<b>Domestic Risks to Economic Outlook</b>		
<b>Deepening in the property sector slowdown.</b>	<b>Medium</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>A sharper and longer-than-expected slowdown in the property sector with financial repercussions and/or inadequate policy responses that could result in a sharp slowdown of economic activity.</li> <li>Banks, NBFIs and private investors take sharp losses from loans and financial product exposures linked to the sector. Mortgage defaults increase.</li> <li>Consumer confidence declines and consumption drops due to wealth effect. Property transactions and prices sharply drop.</li> <li>Unexpected fiscal tightening due to local government financing stress.</li> </ul>
<b>Protracted Deflation.</b>	<b>Low</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>Weak consumer and investor confidence could depress aggregate demand exerting sustained pressure on core inflation.</li> <li>Weak demand, further intensifies the downward pressure on prices and delays the stabilization of the property market, with potential negative feedback loops.</li> </ul>
<b>Balance Sheet Recession.</b>	<b>Low</b>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>Rising losses from real and financial asset price declines lead to materially impaired balance sheets for households and/or corporates.</li> <li>Broad based economic deleveraging, benign credit demand for a prolonged period (required to fully repair impaired balance sheets) fuels negative macrofinancial feedback loops and imposes further strains on medium term growth prospects.</li> </ul>
<b>Unsuccessful debt restructuring of local government financing vehicles (LGFV).</b>	<b>Low</b>	<p><b>Medium</b></p> <ul style="list-style-type: none"> <li>Heavily indebted LGFVs default before restructuring arrangement is fully in place.</li> <li>Asset quality of banks and NBFIs worsens. Weaker confidence dries up funding for the broader LGFV sector. Funding distress spills over to other segments of the capital market.</li> </ul>

## Annex III. Stress Testing Matrix

Banking Sector: Solvency Stress Test		
Exercise		Top-Down by FSAP Team
Institutional Perimeter	Institutions Included	<ul style="list-style-type: none"> <li>Agreed scope: 55 largest deposit takers.</li> </ul>
	Market Share	<ul style="list-style-type: none"> <li>80 percent of the banking sector.</li> </ul>
	Data and Baseline Date	<ul style="list-style-type: none"> <li>Data vintages: December 2023 (fiscal year end).</li> <li>Accounting data: balance sheet, PnL, off-balance sheet and supervisory statistics.</li> <li>Scope of consolidation: solo basis.</li> </ul>
	Methodology	<ul style="list-style-type: none"> <li>FSAP team satellite models and methodologies:</li> <li>Market risk has impacts on both capital resources (either via profit and loss or via other comprehensive income—OCI) and capital requirements (market risk charges—RWA). The impact on capital resources comprises of positions in the trading book as well as other fair valued items in the banking book. The impact on RWA for market risk evolves with balance sheet assumptions.</li> <li>Revaluation losses for securities portfolios (FVPL and FVOCI) are based on duration approach. Losses on equities (both long and short position) were based on stock market price movement specified by the scenario.</li> <li>Credit risk impact impacts both capital resources (credit impairments) and capital requirements (credit risk charges—RWA). Projection of new flows of defaulted exposures, coverage ratio for defaulted loans, and risk weight downgrade for performing exposures.</li> <li>Provisioning and impairments are modeled using economic expected losses approach.</li> <li>Net interest income projection: the effective interest rates (lending, deposit, debt exposures, and debt issuance rates) are projected through econometric satellite model, where the exogenous variables reflect the interest rate environment.</li> <li>Additional regulatory risk charges on RWA (operational risk charges—ORC and counterparty credit risk charges—CCRC) will change according to the overall balance-sheet growth assumptions. The balance sheet will follow nominal GDP growth, when positive, or it will remain stable, when the latter is negative.</li> </ul>
Channels of Risk Propagation	Stress Test Horizon	<ul style="list-style-type: none"> <li>2024: Q1–2026: Q4 (3 years)</li> </ul>
	Scenario	<ul style="list-style-type: none"> <li>Two Scenarios</li> <li>A baseline scenario based on the most recent to the April 2024 WEO macroeconomic projections.</li> <li>An adverse scenario that captures the key risks in the RAM. This scenario relies on GFM, a structural macroeconomic model of the world economy, disaggregated into forty national economies, documented in Vitek (2018). Scenarios for foreign countries where Chinese banks have significant exposure is extracted from GFM and is internally consistent with country scenarios of other ongoing FSAPs.</li> </ul>

Banking Sector: Solvency Stress Test		
Exercise		Top-Down by FSAP Team
Tail Shocks	Risk Covered	<ul style="list-style-type: none"> <li>Risks covered include credit (on banking book), market (revaluation trading book as well as the P&amp;L impact of net open positions in market risk factors such as foreign exchange risks), interest rate risk on the interest-bearing assets and liabilities, and non-interest income projections.</li> </ul>
	Sensitivity Analysis	<ul style="list-style-type: none"> <li>Examine the potential impact of a deflationary path within the original stress scenario.</li> <li>Assess the effect of a higher SME lending proportion or of different LGFV debt restructuring schemes on credit risk, NII, and capital adequacy.</li> <li>Evaluate how different deleveraging scenarios affect NII, considering reduced lending volumes and cost of funding implications.</li> </ul>
Risks and Buffers	Behavioral Adjustment	<ul style="list-style-type: none"> <li>A static balance sheet approach is used, as linking balance sheet growth to nominal GDP growth in China presents technical challenges. Nominal GDP growth in China is high, which will make banks in China would face significant capitalization issues, as they would be unable to raise capital at the same pace as their rapidly expanding balance sheets.</li> <li>Interest income from non-performing loan is not accrued.</li> <li>It is assumed that banks do not issue new shares or make repurchases during the stress test horizon.</li> <li>Dividends are assumed to be paid out at a fixed percent (recommended and agreed with the Chinese authorities) on current period profit after taxes.</li> <li>Dividends is paid out by profitable banks that are meeting their regulatory capital requirements only.</li> </ul>
Regulatory and Market-Based Standards and Parameters		<ul style="list-style-type: none"> <li>Basel III regulatory minima on CET1 (5 percent) and include any requirements due to additional buffers.</li> <li>Total banking capital adequacy ratio against the 8 percent level, and Tier 1 capital ratio against the 6 percent level.</li> <li>Banks with a capital level below these hurdle rates, are considered to have failed the test.</li> <li>Capital conservation buffer is 2.5 percent.</li> <li>Chinese banks are not subject to a CCyB.</li> </ul>
Reporting Form for Results	Output Presentation	<ul style="list-style-type: none"> <li>Evolution of capital ratios on an aggregate level and on clusters of banks.</li> <li>Information on impact of different result drivers, including profit components, losses due to realization of different risk factors.</li> <li>Projected credit impairments, market losses, net interest margins, and non-interest income on aggregate level and clusters of banks.</li> </ul>
Banking Sector: Liquidity Stress Test		
Exercise		Top-down Stress Test Approach by the FSAP Team
Institutional Perimeter	Institutions Included	111 banks with total asset above CNY 200 billion: 6 state-owned, 12 joint-stock, 66 city commercial, 25 rural commercial, and 2 foreign banks.
	Market Share	87 percent of commercial banking, and 77 percent of total banking system asset.

Banking Sector: Liquidity Stress Test		
Exercise		Top-down Stress Test Approach by the FSAP Team
Institutional Perimeter	Data and Reference Date	NFRA's regulatory reports on liquid coverage ratio (LCR), net stable funding ratio (NSFR), and maturity gap. Data as of December 2023. In total currency. Financial reporting at solo basis.
Methodology	LCR	The LCR exercise assesses if a bank's high quality liquid asset can cover the net cash outflows over a 30-day horizon under prescribed scenarios. A ratio is compared with the regulatory requirement of 100 percent.  Four scenarios are constructed: a baseline scenario with regulatory parameters in China; a retail scenario mimics quick withdrawal of deposits by retail depositors; a wholesale scenario captures loss of funding by corporates and financial institutions; and a combined scenario including both retail and wholesale funding stress. Haircuts on high quality liquid assets (HQLA) are assumed with different severity across scenarios.  The analysis is microprudential. It assesses resilience of individual banks to funding stress. The bank-level results will be aggregated by bank group and compared across.
	NSFR	The NSFR exercise assesses if a bank's available stable funding is sufficient to cover its required stable funding by loans and investment over one year. A ratio greater than 100 percent meets regulatory requirement.  Regulatory parameters apply.  The analysis is microprudential. Individual results will be aggregated by bank group and compared across.
	Cash Flow Analysis	Cash flow analysis assesses a bank's ability to cover net funding outflows with its counterbalancing capacity. Positive buffer post prescribed shocks imply bank resiliency, negative cover indicates liquidity shortage.  Two scenarios feature mild and severe funding run-off and investment roll-off over contractual maturities. Asset haircuts reflect shocks to interest rates and additional cost required by counterparties to accept eligible collateral.  Counterbalancing capacity includes HQLA bonds, equity, cash, and release of required reserve once deposits are withdrawn.  This analysis is more macroprudential. Results will be compared across bank groups and aggregated to identify any system-wide liquidity shortfall.  Horizon: five-time buckets ranging from overnight, 1 week, 1 month, 3 months, to 1 year.
Interconnectedness and Contagion Analysis		
Institutional Perimeter	Institutions Included	Coverage varies across the 4 analyses—1) banking network and contagion; 2) systemic importance of financial institutions; 3) regional fiscal-financial nexus between regional LGFVs and banks; and 4) macrofinancial feedback among developers, financial institutions, and macro economy. Exercise 1) uses a balance-sheet approach, and the others are market-based.

Interconnectedness and Contagion Analysis		
Institutional Perimeter	Data	<p><b>Banking network and contagion:</b> 111 banks with total asset above CNY 200 billion: 6 state-owned, 12 joint-stock, 66 city commercial, 25 rural commercial, and 2 foreign banks. Supervisory reports on balance sheet, regulatory capital, risk weighted asset and bilateral large exposures (larger than 2.5 percent of Tier 1 capital) via 6 instruments—loans, deposits, bonds, repos, negotiable certificates of deposit, and derivatives.</p> <p><b>Systemic importance of financial institutions:</b> publicly listed financial institutions including 6 state-owned, 10 joint-stock, 30 city commercial, 13 rural commercial banks, and 60 brokerage firms and asset management companies. Probability of defaults (PD) of individual financial institutions.</p> <p><b>Regional fiscal-financial nexus:</b> 2736 LGFVs and 241 regional banks in 31 provinces, which have ever issued credit bonds in the history. Bond yields of individual bond, issuance and entity characteristics, and regional fiscal conditions.</p> <p><b>Macrofinancial feedback:</b> PDs of 5 financial sectors (state-owned, joint-stock, city commercial, rural commercial banks, brokerage and asset management companies), 3 property sectors (state-owned developers, privately owned developers, and real estate service companies), and 3 macroeconomic indices (consumer confidence, real estate investment, and property price). Data over 2011–2023 on monthly frequency.</p>
Methodology	Banking Network and Contagion	<p>Based on Espinosa-Vega and Sole (2010). Uses bilateral exposures to construct a network among the six groups of state-owned, -joint-stock, city commercial, rural commercial, and foreign banks.</p> <p>Contagion simulation: one institution fails at a time under a hypothetical scenario. Through the credit channel, the institution fails to fulfill debt obligations and causes credit loss to its creditors. Some creditors fail due to insolvency and propagate shocks to their creditors until no one fails further. Through the funding channel, the failed institution withdraws funding from its existing debtors. These debtors sell assets at a haircut to cover cash shortfall, incur losses, and some become insolvent. Insolvent institutions propagate shocks further until no additional institutions fail.</p> <p>Two indices are constructed. Vulnerability index measures the average loss borne by a bank as a share of its capital caused by failures of other institutions. It reflects the extent to which the bank is influenced by the rest of the system. Contagion index measures the losses by all other institutions as a share of their capital if a bank fails. It reflects how influential the bank is to the wider financial system.</p>
	Systemic Importance of Financial Institutions	<p>This analysis compares systemic importance of 119 banks and non-bank financial institutions. It identifies the institutions that could cause damage to the wider financial system.</p> <p>LASSO regressions (Least Absolute Shrinkage and Selection Operator) are used to identify the co-movements of the institutions' PDs. These co-movements underpin a financial network, through which one traces by how much an initial institution failure causes the default risk of others to increase. Credit losses and collateral damage are measured through direct exposure and contagion.</p>

Interconnectedness and Contagion Analysis		
Methodology	Fiscal-financial Nexus between Regional LGFVs and Banks	The analysis identifies the fiscal and financial factors influencing the financing costs of the LGFV and regional banks. The credit spreads of LGFV/bank bonds are regressed against issuer, issuance, macrofinancial, provincial factors and the strength of the local banking/LGFV sector. The analysis has a regional focus—it assesses whether a relationship exists by province, and to what extent the strength of relationship varies across provinces.
	Macrofinancial Feedback among Developers, Financial Institutions, and Real Economy	<p>This exercise depicts a system underpinned by the interlinkages among 3 key macroeconomic variables and financial health of 8 groups of banks and property developers. Based on the system, the analysis simulates impact from prescribed shocks through macrofinancial feedback loops.</p> <p>This analysis uses a reduced-form Vector Autoregression (VAR) with dimension reduction to identify the spillover effect from one sector to another and between macro and financial variables. The VAR model identifies both granger causality and contemporaneous correlation. An impulse response exercise measures the impact by prescribed shock on future evolution of other variables.</p>
Banking Sector Climate Risk Analysis		
Exercise		Top-down Approach by FSAP Team in Collaboration with Authorities
Physical Risk		
Institutional Perimeter	Institutions Included	Aggregate banking sector exposures by provinces
	Data and Baseline Date	<p>Geographical credit and market exposure breakdown based on publicly available data at provincial level for 31 provinces of the Chinese mainland.</p> <p>Corporate data sample as in transition risk (described below) with geographical breakdown.</p> <p>Corporate data as of end-2022 (latest full data available). Banking sector data as of end-2023 (cut-off).</p>
Channels of Risk Propagation	Methodology	<p>Climate scenario around tropical cyclones and floods based on climate change conditions under IPCC scenario SSP5-8,5 with comparison against historical conditions.</p> <p>New stochastic modeling incorporates geospatial cross-correlational of economic activities across all provinces + damage distribution.</p> <p>Generate provincial level impact on credit, market risk metrics (PDs, spreads etc.) and corresponding impact on total loans and corporate bonds (incl. LGFVs). Risk analysis horizon 3 years</p>
Risks and Buffers	Risks	<p>Credit risks, and additional channels of market and liquidity risks considered. All other channels are assumed to remain unaffected.</p> <p>Projections of losses based on historical conditions and climate conditions</p>
	Sensitivity Analysis	Simplified liquidity risk analysis as an added sensitivity test to quantify short term impact of climate shocks (largely illustrative).

Banking Sector Climate Risk Analysis		
Exercise		Top-down Approach by FSAP Team in Collaboration with Authorities
Physical Risk		
Reporting Format for Results	Output Presentation	<ul style="list-style-type: none"> <li>Measures of impact on economic activity by province, and credit and market risk impacts at the regional, and system-wide level Comparison with the historical baseline conditions scenario emphasized.</li> </ul> <p>Results characterized in terms of distributions and described in a fully probabilistic way.</p> <ul style="list-style-type: none"> <li>Aggregate and provincial level banking sector credit, market losses, and capital impact</li> </ul>
Transition Risk		
Institutional Perimeter	Institutions Included	20 D-SIBs with focus on sectoral impact
	Data and Baseline Date	<p>Granular sectoral exposure breakdown (over 26 subsectors). Source: ad-hoc data collection by the authorities from 20 D-SIBs, end-2023 (cut-off)</p> <p>Firm-specific balance sheets, income statements, PDs.</p> <p>Over 4800 firms, historical data from 2002 to 2022</p> <p>Aggregate sectoral levels macro-financial variables.</p>
Channels of Risk Propagation	Methodology	<p>Firm balance sheet stress approach involves multi-year projection of balance sheet dynamics and vulnerability indicators under transition scenarios as described below:</p> <p>Step 1 (Bridge equation): establishing a relationship between firm-specific default rates and firm level balance sheet indicators reflecting viability, liquidity, and solvency conditions (cash ratio, current ratio and leverage ratio called vulnerability indicators and equity volatility). Firm sample restricted to listed companies with available historical default rate estimates.</p> <p>Step 2: Scenario dependent sectoral GVA paths applied to firms' balance sheets. Multi-year projections for balance sheet and profit components (forward-looking) estimated via micro-simulations. Step 3: Elasticities from Step 1 are used to infer stressed default rates (using forward looking metrics from Step 2) for the sample of firms.</p> <p>Step 4: Weighted sectoral aggregates scenario dependent PDs are produced by aggregating firm level default rates and using total outstanding debt as weights.</p> <p>Step 5: Bank level sectoral corporate exposure breakdown is used to produce credit loss impact using default rates from Step 4.</p> <p>Step 6: Stressed delta PDs (reflecting transition risk) used to produce capital impact projections.</p> <ul style="list-style-type: none"> <li>Impact on residual corporate and household portfolios anchored to impact on overall economy during transition to capture indirect general equilibrium effects.</li> </ul>

Transition Risk		
Channels of Risk Propagation	Methodology	<ul style="list-style-type: none"> <li>• Market risk anchored to corporate aggregate PD path implied credit spreads.</li> <li>• Projection horizon up to 2040 to capture medium term effects of transition.</li> </ul>
	Satellite Models for Macro-Financial Linkages	Bridge equation linking defaults rates to firm level vulnerability indicators: a fixed effects panel regression on historical firm level default rates.
Tail Shocks	Scenario Analysis	<p>Based on transition risk scenarios across various sectors via global macro-econometric model (E3ME).</p> <p>Hot house world/current policies serve as the baseline with 3 climate policy (adverse) scenarios reflecting China's climate goals and aligned to narratives of being orderly and disorderly in the spirit of NGFS categories.</p>
Risks and Buffers	Risks	<p>Credit, and market channel of risks. All other channels are assumed to remain unaffected.</p> <p>PDs, Credit, and market risk loss impact relative to the baseline Credit spreads anchored to aggregate corporate PDs.</p>
Reporting Format for Results	Output Presentation	<p>Measures of credit risk impact at granular and high-level sectoral level; market risk impact at corporate securities portfolio level.</p> <p>Impact on residual corporate credit portfolio, household portfolio, and system-wide impact.</p> <p>Outcomes relative to the baseline scenario emphasized; cumulative loss/impact relative to baseline by 2040.</p> <p>Average aggregate capital impact over the next 5 years.</p>

## Annex IV. Implementation of Recommendations from the 2017 FSAP

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
<i>Macroeconomic Recommendations</i>		
De-emphasize high GDP growth projections in national plans that motivate setting high-growth targets at the local level	Near term, high priority	<b>Partly implemented, ongoing.</b> <ul style="list-style-type: none"> <li>The Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Term Objectives for 2035 states that GDP growth should be "kept within a reasonable range and proposed each year as appropriate."</li> </ul>
<i>Systemic risk, Macroprudential Policies, and Strengthening Oversight</i>		
Create a new Financial Stability Sub-Committee (FSS-C) with the sole function of preserving financial stability.	Near term, high priority	<b>Implemented.</b> <ul style="list-style-type: none"> <li>In 2018, the new Financial Stability and Development Committee (FSDC) of the State Council was established to strengthen overall coordination around financial services, promote financial reform and opening up of the financial system, and prevent and resolve financial risks.</li> <li>In March 2023, the "Reform Plan for Party and State Institutions" established the Central Financial Committee (CFC) as the decision-making, deliberative and coordinating body of the Party's Central Committee, responsible for the top-level design, coordination, promotion, and supervision of financial stability and development, as well as the research and review of major policy initiatives in the financial field. Responsibilities of the FSDC were transferred to the new Office of the CFC.</li> </ul>
Establish robust mechanisms for cooperation, coordination, and exchange of information—including granular financial data—with domestic and foreign safety-net participants.	Near term, high priority	<b>Implemented.</b> <ul style="list-style-type: none"> <li>Between November 2017 and March 2023, various coordination mechanisms were established under the framework of the original FSDC to support the stability and healthy development of the financial market.</li> <li>Since March 2023, further coordination mechanisms have been established under the leadership of the CFC to enhance policy coordination and information sharing. These provide for, among others, enhanced information-sharing between the NFRA and the PBC of off-site regulatory information, central bank rating results and insights from on-site verification and risk monitoring for deposit insurance purposes; as well as information-sharing by the NFRA with relevant Ministries, the National Bureau of Statistics and the CSRC. In addition, the CSRC regularly shares balance sheet data of securities financial institutions with other domestic agencies, and</li> </ul>
<sup>1</sup> Status updates on recommendations included in the <a href="#">2017 Financial System Stability Assessment for the People's Republic of China</a> , as reported by the Chinese authorities as of May 2024; overall progress assessment for each recommendation made by Fund staff.		

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
Establish robust mechanisms for cooperation, coordination, and exchange of information—including granular financial data—with domestic and foreign safety-net participants.	Near term, high priority	<p>coordinates with the PBC to promote the unified collection of data on investors' assets and transactions.</p> <p>At the international level, the NFRA and CSRC actively promote cooperation with overseas regulatory agencies. Cross-border cooperation is being supported via regulatory cooperation agreements, periodic meetings of supervisory colleges, recurrent communication on issues of mutual interest, and contributions to the work of standard-setting bodies.</p>
Trigger the countercyclical capital buffer (CCyB), and review banks' capital requirements with a view to a targeted—and in some cases substantial—increase in capital.	Near term, high priority	<p><b>Not implemented.</b></p> <ul style="list-style-type: none"> <li>• The PBC and the CBIRC jointly issued the "Notice on Establishing a Countercyclical Capital Buffer (CCyB) Mechanism" in September 2020, which established a countercyclical capital buffer mechanism and set the initial CCyB requirement to zero.</li> <li>• At present, the CCyB requirement has not been raised, but the PBC and NFRA are considering factors such as the macroeconomic and financial situation, the level of macro leverage, the soundness of the banking system, and the evolution of systemic financial risks to evaluate and adjust the CCyB requirement, as needed.</li> </ul>
Amend primary laws to strengthen operational and budgetary autonomy of the PBC and the regulatory agencies and, increase their resources.	Medium term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• The Chinese government's departmental budget management systems effectively support and safeguard the work of financial regulators, with the PBC, NFRA, and CSRC ensuring that public expenditures are properly budgeted. The preparation, approval, and oversight of budgets are carried out in compliance with the Law of the People's Republic of China on Budgets.</li> <li>• Budget records show that regulator budgets have maintained positive growth over the past few years. Budget calculations were updated as part of the 2023 overhaul of the regulatory structure, with the agencies receiving additional fiscal resources to ensure that duties can be properly executed—resulting in both the NFRA and CSRC increasing staffing and strengthening capacity through training.</li> <li>• To ensure the PBC and supervisory agencies can effectively discharge their respective mandates, further resource increases remain warranted.</li> </ul>
Address data gaps that impede systemic risk monitoring and effective financial regulation and supervision	Medium term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• In March 2018, the General Office of the State Council issued the "Opinions on Comprehensively Promoting Comprehensive Statistics of the Financial Industry," which became the basis for promoting comprehensive statistics of the financial industry.</li> <li>• In recent years, the PBC has sought to improve money supply statistics, as well as statistics for key areas and weak links of the national economy (including but not limited to technology-based</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<p>enterprises and green and inclusive loans). In 2020, the National Financial Basic Database was successfully put into operation, gradually becoming the core data organization hub for comprehensive statistics of the financial industry.</p> <ul style="list-style-type: none"> <li>• The NFRA continues to improve the framework and content of off-site regulatory reports, and has recently refined relevant business reports (e.g., on-balance sheet investments, interbank business, and wealth management activities) to facilitate enhanced monitoring.</li> <li>• The CSRC is aiming to accelerate the construction of a regulatory big data warehouse to promote unified storage and centralized data management, improve the collection and aggregation of regulatory data, and continue to strengthen data sharing.</li> </ul>
Review purpose and structure of the PBC's macroprudential assessment with a view to simplifying, and use it solely as an input to the deliberations of the FSS-C and its working-level sub-groups	Medium priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• China attaches great importance to improving the macro-prudential policy framework and has proposed a regulatory framework with two pillars, i.e., monetary policy and macro-prudential policy. The PBC has continuously innovated and improved its macro-prudential management practices and has developed a system that includes a series of macro-prudential management tools, e.g., for real estate finance, cross-border financing, and the supervision of systemically important financial institutions.</li> <li>• The PBC is currently studying options to enhance the existing assessment indicator system.</li> </ul>
<i>Regulation and Supervision: Banks</i>		
Enhance group risk supervision and the ability to supervise banking and wider financial groups, as well as ownership structures, including the identification of ultimate beneficial owners	Medium term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• Since 2018, the Chinese authorities have worked to strengthen qualification requirements for controlling shareholders, place greater emphasis on the review and identification of ultimate beneficiaries, and strengthen the regulatory framework for Financial Holding Companies (FHC)—including via the issuance of the "Decision of the State Council on Implementing the Access Management of FHC," the "Trial Measures for the Supervision and Administration of FHC" (November 2020), the "Insurance Group Company Supervision and Administration Measures" (December 2021), and the "FHC Related Transactions Management Measures" (February 2023).</li> <li>• Steps to further enhance FHC supervision and regulation are ongoing following the transfer of regulatory responsibilities from the PBC to the NFRA in March 2023.</li> </ul>
Eliminate the use of collateral in loan classifications, constrain banks' ability to roll-over credit to non-medium and	Medium term, high priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• In February 2023, the CBIRC and the PBC jointly issued the "Measures for the Risk Classification of Financial Assets of Commercial Banks" that emphasize the debtor-centered risk classification concept. The Measures stipulate that, except for bonds and eligible small and micro enterprise renewal loan business, financial assets repaid by borrowing new to repay old or through other</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
small enterprise borrowers, and classify all loans that are overdue by more than 90 days as non-performing loans		<p>debt financing methods shall be classified as at least "attention," restricting banks from rolling financing to non-small and medium-sized enterprise borrowers. If the principal, interest or income of the loan is overdue for more than 90 days, it should be classified as at least "substandard," and all loans overdue for more than 90 days shall be included in the non-performing category.</p> <ul style="list-style-type: none"> <li>Provisions on restructured assets have been refined, definitions of restructured assets clarified, and it is stipulated that assets that have been contractually adjusted when the debtor encounters financial difficulties shall be recognized as restructured assets, and an observation period of at least one year shall be set. The risk classification of restructured assets cannot be higher than "attention", and stringent requirements are in place for the classification of restructured assets.</li> </ul>
Strengthen enforcement of "look-through" principles	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>Since 2018, the supervisory agencies have issued a number of policy documents to strengthen supervision, including the Guiding Opinions on Regulating the Asset Management Business of Financial Institutions (April 2018), "Regulations on Supervision and Administration of Wealth Management Business of Commercial Banks" (September 2018), "Interim Measures for the Management of Insurance Asset Management Products" (March 2020), "Notice on Issuing Three Documents, Including the Implementation Rules for Portfolio Insurance Asset Management Products" (September 2020) and "Management Measures for Related Transactions of Banking and Insurance Institutions" (January 2022); and the PBC's "Regulations on the Management of Related Party Transactions of FHC" (February 2023).</li> <li>Observance of the "look-through" principle is included in on-site inspections.</li> </ul>
Increase liquidity coverage ratio (LCR) requirements for interbank and off balance-sheet Wealth Management Products (WMP)	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>Pursuant to the "Commercial Bank Liquidity Risk Management Measures," issued by the CBIRC in May 2023, interbank products are included in the liquidity coverage ratio, consistent with the Basel International Standards.</li> <li>To effectively limit the situation where commercial banks are overly dependent on interbank wholesale financing, the Measures also designed a liquidity matching rate regulatory indicator and set stricter discount rate requirements for interbank wholesale financing.</li> </ul>
Enhance regulatory reporting requirements to collect more granular supervisory data on banks'	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>The CBIRC and NFRA have continuously sought to improve the reporting system and strengthened data quality requirements. Key initiatives include the introduction of an off-site reporting system; a newly built big data platform; the corporate governance supervision system; regular credit risk reporting; supplementary data tables for city commercial banks, as well as rural</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
investment holdings and provisioning		<p>small and medium-sized banks; and the national banking wealth management information registration system.</p> <ul style="list-style-type: none"> <li>• The CBIRC established a monthly and quarterly risk monitoring mechanism for insurance asset management products in early 2023, closely monitors trends and risk changes of insurance asset management products, and strives to achieve early identification, early warning, early exposure and early disposal of risks.</li> </ul>
The China Banking and Insurance Regulatory Commission (currently: NFRA) should enhance forward-looking integrated risk analysis to identify vulnerabilities, challenge banks, and facilitate ex ante intervention.	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• The NFRA has continuously improved the forward-looking and effectiveness of supervision and carried out risk warning. In line with the "Commercial Bank Supervision Rating Method," the regulatory authorities collect internal and external information needed to gauge banks' risk levels, development trends, and concentrated areas in the supervision rating to form a forward-looking assessment.</li> <li>• Acknowledging that stress testing is an important tool for forward-looking supervision, the regulatory authorities urge commercial banks to regularly conduct stress tests that cover the main risks of each business line and fully consider the impact of the economic cycle on the institution's capital adequacy ratio. Banks are required to establish early warning mechanisms, promote regulatory personnel to receive and respond to risk signals in a timely manner, and take differentiated and corrective measures based on comprehensive risk assessment.</li> <li>• The NFRA, together with the PBC, is actively studying and formulating relevant normative documents for early intervention of bank risks. Other relevant initiatives include providing prompt feedback to banks on their ratings; improving forward-looking risk monitoring and early warning mechanism for banks; and conducting quarterly risk screening of trust companies.</li> </ul>
<i>Stress Testing</i>		
Substantially enhance and systematize data and information-sharing across the three regulatory agencies and the PBC for stress testing and systemic risk assessment purposes. Use more granular supervisory data in stress tests.	Medium term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• Under the leadership of the CFC, financial management departments have established various mechanisms for coordination and information sharing (e.g., on social financing scale, monetary credit, banking operations and risks, securities and futures market statistics). In the process of conducting regulatory stress testing, various regulatory departments have closely communicated and exchanged key information on, among others, scope, scenario design, key methods, and test results.</li> <li>• The PBC conducts annual banking stress tests to examine banks' resilience under downturn scenarios, deteriorating risk conditions in key areas, increased liquidity pressures, and defaults of peer trading counterparties. During the stress test, banks maintain close communication with the</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<p>NFRA. Stress tests use internal data and regulatory data submitted by banks, with gradual improvements in data granularity, e.g., trend information for non-performing assets, classification of interest-bearing assets and interest-bearing liabilities, and bond investment categories. In addition, the PBC regularly conducts stress tests on the risks of stock pledge financing by major shareholders of listed companies and the liquidity risks of public funds, and continuously strengthens data and information sharing with regulatory agencies.</p> <ul style="list-style-type: none"> <li>• The NFRA has used more detailed and penetrating data in banking stress testing. For example, when analyzing the impact of investment items, detailed data that penetrates to the underlying assets and industry investment directions is used, including fine-grained data such as overall scale and non-performing assets; in bond valuation stress testing, detailed original data such as the principal, duration, and category of each bond invested by the test bank is used.</li> <li>• The CSRC has adopted more detailed business data of industry institutions in the same scenario risk stress test of securities, funds and futures institutions.</li> <li>• Given mounting risks, the authorities should continue to strengthen their stress testing frameworks and capabilities, with the aim to improve systemic risk monitoring and better inform policy discussions on potential risk mitigants.</li> </ul>
Expand the coverage of non-banks and interconnections significantly for systemic risk assessment developing and integrating stress testing of collective investment schemes (CIS)	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• The PBC's banking stress test uses a network analysis model to assess business correlation and risk contagion between banks, and between banks and non-bank institutions. Macro scenario stress test and sensitivity stress test considered the impact of non-standardized debt investment, off-balance sheet business, and bonds measured at amortized cost on the capital adequacy level of banks, and liquidity risk stress test considered the impact of wealth management product redemption on the liquidity level of banks.</li> <li>• The NFRA has continued to improve stress testing and contagion risk analysis of bank and non-bank institutions. The agency has continuously sought to improve key elements such as scenario design, assumptions, parameter indicators, etc., for a range of institutions.</li> <li>• The CSRC continues to improve the unified scenario assumption indicators for stress testing in the securities and fund industry, including to analyze correlation and risk contagion between licensed institutions. More specifically, it has provided guidance to the Securities Association of China on stress testing, sought to improve stress testing mechanism of securities companies, strengthen the actual application of stress testing in risk management, and effectively improve the ability to predict, warn, and prevent various risks.</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
Enhance inter-agency coordination and analytical capacity of the stress testing teams	Medium priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>• During stress test, the PBC maintains close exchanges and communication with the NFRA on the scope, scenario assumptions, technical methods, etc. of the stress test. At the same time, it has strengthened internal communication and cooperation, e.g., on the macroeconomic econometric model developed by the PBC's Research Bureau when designing macro-stress scenarios.</li> <li>• A stress test team composed of key personnel from the PBC's head office, branches and commercial banks organizes periodic discussions on stress test technology, with the aim to improve analytical capabilities. Key personnel have participated in the banking industry stress test training courses organized by the IMF to learn from international experience, continuously improve stress test methods, and further enhance risk sensitivity.</li> <li>• During the process of conducting regulatory stress testing, the NFRA coordinated the regulatory departments and regulatory bureaus of various institutions to fully participate in key links such as program design and regulatory review. It sent personnel to join the Basel Committee's stress testing working group, learned from international advanced experience, and provided guidance to banks with the aim to upgrade their stress testing methods. It also strengthened personnel training.</li> <li>• The CSRC is in the process of establishing a financial policy coordination mechanism and will strengthen the monitoring and assessment of systemic risks. It will continue to carry out stress testing and robustness assessments of the securities, funds, and futures industries, using a variety of indicators and tools to timely monitor capital market risks and cross-market risks.</li> </ul>
<i>Shadow Banking and Implicit Guarantees</i>		
Make legal and regulatory changes to ensure the bankruptcy remoteness of CIS, including WMP, in the event of insolvency of the manager of the custodian.	Medium term, high priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• The PBC, CBIRC, CSRC and SAFE issued the "Guiding Opinions on Regulating the Asset Management Business of Financial Institutions," confirming, among others, that asset management business is an off-balance sheet business and introducing provisions on information disclosure, custody, and fair valuation of asset management products.</li> <li>• On bankruptcy remoteness, the regulators have formulated various regulations that clearly stated that the property of wealth management products is independent of the self-owned assets of managers and custodians (e.g., CBIRC's "Regulations on the Supervision and Administration of Wealth Management Business of Commercial Banks" from September 2018 and the CSRC's "Administrative Measures for Private Asset Management Business of Securities and Futures Institutions" from October 2018).</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<ul style="list-style-type: none"> <li>If managers and custodians are liquidated in accordance with the law, the assets associated with wealth management products are segregated from the entity's assets and thus cannot be used to offset generalized claims and debts. The regulations were revised in January 2023 to further clarify the trust property attributes of asset management products.</li> </ul>
Move towards eliminating limits on lending to specific sectors, conditional on eliminating implicit guarantees	Medium priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>In terms of monetary and credit policies, the PBC uses regulation to guide financial institutions to improve the quality, efficiency and stability of credit support for the real economy, without directly intervening in micro-entities' economic activities or imposing credit restrictions on related industries. Financial institutions independently decide on credit allocation based on factors such as the risks, operating capabilities, development prospects and their own debt costs of specific enterprises, so as to achieve optimal allocation of credit resources.</li> <li>The NFRA requires commercial banks to adhere to market-oriented and rule-of-law principles, autonomously identify and manage risks, and provide credit services to enterprises.</li> </ul>
Interventions in asset markets, including housing and the equity market, should be limited to episodes of systemic risk.	Medium priority	<p><b>Not implemented.</b></p> <ul style="list-style-type: none"> <li>The NFRA attaches great importance to the prevention and control of real estate-related risks, and urges banking and financial institutions to strengthen compliance management and risk prevention and control, carry out relevant on-site inspections when appropriate, and strengthen monitoring, early warning and risk disposal to firmly maintain the bottom line of preventing systemic risks.</li> <li>The CSRC promotes strong supervision, risk prevention, and high-quality development in an integrated manner. Under normal circumstances, it does not interfere with market operations. However, when the market is seriously out of touch with fundamentals, irrational and violent fluctuations occur, liquidity is exhausted, and market panic occurs, it will take decisive action to hedge risks and correct market failures.</li> </ul>
<i>Regulation and Supervision of Securities Markets</i>		
Improve disclosure of CIS; prohibit specifying expected returns in the prospectus of WMPs.	Near term, high priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>Regulatory authorities have issued various regulations prohibiting the listing of expected rates of return in financial product prospectuses, including the CSRC's "Supervision and Administration Measures for Publicly Offered Securities Investment Fund Sales Institutions" and "Interim Provisions on the Management of Promotional Materials for Publicly Offered Securities Investment Funds" (both published in August 2020).</li> <li>At present, the CSRC strictly follows the "Administrative Measures for Private Asset Management Business of Securities and Futures Institutions," which standardizes disclosure of private equity</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		collective investment plans and strictly prohibits securities and futures institutions from promising expected returns when promoting private equity asset management products.
Introduce a functional overlay to supervision to ensure that similar products issued by different financial firms are supervised and regulated similarly.	Medium term, high priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• The PBC maintains close communication with the NFRA and CSRC to promote the release of industry rules for bank wealth management, wealth management subsidiaries, securities funds, futures, trusts and insurance, etc., to ensure that regulatory requirements and the associated functional supervision concept are clearly defined in the new asset management regulations, and to achieve equal access and unified regulation for all types of financial institutions to carry out asset management business. After the release of the new asset management regulations in April 2018, the PBC continued to pay attention to the operation of the financial market, closely monitored the marginal changes in the behavior of financial institutions, and timely evaluated the rectification and development of asset management business.</li> <li>• The CBIRC's "Regulations on the Supervision and Administration of Commercial Banks' Wealth Management Business" that support the "New Asset Management Regulations" prescribe requirements on controlling maturity mismatch, limiting nested investments, controlling leverage and concentration risks, strengthening investor suitability management, and strengthening compliance sales. Other relevant regulations include the CSRC's "Administrative Measures for Private Asset Management Business of Securities and Futures Institutions" and the "Administrative Provisions on the Operation of Private Asset Management Plans of Securities and Futures Institutions" (October 2018); the CBIRC's "Interim Measures for the Management of Insurance Asset Management Products" (March 2020) and "Notice on Issuing Three Documents, including the Implementation Rules for Portfolio Insurance Asset Management Products" (September 2020); the joint CBIRC/PBC "Notice on Regulating the Management of Cash Management Wealth Management Products" (August 2020); and the CBIRC's "Liquidity Risk Management Measures for Wealth Management Products of Wealth Management Companies."</li> </ul>
Tighten eligibility and enhance haircut methodology for repo collateral	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>• In October 2018, the PBC issued an announcement to officially launch the inter-bank market tri-party repo transactions, requiring third-party institutions, trading platforms and central counterparties to issue business details on the scope of eligible collateral for tri-party repo and discount rate standards. In April 2024, it guided the Shanghai Clearing House and the Foreign Exchange Trading Center to (i) launch the general repo business in the inter-bank bond market; and (ii) formulate and improve the management system arrangements for repo collateral and the calculation method of discount rate.</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<ul style="list-style-type: none"> <li>Similarly, the CSRC guided China Securities Depository and Clearing Co., Ltd. to continuously improve the repo collateral management system and optimize the discount factor and conversion rate calculation.</li> </ul>
Strengthen systemic risk monitoring mechanisms to ensure a holistic view of securities markets and their financial sector interconnectedness	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>The PBC regularly consults on key areas and weak risk links in the bond market, with the aim to strengthen risk monitoring, early warning, and prevention and mitigation work in the bond market. It has established a bond default early warning mechanism that seeks to support regulatory monitoring and information-sharing with local governments and other stakeholders.</li> <li>The CSRC will establish and improve the system and mechanism for comprehensive assessment and response to capital market risks, including a further expansion of the functions of the original stock market risk monitoring and response leadership group, improved systemic risk monitoring and early warning mechanism and enhanced information-sharing to deepen monitoring, early warning and risk prevention in the bond market.</li> </ul>
<i>Regulation and Supervision of Insurance</i>		
Develop plans for risk-based supervision, bringing together all issues and actions of each insurer, including market conduct	Medium priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>During the past years, the regulatory framework for the insurance sector was extensive overhauled, including via the revised "Insurance Group Supervision and Administration Measures" (November 2021) and the "Insurance Company Solvency Supervision Rules (II)" (December 2021). The NFRA is in the process of transitioning from a rules-based to a risk-based supervisory process.</li> </ul>
Establish plan to move valuation to a more market-consistent basis	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>The CBIRC's "Interim Measures for the Administration of Insurance Asset Management Products" and "Notice on the Issuance of Three Documents, Including the Implementation Rules for Portfolio Insurance Asset Management Products" (March and September 2020, respectively) require insurance asset management products to fairly and accurately measure the net value of insurance asset management products. At present, all existing insurance asset management products have achieved net value management operations.</li> <li>In 2020, the Insurance Asset Management Association issued the "Guidelines for Valuation of Insurance Asset Management Products (Trial)," which further established and improved the valuation management system for insurance asset management products and standardized product valuation and net value measurement. China Insurance Asset Registration and Trading System Co., Ltd. (China Insurance Registration and Trading System) and the China Bond Valuation</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		Center jointly developed valuation models for bond investment plans, equity investment plans, and asset-backed plans, and regularly publish valuation results.
<i>Supervision of Financial Market Infrastructures</i>		
Adopt full delivery-versus-payment (DVP) in the China Securities Depository and Clearing Corp (CSDC)	Near term, high priority	<b>Implemented.</b> <ul style="list-style-type: none"> <li>• In December 2022, the DVP principle was fully implemented in China's securities market.</li> <li>• In October 2023, the CSRC instructed China Securities Depository and Clearing Corporation to officially reduce the minimum settlement reserve ratio for stock business from 16 percent to an average of nearly 13 percent, releasing nearly RMB 40 billion in funds.</li> </ul>
Strengthen resilience of financial market infrastructures (FMI) through full implementation of the CPSS-IOSCO principles and strengthening the legal framework	Medium term, high priority	<b>Implemented.</b> <ul style="list-style-type: none"> <li>• Following the issuance of the PBC's "Work Plan for Coordinated Supervision of Financial Infrastructure" in February 2020, it drafted the "Measures for the Supervision and Administration of Financial Infrastructure" to clarify the detailed requirements for access permission for the establishment of financial infrastructure, build a framework for a coordinated supervision system, clarify the division responsibilities among various departments; and drafted the "Decision of the State Council on the Implementation of Access Management for Financial Infrastructure" to clarify the establishment conditions and access process for financial infrastructure.</li> <li>• The "Guiding Opinions on Strengthening the Supervision of Payment and Clearing Business of Clearing Institutions and Improving the Quality and Level of Payment and Clearing Services" (in December 2023) introduced specific measures to strengthen supervision and management of payment and clearing business, improve the quality and efficiency of payment and clearing infrastructure services, and buttress the construction of payment and clearing infrastructure.</li> </ul>
Expand provision of central bank services to all systemically important central counterparties	Medium priority	<b>Implemented.</b> <ul style="list-style-type: none"> <li>• In July 2023, the PBC issued the "Central Bank Deposit Account Management Measures" that clarified the conditions for opening a central bank deposit account, the application and review process, as well as the account service content and usage requirements.</li> <li>• According to the Measures, financial market infrastructures such as systemically important central counterparties can apply to open a central bank deposit account and use the settlement services provided by the central bank. Currently, the PBC provides settlement services to China Central Depository and Clearing Co., Ltd. and Shanghai Clearing House.</li> </ul>
<i>Anti-money Laundering and Combating the Financing of Terrorism</i>		
Mandate enhanced customer due diligence (CDD) for domestic publicly	Medium priority	<b>Partly implemented, ongoing.</b>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
exposed persons (PEPs) on a risk sensitive basis		<ul style="list-style-type: none"> <li>China is actively promoting the revision of the Anti-Money Laundering Law and regulations, requiring financial institutions to take corresponding due diligence and money laundering risk management measures in a timely manner according to customer risk situations.</li> <li>The Anti-Money Laundering Law (Revised Draft) was discussed and approved at the State Council Executive Meeting in January 2024, and the Standing Committee of the National People's Congress conducted an initial review and solicited public opinions in April 2024.</li> <li>China adopts risk-based customer due diligence measures for domestic politically exposed persons.</li> </ul>
Ensure that self-laundering is more effectively investigated and prosecuted as a stand-alone offense.	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>The Criminal Law Amendment (XI) passed in 2020 criminalizes self-laundering as an independent crime. At present, it has become a common judicial practice to independently investigate, prosecute and sentence self-laundering as a crime of money laundering, and a sufficient number of cases have been sentenced.</li> </ul>
<i>Crisis Management</i>		
Triggers for activating a government-led crisis response should be more clearly defined, and limited to systemic cases that may require public resources	Near term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>Since March 2021, the PBC has worked with relevant departments to actively promote financial stability legislation. Article 26 of the draft Financial Stability Law (FSL), currently under review by the National People's Congress, stipulates that the PBC takes the lead in dealing with systemic financial risks and performs the role of the lender of last resort. The State Council's financial department participates in dealing with systemic financial risks in accordance with the law and performs relevant duties in accordance with the regulations.</li> <li>The draft FSL provides institutional arrangements for the prevention and disposal of major financial risks. In terms of quantitative indicators, considering that there are differences in major risk assessment indicators of various financial institutions such as banks, securities, and insurance, the identification standards are not static and competent authorities need to make professional and timely identification based on various factors.</li> <li>It also allows for the use of the Financial Stability Guarantee Fund (FSGF) if financial risks endanger financial stability, with the PBC being able to provide liquidity support for the Fund.</li> </ul>
Develop a special resolution regime for banks and systemically important insurance companies	Medium term, high priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>The draft FSL, which will establish a special resolution regime, identifies the competent authorities and incorporates key elements of international standards on resolution. These include bridge bank and bail-in mechanisms, adherence to the "no-creditor-worse off" principle, express override of shareholder and creditor rights, and reference to the source of funding, including the</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<p>FSGF and hierarchy of creditor claim. However, there are no provisions establishing adequate safeguards to the use of government support.</p> <ul style="list-style-type: none"> <li>Complementary steps taken include the application of TLAC requirements to the Chinese global systemically important banks—with the Industrial and Commercial Bank of China and the Bank of China both having issued TLAC bonds of RMB 40 billion; and the issuance of "Interim Measures for the Implementation of Recovery and Disposal Plans for Banking and Insurance Institutions" (June 2021) requiring deposit-taking financial institutions with a leverage ratio denominator of more than RMB 300 billion and insurance companies with on-balance sheet total assets of more than RMB 200 billion to formulate recovery and disposal plans.</li> </ul>
Develop a formal framework for emergency liquidity assistance by the PBC	Medium term, high priority	<p><b>Not implemented.</b></p> <ul style="list-style-type: none"> <li>The authorities have not introduced an operational framework for emergency liquidity assistance (ELA).</li> </ul>
Enhance the design of the protection funds to limit moral hazard	Medium priority	<p><b>Partly implemented, ongoing.</b></p> <ul style="list-style-type: none"> <li>The FSGF is positioned as a fund controlled by the central government to deal with major financial risks. The funds come from market entities such as financial institutions and financial infrastructure. It operates in a two-tier manner with the deposit insurance fund and the industry guarantee fund to jointly maintain financial stability and security. In the handling of major financial risks, financial institutions, shareholders and actual controllers, deposit insurance funds and related industry guarantee funds and other parties should fully invest corresponding resources in accordance with the law.</li> <li>At present, the basic framework of the FSGF has been initially established, and an initial amount of contributions from the industry have been accumulated. The authorities have not pursued reforms of the deposit insurance fund in recent years.</li> </ul>
<i>Financial Inclusion</i>		
Upgrade the legal, regulatory, and supervision framework for fintech	Medium priority	<p><b>Implemented.</b></p> <ul style="list-style-type: none"> <li>The PBC has issued two financial technology development plans, namely the "Financial Technology (Fintech) Development Plan (2019-2021)" and the "Financial Technology Development Plan (2022-2025)" to promote the integration of finance and technology and advance the digital transformation of finance. It has implemented regulatory tools across the country to guide industry participants to better polish innovative financial products and services, to ensure compliance with regulatory requirements and meet user needs.</li> <li>The NFRA issued the "Guiding Opinions on the Digital Transformation of the Banking and Insurance Industries", requiring banking and insurance institutions to comprehensively improve</li> </ul>

Recommendation <sup>1</sup>	Timeframe	Summary of Measures Taken
		<p>data governance and application capabilities, and strengthen their own scientific and technological capabilities. Moreover, it unified supervisory standards for technology outsourcing in the banking and insurance industries and promoted institutions to improve their information technology outsourcing risk management capabilities.</p> <ul style="list-style-type: none"> <li>• The CSRC has sought to improve the regulatory framework for fintech in the securities and futures sector. Regulatory measures for information technology service institutions have been studied and formulated, a pilot of financial technology innovation in the capital market has been promoted, and the "Notice on Further Strengthening the Security Management of Mobile Application Software of Securities and Futures Operating Institutions" has been issued. In 2021, the CSRC issued the "14th Five Year Plan for the Development of Science and Technology in the Securities and Futures Industry" that provides guiding principles for the digital transformation and development of the securities and futures industry.</li> </ul>

**Statement by Mr. Zhang, Executive Director for  
People's Republic of China  
April 4, 2025**

On behalf of the Chinese authorities, I would like to express my heartfelt appreciation to the FSAP team led by Ms. Jennifer Elliott for their hard work and professionalism during the assessment. Since the launch of this round of FSAP in April 2023, the FSAP team has visited China four times and had almost 500 meetings with the Chinese authorities, providing a detailed and comprehensive assessment of China's financial system. During the 7 years since the conclusion of China's last FSAP, China's economy has continued to grow with good momentum, characterized by a stable economic foundation, strong resilience, and great potential. China's financial system has been operating in a generally stable manner. The financial sector keeps growing, the business structure continues to be optimized, resilience has been enhanced, and financial markets have further deepened. Based on China's specific conditions and the need for high-quality development of the financial sector, the Chinese government has comprehensively strengthened financial regulation and supervision and improved their effectiveness. It has prudently and effectively resolved financial risks in key areas and has ensured no systemic risks arise. It has strengthened financial stability, accelerated the legislation of the *Financial Stability Law*, and improved the mechanism for maintaining long-term financial stability.

The Chinese authorities see this round of FSAP not only as a comprehensive health examination of China's financial system, but also as an opportunity to improve all parties' understanding of China's financial development and reforms. We believe that the staff assessment, which is based on the data as of September 2024, can serve as a valuable reference for us. The assessment also shows that the package of macro policies introduced in September 2024 has been timely and appropriate. We appreciate staff's policy recommendations, though on certain issues we hold a more optimistic view than that of staff, especially given that it is April 2025 now and there have been major positive changes in China's macroeconomic and financial situations. I will focus my discussion on these issues.

**I. China's Financial Stability**

**We believe that China’s financial system is resilient, and financial risks are manageable. Therefore, we are unable to share staff’s view that “financial stability risks are elevated and rising.”** In recent years, in view of the complex economic situations domestically and abroad, the Chinese authorities have taken proactive measures to arrest the increase of local government debt and contain real estate-related risks, aiming at maintaining stable growth and de-risking. Since 2023, the Chinese authorities have introduced a package of policies to resolve local government debt issues. These policies have involved local governments, LGFVs, and financial institutions, and applied comprehensive fiscal and financial means to address the LGFV debt risks in a prudent and steady manner. After more than a year’s efforts, important achievements have been made. Since the second half of 2021, the Chinese authorities have taken active measures to manage the adjustment in the real estate market. In particular, in May and September 2024, we introduced a package of financial policies for the real estate sector, including lowering mortgage rates and reducing the minimum down payment ratios. These measures aimed to actively support the risk mitigation and healthy development of the real estate market from a macro-prudential perspective. As the policy measures gradually take effect, the risks related to LGFVs and the real estate sector have been significantly mitigated.

**In September 2024, the Chinese government introduced a package of incremental policies. Since then, their positive effects have become evident as the financial risks in key areas have substantially declined.** The authorities introduced a RMB 10 trillion program to swap all the implicit local government debt. The work is currently progressing in an orderly manner and has substantially eased the debt burden of LGFVs. We have abolished the nationwide policy floor of mortgage rates and unified the minimum mortgage down payment ratios to 15 percent, further reducing the cost for home buyers. At the same time, the interest rate for existing mortgage loans has reduced, which saved about RMB 150 billion annually in mortgage interests for households and greatly eased their repayment burden. Relevant authorities and local governments have also introduced a series of housing, land, fiscal, and tax policy measures to stabilize the real estate market. Since the adoption of incremental policies, market confidence and expectation has noticeably improved, and key risks such as the LGFV and the real estate sectors have substantially declined. **On LGFVs**, the swap for implicit local government debt has been steadily advanced. With the principle that provincial governments bear the overall responsibility of resolving the operational debt of LGFVs, local governments are actively mobilizing their resources at all levels to support the resolution of LGFV debt. Meanwhile, in line with market-oriented and law-based principles, financial institutions are also working with LGFVs to negotiate specific details of debt restructuring such as maturity extension and interest rate reduction. By far, the number of LGFVs and the size of their debt have dropped significantly, and the risks have been significantly mitigated. **On the real estate market**, transaction volumes are on the rise, residential property sales are picking up, prices have shown signs of stabilization, the market-oriented resolution of risk for developers is accelerating, and the trend of stabilization is taking shape.

**In terms of financial institutions, China's financial institutions remain sound and stable, with the regulatory indicators staying within the reasonable range and the overall financial risks well under control.** China's financial system is dominated by banks. As at end-December 2024, the capital adequacy ratio, non-performing loan (NPL) ratio, and provision coverage ratio of commercial banks are 15.74 percent, 1.50 percent, and 211 percent respectively, indicating sufficient solvency and resilience. Compared to the peak in previous years, the size of assets held by high-risk financial institutions has declined noticeably. According to the central bank's rating results at the end of June 2024, the assets of high-risk banks in the "red zone" accounted for only 1.85 percent of all participating banks, with their risks well under control. Financial regulatory authorities are steadily advancing the risk resolution and restructuring of small- and medium-sized banks while continuously enhancing the regular risk resolution mechanism.

**Staff's stress tests also show that China's financial institutions are resilient.** As stated in the report, **the solvency stress test** on 55 banks covering nearly 80 percent of China's banking sector assets shows that they would be resilient to severe macrofinancial shocks (para 17). **The liquidity stress tests**, which include the cash flow analysis and the liquidity coverage ratio (LCR) test on 111 banks covering 87 percent of the total assets of commercial banks, show that all participating banks meet the LCR requirement and have sufficiently stable funding sources on average (para 25 and 27). As China's financial system is dominated by banks whose combined assets account for 89.7 percent of the total assets of the financial sector as at end of 2024, the above-mentioned stress tests essentially show that China's financial system has sufficient resilience to guard against risks.

**From a macro perspective, China's economy has performed stably on the whole with many positive marginal changes, which is conducive to the stability of financial system.** In particular, with the introduction of the additional policies in September 2024, China's growth has accelerated, market expectations have noticeably improved, and structural transformation has been steadily progressed. As such, the economy has shown a recovery trend with positive momentum. The GDP growth rebounded to 5.4 percent year-on-year in the fourth quarter of 2024, registering a 5 percent growth for the whole year. **First**, the growth rates of financial aggregates are within the reasonable range, which helps the economy stabilize and recover. In 2024, the growth rates of the Aggregate Financing to the Real Economy (AFRE), loans, and M2 stood at 8 percent, 7.6 percent, and 7.3 percent respectively, all of which are higher than the nominal GDP growth rate of the same period. Since the beginning of 2025, these financial aggregate indicators have maintained rapid growth, continuously stabilizing economic growth. **Second**, the financing costs are low and declining, which has effectively stimulated investments and domestic consumption. The two large interest rate cuts in 2024, together with the multiple prior cuts since the pandemic, are showing evident cumulative effect, steadily reduce the financing costs of households and corporates. The focus of macroeconomic policy has turned to both investment and consumption, with increased attention to the latter. **Third**, the credit structure has been continuously optimized to further enhance the momentum of high-quality development. During 2024, loans to specialized, refined, distinctive, and innovative (SRDI) enterprises and

inclusive loans to micro- and small- businesses (MSBs) increased by 13 percent and 14.75 percent year-on-year respectively, both of which are significantly higher than the overall loan growth rate. These specific loans better meet the development need of economic agents and help promote the high-quality economic development.

**The additional policy measures have effectively boosted confidence in the capital markets.** Since September 24, 2024, the major stock market indices for A-shares and Hong Kong stocks have been continuously rising, and market turnover has been active. From September 24, 2024, to March 18, 2025, the Shanghai Composite Index increased by 24.77 percent, the Shenzhen Composite Index by 41.81 percent, the CSI 300 Index by 24.74 percent, the ChiNext Index by 45.61 percent, the Hang Seng Index by 35.59 percent, the Hang Seng Tech Index by 64.09 percent, and the NASDAQ Golden Dragon China Index by 41.81 percent, while the performance of other major stock markets has been mixed during the same period. Since September 24, 2024, the average daily turnover of the A-share market is about RMB 1.71 trillion, more than double the amount prior to the introduction of the package of incremental policies; the average daily turnover of the Hong Kong stock market is around HKD 165.2 billion, also more than double the amount before the policy introduction. **We believe that the financial system is a good reflection of the real economy. With a steady economic growth and continuous policy support, China's financial system will continue to remain sound.**

**China has also made significant progress in financial regulatory reforms, providing a solid foundation for the authorities to prevent and mitigate financial risks.** We are pleased to see that staff has noted the progress of China's regulatory reforms in the report. For example, significant progress has been made in operationalizing the macroprudential framework since 2017 (para 49); Implementation of the Basel III framework, together with strengthened rules for asset classification, consolidated supervision, and related party transactions have helped underpin a significant shift towards more risk-based supervision (para 51); The regulatory framework for securities and derivatives markets has been materially enhanced in recent years (para 56); Since the 2017 FSAP, regulation and supervision on the insurance sector have been enhanced, with greater emphasis on capital, risk management, and governance (para 59); Risks arising from the significant growth in the nonbank financial intermediary (NBFI) sector observed in the 2017 FSAP have been reined in, thanks to proactive measures taken by the authorities (para 60); Various market-opening initiatives have been put in place or expanded since the 2017 FSAP (para 57); China has one of the largest climate finance markets in the world in US dollar terms (para 11); Digital finance is well-advanced with larger technology companies playing a central role (para 12). In general, the direction of financial reforms that China is currently pursuing aligns with most of staff's policy recommendations, and China is on its way to achieve the high-quality development of the financial sector.

## **J. Local Government Debt Risks**

The Chinese government places close attention to the local government debt issue and has taken a series of forward-looking measures to mitigate LGFV-related risks. As the LGFV

debt issue involves many stakeholders, we need time to carefully study this issue and consult with local governments and financial institutions, so that the series of policy measures could only be announced in September 2024. We agree with staff's recommendation that the authorities need to take steps to address the LGFV-related risks. As seen from the policy measures announced since last year, we have formulated a comprehensive plan to address the debt issue, covering all kinds of LGFV debts and with due consideration given to the circumstances of the enterprises and financial institutions involved, which is in line with the FSAP recommendation (i.e., to “design and implement a medium-term plan to address financial stability risks associated with LGFV debt”). As such, we are of the view that staff's relevant policy recommendations have already been implemented. **Driven by the government's proactive policies, the LGFV debt risks have been better contained, and the impact of debt resolution on financial institutions has been minimal. Our main policy measures are as follows.**

**First, a regular monitoring system has been established to closely and comprehensively monitor the debt situation of LGFVs.** In 2023, the PBC took the lead in establishing a regular indicator monitoring system for LGFV debt. According to the monitoring, as of end 2023, the outstanding LGFV debt nationwide was around RMB 44 trillion (about USD 6 trillion), comprising of about RMB 10 trillion of implicit local government debt, about RMB 14 trillion of non-interest-bearing debts unrelated to the financial system (such as accounts payable), and about RMB 20 trillion (about USD 3 trillion) of operational debt of LGFVs. We consider the latter as the real risk exposure of the financial system to LGFVs, and it is much lower than the RMB 58 trillion (about USD 8 trillion) as estimated by staff.

**Second, in September 2024, the Chinese government launched a RMB 10 trillion debt swap program to convert the implicit local government debt of LGFVs into local government bonds.** The program includes raising the local government debt limit by RMB 6 trillion over three years, i.e., RMB 2 trillion per year from 2024 to 2026. It also included allocating RMB 800 billion each year of the new local government special bonds issued from 2024 to 2028 for debt resolution purpose. After the introduction of the debt swap program, the implicit local government debt of RMB 10 trillion has been properly resolved, which has greatly alleviated the debt repayment pressure of LGFVs. At the same time, the government has put in place a strict accountability mechanism to prevent local governments from raising new hidden debt through LGFVs.

**Third, it has been clarified that local governments are resolving LGFV's operational debts under the principle that “provincial governments should bear the overall responsibility”.** On one hand, local governments should resolve debt risks through mobilizing funding resources, and even by cutting public spending and selling assets. On the other hand, local governments should gradually separate the role of financing local governments from LGFVs and transform LGFVs into market-oriented enterprises by improving their market-oriented operating capacity and their debt repayment capability (through asset injection, mergers and acquisitions, and restructuring).

**Fourth, financial institutions support LGFV debt mitigation through various measures.** By the end of 2024, financial institutions have supported the extension, restructuring, and swap of more than RMB 5.4 trillion of LGFV's operational debt. This has helped lower the average interest rate of LGFV financial debt by 0.76 percentage point, reducing their interest expense by about RMB 200 billion each year.

**The series of proactive measures has shown noticeable results.** As of the end of 2024, the outstanding LGFV's operational debt in China stood at about RMB 15 trillion, representing a 25 percent decline from the end of 2023. With this, the LGFV debt level has dropped significantly. Market sentiment and prices also show that the LGFV debt risks have significantly declined after the government introduced the series of policies to address the debt issues. In the fourth quarter of 2024, the average interest rate of newly issued LGFV bonds fell to 2.67 percent, a decline of more than 200 basis points from that in the first quarter of 2023. This decline has far exceeded that of the benchmark interest rates such that the credit spreads noticeably narrowed, suggesting that the market believes the overall LGFV risks have generally declined. By the end of 2024, 40 percent of LGFVs have either transformed into market-oriented enterprises or were completely wound down.

**The measures to address LGFV debt issues have not caused significant negative impact on the profitability and sound operation of financial institutions, which can be seen from several aspects.** **First**, the decline in the interest rates of LGFV debt is basically in line with that of the overall bank loans and is comparable to the decline in the benchmark interest rates. At the end of 2024, the interest rate of LGFV financial debt was 4.14 percent, down 0.76 percentage point from the end of March 2023. Over the same period, the 1-year LPR fell from 3.65 percent to 3.1 percent, and the 5-year LPR declined from 4.3 percent to 3.6 percent. There is no evidence that LGFV risk mitigation has had an additional negative impact on the profitability of financial institutions. **Second**, the asset quality of financial institutions remains generally stable. As monitored by the PBC, at the end of 2024, the NPL ratio of LGFV loans held by national banks was 0.21 percent, while that of the local banks was 0.10 percent. The NPL ratios haven't significantly changed compared with the end of March 2023. It should be noted that, according to the existing regulatory policies, LGFV loans that are overdue for more than 90 days must be classified as non-performing, so the NPL ratio of LGFV loans is also a true reflection of the asset quality of banks. **Third**, the exposure to LGFVs has concentrated in national financial institutions with higher resilience, and LGFV debt has had little impact on the overall soundness of the financial system. According to the PBC, as of the end of 2024, the LGFV operational loans held by 21 national banks accounted for 74 percent of all LGFV operational loans and only represents 3 percent of the total loans of these banks. For small-and medium-sized banks, the authorities have always stressed that they should be prudent in lending to LGFVs. New LGFV loans should be subject to higher-level approval and small and medium-sized banks in rural areas should be strictly prohibited from providing new financing to LGFVs.

We note that staff has used market data to analyze the size and viability of LGFV debt, and based on these analyses and a number of assumptions, staff estimated the impact of LGFV debt restructuring on the financial system. We believe there are problems with these data and the analytical methods that cannot be overlooked, as they result in substantial inconsistencies between the conclusions and the reality, and noticeably overestimate the LGFV debt risks. **First, there is the problem of double counting of the LGFV debt data.** Among the about 3700 bond-issuing LGFVs staff analyzed based on data from WIND database, 1016 of them present their financial statement on a consolidated basis. When calculating the size of debt, however, staff only took out the debt of the subsidiaries of 205 LGFVs based on data from S&P Capital IQ and failed to take out the debt of the subsidiaries from the remaining 811 LGFVs. The correctly adjusted size of LGFVs' interest-bearing debt should be no more than RMB 51 trillion (USD 7 trillion) instead of RMB 58 trillion (USD 8 trillion). **Second,** staff did not exclude the implicit debt to be repaid by local governments from the LGFV debt. A significant portion of the LGFV debt is implicit local government debt, which is to be repaid by local governments in accordance with relevant regulations. Last November, the central government announced the local government special bond swap program of RMB 10 trillion and the repayment of this debt is currently accelerating. These debts should be excluded from the total. **Third,** staff did not fully consider the liquidation of assets, and thus underestimated the solvency of LGFVs. According to the FSAP analysis, the total assets of LGFVs stood at 118 percent of GDP in 2023. This included land which is relatively easy to liquidate. Also, a portion of the total assets was government receivables. According to our data, the debt-to-asset ratio of LGFVs is not high, and local governments are injecting large amounts of realizable assets into LGFVs and paying off arrears to LGFVs to enhance their ability to repay debt. **Fourth,** staff did not consider the support from the local governments.

Moreover, we emphasize that in order to analyze the LGFV risk in China, it is necessary to consider China's specific conditions and consider the regional distribution of debt. **Provinces with large debt burdens actually have strong fiscal space and are fully capable of resolving these obligations independently.** The LGFV debt has a distinct regional feature, where the aggregate amount of debt in the eastern and central regions is relatively large, yet the economy in these regions is more developed and the local governments are able to resolve **these obligations independently** as they have stronger fiscal and economic strength and more resources to use. At the end of 2023, the provinces in the eastern and central regions with relatively large local government debt have LGFV's operational debt that accounts for three quarters of the total in the country, while they contribute to about 80 percent of China's total GDP. In the few other regions, the LGFV debt is relatively small in size and is mainly used for infrastructure investment. The debt repayment can be supported by their large tangible assets, and the local governments have the ability to address the debt risks through mobilizing assets and resources within the provinces.

### III. Risks in the Real Estate Sector

After long-cycle prosperity for nearly three decades, China's real estate market has experienced a fundamental shift and is now looking for a new point of equilibrium. Following a market-oriented and law-based approach, the Chinese government introduced a series of measures from both the demand and supply sides. It has removed housing purchase restrictions in large- and medium-sized cities, improved financial, tax, and other policies, and effectively reduced risks in the real estate market. These measures, together with the self-adjustment measures taken by market participants to adjust business strategies and restructure debt, have ensured that overall risks are currently decreasing. **The main measures to mitigate risks in the real estate market include:**

**First**, a series of restrictions and measures around home purchases and sales, including those previously introduced to curb the excessive rise of housing prices and to limit investment and speculation in the market, have been relaxed or withdrawn. The policy differentiation for ordinary and non-ordinary houses have been removed, and deed tax on first and second home purchases have been reduced. These measures helped release the households' effective demand for home purchases.

**Second**, the nationwide policy floor of the mortgage rates for new loans has been abolished. The minimum down payment ratios for mortgage loans and the interest rates of provident fund loans have been reduced, and the pricing mechanism of the commercial residential mortgage rates has been improved, which has helped lower the interest rates of existing mortgages.

**Third**, the PBC has launched a RMB 300 billion central bank lending facility for affordable housing. Also, banks can now borrow back-to-back from the central bank for 100 percent of the real estate acquisition loans, instead of the previous 60 percent. This facility allows financial institutions, in a market-oriented and law-based manner, to support local state-owned enterprises in purchasing from commercial housing inventories and use them towards affordable housing, so as to promote the market-oriented destocking. Currently, more than 30 cities across the country have implemented projects to acquire existing housing stock, and banks have issued loans of more than RMB 40 billion under the affordable housing lending facility. This has played a catalytic role in reducing the inventory of residential housing. The central government has made it clear that local government special bonds are allowed to be used for idle existing land buyback, new land acquisition and reserve, and residential housing purchasing. Several provinces have already issued announcements to buy back existing land parcels, which is expected to further accelerate destocking in the real estate market.

**Fourth**, through the "whitelist" policy, financing has been provided to real estate projects that are under construction, so as to ensure their timely delivery. Currently, more than RMB 6 trillion of loans have already been approved under the "whitelist" policy, which has strongly supported the stability of the real estate market and the resolution of related risks.

**Fifth**, two phase-specific policy measures—one of which is the rollover of existing financing for property developers under the "Sixteen Financial Policy Measures to Support the Real Estate Sector" in 2022 and the other is the policy regarding commercial property loans—have

been extended to the end of 2026. Overall, real estate financing has been generally stable. Real estate development loans have increased cumulatively by more than RMB 400 billion in 2024, which is 200 billion more than the total increase in 2023 and has helped meet the reasonable financing needs of the real estate sector.

We are glad to see that the FSAP team recognized the measures taken by the Chinese authorities to support the real estate sector over the past few years, and that they pointed out that these measures succeeded in “preventing the unfolding crisis.” **However, we believe that staff’s assessment about China’s real estate market does not accurately reflect the recent positive changes.** In fact, with the support of the additional policy package, a number of indicators, such as the transaction volume of residential housing and the transaction price, all pointed to increased activities in the real estate market. In terms of sales, in the fourth quarter of 2024, the sales area of residential housing in 30 large and medium-sized cities increased month-on-month for three consecutive months and year-on-year for two consecutive months. In the fourth quarter, the sales area of commercial housing in the first-tier cities increased by 57 percent quarter-on-quarter and 40 percent year-on-year. **In terms of price,** there have been signs of stabilization, too. In January 2025, the month-on-month decline in new home prices in 70 large and medium-sized cities narrowed for five consecutive months. Specifically, the prices in the first-tier cities rose month-on-month for three consecutive months, the month-on-month declining trend in the second-tier cities reversed for the first time since July 2023, and the decline in the third- and fourth-tier cities also slowed.

**We can understand staff’s concerns about the potential impact of real estate market risks on financial stability, but it is important to note that the spillover from China’s property market adjustment to the financial system is declining.** Real estate-related loans account for 20 percent of the outstanding bank loans, and about 80 percent of all real estate-related loans are mortgage loans. China has always been prudent in its mortgage loan policies. On the one hand, for a long time, the effective down payment ratio of mortgage loans has averaged about 35 percent. Therefore, there has been sufficient safety cushion. On the other hand, the regulators have set upper limits on the proportion of the outstanding real estate loans and the proportion of outstanding mortgage loans. The proportion of outstanding real estate loans for most banks is less than 20 percent, which has effectively mitigated the concentration risk. The quality of China’s mortgage loans is closely linked to borrowers’ employment and income, and is less affected by the fluctuations in the housing price. The NPL ratio has remained at a low level below one percent for a long time. The real estate development loans are secured by land and projects under construction, and have strict risk management requirements, so the overall risks are well under control.

Looking ahead, as the supportive policies gradually taking effects, China’s real estate market is set to bottom out and stabilize over time. It has been 3 years since China’s real estate market adjustment started, and the risks have been largely mitigated. In recent years, as the rental yield in large and medium-sized cities generally rebounded, the investment value and attractiveness of housing assets have increased relative to other assets.

This will support housing prices in the longer term. Given that the real estate sector is accelerating its transition to a new development model, a number of factors will play a positive role in stabilizing real estate investment and the economy, including the construction of affordable housing, the redevelopment of urban villages, and the on-going urban renewal. In the long run, China's urbanization is still in the development phase. The basic demand still exists, and the continued urbanization in terms of its level and quality will lend strong support to the long-term steady development of the real estate market in the future.

#### IV. The Mandate of the Authorities and the Regulatory Issues

We are pleased to see that staff acknowledged the progress made by the Chinese authorities in establishing a macro-prudential policy framework, strengthening the supervision of the banking and insurance industries, and improving the regulatory framework of the securities and derivatives markets. We also welcome the relevant policy recommendations put forward by the FSAP team, as they provide important guidance and reference for improving our financial regulatory work. **However, we disagree with staff's view that there is conflict between the stability and developmental mandates of Chinese regulatory authorities, which fails to consider the stage of development of China's system.** In terms of mandates, China's regulatory authorities have always considered the prevention and resolution of financial risks, as well as the safeguarding of financial stability, their primary responsibility. But at the same time, it is also a critical task to balance development and stability, which is an international consensus. In terms of fulfilling their mandates, the regulatory authorities have the decision-making independence to perform their duties in accordance with the law, as well as the power to take decisive actions. But we agree that it would be beneficial to further improve the coordination among regulators.

Staff's recommendations on strengthening regulatory effectiveness and improving the financial safety net are in line with the regulatory reform objectives that we have been pursuing in recent years. In fact, the Chinese authorities have already taken actions to further enhance the legislation and the regulatory framework. **With regard to improving regulation and supervision,** the Chinese authorities have improved the laws and regulations through revising a series of prudential regulatory rules, including those related to financial holding companies, capital management, asset classification, corporate governance, insurance solvency, recovery, and resolution, etc. **In terms of regulatory processes,** the authorities have continuously optimized their approaches including on-site inspections, off-site supervision, regulatory ratings, and stress testing, etc. We have also built smart regulatory platforms, integrated regulatory data, and established standardized and online procedures. **As for preventing risks in key areas,** the financial regulators have promoted risk resolution as well as the reform and restructuring of small and medium-sized banks in a steady manner. They have effectively mitigated high-risk shadow banking risks and large corporate debt risks, and have resolutely punished the covering up of non-performing assets. The draft *Financial Stability Law*, which has undergone the second reading, clarifies issues

such as the debt write-down and the strict use of public funds during debt resolution. Its operationalization in the future will help build an authoritative, efficient, and fair financial risk resolution mechanism.

We would like to further elaborate on our views regarding regulatory forbearance mentioned in the report. **Staff attributed the stable NPL ratio of China’s banking sector to the regulatory forbearance policies and the sale of non-performing assets at inflated prices to defer loss. This viewpoint lacks objectivity.** The main reason for the stable NPL ratio of China’s banking sector is the proactive resolution of non-performing assets, with the amount disposed being roughly equal to the new NPL loans in the same period. In recent years, banks have strengthened the resolution of NPLs through market-oriented and law-based methods such as writing off NPLs at their own discretion and selling them in the market. They use open and transparent channels as well as fair and full bidding process to ensure market-based pricing. By enhancing the asset classification framework, improving the rules for NPL resolution, and strengthening off-site supervision and on-site inspection, financial regulators have placed close attention on the formation and resolution of non-performing assets of financial institutions. The regulation and supervision fully cover all the aspects of asset classification, market-oriented resolution, data monitoring, and inspection and punishment. In recent years, about RMB 3 trillion of non-performing assets are resolved every year, which is roughly equivalent to the scale of newly formed non-performing assets. Financial regulatory authorities have enhanced regulatory transparency by regularly publishing regulatory data and holding press conferences release information about the operations and risks of the banking industries and the related data.

We would also like to clarify our position regarding staff’s view on the division of responsibilities between the China Securities Regulatory Commission (CSRC) and the stock exchanges. At present, the CSRC oversees and regulates stock exchanges in accordance with the *Securities Law* and the *Measures for the Administration of Stock Exchanges*, among other relevant laws and regulations. The division of responsibilities between the CSRC and the exchanges is clearly defined, and there is no interference in the day-to-day operations of the exchanges.

## V. On the Progress of Market-oriented Pricing Reform

During the assessment, the FSAP team acknowledged the progress made in the development of China’s capital market since 2017. They agreed that there had been substantial improvements in the rule of law and the regulatory framework. They also provided policy recommendations on further steps to deepen the market-oriented and rule-of-law reforms, for which the Chinese authorities expressed their gratitude. **However, we disagree with staff’s view that the transition to market-based pricing has stalled. In fact, China has made positive progress in the transition to market-based pricing since 2017.** For instance, China has always followed the market-oriented and law-based principles in reforming its capital markets. In particular, as we fully implemented the reform of the registration-based stock issuance system in 2023, the system is substantially more market-oriented, and the stock pricing has become more rational.

Staff raised the issue of pricing in asset disposal. From cases publicly disclosed in recent years, asset disposals have followed the market-oriented and law-based principles, and creditor recovery rates have generally been low. In a few isolated cases, distressed assets may have been sold at relatively modest discounts—these were ad hoc measures taken in the context of risk resolution, with similar cases also seen in other countries. During the risk resolution process, the authorities need to take a holistic approach and consider multiple factors beyond pricing, including financial and social stability. This is also consistent with international practices. Such ad hoc measures do not fundamentally affect the market-based price discovery mechanism.

## VI. Data Gaps

We agree with staff's recommendations on improving data collection and quality to enhance risk analysis. In recent years, China's financial authorities have continued to improve their ability on data collection, analysis, processing, and governance, as well as expanded the regulatory data coverage. With these efforts, we have substantially improved the breadth, depth, and granularity of regulatory data, and considerably enhanced our data management capability and the quality of data. This has provided a more solid and effective data foundation for enhancing risk analysis and implementing regulatory actions. In terms of risk analysis techniques, we thank staff for sharing stress testing techniques with us in the last round of FSAP, based on which we developed our own stress testing framework. At present, both the PBC and the NFRA have established their regular stress testing mechanisms for the banking sector. In response to the evolving risk environment, they also carry out thematic stress tests from time to time, such as those related to the real estate sector and to the interest rate risk of fixed income investments. We are also exploring stress testing in emerging areas such as climate risk. For the next step, we will further improve our methods and capabilities of risk analysis, based on the advanced techniques shared by staff in this round of FSAP.

**However, we disagree with staff's assessment that the data gap has limited the depth and breadth of our systemic risk analysis.** During the mission, the Chinese authorities had many rounds of discussion with staff on data for banking sector stress tests. We have provided the required regulatory data to staff to conduct quantitative analysis. The scope of the data provided by the Chinese authorities has been significantly broader than those provided in 2017 FSAP, and matched with the data scope of recent FSAP stress tests of other countries. In terms of solvency, we provided data on 55 commercial banks with assets of more than RMB 500 billion, and their aggregate asset size accounts for more than 80 percent for all commercial banks. In terms of liquidity and contagion risks, we provided data on 111 commercial banks with assets of more than RMB 200 billion, and their aggregate asset size exceeds 85 percent of the total assets of commercial banks. The participating institutions include all types of banks and would sufficiently represent China's financial system. Overall, we believe that the scope, type, granularity, and the time series of the data provided by the Chinese authorities can meet the needs of systemic risk analysis and stress testing.