

Investment Institute Macroeconomics

Resilience and realignment: Opportunities and risks in China's banking sector

Macroeconomic Research



Key points

- China's banking system is facing some significant challenges from the country's beleaguered property market and local government debt. In addition, while banks' assets have grown in recent years, asset quality has deteriorated
- Unlike overseas, Chinese banks' mortgage exposure appears relatively small. But their exposure to property developers and local government financing vehicles present greater risks, with smaller banks particularly vulnerable
- We believe a systemic banking crisis should be avoided but local government entanglement in the credit process poses risks
- As a result, banks are shifting their focus towards high-tech manufacturing and services to enhance their profitability

¹ Wang, Y., "<u>Brick by Brick: Unravelling China's property Puzzle</u>", AXA IM Research, May 2024

The barometer of an economy

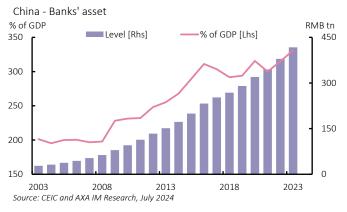
China's economy has been grappling with significant challenges in recent years — primarily an unprecedented property downturn set against the backdrop of a broader economic slowdown. Additionally, the issue of local government debt, continues to exert pressure on the economy. Banks, often seen as the barometer of an economy, are experiencing tremendous strain from these challenges. Following our recent research analysing property market developments¹, in this note we analyse the banking sector's overall health by examining its asset growth, asset quality and exposure to troubled economic sectors — specifically, the property market and local government debt. We will also explore China's banks' potential future.

China's rapid, investment-driven economic growth of the past few decades was highly capital-intensive, generating a sustained and robust demand for credit and positioning banks at the core of the country's financial ecosystem. In the early stages of this growth, banks were primarily state-owned and heavily managed, serving as crucial instruments for channelling resources towards strategic economic priorities. As a result, they not only fulfilled their role in supporting government-directed investments but also reaped the benefits of the growing demand for credit.



In the early 2000s, the property market boom further solidified banks' central role in the economy. The emergence of mortgage products created new opportunities, as banks became key lenders to homebuyers. This added a reliable income stream to their portfolios, fostering a sense of stability within the sector. As mortgage lending became a significant part of their business, banks were able to capitalise on the booming real estate market, further entrenching their importance in China's economic landscape (Exhibit 1).

Exhibit 1: Banking sector's increased significance



However, as China's economy has slowed in recent years, the dynamics which once drove robust bank earnings have shifted dramatically. Investment demand has weakened, leading to a subdued appetite for credit. The housing market downturn has further discouraged households from purchasing new homes and, in some cases, prompted early mortgage repayments. These trends have directly impacted banks' traditional revenue streams, squeezing their profitability more than ever.

Beyond shrinking revenue streams, the risks arising from these economic challenges have threatened the resilience of China's banking sector. However, we believe a systemic banking crisis is unlikely at this stage. To date, failures within the banking system have been largely isolated and idiosyncratic, posing no significant threat to the overall stability. That said, the intricate and tightly interconnections between financial institutions, the real estate sector, and local and central governments create a fragile environment. In such a context, even a minor disturbance could potentially trigger a chain reaction, destabilising the entire banking system.

Looking ahead, banks in China must innovate by creating new revenue streams, while carefully managing their risk exposure. As the country undergoes a structural economic transition, credit demand from traditional infrastructure and property development projects, which were once their primary focus, are fading.

Instead, they are increasingly turning their attention to emerging sectors that align with the new economic priorities.

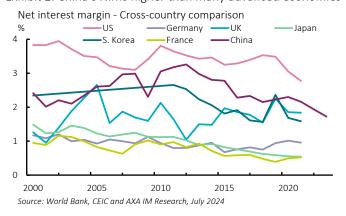
Steady asset expansion amid tightening margins

China's banking sector has demonstrated resilient asset growth in recent years, with total assets expanding steadily at an annual rate of 10% in both 2022 and 2023. The sector's total assets exceeded 330% of China's nominal GDP by the end of 2023² (Exhibit 1). This growth was primarily driven by the six large state-owned commercial banks³. The primary contributors to asset growth were loans, specifically those extended to non-financial corporations. Additionally, banks' reserve assets decreased moderately following an 80 basis-point (bp) cut in the reserve requirement ratio in 2023.

However, despite the steady asset expansion, Chinese banks are facing their worst profitability in recent history. The sector's overall profitability, measured by the net interest margin (NIM), has been on a downward trend since early 2022, reaching a record low of 1.5% in the first quarter (Q1) of 2024. This decline in NIM is partly attributed to interest rate mismatches resulting from multiple policy rate cuts since the beginning of 2022. Furthermore, both return on assets (ROA) and return on equity (ROE) have declined to historic lows.

For decades, China's high economic growth and extensive infrastructure investments fuelled strong demand for credit, enabling banks to maintain relatively high lending rates. The lack of competition in the Chinese market, dominated by a few large state-owned banks, allowed for a wide gap between lending and deposit rates, ensuring robust profitability. Even with the recent decline, Chinese banks have maintained higher profitability compared to counterparts in advanced economies like the UK, France, Germany and South Korea (Exhibit 2).

Exhibit 2: China's NIMs higher than many advanced economies



(BOCOM), and Postal Savings Bank of China (PSBOC). These six large commercial banks are controlled by the Ministry of Finance and Central Huijin Investment Company — an investment institution solely owned by the Chinese government. These accounted for over 40% of all China banking assets as of 2023.

² In the US, banking sector asset is 82.6% of its GDP in 2023, 194.5% for Eurozone and 187.4% for European Union in 2023.

³ i.e. Industrial and Commercial Bank of China (ICBC), Agricultural Bank of China (ABC), Bank of China (BOC), China Construction Bank (CCB), Bank of Communications



China's recent drop in bank profitability can be attributed to a combination of cyclical and structural issues. One of the primary cyclical factors is the ongoing weakness in the property market. As the property sector continues to struggle, Beijing has introduced multiple mortgage rate cuts to help stabilise the market. However, these have been implemented asymmetrically, with existing mortgages benefiting less than new ones. This disparity has led to a significant wave of mortgage prepayments, as homeowners refinance at lower rates, thereby reducing banks' interest income. The weakening of traditional revenue streams from the housing sector has thus put considerable pressure on bank earnings.

On the structural side, China's interest rate framework plays a significant role. This framework allows commercial banks to set loan prices freely while imposing a *de facto* floor on deposit rates. During times of high credit demand and relatively elevated policy rates, this arrangement was manageable. However, recent policy rate cuts have substantially lowered lending rates, while deposit rates have remained broadly stable due to the floor. This has led to a compression of banks' NIMs, a key measure of profitability.

Additionally, the persistent softness in credit demand has further exacerbated the decline in NIMs. With economic growth slowing and investment demand weakening, the appetite for new credit has remained subdued. This reduced demand, coupled with the structural challenges in the interest rate framework, has further squeezed banks' profitability.

As China's investment-driven growth fades and grapples with a slowing economy, the current low level of NIMs may represent a new normal for the banking sector. However, given the tight capital controls and the quasi-oligopolistic nature of the Chinese banking market, NIMs, particularly for large state-owned banks, are likely to recover somewhat if overall economic conditions improve. Nonetheless, banks will need to adapt to this new era by exploring alternative revenue streams, strategically adjusting their operations, and managing risks more effectively to sustain long-term profitability.

Economic downturn unevenly eroded asset quality

While the asset levels of China's banks have increased steadily in recent years, the economic downturn has eroded the quality of these assets, as evidenced by a rise in the ratio of non-performing loans (NPLs). Historically, China's banks have maintained a decent loan quality, with the official NPL ratio remaining below 2% since 2009. However, this figure, constrained by a narrow definition, often fails to fully capture the actual state of loan quality, particularly during economic downturns. For instance, during the wave of property developer defaults in late 2022,

⁴ The official NPL number is published by China's National Administration of Financial Regulation.

the official NPL figure paradoxically declined to 1.6%, rather than increasing as might have been expected.

But a more comprehensive, top-down estimate of Chinese commercial banks' NPLs from S&P Global indicates a much grimmer picture. According to this estimate (Exhibit 3), the NPL ratio understandably rose to a peak in 2020 at 7.9%, largely due to a surge in loan forbearance associated with the pandemic, which amounted to approximately RMB 5.1tn, or 3.5% of total bank loans that year. Following a brief respite in 2021, the NPL ratio rose again to 7.1% in 2022, likely driven by defaults among real estate developers.

Exhibit 3: Top-down estimate of non-performing loans

China - Commercial banks' non-performing loans % of total loans 7.9 8 7.1 6.5 - -- Total NPL 6 5.0 Other problem loans Forborne loans 4 Special-mention loan 2 0 2019 2020 2021 2022 2023 2018

Note: Shaded bars showing estimated values Source: S&P Global,CEIC and AXA IM Research, July 2024

This trend is corroborated by data from 5,239 listed Chinese companies across 10 different sectors (Exhibit 4). The estimated NPL ratio in corporate loans rose moderately during the pandemic and remained elevated, eventually spiking to 17.4% in 2022. Given the substantial size of corporate loans, their deterioration significantly influenced the overall implied NPL ratio in China, which peaked at 10.2% in 2022. In contrast, the quality of overseas loans and retail loans showed less or no significant deterioration.

Exhibit 4: Bottom-up estimate of NPL

China - Implied NPL ratio for commercial banks % of total loan in category 18 Corporate loans Retail loans 17.4 Overseas loans -- Implied NPL ratio 15 12 9 6 3 2014 2017 2020 2023 Source: Citi Research, Company Data, CEIC and AXA IM Research, July 2024



The distribution of bad loans across different types of banks in China is uneven. Although created here by using the official NPL figures – which as stated are likely underestimated – the disparity in NPL ratios among various banks is still apparent in Exhibit 5. Rural commercial banks (RCBs) have consistently shown significantly higher NPL ratios compared to other types of banks, including the six large state-owned enterprises (SOE) and joint-stock banks⁵, which have NPL ratios below the sector average.

RCBs, many of which evolved from Rural Credit Cooperatives (RCCs), have historically been more vulnerable to bad loans. RCCs were initially established to channel state credit to rural areas rather than operate as profit-driven entities⁶. The transformation of RCCs into RCBs began in 1998, with local governments, enterprises and farmers becoming the main stakeholders. However, RCBs often find themselves under pressure to issue policy loans – loans provided to politically significant industries or firms – regardless of loan quality or profitability⁷. Moreover, unlike the larger SOE banks, RCBs typically operate in local areas with smaller franchises, weaker funding profiles, and minimal central government support. This has led to consistently higher NPL ratios for RCBs, a problem exacerbated by their close ties to local property developers, who are increasingly under financial strain.

Exhibit 5: NPL highly concentrated in rural commercial banks

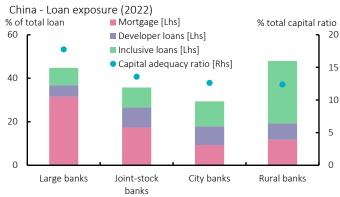
China - NPL's by different types of bank Large CB Joint-stock bank City CB 4.5 Private bank Rural CB --- NPL - Overall 3.0 1.5 0.0 2010 2013 2016 2019 2022 Source: CEIC and AXA IM Research, July 2024

Furthermore, RCBs' NPL ratios are likely understated by a greater margin compared to other banks, partly due to their larger exposure to small and micro-enterprise (SME) loans⁸, which benefit from more lenient NPL classification requirements (Exhibit 6).

⁵ There are 12 joint-stock banks in China. The central government, provincial governments or SOEs have the controlling stake or majority controlling interest of most of the joint-stock banks.

In contrast, large banks and joint-stock banks have generally maintained better asset quality and stronger capital buffers. These 18 institutions collectively account for nearly 60% of the assets in China's banking sector, while more than 3,700 RCBs account for only 13% as of 2023.

Exhibit 6: Bigger exposure to inclusive loans among small banks



Source: IMF, CEIC and AXA IM Research, August 2024

Distress at smaller banks could spill over to the larger banks given the interconnectedness of the banking system⁹. This sector is also likely to see further and accelerated consolidation as risks continue to rise among RCBs – some smaller banks could be dissolved or taken over by larger SOE banks in the coming years, in a process similar to the US Savings and Loan crisis of the 1980s. In fact, this consolidation trend is already underway: at least 56 small commercial banks underwent restructuring, mergers or bankruptcy¹⁰ in 2023 alone and this has been accelerating so far this year, with larger institutions taking over many of these failing entities. This trend is expected to continue, which should improve the overall health of the banking sector but also poses systemic risks if too many banks fail simultaneously.

Moreover, negative developments could spill over into the household and business sectors. While individual and corporate depositors are entitled to compensation of up to RMB 500,000 per account in the event¹¹ of a bank failure, financial investments such as funds or wealth management products purchased through banks would not be eligible for compensation¹², potentially leading to broader financial instability. Rising concerns about the stability of smaller banks could precipitate a flight to quality for deposits, exacerbating pressures on smaller banks.

⁶ The economic reform in 1978 encouraged individual entrepreneurialism, leading to a significant increase in credit demand in rural areas. However, RCCs struggled to meet this demand, prompting individuals and enterprises to seek alternative funding options, such as rotating savings and credit associations and pawn shops, which were mostly illegal. Legal funding sources through commercial banks were inadequate, as less than 1% of loans from state banks were directed to private entrepreneurs at that time.

⁷ Tsai, K., "Imperfect Substitutes: The Local Political Economy of Informal Finance and Microfinance in Rural China and India", World Development 32(9):1487-1507, Sep 2004.

 $^{^8}$ A policy directive in place since 2019 that urges banks to increase lending to SMEs has led to increased credit risks, as small businesses have been disproportionately affected by economic slowdown and the pandemic.

⁹ IMF, "Global Financial Stability Report", International Monetary Fund, April 2023.

 $^{^{10}}$ One of the most well-known cases of this is Baoshang Bank in 2019, who survived under CCB's custody services, before filing a bankruptcy in late 2020. Some businesses were acquired by Mengshang Bank and Huishang Bank.

 $^{^{\}rm 11}$ According to the Deposit Insurance Measure that was introduced in 2015.

 $^{^{12}}$ As of the end of the first half of 2024, there was RMB979.2bn in outstanding balance of the wealth management product sold by rural financial institutions, and city commercial banks hold a fund balance of RMB2.21tn.



Troubled sectors shaking stability of banking sector

As the property market turmoil continues, China's banking sector, a crucial funding source for both property developers and home buyers, is likely to come under increased pressure. Risks take two forms: lending to property developers where default risk has risen and to the mortgage holders. It is worth noting that unlike in international economies, risks from the mortgage loans are likely to remain contained.

Examining the loan quality in the real estate sector, Exhibit 7 shows that NPLs for private-owned developers (POEs) peaked in 2022 but have decreased since. In contrast, the default risk of loans to state-owned developers (SOEs) has been rising sharply since the second half of 2022. By the first half of 2023, 31.6% of real estate-related loans were classified as non-performing, down from 34.6% in the first half of 2022. Yet, the real estate loan quality is unlikely to improve until the property market bottoms out, continuing to pressure the banking sector with increasing default risks from property developers.

Exhibit 7: Quality of loans to property developers worsening China - Underlying NPL for real estate sector

% of total loan in the sector

60
50
FOE developer
40
Implied true NPL % for real estate sector
30
20
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Source: Citi Research, Company Data and AXA IM Research, July 2024

Mortgage loans, on the other hand, are seen as high-quality assets and are unlikely to significantly increase banks' risk exposure. This is because the much lower loan-to-value ratios¹³ and Chinese households' inability to write off bad debt with social contracts¹⁴. However, the shrinking size of outstanding mortgage loans could reduce banks' profitability. In fact, a

surge in early repayments – driven by asymmetric cuts in existing versus new mortgage rates and a pessimistic economic outlook – has added to banks' profit margin pressures in recent months. Over the longer term, mortgage loan applications are expected to remain subdued due to a persistent decline 15 in home sales, further impacting banks' income outlook.

To address the pressures on the property market, the government, together with the People's Bank of China (PBoC), has increased stabilisation efforts. The newly announced relending programme¹⁶ from the PBoC would extend RMB 192bn of bank loans to the property market if fully utilised, where lenders qualified for the de-stocking programme will undergo a strict scrutiny and normally have solid credit ratings, which is unlikely to worsen banks' assets in the near term. However, since these acquired housing inventories will be converted to affordable housing later, the low (or even negative) rental yield¹⁷ may cause solvency issues for the buyers, potentially reducing their credit ratings and increasing long-term risks to banks in the future.

Loans to property developers, and to the related sector, local government financing vehicles (LGFVs) for property-related projects, and others account for around 10% of banks' total asset (Exhibit 8). The risk of this portion is elevated and rising, but it alone should not pose a systemic, imminent risk to the banking sector as a whole.

Exhibit 8: Banks closely linked with real estate

China - Bank's loans to real estate sector and its related (2023) % of bank's total asset



Source: Citi, CEIC and AXA IM Research, July 2024

¹³ As a result of the consistently high down-payment ratio requirement for properties — which was only relaxed recently to boost demand — the loan-to-value (LTV) ratio for a first property was capped at 70% or lower in many big cities, with an additional property LTV capped at 50% or lower. Yet, many investors chose not to take a mortgage loan at all. For more details on China's mortgage market, see Wang, Y., "Brick by Brick: Unravelling China's property Puzzle", AXA IM Research, May 2024.

¹⁴ Chinese borrowers are fully accountable for their debt, and any default would negatively impact their social credit scores. This could not only restrict future borrowing but also limit access to everyday necessities, such as purchasing train tickets.

 $^{^{15}}$ We $\underline{\text{estimated}}$ property sales to decline at an annual rate of 3.3% throughout the 2020s.

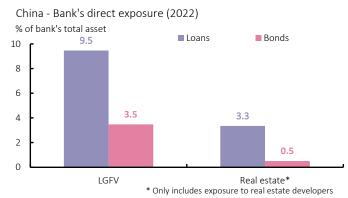
¹⁶ In May 2024, the PBoC announced a re-lending programme of RMB300bn, allowing commercial banks to reclaim up to 60% of the loans they made to local governments or local SOEs for acquiring unsold housing inventories. By the end of June 2024, 4% or RMB12.1bn of the re-lending quota had been issued (yet no completed purchases reported). Excluding the portion covered by the relending programme, the net increase in banks' exposure is RMB8.1bn.

¹⁷ China's gross rental yield is 1.7% (based on the latest data in 2021), while the current interest rate for the PBoC's affordable housing re-lending programme -- a *de facto* interest rate floor of the loans for this initiative -- is at 1.75%, and most commercial bank loans for this purpose were priced at above 3%. However, latest government meetings suggest it is seeking a rental yield of 3.0% for this programme, which is only available by heavy purchase discount offered by property developers.



However, aside from the unprecedented correction in the Chinese property sector, China's economy faces additional risks from local government finance, including LGFVs. These vehicles were set up to fund local projects, mainly infrastructure, which by nature do not yield good returns on investment and have started to cause insolvency issues¹⁸. As such, these highly leveraged LGFVs could further test the banking system's resilience. Since 2020, the debt levels of LGFVs have been rising rapidly. Ad-hoc reports of insolvency issues among some LGFVs have raised market concerns about the stability of banks, who are the largest creditors to LGFVs, with banks' risk exposure to LGFVs likely higher than their exposure to the property market.

Exhibit 9: A bigger reliance of LGFV than real estate



Source: UBS, IMF, CEIC and AXA IM Research, July 2024

The exact scope of LGFVs and their debt remains unclear, due to the lack of official data on the size of LGFV activities and debt. According to International Monetary Fund (IMF) estimates, LGFV debt totalled RMB54tn or 45% of GDP¹⁹ in 2022, up from 39% in 2020 and 34% in 2018. About 80% of the LGFV debt is held by banks, primarily in the form of loans (Exhibit 9). Given this close interlinkage between banks and LGFV debt, even a modest default rate of 5% among LGFVs could lead to a roughly 75% increase in banks' NPLs²⁰.

However, again the impact would likely be concentrated on smaller local banks, which usually have weaker buffers and are most exposed to LGFVs with limited state support. The six large state-owned banks are in a stronger position. But this suggests a modest rise in LGFV default rate would have an even bigger impact on the NPLs of the smaller banks. This uneven distribution of risk exposure echoes the earlier discussion (Exhibit 5).

There is no easy solution to this issue. Managing the situation requires a delicate approach due to the complex fiscal and macroeconomic feedback loops involved. A reduction in local government indebtedness over time would clearly help. But the role of local governments (and hence LGFVs) in providing funds to new projects and local firms makes them a part of the credit transmission process. A sharp slowing would thus act as a tightening in credit conditions which would act as an additional brake to economic activity. Again, this starts to explain Beijing's new acceptance of transferring some local government debt to the central government balance sheet. We will return to this subject in more detail in our next research note.

Opportunities amid challenges

Despite the several challenges facing China's banks in a rapidly evolving economic landscape, significant opportunities for growth and diversification exist. The ongoing structural transition of the economy, moving away from traditional infrastructure and property development, offers banks a chance to reposition themselves in sectors that are poised for long-term expansion.

One of the most promising avenues lies in the rise of high-value goods manufacturing, which includes industries like advanced technologies, robotics, artificial intelligence and industrial innovation. These sectors are critical to China's goal of ascending the global value chain and reducing its reliance on foreign technology. Banks strategically lending to companies within these industries can tap into the expected surge in demand for cutting-edge products and services, creating new and reliable income streams, although broader risks of tech sanctions and tariffs will remain a feature.

Additionally, the shift towards a more service-oriented economy presents further opportunity. Sectors such as digital services are expected to lead China's next phase of economic growth (Exhibit 10). As consumer behaviour evolves and there is a growing demand for higher-quality services, banks that

While idiosyncratic default events are likely to be managed without triggering a systematic crisis, the tight linkage between local financial institutions, LGFVs and local governments means that even a small disturbance could trigger widespread repercussions – not just within the banking system, but across the entire economy. This has likely underpinned the latest Third Plenum moves to support local government finances by central government.

 $^{^{18}}$ While LGFVs are primarily associated with infrastructure, firm-level financial data show these vehicles also allocate financial resources to implement a range of policy goals, including supporting local firms and real estate markets.

¹⁹ Figure does not align with statistics shown in China's National Audit Office report, which is roughly two-thirds of total interest-bearing debt of LGFVs, including listed bonds that are categorised as the government's explicit debt.

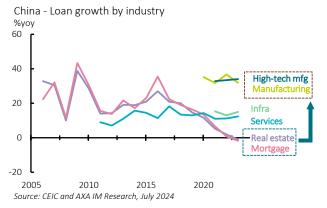
The official report excludes government guaranteed debt or "possible to be recognised debt," as well as debt tied to special construction and government-guided funds, which are approximately a third of total LGFV debt.

²⁰ IMF. Asia and Pacific Dept, "Local Government Financing Vehicles Revisited", People's Republic of China: Selected Issues, 2022(022), Feb 2022.



support innovation and expansion in these areas stand to benefit from sustained growth. By focusing on these emerging industries, banks can reduce their reliance on traditional, highrisk sectors like infrastructure and real estate. This strategic shift aligns not only with government economic goals but also with the banks' need to adapt to an increasingly complex market. However, success in this transition will depend on rigorous risk management. Banks must ensure that their lending practices are robust, with a focus on the long-term viability and growth potential of these new sectors.

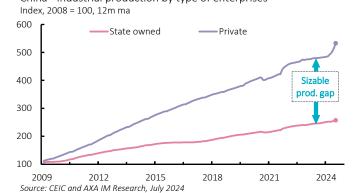
Exhibit 10: Loans favour the manufacturing sector



Another critical area of opportunity lies within China's private sector, particularly among SMEs.

Exhibit 11 shows the increasing gap of industrial production between private enterprises and SOEs, suggestive of the latter's struggles with productivity. Beijing had actively promoted the private sector several years ago, which had led to increased credit demand and a boost in private investment. However, this initiative lost momentum and was thrown into reverse by several ad hoc regulatory interventions that damaged entrepreneurs' confidence and has led to a decline in private investment – particularly foreign direct investment. Revitalising the private sector could unleash significant potential, and banks could play a crucial role in supporting this resurgence. But it is unclear if Beijing has the appetite for the type of regime required to attract such investment.

Exhibit 11: Increasing production gap between SOEs and POEs China - Industrial production by type of enterprises



Handle with care

As China continues to navigate its economic transition, the banking sector will play a pivotal role. By seizing opportunities in high-value manufacturing and high-potential services, banks can not only mitigate the challenges posed by declining traditional sectors but also position themselves as key enablers of China's future growth. With careful risk management and strategic foresight, the opportunities ahead could outweigh the current difficulties, leading to a more resilient and dynamic banking industry.

That said, China's banking sector is navigating a challenging period marked by both structural and cyclical pressures. While the overall health of the sector has been compromised, it has not reached a critical point. The system should prove resilient to isolated failures. However, there is potential for a domino effect which could pose significant risks, testing its robustness. This is particularly the case given the interconnectedness of local governments in China which are intricately embedded as part of the credit transmission process and whose vulnerability threatens to spill over to the banking system. Moving forward, the banking system must focus on consolidation and reform, fostering innovation, and strategically aligning itself with emerging sectors to ensure long-term stability and growth. Embracing these changes will be crucial for the sector's future success.



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