APRIL 2023 **Grasping Shadows** The Politics of China's Deleveraging Campaign Logan Wright A Report of the CSIS Trustee Chair in Chinese Business and Economics

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The Politics of China's Deleveraging Campaign

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Abbreviations

CBIRC - China Banking and Insurance Regulatory Commission

CBRC - China Banking Regulatory Commission

CCP - Chinese Communist Party

CIRC - China Insurance Regulatory Commission

CSFC - China Securities Finance Corporation

CSRC - China Securities Regulatory Commission

FSDC - Financial Stability and Development Committee

GDP - Gross domestic product

LGFV - Local government financing vehicles

LMR - Liquidity matching ratio

MLF - Medium-term lending facility

NBFI - Non-bank financial institutions

NCDs - Negotiable certificates of deposit

NFWC - National Financial Work Conference

NPC - National People's Congress

NPL - Nonperforming loan

OMO - Open market operations

P2P - Peer-to-peer

PBOC - People's Bank of China

R-CAT - Rhodium China Activity Tracker

SIV - Special investment vehicle

SOE - State-owned enterprise

SPV - Special purpose vehicle

SRB - Special revenue bond

TSF - Total social financing

WMP - Wealth management products

Contents

| Executive Summary | 1 |
|--|----|
| 1 The Fear | 3 |
| 2 A Tree Cannot Grow to the Sky | 11 |
| 3 Beijing Declares War on Shadow Banks | 23 |
| 4 Deleveraging and China's Financial System | 36 |
| 5 Deleveraging and China's Economy | 49 |
| 6 Assessing China's Deleveraging Campaign | 61 |
| 7 China's Upcoming Policy Choices and Implications for the United States | 73 |
| About the Author | 87 |
| Endnotes | 88 |

Executive Summary

hina is currently facing a long-term, structural economic slowdown and rising risks of a financial crisis. Key contributors to China's economic growth over the past two decades will not be repeated: demographic dividends, rising shares of global exports, a boom in residential property construction, and an unprecedented single-country expansion of credit and debt. Local governments laden with debt are increasingly unable to implement Beijing's policy initiatives. An economic rebound after lifting Covid-related controls on citizens' movement and activity is already underway this year, but all of the structural headwinds to China's growth will persist.

The deleveraging campaign that China's leadership launched in 2016 to reduce systemic financial risks is the only logical starting point to explain how China's structural economic slowdown began. By reducing the growth of the "shadow" or informal banking system, China's financial authorities cut credit growth in half and made it far more difficult for Beijing to power the economy using its traditional tools of credit-fueled investment by state-owned enterprises and local governments. Over the course of the deleveraging campaign, property developers continued expanding their own borrowing, inflating an unprecedented real estate bubble even larger before it finally burst in late 2021, amplifying China's current economic distress. The deleveraging campaign marked the end point of China's unprecedented credit expansion after the global financial crisis.

But the legacy of China's deleveraging campaign is complex. Had Beijing not taken the forceful steps it did targeting shadow banks starting in 2016, China probably would have faced a financial crisis far earlier, as its system became increasingly difficult to regulate and was already resembling parts of the U.S. financial system ahead of the 2007-2008 global financial crisis. Acting preemptively to control risks in one area of the financial system ended up creating them in another. China had previously used its financial system as a shock absorber for political risks from a slowing economy, rolling over loans and extending credit to unproductive enterprises in order to avoid unemployment and bankruptcies. After the deleveraging campaign cut rates of credit growth almost in half,

China's financial system can no longer play this role, and more credit risks and political consequences are now materializing within the economy, from banks to property developers and local governments.

This report aims to objectively and comprehensively analyze the economic and political consequences of China's deleveraging campaign, which are closely related to China's current economic slowdown. The deleveraging campaign is an important test case of the adaptability and flexibility of the Chinese state to respond to meaningful economic challenges, such as the growth of the shadow banking system. The campaign reflected a series of monetary and regulatory policy choices, where Beijing was forced to calibrate its response to avoid creating unexpected shocks to the financial system, while still reducing systemic risks.

In addition, the internal politics of China's deleveraging campaign shifted over time, particularly as political power became more centralized under Xi Jinping in the late 2010s. The deleveraging campaign was successful in some of its objectives because China's top leaders were narrowly focused on reducing financial risks, but maintaining a consensus behind this objective became far more difficult as the economy suffered. As tightening monetary policy gave way to new regulations, a consensus-driven approach to policymaking also gave way to a campaign-style system of economic governance, marked by periodic crackdowns against internet platform companies and the for-profit education industry. This year, the Chinese Communist Party took concrete steps to strengthen centralized control of China's financial system, in what may presage another political campaign.

Beijing faces difficult strategic choices ahead as it confronts the end of the credit and investment-led growth model that has powered China's economy for the past two decades. Restructuring local government debt and the centrallocal fiscal relationship are near-term imperatives, along with the need to unlock additional spending power for Chinese households to ensure more sustainable growth. Interest rates will need to fall in order to manage debt levels, creating incentives for capital outflows and corresponding pressures on China's exchange rate.

The rising risks within China's economy and financial system also raise new policy questions for the United States in the context of rising systemic competition. Liberalization of China's financial markets has been a longheld U.S. objective, but China's limited convergence with global economic practices and norms has elevated political concerns about deeper linkages between China and global markets. The United States has a clear interest in regulating its own markets transparently, including Chinese firms' participation in those markets, rather than attempting to influence or alter the calculations of risks and returns for investors in China's financial markets. Beijing has plenty of challenges of its own attracting foreign investment given the headwinds China's economy is now facing.

The Fear

y the summer of 2022, China's economy and its housing market were in free fall. The real estate industry had been overbuilding for years, even as China's working-age population had peaked around 2013. Property developers under pressure from new regulatory restrictions started to default in large numbers in 2021, led by Evergrande, China's largest and most indebted home builder. When Evergrande defaulted in late 2021, its debt level was over \$300 billion, roughly equal to the gross domestic product (GDP) of Finland. Covid-19 restrictions imposed in early 2022, including the complete lockdown of Shanghai and similar restrictions in multiple cities, put further pressure on property sales as developers' revenues suddenly plummeted.

Even amid the flagging economy, Beijing was suddenly confronting a novel problem within its real estate markets: property developers had sold large numbers of apartments before they were actually built. Now those same developers were running out of money, which meant Chinese citizens who had bought homes, often using their life savings as a down payment and incurring additional mortgage debt, were at risk of never seeing them built. Moreover, developers' financial problems were becoming increasingly apparent to new home buyers. Developers became effectively unable to sell properties after defaulting on their debt, and buyers feared the homes might never be completed.

In July 2022, many home buyers who were waiting for their homes to be delivered began collectively threatening to stop paying their mortgages as a way to force Beijing to act. This is not uncommon in housing crises, as home buyers whose homes are worth less than the amount borrowed have an incentive to walk away from the debt. The difference in China, however, was that the homes had not even been built before home buyers began threatening to default. Home buyers lost confidence in the entire industry after most developers began relying on preconstruction sales. If Chinese citizens made good on their threats to stop paying, China's banks would be at risk of trillions of yuan in nonperforming mortgage loans, turning the housing industry crisis into a broader financial threat.

Selling apartments before construction is complete is common practice in many real estate markets. But in most of these markets, there are strict escrow requirements for sales revenues enforced upon developers to prevent exactly the scenario unfolding in China in the summer of 2022. Although escrow requirements existed in China, local governments enforced them very selectively. China was now facing an unprecedented combination of economic and financial threats, plus a crisis of confidence in the value of households' primary financial assets, which threatened to weaken consumer spending as well.

Ironically, the catalyst of change for real estate developers relying on preconstruction housing sales as a source of revenue was an attempt to reform and stabilize China's financial system. Starting in 2016, Beijing embarked upon a broader effort to crack down on shadow financing channels using a combination of monetary and regulatory tightening steps, collectively labeled the "deleveraging campaign." In the property sector specifically, the sudden elimination of shadow financing for developers forced home builders to repay their shadow debt by borrowing from another channel: home buyers. This introduced Ponzi-type financing systems into an industry that over the previous two decades had been one of the most important drivers of China's economic growth. When credit and sales revenues started to run out in 2021 and 2022, rather than default on shadow lenders, real estate developers risked defaulting on individual homeowners and, in the process, dismantling an industry that represented around one-quarter of China's economy.

Pushing the System to the Brink

The seeds of the property market meltdown had been sown almost a decade earlier during one of the first attempts by Chinese authorities to contain growth in the shadow banking sector. Thursday, June 20, 2013, was a frightening day for the Chinese Communist Party (CCP), even if only a few people within China's bureaucracy understood what happened. On that summer day, China's financial system came to the brink of collapse. China's central bank, charged with maintaining financial stability, had unintentionally forced the system to an unsustainable point. Interbank short-term money market rates shot up to 20-30 percent, indicating banks were holding onto all available cash and unwilling to lend to other banks, even at very high interest rates. Those prohibitive rates also meant banks were unwilling to lend to companies and households at more conventional rates. Had this money market squeeze continued, China would have risked significant economic contraction and insolvencies by multiple financial institutions. Within weeks, the nation's remarkable record of sustained economic growth over the previous two decades would have come to a screeching halt.

Similar to the property market meltdown, the most severe liquidity squeeze China's financial system had faced was ironically caused by a genuine effort at reform. The People's Bank of China (PBOC), China's central bank, was trying to reduce banks' reliance upon riskier funding channels, known as wealth management products (WMPs). Because China's deposit and lending rates were fixed within narrow ranges, banks could not compete for deposits based on offering higher interest rates. WMPs provided a work-around. They allowed investors higher rates of return than official deposit rates for short periods, such as one month or three months. Investors would then typically roll over the products as they matured, attracted by continued higher returns. Banks could attract new funding and expand their lending as well, bypassing regulatory limits.

Problems arose when banks suddenly could not find investors for new products, which meant they needed to repay investors in the maturing WMPs. The PBOC ended up encouraging just such an event by suddenly withholding liquidity from banks during a time when they were looking to the PBOC, their mother bank, for reassurance that conditions would stabilize. Instead, the central bank delivered a warning at a meeting on June 17 that banks needed to rely upon themselves to manage imbalances between their volatile funding sources

and riskier assets, rather than wait for help from the PBOC. The message triggered shock waves throughout China's financial system. Banks immediately cut back on lending to one another, as traders knew many banks were in vulnerable positions and were fearful no assistance would be forthcoming from the mother bank.

As those decisions quickly cascaded around the banking system, there was very little cash on offer for regular bank business, such as lending to companies and households or trading securities. This caused interbank money market rates to rise sharply. With money market rates suddenly higher than the interest rates banks were offering on WMPs, WMPs became far less attractive to investors, which included banks themselves. Now banks issuing those WMPs had a new problem: their investors wanted their money back, which meant banks needed to borrow aggressively in the money market. But at that point, few banks were willing to lend money at all, and the PBOC appeared unwilling to help.

The result was a massive liquidity crunch on June 20, 2013, as funding became suddenly unavailable throughout the Chinese financial system. Some commentaries compared the event, with some justification, to the collapse of Lehman Brothers in the U.S. financial crisis of 2008. Banks and investors started acting rationally to protect themselves by selling virtually anything that could be sold. The stock market suddenly plummeted by over 10 percent in a day and a half, even though there were administrative limits on how far stocks could actually decline in daily trading.

The central bank panicked. It first provided emergency liquidity to calm the markets late in the day on June 20. Then, on June 25, with the stock market still declining, it released a statement claiming liquidity would be available and sufficient for regular market operations. Money market rates gradually stabilized in the following days. The crisis was over but at the cost of the PBOC's credibility.

In the following years, WMP issuance and shadow banking activity expanded rapidly. The market had called the central bank's bluff. Facing the threat of a self-created liquidity crisis, the PBOC blinked. After the central bank backed down so publicly, traders could be reasonably sure the PBOC would do the same in the future and would provide funding to the market when conditions became truly dire. As a result, banks and traders could afford to take more risks. Shadow banking products, even though they were highly risky and delivered high and unsustainable rates of return to investors, had basically become too big to fail.

The June 2013 interbank market crisis marked the end of innocence for China's financial system-China was now playing in the big leagues of global finance, and this type of mismanagement of basic money market conditions was noticed worldwide. Greater risks loomed ahead as the financial system continued to become much larger and more complex. The crisis was China's first limited attempt at reducing risks within the financial system, and the results showed that the next attempt would need to be much more comprehensive in scope.

Even the PBOC was taken by surprise by these events. How had China's shadow banking system become so large, so quickly that it suddenly posed a threat to financial stability? If the central bank could not control the system in its early stages of growth in 2013, how could it do so in the future? Fear of financial crisis gripped China's regulators following the June 2013 interbank market squeeze. The events of that month highlighted the challenge China's financial authorities would eventually face in attempting to dramatically remake its financial system to avert a much larger crisis. This effort, starting in May 2016, became known as China's deleveraging campaign.

Why Study China's Deleveraging Campaign?

This report analyzes the effects of China's deleveraging campaign, which was Beijing's attempt to reduce systemic risk within its financial system, primarily involving policy choices from 2016 to 2019. An in-depth study of this period in China's history may seem mistargeted and out of date given China's far more pressing ongoing economic slowdown and property market crisis, which have produced a dramatic downshift in economic growth and significant financial stress in onshore markets.

But the deleveraging campaign is the only natural starting point to understand China's current economic and financial distress and how financial risks emerged despite genuine efforts to reform China's system. China's economic growth over the past two decades has depended heavily upon a set of conditions-rapid credit and investment growth as well as a booming property and land market-that cannot continue in the future. Maintaining the current course of investment-led growth is a dead end and will produce lower rates of economic expansion and continued insolvencies and defaults among companies and banks.

Changing course from China's current economic model requires a sharper slowdown in economic growth in the short term in order to catalyze different growth drivers in the medium term, as well as crowding in private capital to finance those sectors. Policymakers in Beijing understand this trade-off, even if the choices are unpalatable. If China engages in more significant structural reforms to its economy, growth must slow significantly in the near term because borrowers who depended upon the financial system to roll over debt and maintain less productive investment must be cut off from new credit. Those sectors of the economy must shrink over time. Only then can the financial system's resources be redirected toward more productive forms of investment.

At the same time, reforming a financial system and an economy where the state retains an outsized role and influences prices and resource allocation is a complex process. While most available data in China support the argument that private companies invest far more efficiently than state firms, the fact that state firms are guaranteed by central or local governments and face no hard budget constraints means they can maintain access to credit. When overall credit growth slowed, private firms were squeezed while state firms continued to receive loans. Similarly, in general, when interest rates rise in such a semi-reformed system, state firms are insensitive to borrowing costs and can offer financial institutions superior terms relative to private firms. As a result, attempts to reduce systemic risks may produce more short-term risks of defaults and insolvencies and reduce the efficiency of investment in the entire economy. The consequences of reform in a financial system such as China's are not easy to predict, nor can they easily be placed along an axis between greater market liberalization and greater state control.

The deleveraging campaign reflects those efforts at structural reform in microcosm and the difficult trade-offs involved. Its successes and failures indicate the possibilities and limits of reform of China's economy and financial system, as well as Beijing's ability and capacity to respond to unsustainable trends within its own system and the influence of technocrats on China's policymaking process. The key question currently facing observers of China's economy is whether or not Beijing can change course and maintain past rates of economic growth using new drivers despite the headwinds China is currently facing. The deleveraging campaign is interesting as a test case of Chinese policymaking in response to systemic risks that materialized in the mid-2010s.

Over the past two years, China's economy has been rocked by political intervention into economic policymaking, from crackdowns on internet platform companies such as Alibaba to Covid-19-related restrictions on activity to the effective closure of the private education and tutoring industry. The deleveraging campaign provides a window into whether or not technocrats within a one-party state can effectively execute

long-term plans in the interest of China's political leadership and long-term stability. It also can address the question of whether these political interventions are limited exceptions to more effective technocratic management of the economy or part of a longer-term trend.

In addition, the success or failure of China's deleveraging campaign is central to the future of China's economy. The core objective of the deleveraging campaign is to reduce risk within the financial system. It is impossible to consider the long-term growth of China's economy without considering the nature of the financial system that will finance investment and consumption in the future. Similarly, longer-term growth in China depends upon an expansion in productivity, including the efficiency of the financial system in allocating capital.

China's economic growth over the next 5 to 10 years will depend upon how successfully and efficiently the financial system can shift its resources away from property-related lending and local government investment projects toward more productive private sector firms. A country's potential economic growth is typically measured by estimating or calculating future changes in inputs of labor and capital and the growth of productivity of those inputs, labeled as total factor productivity (TFP). China's working-age population has been shrinking since around 2013, and urbanization rates are slowing. Therefore, its labor force is likely to continue declining in the future. Capital accumulation using the old model of growth has slowed for some time, as there are declining marginal returns to greater investment in the property sector and local government infrastructure. There is certainly more potential for investment and capital accumulation within China's economy, but it depends upon a very different pattern of financing from what China has seen so far, with capital shifted to more productive industries. The productivity growth of those inputs, to a large extent, depends upon whether or not the financial system can be reformed and can redirect resources to more efficient and productive uses. Otherwise, China's economic growth rates will continue to slow over the next decade to 2 percent or below.

Competitions of Systems

The deleveraging campaign's success or failure also implicates global perceptions of China's power and influence. One vision of China after deleveraging involves stable, technocratically oriented leadership capable of solving some of the most pressing challenges facing China's economy while maintaining high rates of economic growth. This view suggests important advantages to China's system of political organization with the CCP's monopoly on political power. It also demonstrates China's continued international influence and capacity to engage with its allies and aligned partners economically. Finally, this view suggests that challenges to China's continued rise in global influence will not come from financial stress or the economy overall, given that Beijing effectively countered one of the most significant threats to China's economic stability.

An alternative narrative sees Beijing caught in an economic trap of its own making, unable to effectively reform its system or change course. As the deleveraging campaign and the collapse of the shadow banking system produced more and more defaults and credit risk in the financial system, lenders became far more risk averse, and Beijing was unable to control the volume of credit deployed in the economy. The property sector's rapid decline dramatically weakened overall growth and eroded the wealth of the vast majority of Chinese households, whose primary assets were most often their homes. Moreover, many households owned multiple properties. This view suggests that the costs of China's rapid pace of expansion over the previous decade were far higher, and that China's leadership and technocrats could not successfully manage them. In short, economic gravity reasserted itself, and China reverted to the mean of other emerging markets where credit had expanded rapidly. Rather than serve as a model, China's economic and political system was discredited in the eyes of the world, and China's international influence correspondingly waned.

Both of these are just narratives, of course, within oppositional views concerning the competition of political systems. But much is at stake within the question of how the world perceives China's technocratic competence and the stability of its economic model overall. The deleveraging campaign is the most meaningful available window into a complex but necessary technocratic decisionmaking process, and assessing the effects of the campaign can help to determine which future is more likely to emerge in China.

The Current State of Risks within China's Financial System

China's financial system is currently under greater stress than ever, primarily because of the adjustment underway within the property market. Property industry-related lending in China totals roughly 73 trillion yuan (\$10.7 trillion), including mortgages, loans to developers, and other informal borrowing. So far, most of the losses in the industry's adjustment have been felt by developers who have defaulted, but this stress will eventually show up within financial institutions as well. Local governments are facing new fiscal pressures as a result of the decline in land sales, and there are growing risks that local government financing vehicles (LGFVs) will default on their publicly traded debt, which has not yet occurred. Ever since the deleveraging campaign launched in 2016, the slowdown in credit growth has exposed different types of borrowers to risks of default. Increasingly, within China's system, these assets, such as the bonds issued by local state-owned enterprises (SOEs) and LGFVs, are considered "safer." As the slowdown in credit growth has continued since the deleveraging campaign began to take hold, China's economic growth has weakened as well.

Examining the deleveraging campaign also provides the most coherent and parsimonious view into China's ongoing and extended economic slowdown and what will be necessary to reverse it. In 2022, China's economy grew at only 3 percent officially, but the actual growth rate was probably negative given the disruptions from lockdowns, travel restrictions, and the spread of Covid-19. In early 2023, optimism about the end of Covid-19 restrictions catalyzed anticipation of a much stronger rebound in China's economy. But the slowdown China is currently facing has been ongoing for over six years and dates from the decline in overall credit growth and the unwinding of an unprecedented expansion in credit.

The importance of credit growth to China's economic expansion over the past two decades is discussed extensively in the 2018 report Credit and Credibility. From 2007 to 2016, China's banking system expanded by \$24.6 trillion in assets, or around one-third of global GDP, almost quadrupling over just eight years, as bank assets grew by an average of 18.1 percent. Since 2017, overall credit growth has been cut in half, and many borrowers, including state-owned and private sector firms, households, property developers, and local government enterprises, have consequently been unable to access new financing. The net result has been a significant slowdown in economic growth as firms reduce output or default, while household consumption has similarly declined. Previously, the expansion of China's shadow banking system had provided access to borrowers underserved by the traditional system, but with those channels closing, consumer activity and many types of investment started to fall, significantly reducing China's economic growth.

Financial risks also began to materialize as borrowers unable to refinance their debts created new credit risks in more and more asset classes. The riskiest financing structures, peer-to-peer (P2P) lending networks, started collapsing in 2018, touching off protests from angry investors in several cities. Smaller banks followed, with Baoshang Bank's default in 2019, the first in over two decades, touching off several additional bank failures. Then, local state-owned firms started defaulting on bonds in larger proportions, with the default of Yongcheng Coal in November 2020 raising the possibility that local governments could actually create new credit risk rather than reduce it. Trust companies that aggregated investments from banks and wealthy individuals and

lent to property developers were the next to default in 2020 and 2021, followed by an increasing number of developers. Finally, by 2022, individual home buyers were threatening to default on their mortgages as more developers were unable to complete houses they had sold in advance of construction. Credit risk had started in the riskier periphery of China's financial system and had moved closer and closer to the center.

China's deleveraging campaign was the critical policy choice that set these events in motion, even if Beijing clearly did not intend some of these consequences. As a result, the deleveraging campaign is inseparable from China's current economic slowdown, as well as the rising financial risks that threaten to accelerate the current downturn in credit and investment growth. But the deleveraging campaign also managed to limit different forms of financial risk tied to the funding of the banking system. Controlling shadow banks may have reduced the overall pace of credit growth but also may have moved credit back to more regulated forms, such that Beijing could influence the direction of finance in the economy.

This report aims to comprehensively assess China's deleveraging campaign and its economic and political consequences, especially as they relate to China's current economic slowdown and the adaptability and flexibility of the Chinese state to respond to meaningful challenges. The campaign reflected a series of policy choices, some involving monetary policy, some involving regulatory issues, and some involving public messaging or guidance. At each step, Beijing was forced to calibrate its response to avoid shocking the financial system as the PBOC had done during the 2013 interbank market crisis. In turn, the report aims to discuss the internal politics of China's deleveraging campaign and the balance of bureaucratic and political interests that allowed it to develop and continue.

Plan of the Report

The report provides a comprehensive assessment of the economic and political conditions that produced China's deleveraging campaign and its implications for China's current economic challenges. Chapter 1 explains the initial concerns facing China's leaders after the fragility of the financial system was exposed during the June 2013 interbank market crisis.

The economic background of China's deleveraging campaign, the rapid expansion of China's shadow banking system, and the corresponding emergence of systemic financial risks are the subject of Chapter 2. The banking system saw an unprecedented single-country credit expansion after the 2007-08 global financial crisis, and the core activities of the system-deposit taking and lending-changed rapidly. Moral hazard was widespread, as most lenders and investors assumed borrowers were guaranteed. This allowed the financial system to expand at unprecedented speed, with most lenders unconcerned about credit risks.

The mechanics of the deleveraging campaign and the policy choices Beijing made to reduce risks within the shadow banking system are covered in Chapter 3. Starting in 2016 with a People's Daily article from an "authoritative personage," the campaign transitioned from monetary tightening steps to regulatory tightening measures, as well as controls on local government borrowing. Control over localities not only involved financial regulators but also an effort to promote much tougher fiscal discipline at the local level by the Ministry of Finance.

The consequences of these measures within China's financial system are discussed in Chapter 4. Using data from China's banks and nonbank financial institutions, both individually and system-wide, the report discusses how the funding structures of China's banks shifted away from WMPs toward more conventional deposits, as well as some of the unintended consequences of that shift. In addition, the chapter covers the changes in the lending activities of Chinese banks and nonbanks and the migration of shadow banking assets back to formal loan books.

The effects of these financial changes on the broader economy are the subject of Chapter 5, including the slowdown in credit growth and its impact on different types of borrowers, particularly low-income consumers, property developers, and local governments. Investment growth rates slowed significantly as shadow banks contracted, particularly among local governments in China's interior and northeastern provinces.

Chapter 6 analyzes the deleveraging campaign's effects as they relate to Beijing's objectives at the outset. The campaign significantly reduced some financial risks on the liabilities side of banks' balance sheets, as intended, while unintentionally creating meaningful new credit risks on the asset side, slowing the economy significantly. These consequences emerged because Beijing was unaware of the size of the shadow banking system and the potential effects of contracting informal lending channels.

The concluding chapter, Chapter 7, assesses the implications of the deleveraging campaign for Beijing's capacity to respond to systemic risks, as well as the importance of technocratic influence within China's policymaking process. In addition, it discusses the impact of the changes in China's economy and financial system for China's international influence, as well as the long-term growth of China's economy. The report concludes with implications for the United States and other like-minded democratic countries in their relationships to China's financial system, as well as the implications for global systemic competition between democratic and autocratic political systems.

A Tree Cannot Grow to the Sky

ollowing the 2007-08 global financial crisis, China launched a countercyclical stimulus program that catalyzed an unprecedented boom in credit growth. Over the next eight years, through the end of 2016, that credit expansion was larger as a proportion of global GDP (around 32 percent) than any single-country credit boom in at least a century. The stimulus effort, which was generally labeled China's 4 trillion yuan package, was successful at stabilizing the economy via lending to state-owned enterprises (SOEs), property developers, and newly created local companies labeled as local government financing vehicles (LGFVs).

The actual size of China's stimulus was much larger than 4 trillion yuan (\$588 billion), roughly 13 percent of China's GDP at the time, because it was generally funded through lending from the banking system, rather than direct fiscal spending by government. Banks were encouraged to lend aggressively, and did so, to all types of borrowers but particularly those that were state-owned or guaranteed. Overall credit growth, measured via total social financing (TSF), skyrocketed by 32 percent in 2009 and a further 24 percent in 2010. Even after the economy had clearly stabilized and inflation picked up in 2011, credit growth barely slowed in China, posting 18 percent growth in 2011 and 19 percent in 2012. By the end of 2012, China's banking system had more than doubled its total assets in only four years.

Financial risks naturally grew given the volume of credit growth deployed in such a short period. But for Beijing, the alternative to continuing credit growth would have been a sharp slowdown in the economy, as borrowers cut off from newly acquired credit would need to reduce output and employment. As a result, China's leaders were still comfortable with the growing financial risks, as these reduced the political risks of a slowing economy, including rising unemployment. The financial system had served as a shock absorber, channeling resources to enterprises facing losses, in order to maintain output and prevent the types of economic adjustments that occurred in market economies, including defaults and bankruptcies. As a result, China's overall debt burden and the corresponding financial risks increased, while political risks to the Chinese

Communist Party (CCP)'s leadership declined. Beijing could have stopped this process earlier, but China's leadership and many local government officials likely were willing to live with these compromises-for a while.

A BRIEF EXPLANATION OF TERMS

Wealth management products (WMPs): WMPs are investment products sold mainly by banks to pool money from retail investors. They typically feature short-term maturities (less than a year) and implicit guarantees from the issuer (though new regulations have phased out these guarantees). Most significantly, they offered higher returns compared with deposit rates. Initially, small banks offered these funds at higher rates to compete with larger banks for funding. Regulators viewed WMPs as instruments of reform and more marketoriented liability tools for banks. Later, WMPs became the key source of funding for the shadow banking business and have faced a severe crackdown since the new asset management rules introduced in 2018. Since that time, shadow banking activities have declined sharply. The outstanding balance of banks' WMPs totaled 29.15 trillion yuan (\$4.3 trillion) at the end of June 2022.3

Shadow banking: The broader definition of shadow banking usually refers to financial services similar to those that traditional banks offer but which are provided by nonbank financial institutions outside the regulatory structure of the formal banking system. China's shadow banking business is unique because a large portion of this finance is still sourced from banks themselves, with banks moving assets on or off their balance sheets in different forms (depending upon regulatory changes). The shadow banking business in China evolved to bypass regulatory restrictions so that banks could continue to lend to property developers and local governments, as well as other restricted borrowers. Later, banks found additional benefits to shadow banking activity, such as expanding leverage, preserving capital, and concealing nonperforming loans (NPLs). A 2020 working paper from China's Banking and Insurance Regulatory Commission (CBIRC) generally defines shadow banking to include WMPs, banks' interbank WMPs, interbank special purpose vehicle (SPV) investments, entrusted loans, trust loans, nonequity public funds, asset management service of brokerages and insurance companies, asset-backed securities, nonequity forms of private equity financing, peer-to-peer (P2P) lending, leasing, lending by microfinance companies, factoring, consumption loans by non-licensed institutions, and debt products issued at local financial exchanges.4

Nonbank financial institutions (NBFIs): In China, NBFIs are mainly trust firms, brokerages, funds (public and private), insurance companies, finance firms of large SOEs, or other small firms, from leasing to factoring companies.

Peer-to-peer (P2P) platforms: P2P platforms pool money from retail investors and then lend to retail investors as consumption loans. Initially, P2P firms provided real benefits in providing financial services to underserved households and helped boost consumption. Later, these businesses featured aggressive competition as platforms raced to offer exorbitantly high interest rates to attract more funds. These rates were so high that they could not be repaid out of existing investments, and many of the platforms were exposed as Ponzi schemes. The number of P2P platforms peaked in 2015 and then declined as the regulatory environment turned unfriendly, until all P2P platforms closed in 2020.

Trust companies: Two financial institutions have full lending licenses in China: banks and trust firms. These lending licenses have helped trust firms become the largest of the three primary channels for banks to shift money into shadow banking (the other two are brokerages and funds). Even during the early stage of deleveraging, when both brokerages and funds' shadow banking business lines were shrinking, trust firms were still expanding. Trust companies can also pool money from retail investors by selling trust products.

Beijing has provided only 71 trust licenses and has stopped providing new ones. Currently, there are 68 trust firms in operation and 21 trillion yuan (\$3.1 trillion) in assets under management, according to data from the China Trustee Association.

Implicit guarantees: Implicit guarantees refer to the belief that many forms of borrowing in China cannot default, which is rapidly coming into question. Specifically, this refers to guarantees behind Chinese bonds in the interbank market and WMP products for retail investors. In the bond market, the only corporate bonds that have not officially defaulted (outside of quasi-government bonds such as those railways and banks issue) are LGFV bonds, though there have been occasional technical defaults on these bonds). In the WMP market, trust products have defaulted frequently. Although banks' WMPs have failed to deliver promised returns, they have not defaulted outright yet.

Repo rates: Repo rates are interest rates on collateralized interbank borrowing among banks and NBFIs within pledged repo transactions of China's interbank market.

Maturity mismatch: This refers to financial institutions pooling money using short-term funding instruments on the liabilities side of the balance sheet in order to purchase long-term assets. The funding instruments must be rolled over continually, generating refinancing risks. Banking regulators have introduced three liquidity indicators to reduce these maturity mismatches by discouraging short-term borrowing.

Negotiable certificates of deposit (NCDs): NCDs are a primary source of wholesale funding for banks introduced at the end of 2013. WMPs allow banks to pool money from retail investors, but in the years before internet financing was developed, small banks' access to retail investors was still limited, even though they could offer high returns. NCDs are different, as they allow a bank, no matter how small, to borrow money from every bank around the country by selling a product backed only by the bank's creditworthiness (whereas repo borrowing requires collateral). In the early years, NCDs were not included as a proportion of banks' interbank liabilities, which are limited to one-third of the total. In 2018, this loophole was closed, and tougher regulations were introduced for NCDs in the course of the broader deleveraging campaign.

Enter Shadow Banks

Most of the investment projects that China's local governments financed following the global financial crisis were not necessarily designed to generate financial returns that could repay the loans. Banks were simply a mechanism to channel credit into the economy more quickly than waiting for large-scale government bond issuance. As a result, banks had a problem in lending to guaranteed borrowers, who still needed more money to continue their investments. Banks had no incentive to cut off these projects because the state implicitly or explicitly guaranteed the loans. Canceling loans would generate immediate fiscal costs, and banks would see their profitability decline because of the need for new provisions against bad debt. But the loans were not technically performing, which could create liquidity problems if banks suddenly faced withdrawal of deposits or other liabilities. These scenarios were exactly what occurred during the June 2013 interbank market crisis (the basic problems that developed within the banking system are discussed in detail in Chapter 2 of Credit and Credibility).5

The growth of the shadow banking system emerged as a partial solution to banks' difficulties maintaining these loans to state-owned and local government borrowers as performing assets, so banks did not need to mark the loans down in value. China controlled the growth of lending through blunt regulatory instruments-including outright quotas for individual banks (these are still used to some extent), ceilings on deposit rates, and floors on lending rates—to guarantee banks a fixed net interest margin and profitability. The deposit rate ceilings were also designed to prevent banks from raising short-term interest rates to attract additional financing, competing with other banks for funding and increasing the overall level of risk in the financial system. Broader loan-to-deposit ratios were imposed around 75 percent for most banks to ensure that funding was sufficient to cover potentially risky lending. Before 2012, these tools were very blunt but generally effective in China's financial system. In 2009 and 2010, Beijing was eager to expand credit and investment and relaxed lending quotas and guidance to local governments. After the initial postcrisis stimulus, localities were eager to continue borrowing and investing at the same pace, so they created mechanisms to avoid Beijing's restrictions via shadow banks.

Banks gradually channeled more and more of their funding into shadow banking channels outside of their formal loan books. Because they could not compete with one another by raising deposit rates, they would channel funds as an investment into a WMP, which would then invest the funds into a third-party financial institution such as a trust company or asset management company. The trust company, unburdened by the same sets of regulations and quotas governing bank loans, could then lend to the final borrower. This effectively moved what was traditionally a straightforward loan into an off-balance-sheet asset, in which the bank holds a claim on the third-party shadow banking institution, or NBFI.

Shadow banks offered local governments and SOEs a way to keep borrowing and investing to fund ongoing projects even after Beijing stepped in to limit credit growth following the postcrisis stimulus. A shadow bank or NBFI would provide a higher-interest bridge loan to a borrower for a short time, perhaps even less than one month. The bridge loan would be used to repay the older bank loan that needed to be rolled over. Then the bank could extend the borrower a larger new loan based on solid recent credit history. The new loan could be used to repay the shadow bank loan with both principal and interest. And the bank could still mark the loan as performing since the old loan had been repaid in full and a new loan had been granted. Sometimes bank loan officers themselves managed these shadow banks, allowing the officers to profit personally from the rollover process.

Shadow banking not only facilitated new lending to state-owned borrowers but also allowed banks to circumvent regulations on lending to certain types of borrowers, particularly property developers and LGFVs. As regulators attempted to curtail these practices and created specific limits on trust companies or other lenders, forms of credit quickly evolved to circumvent the regulations. The lending was profitable, and borrowers were willing to pay higher interest rates because they were either cut off from other forms of credit or insensitive to borrowing costs (such as local governments). As a result, shadow banks quickly expanded in an economy that had seen an explosion of credit growth, where politicians, local governments, banks, and borrowers all wanted growth to continue.

Another function of shadow banking was to restructure the form of lending so banks could expand credit and profits by a larger margin, even if they could not expand their capital bases. Regulators applied higher risk weightings and corresponding capital requirements on loans than on short-term claims on other financial institutions, which were considered safer. As a result, banks had incentives to restructure loans as different types of assets, either by hiding them entirely off their balance sheet or by representing them as a different form of credit, such as an "investment receivable" or an "interbank entrusted payment." The complexity of these systems grew throughout the expansion of the shadow banks. But the overall purpose was simply to maintain credit to preferred borrowers and to continue profitable lines of business.

But there were new problems that shadow banks created as well. In offering short-term WMPs to retail investors, banks were often competing with one another explicitly via interest rates, which meant they also needed to find borrowers who were willing to pay higher rates. These borrowers were generally

property developers who could afford higher borrowing costs because of their high gross margins and local governments who were not sensitive to borrowing costs because they faced no budget constraints. While lending to these sectors was more lucrative, channeling new credit to these areas also meant less credit to the rest of the economy. Developers and local governments' implicit guarantees essentially made lending to these firms risk-free for several years and lifted the overall borrowing costs of the entire economy. Ultimately, high borrowing costs were one of the most important reasons behind the rise in defaults in recent years. One key goal of deleveraging was to reduce borrowing costs for the entire economy, especially for local governments. Given that LGFVs generate returns on assets of less than 2 percent, they can barely manage a 3 percent interest rate, while many of these firms were actually borrowing at shadow bank interest rates as high as 10 percent. At rates this high, new borrowing from LGFVs is necessary just to service older debts, rather than initiating new investments. Reporting to the National People's Congress (NPC) in December 2015 after the first year of the local government bond swap program, Finance Minister Lou Jiwei commented that the program helped to reduce localities' borrowing costs from 10 percent to 3.5 percent.⁶

Most of the loans that shadow banking institutions made were longer in duration than the WMPs, which were often only one month or three months. But banks issuing WMPs now had a new problem: they needed to keep rolling over this funding, which came from retail investors, corporate depositors, and other banks. Moreover, the financial system as a whole became riskier, as shadow banks were forced to extend loans to borrowers willing to pay higher interest rates.

Moral Hazard and Rapid Shadow Banking Growth

Central to the growth of shadow banking was the widespread moral hazard throughout the financial system. Moral hazard refers to a condition in which decisionmakers or investors either seek out additional risk or avoid managing risk because they believe they are protected from losses. Several factors contributed to the development of moral hazard within China's financial system, but the most important was Chinese authorities' continued interventions to stabilize markets in the event of any financial instability or widespread losses. Chapter 6 of Credit and Credibility discusses this phenomenon and the pattern of government intervention in far greater detail. Most Chinese citizens and investors in China's financial markets understood that the CCP was highly averse to perceived political instability. If financial losses among shadow banking products materialized, they were likely to generate protests and social discontent. Beijing had clearly established a precedent to intervene and minimize financial losses as a mechanism to avoid political dissent. Financial risk thus continued rising as a tool to minimize political risk to the party's rule.

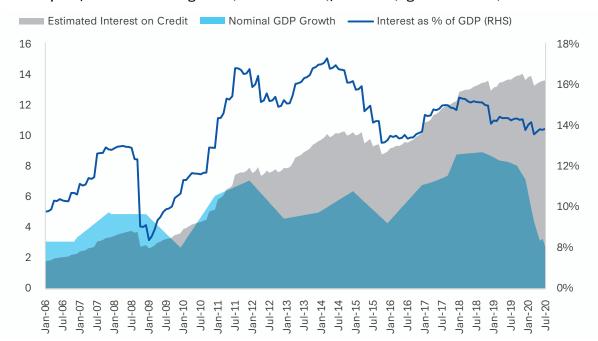
The state's outsized role within China's economy was one of the most important contributors to the perception that virtually all assets within China's financial system were guaranteed. SOEs face soft budget constraints and often receive subsidies directly from fiscal resources in order to continue operating. Lending to SOEs is therefore seen as entirely safe because the state must support these borrowers regardless of the level of debt they accrue. Banks typically are happy to lend to state-owned borrowers and will do so until they hit lending quotas, as the profitability of such loans is basically guaranteed. Even if the borrower cannot repay its debt, the state will presumably ensure the company's solvency. Loan officers also face personal incentives for lending to state firms. A loan officer could be personally blamed for losses incurred by lending to private firms, whereas lending to SOEs would be viewed as a job requirement.

To compound this issue, banks themselves are state owned in China, so borrowing between banks is also perceived to be entirely guaranteed. Even during the interbank market crisis in June 2013, banks stopped lending to the market not because they thought their counterparties would suddenly declare bankruptcy but because they were concerned the People's Bank of China (PBOC) would not provide enough liquidity in the short term to engage in regular business. These guarantees on banks created incentives for loan officers to transform riskier loans into claims on banks themselves by borrowing or lending to banks using the riskier assets as collateral.

One can easily see how credit could expand rapidly in a situation in which the state guaranteed both borrowers and lenders. But there are also more fundamental limits to how fast credit and debt can grow relative to the size of China's economy. As the *People's Daily* diagnosed China's debt problem in May 2016, "A tree cannot grow to the sky." Figure 2.1 illustrates the key problem with a rapidly rising corporate debt burden, even if it is SOEs that are borrowing: significant quantities of new credit must be used to service older debt, so every yuan of new credit no longer generates the same economic activity as in the past. Cash flows and savings that fund investment are distributed unevenly throughout the economy, but the annual interest on credit, estimated using average quarterly borrowing rates from the PBOC, has exceeded nominal GDP growth every year since 2012. An International Monetary Fund working paper published in early 2018 concerning China's credit booms notes that in 2007-08, 6.5 trillion yuan (\$950 billion) in new credit growth boosted nominal GDP by 5 trillion yuan (\$735 billion). In 2015-16, 20 trillion yuan (\$2.9 trillion) in credit was needed to create the same marginal GDP growth.⁸

Figure 2.1: Estimated Annualized Interest on Credit and Nominal GDP Growth, January 2006–July 2020

Trillion yuan, 12-month rolling sum (left-hand side); Percent (right-hand side)



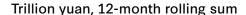
Source: People's Bank of China, National Bureau of Statistics, and Rhodium Group estimates.

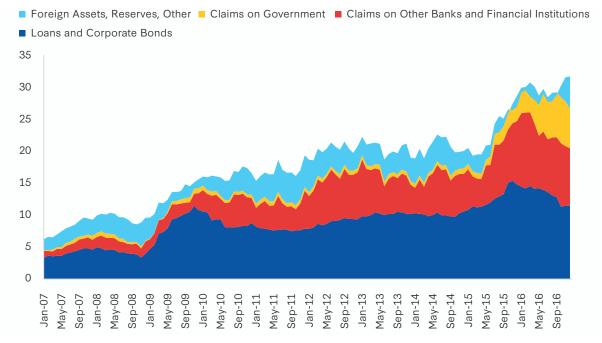
By 2012, conditions were set for a rapid expansion of credit, with shadow banks playing an increasingly important role in the process. At first, regulators were loath to crack down on shadow banking activities because both WMPs and lending via NBFIs were viewed as instruments of financial system reform. By

competing for funding with banks, many Chinese officials thought WMPs played a role in interest rate liberalization, which was a long-held goal of financial reformers. Furthermore, riskier lenders such as P2P networks were playing an important role in expanding access to financial services to lower-income households and small private businesses that had previously been cut off from the state-owned banking system. There were many reasons for Chinese authorities to tread cautiously in regulating these institutions, which also allowed them to grow quickly.

From 2012 to 2016, informal or nonbank lending expanded by at least 36.7 trillion yuan (\$5.3 trillion), representing around 31 percent of total credit extended over those five years (the shadow lending components are represented by the dark blue area of Figure 2.2). Much of this was borrowed by property developers, local governments, and speculators and ended up fueling a number of asset bubbles in property, stocks, and commodities.

Figure 2.2: Annualized Components of Bank Asset Growth, 2007-2016





Source: People's Bank of China.

Shadow banks significantly complicated the traditional operations of China's financial system. In order to generate additional returns and repay investors at higher interest rates, lenders had to take additional risks in extending loans to borrowers that were not guaranteed. The fact that the state-guaranteed banks meant they felt comfortable guaranteeing WMPs offered to their customers, even if those WMPs were making very risky loans to borrowers that could default. The assumption was that the banks themselves would simply pay the losses from risky loans out of their own funds and continue to provide their customers with high rates of return. Otherwise, the investor could shift to another bank. In turn, trust companies, asset management companies, and other NBFIs felt comfortable lending to local governments and LGFVs at high rates because the NBFIs often boasted some degree of state ownership as well, usually by local governments. The assumption of widespread government guarantees on both borrowers and lenders led to a significant expansion of system-wide financial risks, as shadow banks started to become almost one-third of overall lending from 2012 to 2016.

The Great Ball of Money

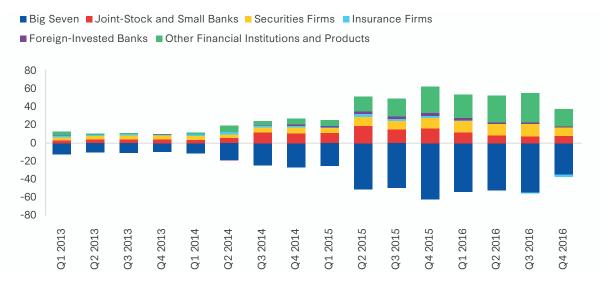
The aftermath of the interbank market crisis in June 2013 set the stage for a wave of bubbles in China's financial and asset markets. Even as the banking system came to the brink of collapse in 2013, investors, depositors, and bankers essentially called the PBOC's bluff, as the dramatic sell-off forced the PBOC to inject sizable amounts of liquidity and calm the money markets. Rather than a "flight to quality" in which investors sought out safe assets, the rise in interest rates encouraged investors to engage in a "flight to risk," sinking funds into higher-interest WMPs, knowing the banks issuing them would need to guarantee their returns. In order to prevent the crisis from repeating itself later, the PBOC needed to manage short-term interbank market rates far more carefully to avoid spikes that might trigger additional redemptions of WMPs and a spiral in short-term rates.

Many internet finance companies that became dominant in China over the next decade, such as Alibaba and Tencent, started in this field during the aftermath of the June 2013 interbank market crisis. They offered their customers high returns and encouraged depositors to shift funds from banks to internet-based funds simply by reinvesting the funds raised on their platforms in the interbank market at even higher rates.

These conditions were conducive to a wave of financial speculation, indirectly encouraged by the PBOC. By intervening regularly to keep money market rates low and stable, the central bank encouraged shadow banks not only to borrow aggressively in the money markets at low rates but also to add leverage to their positions in order to generate yield. Soon, virtually anything that could generate yield in China's financial system was seeing an influx of money channeled from banks via WMPs into third-party lenders. NBFIs became the largest borrowers within China's money markets, larger than even city or rural commercial banks (Figure 2.3). This surplus liquidity was often labeled China's "great ball of money," rocketing from one speculative market to the next.

Figure 2.3: Borrowers and Lenders in Pledged Repo Market, Total Turnover, 2013–2016





Note: Borrowing reflected in positive totals, lending in negative totals. Source: PBOC quarterly monetary policy reports.

The first obvious source of speculative activity in 2012 was the property market. China's property market was the largest individual asset market in the country, and there were powerful forces motivating speculation in

housing. Prices had risen dramatically ever since the liberalization of the housing market in the late 1990s. The few setbacks in 2008 and 2011 were only six to nine months in duration, usually viewed as an opportunity to pile back into the sector. Developers were able to borrow liberally from shadow banks, bypassing limits on borrowing

for land purchases. As a result, land prices continued rising, with developers then pushing up housing costs to maintain margins. Most investors thought that the sector was simply "too big to fail," given the importance of property to China's overall economic growth and localities' reliance upon land sales revenues. The symbiotic relationship between developers and localities encouraged increases in construction and housing purchases.

By 2014, however, the excesses within the sector were readily apparent. Numerous stories circulated in media concerning ghost towns as developers built outside of major cities far in excess of fundamental demand. Beijing launched a shantytown redevelopment program to resettle residents living in older homes by encouraging them to buy from the ample stocks of housing. Trust companies started to face defaults on loans to developers and reduced lending to the sector, which was one cause of a widespread slowdown in the economy in 2014 and 2015 led by weaker property construction. Steel and other commodity prices dropped sharply, but the output of raw materials did not because most firms were able to roll over their loans, in part by using shadow banking channels. As a result, China started to face significant deflationary pressures in producer prices, which stayed negative for four consecutive years, from 2012 to 2016. While producer prices were negative, consumer prices fluctuated but generally grew. This can be most easily explained by the fact that most credits went to state-owned producers, who continued operating even if profits were declining because they were trying to avoid job cuts and potential political instability. In November 2014, the central bank started cutting interest rates to reduce real borrowing costs for firms.

After the property sector weakened significantly in 2014, the great ball of money shifted to China's equity market. The Shanghai Composite Index began rising in late 2014, but there seemed to be little macroeconomic logic behind the move. With the economy flagging, led by the property sector, many expected policymakers would step in to support growth, but there has been little evidence of such support so far. China's equity markets had long been likened to casinos, but part of the reason for their volatility was the investor base, which consisted of far more retail investors and momentum traders than fundamental investors.

As China's equity markets were highly responsive to policy changes and liquidity conditions, it was the liquidity conditions and speculative activity that drove most of the epic boom and bust in China's stock market in 2015, which then forced Chinese leadership to respond to stem the market's rapid descent. Margin trading was facilitated by lending from shadow banks, which expanded rapidly throughout the early months of 2015. Nie Qingping, the ex-chairman of the China Securities Finance Corporation (CSFC), the very vehicle Beijing used to bail out the stock market in 2015, said that the more than 3 trillion yuan (\$440 billion) from banks' WMPs was fueling margin trading in the stock market. As share prices rose, investors pledged the shares they had just purchased as collateral for additional margin loans (Figure 2.4). Naturally, when prices declined, this exacerbated the decline in share values. The collapse was so rapid that Beijing was forced to buy around 2 trillion yuan (\$294 billion) in stocks using the CSFC to attempt to prevent a more dramatic sell-off. More direct interventions included prohibitions on short selling and security forces starting to investigate the causes of the sell-off. Since 2015, China's stock prices have not rebounded to the levels where Chinese authorities decided to buy large volumes of stocks to stabilize the market. Most of the funds allowed speculators to exit the market, and the property market stabilized again as investors moved from the equity market back into housing.

In April 2016, the frenzy spread to commodities markets, and trading in Chinese commodities futures started to exceed trading volumes on all Chinese equities exchanges and even the Nasdaq at its dot-com-era peak

in 2000.¹² Short-term money market rates were extremely stable at around 2 percent, which allowed NBFIs to take risks in a number of different assets. Corporate bonds were also bought aggressively on leverage, as an environment of lower interest rates and a weaker Chinese economy meant very few types of assets could actually generate the returns necessary to repay WMP investors. Leveraged bets were therefore necessary, and corporate bond spreads to risk-free assets dropped to all-time lows. P2P lending networks popped up around China, borrowing from individuals at high rates and lending at even higher rates. Many of the borrowers from P2P platforms were small private businesses and lower-income households borrowing for down payments for mortgage loans. The great ball of money just rolled on.

Figure 2.4: China's Shanghai Composite Index and Margin Trading Balances, 2014–2016

Index points (LHS); Trillion yuan (RHS)



Source: WIND.

Regulatory Whack-a-Mole

The obvious question that emerges from these stories of financial speculation is why regulators did not notice the risks building and respond more quickly. Bureaucratic factors explain some of the regulatory oversight, in part because no regulator could see the whole picture. Shadow banking activity had grown precisely to avoid regulatory oversight. As a result, regulators struggled to understand the size of total shadow banking activity. In 2012, individual Chinese institutions had narrow regulatory mandates, with the China Banking Regulatory Commission (CBRC) covering banks and trust companies, the China Securities Regulatory Commission (CSRC) covering securities companies, and the China Insurance Regulatory Commission (CIRC) regulating insurance firms. So, when regulations on one form of lending emerged, such as prohibitions on banks cooperating directly with trust companies in 2010, banks would simply shift their channel business to a different type of NBFI governed by a different regulator. Shadow banking was seemingly no one's responsibility, and regulators could see only individual pieces of a rapidly developing puzzle.

Before the deleveraging campaign, there were several iterations of this game of whack-a-mole with different forms of shadow banking activity. In April 2014, for example, all five financial regulators in China, led by the

PBOC, issued Circular No. 127, which meaningfully limited banks' ability to conceal loans and other assets as collateral within interbank transactions.¹³ But the net effect was simply for banks to shift shadow banking activity to other classifications, including "investment receivables" and "directional asset management plans." Until the deleveraging campaign started, all of these controls focused on the lenders rather than the funding sources-the WMPs themselves. This changed with the imposition of new asset management rules in 2018, which were one of the most significant elements of Beijing's deleveraging effort.

Furthermore, regulators themselves were not always interested in quickly controlling asset growth within their particular areas of jurisdiction. While they were keen to avoid systemic financial risks from developing (and potentially taking the blame for them), many local governments and state-owned firms clearly benefited from the expansion of shadow financing activities. Regulators within individual financial sectors had incentives to grow their industries as well as to expand their industries' imprints within the economy. Regulators often competed with one another to grow their sectors' overall asset bases, which would make their areas of jurisdiction more significant within the economy. One of the justifications for the deleveraging campaign was to address this patchwork of controls over shadow banking activities in China's financial system.

Attention Must Be Paid

The structure of China's financial system changed significantly between 2012 and 2016. Before 2012, China's bank-centric financial system was generally inefficient but stable. The banks' funding was primarily concentrated in deposits from both households and corporations. Those state-owned banks then lent predominantly to SOEs, which inefficiently invested the capital relative to more efficient private firms. China generally posted surpluses in its international balance of payments, and as a result, there were more deposits flowing into the system most of the time. Banks seldom needed to compete for funding against one another. The system may have been lethargic, but it seemed highly resistant to a system-wide crisis. Beijing had made choices to deliberately prioritize stability over efficiency.

By 2016, the entire structure of China's financial system had changed. Marginal funding growth for the banking system came from WMPs or other non-deposit instruments rather than deposits. Banks needed to compete against one another for funding by offering higher and higher interest rates, which required them to take additional risks in lending to earn higher returns. As a result, banks' marginal lending decisions were more likely to be placed with a third-party asset manager, such as a trust company, an asset management firm, or a brokerage, rather than a conventional loan. In addition, China faced significant changes in its international payments, with periods of strong inflows and strong outflows. Banks' deposit levels fluctuated more regularly, making them more reliant upon the interbank money market for funding and requiring them to constantly compete for deposits and WMP funding. All of these developments made the financial system not only far more unstable but also far more difficult for Beijing to control.

By 2016, Beijing was losing one of its primary policy levers to control the economy-the allocation of creditbecause banks were engaging in regulatory arbitrage and shifting money to the shadow banking system. Far from controlling flows of credit, Chinese regulators were struggling to monitor where money was going within the financial system. Most forms of shadow banking existed to deliberately avoid government regulations on capital risk weightings or to hide lending to restricted borrowers such as LGFVs or property developers.

Furthermore, the changing structure of the system was generating significant financial risks. The off-balancesheet structures that banks were using, which involved channeling money from depositors and investors

into opaque off-balance-sheet vehicles, appeared very similar to the SPVs and special investment vehicles (SIVs) that had been exposed at U.S. banks during the 2007-08 global financial crisis. Banks were still likely to bear some risk if the investments defaulted because they would have reputational risks to their customers. Most customers thought the investments were essentially guaranteed because there were very few historical defaults. The investments continued becoming riskier and riskier because banks and NBFIs needed to seek higher returns to pay their investors higher rates.

The entire financial system appeared to be subsidized by the state as well, with private investors capable of generating strong returns from WMPs while any losses on shadow bank loans would be backstopped by local or central government. China had shifted from a system of financial repression, in which depositors had little control over where to place their money, to a system of widespread moral hazard. Both the liabilities and assets sides of banks' balance sheets were becoming riskier, and the actors contributing to that risk assumed the state would ultimately provide support if any losses materialized.

Politically, this was an enormous challenge for Beijing. Most Chinese officials had no intention of ever subsidizing losses in risky lending schemes such as P2P networks or property market speculation. But popular belief in the government's guarantees was strong. Delivering a public message that losses on these risky investments were probable would shock financial markets accustomed to government intervention to stabilize conditions. It would risk repeating the consequences of the PBOC's message to banks to rely upon themselves during the interbank market crisis in 2013. Losses might spark protests among angry investors. But larger losses from rapidly expanding financial bubbles were even more probable if the system kept expanding in the same fashion as it had from 2012 to 2016.

This was the situation facing Beijing in 2016 when Chinese authorities decided to launch the deleveraging campaign. The financial system was no longer a shock absorber that allowed the party to manage political risks. It was starting to create political risks on its own.

Beijing Declares War on Shadow Banks

Averting a Looming Crisis

Beijing's primary fear in 2016 was that if the financial system continued growing at such a rapid rate and in the same unregulated fashion, more financial bubbles would start to burst, similar to what had just taken place in the equity market the previous year. Those bubbles could potentially have much greater political fallout, particularly in the property market, given high homeownership rates in China. Party leadership was forced to contemplate difficult choices about how to slow the growth of overall debt and shrink the shadow banking system without affecting the broader economy too severely, which could trigger unemployment and social discontent. Furthermore, they needed to avoid rapid and dramatic changes in policy that might trigger a rerun of the June 2013 interbank market crisis or another financial market contagion.

The deleveraging campaign started with a high-profile interview with an "authoritative personage" published on May 9, 2016, in the *People's Daily*, the CCP's newspaper. ¹⁴ Often, significant policy changes in China begin with a high-level message from leadership, usually via state media channels, including the *People's Daily*. This communicates key policy messages internally, within China's bureaucracy so that party cadres understand new priorities. The interview occupied almost the entire section below the front-page fold and filled the entire second page as well. It outlined a remarkable critique of the pattern of China's growth seen from 2012 to 2016 and the limits of China's traditional policy tools to stabilize the economy: "Economic stabilization relies on the old method, which is investment-driven, and fiscal pressure in some areas has added up to possibilities of economic risks." ¹⁵ Clearly identifying leverage and debt as the culprits, the quasi-official voice argued, "A tree cannot grow to the sky, and high leverage carries high risks. Mishandled, it will lead to a systemic financial crisis, causing an economic recession, and even lead the people's savings to fizzle out, which would be dangerous. This comparison shows us where the emphasis of the work must be—there cannot be additional leverage in order to stimulate the economy." ¹⁶

Many suspected the voice in the *People's Daily* article was Liu He, then deputy head of the National Development and Reform Commission and the leading official managing economic and financial affairs, or the collective voice of his office at the Central Economic and Financial Leading Group. The commentary not only inveighed against more traditional forms of stimulus using local government investment by calling for more significant financial reform but also commented that leverage is the "original sin" and a "source of high financial risks," which amplified potential risks in movements of the exchange rate, as well as property and capital markets. The voice warned, "Big stimulus will only result in bubbles, which is a must-learn lesson." ¹⁷

The interview focused extensively on setting expectations for lower economic growth in the near future and avoiding the short-term thinking that had dominated stimulus efforts for the economy up to that point. By identifying leverage as the core problem facing China's financial system, the article created political space for financial technocrats to start producing concrete proposals to cut debt levels throughout the system. Fundamentally, the deleveraging campaign was about targeting the shadow banking sector-both in terms of lending and bank funding activities. China's leadership merely wanted to reduce the potential for systemic financial risks that might create political problems. China's financial technocrats faced a more difficult challenge in reducing banks' reliance upon the specific channels for borrowing and lending that had evaded regulatory controls thus far.

Why "Deleveraging"?

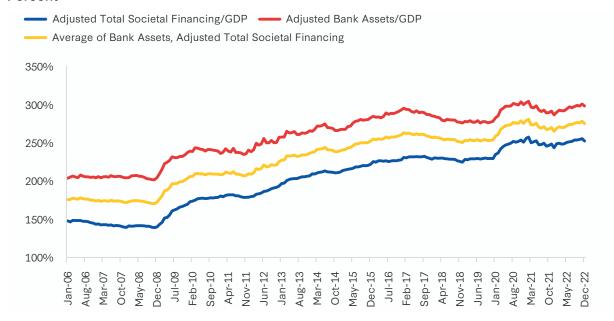
The deleveraging campaign was successfully launched only because the concept of "deleveraging" itself could be interpreted differently depending on a range of political objectives. Structural reform was difficult because entrenched interests had always maintained the system as it was. Local governments continued to rely upon easy credit to fund new investments, maintaining employment and growth. Property prices continued to rise, incentivizing new purchases and land development. Banks had few incentives to declare losses individually in order to keep growing. Maintaining a political coalition in favor of controlling the growth of the financial system and overall credit was a difficult challenge.

At its core, deleveraging is about the reduction of China's debt levels over time. China's aggregate debt burden started expanding rapidly in 2009 with the postcrisis stimulus, labeled as a 4 trillion yuan (\$588 billion) investment package, which was in reality far larger, as previously discussed. Most significantly, local governments led this stimulus effort and funded it via the banking system rather than out of fiscal revenues. The International Monetary Fund's Global Financial Stability Report placed China's debt-to-GDP ratio at 254 percent in 2016, up from only 142 percent in 2006. China's nonfinancial corporate sector debt at the time was equivalent to 165 percent of GDP, the highest among major economies.

But the deleveraging campaign was not simply about reducing debt, as it was primarily focused on mitigating overall financial risks. As a result, virtually any program to reduce perceived financial risks could effectively be wrapped in the guise of the broader deleveraging campaign. The high-level endorsements of these objectives by the authoritative personage in the *People's Daily* and subsequent Politburo statements would help to reinforce the leadership's support for these objectives. Many goals of the deleveraging campaign were advanced by different interest groups within China.

Figure 3.1: Alternative Measures of China's Credit-to-GDP and Debt-to-GDP Ratios, 2006-2022

Percent



Source: People's Bank of China.

For purely financial technocrats, such as those at the central bank and banking regulator, deleveraging narrowly represented an attempt to reduce the potential financial risks associated with high and rapidly growing debt-to-GDP and credit-to-GDP ratios (Figure 3.1). For these technocrats, any opportunity to control overall credit growth was welcome. But for advocates of the interests of state-owned enterprises (SOEs), the deleveraging push provided an opportunity to reduce the debt burdens on SOE balance sheets so that SOEs could operate more freely in the future with less concern for the broader consequences for systemwide financial stability. For economic planners more focused on China's long-term growth trajectory, the deleveraging effort also took aim at an obstacle to maintaining targeted growth rates in the form of the servicing costs of China's existing debt. The Politburo's support for deleveraging and high-level messages in support of that goal allowed all of these camps to push forward with their own objectives.

All of these steps in combination reflected a campaign within China's political structure-not a Western political campaign in advance of a democratic election but a style of Chinese politics that involves the mobilization of bureaucratic institutions toward particular targets or objectives using propaganda and persistent messaging. Early versions of these campaigns in the 1950s and 1960s attempted to generate mass participation in political movements because of the lack of effective bureaucratic institutions in China's system at the time. Modern campaigns are more about mobilizing bureaucracies and communicating top leadership priorities meant to change lower-level officials' behavior. The fervor of the high-level commitment from leadership reinforces lowerlevel officials' attempts to comply with the needs of the campaign. However, campaign-style governance limits policy bandwidth because officials can only be focused intensely on a few issues at a time.

China's Politburo regularly issues statements following its near-quarterly meetings on economic work, and these are often interpreted as important signals of the CCP leadership's priorities and intentions when it comes to economic policy. Immediately following the authoritative personage interview in the People's Daily, Politburo's

statements started to emphasize the importance of deleveraging-related objectives. In late October 2016, the Politburo commented that China needed to "curb asset bubbles and safeguard against economic and financial risks."18 The People's Bank of China (PBOC) released quarterly monetary policy reports as well, and in the fourth quarter of 2016, the report focused heavily on the property market, with several references to the pernicious effects of "bubbles" and the need to limit the overall credit impulse to contain financial speculation. The central bank used the word "bubble" 16 times in the 2016 fourth-quarter report (versus 7 times in the previous report). Within the PBOC's monetary policy reports, special columns command the most attention because they are inserted entirely at the discretion of PBOC staff to discuss timely and unusual policy issues. The fourth-quarter report features a special column discussing the relationship between asset prices, monetary policy, and property prices. It argues that macro-prudential policy alone is not enough to curb asset bubbles, which in fact requires establishing a new policy framework with two pillars: monetary policy and macro-prudential policy.

Following a Politburo statement in April 2017 emphasizing the importance of financial security, China's official Xinhua News Agency published seven commentaries over the course of a week in early May 2017 calling for upgraded regulation of the financial sector and urging financial institutions to take their own responsibility in improving risk controls.¹⁹ The commentaries also pledged to address risks and require local governments to cooperate with central government efforts in order to better serve the real economy.²⁰ The lead commentary linked financial security with national security, arguing, "Financial security is defined as 'an important issue of governing the country,' suggesting it is an issue concerning the overall development plan of the CPC and the country, the country's economic and social development and national security work. Everyone needs to have a full understanding of this."21 These were strong signals of support for both monetary tightening and regulation from China's highest leadership, and these policy signals were unlikely to be reversed quickly.

China also held a significant meeting concerning financial work every five years, typically labeled as the National Financial Work Conference (NFWC). Previous conferences had proposed fundamental changes to China's financial system, including the bailouts and restructurings of state-owned banks following the Asian financial crisis. Following the conference held in July 2017, the Xinhua News Agency published an aggressive 3,300-word story using the word risk 28 times and regulation 22 times and describing deleveraging as a long-term campaign. In addition, the leadership used new rhetoric to point out the importance of controlling financial "aggregates," suggesting that the overall growth of the financial sector was emerging as a key benchmark for the success of deleveraging.²² Politburo statements supporting deleveraging continued for several quarters, as the December 2017 statement claimed that leverage should be effectively controlled, the financial sector should better support the real economy, and a higher priority should be placed on reducing risks.²³ The Politburo statement referenced three major "battles," which included controlling financial risks, fighting poverty, and reducing pollution.24

These leadership messages clearly provided political space for many bureaucratic agencies to advance their own efforts in support of the deleveraging campaign. But politically, it was difficult for financial technocrats to maintain momentum to reduce aggregate debt and credit. A more aggressive and vocal regulatory effort from other agencies risked generating too much attention and internal political opposition from all of the local governments and SOEs that required ongoing access to credit. For many years, the PBOC tried to implement smaller, quieter, and more incremental tightening steps that required fewer internal approvals but eventually produced changes in incentives in order to try to reduce risky behavior within the financial system. But with other institutions such as the China Banking Regulatory Commission (CBRC) and China Insurance Regulatory Commission (CIRC) turning up the political volume on the deleveraging campaign, there was a growing risk of alarm among banks, local governments, and potentially higher-level political leaders. Ultimately, the PBOC led

the first salvoes in the extended battle against shadow banks by tightening monetary conditions and raising short-term money market rates. But they had to tread cautiously to avoid generating systemic financial risks as they had in June 2013. And they also had to avoid generating any internal political perception that the deleveraging campaign was slowing the economy significantly.

Monetary Tightening

After the May 2016 People's Daily interview and rhetoric from China's political leaders, the first actions in the deleveraging campaign came from the PBOC, China's central bank. Banks had seen a significant change in their funding structures from 2012 to 2016 and were much more dependent upon funding from wealth management products (WMPs). In addition, more banks and nonbank financial institutions (NBFIs) were borrowing aggressively from the short-term repo market in order to place leveraged bets in more speculative asset markets and boost returns. This meant that banks and NBFIs were far more vulnerable to changes in short-term funding conditions in China's money markets. If repo rates suddenly moved higher or became even more volatile, it became far riskier to sustain leveraged positions in risky assets because a change in funding costs could quickly push those positions into losses.

The PBOC started the process of raising short-term money market rates on August 24, 2016. After a long period of stability in its regular open market operations (OMO), the central bank suddenly introduced 14-day reverse repurchase operations (reverse repos) at 2.4 percent rather than the more traditional seven-day funding at a fixed rate of 2.25 percent. The effect of this move was to introduce uncertainty about the PBOC's intentions and to boost short-term overnight repo market rates, which edged higher into the 2.1-2.2 percent range.²⁵ Rather than an outright hike in interest rates, the PBOC's move raised the average weighted funding costs in the money market. But the market noticed the PBOC's change in behavior right away and became far more sensitive to future tightening signals.

The PBOC then engaged in a more persuasive policy operation by instructing banks to reduce their borrowing overnight and encouraging them to borrow at longer terms, which would have the effect of raising overall funding costs for banks and NBFIs. At the same time, to reinforce the effect of the policy guidance, the central bank offered larger volumes of longer-duration funding via its medium-term lending facility (MLF), which typically offered funding for a full year.

These steps advanced incrementally, but they had clear effects on China's money markets. Overnight rates rose from the 2.0-2.1 percent range in July and August 2016 to 2.4-2.7 percent by December 2016, with occasional spikes even higher. All of this occurred before the PBOC had formally adjusted the interest rates it offered to the market for short-term financing, which are more commonly viewed as the relevant policy interest rates for the central bank. The central bank's first formal hike in these OMO interest rates did not occur until February 2017 and eventually produced four separate hikes totaling 30 basis points, with the last of the cycle occurring in April 2018.

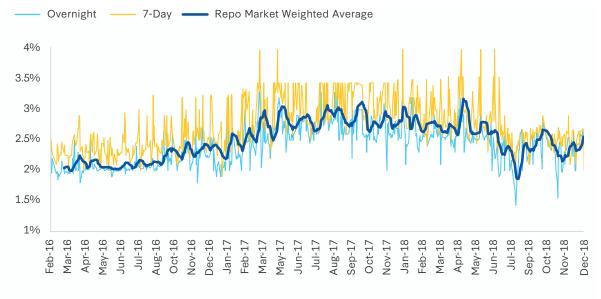
The rise in short-term money market rates and the sudden injection of policy volatility basically had the desired effect, which was to reduce the attractiveness of short-term borrowing in order to take leveraged positions into longer-term assets. With weaker demand for bonds, yields rose and bond issuance declined. Overall credit growth had not yet started to slow, but the shadow banking components of credit growth were starting to decelerate and unwind.

But even though the direction of the policy adjustment was intended, the PBOC struggled to control its magnitude, as the monetary tightening campaign produced some significant shocks in the interbank market. In December 2016, a small securities company called Sealand Securities indicated it might refuse to honor some esoteric forms of entrusted bond contracts, in which securities companies would temporarily warehouse bonds for banks or other third parties. The bonds involved were safer policy bank bonds, but the concern that spread through the market was that other NBFIs might walk away from similar deals. As a result, banks stopped lending to NBFIs in the same volumes, and there was quickly a liquidity squeeze in the market, given that NBFIs were the primary borrowers throughout China's interbank market. In order to calm the squeeze, the PBOC even needed to extend trading hours on some days in order to prevent defaults on interbank payments, which had touched off the June 2013 crisis. Then, regulators, led by the China Securities Regulatory Commission (CSRC), needed to gather the creditors of the firm into a meeting over the weekend in order to manage the resulting fallout and prevent further contagion.

More generally, the Sealand Securities scandal exposed an uncomfortable reality for the PBOC and its deleveraging effort: the potential for overstepping and triggering unintended consequences was readily apparent. The market contagion from credit risk among even very small institutions caused a significant sell-off in China's fixed-income markets and forced regulators to directly intervene, refusing to allow Sealand to back away from the contracts. Even as the PBOC was trying to break the pattern, market stability in China depended upon widespread implicit guarantees. Any deviation from that pattern led to immediate shocks and market instability.

Figure 3.2: Changes in Short-Term Interbank Market Repo Rates, February 2016–December 2018





Source: Bloomberg.

There were other limits to the PBOC's monetary tightening efforts as well. For every action trying to contain the growth of China's shadow banking system, there is seemingly an equal and opposite reaction by banks trying to maintain funding channels and expand their balance sheets. By limiting short-term borrowing via overnight repo markets, negotiable certificates of deposit (NCDs) issued in the interbank market quickly grew to become an alternative funding source for banks, particularly for joint stock and city commercial banks. This

caused short-term interbank funding rates for banks to rise, which in turn passed higher interest rates on to borrowers in the real economy.

In a way, NCD funding was riskier than funding from the interbank market because banks could simply issue the NCDs without any collateral. Because banks were presumed to be state-owned and guaranteed, this was an unlimited new higher-interest financing channel. In addition, the NCDs created new pressure to roll over the instruments, just as WMPs had created. Banks had to increasingly issue short-term NCDs at higher and higher costs. Ironically, without new regulations on this practice, the PBOC's monetary tightening campaign was likely to create new financial risks without meaningfully limiting banks' funding costs.

There were other limits to the PBOC's monetary tightening efforts as well. In trying to encourage NBFIs to reduce speculative assets, the PBOC was attempting to deny these institutions short-term funding. But the counterintuitive effect of such a liquidity squeeze was to force NBFIs to immediately sell any assets they could to raise money. Often, these were not risky but safer assets, including government bonds and policy bank bonds. After all, these assets were by far the most liquid in the market, making them an easy choice for traders to sell. But sales of these government and policy bank bonds forced issuers' yields higher. Policy banks such as the China Development Bank and the Agricultural Development Bank of China depended upon the bond market for funding. But their business was largely making low-cost loans to local governments and SOEs. After a sell-off in the bond market in late October and early November 2017, policy banks could barely sell any bonds at yields below 5 percent, which made it difficult for policy banks to operate, given that most of their loans were made with yields around 4 percent. As a result of the deleveraging campaign, policy bank bond issuance dropped by over 30 percent in 2017.

Despite the PBOC's best efforts, monetary tightening was creating new problems of its own by the end of 2017. Short-term funding rates were higher and shadow banks were under pressure, but overall credit growth had barely slowed. Banks were finding alternative mechanisms to circumvent the effects of the PBOC's controls on short-term financing. Property sales, prices, and new construction were still booming. Brokerages and fund assets were under pressure, but banks were able to shift some of the channel business to trust firms instead of these lines of credit completely disappearing. Overall financial risks were still rising, arguably, as banks and NBFIs were incentivized to take risks in more speculative lending. Monetary policy tightening was necessary but ultimately insufficient to squeeze shadow banks. Beijing needed to tighten the regulatory noose on banks and nonbank institutions as well.

Regulatory Tightening

The regulatory measures that Beijing introduced from 2017 to 2018 constituted the most significant changes in policy toward China's shadow banking sector. Beijing was aware that previous regulations had been only a patchwork approach, and a more integrated effort to address banks' reliance upon WMPs and other nondeposit liabilities was necessary. The overall focus of these regulatory efforts was to illuminate and highlight the risks in the system by forcing off-balance-sheet funding and loans back onto banks' formal balance sheets. The other key focus was to break the assumption of implicit guarantees behind banks' issuance of WMPs. For the shadow banking system to be controlled, investors and depositors needed to understand that they could face losses, even on products that banks were issuing. Beijing was trying to address the moral hazard at the heart of the financial system.

A New Macroprudential Framework Enforced by the PBOC: The PBOC, CBRC, CSRC, and other institutions introduced several new regulations and circulars throughout the most intense periods of the deleveraging campaign. One of the more significant early steps was the introduction of a new macroprudential assessment framework by the PBOC. The central bank would review critical indicators of banks' assets and liabilities on a quarterly basis and would assign an A, B, or C classification to the bank, which potentially influenced its access to central bank liquidity facilities or its regulatory treatment. In December 2016, the PBOC decided to include banks' reliance on WMPs in the quarterly macroprudential assessment, which placed banks on notice that more regulations targeting non-deposit liabilities were likely to emerge.

Asset Management Rules Targeting WMPs and Off-Balance-Sheet Assets: The most significant regulatory changes that China introduced during the deleveraging campaign concerned rules governing almost all investment and funding products, on both the liability and asset sides of banks' balance sheets. These were more comprehensive in scope and covered almost all financial institutions, banks, trusts, brokerages, and funds in order to avoid the regulatory whack-a-mole problem. These were informally called the "asset management rules," and the first draft of these regulations was issued in February 2017. A further draft was refined in November 2017, and the final version was released in late April 2018. The rules had relaxed somewhat over the drafting process, primarily by allowing banks a longer grace period to change the structure of their asset bases.

The core of the new asset management rules was designed to curb shadow banking growth and limit banks' "channel" business, placing funds with third-party asset managers and NBFIs. The new rules banned any implicit or explicit guarantees on WMPs or asset management products, which had been the foundation of the rapid growth in shadow banking channels from 2012 to 2016. Asset management products were not permitted to invest, directly or indirectly, via either debt or equity into industries or sectors that were targeted by government regulations and explicit credit restrictions, such as lending to property developers and local government funding vehicles (LGFVs).

Furthermore, the rules challenged banks' existing procedures by permitting only one level of intermediation within asset management products, making it more difficult for banks to bypass various regulatory controls. For example, banks seldom invested directly in trust products. They would invest in asset management products issued by brokerages first and then use these funds to invest in trust products, avoiding a 10 percent risk capital requirement. This type of cooperation was very common among asset management products and NBFIs but would not be allowed under the new rules, which also disallowed funding these types of assets from "pooled" financing by banks.

In addition, the new asset management rules required that WMP investments be marked to market for investors to see both profits and losses. This meant that if WMPs started generating losses, investors would know how their investments would be marked down. Most retail and institutional investors bought WMPs on the assumption they were as safe as deposits while offering higher returns, and official losses were likely to frighten many current and potential investors. The logic of the new rules was that banks would face problems rolling over WMPs in driving overall balance sheet growth.

Marking WMPs to market was a hugely disruptive event within the financial system, and banks strongly resisted the implementation of these rules. Some sought a caveat, in which cash-type WMPs that invested in short-term money market instruments and nothing longer than a year in maturity could still be sold to investors on a cost basis instead of marking the products to market. Naturally, banks attempted to classify more of their WMPs as "cash-type" to avoid the new regulations.

Table 3.1: List of Major Regulatory Policies, 2017-2018

| Targets | Date | Regulation/ Circular No. | Policy Changes |
|--|------------------|-----------------------------|--|
| Banks | March 2017 | CBRC No. 45 | Making sure banks comply with rules and regulations |
| Banks | March 2017 | CBRC No. 46 | Cracking down on arbitrage via NCDs and WMPs |
| Banks | April 2017 | CBRC No. 53 | Cracking down on innovation, shadow banking |
| The three circulars listed above are labeled informally as the "334 checks." | | | |
| Funds | August 2017 | CSRC No. 12 | New liquidity risk management requirements |
| Banks, all NBFIs | November 2017 | PBOC and others | Comprehensive rules governing asset management |
| Banks | December 2017 | CBRC | New liquidity risk management requirements |
| Banks, trusts | December 2017 | CBRC No. 55 | Tightening rules on trust loans |
| Banks, all NBFIs | December 2017 | PBOC No. 302 | Tightening rules on bond trading; cap on repo |
| Banks | January 2018 | CBRC | Step up concentration risk controls |
| Banks | January 2018 | CBRC No. 2 | Tightening rules on entrusted loans |
| Private funds | January 2018 | AMAC | Block investment to trusts and entrusted loans |
| Brokerages | January 2018 | CSRC | Limiting brokerages' investment in trust and entrusted loans |
| Banks | January 2018 | CBRC No. 4 | Establish 334 checks as a long-term mechanism |
| NCDs | Q1 2018 | PBOC | NCDs included in interbank liabilities, to hurt issuance |

Sources: Government websites and media reports.

Liquidity Management Guidelines to Discourage Short-Term Borrowing: The other major regulatory rules the CBRC introduced in December 2017 concerned banks' management of liquidity, which involved guidance of their liabilities' structures and their assets. Generally, the idea of these new liquidity management rules was to force banks to borrow using longer-term, higher-cost funding and to shrink the duration of their assets so as to reduce the potential liquidity mismatch or any financial problems that would result from failing to roll over short-term funding instruments.

In January 2018, the CBRC introduced new rules to limit the use of wholesale short-term funding to invest in longer-term assets. This was in the form of a new guideline labeled the liquidity matching ratio (LMR).²⁶ Anything banks borrowed that was shorter than three months in maturity from the interbank market-most importantly including NCDs-received a zero value within the calculation of the LMR, which discouraged banks from selling one-month NCDs and encouraged longer-term (3-6 months) NCD issuance. The LMR discouraged banks from engaging in interbank and shadow banking business in favor of traditional deposit and loan business. If a bank did absolutely nothing but accept deposits and make loans, it would easily meet the LMR threshold. However, most interbank businesses and other investments (shadow banking activities) had higher weights in the denominator, increasing the difficulty of achieving the required ratios for banks heavily involved

in off-balance-sheet lending. The net effect of the new ratios was to reduce banks' reliance upon short-term funding in the form of NCDs or WMPs.

New Regulations Limiting the Use of NCDs to Circumvent WMP Regulations: NCDs were targeted specifically as well. While in the past NCDs were technically classified not as interbank liabilities but as "bonds payable," regulators closed that loophole in August 2017. At that point, banks were then subject to a preexisting limit that interbank liabilities could only be one-third of banks' total liabilities. The regulation then effectively cut off one of banks' most important marginal sources of funding growth and left them with a choice to either raise additional deposits or allow their balance sheets to shrink as these short-term funding instruments rolled off.

Regulations to Force Loans Back onto Banks' Balance Sheets: On the asset side of the balance sheet, regulators encouraged banks to migrate their off-balance-sheet assets back onto the formal balance sheet in the form of loans. To a certain extent, this process was automatic, as the inability to roll over a short-term funding instrument meant that a shadow lender or NBFI was suddenly short of funding; therefore, a claim on the NBFI ended up as a claim on the underlying borrower. The exact scale of the targeted reduction in off-balance-sheet assets remained undeclared. Most reports claimed there was informal guidance targeting around a one-third reduction in shadow banking activity by the end of 2020, or around 8 trillion yuan (\$1.2 trillion) in assets moving back to formal balance sheets.²⁷ Banks' claims on NBFIs would need to shrink by 2-3 trillion yuan per year to meet that target.

Limits on "Cash Pooling" within WMPs: A December 2018 decision placed further restrictions on how WMPs could operate. The CBRC issued a new circular that required banks to run their WMP business in a separate entity from the bank itself so that cash pooling from WMPs could not be used to fund assets within banks' formal loan books. ²⁸ Clarifying that banks' WMPs were separate subsidiaries was also designed to limit the potential risk to the banks' own liquidity in the case that WMP funding dried up quickly, as in the June 2013 interbank market crisis.

Regulations on Peer-to-Peer (P2P) Lending Networks: Beijing also experimented with various regulations on P2P lenders in 2016 and 2017. P2P private lenders were often among the riskiest forms of shadow financing, and they evolved quickly to provide short-term loans to small businesses as well as down payments for mortgages for lower-income households. Regulations introduced in 2016 prohibited these products from pooling funds, holding deposits, or providing guaranteed returns to customers. The rules also limited individual and corporate loan levels per platform in an effort to squeeze the scope of these businesses. Additional regulations forced these platforms to register officially with authorities and obtain online lending licenses. These platforms started to weaken significantly in 2017 and 2018, and many collapses and defaults generated protests from dissatisfied investors, including a significant protest of thousands of people in Beijing in August 2018.

Explicit Targets for SOEs to Cut Leverage Ratios: New regulations on SOEs were imposed as well, with explicit targets on leverage ratios for some types of state firms. In September 2018, the CCP's Central Committee and the State Council issued a joint circular, officially publicizing a deleveraging target for the first time, requiring all SOEs to cut leverage by 2 percentage points from 2017 levels by the end of 2020. SOEs were encouraged to engage in debt-to-equity swaps in order to reduce their aggregate debt burden. The PBOC also included specific funding allocated for such debt-to-equity swaps, often when cutting banks' required reserve ratios. Ultimately, banks were reluctant to engage in these debt-to-equity swaps with SOEs, and actual implementation was very limited. State firms then attempted to meet the regulatory requirements by issuing perpetual bonds, which would not be included in official debt calculations since they are typically classified as equity.

The flurry of regulatory tightening conditions had a meaningful impact on banks' engagement with NBFIs. Rather than a whack-a-mole approach to looking at individual forms of lending, the regulatory tightening steps targeted the funding side of banks' balance sheets and the WMPs and NCDs that had sustained shadow banking activity. As the next chapter discusses, overall shadow banking assets started declining in 2017, and China saw the slowest pace of overall credit growth in recent history in 2018.

In addition, the success of regulatory tightening allowed Beijing to take the pressure off the banking system via monetary policy and actually ease monetary conditions starting in 2018. With more confidence that the regulatory structure to control shadow banking activity had been strengthened, Beijing was able to reduce interest rates to manage potential financial stress. Monetary tightening was a necessary condition for deleveraging to succeed, but regulatory tightening became the primary tool to achieve deleveraging after monetary tightening produced unintended consequences. In a highly indebted economy and a risky financial system, continued monetary tightening would have likely generated significant new financial risks.

Reorganization of Government Bureaucracies

One of the most significant elements of the deleveraging campaign was the reorganization of China's regulatory structure governing the financial system. The creation of a "super regulator" had been a subject of discussion in China for several years. In 2013 the State Council, at the request of the PBOC, agreed to establish an interministerial joint meeting for financial regulation and coordination. This was an organization with no real power, but it became useful for communication purposes across financial bureaucracies. One of the main reasons such coordination is necessary is the development of financial institutions with mixed operations—those that operate as commercial banks, asset managers, and insurance providers. The three individual regulators were divided in their supervision of such institutions, enabling them to take on far greater risks than any one regulatory agency would permit. A super regulator would unify those bureaucratic responsibilities while avoiding the problem of banks and NBFIs restructuring assets or liabilities to avoid regulatory oversight by an individual agency.

The NFWC that took place in July 2017 created the leadership consensus around a new regulatory agency, which ended up becoming the Financial Stability and Development Committee (FSDC) under the State Council, created in November 2017. The agency was a financial coordination commission above the PBOC and the other three financial regulatory institutions-the CBRC, CSRC, and CIRC. In the end, Liu He led the committee, with the central bank managing daily operations. The other key change resulting from this reorganization was the merger of the operations of the CIRC and CBRC into a new China Banking and Insurance Regulatory Commission (CBIRC).

Over the next year, the FSDC was the primary institution rolling out new regulations consistent with the deleveraging campaign's objectives. The establishment of the committee corresponded with the most aggressive period of regulatory tightening, with Beijing's resources concentrated to avoid the potential for regulatory arbitrage. Most significantly, the deleveraging campaign was important enough for China to contemplate a wholesale reorganization of its bureaucratic structure for financial regulation. In turn, that bureaucratic reorganization was necessary for the broader deleveraging effort to gain momentum and for an effective transition from monetary to regulatory tightening efforts.

Controls on Local Government Debt and Investment

In addition to regulatory controls on banks and NBFIs, Chinese authorities intensified their focus on local governments themselves since localities had been key drivers of credit demand for many years, both via

direct borrowing and indirectly via LGFVs and related companies. Local government debt had been in focus for Chinese regulators for years, with a 12.2 trillion yuan (\$1.8 trillion) "swap bond" program launched from 2015 to 2018, designed to replace higher-interest debt from shadow banks with low-interest debt from local government bonds. After the swap bond program, local governments were intended to only be able to borrow money by selling bonds. In addition, the swap bonds were supposed to retire all of their hidden obligations, making them more transparent in the form of bond debt. But in reality, local governments underreported the actual size of their borrowing from shadow banks and were still servicing large quantities of debt after the swap. Even worse, their debt continued expanding after the restructuring effort, not only through shadow banking channels but also through more direct borrowing from banks by local SOEs, LGFVs, and other local public institutions such as universities and hospitals.

By early 2018, Chinese authorities placed these more expansive categories of debt under the regulatory microscope and implemented measures to reduce implicit debts incurred by local governments. There were several circulars released by local Ministry of Finance offices attempting to force localities to disclose total levels of implicit debt, with the idea of eventually controlling it.29 The debt totals would include debt incurred by local governments, financing platforms (LGFVs), SOEs, and public institutions in nonbond forms of borrowing used to fund public welfare projects. Implicit debt generally included any form of borrowing that would eventually require fiscal funds to repay the debt. The specified forms of financing in the circulars included bank loans, trust loans, commercial leasing, corporate bonds, public-private partnerships, procurement, equity financing, government-guided funds, and private equity. These circulars claimed that the objective was to repay all local government implicit debt within three to five years. Naturally, reducing these forms of borrowing would also slow economic growth.

Beijing had always maintained an ambiguous relationship regarding central government support for local government fiscal obligations. While Beijing's guarantees were often necessary in order to sell local government bonds at auction, the Ministry of Finance usually tried to argue that local government debt in general was to be managed at the provincial level or below, and Beijing had no intention of providing support. At the same time, the local debt situation had become so unsustainably large that there was no plausible path out of the debt problem other than Beijing providing direct support and incurring significant fiscal costs. In trying to encourage local governments to digest and reduce implicit debt, Beijing tried to eventually reduce its own fiscal obligations but with the acknowledged consequence that this was likely to slow the economy as well. But placing additional pressure on local governments to reduce their own borrowing was essential for the broader deleveraging campaign to succeed, reinforcing the effects of monetary and regulatory tightening.

Moral Hazard and Root Causes

The deleveraging campaign China launched in 2016 involved several tools and incremental steps-from monetary tightening efforts to tighter regulations on shadow banking to the reorganization of government bureaucracies and controls on local government implicit debt. Over time, these measures not only reduced credit and debt growth but also offered a far more stable policy environment involving less competition among China's financial regulators. While credit became scarce in the short term, as discussed in the next chapter, squeezing shadow financing would also have the salutary effect of reducing funding costs for some Chinese corporations over the longer term.

Monetary and regulatory tightening are effective tools to control leverage growth temporarily, but they cannot eliminate the root cause of leverage in China: widespread moral hazard and implicit no-default guarantees.

These guarantees allow banks, companies, and local governments to borrow recklessly, and as long as implicit guarantees exist, leverage will bounce back once monetary policy is eased and regulators loosen their controls.

Even after the regulatory tightening campaign intensified, other forms of financing began slipping through the cracks, given the profound political incentives to continue borrowing and rolling over existing debt to fund new property construction and local government projects. Asset-backed securities became an alternative mechanism for property developers to borrow, first at small volumes and then ramping up in 2017 and 2018. Rather than competing based on WMP interest rates, banks started to offer structured deposits, which were designed essentially to offer higher interest rates to depositors based on obscure investment bets, making them similar to WMPs.

Credit growth slowed significantly in 2018, with corporations the primary victims. But households actually expanded their overall borrowing. Because there were fewer alternative channels to lend to higher-interest borrowers via shadow banks and NBFIs, banks searched for the highest-interest lending opportunities available, which were mortgage loans to home buyers and credit card debt to consumers. In combination with the shantytown redevelopment program, this ended up driving another wave of speculation in the housing and land markets, even while overall credit growth remained under pressure. The property market's resistance to deleveraging further fueled the bubble in the years ahead, as discussed in subsequent chapters.

Of course, regulatory tightening did not stop in 2018. The deleveraging campaign extended further, even after the economy had weakened and even following the outbreak of Covid-19 in early 2020. Because speculation in the property market had continued, in late August 2020, China introduced its most significant regulatory tightening step, the "three red lines," explicitly limiting the borrowing of property developers according to specified financial ratios. This step was widely linked to the property market's dramatic downturn starting in 2021 as developers cut off from financing were forced to scale back on new land purchases and place more inventory on an already crowded market. In 2021, the newly inaugurated CBIRC initiated new controls on borrowing by trust companies after trusts had avoided some of the harshest regulatory measures on NBFIs. The new limits targeted a 1 trillion yuan (\$147 billion) reduction in trust loans over the full year, which ended up weakening the sector and LGFVs' access to credit. 30 Late in 2021, authorities also unveiled new controls over cash-type WMPs to reduce the types of assets and increase the quality of the assets banks could place within these instruments, which were designed to bypass the requirements to mark WMP investments to market.

China's deleveraging campaign hit shadow banks with multiple blows, and even after the most intense periods of the campaign in 2017 and 2018, additional incremental steps were rolled out in the following years. But the most effective step within the deleveraging effort was to precipitate defaults within China's financial system, forcing financial institutions to start to price credit risk more effectively. Eliminating the widespread guarantees within China's financial system was a necessary element for reducing overall systemic risks in China. But this step itself was dangerous, as investors who noticed guarantees breaking down in one asset market, such as P2P lenders or state-owned corporate bonds, would naturally wonder whether those guarantees might change elsewhere, thus causing investors to protect themselves, reduce risks, and sell assets.

Beijing's war against shadow banks was a complicated balancing act, reducing credit and allowing defaults to teach investors more accurate risk perceptions but without triggering systemic risks. These were Beijing's intentions, but the actual effects of the deleveraging effort on the economy and financial system are explored in more detail in the following chapters.

Deleveraging and China's Financial System

hapter 3 described the mechanics of China's deleveraging campaign and the individual actions that Beijing initiated in its efforts to shrink the shadow banking system. Monetary tightening progressed to regulatory tightening and a reorganization of government bureaucracies, accompanied by a broader effort to control local government debts. But China had often attempted to impose new limits on informal banking, and even a coordinated campaign such as that launched in 2016 was no guarantee of success in achieving Beijing's objectives.

This chapter evaluates the results of Beijing's efforts to control shadow banks, primarily based on the actions taken from 2016 to 2018, using data from banks themselves, as well as aggregate data from the People's Bank of China (PBOC), China Banking and Insurance Regulatory Commission (CBIRC), and other sources covering nonbank financial institutions (NBFIs). Financial results from 42 banks are reported here, covering around 66 percent of the total assets of China's banking system.

The primary effects of the deleveraging campaign on China's financial system can be summarized as follows:

Overall credit and debt growth slowed significantly, with an outright contraction of credit within the shadow banking system. The campaign was generally successful in its primary objective, which was to reduce the size of the shadow banking system, particularly in terms of the volume of credit flowing through these less regulated channels. The shadow banks and NBFIs were large enough to have an impact on the overall pace of credit and debt growth in China's economy, which slowed considerably in late 2017 and 2018.

Non-deposit liabilities, such as wealth management products (WMPs) and other interbank liabilities, contracted and were replaced with more stable deposits. Monetary tightening reduced leveraged positions in speculative markets, while regulatory efforts to mark WMPs' investments to market value reduced the aggregate volume of interbank financing, forcing banks to attract deposits on their balance sheets.

Regulatory pressure on negotiable certificates of deposit (NCDs) reduced the proportion of these instruments within overall bank funding structures. Initially, the household sector replaced some WMPs with structured deposits and, after a subsequent regulatory crackdown, shifted funds into safer time deposits.

Loans migrated back to the formal balance sheets of banks, replacing investment receivables and other types of credit assets. The changing funding climate and the regulatory pressure on the channel business from banks to NBFIs caused a sharp reduction in these assets on banks' balance sheets. The liquidity matching ratio (LMR) requirement and other regulatory measures encouraged banks to account for off-balance-sheet assets as loans. As a result, loans rose as a proportion of total assets within the banking system. Banks faced heavier pressure to boost capital levels to accommodate the rising level and proportion of bank loans on their balance sheets.

The distribution of credit across provinces shifted, with the slowdown in credit concentrated in the northeastern and western provinces. Many provincial governments had relied upon shadow banking channels to expand overall investment, and those provinces were hit hardest by the sector's contraction. Coastal and southeastern provinces generally maintained their access to credit despite the deleveraging campaign, which also indicates the importance of the property market within those regions.

Defaults and credit risk within informal financial institutions became far more common. Starting with peer-to-peer (P2P) lending networks, which defaulted in large numbers in 2017 and 2018, the deleveraging campaign cut off many types of borrowers from credit, which resulted in difficulties in refinancing. Small banks began to default in 2019, and corporate bonds defaulted in much larger numbers by 2020. Property developers and trust companies started defaulting in larger volumes in 2021.

An Overall Slowdown in Credit and Debt Growth

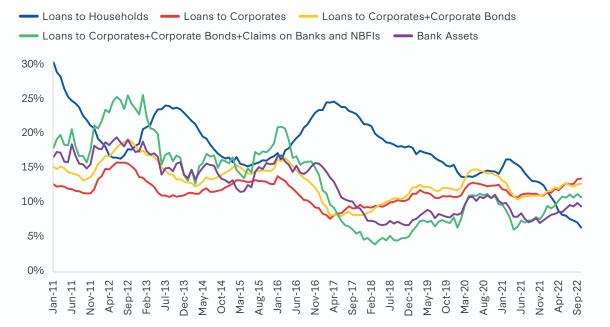
The deleveraging campaign's primary impact on the financial system was to slow the rapid extension of credit and accumulation of debt that had marked the previous eight years since China's 4 trillion yuan (\$588 billion) stimulus package launched in late 2008. The overall pace of credit growth from 2009 to 2016, measured via bank asset growth, averaged 17.5 percent. In 2017, asset growth nosedived to 8.4 percent. By the end of 2018, it had hit an all-time low of 6.8 percent. While headline GDP growth was probably overstated for several years between 2014 and 2018, official real GDP growth averaged 7.0 percent over that five-year period. As a result, the deleveraging campaign formally lived up to its name, with aggregate leverage-credit and debt as a proportion of GDP-falling for one of the first times in China's recent history.

Bank assets are a reasonable but imperfect measure of overall credit growth in China's economy. China technically publishes multiple statistics measuring total credit. These include the total volume of formal bank loans, as well as a broader classification called "aggregate financing to the real economy," which most observers label total social financing (TSF). This is a very loose translation for the Chinese term, which generally refers to society-wide financing.31 Both bank assets and TSF include some measures of shadow banking activity, but these are distinct. Bank assets are a slightly more expansive measure of shadow banking and overall credit growth. TSF statistics include categories for undiscounted bankers' acceptances, loans from trust companies, and entrusted loans, which are corporate-to-corporate loans. Undiscounted bankers' acceptances are usually correlated with shadow banking activity, but the statistic is not a direct measure of shadow lending, as it can also reflect short-term changes in interest rates or temporary liquidity crunches within the banking system. Trust loans and entrusted loans are generally considered to represent shadow banking loans, but they are only limited categories of these loans. The trust loans statistic within PBOC TSF data is generally thought to be smaller than the overall volume of trust loans extended in China.

Bank assets data released by the China Banking Regulatory Commission (CBRC) and the PBOC under the Balance Sheet of Other Depository Corporations are slightly more expansive in covering different categories of credit than the PBOC's TSF measure.³² Bank assets include categories for banks' claims on other banks, which were often used to hide shadow banking assets as collateral until the practice was regulated more stringently in 2014. The data series also includes banks' claims on other financial institutions, which can include NBFIs. This series included many of the different asset forms that banks used to circumvent regulatory controls, including trust beneficiary rights, directional asset management plans, and investment receivables. As this asset transformation was a key part of the expansion of shadow banking from 2014 to 2016, a measure that incorporates these claims is slightly more accurate, if still incomplete. When asset growth started slowing in late 2017 and 2018, bank assets showed a sharper decline than TSF, largely because TSF did not capture as large a proportion of informal financing activity.

Most of the slowdown in credit growth occurred in the informal banking channels and lending to China's corporate sector. Within banks' assets, these loans were particularly concentrated in banks' claims on third-party financial institutions and NBFIs, which were central to shadow banking activity. Banks' claims on other banks, combined with their claims on NBFIs, shifted from an annual expansion of 9.9 trillion yuan (\$1.5 trillion) in 2015 and 9.0 trillion yuan (\$1.3 trillion) in 2016 to an outright annual contraction of 451 billion yuan in 2017 and a whopping 3.1 trillion yuan (\$449 billion) in 2018. This was the primary reason that overall new bank asset growth slowed from 31.2 trillion yuan (\$4.6 trillion) in 2016 to only 19.3 trillion yuan (\$2.8 trillion) in 2017 and 17.0 trillion yuan (\$2.5 trillion) in 2018. A combined measure of lending to corporations, in addition to corporate bond issuance and shadow banking claims, rose by only 4 percent by early 2018, the lowest rate of growth in history. This same measure had surged by an average of 18.3 percent from 2012 to 2016. As the charts show, these were significant changes in overall credit growth and lending activity across China's economy. Basically, corporate credit growth was cut by more than half, and many borrowers found themselves suddenly cut off from financing.

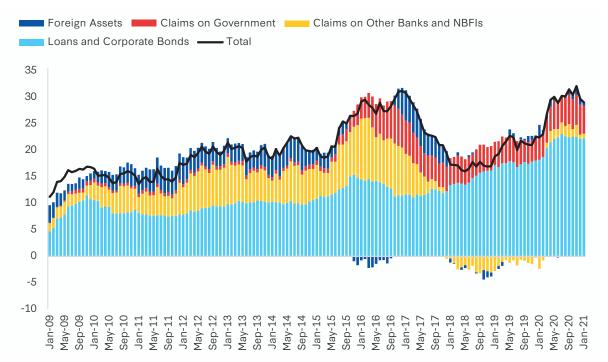
Figure 4.1: Measures of Credit Growth, January 2011-September 2022 Percent, year-over-year



Source: People's Bank of China.

Figure 4.2 shows the changes in the composition of banks' total assets over time. As the deleveraging campaign intensified, some of the channels for shadow banking activity-banks' claims on NBFIs and claims on other banks-shrank considerably, while loan assets increased. Informal banking activity went from being the most important marginal driver of credit growth within the system in 2015-16 to the most significant drag on asset growth by 2018.

Figure 4.2: Annualized Sources of Bank Asset Growth, January 2009-January 2021 Trillion yuan, 12-month rolling sum



Source: People's Bank of China.

Contraction in Non-deposit Liabilities and WMPs

Overall credit growth slowed considerably in 2017 and 2018, in part because funding for shadow banking assets had dried up as short-term money market rates rose and became more volatile. Regulatory pressure on WMPs was generally successful in reducing banks' issuance of these products, which meant that many financial institutions were forced to rely upon more traditional deposits.

As shadow banking expanded from 2012 to 2016, banks saw a steady decline in their reliance upon deposits as a proportion of overall funding (Figure 4.3). This ratio fell sharply from 79.6 percent in 2012 to 71.4 percent in 2017 (with 250 trillion yuan [\$36.8 trillion] in banking system liabilities at the end of 2017, each percentage point represented a 2.5 trillion yuan [\$370 billion] decline in deposits). But as informal financing channels and reliance upon interbank funding shrank, deposits became more important within banks' overall funding, and the ratio rose quickly in 2018, ascending to 74.6 percent in 2021.

Deposits — Deposit/Liability Ratio (RHS) 200 82% 180 80% 160 78% 140 76% 120 100 74% 80 72% 60 70% 40 68% 20

Figure 4.3: Growth of Deposits and Proportion of Overall Bank Liabilities, 2012-2021 Trillion yuan (LHS); Percent (RHS)

Source: Banks' annual reports.

2012

2013

2014

2015

0

Similarly, monetary tightening steps and higher interest rates dramatically reduced the growth and importance of interbank financing in China's money markets. The proportion of interbank liabilities relative to total bank liabilities among surveyed banks remained stable following the introduction of the deleveraging campaign, dropping from a peak of 21.5 percent in 2016.

2016

2017

2018

2019

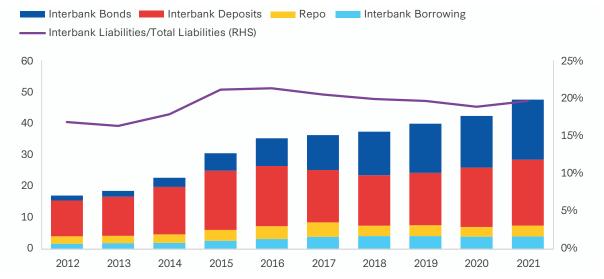
2020

66%

2021

Interbank deposits from other banks, which had been used to allow smaller banks to compete for funding at higher rates, dropped sharply, from 19.2 trillion yuan (\$2.8 trillion) in 2016 to 16.1 trillion yuan (\$2.4 trillion) in 2018. For a while, this financing was replaced by interbank NCDs, which show up in Figure 4.4 as interbank bonds. But the net result of the deleveraging campaign was to freeze interbank financing as a marginal driver of new shadow banking growth within China's financial system.



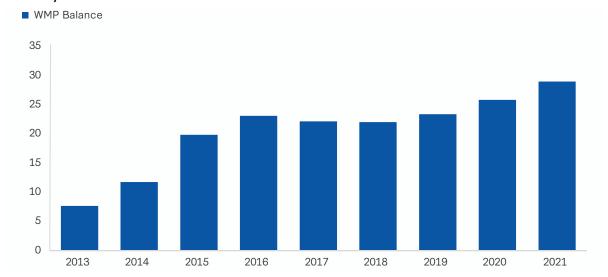


Source: Banks' annual reports.

Similarly, regulatory tightening measures and requirements that WMP investments be marked to market value caused banks to dramatically scale back issuance of new WMPs. The balance of WMPs contracted outright from 23.1 trillion yuan (\$3.4 trillion) in 2016 to 22.0 trillion yuan (\$3.2 trillion) by 2018 (Figure 4.5). Basically, this meant existing WMP funding was being rolled over, but these instruments were not being used as a marginal source of new funding within the financial system.

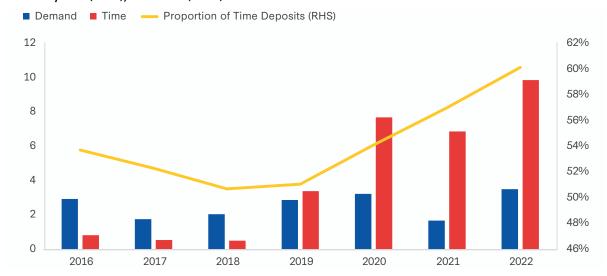
Later, in 2020 and 2021, WMP issuance rebounded again as interbank interest rates declined. But these were primarily cash-type WMPs restricted in the types of assets in which they could invest and still subject to controls under the new asset management rules introduced in 2018.

Figure 4.5: Outstanding Wealth Management Products, 2013-2021 Trillion yuan



Source: Chinawealth.com.cn annual WMP reports.

Figure 4.6: Annual Growth of Household Demand and Time Deposits, 2016-2022 Trillion yuan (LHS); Percent (RHS)



Source: People's Bank of China.

As mentioned previously, many banks attempted to bypass regulatory guidance on WMPs by introducing higher-interest deposits labeled as "structured deposits." These were often used as vehicles for arbitrage, in which low-cost borrowing from the money markets when rates were low could be redeposited into other banks' structured deposits at a profit. As the deleveraging effort continued in 2020 and 2021, regulatory scrutiny of structured deposits increased. As a result, many investors had no choice but to shift savings back into more traditional long-term time deposits, which had seen no significant reduction in interest rates since the deleveraging campaign launched (Figure 4.6). With banks reducing issuance of WMPs and more WMPs bearing losses in investments that investors could see transparently, time deposits became the much safer alternative. As a result, banks started relying upon deposits for a far greater proportion of overall funding starting in 2018.

The overall trend from 2016 to 2019, the most intense period of China's deleveraging campaign, was to reduce reliance upon non-deposit sources of funding such as WMPs. Banks' liabilities became much clearer to regulators and investors and shifted back toward more traditional deposits.

Shadow Banking Assets Migrate Back to Loans

On the asset side of banks' balance sheets, the effect of the deleveraging campaign was similar. With shadow funding instruments contracting, banks needed to move loans back to formal balance sheets. This caused banks to fully account for these loans within capital risk weightings and contributed to slower asset growth as well. As a result, formal bank loans rose consistently as a proportion of surveyed banks' overall assets, from 46.3 percent in 2016 to 55.4 percent in 2021 (Figure 4.7). Once again, the deleveraging campaign's start in 2016 was the critical inflection point in banks' management of their balance sheets.

Loans — Loans/Assets (RHS)

160
140
120
100
80

Figure 4.7: Total Loans and Proportion of Total Bank Assets, 2012–2021 Trillion yuan (LHS); Percent (RHS)

Source: Banks' annual reports.

2012

2013

2014

2015

60

40

20

0

Banks used several different classifications of assets for their channel business in raising funds from depositors and placing them with NBFIs and other shadow banks or asset managers. Some of these included trust

2017

2018

2019

2020

2016

46%

44%

42%

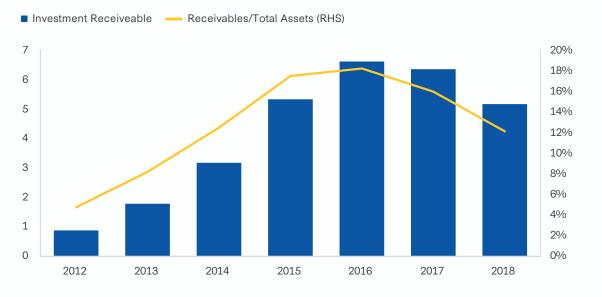
40%

2021

beneficiary rights, in which the bank did not keep the loan on its balance sheet, only a beneficiary right to the interest income. Others included investment receivables and directional asset management plans, in which loans were reclassified as investments or asset management plans. As Figure 4.8 shows, these assets skyrocketed in popularity from 2012 to 2016, rising from 4.8 percent to 18.3 percent of total bank assets. However, the deleveraging campaign dramatically affected the attractiveness of these assets, and they subsequently dropped to 12.2 percent of total assets in only two years.

After the accounting treatment of these assets changed under a new accounting standard labeled International Financial Reporting Standard 9, banks stopped reporting these assets as investment receivables, as they would have needed to account for additional credit losses within these instruments, which explains why the data series stops in 2018.

Figure 4.8: Total Investment Receivables and Proportion of Total Assets, 2012-2018 Trillion yuan (LHS); Percent (RHS) Investment Receiveable — Receivables/Total Assets (RHS)



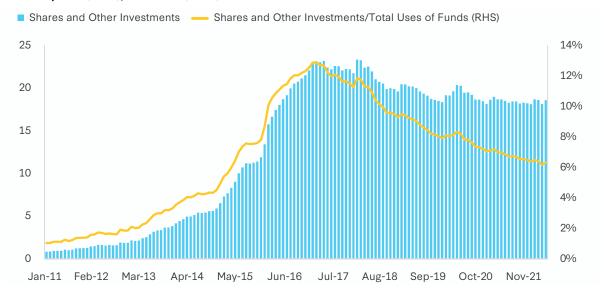
Source: Banks' annual reports.

Within the PBOC's official data, these non-loan assets or other forms of shadow credit were often counted within a category labeled "shares and other investments" for banks, as a category for uses of banks' funds, similar to loans (Figure 4.9). This more comprehensive monthly data series clearly shows the rapid rise of shadow banking channels from 2011 to 2016, when the category of shares and other investments rose by an astonishing 20.8 trillion yuan (around \$3.0 trillion at 2016 exchange rates) and represented a peak of 12.9 percent of the total uses of funds.

The outright peak in this series indicating shadow banking activity was reached in February 2017, after the deleveraging campaign had started. By 2021, these were around half of the peak proportion of banks' uses of funds.

There are also data series available from NBFIs, who were often the final lenders or the agents within the shadow banking system. A combination of data sources from the industry associations linked to these institutions can create a reasonable proxy for the total assets of NBFIs on an annual basis, even if this is likely conservative.³³

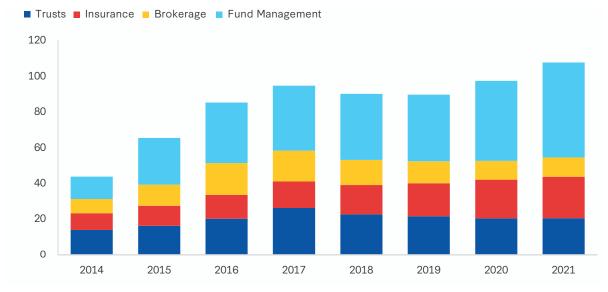
Figure 4.9: Shares and Other Investments within Banks' Uses of Funds, 2011–2022 Trillion yuan (LHS); Percent (RHS)



Source: People's Bank of China.

Total NBFI assets skyrocketed between 2013 and 2016, rising by an estimated 51 trillion yuan (\$7.3 trillion). This is roughly in line with previous estimates of total informal financing growth within formal banks' asset books of 36.7 trillion yuan (\$5.4 trillion) from 2012 to 2016. Most significantly, these assets contracted meaningfully in 2017 and 2018, led by the trust sector, which often lent to property developers and local government financing vehicles (LGFVs) (Figure 4.10).

Figure 4.10: Estimated Total Assets of Nonbank Financial Institutions, 2014–2021 Trillion yuan



Sources: China Trustee Association, CBIRC, CSRC, and Asset Management Association of China; Rhodium Group estimates and calculations.

The regulatory tightening campaign also drove banks and asset managers to change how they allocated funds raised within WMPs. Data from Chinawealth.com.cn, the government website for WMP products, show how WMP assets changed over the course of the deleveraging effort (Figure 4.11). The total proportion of nonstandard credit assets, or those usually associated with shadow banking loans, fell from 27.5 percent in 2013 to only 8.4 percent in 2021. Similarly, the proportion of safer assets, including bonds, continued rising, finally reaching 68.4 percent of WMP assets in 2021. The levels of cash and bank deposits also include interbank bank deposits and placements of funds with other banks, which were regulated more stringently starting in 2017. As a result, the proportion of these assets also declined under the deleveraging campaign.

■ Bond ■ Cash and Bank Deposits ■ Non-standard Credit Assets ■ Equity 100% 80% 60% 40% 20% 0% 2013 2014 2016 2017 2019 2015 2018 2020 2021

Figure 4.11: Estimated Assets Managed within WMPs, 2013-2021 Percent

Source: WMP annual reports from Chinawealth.com.cn.

Overall, the net effect of the deleveraging campaign was to clarify banks' shadow banking exposures, moving more assets back to the formal loan book. Similarly, most measures of informal or shadow banking loans rose very quickly from 2012 to 2016 and, upon the introduction of the deleveraging campaign, began contracting in 2017 and 2018. The net effect was to shine a light on more, but not all, of banks' riskier lending practices.

Differentiation in Credit Growth across Provinces

One of the more important implications of the deleveraging campaign was the way it changed the geographic distribution of economic growth in China and accelerated differences in financial conditions across different provinces and regions. Because some provincial governments had relied upon LGFVs and shadow banking channels more heavily than others, when those channels contracted, some provinces posted considerable slowdowns in overall credit growth. This weakened local government investment within those localities and forced them to rely more heavily upon local government special revenue bonds (SRBs) for fiscal support.

Figure 4.12 shows how regional patterns of credit distribution changed considerably after the introduction of the deleveraging campaign. Before the campaign, from 2014 to 2018, credit growth in northeastern provinces (considered China's rust belt) and western provinces actually outpaced overall credit growth and the loans

extended in eastern and southeastern coastal provinces. By 2018, this pattern of credit distribution changed fundamentally. Since the end of 2018, credit growth across the northeastern and western provinces has averaged only 4 percent, compared to 13 percent in the coastal southeast.

Northeast and West — Central and Interior — Coastal Southeast 18% 16% 14% 12% 10% 8% 6% 4% 2% 0% Q2 Q4 Ω4 Q2 Ω4 Ω2 Ω4 Q2 Ω4 Q2 Ω4 Ω2 Ω4 Ω2 Ω4 Ω2 2014 2015 2015 2016 2016 2017 2017 2018 2018 2019 2019 2020 2020 2022

Figure 4.12: Estimated Credit Growth (TSF) across Regions in China, 2014–2022 Percent, year-over-year

Source: PBOC; Rhodium Group calculations.

Some of this differentiation can be explained by the shift toward mortgage lending within the financial system and the fact that property markets were more vibrant and prices higher in the southeastern coastal provinces, where the population was still growing. But overall, it shows a change in the financial system's willingness to extend credit in riskier regions of the economy, where growth prospects were weaker.

In addition, the slowdown in credit in interior provinces demonstrates how the deleveraging campaign introduced new credit risks into China's financial system, based on the perceived credit quality of the local government involved in guaranteeing or supporting different types of assets. This geographic counterparty risk became more important as more local government state-owned enterprises (SOEs) started to default, which effectively cut off entire provinces from financing.

Defaults Rise Sharply as Credit Risk Emerges

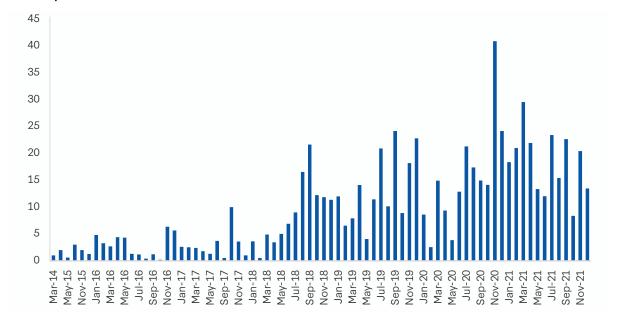
The deleveraging campaign also accelerated the introduction of credit risks and default risks into China's financial system, even though this process was already underway. From 2012 to 2016, China's shadow banking system expanded rapidly because many investors assumed that losses were almost impossible and that, if widespread financial distress became a possibility, Beijing would intervene and calm markets, minimizing losses. Investors and market participants did not need to limit their own risks before 2016 because they could count on the fact that Beijing was concerned about the political effects of financial instability.

The deleveraging campaign broke down the assumption of moral hazard within the financial system in two ways. First, by declaring war against shadow banking institutions, Beijing clearly indicated a changing set of political

preferences in which shadow financing channels were considered riskier. This forced investors to contemplate the possibility that Beijing might not offer concrete support for the riskiest credit channels within the financial system, such as P2P lending networks and trust companies. Once that possibility of default emerged in certain asset classes, the leap to other assets potentially defaulting was much smaller. As a result, investors and markets needed to start considering which informal financial institutions bore credit risk, and they reduced investments accordingly. This helped to accelerate the contraction of the shadow banking sector in general.

Second, by reducing aggregate credit growth, particularly within shadow financing channels, the deleveraging campaign reduced the refinancing possibilities for many types of borrowers, who were suddenly cut off from credit. Even if Beijing had wanted to send alternative political signals that certain borrowers were safe, the reduction in credit growth would have generated additional defaults and credit risk. This was particularly common within China's corporate bond market, where the first sharp rise in defaults took place in the second half of 2018, when overall credit growth declined sharply (Figure 4.13). Defaults on corporate bonds continued in later years and spread to new borrowers, including local government SOEs.

Figure 4.13: Monthly Corporate Bond Defaults, Onshore Market, March 2014-December 2021 Billion yuan



Source: Rhodium Group Corporate Bond Default Database.

In addition, the borrowers who were defaulting were typically from industries serviced by shadow banking institutions, including LGFVs and property developers (Figure 4.14). Defaults were concentrated in the capital goods and materials sectors, along with utilities, in 2018 and 2019. Then, defaults in the property sector became much more common in 2020 and 2021.

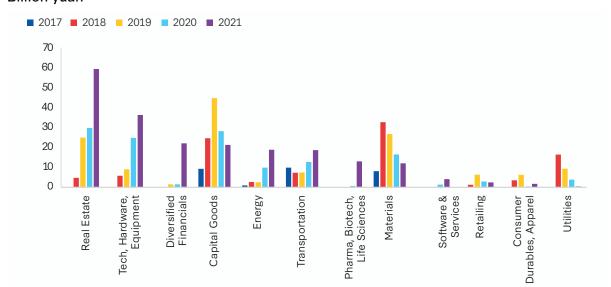


Figure 4.14: Breakdown of Onshore Corporate Bond Defaults by Industry, 2017-2021 Billion yuan

Sources: Rhodium Group Corporate Bond Default Database and implied calculations.

This introduction of credit risk within China's financial system set the stage for the end of China's decade-long credit bubble. Once lenders needed to consider the possibility of default, fewer and fewer asset classes and industries were considered creditworthy. As those industries slowed along with the broader economy, credit demand dried up as well. One of the deleveraging campaign's most significant impacts was the introduction of credit risk in several asset classes, which gradually broke down the widespread assumption of moral hazard and implicit government guarantees across China's financial system.

A Changed Financial System

Over the course of three years, from 2016 to 2018, the deleveraging campaign redirected China's financial system in several ways. Shadow banking channels contracted, which forced banks to search for more stable deposit funding. Loans that could no longer be funded by shadow banking institutions and banks' channel business migrated back to the formal loan book. This had the effect of increasing transparency within China's banking system and improved the overall stability of the funding base for banks. The contraction in shadow banking channels caused the overall pace of credit growth to slow significantly, by far more than Beijing had intended. In part this was because the actual size of the shadow banking system had been obscured from regulators' view.

Furthermore, the deleveraging campaign introduced new changes in the patterns of credit distribution within China. Certain localities in China's northeastern and western provinces were hit much harder than others from the slowdown in credit growth, while coastal southeastern provinces retained their access to credit. Defaults became far more probable in riskier financial assets and started spreading to corporate bonds and SOEs as well. Smaller banks, such as Baoshang Bank and the Bank of Jinzhou, defaulted based on their exposure to riskier forms of lending concentrated within certain localities. Banks started to differentiate lending patterns across localities and across asset classes as credit risk became much more acute relative to a baseline in which almost all assets were assumed to be guaranteed and losses were improbable. This redirection of China's financial system had meaningful effects on the real economy as well.

Deleveraging and China's Economy

iven the deleveraging campaign's impact on China's financial system, the real economy was bound to feel its effects. Beijing's bargain and hope was that deleveraging could simply "skim the froth" of the speculative activity within China's financial markets without affecting borrowers in the broader economy. But cutting credit growth roughly in half meant that many borrowers suddenly found themselves cut off from financing and needing to scramble for alternative options.

The effects of the deleveraging campaign on China's economy, starting around 2018 and continuing in the following years, can be summarized as follows:

Economic growth slowed by a larger margin than Beijing had anticipated. The broader objective to limit financial risks without squeezing the real economy was generally unsuccessful. Shadow banks were funding real borrowers in China's economy as well as financial speculation. While headline GDP growth barely moved during the deleveraging campaign, most indicators of industrial output contracted outright in the second half of 2018.

The property bubble reinflated because credit was reallocated to mortgage loans for households, which used credit to buy houses before they were constructed. The deleveraging campaign encouraged banks to seek out borrowers willing to pay higher interest rates, which were primarily home buyers taking out mortgage loans. As property developers were forced to repay shadow banking debt, they often used preconstruction housing sales to do so, replacing borrowing from shadow banks with borrowing from leveraged home buyers. This transition explains the continued growth of China's property bubble and developers' financing shortfalls, which made them unable to complete houses sold in 2021 and 2022.

China's private sector was affected most by the decline in overall credit, reducing business investment. Overall credit growth slowed significantly in 2017 and 2018, largely because of the slowdown in shadow

banking channels. As loans to China's corporate sector contracted, state-owned enterprises (SOEs) largely preserved their access to financing, while private sector firms were squeezed disproportionately, reducing the overall efficiency of investment in the economy.

Inflation dropped meaningfully as corporate credit slowed, and low- and middle-income households lost access to financing from shadow banks, reducing consumer spending. Ever since the deleveraging campaign started to impact shadow financing channels, China's core consumer price inflation has remained below 1 percent, indicating the slowdown in consumer credit growth caused by the collapse of peer-to-peer (P2P) lending networks and other informal financial channels.

Fiscal strains within China's local governments increased significantly, requiring more assistance from Beijing. The pressure on local governments to repay implicit debt, along with the decline in the property market, significantly weakened localities' capacity to repay their obligations. New fiscal tools such as local government special revenue bonds (SRBs) became necessary to maintain infrastructure investment.

A Credit-Induced Slowdown in Output and Investment

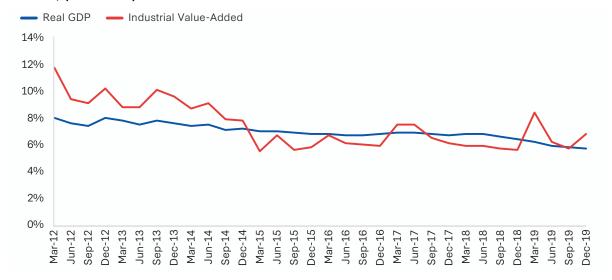
The deleveraging campaign caused overall credit growth to slow from 15.7 percent in 2015 and 2016 to only 8.4 percent in 2017 and 6.8 percent in 2018 (measured via bank assets). This basically meant that credit growth was cut in half in a very short timeframe. For corporate borrowers, the squeeze was even more extreme, as some new lending was also being redirected to China's households. Many borrowers, unable to refinance, were forced to make difficult choices about reducing output and investment or financing investment out of profit or operating cash flows. Many state-owned corporations and local government financing vehicles (LGFVs), however, engaged in quasi-fiscal investments that had very weak operating cash flows and profitability. They depended on new credit to maintain activity. As a result, when credit growth slowed, the overall pace of output growth slowed as well.

Much of the slowdown in output growth in 2018 was readily apparent in some Chinese data series but not others (Figure 5.1). Headline GDP growth is notoriously "smoothed" in China, and over the course of 2018, this measure barely slowed at all, from 6.9 percent growth in the first quarter to 6.5 percent growth in the fourth quarter. GDP growth rates in China over the four-year period from 2015 to 2018 were the smoothest of any major economy in at least 30-40 years (given data availability questions), never moving outside a range of 6.5-7.1 percent growth. Industrial value-added growth in China, an indicator of real output and an input into official GDP calculations, was only slightly more volatile, falling from 7.0 percent growth in April 2018 to 5.4 percent growth in November.

Other subcomponents, however, pointed to a much more severe slump. Auto sales had shown a 16 percent decline by November and December. Output of major household durables and white goods such as refrigerators and washing machines started to contract in late 2018, along with other consumer goods. Property developers started to slow construction of houses they had already sold in order to retain cash, and house completions declined by 8 percent in 2018.

Figure 5.1: Real GDP and Industrial Value-Added Growth in China, March 2013-December 2019

Percent, year-over-year



Source: National Bureau of Statistics.

In order to look at a broader measure of industrial output, the Rhodium China Activity Tracker (R-CAT) takes a weighted average of unit-level monthly output of all 103 industrial output series released by the National Bureau of Statistics (Figure 5.2). The indicators are then seasonally adjusted and weighted based on proxies for their importance within the economy, using revenue of major enterprises and tax revenues. The net result showed that aggregate weighted industrial output had fallen by 6-7 percent year over year in the third quarter of 2018, with the most significant declines occurring in output of consumer goods. These were the largest declines in overall output until the Covid-19 pandemic hit in early 2020.

Figure 5.2: Rhodium China Activity Tracker (R-CAT) and Industry Subindicators, November 2013-November 2018

Index of three-month moving average year-over-year change; previous year = 100



Source: National Bureau of Statistics; Rhodium Group calculations.

Other indicators of aggregate economic activity showed similar declines. An alternative measure used by the U.S. Federal Reserve in evaluating the effects of a changing credit impulse on China's economy similarly showed a meaningful cyclical downturn in 2018.34 This was also consistent with the People's Bank of China (PBOC) 's shift toward monetary easing at the time. Overall, official Chinese data tend to smooth out the impact of the business cycle, but a variety of alternative indicators point to the importance of cyclical trends, particularly in 2018. The deleveraging campaign had a meaningful effect on economic momentum in China, even if the intention of the campaign was simply to limit speculative activity in financial markets.

Reinflating the Property Bubble

Property development has always been an industry heavily dependent upon credit growth. Yet when credit growth slowed sharply during the deleveraging campaign, the property sector grew, and the housing bubble became even larger, both in terms of new construction and prices. This was one of the most surprising consequences of the campaign itself. Property developers replaced financing from shadow banks with financing from leveraged home buyers in the form of housing purchases made before construction was complete. The effects of the deleveraging campaign also created the conditions for the more significant collapse of China's housing market in 2021 and 2022. The developers that defaulted first in 2021 and 2022 were generally those that were most aggressive in leveraging up in 2017 and 2018, when the property sector was under pressure from the contracting shadow banking sector.

China's residential housing market rapidly developed in the 2000s, mostly involving new construction from developers, while secondary market sales were slower to take off. Prices rose considerably as China's urbanization rates and household incomes surged over the decade along with economic growth. Developers were incentivized to borrow aggressively and expand quickly, which involved bidding up prices for land. Setbacks in the housing market in 2008, 2011, and 2014 were very short-lived, and expectations for continued price growth remained strong.

One consequence of this history of rapid price growth was that developers could typically find buyers easily and could impose additional requirements on Chinese home buyers that other markets likely would not have been able to bear. As a result, developers were often able to collect 100 percent of the purchase price of homes based on floor plans alone after initially breaking ground on land. Home buyers would even start paying mortgages on properties they had not yet received. Developers increasingly came to rely on preconstruction sales of housing as a source of revenue. This was possible because home buyers believed housing values would generally rise, so they were less concerned about when exactly their final properties would be delivered.

The deleveraging campaign initially squeezed property developers' financial conditions by restricting shadow financing channels. Property developers were among the largest borrowers from several types of nonbank financial institutions (NBFIs), particularly trust companies. When those channels of lending evaporated in 2017 and 2018, many property developers needed to preserve cash. Yu Liang, the head of Vanke, China's largest real estate developer at the time, said the real estate market was at a "turning point" and emphasized that his goal for the company in 2018 was that it "survives." 35 Other large developers, such as Evergrande, were far less cautious in 2018 and continued to borrow aggressively and acquire land.

Property developers changed their business model in two ways in order to ensure survival. First, they slowed construction on houses already in progress. This reduced immediate costs and outlays for these firms but also weakened China's commodity demand and slowed the economy more broadly. This was partially responsible

for the decline in consumer durables and white goods in 2018 because fewer houses were being completed, so people did not need as many appliances to fill their homes. Similarly, auto sales slowed, as these were typically correlated with property sales.

Figure 5.3: Growth in Property Sales, Starts, Completions, and Sales of Existing Houses, 2016-2022

Percent, year-over-year three-month moving average



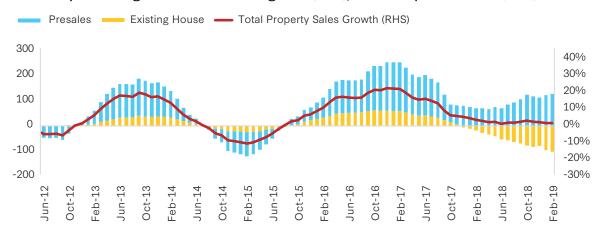
Source: National Bureau of Statistics.

Second, developers started relying upon preconstruction sales to generate additional revenues. This was very attractive to home builders because their cash outlays to prepare projects for sale were extremely limited, but then developers were obligated to eventually complete these units. As a result, throughout the deleveraging campaign, a strange divergence occurred in China's housing market. New starts surged, rising by 20 percent in 2018, but sales of completed houses plummeted, declining by 26 percent in terms of floor space during the year (Figure 5.3). While total sales were weakening in 2017 and 2018, sales of preconstructed houses were still rising by 10 percent in 2018 in terms of floor space and an astonishing 22 percent in terms of revenue (Figure 5.4).

Essentially, developers had shifted one form of credit to another, from borrowing from shadow lenders to borrowing from home buyers. Now they were responsible for delivering rising numbers of homes. This process also introduced some Ponzi-type elements of financing into China's property sector, as the rush to raise money from presales was likely necessary because shadow banking loans were being called in. These loans were often high-interest, and many developers may have been pledging revenues for future home construction in order to repay legacy debt to shadow banks. In most markets, these proceeds for future construction were placed in escrow accounts, so there was little chance that home buyers could face defaults. However, as discovered when the housing market imploded in 2021 and 2022, the regulatory structure for China's housing market was lax in enforcement, particularly among local governments, which had incentives to encourage property developers to expand aggressively.

Figure 5.4: Developer Sales of Presold Units and Existing/Completed Units, June 2012-February 2019

Year-over-year change in 12-month rolling sum (LHS); Million square meters (RHS)

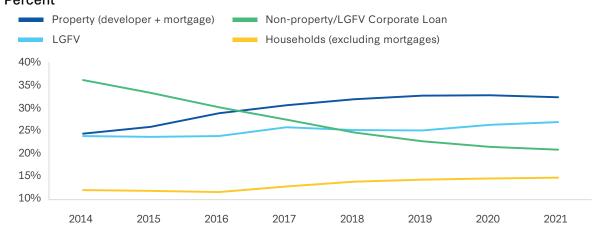


Source: National Bureau of Statistics.

The deleveraging campaign also redirected more lending to home buyers in the form of mortgage loans. Banks wanted to extend loans to higher-interest borrowers, which were suddenly scarce because of the crackdown on shadow banking. A survey of banks' results showed that the proportion of property-related lending, including mortgages and loans to developers, rose to 33 percent in 2018 from 24 percent in 2014 (Figure 5.5). This was contrary to the objectives of the broader deleveraging campaign to reduce systemic risks.

Because housing prices were still rising, many home buyers were still willing to borrow in anticipation of further price appreciation. Total new household loans reached 7.3 trillion yuan in 2018 (\$1.1 trillion), almost matching total corporate lending of 8.3 trillion yuan (\$1.2 trillion). The pace of mortgage lending slowed in later years, but loans to households stayed in the same range of 6 to 8 trillion yuan per year from 2019 to 2021. This was an enormous volume of fuel for speculation in China's housing market.

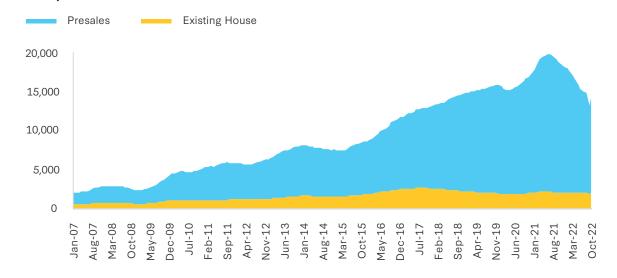
Figure 5.5: Proportions of Bank Loans to Different Sectors, 2014-2021 Percent



Source: Banks' annual reports.

As a result, China saw one form of housing bubble—an excess of construction—replaced with another, a credit bubble from households to developers based on the promises of future construction. From the end of 2015 to June 2021, the total annual volume of presales revenues for developers nearly tripled, from 5.8 trillion yuan (\$850 billion) to a peak of 16.3 trillion yuan (\$2.4 trillion) (Figure 5.6). This credit expansion intensified during the deleveraging campaign, and its reversal created the credit crunch that would produce the spectacular collapse of China's housing market in 2021 and 2022.

Figure 5.6: Annual Revenues from Completed Houses, Presales, January 2007-October 2022 Billion yuan



Source: National Bureau of Statistics.

The Private Sector Is Squeezed

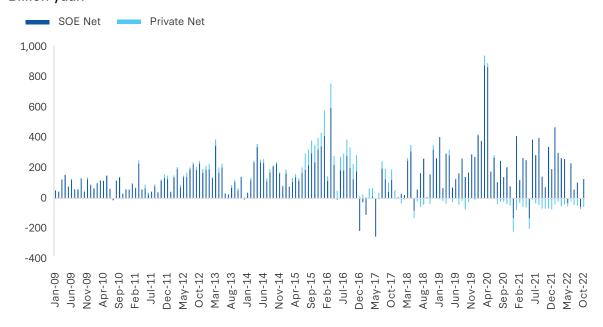
China's private sector has always faced difficulties in borrowing from the formal banking system. Loan officers in China have typically extended loans based on either government guarantees to SOEs or based on collateral. Private firms do not boast direct government support and typically have weaker asset bases. As a result, when they access credit from China's banks, they typically pay higher interest rates, sometimes by paying fees to credit guarantee companies or by seeking other forms of credit enhancement. In turn, these firms are typically far more efficient in generating returns relative to SOEs, so they are capable of paying higher interest rates. The other consequence is that lending to the private sector tends to be shorter term, usually involving loans for working capital rather than project-based lending for investment.

When the deleveraging campaign reduced overall corporate credit growth, mechanically this had a disproportionate impact on China's private sector. Beijing's approach to encouraging the private sector has ebbed and flowed over the years, with the common phrase guo jin min tui ("the state advances and the private sector retreats") frequently used to describe conditions for private firms in the 2010s. When overall credit growth slows, state-owned firms typically maintain access to the banking system because of their political ties. The debt servicing needs of these firms have continued to rise as the volume of debt has expanded and interest costs have risen. As a result, the squeeze in overall lending in 2017 and 2018 tended to reduce credit to the private sector to a greater extent than credit to state-owned firms.

As banks lost access to financing, they needed to make more difficult choices in extending new loans, which usually meant private-sector firms lost access to working capital loans. Xu Gao, then with Everbright Securities, commented on this trend in 2019: "In an environment where credit is tightening, financing constraints of private enterprises are tightened even more, which makes the operating conditions of private enterprises worse than those of SOEs. This in turn strengthens risk aversion of financial institutions toward private enterprises, further tightening financing conditions for private firms."

After years of abundant financing from 2014 to 2017, net corporate bond issuance by private enterprises was negative most of the time after 2018 while SOEs' net bond issuance remained at high levels (Figure 5.7). This resulted in a clear slowdown in industrial output of these firms, new investment, and job growth, given that private firms are responsible for around 80 percent of China's overall urban employment.³⁷

Figure 5.7: Net Corporate Bond Issuance by State-Owned and Private Firms, January 2009-October 2022
Billion yuan



Source: WIND.

The introduction of new credit risks was also problematic for private firms. As banks started to face defaults and losses on lending through NBFIs and third-party financial institutions, loan officers concerned about credit risk naturally pared back lending to the private sector. P2P lending networks were highly speculative but were involved in lending to smaller firms, even at high interest rates. The defaults and implosions of these platforms reversed some of private firms' gains in access to financing.

For the private sector, the broader slowdown in credit growth was a painful process because credit expansions do not necessarily benefit the private sector as much as credit crunches hurt private firms. Typically, countercyclical monetary policies involve incentivizing new investment projects through credit to state-owned firms and local governments. Eventually, there are spillover effects into the business environment for the private sector, but this requires time for the broader economy to improve.

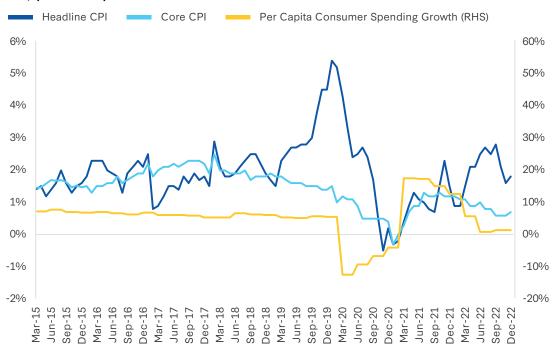
The deleveraging campaign and the corresponding structural slowdown in credit growth have created a much more restrictive financing environment for China's private firms relative to the years of rapid credit expansion from 2009 to 2016. This will naturally reduce the overall efficiency of China's financial system and reduce the productivity of new investment in China's economy, weakening overall economic growth over the next decade, unless more significant structural reforms reverse this pattern.

Downshift in Inflationary Pressures

Just as private sector firms were cut off from credit as some financing channels contracted under deleveraging, China's low- and middle-income consumers were similarly squeezed. Mortgage lending expanded significantly under the deleveraging campaign and fueled additional property sales, as previously discussed. But the collapse of P2P lenders and other shadow financing channels ended up closing some channels for household borrowing that had recently opened for lower-income households. Higher household borrowing to repay mortgage debt, in combination with reduced access to overall credit, ended up constraining household consumption growth in China following deleveraging. As a result, China has yet to see any meaningful consumer inflationary pressure since the deleveraging campaign, with core consumer price index (CPI) growth (excluding food and energy prices) trending downward consistently since 2018 and staying roughly around 1 percent for the past five years (Figure 5.8).

Figure 5.8: Measures of China's CPI, Core CPI, and Per Capita Consumer Spending, March 2015-December 2022





Source: National Bureau of Statistics.

Even when credit was expanding strongly in China from 2012 to 2016, the economy saw no meaningful inflationary pressures. Household income as a proportion of China's economy remains extremely low, around 55 percent of GDP, in part because of the structure of China's growth model.38 For years, low wages or household incomes

were necessary to improve the competitiveness of China's exports and to reduce barriers to new investment. The limitations on income have similarly constrained a rise in household consumption and consumer prices.

The only rise in CPI above 3 percent in recent years has been the consequence of a significant disease in China's hog population, which ended up severely limiting pork supply and pushing up prices temporarily. In part, low inflation also results from most new credit in China's financial system being channeled to producers, even when demand weakens. The net result of this process, even during the years of strong credit growth from 2012 to 2016, was persistent deflationary pressure in producer prices as output continued expanding, with no strong pickup in consumer prices. The property market's rebound in 2016 and 2017 generated some additional producer price pressure, along with the rise in commodity prices in 2021. But there has been no meaningful rise in consumer prices in China, indicating ongoing limitations on household income growth. The deleveraging campaign indirectly reinforced these processes, weakening consumers' access to credit and introducing new caution concerning the broader economic outlook. This has reduced overall inflationary pressures within China's economy, as evidenced by the sustained slowdown in core CPI growth since 2018.

Fiscal Pressures on Local Governments

One of the most significant impacts of the deleveraging campaign in China's economy was its effect on local government fiscal conditions. Deleveraging pressured some of localities' revenue channels directly but also compounded their problems in managing a rising debt burden. As a result, many local governments struggled to maintain infrastructure investment growth following the deleveraging campaign, and overall infrastructure spending has downshifted considerably since 2018.

Deleveraging placed new pressure on property developers' finances, which ended up meaningfully reducing their capacity to buy new land from local governments. Instead, developers were more eager to start projects from their existing land banks. As a result, growth in land sales slowed sharply in 2018 and 2019. Given that developers typically have a year to make payments to local governments for land parcels, the effect of this slowdown in land purchases lagged over a year.

Furthermore, the deleveraging campaign added to localities' difficulties in managing debt. Many local governments had relied heavily upon LGFVs and shadow banking activity to fund investment. With those channels contracting, localities were forced to reduce new infrastructure investment but still needed to manage the legacy debt, which was more difficult to refinance and required spending from general government funds. In addition, part of the deleveraging effort included pressure on local governments to pay down implicit debt over a period of three to five years. Local governments needed to start considering other options such as selling state assets or privatization. Managing debt became a far more urgent priority as overall credit growth declined.

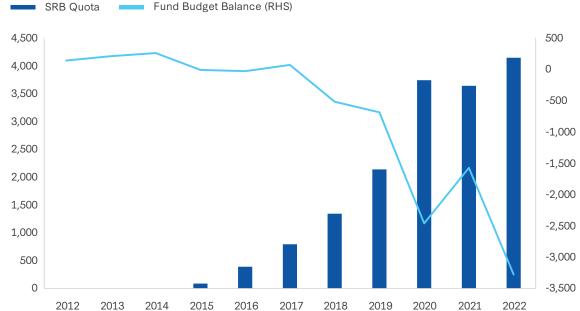
Defaults among local government SOEs became more common as a result of these pressures, even before the downturn in China's property market. When the Henan provincial government reorganized the priorities of Yongcheng Coal, shifting funds that were allocated to repay bond investors toward other uses, the resulting November 2020 default on the bonds forced markets to consider localities as a source of risk for the first time rather than think about local government guarantees as a bulwark of stability. After Yongcheng Coal's default, concerns about local government actions prevented any other firm from Henan province from issuing debt in China's corporate bond market for over a month.

The pressure on local government fiscal conditions has primarily been revealed through weaker infrastructure spending. Infrastructure investment growth as measured via fixed asset investment grew by only 3.8 percent

in 2018 and 2019, 0.9 percent in 2020, and 0.4 percent in 2021, before rebounding in 2022. Local governments' deteriorating fiscal balances and declining land sales revenues forced them to become more reliant upon a new channel for government borrowing: local government SRBs. In 2015, local governments reported a deficit in their fund budget for the first time (Figure 5.9). This fund budget consists of land sales revenues and spending categories that include the costs of redeveloping land for sale, as well as other categories of expenses separate from official budgetary spending. SRBs were first introduced to provide financing for the deficit in the fund budget, and issuance quickly expanded in the years ahead as deficits ballooned. Technically, these bonds are designed to fund only infrastructure projects and are not supposed to be used for general fiscal spending. But a significant proportion of the bonds issued from 2018 to 2022, usually around 20-30 percent, has been used for refinancing existing local government debt burdens. The Ministry of Finance imposes restrictions on the types of projects that must be funded with these SRBs so they do not add to implicit debts of localities. Because fewer projects met those criteria, the ministry was forced to relax some of these restrictions in early 2022, with infrastructure investment growth still under pressure.

Figure 5.9: Local Government Special Revenue Bond Issuance, Balance of Fund Budget, 2012-2022





Source: Ministry of Finance.

The Deleveraging Campaign and China's Economy

The deleveraging campaign's changes in the financial system extended to China's real economy. The broader slowdown in credit clearly affected economic growth and squeezed private sector borrowing channels. The pressure on local governments' implicit debts weakened local fiscal conditions and reduced infrastructure investment growth. Controls on consumer credit and employment prospects also reduced overall inflationary pressure in the economy. All of these effects were generally expected given the reliance of China's economy on credit and investment.

One of the most surprising and unexpected developments, however, was that the deleveraging campaign ended up inflating China's property market bubble further by replacing one form of borrowing from shadow banks with a larger channel of borrowing from households. As a result, the campaign ended up meaningfully amplifying one of the most important systemic risks in China's economy and financial system. This risk started materializing in the summer of 2021 and into 2022 as property construction and sales plummeted, meaningfully weakening economic growth. The consequences for the financial system are still emerging, and it can be argued that the property bubble would have burst or deflated anyway, regardless of Beijing's actions. But both the expected and unanticipated implications are necessary to make a broader assessment of China's deleveraging campaign, based on Beijing's original objectives and the actual impact on China's longer-term economic trajectory.

Assessing China's Deleveraging Campaign

he current slowdown in China's property sector and the emergence of local government fiscal risks raise the question of how to assess the costs and benefits of the deleveraging campaign more broadly. The campaign contained some specific financial risks on the funding side of banks' balance sheets while catalyzing new credit risks on the asset side. The balance is meaningful, and this chapter's assessment of the deleveraging campaign's successes and failures is based on the criteria that Beijing established for reducing systemic risk.

Credit, Moral Hazard, and China's Economic Growth

The core question of the deleveraging campaign's effectiveness concerns China's growth model, particularly since the 2007-08 global financial crisis. One view holds that China's rapid credit growth and expansion of debt and investment via the shadow banking system were mistakes, abetted at times by policy decisions which contributed to speculative froth in multiple asset markets. After Beijing contained those risks and curtailed the role of the shadow banking system, economic growth should have reverted to a more sustainable pace. In this view, deleveraging was an important corrective to restore China's economy to a more stable footing and eliminate important risks within the financial system. In addition, deleveraging was necessary to reduce borrowing costs for companies engaged in real investment rather than speculative ventures by controlling the growth of shadow banks.

An alternative view, however, is that credit and investment growth, encouraged by widespread moral hazard throughout the financial system, was intrinsic to China's economic expansion since the global financial crisis. By taking strong steps to limit credit growth, including within the shadow banking system, the deleveraging campaign was also likely to bring China's postcrisis economic expansion to an end, pointing to much weaker growth in the future. This view points to the importance of the property sector in driving China's growth since 2008, despite Beijing's efforts to control the growth of the industry. Excessive property investment may have been unintended,

but it was also one of the most important industries in China's economy. In this view, there was little speculative froth in China's credit expansion; the entire pattern of investment growth that resulted was unsustainable.

With China's economy now under considerable pressure from the property market's decline, the debate between these two interpretations has become far more relevant. If the financial system continues to grow at a slower pace, acting as a constraint on new investment rather than enabling economic expansion, how fast can China's economy reasonably be expected to grow? If the property sector continues to contract, what sort of limit does this place on China's future economic expansion? What proportion of China's economic growth over the past decade has been structural, and what proportion has been the by-product of an unprecedented credit expansion?

The deleveraging campaign has facilitated new forms of credit risk, which will limit the future expansion of China's financial system. Moral hazard is no longer widespread across China's financial system, even if there is still some degree of confidence that the government will intervene to prevent financial contagion. Ever since the deleveraging campaign, risky assets, starting with peer-to-peer (P2P) lending networks, began defaulting in larger numbers, and eventually, even assets considered safer, such as smaller banks, bonds from large property developers, and local government state-owned enterprises (SOEs), were taking on losses. This reduced lenders' willingness to extend new credit to larger and larger areas of China's financial system.

Because the financial system has already expanded so rapidly, now holding 377 trillion yuan (\$55.4 trillion) in assets or over half of global GDP, previous rates of credit growth above 15 percent are not possible, as this would involve credit growth totaling around half of China's economic output every year, well above even the 2009 pace of new lending immediately after the global financial crisis. Credit growth will slow in the future, and GDP growth will likely slow along with it. The question is how steep the decline will be, which depends upon what other asset classes will begin to default and therefore trigger additional market concerns about credit risk.

One of the primary concerns is that local government financing vehicles (LGFVs), which have already defaulted on shadow banking instruments, will start to default on their publicly traded bonds. This would create new credit risk in around 40 percent of China's 33 trillion yuan (\$4.8 trillion) corporate bond market and would also likely reduce a significant source of credit demand for smaller banks. It would also significantly reduce local government infrastructure investment, which has been almost as large a driver of investment growth as the property sector.

There is far more evidence that contraction in the shadow banking system has limited credit to real borrowers, not just speculative froth. As a result, as credit growth has slowed following the deleveraging campaign, China's economic growth will appear different in the future. Marginal returns to new investment via property and local government infrastructure will not be the same as in the past, given declining credit availability. Growth will be powered by different drivers, including household consumption. Based on the economy's performance since 2018, it will also be slower overall. The question in evaluating the deleveraging campaign becomes whether the medicine that Beijing applied was effective in treating the disease of speculative activity in the shadow banking system or whether it left the economy unable to continue sustainable economic expansion in the future.

Analyses of the Deleveraging Campaign

Since the campaign intensified in 2018, Beijing's deleveraging efforts have seldom been discussed in their entirety as a multiyear policy effort using a combination of monetary and regulatory tightening measures. Usually, the campaign is mentioned in the China economics literature as a series of stand-alone actions targeting specific types of shadow banking transactions and institutions. In general, available published analyses make four types of arguments about the campaign's effectiveness.

The first emphasizes the deleveraging campaign's success as a proactive measure to eliminate an emerging systemic financial risk in 2016. As a result, the campaign is a demonstration of Chinese authorities' effectiveness and adaptability in response to systemic challenges. Tom Orlik's The Bubble That Never Pops features an entire chapter on the deleveraging campaign called "Deleveraging without Self-Detonating," which generally describes the effort favorably. Orlik argues, "A year and a half into the deleveraging campaign, China's policymakers had achieved faster growth, a steady debt-to-GDP ratio, and a shrinking shadow banking sector."39 Orlik credits "the underlying resilience of the economy and financial system, the underappreciated ingenuity of policymakers, and the unusual resources of an authoritarian state" as responsible for deleveraging's effectiveness. 40 As a result, he argues that because shadow financing activity was mostly funding speculation in China's financial markets rather than borrowing in the real economy, the effect of deleveraging on overall economic growth was marginal.

China's public accounting of the deleveraging campaign's successes was similar in tone. The China Banking and Insurance Regulatory Commission (CBIRC) issued a public working paper in December 2020 discussing the broader effort to control financial risks and summarized the results as follows: "Not only has the scale of shadow banking been greatly reduced, but more importantly, operations have become more standardized, structures have been simplified . . . and systemic risks and hidden dangers have been curtailed." Furthermore, the CBIRC's assessment claimed that the deleveraging campaign had also reduced international criticism of China's financial management: "After 2017, international assessments have completely changed, and now affirm the remarkable achievements of China's governance of shadow banking, not only ensuring the stability of China's financial system, but also becoming the driving force for the decline in global shadow banking."42

The second set of arguments discussing the deleveraging campaign usually comes from Chinese analysts and claims that deleveraging was overdone or excessive. These analysts flag the government's need to relax some of the controls on shadow banking activity by the end of 2018 and push back against the extreme tightening of credit conditions, particularly for local government or the private sector.⁴³ Shadow banking activity, in these arguments, was still essential for powering the economy, specifically for local governments. Some analysts with this line of reasoning argued that China's previous accumulation of debt was not excessive and was simply a by-product of China's growth model. Consistent with most of these accounts, Beijing started to relax its campaign to control local governments' implicit debt levels by the end of 2018, allowing localities and LGFVs to roll over some of their own borrowing. Official local government infrastructure investment growth had plummeted from 19 percent in 2017 to 3.8 percent in 2018, triggering an adjustment from Beijing.

One example of this line of argument came from People's Bank of China (PBOC) officials, including former research director Xu Zhong, who criticized a one-size-fits-all deleveraging process. Xu wrote in a 2019 Caixin commentary, "Cleaning up local debts has been done too hastily starting last year, and the downward pressure on the economy has led to declining local government assets, making local governments face increased risks and uncertainties."44 Xu Gao from Everbright Securities made a similar argument in February 2019, claiming that the unintended effect of deleveraging was actually contrary to the policy's original intention, boosting leverage ratios among private enterprises and tightening credit conditions among these firms through a rise in borrowing costs.⁴⁵ The National Finance and Development Laboratory, a research institution under the Chinese Academy of Social Sciences, argued that deleveraging corporate balance sheets contributed to balance sheet recession risks, as reduction of overall debt levels reduced prospects for new investment. 46 The 2021 report argues, "China's macro leverage ratio has declined for three consecutive quarters. However, problems such as the slowing recovery of the real economy, ongoing enterprise deleveraging, and rising risks of defaults among urban investment companies may still bring hidden worries to the Chinese economy."47

The third category of assessments generally makes the argument that deleveraging has not achieved very much at all, simply because it has not actually occurred. These analysts focus on the fact that China's credit growth in headline terms continued expanding faster than GDP, and there was still considerable speculative activity in China's economy underway, despite the crackdown on shadow banking activity. For the analysts in the "deleveraging did not happen" camp, business as usual continued within China's economy and financial system, and the deleveraging campaign was ineffective despite Beijing's high-profile attention to the subject, indicating broader policy failures. Leland Miller of China Beige Book, for example, has argued extensively that the shadow financing crackdown did not have meaningful impact on overall borrowing via informal channels in China's financial system and that available data showed "no sign of retrenchment of either overall credit provision or shadow finance specifically" by the start of 2020.48 Christopher Balding made a similar case in early 2018, arguing, "Much of the financial deleveraging that has taken place has simply moved into other instruments."

A fourth set of assessments is more balanced and typically retrospective in nature. Written in 2021 or 2022 rather than at the height of the deleveraging campaign in 2018, these explanations essentially argue that the campaign had some modest accomplishments in managing shadow banking risks or controlling the rise of debt-to-GDP ratios but left other problems within the financial system unaddressed. For example, Shuli Ren of Bloomberg wrote in late 2022 that the deleveraging campaign had on balance reduced financial risks in China and made it "a much safer place to put your money," even while acknowledging the rising leverage among LGFVs and problems in managing the fallout within the property sector. ⁵⁰ Hung Tran, formerly of the International Monetary Fund, similarly argued that deleveraging is a necessary process that Beijing is managing to reduce the economy's reliance upon credit, even if it will produce much slower economic growth in the future. ⁵¹

Evaluating the Deleveraging Campaign on Beijing's Terms

While there are multiple arguments about the balance of costs and benefits from the deleveraging campaign, the assessment that is probably most important concerns Beijing's priorities. Financial and economic analysts may have their own views, but Beijing had clear reasons for launching the deleveraging campaign, as outlined in Chapter 2. Beijing's primary objectives were to eliminate the political risks that had emerged from the rapid growth of the shadow banking sector and authorities' inability to control the financial system. Specifically, Beijing attempted to control the rising pace of credit growth and debt-to-GDP ratios, eliminate systemic risks from the shadow banking system and wealth management products (WMPs), reduce the pressures on the economy and fiscal system from local government debt, and reduce debt levels and burdens among SOEs. The section below evaluates the progress of the deleveraging campaign with reference to these specific objectives.

Slowing the Pace of Credit Growth and Limiting the Rise in Debt-to-GDP Ratios: By this overarching metric, the deleveraging campaign was successful. Credit growth, as mentioned in Chapters 4 and 5, was cut roughly in half under pressure from both monetary and regulatory tightening steps. Estimated credit-to-GDP ratios, using a weighted average measure of adjusted total social financing (TSF) growth and bank asset growth, rose from 172 percent in 2008 to 261 percent at the end of 2016. By 2018, that ratio had declined to 250 percent. It continued to rise in 2020 after the Covid-19 pandemic slowed GDP growth and required emergency lending, but this was unrelated to previous efforts to control financial risks. At the start of the deleveraging campaign, the overriding question was whether or not Beijing would have the stomach to actually slow credit growth and expose Chinese companies and financial institutions to credit risks.

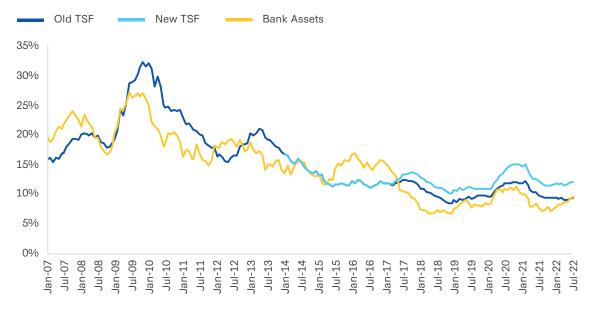
Clearly, at least some financial technocrats were willing to countenance those risks, even as they arrived in 2018. However, it was not easy to maintain political support for the slowdown in credit growth. Even though

China's top leadership had mandated deleveraging and reducing financial risks, few SOEs or local governments were willing to have their access to financing cut down. The deleveraging campaign limited shadow financing channels, which were generally larger than Beijing had anticipated. As a result, many of the borrowers from shadow banks-property developers, local governments, and their LGFVs-would have been the primary political opponents of the campaign. But shadow banks had limited direct political support. It was difficult for anyone in the Chinese system to argue that financial institutions should extend large volumes of credit outside of Beijing's regulatory oversight. As a result, local governments and property developers were not very effective in pushing back against the newfound regulatory scrutiny.

SOEs were different, though, as banks started to redirect credit toward households and away from corporations. Throughout the deleveraging campaign, household debt-to-GDP ratios rose, while corporate debt-to-GDP ratios declined. The PBOC was interested in maintaining controls on overall credit but needed to manage the internal perception that credit growth was collapsing. It is probably not a coincidence that the central bank changed its calculation methods for aggregate credit growth (TSF growth) four times over the course of the deleveraging campaign in 2018 and 2019 (Figure 6.1). All of the adjustments had the effect of boosting headline credit growth, generally by incorporating new components within TSF. These included issuance of asset-backed securities and loans written off by banks (included in July 2018) and, most controversially, central government bonds (included in December 2019), which were generally considered an instrument of fiscal policy rather than a component of credit to the nonfinancial corporate sector. While the PBOC's motivations in adjusting the data remain unknowable, the revised data series smoothed out the overall decline in credit growth, which could be used to argue that the deleveraging campaign had not had a significant impact on preferred credit channels. The reality was that credit growth was slowing sharply in 2017 and 2018, as indicated by the decline in bank asset growth. This was consistent with Beijing's initial objectives, even if it was difficult for the PBOC to maintain political support for its efforts across the bureaucracy.

Figure 6.1: Measures of Aggregate Credit Growth, before and after TSF Data Revisions, January 2007-July 2022

Percent, year-over-year



Source: Peoples's Bank of China.

Eliminating Systemic Risks from Shadow Banking Activities and WMPs: The deleveraging campaign made significant progress in reducing the risk China's banks would suffer from a funding squeeze similar to the June 2013 interbank market crisis. Efforts to control the shadow banking sector took aim not only at the shadow lenders but also at the funding instruments themselves. Regulations designed to mark the assets of WMPs to market prices informed investors that losses on such products were possible, which reduced their attractiveness and overall issuance volumes. As a result, banks no longer relied as heavily upon WMPs as a source of funding, so there was a much smaller risk that banks could not roll over a significant funding channel if money market conditions tightened considerably. Even though negotiable certificates of deposit (NCDs) and structured deposits became much more prominent financing tools for banks replacing WMPs, they were also targeted by subsequent regulatory measures that were generally effective in limiting their growth.

Similarly, shadow banking assets contracted outright by virtually any measure in 2017 and 2018. This was clearly revealed within the official bank assets data, though the data do not comprehensively cover all shadow banking channels, as discussed previously. The CBIRC working paper reviewing the accomplishments of the deleveraging campaign claimed that, by the end of 2019, a broad measure of shadow banking assets had declined by 16 trillion yuan (\$2.4 trillion) since the end of 2017, whereas a narrow measure was down by around 12 trillion yuan (\$1.8 trillion) from its peak,⁵² By any reasonable metric, China's shadow banking sector the trust companies, asset management companies, brokerages with custody of bank loans, and P2P lenderswas much smaller and posed less of a systemic risk to China's financial system than before the deleveraging campaign began in 2016. This was a clear success on the basis of Beijing's original objectives.

The caveat is that this success in containing shadow banking activity did not necessarily translate into minimizing systemic financial risks. By controlling one form of risk on the funding side of banks' balance sheets, the deleveraging campaign clearly contributed to credit risks on the other side of the balance sheet, as borrowers were increasingly cut off from refinancing channels. Those credit risks started to materialize in larger volumes and gradually extended to more asset classes as well. As Credit and Credibility argues, this process of paring back government guarantees and introducing new credit risks remains the most probable path to a systemic crisis in China's financial system. When investors cannot know how Beijing's intentions to provide guarantees are changing, contagion can spread as guarantees are questioned in more and more asset classes. Rather than investors relying upon protection from Beijing's guarantees, the new uncertainty concerning more and more assets that can default has created the potential for additional financial contagion and systemic risks. It is difficult for any investor to know at what point Beijing will be comfortable with the rise in credit risk versus uncomfortable about the potential financial contagion that could result from widespread risk aversion.

Ironically, the deleveraging campaign reinflated China's largest financial bubble—the residential housing market. In addition, deleveraging shifted the risks of the bubble bursting into direct costs from homeowners facing the prospect of houses that might not be delivered instead of developers owing money to unstable financial institutions. When developers repaid shadow banks calling in their credit lines, they did so with money from home buyers who had taken out mortgage loans. The entire property sector became far more reliant upon preconstruction sales as a source of financing, which was arguably riskier than developers borrowing from shadow lenders. Rather than be hit by deleveraging, developers expanded their overall borrowing and reinflated property starts to new highs as an alternative source of financing. As a result, the deleveraging campaign arguably contributed to systemic risks from a property market collapse while attempting to address shadow banking challenges.

Reducing Economic Pressures from Rising Local Government Debt: Very little progress was made in reducing the debt of local governments or the corresponding constraints on future growth, despite Beijing's efforts to reduce implicit debt and to crack down on shadow financing channels. Generally speaking, local government debt continued rising throughout the deleveraging campaign, including the short-term interest burden from LGFVs. Estimated total debt from LGFVs rose from 24.1 trillion yuan (\$3.5 trillion) in 2016 to 56.7 trillion yuan (\$8.3 trillion) in 2021, with a steady rise each year (Figure 6.2).

 Interest-Bearing Debt Payables 60 50 40 30 20 10 0 2015 2016 2017 2018 2019 2020 2021

Figure 6.2: Total Interest-Bearing Debt plus Payables from LGFVs, 2015-2021 Trillion yuan

Sources: WIND and LGFV annual reports; Rhodium Group calculations.

Even though local governments were cut off from shadow financing channels, they had opportunities to borrow directly from the formal banking system and were able to crowd out other borrowers, including private sector firms. Through this process, the overall efficiency of China's financial system in generating economic growth declined, with more new credit being channeled to repay existing debt rather than fund more productive activity.

Even now, one of the most pressing potential risks to China's financial system is the possibility that LGFV bonds might start defaulting in large numbers, indicating the continued salience of local government debt risks. The deleveraging campaign made very little progress in minimizing or eliminating these risks, with declining infrastructure investment since 2017 indicating the structural challenges posed by rising debt servicing costs for LGFVs.

Reducing Debt Levels of SOEs to Improve Efficiency: SOEs did not meaningfully reduce their debt levels throughout the deleveraging campaign, despite targets to do so. These targets were delivered in September 2018 when the Party Central Committee and the State Council required all SOEs to cut leverage by 2 percentage points from 2017 levels by the end of 2020. Generally, few firms actually reduced overall debt levels, as they were able to maintain access to credit from the banking system, and private sector firms suffered disproportionately. In addition, one of the primary tools Beijing had anticipated for reducing SOE

leverage, debt-to-equity swaps, never accelerated during the deleveraging campaign, as banks were unwilling to take the additional risks attached to equity holdings in state-owned companies.

One of the signs of the continued pressure from SOE debt burdens was the surge in issuance of SOEs' perpetual bonds in late 2018 and early 2019. Perpetual bonds are classified as equity rather than debt and would therefore allow SOEs to meet some of their requirements for reducing formal debt levels. Usually, these bonds are three or five years in duration, with a call option for the issuer to extend the bond's duration, making them "perpetual." Issuance of these bonds surged at the end of 2018, as SOEs were scrambling to meet their targets. But in reality, the perpetual bonds were simply higher-interest debt that technically increased SOEs' overall debt servicing costs and the risks associated with rising debt levels. This was not a meaningful reduction in systemic risks associated with SOE debt levels.

What the Deleveraging Campaign Reveals about China's Economy

The deleveraging campaign made significant inroads against certain types of systemic financial risks in China-those associated with funding stress on the liabilities side of banks' balance sheets and the potential linkages between banks and riskier nonbank financial institutions (NBFIs). By the end of 2018, the risk of a June 2013-style liquidity crisis in which banks struggled to meet liquidity demand from WMP redemptions was substantially lower than at the start of the deleveraging campaign in May 2016. Similarly, the overall size of the informal financial sector shrank in 2017 and 2018, and risks from bad loans within that sector correspondingly declined. When P2P networks started imploding, they were not intertwined enough within China's financial system to have a meaningful impact on China's banks or major borrowers. In those aspects, the deleveraging campaign made China's broader financial system safer and more stable, even if overall economic growth slowed and new credit risks emerged in individual sectors.

The flip side of this suppression of risks on the liabilities or funding side of banks' balance sheets was the creation of new risks on the asset or lending side. Simply put, by shrinking credit available to corporate borrowers who had depended upon cheap credit and soft budget constraints for years, many firms were now cut off from financing and had to make difficult decisions about hiring, new investment, and repaying their debt. Throughout this process, state-owned firms and local governments managed to maintain access to the formal banking system, while private firms were disproportionately affected by the slowdown in credit growth. Low-income households were suddenly deprived of credit as well, as lending to these riskier borrowers without credit histories naturally required lenders willing to take additional risk and seeking higher yields.

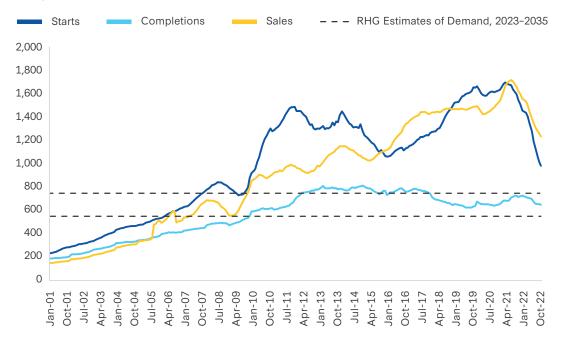
Shadow banking, while generating new risks, had also been the primary channel for financial deepening—the expansion of financial services to new borrowers-within China's staid and conservative banking system, which had always prioritized stability over efficiency or innovation. The potential for shadow banks to bypass the state-owned banking oligopolies and allow small businesses, sole proprietorships, and low-income households to obtain credit for the first time was one of the primary reasons China's reformers and financial technocrats wanted to see these channels expand and at first took a more permissive attitude toward prudential regulation. The lending was risky in aggregate, but any expansion of finance to new borrowers was likely to entail new risks. In the course of attacking shadow banks, the deleveraging campaign also reversed meaningful steps in China's financial deepening and left smaller private borrowers and low-income households scrambling for alternatives.

Replacing funding risks with credit risks was a fairly predictable consequence of the deleveraging campaign, which could have been reasonably expected as credit slowed. Property developers' redirection of shadow

credit into borrowing from home buyers was almost completely unexpected. The property industry relied heavily upon credit and borrowing from shadow banks in particular. So when shadow banks contracted meaningfully in 2017 and 2018, it was highly surprising that plans for new housing construction actually started accelerating (Figure 6.3). Developers could borrow from homeowners, taking out mortgages to repay loans to shadow banks. As a result, the housing bubble reinflated and required blunter measures such as the "three red lines" restricting developers' overall borrowing to contain the growth in the sector. The deleveraging campaign created both predictable and unanticipated consequences.

Figure 6.3: Annualized Property Starts, Sales, and Completions, January 2001-October 2022

Million square meters



Source: National Bureau of Statistics.

Similarly, the deleveraging campaign broke the assumption of explicit and implicit guarantees throughout China's financial system. Through signaling from China's political leadership, the crackdown on shadow banks created new political signals that Chinese authorities were comfortable with a certain degree of financial instability. Even protests surrounding the implosions of P2P networks in the heart of Beijing in August 2018 did not move authorities to intervene and support these institutions, as had been common in the past. Defaults became increasingly probable in multiple asset classes, moving closer to core areas of government support, including local government state-owned firms and trust companies.

Yet while moral hazard across China's broader financial system was broken, the problem of implicit government guarantees within some asset markets was not. Central state-owned firms and LGFVs were still assumed to be guaranteed because none of these firms had yet defaulted. So as overall credit growth declined, financial resources redirected to the only "safe" areas of the economy, even though these were the least efficient firms in terms of their ability to generate economic returns from new investment. Deleveraging did little to correct the problems of the outsized role of SOEs within China's economy and, ironically, strengthened their importance.

As a result, the notable successes of the deleveraging campaign did not necessarily improve the sustainability of China's economic growth for the next decade. Credit growth at high rates was intrinsic to the rapid economic growth in China following the global financial crisis. With the property sector now meaningfully contracting and returns on local government infrastructure investment naturally declining, Beijing is left to look for other drivers of growth, with few easy options given the costs of managing the legacy debt from past investments. As overall credit growth slows, investment will slow as well. Construction of residential or commercial property or infrastructure is unlikely to be a structural driver of economic growth in the future. Even as household savings rates fall as China's population ages, consumption-led growth will be slower than investment-led growth, mostly because consumption is constrained by incomes, and household incomes in China remain at low levels, around 60 percent of GDP.⁵³ Disposable incomes after taxes and social insurance contributions are generally lower, below 50 percent of GDP.⁵⁴

The structural slowdown in credit growth will induce an endogenous slowdown in new investment and GDP growth as well. Beijing has no realistic option to accelerate credit growth to the roughly 15 percent pace seen in the 2010s, given the existing size of the financial system and the sudden emergence of credit risk driving multiple lenders to be cautious in lending. The deleveraging campaign that started in 2016 marked the peak of China's credit-driven economic growth model. As credit growth slowed, prospects for China's future economic expansion correspondingly declined. The deleveraging campaign was highly necessary to eliminate near-term financial risk but insufficient to lay the foundation for more stable and sustainable growth in China's economy.

The deleveraging campaign's results highlight the limited degree of control that policymakers have over economic outcomes, even within an authoritarian state-controlled financial system such as China's. Controlling credit growth was dangerous, even if failing to act and allowing systemic risks to build in 2017 and 2018 would have been far worse and may have created a different type of financial crisis. Reining in financial risks and volatility in financial markets by reimposing controls and regulatory restrictions on certain types of borrowing and lending limits dynamism in the economy and creates volatility elsewhere within the financial system. Following the global financial crisis, China's policymakers had been willing to countenance more financial risks and volatility as a counterweight to political risks and potential instability. The deleveraging campaign was designed to curtail financial risks, which ended up creating new economic and political risks, particularly from property developers' unfinished houses. Policymakers cannot control market outcomes in China's financial system, and there remains no magic solution to deflate an unprecedented credit bubble.

Deleveraging and China's Political Transition

Deleveraging arguably came far too late in China. Had the PBOC stood its ground in the aftermath of the June 2013 interbank market crisis and moved forward with an aggressive monetary and regulatory tightening agenda after delivering a shot across the bow of the banking system, the costs of adjustment would have been far lower. But there was clearly no political constituency in China that could have sustained a prolonged deleveraging campaign in 2013, nor a political structure that could have approved such a campaign. In the first year of Chinese president Xi Jinping's administration, China's economic decisionmaking was still driven primarily via multiple inputs into the State Council and the Economic and Financial Leading Small Group. Decisionmaking involved compromises, even if there was no complete consensus among policymakers, but multiple inputs into the policymaking process were likely to be heard. Local governments and SOEs would be able to push back against the PBOC's calls for more aggressive regulation, particularly monetary tightening. After all, in 2013, shadow banks were just starting to ramp up their activities, and the risks were not apparent to most outside of the financial system. Following the global financial crisis, Beijing had been comfortable

with trade-offs favoring stronger economic growth, even if financial risks were rising as a result. Regulatory oversight of the shadow banking system was still conflicted among several different institutions as well. It would take time to build the internal political case for a more aggressive deleveraging campaign in China, and those conditions were not present in 2013.

The deleveraging campaign arrived in the later years of Xi's first term, when consensus-driven policymaking was still the norm in China. Chapter 2 described the formation of the political consensus behind deleveraging, as the multiple bubbles and extensive speculation in China's financial markets exposed the systemic risks that were building. This allowed financial technocrats to overcome objections from local governments, as shadow banks had weak bases of political support. The increasing centralization of authority under Xi and the regulatory restructuring creating the Financial Stability and Development Committee helped to reinforce the political importance of deleveraging and created conditions for sustaining the campaign despite its impact on the economy.

This also changed the political structure behind China's implicit and explicit guarantees, which played a prominent role in the property sector's decline in 2021 and 2022. Moral hazard in China before the deleveraging campaign was based on a strong belief that China's leadership was averse to signs of political instability and would therefore gladly deploy financial resources to manage any stress in the event that concrete credit risks materialized. But this calculus changed once financial markets started to conclude that Beijing was trying to reform its financial system by introducing credit risk and creating defaults and insolvencies among certain types of borrowers, such as shadow banks or private property developers.

The centralization of power in China under Xi and his direct support for certain policy initiatives made it far more difficult for those policies to be reversed, unless Xi himself reversed them publicly. As a result, when Xi publicly identified with the phrase "houses are for living, not for speculation," it was a reasonable conclusion that any support Beijing would provide for the property sector would be limited, since Xi wanted to see lower levels of speculation. Similarly, crackdowns against education technology firms and internet platform companies in 2021 were seen as part of a broader political campaign to promote "common prosperity" in China. Despite the impact of these regulatory efforts on economic growth, Beijing pushed through, raising new questions about what Xi's priorities actually were and where maintaining economic growth or financial stability might fit within a new set of politically determined objectives.

Under collective leadership, government guarantees of financial assets had more force and credibility behind them because there would be multiple voices in favor of stability and these voices would be heard in the policymaking process at some level. In contrast, under centralized leadership, government guarantees were now vulnerable if perceptions of Xi's preferences changed, while other voices were far less prominent in decisionmaking. This process of political centralization accelerated the unwinding of China's credit and property bubbles by exposing more assets to new default risks and increasing risk aversion among lenders. It is impossible to assess the legacy of the deleveraging campaign without considering how the increasing centralization of political power influenced its effectiveness and amplified the effect of both monetary and regulatory tightening steps. Regulatory actions initiated in 2013 would not have had the same force and impact on market perceptions of risk within China's financial system as those in 2021 and 2022, and the centralization of power in China was a critical factor behind that change.

Ultimately, China's deleveraging campaign exposed the inefficiency of China's unreformed economic growth model by stripping away the credit growth that had maintained rapid rates of economic expansion, despite the inefficiencies of the state's role within the economy. The PBOC initiated both monetary and regulatory changes, but the effectiveness of these steps was limited by the state's role within the economy and the financial system.

Rather than reduce borrowing costs for the "real economy," cracking down on informal financial channels raised costs and squeezed finances for the private sector, while banks maintained lending to inefficient state-owned borrowers and local governments. Their implicit guarantees remained intact, despite the deleveraging campaign, because of state-owned firms and localities' heft within China's political structure, not because of their economic efficiency or performance. This is not a critique of the deleveraging campaign itself, but its impact within China's political system was always going to be tempered by the nature of the Chinese state and the impact of state participation within the financial system. Deleveraging ended China's unprecedented credit bubble, which revealed the limits of relying upon a state-directed and investment-led growth model.

China's Upcoming Policy Choices and Implications for the United States

The deleveraging campaign launched in 2016 marked one of the most significant efforts Beijing has made to counter systemic risks within its financial system and implicitly shift its economic growth model. But in the campaign's aftermath, following the contraction of the shadow banking sector, China now faces an unprecedented series of economic challenges and few options to maintain a pace of economic growth in line with the leadership's objectives to double per capita GDP between 2020 and 2035. Neither the property sector nor local government infrastructure investment can serve as a driver of economic expansion. Credit growth overall will slow from current levels as the financial system expands at a slower rate than the real economy, reversing the trend seen over the past two decades.

Beijing is also losing control over its ability to influence the economy with fiscal policy, given the rising levels of local government debt and the pressure of debt service on future spending capacity. Local government financing vehicles (LGFVs) are already defaulting on some forms of borrowing and are increasingly at risk of defaulting on bonds. An inability to maintain financing access to these vehicles would effectively limit Beijing's ability to use fiscal policy to drive additional investment and maintain growth. Some form of bailout of China's localities will be necessary in the years ahead, most likely using fiscal resources or an expansion of funding from the central bank's balance sheet. A recent article in the journal *Qiushi* ("Seeking Truth") seemed to flag the necessity of such a restructuring of local government debt, with the need to extend maturities of local government debt and reduce interest rates. 55 After such a bailout, additional long-term sources of revenue for China's local governments, most likely including new taxes, will be necessary. Both credit-fueled investment from state-owned companies and local government infrastructure investment cannot be the answer to Beijing's search for new drivers of economic growth.

In addition, China's demographic realities are now tempering Beijing's economic ambitions. Before the release of 2020 census data in May 2021, most independent estimates of China's population trajectory placed the

country's population peak in the late 2020s or early 2030s. But birth rates have collapsed in recent years, amplified by the pandemic. Total births in China reached only 9.6 million in 2022, down from 17.9 million in 2016 and 10.6 million in 2021. ⁵⁶ As a result, China's overall population declined in 2022, nine years after the working-age population peaked and began declining in 2013. These demographic headwinds are new obstacles to continued growth that Beijing could not have anticipated when formulating its long-term economic plans just a few years earlier.

Some challenges are far more pressing, including managing the financial fallout from the property sector's decline and rising credit risks as defaults and insolvencies continue to grow. The property sector benefited disproportionately from China's record-breaking credit expansion, so the losses from both mortgage loans and loans to developers will impact the financial institutions that extended them. So far, mortgage loans appear to be safer, but the extent of the decline in overall property prices remains unclear and could accelerate. Smaller banks are rapidly reorganizing and consolidating to improve their overall balance sheets to meet regulatory limits. Credit risks from corporate bonds and commercial acceptances (short-term financing issued by companies themselves) are rising as the economy slows.

In 2019, before the Covid-19 pandemic, the People's Bank of China (PBOC) conducted stress tests in which "severely adverse" scenarios for GDP growth were placed at 4.15 percent. ⁵⁷ Since then, the economy has seen two years of official growth below those levels—in 2020 and 2022. There are reasonable arguments that 2022 economic growth was negative given the adverse impacts of lockdowns and Covid-19 restrictions on both investment and household consumption. Average growth rates during the three years of the pandemic were only 4.5 percent, even based on official data. Before the slowdown during the pandemic, Beijing did not consider the economic growth rates China has seen over the past three years as within the reasonable range of probabilities. Now, it remains unclear how China can maintain growth close to these levels over the next decade without relying upon the property sector, infrastructure investment, or rapid credit expansion. The deleveraging campaign marked the sunset of China's previous economic growth model, giving Beijing some stark options to adjust its strategic approach from here.

State and Market Forces in China's Financial System

The deleveraging campaign also highlights the difficulties of reform within a hybrid economic and financial system where the state retains a significant role among both borrowers and lenders, which can distort market signals to private enterprises. One of the effects of the campaign was that private firms' sources of financing were squeezed while the risk of default among private enterprises rose, in contrast to state firms, which were still perceived to be guaranteed. As a result, the deleveraging campaign reversed some of the progress of reforms designed to expand private sector access to financing overall and improve the broader efficiency of the financial system.

As the property market adjustment continues, the same dynamic is repeating itself. Heavily leveraged private developers are now struggling to borrow, given the broader risk aversion from lenders to the sector. Banks are being instructed to increase credit to the property sector overall, but lenders only feel comfortable extending loans to state-owned firms. As sales revenues continue declining, state-owned developers will likely be able to acquire the assets of more distressed private developers, increasing the presence of state firms within the sector.

Interest rate adjustments can similarly have unintended effects in half-reformed financial systems. State firms and state banks almost always distort signals that should emerge from market-based pricing of capital. China's deposit and lending rates were previously administratively set in order to guarantee some profits for state-

owned banks while keeping borrowing costs for state-owned companies low, in order to generate incentives for investment. By 2015, lending rates were fully liberalized, and the PBOC abolished the formal ceiling of deposit rates relative to a benchmark rate. In theory, this meant that banks could offer higher deposit rates to attract funding, but in practice, banks continued to use informal coordination among themselves to keep these deposit rates low and prevent banks from competing based on interest rates. The benchmark deposit rate remains in place today as the unreformed portion of China's interest rate system. As a result, banks remain in an uncertain position in managing their own financial conditions, with funding rates still largely set via administrative fiat while lending rates respond more meaningfully to market forces. These distortions have prevented Beijing from stimulating credit growth when the economy slows, as banks remain unable to push down borrowing rates by sufficient margins to generate credit demand.

One of the goals of the deleveraging campaign was to reduce the influence of the shadow banking system, which lends at high interest rates, in order to allow borrowers in the "real economy" to access credit at lower borrowing rates that are more sustainable. But even after shadow banks retreated, formal banks were reluctant to lend at lower rates and resisted multiple attempts to pass on lower funding costs to final borrowers. In the opposite direction, pushing interest rates higher to reduce credit demand and control overall financial system growth can, ironically, increase financial risks if state-owned borrowers are insensitive to rising interest costs and then push up interest rates for private borrowers by larger margins.

At this stage, even if structural reform efforts move forward with greater speed, it seems extremely unlikely that state ownership of the banking system will change, that state-owned enterprizes (SOEs) will become a much smaller force within China's economy, or that SOEs will quickly lose access to credit from state banks. The result is that the rest of the world will need to confront engagement with a Chinese financial system that continues to see meaningful state-led distortions in the pricing of capital and the allocation of credit. Conventional wisdom suggests that liberalizing China's financial markets and permitting more foreign participation would be beneficial in breaking down some of these constraints and improving efficiency in China's allocation of capital. But if those market mechanisms simply will not operate for significant proportions of borrowers and lenders within China's economy, and those borrowers and lenders become more important forces within the economy over time, then the benefits of liberalization and foreign participation in markets will be similarly limited.

Centralization of Political Power and Credibility of China's Policymaking

The process of the deleveraging campaign, starting in 2016, reveals changes in the adaptability of China's policymaking over time as well. The campaign designed to remake China's economic growth model started with an aggressive leadership messaging effort to build consensus across China's bureaucracy. Then technocrats in the financial bureaucracies, primarily at the PBOC, started the aggressive monetary and regulatory tightening efforts necessary to control shadow banking and bring down overall credit growth. But those technocrats struggled to maintain the political consensus behind deleveraging, given widespread pushback from SOEs, local governments, and other Chinese officials more interested in maintaining economic growth than controlling credit and financial risks. Even though the campaign was led from the top, there was always a consensus-oriented element necessary to maintain political momentum in controlling credit growth and shadow banking activity.

Another campaign, launched just five years later, in 2021, appeared very different in scope and mechanics, though the objective was the same: restructuring China's current pattern of economic growth and reorienting goals around "common prosperity." The new campaign was designed to limit the influence of technology

giants and internet platform companies on the economy, including the effort to reverse Didi's initial public offering in the United States and similar regulatory efforts targeting Alibaba, Meituan, Tencent, and other firms. Those actions were followed by a surprise regulatory change to suddenly outlaw the profitability, capital raising, and equity listings of education firms in July 2021, presumably as an effort to reduce the rising cost of raising and educating children as China's birth rate declined. These regulatory changes, announced quickly and without warning, shocked financial markets and forced financial technocrats to defend the government's actions to foreign investors in an effort to manage the fallout.

One of the most important trends occurring between these two campaigns was the rising centralization of authority in China under Xi Jinping. In early 2018, the CCP set events in motion that effectively ended term limits for the position of general secretary, allowing Xi to remain in his position for a third term starting in 2022, longer than the norm of two terms established under Deng Xiaoping's bureaucratic reforms in the 1980s. That shift had a meaningful impact on Chinese policymaking as well, as decisionmaking authority started to move away from more conventional technocratic organizations under the State Council toward CCP-led organizations where Xi exercised a more direct role. ⁵⁸ Policymaking conducted by political campaign is far less predictable and operates contrary to the requirements of a market-driven economy, where rules and incentives of regulatory institutions are more transparent.

The end of China's "zero-Covid" policy was another powerful example of this trend of centralization of authority. Despite the rising costs of the draconian controls on people's movement and onerous testing requirements, the identification of Covid-19 policy with Xi personally meant that local officials continued to compete with one another to strictly enforce testing requirements and restrictions, even after it became highly impractical to do so given the contagion of the virus. When Xi finally shifted his rhetoric concerning the policy in late November 2022, partially in response to nationwide protests, local governments quickly competed to shift in the opposite direction and dismantle the controls, even before there was a plan to phase out restrictions and improve access to vaccinations, which could have limited the public health impacts of a debilitating wave of the virus. Instead, the disease spread at rapid rates nationwide in December 2022 and January 2023. The centralization of authority in China meant that no one within the political system could entertain an open policy debate concerning the zero-Covid policy until Xi himself wanted to see it dismantled.

One of the critical questions now facing China's economy concerns how new structural reforms or changes in China's strategic priorities can be credibly communicated. While the deleveraging campaign showed how pressure for reform could advance from below and how maintaining a political consensus was difficult but necessary, reformist signals from lower-level officials will not have the same clout in a centralized political system. Unless Xi himself announces a clear intention to make a particular strategic choice, it is difficult for experiments in reform, which had been so central to China's four decades of "reform and opening," from gaining momentum and being used as trials for potential nationwide expansion. Changing China's growth model cannot occur simply based on top-down announcements, as millions of market participants need to believe that the system is changing to be willing to take risks in the economy and in financial markets. After all, a speech from Xi reversing the previous party line on a particular sector could quickly reduce the value of new investments. This is a particularly concerning trend given the rising scrutiny of the financial sector by China's anticorruption investigators.⁵⁹

China's centralized political system is less capable of sustaining meaningful economic reforms than in the past, in part because it is difficult for officials to communicate their intentions to reform the system credibly. The deleveraging campaign operated in a far different political context as a sustained effort to reform China's financial

system and generated some meaningful successes along with some unintended consequences. Now a new generation of leadership must make more difficult strategic choices concerning the future direction of the economy.

A New Economic Leadership Confronts Complex Strategic Economic Choices

Following the 20th Party Congress and Xi's reappointment to a third term as the CCP's general secretary, China appointed new economic leadership, led by a new premier, Li Qiang, and Xi's confidant He Lifeng as vice-premier in charge of finance and economics. He replaced Liu He, the presumed driving force behind China's deleveraging campaign and an official with strongly reform-oriented views. However, the leadership of China's central bank and finance ministry remained in place, suggesting a need for policy continuity and steady hands as difficult choices loom for the economy and financial system.

The new set of leading officials confronts complex trade-offs regarding management of the rising risks within the financial system and the structural slowdown of China's economy. Tactically, several steps can be taken to repair some of the damage from China's zero-Covid policies. But strategically these choices involve deciding which portions of China's economy the leadership sees as essential for China's interests in the future and which are more marginal. All of these choices raise the question of where China will try to direct the economy after the deleveraging campaign shrank the timeline of the previous growth model.

Following the deleveraging campaign, Beijing essentially has four options in attempting to keep its economy operating and its financial system stable. Each involves different trade-offs between economic growth and stability. None of these options assumes that Beijing will launch significant structural reforms of its economy through steps such as breaking up SOE oligopolies or aggressively liberalizing financial markets to crowd in private capital into underserved sectors. These steps could unlock significant gains in productivity and help improve China's growth potential in the long term after incurring some short-term costs. But they have been promised since 2013, in the early stages of Xi's administration, with little evidence of progress over the past decade. Reforms have frequently been initiated, only to be quickly reversed after dramatic economic consequences become apparent, in a pattern similar to the interbank market crisis of 2013.⁶⁰ This suggests structural reforms have already been attempted, raising obstacles to additional attempts; the assumption of reform cannot be the base case in any set of expectations about China's future. But without more aggressive structural reforms to unlock growth potential, the option set that Beijing confronts in managing its financial system is far more limited in scope.

DOUBLING DOWN ON DELEVERAGING

The strategic option for Beijing most in line with reform-oriented objectives would be to double down on controlling risks in the financial system. Leaders would conclude that the costs of deleveraging are manageable and that financial risks in the economy are still brewing, requiring relatively strict limits on credit and debt growth to ensure the sustainability of China's economic expansion in the future. Essentially, this option sees Beijing accepting slower economic growth as inevitable, either because of China's demographic challenges or because of the weakening property sector. Hence, leaders would decide it is imperative to control rising financial risks now rather than add to them and make the problem even more difficult to manage later.

Doubling down would involve new restrictions on local government borrowing and SOEs, given that these sectors have effectively circumvented the effects of the deleveraging campaign since 2016. It would also involve new regulations targeting shadow banking activity and continued limits on property sector investment and

borrowing by developers. Most notably, the clearest sign of Beijing embarking upon this more reform-oriented choice would be explicitly lower GDP growth targets or abandoning the targets altogether. Given the historical importance of GDP growth targets within China's system, such a decision would highlight a significant shift in Beijing's priorities. Based on the government work report unveiled in March 2023, there are some signs that Beijing is attempting to control continued growth in property investment and local government debt. But there are no signs Beijing is abandoning its economic growth targets.

The likely consequences of this set of policies would be a significant slowdown in economic growth. This would reduce the international tension associated with democratic and autocratic systems, as China's model would likely face its own limits, just as the Soviet economy did in the 1980s. The fact that China's loss of international influence would be a meaningful consequence makes this strategic option highly unpalatable from Beijing's perspective. However, China would likely garner some support from financial markets and international policymakers as well, as financial technocrats would appear to be driving economic policymaking once again and responding effectively to China's long-term challenges by creating the conditions for a more sustainable economy in the future. However, most of the media response to Beijing doubling down on deleveraging would likely be focused on the slowdown in growth, the inevitable costs of the property bubble bursting, and ongoing financial stress.

SAVING LOCAL GOVERNMENTS

Beijing may be comfortable with slower economic growth in the future but would need to respond more forcefully to the financial risks building at local governments. Right now, these risks are threatening to snowball and produce a fiscal crisis and pressure on the banking system. If Beijing does not respond quickly by reinforcing guarantees for these local governments and related companies, the central government could lose control over fiscal levers to support the economy. Hence, one strategic choice China's leaders could make would be to explicitly bail out localities and their financing vehicles while maintaining pressure on shadow banks and the property sector. This would combine some elements of the strategy to double down on deleveraging while setting aside certain reform objectives. The rising risks associated with local government finances, including declining land sales revenues and the costs of zero-Covid measures, have increased the urgency of Beijing's decisionmaking regarding local government debt pressures.

The primary policies associated with this approach would be an explicit recognition of local government debt and a bailout or fiscalization of local government obligations, shifting them to explicit central government debts. This may also involve some form of monetization of the debt using liquidity provided from the central bank's balance sheet. As such, there would be a large up-front fiscal cost to such a bailout, as well as the possibility of larger costs in the future, given that the purpose of this fiscalization would be to allow localities to continue investing to maintain a baseline level of infrastructure construction and growth. Presumably, this would be paired with continued pressure on property-related lending and clear overall credit limits to prevent debt from growing out of control.

This option would likely continue to produce weaker economic growth, primarily from the property sector, but infrastructure investment would stabilize, preventing a sharper downturn. Chinese policymakers would generally appear reactive to financial stress rather than proactive in preventing it, given that the problems of local government debt appear intrinsic to China's political system. Media coverage of China's economy would probably continue to focus on the problems in China's property sector rather than on stabilization in infrastructure investment. China's fiscal space to stimulate the economy would appear constrained due to the required size of the bailout of local governments. But the extent of the slowdown in China's economy would be debatable, and local government debt would no longer represent an acute risk to the financial system because most of this debt would explicitly be the obligations of the central government.

SAVING THE PROPERTY SECTOR

China's leaders may eventually conclude the consequences of a sustained property market downturn are too severe for the party's base of support among China's urban middle and upper classes, both politically and economically, and take efforts to reverse their previous crackdown on the sector. In many ways, this process is already underway. But most of what Beijing has attempted to do in supporting the sector so far is to offer new credit lines to developers to complete unfinished houses and to prevent further defaults within the industry that might add to financial stress. This falls short of broader attempts to turn the overall trajectory of the sector around so it can once again represent a driver of economic growth.

The policy options that would be involved in this choice would be relaxing controls on borrowing by property developers and providing other forms of liquidity to developers to prevent defaults on their debts. In addition, both Beijing and local governments would then provide additional incentives for property purchases, likely through lower down payment requirements, lower mortgage rates, reduced taxes on resale of properties, or even subsidies for first-home purchases. Growth targets would likely be maintained in current ranges of around 5 percent, without significant revisions to prepare the political system for slower economic growth.

Even with these policies supporting the property sector, there is no guarantee Beijing will be successful in turning the industry around to once again power the economy. The imbalance between the pace of construction from 2016 to 2021 and fundamental demand among owner-occupiers suggests that China's property industry needed to contract—and is in the process of doing so. China's home ownership rates are extremely high, and new entrants to the housing market are declining. Even lower down payment requirements and mortgage rates may not encourage additional housing purchases. And even if sales do stabilize and rebound, developers may simply use the available resources to repair their balance sheets and pay down debt rather than initiate new construction activity. Once the pace of construction declines to a more sustainable level, the sector may contribute to growth cyclically from time to time, depending upon price trends and changes in monetary policy. But structurally it appears unlikely that the property sector can drive the economy forward, even if Beijing provides considerable support for the industry.

Policymakers would also appear reactive and would likely lose some credibility because of their rapid reversal in efforts to control the property sector. To a certain extent, this reaction is already unfolding, even if there is more short-term optimism about the economy because of the change of China's Covid-19 policies. But the overall international reaction would likely remain focused on the fundamental imbalances within China's economy and the fact that authorities needed to continue relying upon the property sector to maintain growth rather than adjust the growth model more fundamentally.

OUT OF OPTIONS: BACK TO 2009

Beijing may also quietly conclude it cannot maintain its deleveraging objectives and its desired rates of economic growth at the same time. Hence, the financial system would need to take on its traditional role as the shock absorber for the real economy and political system, even if that means more financial risks in the future. It appears highly unlikely Beijing would ever formally announce it has reached such a conclusion, given that China's postcrisis credit expansion was unprecedented in global and historical terms and would be viewed as extremely risky to continue. But this strategic choice would reflect an internal judgment that without strong economic growth, the political consequences for China's leadership would simply be too severe given the importance of maintaining the internal and external perception of China's inexorable rise.

A reversal of Beijing's deleveraging objectives would essentially involve abandoning credit limits and quotas altogether. It would also involve new assistance to local governments, property developers, and home buyers to maintain the previous drivers of the economy. Economic growth targets would be raised back to the 6-7 percent range to encourage local governments to compete against one another to drive additional investment. Capital adequacy ratios for banks may need to be relaxed in order to facilitate additional credit growth.

The response to the abandonment of deleveraging as a strategy would likely be similar to what occurred in March 2020 immediately after the pandemic first hit China. Most companies and local governments would instantly respond to the call to drive growth again, and banks would lend aggressively and roll over loans from state-owned firms and local governments. However, the effect would be very short lived. International media coverage would focus on Beijing's dramatic about-face and the continued headwinds to China's economic performance in the long term, particularly given the diminishing returns of credit and investment-led growth. The financial system would likely come under severe stress only a year or two after Beijing makes this choice, given the high levels of nonperforming assets already within the banks and NBFIs.

BEIJING'S BEST OPTIONS FROM HERE

China faces no easy choices, and all of these options entail some costs. The slowdown in China's economy is structural in nature, and future growth rates will not resemble those in the past. But there are certain choices that He Lifeng and his new leadership team can take that will at least prepare a foundation for more stable economic growth in the future while minimizing disruptions within the financial system.

First, credit growth must remain only marginally higher than nominal GDP growth but far below previous rates of credit expansion. Slowing credit growth sharply will have an immediate impact on China's investment activity and overall economic growth. Enough credit must be provided to prevent widespread financial stress, which could endanger household consumption. But continuing to expand credit in line with previous patterns would only add to debt servicing costs that would weaken investment in the future. China's financial system has already grown at rates much faster than the real economy over the past two decades, and slowing credit growth is a minimal requirement to reverse those trends in the future.

Second, local government debt will need to be restructured and, likely, fiscalized. This probably involves guaranteeing the debts of existing LGFVs and replacing them with central government bonds but then either phasing out these companies or reorganizing their funding under central government control. The financing strains upon LGFVs at present could trigger a broader credit crunch and slowdown in the economy if firms are forced to stand on their own without guarantees. Beijing would prefer not to support LGFVs but likely has no choice. Critical decisions will be made after the reorganization and recognition of around 54 trillion yuan (\$7.9 trillion), or 45 percent of GDP in local government debt, in order to prevent the problem from growing once again.

Third, measures must be taken to use fiscal resources to improve the foundations for household consumption and reduce the household savings rate. This can involve direct fiscal transfers to households from the state, improvements in the social safety network and medical facilities to reduce precautionary savings, reducing taxes or required contribution payments, or other measures to boost the household income share of GDP after transfers. This is a broader structural reform issue rather than specifically related to the deleveraging campaign, but continuing to control credit and investment growth will essentially force household consumption to lead China's economy forward over the next decade. Providing additional fiscal support to reduce the household savings rate is necessary to prevent a sharp slowdown in overall economic growth.

Fourth, onshore financial markets must be liberalized further to drive inflows into China's equity and fixedincome markets. This is necessary to produce a counterbalancing inflow into renminbi-denominated assets to offset the inevitable outflows that will result from the diversification of China's household and corporate savings into foreign assets. It also makes it easier for China's central bank to defend the exchange rate during periods in which larger volumes of capital outflows push the currency weaker. Maintaining a stable exchange rate is necessary to incentivize additional inbound investment as well as drive additional consumption-led growth by maintaining China's overseas purchasing power.

None of these choices on their own or collectively will eliminate threats to China's financial stability, but together they should place the economy and financial system on a firmer foundation than the present continuously building credit risks. Overall, however, these options are not politically easy for Beijing to execute, particularly involving steps to boost household incomes and consumption, as well as reorganize local government debt. They involve significant admissions that past economic choices have led China toward an unsustainable path and that significant corrections that will slow economic growth are necessary. None of that messaging is consistent with the CCP's broader propaganda messages that China's economic rise is inevitable.

Probable Long-Term Outcomes for China's Economy and Policy

Even if Beijing makes reasonable decisions to manage financial risks from here, the aftermath of the deleveraging campaign and the end of China's credit-driven growth model leaves Beijing with a far more limited option set over the next decade. Predicting economic trends remains a perilous exercise, but in the absence of a significant break from China's current trajectory of slowing credit and investment growth, some outcomes appear more probable than others. Reform trajectories unlocking faster productivity growth rates are still possible but are less probable given the attempted reforms China has already launched and reversed over the past decade. This section discusses the longer-term economic and policy implications from the deleveraging campaign's effects itself and not necessarily the impacts of slower economic growth. Of course, weaker credit and investment growth will slow the economy as well.

The slowdown in credit and investment growth will continue. China's deleveraging campaign has created conditions within the financial system that will be very difficult for policymakers to reverse, even if they intend to do so. Specifically, credit growth cannot achieve the same pace as seen in the previous decade and is far more likely to slow to a single-digit pace in the future. China's financial system is already so large, at 376.7 trillion yuan (\$55.3 trillion), in bank assets, that continued expansion at double-digit rates strains both the capacity of the system under current capital requirements and demand from potential borrowers. Credit demand has weakened along with the economy in recent years, particularly from households and the private sector. Risk aversion among lenders exposed to additional credit risks will limit the types of borrowers considered creditworthy. Low rates of return on assets within the banking system will prevent the system from recapitalizing itself out of retained earnings, which will ultimately limit credit and investment growth. In the absence of meaningful structural reforms that could unlock new private sector credit demand, the overall pace of investment growth and GDP growth will slow.

Demand for imported commodities will be weaker. In several commodities markets, demand from China's construction activity has been a critical driver of growth over the past two decades. As one of the most creditintensive sectors in the economy, the property sector's medium-term decline means that imports of iron ore, copper, aluminum, base metals, and some refined petroleum products will likely slow. In some cases, lower prices could increase China's imports of these products because Chinese domestic production costs more. But

for most commodities associated with China's construction activity, the next decade of China's demand will be much weaker, with the property sector likely to stabilize at around 40-50 percent of the previous decade's levels of construction.

Interest rates for most forms of government and quasi-government borrowing will fall. China's local government debt problem is simply too large at this point to outgrow, given that potential growth in China over the next decade is below the rates seen following the 2007-08 global financial crisis, when China accumulated debt rapidly. As a result, the only effective tool to manage the debt burden is restructuring it at lower interest rates, which will probably involve funding from the central bank's balance sheet. This also means that policy interest rates from the central bank and critical funding rates will need to decrease over time. In a highly indebted system, there are few options to meaningfully raise interest rates without triggering immediate financial stress.

China's fiscal policy and responsibilities of central and local governments will be restructured. One of the probable results of China's deleveraging campaign will be a change in how China manages its fiscal policies, particularly the balance of responsibilities between central and local governments. Currently, local governments only receive a limited proportion of official tax revenues but have most of the responsibilities for social services spending, particularly for education and medical services. The recent decline in the property market has further pressured local government revenues by weakening land sales revenues, which declined by 24 percent, or around 1.6 trillion yuan (\$235 billion), in 2022.61 The absence of bids in the land market drove localities to pressure LGFVs to buy land from local governments, and LGFVs were involved in 40-45 percent of land purchases in 2022, based on a bottom-up analysis of land auctions. 62 In the long term, Beijing has been attempting to unlock new sources of revenue growth for localities, including the possibility of property taxes. But the decline in the property market makes this far less attractive given the government's recent attempts to shore up demand.

The deleveraging campaign has undercut significant sources of local government revenues via land sales and access to credit through LGFVs. As a result of weakening financing for LGFVs, Beijing is effectively losing control over fiscal policy as an instrument to stabilize the economy. The current model of local government finance is unsustainable, and one of the probable outcomes will be some reform measure rebalancing central and local revenues and responsibilities for social services spending.

On balance, China's exchange rate should depreciate in the long term. Predicting the movements of exchange rates may appear foolhardy, and any such projections remain speculative given the sheer uncertainty of global financial markets. But the case for a weaker exchange rate is based on the necessity of longer-term declines in interest rates in China, which will both encourage capital outflows from China's world-leading money supply as well as reduce incentives for capital inflows into a low-interest-rate, low-growth economy. The potential use of the central bank's balance sheet to stabilize financial conditions concerning local government debt will further incentivize capital outflows.

The limited level of diversification of China's domestic savings into foreign assets (around 98 percent of China's deposits are held in renminbi rather than foreign currencies) offers fuel for many years of high levels of capital outflows. While the central bank had \$3.13 trillion in foreign exchange reserves as of December 2022, this was only around 8 percent of China's money supply, the lowest level in at least three decades and lower than levels even during the 1997 Asian financial crisis. As a result, the PBOC will likely be selective in choosing when to intervene to support the currency, particularly if the economy is slowing and exporters could benefit from some currency depreciation.

Trade surpluses from China and trade deficits in developed economies should continue. The probable results of slower economic growth and a weaker exchange rate in China will be stronger exports from China and weaker Chinese imports from the rest of the world. Every meaningful slowdown in China's investment growth rate has driven an expansion of the trade surplus, affecting both import prices and volumes. The anticipated long-term depreciation in the exchange rate will be driven primarily by changes in capital flows, which means trade flows and the current account will need to balance out those adjustments. Even if China becomes less significant within global supply chains and alternative centers for goods manufacturing emerge, imports may fall by larger margins than exports in response to a weaker exchange rate. China's household consumption and domestic demand for raw materials will determine levels of imports, which will be pressured by the reduced purchasing power from a weaker exchange rate.

The U.S. Relationship with China's Financial System

Given the rise in tensions between the United States and China in recent years, there is an active debate in the United States concerning what type of relationship the country should have with China's financial system. The stakes of this debate are meaningful, but the U.S. interests involved are not entirely straightforward. Traditionally, the view animating U.S. financial engagement toward China over the past two decades has been that liberalization of China's financial markets is clearly in U.S. interests. Liberalization increases opportunities for U.S. firms in a rapidly growing economy and introduces competition that would both deepen market forces within China's financial system and facilitate operating conditions for foreign firms on a more level playing field than they presently enjoy in China. Eventually, state-owned banks, brokerages, insurance companies, and other financial institutions would need to respond to the growing demands of market competition, and foreign financial institutions would likely gain market share over time.

China has made notable efforts toward financial reform over the past decade but has met with limited success, and the immediate market consequences of such reforms have caused Beijing to reverse course and re-establish statist influence and controls. U.S. financial institutions have expanded within China's financial sector in absolute terms, but relative to expectations and, most importantly, to the size of the Chinese financial system, they have not. Bilaterally, Beijing has been willing to prioritize U.S. financial interests such as concessions made within the Phase One Agreement-but to the exclusion of key segments (such as payments), and with limits in implementation. Prominent U.S. firms have gained access to new licenses and have expanded ownership stakes of their Chinese joint ventures in some segments of the financial industry. But absent broader structural reforms to the economy, Washington is no longer interested in deals that benefit financial firms disproportionately.

The key question remains whether or not China's convergence with international norms, gradual or otherwise, is still possible. If that objective is impossible in the foreseeable future, given the revealed pattern of Chinese refusal to accept concomitant instability during financial transition, and the direction of the Chinese financial system continues moving away from market forces and toward greater levels of state control, then the premises of international engagement with China's financial system are more suspect.

This change in China's reform direction has driven a larger discussion about the costs and benefits of Chinese companies providing equity offerings in the United States. Chinese firms had provided limited disclosures in the past, creating several high-profile cases in which misrepresentations by Chinese companies resulted in losses for U.S. investors. The Holding Foreign Companies Accountable Act, passed in 2020, was a congressional response to these concerns. The resulting audits and inspections by the U.S. Public Accounting Oversight Board had reduced the probability of mass delistings of the 262 Chinese firms listed in the United States in September 2022.63 U.S. investors' portfolio securities holdings of Chinese firms, including equity and debt holdings and listings in Hong Kong, totaled around \$1.2 trillion as of the end of 2020.64 The valuations of those holdings declined significantly given the slowdown in China's economy in 2021 and 2022, and the regulatory crackdown on key internet platform companies intensified those losses.

The question now confronting the United States is what changes to U.S. policy priorities are necessary given that state distortions in China's semi-reformed financial markets are likely to persist. Financial risks in China's system are likely to increase in the years ahead, and exposing U.S. investors and companies to those risks must be balanced against the potential returns. At the same time, Chinese firms selling securities overseas typically have alternative financing sources within the domestic economy as well. Therefore, reducing U.S. investments in those firms generally does not impact Chinese companies but reduces potential benefits to U.S. investors from higher returns or diversification of their portfolios on a global basis. The logic of pushing for divestment from Chinese securities is primarily political in nature, which is not to downplay its attractiveness in the current climate of U.S.-China relations.

As detailed earlier, China's longer-term economic interests will persistently drive the country's leadership toward further opening China's capital markets for foreign investment, as these inflows are necessary to counterbalance the inevitable capital outflows that China will face. Even when nationalist or protectionist sentiment appears dominant in China, the priority to encourage foreign inflows into China's financial system continues reemerging over time. Chinese officials may attempt to maintain access to capital flows without any relaxation of state control necessary for market forces to function, but any significant measures to restrict capital outflows from China will also reduce the potential for inflows into China's markets. Portfolio flows are not likely to remain contained by Chinese capital controls, as China can slow outflows at times but is unable to stop them completely.

Whether or not meaningful reform within China's financial system is still possible, Beijing will be forced to speak publicly and act as if market liberalization and reform are still among China's primary policy objectives. The ideal situation for the United States would be for reformist tendencies to strengthen in China, allowing the case for engagement within a liberalizing Chinese financial system to build political momentum and increase U.S. financial institutions and investors' exposure to a reforming economy with stronger growth prospects. While that ideal case is highly improbable, there is still a strong argument for maintaining access for U.S. financial investments into China's equity and fixed-income markets while also tightening and maintaining regulatory controls on the types of Chinese firms that can access capital in U.S. financial markets. The rising risks emerging from China's financial system at present require U.S. regulators to seek additional disclosures about those risks to level the playing field across U.S. financial markets so that the information Chinese firms provide is equivalent in accuracy and reliability to that of other listed U.S. firms. Many of those steps are already in process and should continue to squeeze any loopholes in disclosure requirements that emerge.

But the logic for diversification of global investment portfolios into renminbi-denominated assets is strong as well, given the historically closed nature of China's capital markets, which means that global investors hold very small proportions of renminbi-denominated assets relative to the size of China's economy. Global investors continue to beware the risks of direct investments in China's markets. Geopolitical risks of investments in China have been rising for several years already, and intensified after the Russian invasion of Ukraine, making Beijing's task far more difficult. But this is Beijing's own challenge-successfully attracting large volumes of foreign capital likely requires commitments to reform that are currently unpalatable in China and permitting cross-border capital flows that may influence domestic financial stability.

A significant degree of financial interdependence between the United States and China will continue, barring a full-blown shift of the present competition to a warlike footing, but the level of that interaction could vary greatly. As China runs a trade surplus with the United States, the dollars earned by Chinese exporters will be recycled into U.S. markets, either via Chinese companies, banks, or the central bank. This was the pattern of engagement through which China's central bank accumulated large volumes of foreign exchange reserves and purchased U.S. Treasury debt in the 2000s. That pattern has now changed, with Chinese purchases and sales of U.S. securities becoming much more volatile, and private Chinese investors are now acquiring larger volumes of U.S. equities and bonds. Cutting back on U.S. investors' portfolio inflows into China may narrow the channels of the financial relationship between the two countries but will not eliminate it. The United States is generally better off letting Beijing either succeed or fail in its courtship of foreign investment, rather than supply an easy scapegoat to explain flagging global interest in China.

If Beijing succeeds in attracting sizable foreign inflows, financial interdependence carries its own political logic, and there will be stronger incentives for Chinese authorities to push toward greater market liberalization to prevent rapid capital outflows. At the very least, foreign investors will become more significant players within China's equity and fixed-income markets with the potential to influence domestic policies and messaging to the markets even within a semi-reformed system. Portfolio flows offer few opportunities for Beijing to use economic interdependence to its political advantage, unlike similar concerns about direct investment and China's position within global supply chains. The presence of foreign investors offers both a stabilizing source of inflows and a potential threat to stability within China's financial markets should favorable conditions for investors change. With the added foreign inflows, China's exchange rate will receive some external support, which will help to avoid ballooning Chinese trade surpluses and U.S. trade deficits.

If Beijing fails to attract inflows over time, then China has a larger problem on its hands, as existing foreign investors will likely continue shifting money out of Chinese markets. Domestic households and companies will try to diversify into foreign assets, while Beijing continues to tighten controls on those outflows. China's exchange rate will likely depreciate, which will impact global economic growth and widen China's external imbalances, forcing adjustments into deficit countries such as the United States. China will appear less influential within the global economy, as the size of its economy and its purchasing power will weaken in U.S. dollar terms. In this circumstance, there will still be large Chinese inflows into U.S. financial markets, but they will be led by private Chinese investors fleeing renminbi-denominated assets.

The political benefits and costs to the United States of these two scenarios are not readily comparable, but it is not in U.S. economic interests to see China's exchange rate plummet, reducing China's import levels. This would create a beggar-thy-neighbor effect on other Asian economies (including U.S. allies) and weaken the global economy. Portfolio investments are not direct investments and can shift when market conditions change. (As mentioned previously, fears of restrictions on those outflows will likely mitigate the volume of inflows.) It is also easy to see how U.S. government actions designed to restrict inflows into Chinese markets could be counterproductive and increase those investments from third parties by temporarily depressing prices—exactly what occurred when the U.S. prohibited investments in Chinese firms linked with the military in the waning days of the Trump administration.

Regulating U.S. financial markets transparently, including Chinese firms' participation within those markets, is clearly in U.S. interests. Influencing investors' perceptions of China's financial markets or patterns of participation within those markets is not. Beijing has its own challenges in attracting foreign inflows given its slowing economy, declining interest rates, opaque policymaking, and stagnant reforms.

Systemic Competition and China's Growth Model

As China's structural economic slowdown continues, this is likely to impact global perceptions of the attractiveness of its economic and political system within the broader context of the ongoing narrative of competition between democratic and autocratic systems. How China responds to rising financial stress will have a meaningful impact on those perceptions as well. In theory, a capable technocratic elite within a oneparty state, insulated from domestic political pressures, should be able to manage financial stress very well. China responded to the Asian financial crisis effectively, setting up a Central Financial Work Commission in 1998 under Premier Zhu Rongji's leadership and orchestrating a significant regulatory overhaul and a restructuring of the entire banking system in the early 2000s. There are current reports that the Central Financial Work Commission could be restarted this year, highlighting the scale of China's ongoing challenges. 65

But the political imperative of systemic competition and concerns about the global perceptions of China's economy may prevent China's financial authorities from taking the necessary steps to ensure systemic stability in the future. Chinese authorities have a number of policy tools in the event of a financial crisis, such as emergency liquidity facilities from the central bank, forced restructuring of distressed commercial banks or other financial institutions, and direct interventions into financial markets to prevent financial contagion. The problem China's leaders face is that the use of these measures clearly indicates China is facing a financial crisis intrinsic to its growth model and past decisionmaking and reflecting upon the Chinese system as a whole.

As a result, financial technocrats are constrained. They have plenty of crisis management tools but may never be able to use them. Using them would suggest a larger problem with China's economic system and the politics that produced it. Push will never come to shove, as an all-out crisis management effort would suggest China's economic system is not working. Beijing will attempt to keep the evidence of financial stress secret while quietly deploying tools to manage that stress. But it is difficult to calm financial markets quietly, as financial contagion will cause market participants to look for clear signals of reassurance from policymakers.

China's deleveraging campaign set events in motion that have ended China's credit- and investment-led growth model. But grasping the shadow banking system created additional financial risks in the property market and contributed to rising credit risks as implicit guarantees by the state eroded and defaults proliferated. In the future, China's economic policymaking will be occupied by managing the consequences of the economic and financial conditions produced by the deleveraging campaign while attempting to maintain a narrative that China will still grow in economic and political power and influence. This was a much easier task in the last decade, when China still had years of credit and investment growth ahead. But given demographic pressures, a harsher external political environment, a declining property market, and a financial system that can no longer serve as a shock absorber for the political system, Beijing faces a tough road ahead in a competition of political systems.

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