SECTION 2: FISCAL, FINANCIAL, AND DEBT PROBLEMS WEIGH DOWN BEIJING'S AMBITIONS

Abstract

Optimism surrounding China's post-COVID economy at the beginning of 2023 has all but vanished. For two decades, this growth model has relied on debt-fueled investment in both commercial and residential real estate and infrastructure, which combined, have generated employment and revenue, and routinely accounted for 40–45 percent of China's gross domestic product (GDP). Chinese Communist Party (CCP) policy decisions have contributed directly to weaknesses and the collapse in the real estate and infrastructure sectors. The CCP's approach has left the country encumbered with an unsustainable debt burden and a deeply imbalanced economy, with China unable to consume what it produces and reliant on export-led growth. These structural problems have become acute, posing significant political and economic challenges to the Party-state. Confident that its strong central government balance sheet can prevent systemic instability, the CCP is focused on constraining the rapid growth in debt at the local levels where some of the largest economic challenges are concentrated. Beijing intends to grapple with structural issues by asserting more top-down control, aiming to defuse debt risks while steering more resources into the Party's technology ambitions.

Key Findings

- China has relied upon investment in real estate and infrastructure to create employment, generate revenue for local and central government coffers, support upstream industries like steel and cement, and broadly drive its domestic economy. This decades-old debt-fueled model is now facing its most severe challenge. A crisis in China's real estate sector, which accounts for 25–30 percent of the country's GDP, has cascaded through the economy. Property developers have lost capacity to buy land, purchase construction materials, make payments to contractors, and deliver housing units. Thirty-four of fifty developers have defaulted at some point on dollar-denominated bonds, with the two largest companies in—or at risk of—bankruptcy. Infrastructure construction, which accounts for another 15 percent of GDP, is experiencing similar pressures.
- The property crisis has had a severe impact on local government revenue. Real estate developers' purchase of new land plots has collapsed. Land sales have previously provided roughly one-third of local government revenue essential to education, health, municipal services, and general welfare.

- With roughly 70 percent of household wealth tied up in real estate, falling property sales and prices have shifted consumer focus to reducing existing household debt. This, in turn, is contributing to risks of deflation.
- Despite over two decades of official statements emphasizing the importance of boosting consumption, in 2022, household consumption as a share of GDP dropped to its lowest level in nearly a decade, followed by a slight 2023 rebound. As a result, China will continue to rely on exports to sustain growth, distorting markets and leaning on the rest of the world to absorb its excess production.
- The failure of the real estate model is systemic, and the financing mechanism that underpins it is in acute stress. Rising property loan defaults with falling asset sales and prices have created the conditions for broader instability in the financial system. Bank profit margins are declining and consumer deposit rates are shrinking, while bank balance sheets are carrying an increasing load of undeclared nonperforming loans. These financial strains are occurring at a time when the CCP is opening the sector to foreign investment, raising risks for U.S. citizens invested in pension and wealth management products.
- In addition to the pressures of the pandemic, misguided policy choices by the CCP have contributed to the country's overall debt-to-GDP ratio, which has more than doubled since 2008. In 2023 it passed 300 percent. Much of this debt is passed between one state-owned entity and another to hide the volume of debt and the impact of risk. As an example, 80 percent of local government bonds are purchased by state-owned commercial banks.
- Beijing has stated its intention to address the accumulation in local debt; however, policy choices may be constrained by the financial risks and destabilizing impact on households, foreign investor sentiment, and state and non-state-owned enterprise revenue.

Recommendations

The Commission recommends:

- To combat tariff evasion by Chinese exporters, Congress amend the procedures for investigating claims of trade remedy laws in the Enforce and Protect Act of 2015 to include merchandise subject to tariffs under the findings of the 2018 Section 301 investigation into China's acts, policies, and practices of related to technology transfer, intellectual property, and innovation.
- Congress consider legislation establishing a framework for corporate disclosure requirements to provide investors greater transparency into risks from publicly traded companies' exposure to China. Factors encompassed within the framework may include but not be limited to the percentage of companies' total assets in China, their joint ventures with Chinese firms, the amount and nature of research and development they undertake in China, and the influence of any company personnel

associated with the Chinese Communist Party in corporate decision-making.

- The Joint Economic Committee should consider resuming production of an annual unclassified report on the state of the Chinese economy and economic policy decisions of the Chinese Communist Party. The report would analyze open source and classified data and analysis, leveraging expertise from across the U.S. government, including analysts and economists from the relevant agencies of the intelligence community.
- Congress consider legislation requiring federal financial authorities, including the Federal Reserve, to seek specific information from bank and investment institutions regarding their exposure to, and involvement in, the People's Republic of China. Such information shall include any wealth management products they offer within China and any Chinese investment vehicles they may sell to citizens of the United States directly or indirectly.

Introduction

China's economic landscape in 2023 is impaired by intensifying challenges, many of which are not new but have grown in magnitude over the past three years. Central to these issues is the real estate sector, a cornerstone of China's economy. Its substantial contraction since Beijing imposed austerity measures on lending to developers in 2020 has had a cascading effect, driving the broader economy toward deflation and diminishing household wealth as property sales and prices have dropped. The CCP's public push for Chinese households and nonstate businesses to drive the recovery in 2023 met a muted response. China's soaring official youth unemployment rate in 2023 became the most cited data point in evidence of economic weakness. Consistent with past practice, the Party did not address the concerns, rather it stopped releasing the data after it passed 21 percent in June. The CCP's efforts to censor China's economic data, however, cannot mask the country's economic challenges.

The year has also seen longstanding structural problems reach critical thresholds. For two decades, Beijing's debt and investment-led growth model relied on new property and infrastructure construction, which together reliably accounted for upward of 40–45 percent of GDP. This model's longevity has resulted in a deeply unbalanced economy. Moreover, Party-state lending practices, which favor inefficient state-owned enterprises (SOEs) over nonstate firms, have eroded the country's productivity and saddled the nation with debt. Property developers and local governments, the long-standing source of revenue generation and stimulus, now are heavily weighed down by unproductive debt limiting their maneuvering room to restore the economy. Further challenging and constraining Beijing, China's tax and fiscal structure, tailored around this investment-led model, is facing declining revenue and mounting expenditures. The Party-state under General Secretary of the CCP Xi Jinping nonetheless retains—and is bolstering—its imposing sway over China's economy, aiming to redirect resources into technological development and strategic industries and hoping that innovation can defuse accumulated problems. While the CCP's central balance sheet

provides the strength to pose challenges to the United States in targeted industries, underlying challenges in China's economic model indicate that Beijing's ambitions face growing internal headwinds.

This section begins with an overview of China's economic weakness and the central role of the real estate crisis therein. It then discusses broader structural issues related to overinvestment and underconsumption, accumulation of debt, and the local government fiscal and debt challenge. The section then looks at developments in China's financial and technology sectors. This section draws on the Commission's 2023 hearing on "China's Current Economy: Implications for Investors and Supply Chains," the Commission's staff and contracted research, consultations with policy experts, and open source research and analysis.

China's Real Estate Crisis Devastates Domestic Demand

The collapse in China's real estate sector is a significant contributor to the weakness in China's current economy. Over the last two decades, real estate and related construction has become the cornerstone of China's economy. Lacking other sources of stable investment, China's urban middle and upper classes have traditionally seen homeownership as a one-way bet. Any developments therein matter greatly to China's overall growth, to many other interdependent industries, to households, and to government revenue. Roughly 25–30 percent of GDP annually over the past decade has derived from related activity (compared to 17 percent in the United States), which includes production of the materials used in construction; roughly 70 percent of Chinese household assets are in property (compared to 35 percent in the United States);* and approximately 30 percent of total government revenue over the past decade has been generated via local government land-use sales to property developers.† [1] Real estate development is also a highly leveraged business, with developers funding land purchases and housing construction through loans, bonds, and deposits from home buyers rather than revenue.

As credit tightened, construction and delivery of property slowed, which in turn had a significant impact on households. Chinese house-

*There are many estimates of real estate's share of household wealth, but most reporting goes with the 70 percent figure. The 70 percent figure derives from a People's Bank of China survey of urban households in 2019 (however, as the report notes, only 59 percent is in the form of residential property). State-owned newspaper *Economic Daily's* 2019 housing wealth survey produced similar numbers: 71 percent in real estate for urban households and 52 percent for rural. One frequently cited source, China's Southwest University of Finance and Economics *2018 Urban Household Wealth Health Report*, however, estimates that 78 percent of urban wealth is in real estate. Other estimates are lower, some by quite a lot. Goldman Sachs estimates 62 percent of household wealth is in property. The Chinese Academy of Social Sciences estimates real estate is just 33 percent of assets in household balance sheets.

†The state owns all urban land in China and leases it to property holders for varying durations depending on the land use—70 years for residential use, 50 years for commercial use, and 40 years for industrial use. Local governments also frequently raise capital through loans from quasigovernment investment vehicles using converted land as collateral. Rural land is owned by village collectives. Lacking sufficient tax revenue to meet their expenditure obligations, many local governments in China generate a substantial portion of their revenue through land expropriation: the governments compel farmers to sell rights to their land to the government far below market value, rezone this land as "urban," and then lease it to property developers at a significant return. Meg Rithmire, "Land Institutions and Chinese Political Economy: Institutional Complementarities and Macroeconomic Management," *Politics & Society* 45:1 (2017), 123–153, 126, 135; *China Economic Review*, "If Beijing Is Your Landlord, What Happens When the Lease Is Up?" June 17, 2013; Wen Wang and Fangzhi Ye, "The Political Economy of Land Finance in China," *Public Budgeting & Finance* 36:2 (2016), 91–110, 91–93.

holds serve as the most important financiers to real estate developers, meaning they effectively prop up the central pillar of their economy.[2] Roughly 90 percent of home sales in 2021 were for "presold" units.[3] This means Chinese families took on interest-bearing mortgages which they then, in effect, lent on without interest to developers in exchange for yet-to-be-completed units.[4] The developers relied on prepayments for under-construction units to continue paying contractors and buying land from local governments to turn into more housing units. However, when developers like Country Garden and Evergrande could no longer take on new debt because of limits set by the "three red lines" policy,* they began defaulting and could not complete construction on presold units. Alarmed buyers protested publicly, defaulted on home mortgages, and actively reduced their debts.[5]

Household disillusionment with the sector has continued into the first half of 2023, with outstanding residential mortgage debt declining year-over-year in Q2 2023, a drastic change from the previously rapid pace of mortgage debt accumulation prior to the pandemic.[6] From 2014 to 2019, for example, mortgage debt increased by approximately 260 percent, or 21.2 percent every year, from $1.6 trillion (renminbi [RMB] 11.5 trillion)† to $4.15 trillion (RMB 30.1 trillion).[7] Once households lost confidence in the property market and in developers, the flow of funds at the core of much of China's economy seized up, with developers' most important revenue source declining at the same time they were cut off from bank lending.[8] Thousands of recipients of those funds—most importantly contractors, upstream industries, and local governments—are now feeling the pain.[9] Developers remain in crisis as of September 2023, with Country Garden, China's largest developer, teetering on the verge of default and in a grace period after missing coupon payments on offshore dollar-denominated bonds.[10] China's second largest developer, Evergrande, already defaulted and is still struggling to restructure its staggering $340 billion in liabilities.[11] Evergrande has filed for bankruptcy in U.S. courts, seeking legal protections that may have implications for investors.[12]

After peaking in early 2021, new housing construction starts and total sales have both been on a near-continuous decline. Since then, activity in the property sector has been reduced by more than half, with new housing starts down 57 percent and sales down 39 percent from their peaks.[13] Analysts at Rhodium Group expect the real estate contraction will not level off until 2024 at the earliest.[14] In the meantime, the Party-state has stepped in, prioritizing completion of presold houses to avoid further unrest. Highly leveraged nonstate developers have sold projects and equity to state-owned developers at the same time policy banks have stepped in to support completion of presold units.[15] The unfinished housing stock, as implied by the data, is now at a record low, but at 65 million square meters still represents a major challenge for Beijing to resolve.[16]

The intention behind diminishing the role of the property sector is likely three-fold: to limit excessive expansion of real estate con-

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*The "three red lines" cuts off new bank loans to real estate developers that do not meet certain prudential requirements, including: (1) a debt-to-asset ratio of 70 percent; (2) a debt-to-equity ratio of 100 percent; and (3) short-term borrowing on par with cash reserves.

†Unless noted otherwise, this section uses the following exchange rate throughout: $1 = RMB 7.25.

struction, to redirect Chinese household savings into technology and the Party-state's "innovation-driven development strategy," and to free up resources to facilitate a longer-term transition toward more sustainable domestic demand.* The short-term impact, however, has been devastating for China's economy. The central government now faces a dilemma: it is hesitant to restimulate the sector but also wary of further home price declines, which could further stifle consumer spending as households feel poorer. Controlling the expansion in China's real estate sector, long delayed but necessary, by no means ensures that new growth drivers will materialize. Indeed, nothing of sufficient scale can fill the hole in construction activity caused by the diminishment of the real estate sector.

Property Price Declines Trigger "Balance Sheet Recession" and Deflation

The term "balance sheet recession" is being used with growing frequency to characterize the state of the Chinese economy.[17] It refers to an economic situation wherein individuals, firms, and even local governments, anxious about their debt levels and potentially declining asset values, prioritize repaying existing debts rather than undertaking new expenditures, new borrowing, or new investments.[18] Such behavior can lead to deflation, a situation where overall price levels decline due to a lack of demand. Deflation can lead to a problematic cycle of delayed spending and investment, as households and businesses fear investments will not generate returns and must repay loans in money worth more than what was borrowed, stifling economic growth.†

Though household spending has been the only driver of China's GDP growth in 2023, household consumption expenditure growth is still below pre-pandemic levels.‡ [19] Weak employment, especially youth unemployment, plays a role in this, as does lack of policy support for household incomes.[20] Property price declines likely play the biggest part, though data from property agents and private providers indicate that prices have plunged between 10 and 25 percent from their peak in many of China's major second-tier cities § versus only 6 percent in official statistics.¶ [21] The negative wealth effect

*The "innovation-driven development strategy" is a term formally introduced under General Secretary Xi at the 18th Party Congress in 2012 to refer to the Party-state's growing emphasis on developing science and technology prowess and striving to rely more on innovation and productivity for growth. *Xinhua*, "Explainer: What Does China's Innovation-Driven Development Strategy Mean for the World?" March 9, 2023.

†Because there is an opportunity cost to holding money, the real value of uninvested savings effectively decreases over time. In a deflationary environment, however, the expectation is reversed: the real value of money increases over time, as the same unit of currency can purchase more goods and services as price levels drop. Debt burdens thus get magnified, and because real interest rates are equal to nominal rates net of inflation, the real interest rate borrowers must pay also increases as price levels decrease.

‡Retail sales grew at a meager 3.1 percent year-on-year in Q2 2023 (a number that is still likely overstated), while Alibaba's online sales fell 4.2 percent. Logan Wright, Allen Feng, and Endeavor Tian, "June/Q2 2023 Macro Data Recap," *Rhodium Group China Markets Research*, July 17, 2023, 1.

§Chinese cities are unofficially but widely grouped into four "tiers" based on population, affluence, and whether they are governed at a provincial level (e.g., Shanghai, Chongqing, Beijing, and Tianjin are provincial-level municipalities), as provincial capitals, or at lower echelons of administrative hierarchy. For example, Shanghai is a first-tier city; Chengdu, the populous capital of Sichuan and a regional hub in the southwest, is a second-tier city; Wenzhou, a prefecture-level port city and tourist destination on the coast of Zhejiang Province, is a third-tier city; and Xiangcheng, a county-level city in Henan Province famous foremost as the birthplace of the first president of the Republic of China, Yuan Shikai, is a fourth-tier city. Dorcas Wong, "China's City-Tier Classification: How Does It Work?" *China Briefing*, February 27, 2019.

¶While property price declines are not yet akin to the real estate bubble bursting in Japan in the 1990s, secondary market property prices in China's second-tier and third-tier cities have

from the hit to most households' primary asset has led consumers to shore up savings, avoid new borrowing, withdraw from mortgage debt and riskier investments such as wealth management products, constrain their consumption, and funnel into bank deposits.[22] Even sharper price decreases remain a key risk.[23]

Recent data indicate that China remains near deflationary territory in key areas, pointing to the seriousness of the economic downturn.[24] Deflation compounds the difficulty in reviving household spending as it incentivizes households to delay their purchases and hoard cash.[25] Consumer price growth dropped to zero in June for just the second time in over a decade and turned negative in July, but bounced back in August.[26] Producer prices, meanwhile, saw a continuous yearlong decline accelerate sharply in June, caused in large part by weakness in the property and construction sectors, and has only ameliorated slightly in August.[27]

The collapse in the real estate industry is a core driver of deflation, as declining construction drags down producer prices as well as broader industrial demand. As with households, nonstate businesses across China's economy have refrained from new investment and have instead drawn down inventories amid producer price deflation.[28] Nonstate business investment in the first six months of 2023 declined 0.2 percent year-on-year, the first time in years this figure has declined outright.[29] The data point is particularly notable given the weak base in 2022, indicating the dire straits most private businesses are in following Zero-COVID.[30] Meanwhile, with prices falling, businesses have decreased their borrowing despite Party-state admonitions to banks to loosen lending standards and lend more to the real economy. The People's Bank of China (PBOC) has also eased monetary and banking policy, lowering interest rates multiple times this year and decreasing banks' reserve requirement ratio (or the amount of deposits banks must hold in reserve) three times. Such moves to increase liquidity and stimulate lending have thus far been largely insufficient to stimulate the economy (for more, see "Banking Sector Struggles to Deploy Credit to Support Growth" below). Since 2022, almost all investment growth in China has come from state-owned entities, which do not operate according to market rationality. The CCP is now pressuring economists to avoid discussing deflation and other negative economic news.[31] In July 2023, the Central Committee and State Council jointly issued a 31-point opinion on how to increase support for the nonstate sector. While likely a welcome message for Chinese businesses, it is far from enough to restore business confidence or paper over massive economic challenges.[32]

The CCP Tries to Control Economic Statistics—and the Narrative about Its Rise

Control over economic data has steadily increased under Xi's tenure and reached new levels in 2023. As the CCP has relentlessly trained its focus on achieving great power status under Xi,

continued a multiyear decline into 2023, with year-on-year decreases each month thus far in 2023. First-tier city secondary market prices (i.e., Shanghai, Beijing, Guangzhou, and Shenzhen) even saw their first official decline overall in June 2023 since August of 2019. Logan Wright, Allen Feng, and Endeavor Tian, "Property Market Chartbook, July 2023," *Rhodium Group China Markets Research*, July 27, 2023, 5.

The CCP Tries to Control Economic Statistics—and the Narrative about Its Rise—*Continued*

the narrative of China's robust, inevitable economic rise is a critical propaganda message Beijing seeks to guard and amplify. As just one of many machinations to bolster this narrative, Beijing routinely manipulates its headline data, often retroactively adjusting previous years' data downward so as to fictitiously create year-over-year growth. As Logan Wright, partner at the economic research firm Rhodium Group, noted in testimony before the Commission, "China's headline economic data—meaning the data likely to generate media coverage, such as GDP growth—should be understood as critical elements of China's internal and external narrative management concerning the economy."[33] Data series that contradict Beijing's narrative, or that might allow other observes to derive an alternative picture, are increasingly suppressed and restricted, such as China's youth unemployment data.

With Weak Domestic Demand, China Leans on Consumer Markets Elsewhere

Export-oriented manufacturing has been a singular boost to China's economy since COVID. Net exports contributed nearly a quarter of China's real GDP growth from 2020 to 2023, the largest share since the late 1990s.[34] In contrast to the property sector, the importance of exports has been routinely emphasized, including by Premier Li Qiang at a State Council meeting in April 2023, which stressed the importance of implementing policies to promote exports.[*][35] Even during lockdowns in 2022, China enacted policies to ensure export-oriented manufacturers were protected, subsidized, and able to sell to global markets. China's mercantilist economic structure and policy orientation continues to impact global trade.

China's exports reached $3.6 trillion in 2022—up 44.6 percent from $2.49 trillion in 2019.[36] When looking just at manufactured goods, China reached roughly $3.5 trillion in exports while importing just $1.5 trillion at the end of 2022.[†][37] Data through the first seven months of 2023 indicate China's trade has contracted from record highs in 2022, but an evolving mix of manufacturing exports, including automobiles and legacy semiconductors, pose new challenges to the United States and global trade. Investment into the manufacture of electrical machinery and equipment was up a staggering 42.6 percent, the most of any category, indicating there are still select pockets of economic activity.[38] Meanwhile, cars produced in China, particularly electric vehicles, emerged from the pandemic

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*China's 14th Five-Year Plan effectively makes this obligatory by doing away with targets for the services sector's growth and instead calling for the extraordinarily high manufacturing share of GDP to remain stable. *Xinhua*, "(Two Sessions Authorized Release) The 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through 2035" ([两会受权发布] 中华人民共和国国民经济和社会发展第十 四个五年规划和 2035 年远景目标纲要), March 12, 2021. Translation.

†China issued substantial tax rebates to manufacturing exporters in 2022, totaling $243.3 billion (RMB 1.55 trillion). Meanwhile, China taxes imports at regular values, earning $231.3 billion (RMB 1.63 trillion) in tax revenue, thus intentionally creating an imbalance in favor of its own exports while discouraging foreign imports. China Ministry of Finance via CEIC, *CN: Govt Revenue: General Public Budget Revenue: Tax: Refund of Tax for Export; Consumption and Value Added of Imported Product*.

as a major force in international trade.[39] Up until 2020, China had only a moderate share of global auto exports; exports have since skyrocketed. In the first quarter of 2023, China surpassed Japan as the world's largest auto exporter, exporting 1.07 million vehicles, 58 percent more than the previous period.[40] While U.S. and Western manufacturers such as Tesla, BMW, and Renault still make up a substantial share, Chinese companies such as SAIC Motor Corp. are also among the top exporters.[41]

China's Long Foretold—Yet Still Unrealized—Rebalancing

While real estate is at the center of China's economic problems in 2023, the roots of the problem are deeper, residing in the Party-state's growth model. Over the last two decades, the defining characteristic of Beijing's economic model has been heavy reliance on debt-fueled investment and exports relative to domestic household consumption.* As Party secretary of Zhejiang Province in 2005, Xi Jinping presciently worried about the problems such an economic model would bring, writing that "a long-term high investment rate and a relatively low consumption rate, and the imbalance between investment and consumption ratios, will result in growth overly dependent on investment, causing a series of issues in the macro areas of production, distribution, and consumption."[42] Today, at 38.5 percent of GDP, China's private consumption share of GDP remains by far the lowest of any major economy, at nearly half the United States' 68.2 percent share and small even in comparison to the 50 percent typical in other East Asian economies that pursued a similarly investment-driven growth model.[43] From 2010 through the end of 2021, China's economy saw a small move in the direction of rebalancing away from investment and toward consumption-led growth (with consumption's share of GDP increasing from 34.6 percent to 38.5 percent).[44]

The Party-state's choice not to support households during its COVID-19 containment led consumption's share of GDP by the end of 2022 to fall to its lowest since 2014.[45] Beijing extended substantial subsidies, tax breaks, and cheap loans to businesses to try to prevent some shutdowns, but in stark contrast to the United States and other developed countries it offered relatively little assistance to households themselves.[46] At the same time, China's poorly developed social welfare and healthcare systems placed the burden largely on households and individuals to take care of themselves.

Despite rhetoric about increasing domestic consumption, in practice nearly all meaningful economic stimulus continues to go to producers in the form of subsidies, below-market loans, and tax breaks. This is one reason why households responded tepidly when Beijing called upon them to drive the economic recovery in 2023. Even the Party-state's limited consumption promotion strategies—such as subsidizing purchases of big-ticket items like electric vehicles—tend to be narrow and clearly intended to bolster a specific favored in-

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*In the expenditure approach to GDP accounting, the most frequently used, there are four categories of growth: consumption, investment, government spending, and exports, represented by the equation Y=C+I+G+NX, wherein Y is GDP, C is household or private consumption, I is investment, G is government spending, and NX is exports minus imports. In this section, consumption only refers to household consumption unless otherwise stated. "Final consumption" is another frequently used measure that refers to both household consumption and government spending combined.

dustry. Notwithstanding the Party-state recently releasing several high-level plans to boost domestic consumption, policymakers reliably and consistently fail to offer proposals that would meaningfully bolster consumption.*[47]

Failure to Rebalance Is Rooted in the Party-State's Demand for Control over the Economy

China's investment-led growth model is a bulwark of the Party-state's organizational apparatus and its ability to continue co-opting elites and ensure regime survival. However, it also perpetuates a system of regulatory capture in which state-run banks keep SOEs operating through evergreen loans. At the same time, the central government establishes administrative monopolies to insulate SOEs from nonstate sector competition and guarantee their market share and profit margins. These are defining features of the Party-state's economic management, and they shed light on its reluctance to stimulate household consumption and rebalance away from an investment-led economic model. The Party-state retains control in part through a hierarchal rent-sharing scheme: the Chinese public's accrued savings are held in captive deposits in state banks because there are few alternative investment avenues. These savings are then lent to SOEs and a network of elites in key sectors such as real estate, infrastructure, utilities, and upstream commodities at below-market interest rates to fund centrally directed projects. But because the system is so indebted, its continued stability—the continued ability of highly indebted SOEs to service debt—depends on further lending and directing SOEs to fulfill state projects, regardless of whether there is market demand for them. As economists Thomas Rawski and Loren Brandt described in 2020,

> *Authoritarian governance dominated by self-perpetuating elites occupies the core of China's political economy. The power and status of leaders at all levels rest on personal networks of patronage and loyalty. Rewarding supporters with money, positions, and commercial opportunities forms a critical bulwark of elite adherence, and thus regime survival. The continuing need to distribute resources inclines leaders toward institutions and policy structures that place large flows of rents at their disposal.*[48]

Developments that undermine the Party's capacity to control resources are perceived as threats by Party leaders. This plausibly explains why growing calls by both Chinese and U.S. economists to stimulate consumption via direct distribution of resources to households appear to be nonstarters: bottom-up consumption does not buy elite adherence, nor can consumer spending be as readily funneled into the Party-state's priorities, such as technological self-reliance and industrial upgrading.

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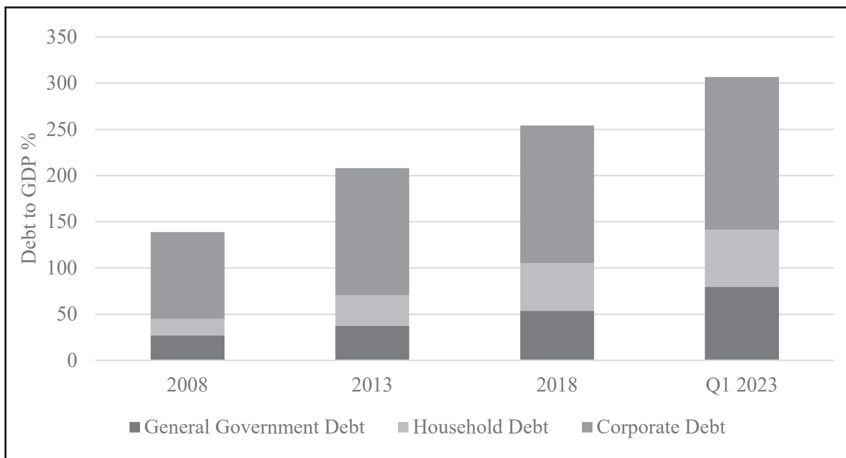
*This pattern is not new. Most famously, in 2007, then Premier Wen Jiabao—opining on the same issue—described China's economy as "unstable, unbalanced, uncoordinated, and unsustainable" and promised to boost consumption. China Government Network, *Wen Jiabao: China Has the Conditions to Continue to Maintain Stable and Rapid Economic Development*, (温家宝:中国具备继续保持经济平稳较快发展的条件) March 16, 2007. Translation.

China's Debt Burden Forecloses Old Growth Playbook

The Overall Debt Picture

Overall debt to GDP in China is now more than double what it was in 2008 (Figure 1), according to data from the Bank for International Settlements (BIS).[49] Almost every sector's balance sheet in China is now highly leveraged. Chinese households, once touted as debt averse with a meager 17.9 percent of debt to GDP in 2008, now hold an estimated 63.5 percent of GDP in debt as of June 2023, only slightly less than in the United States.[50] Corporate debt, meanwhile, rose rapidly in the early 2010s and has leveled off at 165.1 percent of GDP, double the 80 percent level in the United States.[51] China's general government debt in 2023, according to BIS, is estimated at only 79.4 percent of GDP, lower than the 120 percent in the United States.[52] But this is misleading: the International Monetary Fund's (IMF) more expansive "augmented debt" calculation gives a more accurate estimate of China's total government debt at 121 percent of GDP (this includes officially recognized central and local debt, implicit local debt, and debt from government funds).[53] China's central government itself maintains the only unencumbered balance sheet in the country, at 23 percent of GDP in 2023 (up from 14.8 percent in 2014).[54] While explicit local government debt is only 32 percent of GDP, the implicit debt of their locally owned financing vehicles accounts for another 53 percent of GDP in 2023, bringing total local debt to 85 percent of GDP.[55]

Figure 1: China's Total Debt to GDP, 2008–Q1 2023



Source: Bank for International Settlements, "BIS Total Credit Statistics."

The upshot of China's debt situation is that it has achieved developed country debt levels at middle income GDP per capita levels. China's economic growth over the last two decades is inseparable from its growth in debt, as China's banking sector has ballooned from $9 trillion in assets to a staggering $56 trillion at

the end of 2022, representing the largest single country expansion in credit in modern economic history.[56] This unprecedented expansion in credit largely flowed into China's real estate and infrastructure construction bubble. Research from the IMF and others has shown that China's productivity slowdown is closely linked to the expansion of credit to these sectors over the last decade, as investment in more productive areas was crowded out.[57] With viable infrastructure projects increasingly difficult to find and housing arguably oversupplied, substantial additional construction appears unlikely.[58] As Dr. Wright noted in testimony before the Commission, the financial system in China will not be able to maintain such extensive credit growth again and will "no longer be as capable of insulating unproductive enterprises from default."[59] In effect, the old playbook for growth in China is over. And with the Party-state structurally antagonistic to consumer-led growth, it is difficult to see where new growth will derive. As China settles into a lower growth equilibrium, it must now also contend with the accumulated problems from its previous growth model.

Local Government Debt: The Crux of the Problem

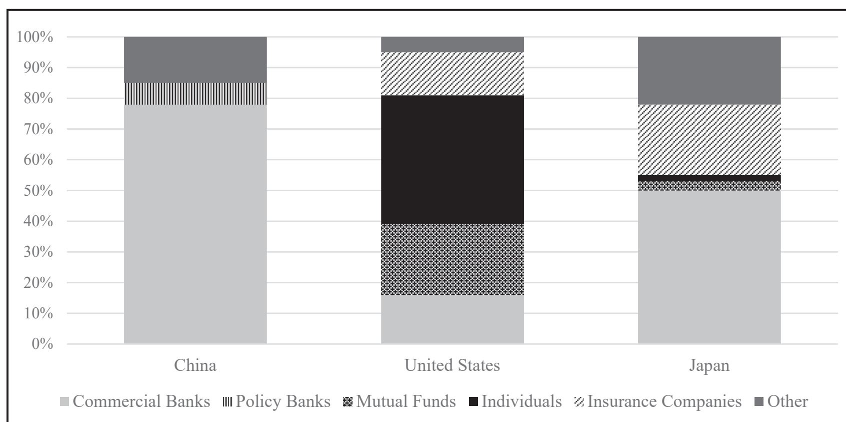
Under General Secretary Xi's tenure, local government debt has accumulated more rapidly than any other sector.[60] There are two broad categories: (1) the explicitly recognized bonds of local governments themselves; and (2) the debt of the SOEs they control, known as local government financing vehicles (LGFVs). Analysts refer to the latter as "implicit debt" of the local governments, as investors in China treat these entities as backstopped by local governments, even as Beijing denies these are the government's obligations and instead includes them in corporate debt statistics.*

Explicit Local Debt (32 percent of GDP): The IMF estimates explicitly recognized local government debt in 2023 will total $5.5 trillion (RMB 40 trillion), equivalent to 32 percent of China's GDP and up from 23.8 percent in 2014.[61] As indicated in Figure 2, ownership of explicitly recognized local government bonds as of 2019 is highly concentrated, with China's commercial banks, overwhelmingly state-owned, purchasing 80 percent of the bonds.† [62]

* Prior to 2015, municipal governments could not issue debt directly, with the exception of a few pilot programs authorized by China's central government. Because local governments' revenue bases were often insufficient to meet their expenditure obligations, they used LGFVs to evade these restrictions, having the LGFV issue debt on the local government's behalf. This practice has continued even as China legalized municipal debt issuance in 2015. Zhiguo He, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China's Quest for Capital: Motivations, Methods, and Implications*, January 23, 2020, 6, 10.

† Officially recognized local government bonds include general and special purpose bonds.

Figure 2: Local Government Bond Holders, 2019



Source: Alex Holmes and David Lancaster, "China's Local Government Bond Market," *Reserve Bank of Australia*, June 2019, 184.

Implicit Local Debt (53 percent of GDP): The IMF estimates overall LGFV debt in 2023 will total $9.1 trillion (RMB 66 trillion), equivalent to 53 percent of China's GDP and up from 13.5 percent in 2014.* [63] Ownership of local government implicit debt (i.e., LGFV debt), meanwhile, is a larger and more complicated story than explicit local debt. There are two main categories of LGFV debt: bonds and bank loans.[64] The exposure to LGFV debt across China's financial system is extremely large. According to estimates as of July 2023 from Dr. Wright and Allen Feng at Rhodium Group, LGFV bonds represented 51 percent of all corporate bonds in China, and LGFV loans comprised 20–25 percent of all of China's bank loans.[65]

LGFV bonds are roughly 25 percent of all LGFV debt.[66] In contrast to explicitly recognized local government bonds, LGFV bonds are largely privately owned via investment products, including wealth management products and other products issued by fund management companies, trust companies, and nonbank financial institutions. Roughly two-thirds of LGFV bonds were sold in this manner.[67] Banks purchased most of the rest.[68]

Bank loans, however, are the main funding source for LGFVs. Unlike local governments themselves, their LGFV proxies can borrow directly from banks—which is in fact what they were originally set up to do. Loans make up as much as 75 percent of all LGFV debt, or $5.66 trillion (RMB 41 trillion), per Dr. Wright and Mr. Feng's calculations.† Most loans originate from branches of China's six largest national banks, while a rapidly rising share comes from city

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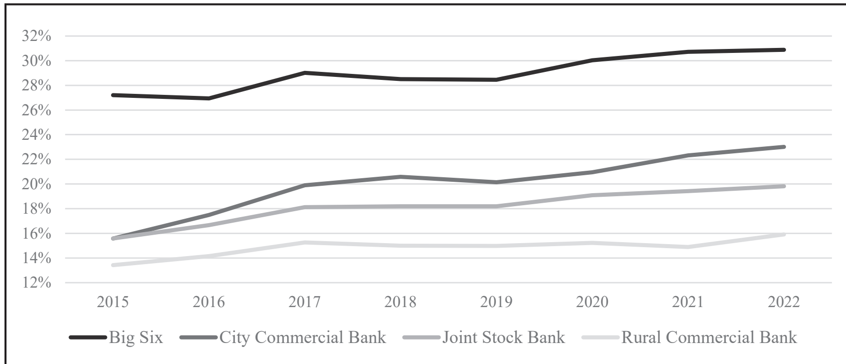
* By the end of 2021, Dr. Wright calculated total LGFV debt stood at $8.4 trillion (RMB 54 trillion), equivalent to 43 percent of China's GDP, though as he notes this is almost certainly an underestimate. Dr. Wright's calculations derive from a bottom-up survey analyzing roughly 3,000 LGFVs that release financials. Many smaller LGFVs, however, do not publish financials. Logan Wright and Allen Feng, "Tapped Out," *Rhodium Group China Markets Research*, May 23, 2023.

† Rhodium Group surveyed a sample of over 300 banks to confirm this number from the bottom up, looking at their lending to four industries that are most heavily dominated by local government infrastructure investment and LGFVs: transportation, power/heat/water production and supply, utilities/public services, and commercial/leasing services. Logan Wright and Allen Feng, "Who Holds China's Local Government Debt," *Rhodium Group China Markets Research*, August 3, 2023, 5.

commercial banks, which are controlled by local governments (see Figure 3).[69] China's financial institutions are consequently highly exposed to credit risk from LGFVs.

Figure 3: Estimated Holdings of LGFV Loans by Bank Type, 2015–2022



Note: Percentages for each type of bank reflect LGFV loans relative to total loan balance. The big six banks are the six largest national-level banks, namely the Industrial and Commercial Bank of China (ICBC), Bank of China (BOC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of Communications, and Postal Savings Bank of China. City and rural commercial banks are those incorporated at the city and township level and largely controlled by local governments. Lastly, China's 12 joint-stock banks, sitting between the nation's large state-owned banks and smaller city commercial banks, have more diversified ownership but are still state controlled.
Source: Adapted from Logan Wright and Allen Feng, "Who Holds China's Local Government Debt," *Rhodium Group China Markets Research*, August 3, 2023, 6.

While the average LGFV debt-to-GDP ratio in China's provinces is 70.6 percent as of 2021, some provinces—such as Guizhou, with 157.81 percent of GDP—face more severe challenges.[70] There are growing risks of a potential default on LGFV-issued bonds, an event that has thus far never occurred in China but could have systemic risk implications, as a default could lead to rapid repricing of all such debt.[71] Local government debt is where the Party-state has enabled and allowed debt to accumulate most rapidly in pursuit of growth over the last several years. As the Party-state deals with its debt burdens, this is where some of the greatest potential risks reside.

The heavy debt load local governments carry is also important context to understand the current state of the economy: debt-fueled investment by local governments and their proxies has been the primary lever the Party-state has relied upon to enact stimulus and promote growth over the last two decades. Locally owned banks, controlled by local Party-state officials, have been a particularly critical source of this debt-fueled growth.[72] This policy support channel is now heavily encumbered (leading to questions about the ability to pull this lever in the future). At the same time, the Party appears more resolved than ever before not to pull it (leading to questions about the will to do so).[73]

In April 2023, the Politburo reiterated earlier messages sent at both the March 2023 National People's Congress and the December 2022 Central Economic Work Conference, noting that debt—in particular the off-balance-sheet debt held by LGFVs—is at the top of the Party-state's economic agenda.[74] The central Party-state

currently lacks a clear picture of the volume and composition of such local debt. Beijing's struggle to ascertain and contain such local government debt is underscored by a new round of nationwide inspections reportedly launched in May 2023 by China's Ministry of Finance to understand the scope of the problem.[75] Meanwhile, the exposure of the banks was clearly demonstrated in the first LGFV debt restructuring pushed through early in 2023, with bank lenders given no choice but to allow borrowers to delay loan payments and extend the time they had to pay back their debts.[*] [76] With Beijing signaling more serious intent than ever about reining in local debts, the question is whether the central government would be willing to tolerate the consequences (for more detail, see Appendix: Bureaucratic Reorganization Points to Focus on Local Debt Challenges).

If Beijing were to take effective steps to cut off LGFV borrowing, China's growth would collapse below zero. Local government investment accounts for roughly 14–15 percent of GDP.[77] Further, LGFVs' role in stimulating China's economy goes beyond infrastructure, as a recent IMF report details.[78] LGFVs have direct and indirect investment linkages to nearly 5,000 non-LGFV firms, of which roughly half are nonfinancial firms that undertake a large amount of investment relative to income.[79] LGFVs amplify risks in the system by using their own easy access to credit to support these affiliated companies.[80] Further LGFV credit constriction would thus have a major knock-on effect. With LGFV income from operating activities so minimal that the IMF estimates new external financing, primarily in the form of debt, is responsible for 80–90 percent of their spending, a reinvigorated deleveraging campaign will inevitably limit LGFVs' ability to fulfill their GDP-boosting role.[81] Whether Beijing would be willing to stomach so much additional economic turmoil on top of the real estate sector's collapse remains to be seen.

China's Fiscal Crisis

China's local governments entered 2023 in a fiscal crisis, with China's overall consolidated budget deficit[†] having risen to 7.2 percent of GDP ($1.21 trillion) by the end of 2022, up from 4.9 percent of GDP ($784 billion) in 2021.[82] The increase had three major drivers: first, government expenditures rose sharply to provide for Zero-COVID enforcement. Second, tax revenues decreased as many firms reduced operations at the same time Beijing and local governments reduced fees on businesses and granted sizable subsidies and tax credits to firms.[83] And finally, property-related taxes as well as sales of land use rights—which together constitute roughly a third

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*For an overview of the first LGFV restructuring in the city of Zunyi, in Guizhou Province, and how the costs of local government debt restructuring are likely to be borne by banks, see U.S.-China Economic and Security Review Commission, "Fiscal: Bank Loan Restructuring Shows Limits of Local Debt Cleanup," in *Economics and Trade Bulletin*, January 31, 2023, 6.

†There are three budget categories used by China's government: the general public budget revenue, the government-managed fund revenue, and the state-owned capital budget. The social insurance fund is generally treated separately. General public budget revenue is the category related to taxes and government fiscal outlays, similar to the U.S. government budget, whereas fund revenue refers mostly to revenue and expenditures related to land sales. *Xinhua*, "Report on Central and Local Budget Implementation in 2022 and Draft Central and Local Budget in 2023 (Summary)" (关于2022年中央和地方预算执行情况与2023年中央和地方预算草案的报告(摘要)), March 6, 2023. Translation.

of local government revenue—plummeted as the real estate sector contracted.[84] Land sales in particular contracted 23.3 percent from $2.35 trillion (RMB 8.7 trillion) in 2021 to $991 billion (RMB 6.7 trillion) in 2022.*[85] The crisis was not evenly distributed, as poorer provinces saw steeper declines. Yunnan, for example, saw its general budget revenue decline 27 percent and fund revenue drop 68 percent.[86]

The situation was likely even worse than top-line indicators suggest, however. According to research from Dr. Wright and Mr. Feng of Rhodium Group, which analyzed the 2022 annual results of 2,892 LGFVs in 205 cities, nearly half of all land use right sales were to LGFVs in 2022, up from 33 percent in 2021 and 17 percent in 2020.[87] In effect, local governments engaged in expensive borrowing from banks via LGFVs in order to create one-off fiscal revenue. The across-the-board fiscal crisis has seriously constrained Beijing's capacity to act on its priorities, whether that be infrastructure building or common prosperity. As Dr. Wright and Mr. Feng assess, weakness in local government finances "is the primary reason that there has been no meaningful fiscal support for China's recovery this year."[88]

The challenge facing China's fiscal capacity, however, is broader and deeper than recent stresses from Zero-COVID: China's entire fiscal and tax system has been structured around revenues from an investment-led growth model.[89] Specifically, both the central and local governments rely heavily on production-focused taxes, such as the enterprise income tax and value-added tax (VAT). In 2022, enterprise income taxes and the VAT made up the majority of general budget revenue at a combined 54.4 percent.[90] Personal income tax, meanwhile, made up a meager 8.6 percent of general public budget revenue in 2022, well below the Organization for Economic Cooperation and Development average of 25 percent.[91] The high level at which the personal income tax rate begins effectively excludes most of the population from paying anything, while many of the wealthiest individuals are able to evade the tax.[92] The Party-state's fiscal structure thus provides little incentive to boost household income while effectively necessitating production expansion. The importance of production to government revenue, particularly at the local level, creates overwhelming incentives for local governments—who will go to great lengths to accumulate a revenue base—to attract new investment and promote additional production. China's tax system thus incentivizes excess capacity and debt-fueled investment, as tax revenue expands in line with production expenditure, contributing to imbalances in China's domestic economy as well as global trade distortions.

China's problematic balance in its center-local fiscal relationship further complicates the situation. Beijing denies local governments discretion to set tax rates in their jurisdictions and only allows 50

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* For context, rural land is owned by village collectives, while the state owns all urban land in China and leases it to property holders for varying durations depending on the land use—70 years for residential use, 50 years for commercial use, and 40 years for industrial use. Local governments thus convert rural land to urban land and sell usage rights. Local governments also transfer land to LGFVs, which raise capital using the converted land as collateral. Meg Rithmire, "Land Institutions and Chinese Political Economy: Institutional Complementarities and Macroeconomic Management," *Politics & Society* 45:1 (2017): 126, 135; *China Economic Review*, "If Beijing Is Your Landlord, What Happens When the Lease Is Up?" June 17, 2013.

percent of fiscal revenue to be retained locally while shifting 85 percent of expenditure obligations onto the local level.[93] Across the largest expenditure areas, namely social security and employment, health, and education, local governments bear closer to 90 percent of the expenditure burden.[94] Beijing is not blind to local governments' burden and has been increasing transfer payments. In response to Zero-COVID-induced hardships in 2022, the center increased transfers to localities by 18 percent in 2022, sending down an additional $224 billion (RMB 1.5 trillion) and nearly offsetting the officially calculated decline in local land sales.* [95] But major inefficiencies and a lack of accountability plague the transfer mechanism, including delays as well as siphoning as the transfers make their way from the center to the province and to cities, counties, and townships.[96] Beijing's asymmetric resource concentration grants it political leverage over localities (which must turn to the central government to make up funding shortfalls) but induces highly undesirable behavior at the local level as local officials strive to make up for limited funding while facing intense competition for promotion based on growth and fulfilling top-down mandates.[97]

Beijing has been striving to tighten controls on off-balance-sheet borrowing without compromising its centralization of financial power over localities and changing the underlying relationship. Beijing has been granting localities the ability to issue increasing amounts of debt via centrally controllable and observable channels, for example granting localities an overall special purpose bond quota of $524 billion (RMB 3.8 trillion) in 2023,† a 4.1 percent increase from the 2022 quota.[98] Such explicitly allowed debt, however, comes nowhere close to replacing off-balance-sheet LGFV borrowing and is also earmarked to be spent on "high-quality" infrastructure projects, which are increasingly scarce. With Beijing prioritizing controlling implicit and off-balance-sheet borrowing, local governments face an increasingly impossible task of maintaining GDP-supporting investment while balancing their other major fiscal obligations.[99] Ultimately, stress from debt obligations is rising and an aging population will demand increasing support.[100] Despite General Secretary Xi's conspicuous rhetoric around promoting common prosperity and people's wellbeing, changes to the tax system and implementation of social welfare programs that would put such an agenda on more stable financial footing are lacking.[101] In fact, under Xi's tenure, the government's revenue as a percentage of GDP has fallen substantially from 30.8 percent in 2013 to 23.3 percent in 2022, while more sustainable non-land-sale tax revenue fell from 21.8 percent in 2013 to just 16.8 percent in 2022 (see Figure 4).[102]

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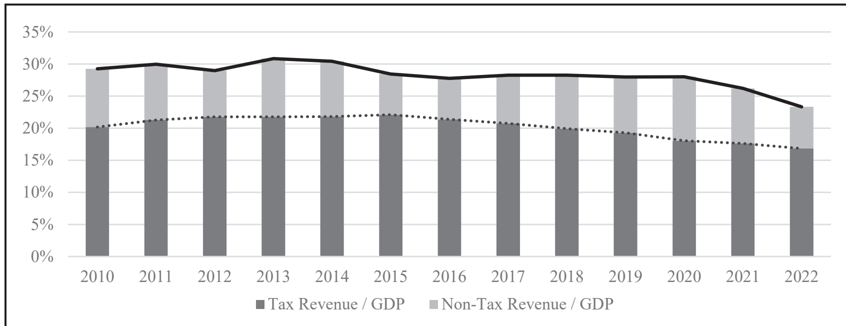
* Local governments used LGFVs to borrow from banks and purchase 50 percent of all land in 2022. The decline of land sales, had they not done so, would have been much larger. This is the prime example of using the banking system as an expensive source of quasi-fiscal revenue. Logan Wright and Allen Feng, "Tapped Out," *Rhodium Group China Markets Research*, May 23, 2023.

† Special purpose bonds are a debt instrument Beijing allocates to local governments and earmarks for infrastructure projects and other projects.

Figure 4: China Government Revenue as Percentage of GDP, 2013–2022



Source: China Ministry of Finance via CEIC.
Note: Tax revenue includes central and local general public budget revenue; nontax revenue includes central and local fund revenue (which is mostly revenue from land sales).

Local Government Debt and Fiscal Reform Paths Are Politically Difficult

Beijing confronts a two-fold challenge: dealing with the stock of existing debt and adjusting the flow of funds and impetus for potential additional debt. With regard to existing debt, Beijing has four broad options, from most to least challenging: write off the debt and assign losses; sell assets to pay down the debt; absorb local debt onto the healthier central government balance sheet; or restructure the debt.* With regard to the fiscal flow of funds and potential new debt, Beijing could: extricate the banking sector from Party-state control; adjust the center-local fiscal balance; find new recurring revenue streams; or cut expenditures. Ultimately, as Nicholas Borst, vice president and director of China research at Seafarer Capital Partners, noted in testimony before the Commission, the paths Beijing is most likely to tread are those that require as few difficult structural changes as possible.[103] China is thus likely to muddle through using familiar tactics of defusing acute risks by moving debt from one balance sheet to another (e.g., state-owned commercial banks, policy banks, or asset management companies), while underlying problems linger and further weigh on growth.[104] Fundamentally resolving the problems, however, would require pursuing more difficult paths.

Debt Stock Options

Write Down Debt and Assign Losses: The quickest and most thorough way to deal with unproductive local debt would be for Beijing to force the most distressed local governments and their LGFVs through a bankruptcy process wherein creditors accept losses and bad debt is recognized and written down.[105] While theoretically the most straightforward way to deal with debt, breaking implicit guarantees would lead to system-wide readjustments that would see many LGFV borrowers unable to roll over loans, abruptly curtailing

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* China's Ministry of Finance created a similar list in 2018 for how it might tackle off-balance-sheet debt, specifying "six strategies for resolving local governments' hidden debt: arrange repayment through government funds; sell government equity and state-owned assets; use project carry-over funds and operating income for repayment; convert borrowings into business debts; roll over existing debt by issuing new debt; or use of bankruptcy reorganization or liquidation." Cheng Siwei et al., "China's Economy Hostage to Local Governments' Hidden Debts," *Nikkei Asia*, August 23, 2023.

a substantial share of LGFV economic activity and creating major contagion risk.[106] At the same time, assigning the losses would be a very difficult and politically fraught process. Banks are not sufficiently capitalized to deal with the extent of losses they would likely be exposed to, and many ultimate creditors to local governments are wealthy urban Chinese households who represent a powerful constituency.[107] Abruptly assigning losses and writing down debt would thus risk economic consequences and discontent among politically influential constituencies. Nonetheless, Beijing could try to slowly and selectively introduce bankruptcy processes for local governments and LGFVs, though even this could still potentially precipitate contagion and lead to rapid readjustments in credit worthiness of many such borrowers and a cascading contraction in economic activity.[108]

Asset Sales: The central and local governments could preemptively try to sell off state-owned assets to pay down local debts or even do so in conjunction with bankruptcy processes discussed above. According to an IMF estimate, LGFVs held assets equivalent to 120 percent of GDP in 2020, half of which are physical assets and half of which are financial, in comparison to liabilities equivalent to just 75 percent.* [109] Meanwhile, in addition to LGFV assets, central and local governments have extensive financial holdings, particularly as the Party-state has invested heavily into the nonstate sector, part of a broader shift toward a Party-state-capitalism economic model.[110] One Chinese government think tank estimates central and local government financial holdings at $19 trillion in 2019, equivalent to 130 percent of GDP at the time.[111] Most LGFV and government assets, however, are priced at book value and likely diverge sharply from their true market value.[112] Many, though, such as Guizhou's 50 percent ownership of publicly listed liquor company Moutai, with an overall market capitalization of over $300 billion in 2023, are real and substantial.[113] Given Xi's views on the importance of the state-owned sector, however, major central government asset sales of strategically important SOEs are unlikely. Asset quality of local governments will be highly variable, and any widespread effort to sell off assets could lead to panic and rapid deterioration in value. Overall, this path would require substantial reduction in the size and role of the state sector while introducing substantial risk as assets are repriced.

Central Government Action: China's central government commands one of the only unencumbered balance sheets with a debt of $3.88 trillion (RMB 26 trillion) in 2022, a debt-to-GDP ratio of 22 percent and significantly below that of other major economies.[114] Further, as Mr. Borst wrote in testimony before the Commission, the central government can also borrow at very low rates over long durations.[115] The central government has the option to establish relief funds for struggling local governments and LGFVs or direct-

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*As the IMF noted in 2020, "Infrastructure and other physical assets like inventories account for 48 percent of LGFV assets, down from 52 percent in 2015. Financial assets, encompassing accounts receivable and investments in securities, cash, loans, company equity and other unspecified tangible assets, are the fastest growing portion of LGFV balance sheets, accounting for 48 percent of total LGFV assets, up from 42 percent in 2015. Intangible assets account for the remaining 4 percent of assets." *International Monetary Fund*, "People's Republic of China: Selected Issues," December 20, 2021, 40.

ly move certain local government debts to its own books. Another possibility is for the central government to inject capital into its state-run banks, policy institutions, and asset management entities to enable them to aid local governments.[116] Moving the debt from one state balance sheet to another does not resolve the debt stock issue, though it may place the existing debts with actors more capable of bearing them. Depending upon how the central government acted, however, it could encumber its own balance sheet, potentially constraining Beijing's ability to maneuver in the future while introducing additional moral hazard into the system.

Restructuring and Rolling Over Debt: Beijing may seek to restructure a substantial portion of the costliest debt, most prominently the implicit debt of LGFVs, by swapping or rolling it over into debt with a lower interest rate and longer duration. Beijing ran this playbook once before in 2015 when it allowed local governments to convert $1.9 trillion (RMB 12.2 trillion) from LGFV loans into explicitly recognized local government bonds—and made state banks serve as the counterparty.[117] Reviving that playbook, in August 2023, Beijing allowed provincial-level governments to raise $139 billion (RMB 1 trillion) via bond sales to swap the debt of the most troubled LGFVs at various administrative levels, effectively bailing them out by shifting the debt burden to provincial governments instead.[118] Bloomberg also reported that authorities identified "12 provinces and cities as 'high-risk' areas where more support will be provided, including the provinces of Guizhou, Hunan, Jilin, and Anhui, as well as Tianjin city."[119] Meanwhile, restructuring could take a slightly different form, as with the first explicit LGFV loan restructuring of Zunyi Road and Bridge Construction Group in Zunyi City in Guizhou Province. Rather than converting LGFV debt to explicit bonds, bank lenders were forced to restructure the loans with the LGFV itself, pushing the maturity of loans out for 20 years and drastically reducing the interest rates.[120] Beijing recently signaled, however, that it would not be following the Zunyi model more broadly.[121] Overall, as the August announcement indicated, this approach of rolling over the debt is effectively the path of least resistance for Beijing, as it does not require any hard, structural changes or sharp and immediate consequences. In this muddling-through scenario, existing debt will slowly be amortized as borrowing costs are reduced, and the ultimate lenders (i.e., household depositors) will bear the costs in the form of lower returns on their savings.[122]

Debt and Flow of Funds Options

Remove Party-State Control of Banks: Aside from China's high national savings rate, Party-state control over banks is perhaps the most fundamental factor facilitating China's massive debt buildup. Party-state officials at central and local levels are able to direct banks to create debt at will. Local officials have played an increasingly prominent role in bank debt since the mid-1990s as Beijing allowed locally controlled banks (city commercial banks) to proliferate.[123] The ballooning number and overall asset size of these local state banks have made them a major pillar of China's debt and investment growth model.[124] The lack of separation between the Party-state and the bank system allows central and especial-

ly local Party-state officials to command banks to lend.[125] Without changing this institutional setup, China's problematic debt dynamic may never be resolved. Severing the CCP from the banks, however, would be antithetical to the Party's Leninist agenda of controlling the economy's commanding heights.

Change Center-Local Dynamic: The imbalance between local revenue and expenditure is another key structural issue undergirding local government debt and fiscal problems. Overburdening and underfunding local governments is a fundamental issue in China's system—one that contributed to the failure of the 2015 restructuring to get local governments to stop using LGFVs—and it is likely to limit the system's effectiveness again in 2023.[126] To fix the issue, Beijing could give localities greater autonomy to develop revenue streams (i.e., allowing local governments autonomy in setting tax rates). Alternatively, Beijing could allow local governments to retain a greater share of existing tax streams, such as the VAT, of which localities currently only retain 50 percent.[127] Another option is for Beijing to centralize more expenditures to limit lower-level burdens in areas such as healthcare and education, where localities currently bear 90 percent of the spending obligations.[128] Without raising overall revenue, however, Beijing would simply be transferring the fiscal deficit onto itself while decreasing its top-down control over localities. Given the clear preference for consolidating central control, further decentralization is unlikely.

Raise Revenue: In addition to the limited role of the personal income tax discussed already, China also has no estate tax and no property tax.[129] For years, analysts—and China's own State Council beginning in 2003—have flagged a property tax as an obvious route China should pursue to at least partially remedy a variety of ills, from regressive taxation to the property bubble to fiscal challenges.[130] In April 2023, China reportedly finished creating its first nationwide property registration list, which it had begun compiling in 2014.[131] This could be a precursor to the long-anticipated implementation of a property tax. However, the long delay in creating the list, coupled with the quiet abandonment of property tax pilots that were part of Xi's 2021 "common prosperity" initiatives, does not bode well. The Party-state faces resistance from many corners, from local governments and property developers to middle- and upper-class homeowners to corrupt communist cadres with multiple homes.[132] The Party-state may also be reluctant to expand direct taxes on the population, which could increase discontent as well as demands for accountability.[133] Thus, reforms that would increase revenue, such as increasing reliance on personal income taxes and establishing property taxes, remain elusive as the Party-state avoids politically fraught changes to its tax system.

Cut Expenditures: Without additional revenue, austerity is the other obvious option. This raises the risk of local discontent, particularly in the most distressed areas. But this option impacts the least politically powerful constituencies and is thus seeing the most traction.[134] Hegang, a city in the country's northeast whose debt to fiscal revenue exceeded 200 percent in 2021, became the first city administration subject to the emergency plan initially published by

the State Council in 2016.[135] This emergency plan describes how local governments in crisis should deal with rising debt and fiscal distress. The core of the response is austerity: public services shut down and public employees like street cleaners and teachers facing pay cuts or even withholding.[136] Recent calls from Beijing have echoed this model, encouraging local governments to reduce social welfare spending, a move likely to further undermine consumption and increase precautionary saving behavior.[137] With debt servicing costs as the fastest-growing expenditure area over the last decade, austerity without a solution to debt will be difficult.[138] Either way, cutbacks are likely to come and will likely be borne by those least able to resist.

For now, Beijing continues its longstanding trend of muddling through its debt and fiscal challenges rather than enacting difficult structural resolutions, as little progress has yet been made in resolving bad debt, achieving fiscal rebalancing, or creating alternative income streams. With the old investment model faltering, revenues stagnating, and expenditure obligations rising, stresses will only mount, hard choices will become more pressing, and Beijing's fiscal space to enact domestic priorities will likely grow more constrained. Unlike in 2008, the CCP does not have double-digit growth looming over the horizon to rescue it.

Economic Impact of Unfolding Risks in China's Financial System

Chinese banks struggled to support the economy in 2023, aggravating financing conditions for China's nonstate companies. Increases in defaults on property loans, declines in sales, and falling asset prices have forced banks to shore up their capital positions to absorb further potential losses, constraining their ability to lend in spite of central government pressure to boost growth through easy credit. Additionally, in the first half of 2023, corporate bond issuance collapsed and equity market listing activity slowed. Consequently, China's financial sector cannot play the role of shock absorber against economic downturn and unemployment.

Banking Sector Struggles to Deploy Credit to Support Economic Growth

Rising property loan defaults and falling asset prices have forced China's commercial banks to rebuild their balance sheets, trading profit and new lending for greater ability to mitigate risks. Those risks have been sizeable. Reported nonperforming loans held by Chinese commercial banks increased by $34 billion (RMB 246.2 billion) between June 2022 and June 2023 to $441.4 billion (RMB 3.2 trillion), equal to 1.7 percent of the total loan portfolio.[139] The true level of nonperforming assets is almost certainly much higher, as Chinese banks delay or avoid recognizing losses on loans.[140] China's banking sector is also highly exposed to default risk among property developers, with $1.8 trillion (RMB 13.1 trillion) in loans extended for real estate development in June 2023, the equivalent of 5 percent of all lending.[141] By the middle of 2022, property developers in default on their bonds held over $567 billion (RMB 3.8 trillion) in outstand-

ing debt to China's banking sector.* [142] Chinese banks are likely to recover only a portion of those loan balances. Although commercial banks across China's financial sector—including the four largest national state-owned banks †—are exposed to the property downturn, balance sheet risks are highest in smaller city commercial and rural banks, which have lower buffers of regulatory capital and tend to be more exposed to individual borrowers.[143] To remain in compliance with Chinese banking regulations,‡ those banks confronting declines in asset quality were forced to divert resources to clean up their balance sheets and set aside billions of RMB to provision against losses.[144] This problem is not new: 2022 was the third year in a row that Chinese banks disposed of over $448 billion (RMB 3 trillion) in nonperforming assets.[145] Much of this delinquent debt was acquired by China's state-owned distressed asset management companies, allegedly boosting the financial health of banks by shuffling nonperforming loans to other parts of the financial market.[146] As a result, China's banking sector appears outwardly to be stable, with bank capitalization above minimum regulatory requirements. The reality is that mounting risks in the financial system remain.[147]

Capital constraints on extending loans have hurt the ability of Chinese banks to boost credit, offset the economic downturn, and otherwise support the Party-state's policy goals. The PBOC has gradually guided borrowing rates lower over the past year as it sought to stimulate lending activity.[148] However, these rate cuts narrowed banks' net interest margins—the difference between interest banks earn on loans and the rate banks pay on deposits.§ The net interest margin for all banks declined from 1.97 percent in the first quarter of 2022 to 1.74 percent at the start of 2023.[149] Throughout 2023, the PBOC sought to lower deposit rates to ease pressure on lenders; however, these efforts were disjointed with lending rate cuts, causing deposit rates to decline more slowly than loan rates.[150] Declining profitability consequently constrained banks' ability to expand their capital base, and banks faced reduced capacity to extend credit, particularly to riskier borrowers in the nonstate sector.[151] Due to these capital constraints, banks have responded weakly to policy efforts to boost liquidity in targeted sectors. A set of lending facilities introduced

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* S&P Global Ratings estimates that nonperforming loans to the real estate sector doubled in 2022. S&P Global, "Chinese Banks Enter 2023 in Worse Shape than Global Peers; More Risks Ahead," December 19, 2022.

† In June 2023, the Bank of China, Industrial and Commercial Bank of China, China Construction Bank, and Agricultural Bank of China reported that their balances of nonperforming loans to the construction sector rose 32 percent, 23.9 percent, 20.8 percent, and 9.7 percent year-on-year, respectively. Nonperforming property loans also increased at three of the Big Four banks by more than 12 percent year-on-year, although the Bank of China reported a 22.8 percent decline. Echo Wang, "China's Top Banks Report Rising Bad Loans as Property Woes Spread," *Nikkei Asia*, August 31, 2023.

‡ China implemented regulations in 2013 to increase the minimum available capital banks are required to hold in proportion to their risk-weighted assets as part of the international reform effort under Basel III. Basel III introduced a set of standards to address shortcomings in financial prudential regulations exposed during the 2007–2008 Global Financial Crisis. While many Chinese banks nominally comply with the capital adequacy ratios set forth in Basel III, the true resiliency of Chinese banks may be overstated due to lax accounting of nonperforming loans across China's banking sector. For more on China's adoption of Basel III standards, see Virgilio Bisio, "China's Banking Sector Risks and Implications for the United States," *U.S.-China Economic and Security Review Commission*, May 27, 2020, 13–15.

§ Chinese banks rely on deposits as their primary source of funding, and competition to attract more depositors has kept deposit rates elevated since 2022. Allen Feng and Logan Wright, "Center of the Storm: Banks' Results Cry Out for Rate Cuts," *Rhodium Group*, July 25, 2023; *Trivium China Markets*, "Interest Rate Cuts—Time to Get Unconventional?" June 30, 2023.

by the PBOC in 2022 to provide $59.3 billion (RMB 430 billion) to property developers for finishing incomplete housing projects largely failed to get off the ground.[152]

China's monetary policy stimulus failed to revive nonstate demand for credit. Even with record low interest rates, declining revenues and expectations of a prolonged economic slowdown caused businesses to hold back on investment projects.[153] In July 2023, the stock of financing grew at its slowest pace on record, increasing by just 8.9 percent compared to the prior year, as businesses paid down debts and avoided additional borrowing.[154] Beijing's standard playbook to slowing growth based on aggressively expanding liquidity is consequently failing to perform.

Banks Curtail Lending to the Nonstate Sector as Risks Rise

China's deleveraging campaign amplified a lending bias against nonstate companies, which suffered tight credit conditions even as borrowing costs fell. In 2023, banks were either unable or unwilling to lend at rates attractive enough to nonstate firms. In the year through August 2023, overall fixed asset investment grew 3.2 percent year-on-year, compared to 7.4 percent among state-linked firms.[155] Since the mid-2010s, the government's willingness to let financial institutions fail under its deleveraging campaign has forced banks to begin pricing in the risk of default on their assets.[156] More risk averse, banks are less likely to lend to nonstate firms even though they are often more dynamic than SOEs, as the central or local governments are likely to backstop SOE borrowers. As local governments' credit situations have worsened, Dr. Wright indicated that banks' lending decisions also account for a "geographic counterparty risk," explaining that "over the past three years, loan officers and bond investors began determining credit risks based on the perceived stability of local governments backing certain companies."[157]

Equity Market Reforms Fail to Revive Stock Investment

Despite a flurry of regulatory action to boost China's stock trading in 2023, prices slid as pessimism about the economy spread to China's equity markets. The CSI 300 index, which tracks the largest companies listed on the Shanghai and Shenzhen stock exchanges, fell 5.1 percent between the start of 2023 and the end of September.[158] Investors held back from secondary market trading as listed companies reported large earnings decline amid China's slowing economy.[159] A statement from a Politburo meeting chaired by General Secretary Xi on July 24 pledged to "invigorate the capital market and boost investor confidence."[160] Three days prior to the Politburo's meeting, Fang Xinhai, the vice chairman of the China Securities Regulatory Commission (CSRC), met with foreign investors to discuss steps to boost foreign investment in China.[161] On August 27, the Ministry of Finance and the CSRC announced a series of measures aimed at stimulating trading activity. These included halving the stamp duty on securities trading to 0.05 percent—the

first cut since 2008—lowering margin requirements on trades, and increasing restrictions on large shareholders selling shares.[162] Additionally, China's stock exchanges reportedly instructed large mutual fund managers to avoid selling more shares than they bought.[163] Despite these efforts, trading activity remained muted as investors weighed the impact of China's prolonged growth slowdown, leaving policymakers grappling with the challenge of restoring confidence in a beleaguered market.[164]

The CSRC slowed down IPO listing activity after listings of small companies increased on Chinese stock exchanges. Through June 2023, 173 companies listed on China's major exchanges, an increase from 169 over the same period in 2022.[165] As a result, the Shanghai and Shenzhen stock exchanges were the most active IPO markets globally in the first half of 2023.[166] However, many of the IPOs were for small-cap companies and startups, and total proceeds from IPOs fell by 33 percent year-on-year.[167] Despite this decline, Chinese companies still raised $34.2 billion (RMB 247.8 billion) in funds by going public on Chinese stock exchanges between January and July 2023.[168] This continued appetite among investors for IPOs reflects the nature of China's listing process, where shares pop on debut. Because the IPO approval process is tightly controlled by China's securities regulators and involves regulatory restrictions on offer prices, IPOs on Chinese stock exchanges are historically undervalued, leading to one-way speculative bets for investors.* [169] Nearly half of the stocks listed in August 2023 doubled their share price on their first day of trading.[170] Because of these incentives for investors, the CSRC viewed the IPO activity as sucking liquidity away from trading in large-cap stocks.[171] The CSRC announced on August 27, 2023, that it would slow the pace of IPOs, citing a need to establish a "dynamic balance" between supply and demand.[172] The delay could impact more than 650 companies that are waiting to list on the Shanghai and Shenzhen exchanges.[173] This move ironically appears to undermine reforms introduced by the CSRC in March 2023 that aimed to improve the IPO listing process by limiting direct regulatory interventions, as discussed in the next section.

Chinese regulators will likely continue fast-tracking listing applications from companies in advanced technology sectors as the Party-state leverages stock markets to support its techno-industrial goals. Over 42 percent of funds raised through IPOs in the first seven months of 2023 came from the STAR market, which specializes in smaller innovative technology companies (see textbox below).[174] As Beijing channeled support to the semiconductor industry following U.S.-led restrictions on advanced semiconductor exports and investments, 14 Chinese semiconductor firms received approval to go public, raising $8.7 billion (RMB 63.4 billion) in funding as of early August 2023.[175] In 2023, three of the largest IPOs were led

*The CSRC's policies that create a systematic underpricing of IPOs are motivated by a desire to prevent investors from taking losses during IPOs. However, such restrictions also make it less worthwhile for Chinese companies to list domestically as compared to going public overseas in the United States, Hong Kong, or other markets. Because their offer value is below market value, companies are forced to leave money on the table when going public; when the price of their stock is inevitably bid up after its debut to reflect the true value of the listed company, the gains accrue to retail and institutional investors rather than the company itself. Yiming Qian, Jay R. Ritter, and Xinjian Shao, "Initial Public Offerings Chinese Style," *Journal of Financial and Quantitative Analysis* First View (November 2022): 11–13.

by semiconductor companies: Hua Hong, which raised $2.9 billion (RMB 21.2 billion); Nexchip Semiconductor, which raised $1.6 billion (RMB 11.5 billion); and Semiconductor Manufacturing Electronics, which raised $1.5 billion (RMB 11.1 billion).[176] Overseas investors may be able to invest in these newly issued stocks in the future, as Shanghai and Shenzhen-listed shares that meet certain requirements—including a minimum market capitalization and length of time on the exchange—are added to the Stock Connect programs for cross-border trading.[177] The CSRC may also ramp up approvals of Chinese companies' applications to list on foreign stock exchanges (for more on the CSRC's changing registration mechanism for overseas IPOs, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Relations).[178] Many Chinese companies list on U.S. exchanges through complex corporate structures called variable interest entities, which have unresolved legal standing inside China, amplifying the risks to U.S. investors.

China's Capital Markets Serve the Party-State's Technology Development Goals

In capital markets, Party leadership has fully restructured how domestic tech firms raise capital, with an eye toward financing firms that support national technology development goals. The Shanghai-based Science and Technology Innovation Board, commonly known as the STAR market, was launched in 2019 to help smaller Chinese tech companies that align with national development strategies raise funds in China's capital markets.[179] Historically, the Shanghai and Shenzhen stock markets have catered to larger established firms due to minimum revenue requirements and an onerous listing process. Listings on the STAR market have accelerated, and in 2022 its $34 billion in IPO proceeds was the world's largest.[180] As of 2022, 82 percent of the STAR-listed companies are operating in industries targeted by the Made in China 2025 initiative, such as advanced information technology equipment, biomedical devices, and electrical power equipment.[181] The growth of these firms within STAR on the Shanghai Stock Exchange stands in contrast with the experience of larger, more commercial-facing firms such as Ant Financial, which had its listing on the Shanghai exchange blocked by Party regulators in 2020.

Beijing is attempting to expand a pre-IPO pipeline to support early-stage companies scaling up for IPOs. Government guidance funds—investment vehicles that combine state and nonstate capital—are key policy instruments used by the Party-state to make pre-IPO venture and private equity investments in startups operating in strategic and emerging sectors.[182] As of July 2023, there were more than 2,100 government guidance funds that have raised a total of $897 billion (RMB 6.5 trillion), although only a fraction of this capital has been deployed.* [183] One study found

* Private equity and venture capital financing tends to be much smaller than funding raised during an IPO. For example, 546 companies raised $118.4 billion (RMB 858.2 billion) through IPOs on the STAR Market as of July 2023, compared to a total of $82.8 billion (RMB 600 billion) in venture capital funding raised by these companies. *Securities Times*, "Focusing on the Fourth Anniversary of the STAR Market—The Vibrant STAR Market Yields Fruitful Outcomes as a Pilot Zone of Registration System," *Shanghai Stock Exchange*, July 21, 2023.

China's Capital Markets Serve the Party-State's Technology Development Goals—*Continued*

that two-thirds of all government guidance funds have yet to make any investments.[184] According to researchers at the Center for Security and Emerging Technology, "most guidance funds fail to live up to their ambitions, weakened by unrealistic goals, bureaucratic constraints, incompetent management, risk aversion, and a lack of market discipline."[185]

Attempts to Streamline Domestic IPOs Face Constraints from Party-State Priorities

To expand the role of stock exchanges in its financial system, China has recently streamlined the process for going public across its domestic equity markets. In a change to the listing process planned for over a decade but repeatedly stalled,* China switched from an approval-based procedure administered by the CSRC to a "registration-based" process for companies going public on all domestic stock exchanges in 2023.[186] The change expands the role of investors in vetting listing applications.† Any company that meets the listing requirements will ostensibly be able to issue shares. After testing such a system on smaller exchanges, including the STAR market, the main boards of the Shanghai Stock Exchange and the Shenzhen Stock Exchange implemented this registration-based process in March 2023.‡[187] The new IPO system is meant to address a major backlog of applications under the CSRC's approval-based process, where the security regulator undertook a lengthy case-by-case review process that forced companies to wait over a year on average for their IPO after filing.[188] The switch to a registration-based system is intended to speed up the listing process for startups and expand companies' access to equity financing in China's financial system.§ The changes are simultaneously intended to make market

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* Reforms to create a registration-based IPO process were first proposed in 2013, but changing the system proved challenging to accomplish without undermining regulators' oversight of markets. China's regulators used the IPO review process to identify and weed out fraud, a rampant problem in China's equity markets. Compared to U.S. markets, there is far less policing by private entities bringing class action suits and less enforcement capacity for monitoring market behavior, like insider trading. China concentrated regulatory resources into policing which companies were listed in the first place to compensate for these weak oversight mechanisms. Franklin Allen et al., "The Development of the Chinese Stock Market," in Marlene Amstad, Guofeng Sun, and Wei Xiong, eds., *The Handbook of China's Financial System*, 2020, 287–288; Charles Horne and Xinling Wang, "What We Learned from the Stock Market Crash," *China Economic Quarterly*, March 2016, 37–38.

† Though Chinese securities companies are the lead underwriters for most listings, foreign firms, including U.S. financial companies, have sponsored a number of IPOs on China's stock markets. Foreign participation in bookrunning Chinese IPOs may help companies that pose national security risks to the United States attract funding. Goldman Sachs and JPMorgan are vying for a role in the planned listing in Shanghai of multinational agrochemical giant Syngenta, which was acquired by Chinese SOE ChemChina in 2017. ChemChina is included on the U.S. Department of Defense's Chinese Military Companies list. Kaye Wiggins et al., "China's Biggest IPO in Years Poses $9bn Question for Western Banks," *Financial Times*, June 25, 2023.

‡ Since 2019, China has experimented with a U.S.-style registration system on its small-cap stock exchanges, where the exchange itself evaluates a company's compliance with its listing standards and disclosure requirements. The CSRC first deployed a registration-based system on the Shanghai Stock Exchange's STAR Market in 2019, followed by introducing reforms on the Shenzhen Stock Exchange ChiNEXT Board in 2020. The Beijing Stock Exchange also implemented a registration-based system when it debuted in September 2021. Quan Yue et al., "Seven Things to Know about China's Latest IPO System Overhaul," *Caixin Global*, February 3, 2023.

§ Even though China's equity market is the second largest in the world, it plays only a minor role in capital allocation in the overall economy. As a component of Aggregate Financing to the

participants more accurately price an IPO's valuation and bear the costs and risks of inadequately scrutinizing IPO applicants' disclosures. However, the CSRC may not have the enforcement capacity to prevent fraud, potentially putting investors, including U.S. investors, at risk. With IPOs continuing to jump in price in excess of 300 percent on debut after March 2023, the policy change appears to have limited effects thus far.[189] Investors continue to view IPOs as reliable and highly profitable opportunities, often neglecting thorough due diligence.

Even with a reformed listing process, companies in sectors not prioritized by the Party-state's industrial policy may still face restrictions when seeking access to China's capital markets. Although investors now have an expanded role in the listing application process, companies still require final approval from the CSRC before going public, and the regulator has stated it will assess whether issuances align with national industrial policy objectives.[190] Further, the CSRC has reportedly set up a "traffic light" system for financial institutions that underwrite IPOs, warning financial institutions that manage the process of taking a company public to increase scrutiny of firms in "yellow light" industries and avoid supporting IPOs in "red light" sectors, such as alcohol, and sectors currently under CCP political scrutiny, like private education providers.[191] Businesses in sectors that further China's techno-industrial objectives, such as semiconductor manufacturers, will face a smoother path to going public.[192]

Foreign Investors Remain on the Sidelines

Having withdrawn billions from Chinese assets since 2022, foreign investors have refrained from reentering China's financial markets. Between December 2021 and December 2022, non-Hong Kong* foreign portfolio holdings of Chinese assets declined by $324 billion, a drop of 21 percent.[193] The outflow of foreign capital stemmed from a culmination of factors since the start of 2022. Interest rate hikes in developed economies reduced the extra yield investors could earn on Chinese assets over assets in advanced markets.† The shift in interest rates and China's slowing domestic economy caused China's currency to depreciate, further reducing the dollar-denominated returns foreign investors could earn on Chinese investments. Rising geopolitical tensions due to China's stance on Russia's unprovoked

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Real Economy, a measure that China uses to track the broad scope of funding across its financial sector, China's equity markets contribute roughly 3 percent of the total amount of funding from the financial sector to the economy. Zhiguo He and Wei Wei, "China's Financial System and Economy: A Review," *Annual Review of Economics* 15 (August 2022): 18.

* Mainland China classifies residents of Hong Kong and Macau as foreigners in its balance of payments data. Hong Kong is China's single-largest source of "foreign" capital due to Chinese companies that round-trip investment through Hong Kong. In December 2022, Hong Kong reported that its residents held $395 billion in Chinese portfolio assets, accounting for 25 percent of total foreign and Hong Kong portfolio holdings. International Monetary Fund, "Derived Portfolio Investment Liabilities (All Economies) by Economy of Nonresident Holder: (Derived from Creditor Data)," *Coordinated Portfolio Investment Survey*.

† Chinese government bonds have yielded less than U.S. Treasuries since April 2022, and on August 21, 2023, the gap reached 1.78 percentage points, the highest reading in 16 years. As of August 2023, ten-year U.S. Treasuries carried a yield above 4 percent, providing investors a higher return than ten-year Chinese government bonds, where yields remained below 3 percent. *Federal Reserve Bank of St. Louis*, "Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis," August 30, 2023; China National Interbank Funding Center via CEIC database; Hudson Lockett, "Global Investors Dump Chinese Securities as State Support Hopes Fade," *Financial Times*, August 17, 2023.

invasion of Ukraine added to the uncertainty of investing in China, particularly as the investment world took note of the losses suffered by holders of Russian assets due to the coordinated international financial sanctions campaign.[194] Investment firms factored in the risk of sanctions and reputational damage if China took overt action to support Russia. Portfolio flows briefly turned positive in December and into the first months of 2023, but this tepid rebound quickly abated as investors confronted the headwinds to China's economy.[195] Foreign and Hong Kong holdings of onshore Chinese bonds declined by $14.3 billion (RMB 103.6 billion) in the year through August, falling to $438 billion (RMB 3.2 trillion) in August 2023.[196] On the equity side, foreign and Hong Kong investors added Chinese stocks to their holdings at the slowest rate in five years in 2022, with foreigners on net purchasing $12.5 billion (RMB 87 billion) in Chinese shares, a drop of nearly 80 percent relative to 2021.[197] Foreign interest in Chinese stocks remained muted in 2023. Foreign portfolio investment into China's equity markets rose briefly in July 2023, but the trend quickly reversed in mid-August after Country Garden missed coupon payments on its dollar bonds, renewing investor concerns about the weakness of China's economic recovery.[198] In a selling spree that spanned a record 13 consecutive days, overseas investors offloaded $10.7 billion (RMB 77.9 billion) in onshore stocks.[199]

China Eases Restrictions on Foreign Investment in Asset Management Companies

Since 2014, China has approved the creation of roughly 50 local asset management companies (AMCs), joining the four large national AMCs that were created in 1999 to take nonperforming assets off the balance sheets of China's big four national banks, as well as a fifth national AMC created in 2020 to deal with COVID-19-related distress.*[200] Unlike AMCs in most countries that specialize in one-off acquisitions of bad loans so banks can keep lending, AMCs in China play a role more akin to a distressed debt manager, routinely taking bad loans from the same sources so banks can maintain a facade of low nonperforming loans.[201] In July 2023, China's new bank regulator set out draft rules indicating it would soon remove minimum asset requirements for equity investments by foreign financial institutions (previously firms had to have at least $10 billion in assets) and allow nonfinancial foreign entities to make investments into China's AMCs.[202] AMCs will thus be the newest vehicle in China's carefully managed financial system to be opened to a broader array of foreign financiers, coming on the heels of 2020 regulations that opened China's mutual fund and life insurance markets to full foreign ownership.[203] The gambit is likely aimed at securing additional foreign capital and expertise to assist in financial engineering, particularly important given increasing debt troubles in China's economy.

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*First established in 1999 to clean up major Chinese banks' balance sheets after the East Asian Financial Crisis and prepare them for foreign stock listings, asset management companies buy and dispose of banks' nonperforming loans, recapitalizing the banks and attempting to recoup value from the distressed assets. Barry Naughton, *The Chinese Economy: Transitions and Growth*, MIT Press, 2007, 462–463.

To reattract foreign investment to China, Beijing amplified a narrative that China's financial markets were open to overseas investors and that China was committed to a long-term process of opening of its capital account.[204] Although foreign investment makes up only a small portion of total investment across China's financial markets—with foreigners owning less that 5 percent of the outstanding market capitalization on China's domestic markets—China's government sees attracting foreign capital as central to the realization of several overlapping objectives.[205] Increasing the role of global investors lends knowhow and expertise to further professionalize China's financial markets, contributing to policy efforts to improve the corporate governance of Chinese-listed companies, stabilize market activity against China's volatile retail investors, and expand Chinese firms' access to capital.[206] At the same time, Beijing is wary of allowing foreign investors to dominate China's financial markets and balances financial opening against the government's strict maintenance of market control and steering of market activity. To maintain close control over cross-border capital flows, China has strategically opened channels into its financial markets, notably by establishing the Stock Connect in 2014, the Bond Connect in 2017, and, most recently, the Swap Connect in May 2023 (for more on foreign investors gaining access to the onshore derivatives market, see Chapter 5, Section 3, "Hong Kong"). Despite these policies, China will not permit unfettered inflows or outflows of capital so long as its investment-led economic growth model relies on channeling domestic savings back into the banking system. Although Beijing aims to direct foreign capital to fund its techno-industrial goals, full capital account opening means giving global capital markets greater influence over the allocation of capital within China while losing the ability to manage the value of the exchange rate (for more on the limits to RMB internationalization, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Relations).

China's monetary policy options to stimulate the economy were limited by the rapid depreciation of the RMB. The outflows of capital in 2022 and 2023 put sharp downward pressure on the RMB. The RMB exchange rate fell from 6.37 RMB per dollar at the start of 2022 to the 7.30 level at the end of October 2022, its weakest reading since 2007.[207] The RMB remained depreciated against the dollar into 2023 amid continued capital outflows and weak export orders. Although the RMB was largely stable relative to other major currencies, the rapid shift in China's exchange rate with its largest trading partner heightened uncertainty for foreign investors and impacted China's trade account.*[208] The PBOC sought to smooth the volatility of the RMB, deploying a number of indirect measures to intervene in the value of the exchange rate, including managing the daily fixing rate† to slow the depreciation of the onshore RMB.‡[209] The

*An RMB depreciation against the dollar is not unambiguously beneficial to China's economy. Although a weaker currency makes Chinese exports cheaper for the United States, it simultaneously makes it costlier for China to import intermediate products and consumer goods priced in dollars. This impacts not only goods imported from the United States but also imports from other countries that are paid for in dollars.

†The PBOC publishes a central parity rate every day, which establishes a midpoint for the value of the exchange rate. The value of the RMB is allowed to move up to 2 percent above or below the reference level. The PBOC can slow the depreciation of the RMB by setting a lower-than-expected central parity rate.

‡China utilizes a nontransparent regime to manage and influence the value of the RMB. Under the managed-float system, the exchange rate can adjust freely over the long term, but the PBOC

PBOC also appeared to direct China's national state-owned commercial banks to deploy their foreign asset holdings, which totaled around $1.1 trillion, in defense of the RMB (for more on the volume of reserves controlled by the PBOC, see the textbox below).[210] The weakness of the RMB factored into the central bank's ability to use monetary easing to push borrowing costs lower and stimulate the economy. Further reducing interest rates to lower financing costs for domestic borrowers would decrease the attractiveness of Chinese investments, induce more foreign capital outflows, and add additional depreciation pressure on the RMB. As China trends toward further opening its capital account to foreign investment flows, it will confront a dilemma between intervening in the exchange rate and using monetary policy to support economic growth.[211]

China's Foreign Reserve Accumulation

Official data on China's foreign exchange reserves understate the true value of foreign assets controlled or influenced by the Party-state. China's accumulation of unreported reserves gives the central government greater capacity to intervene in foreign exchange markets. In August 2023, the PBOC controlled $3.2 trillion in officially-reported foreign exchange reserves.[212] China's officially reported reserves have remained level since the beginning of 2016 at around $3 trillion, despite a continued influx of foreign currency into the economy that resulted from China's growing trade surplus.[213] The PBOC appeared to avoid accumulating these inflows of foreign currency on its own balance sheet.[214] As Brad Setser, senior fellow at the Council on Foreign Relations, notes, "China often seems to have bought foreign currency in the market and then lent it to domestic institutions who then invested abroad—at times, on a rather significant scale."[215] The institutions most prominently involved include China's state-owned commercial banks, China's policy banks (e.g., China Development Bank and China Export-Import Bank), and a number of sovereign wealth funds (e.g. China Investment Corporation). The institutions accumulating these "shadow reserves"—so-called because they do not appear as reserves in financial accounts—likely hold another $3 trillion in overseas assets, bringing total holdings to $6 trillion.[216] China appears to be using the reserves to maintain the value of the RMB, quietly selling large quantities of dollars through state-owned banks. For example, Dr. Wright and Mr. Feng of Rhodium Group observed that the Industrial and Commercial Bank of China and the Agricultural Bank of China reported combined foreign exchange losses of $1.3 billion (RMB 9.2 billion) in 2022, even though they should have seen increased profit on their large dollar holdings from the dollar appreciation in 2022.[217] This suggests that these banks swapped their dollar holdings for RMB,

sets a cap on daily exchange rate movements to slow the speed of adjustment. Additionally, the Chinese authorities can directly intervene in markets to guide the value of the RMB. China also possesses a number of indirect means to intervene in exchange rate markets. In April 2023, former Governor of the PBOC Yi Gang asserted that China no longer intervenes in exchange rate markets and allows market forces to determine the RMB's value. Yi Gang, "Macro Week 2023: Yi Gang, Governor of the People's Bank of China," *Peterson Institute for International Economics*, April 15, 2023; U.S. Department of the Treasury, Office of International Affairs, *Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States*, June 2023, 20–24.

China's Foreign Reserve Accumulation—*Continued*

slowing the RMB depreciation. China's leadership likely believes obscuring its management of the exchange rate through these indirect channels will avoid raising investor concerns about the value of the RMB, which has dropped significantly since 2020 and faces continued depreciation pressure given China's low interest rates, weak economic performance, and capital outflows from foreign investors following China's tacit support for Russia war in Ukraine.*

Beijing's Evolving Technology Ambitions

The year 2023 saw China's government attempt to revive growth in the consumer technology sector, which sputtered amid a sprawling regulatory tightening of e-commerce, fintech, ed tech and other data-intensive business models since late 2020. While government leaders announced that the crackdown would be easing, the CCP has kept in place close government oversight, ensuring that the future of Chinese tech, particularly in the cutting-edge field of artificial intelligence (AI), proceeds under the close watch of Beijing. The Party-state's hand in steering tech development also strengthened with the March restructuring of the Ministry of Science and Technology (MOST) and creation of a new Party-led commission, likely to be chaired by General Secretary Xi. Both will exercise greater control in directing the vast resources China channels toward its industrial policy initiatives, reflecting China's enduring and deepening prioritization of achieving technological breakthroughs in order to boost productivity and attain self-sufficiency.

Tech Campaign Eases but Chill Persists

Amid a broader economic slowdown, the CCP eased its tech crackdown in early 2023, likely spurred by layoffs in the industry. In January, Guo Shuqing, then Party Secretary of the PBOC, announced that the expansive Party-led crackdown on China's technology sector had been basically completed.[218] Launched in late 2020, the CCP's common prosperity campaign sought to contain the "disorderly expansion of capital" among major internet firms like e-commerce giant Alibaba, and also imposed stricter regulation on fintech and edtech firms and tighter controls on cross-border data flows.† [219] The campaign's "completion" in January 2023 brought under Beijing's watchful eye a sector viewed as essential by Party leaders—with the stated goal of aligning tech development with strategic government objectives.[220] Chinese technology firms have faced difficulties under

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* Foreign exchange transactions directly from the PBOC's balance sheet are relatively easy to track by the changes in official reserves, though China does not explicitly disclose the size of its foreign exchange market intervention. Foreign exchange interventions by China's state commercial and policy banks are even less transparent. The U.S. Department of Treasury uses net foreign exchange settlement to estimate Chinese banks' foreign exchange transactions, however, these data are frequently difficult to interpret for signs of intervention. U.S. Department of Treasury, Office of International Affairs, *Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States*, June 2023, 20–24.

† For more on regulatory tightening in the tech sector and its motivations and consequences, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 1: "Year in Review: Economics and Trade," in *2021 Annual Report to Congress*, November 2021, 134–138.

sustained investigations, with Alibaba and Meituan receiving fines totaling $2.8 billion and $530 million, respectively, for what the government characterized as antimonopoly and antitrust violations.[221] The crackdowns introduced significant drag on China's technology sector as investment and financing in China's internet industry decreased 42.6 percent in the first quarter of 2022 and 76.7 percent compared to the same period in 2021.[222] This decline led to layoffs at internet companies, with China's Ministry of Industry and Information Technology announcing a total of 216,800 job losses reported from July 2021 to mid-March 2022.[223] According to data from Maimai, the Chinese job networking platform, December 2021 showed a drop of 50 percent year-on-year in the growth of new hiring among the top ride-hailing, e-commerce, gaming, and social media companies.[224] The following year saw this trend continue with companies like video-streaming site Bilibili and TikTok parent ByteDance cutting their workforce and reducing new hiring in 2022.[225]

While the platform economy is still viewed by the government as essential to China's development, it will continue to be scrutinized to ensure it supports the economy and national technology development goals. Following Guo's January announcement and signs of renewed support for China's tech sector at China's yearend economic work conference, regulators have greenlighted activities by major tech firms that had been halted during the crackdown. For example, Ant Group received approval to expand its consumer finance arm's capital base by $1.5 billion (RMB 10.5 billion) in preparation for an IPO, coming more than two years after regulators halted Ant's planned IPO on the Shanghai and Hong Kong stock exchanges in November 2020.[226] Similarly, ride hailing company Didi Chuxing resumed new user registration after it was ordered to stop in 2021.[227] Yet despite the crackdown's easing, there is a lingering chilling effect among major tech players. Announced regulations keep tight government oversight in place, particularly by the PBOC and Cyberspace Administration of China (CAC), which have been empowered to closely monitor and review the function and business practices of prominent tech firms.[228] For example, the Fintech associated arms of Ant Group and JD were made to restructure as financial holding companies, placing new regulatory capital requirements on each firm, and placing both fintech operations directly under PBOC oversight.[229] In another salvo by PBOC in using its powers to rein in major tech firms, in July 2023 PBOC fined Ant Group $982 million (RMB 7.12 billion) for a raft of violations, including what PBOC determined to be violations of corporate governance and financial consumer protection laws.[230] In this chilled environment, other prominent tech firms continue to lag, including Alibaba and JD, which have yet to recoup their 2019 stock valuations as of October 2023.[231]

With these tightened regulations and renewed priorities from Beijing, a wave of prominent Chinese technology entrepreneurs have been pushed out or stepped down. On the same day Party regulators announced that the regulatory campaign would be easing, they simultaneously took a blow at one of China's most notable tech executives: several hours after Guo's announcement, reports broke that Jack Ma, the founder of Alibaba, would have his voting rights reduced. Mr. Ma lost a controlling stake in his firm, seeing his vot-

ing rights shrink from above 50 percent to 6.2 percent following an investigation into Alibaba's business practices.[232] Joining Mr. Ma, JD.com's Richard Liu, ByteDance's Zhang Yiming, and Pinduoduo's Colin Huang are no longer CEO or chairman of their respective firms.[233]

Lagging Technology and Staunch Oversight Confounds China's ChatGPT Competitors

The November 2022 launch of Open AI's ChatGPT prompted an outpouring of investment in competing models among Chinese tech firms, but results so far have been lackluster. A flurry of AI startups quickly gained backing from investors, with MiniMax, which works on Large Language Models (LLMs) similar to that of ChatGPT, gaining a valuation of $1.2 billion valuation just a year and a half after its founding.[234] The former heads of delivery giant Meituan and search engine Sogou also founded new AI firms focused on creating LLMs, with the Sogou-backed venture receiving $50 million in capital from investors.[235] Chinese national champions, which have received significant state funding to research and develop AI, have also sought to enter the LLM market, with Baidu, SenseTime, Huawei, and Alibaba all announcing LLMs in development and in consumer testing.[236] Baidu's "Ernie Bot," which mimicked ChatGPT, underwhelmed at its launch as the prototype only presented a prerecorded demonstration of the software's capabilities rather than a live interaction.[237] It has since failed translation and math tasks.[238] The muted reception of Ernie Bot caused shares of Baidu to slide as much as 10 percent following its launch.[239] Access to ChatGPT is restricted in China.*

The long-term prospects for development of Chinese LLMs is constrained by the restrictive regulation regime the CCP is placing on AI developers. A law passed in January 2023 obliged LLM providers to "dispel rumors" spread using content generated by their products, meaning that companies can be held legally liable if their AI tools produce information or opinions that challenge the CCP.[240] An April 2023 draft law goes a step further, requiring LLM developers to verify the truth and accuracy of both what the AI programs produce and the material used to train the program. As LLMs rely on vast troves of data to function effectively, this last requirement especially is a significant roadblock.[241] The April regulation further requires that AI models reflect "core socialist values" and requires firms to submit a security assessment of their models to authorities before they launch their offerings to the public.[242] Beijing's high rate of regulation of China's AI industry will likely adversely impact the success of its startups. In response to this wave of regulatory scrutiny, and in light of China's slowing economy, a growing number of Chinese startups are

*While U.S. AI-backed products such as ChatGPT have been blocked in China, Chinese companies have tested AI products and collected data in the United States. Since 2016, Baidu has been permitted to test its autonomous vehicles on public roads in California, with a driver present to ensure safety. In 2021, that permission was upgraded to a new permit allowing Baidu to test its autonomous vehicles without a driver present. U.S. firms do not have reciprocal access to test AI-assisted products in China. Andrew J. Hawkins, "Baidu is the Sixth Company Approved to Test Fully Driverless Cars in California," *The Verge*, January 27, 2021.

Lagging Technology and Staunch Oversight Confounds China's ChatGPT Competitors—*Continued*

deciding to move their operations abroad and sell to an international market rather than focus on China's domestic market.[243] This shift allows Chinese AI firms to both gain easier access to foreign investments and potentially avoid sanctions imposed on Chinese companies by the United States. Poor retention of Chinese-trained AI talent is a further drag of the nation's AI development: a 2020 study by MacroPolo found that while more leading AI researchers did their undergraduate education in China than anywhere else, a sizeable majority of these researchers and experts have since left to pursue their graduate work abroad. More than half of these AI experts came to the United States, and over 90 percent of those who came to the United States chose to stay and work in the United States after graduation as of 2020.[244]

The development of advanced AI has been a key focus for Party leadership over the last decade, reflected in the New Generation Artificial Intelligence Development Plan published in 2017.[245] However, that plan failed to substantively anticipate rapid strides in AI LLM innovation. As China's LLMs try to catch up, they still depend on U.S. research and technology.[246] Despite the Party's efforts to develop technology surrounding AI, recent research by *Foreign Affairs* analyzing Chinese AI LLMs found that 17 of China's main LLM models used chips produced by the California-based firm NVIDIA while just three models were built with Chinese-made chips.[247]

Regulatory Shifts Strengthen the Party's Position at the Center of Tech Development

Party Oversight of Science and Technology Ministry Strengthened

China's Ministry of Science and Technology has been recast to centralize management of industrial policy, shedding much of its program administration to focus on key technology breakthroughs. For years, MOST administered a broad portfolio of state projects to advance an array of policy goals, ranging from building industrial parks to fostering rural technological development.[248] In 2020, it managed over $5.6 billion (RMB 40 billion) of government research and development (R&D) funds, the highest among the 40 central government R&D funding management departments.[249] Following years of poorly administered R&D projects leading to waste, duplicative investment, and corruption, the reforms announced in March 2023 spin off much of MOST's project evaluation and management to other agencies and strip its role in building high-tech industrial development zones.[250] In their place, the restructuring will focus MOST's portfolio primarily on coordinating across government agencies on projects aimed at strengthening China's technological self-sufficiency and achieving breakthroughs on key industrial policy goals.[251]

Establishment of the powerful Party-led Central Science and Technology Commission (CSTC) within MOST underscores the min-

istry's focus on developing critical technologies. While the CSTC has not been fully formed as of October 2023, it is expected to spearhead initiatives in new technology and evaluate the progress of technological development across the government.[252] Operating as an entity directly under the CCP Central Committee, the new commission also gives Party leadership a direct role in supervising scientific and technology policies and in guiding research on critical technologies. Although the chair of the CSTC has not yet been indicated as of October 2023, experts predict the commission will be chaired directly by Xi Jinping. If Xi does become chair of the commission, it will be a clear demonstration of the importance he places on directly managing China's technology developments.[253]

China Deepens Emphasis on "Self-Reliance," but Progress Is Mixed

In the face of continuing U.S.-led export controls and sanctions, China continues to turn to indigenous firms to develop critical technologies. The finance ministry said it would boost special funds for the industrial and manufacturing sectors by $607 million (4.4 billion RMB) to $1.83 billion (13.3 billion RMB) in 2023 to support critical technologies such as integrated circuits.[254] It announced an additional $897 million (RMB 6.5 billion) for science and technology advancement at the local level this year, an increase of $280 million (RMB 2 billion).[255] These sizable increases underpin China's push toward "self-reliance," seeking to promote the capacity of domestic firms to develop circuit and semiconductor technology as it races to reduce China's current reliance on global technology supply chains.

However, funding increases do not always yield rapid scientific breakthroughs in China. This has been the case with Made in China 2025, which has not achieved its goal of producing 40 percent of the chips consumed in domestic value chains by 2020 and 70 percent in 2025 (China's microchip consumption was just 16 percent domestically in 2021).[256] Meanwhile, as U.S.-led export controls on semiconductors came into full effect, China's chip imports slumped 23 percent in the first three months of 2023.[257] The CCP government is aware of "chokepoints" in its supply chain where reliance on foreign technologies will likely continue for years.[258] This is a critical issue for Chinese manufacturers of smartphone processors and autonomous driving tools, who are still heavily dependent on foreign countries to manufacture chips essential to their function.[259] In AI development too, many Chinese labs heavily rely on high-end chips developed by U.S. firms.[260]

A Centralized Data Regime

The Chinese government also announced the formation of the National Data Bureau (NDB) under the National Development and Reform Commission. The NDB's aim is to centralize control of China's data and harness the country's digital resources for economic growth.[261] The establishment of the bureau comes as China implements its data governance regime, wherein China views cyberspace,

data, and networks as sovereign territory subject to local laws and restrictions and largely isolated from international actors.* The new national-level NDB is set to oversee the management of all data flows between government agencies. Despite the Party-state's attempts to centralize dataflows—including increased oversight of and limitations on cross-border dataflows—government control of data within China is highly fragmented, with some 18 province-level data authorities established since 2015 to manage local data resources.[262] In its role, the NDB will seek to consolidate domestic management of Chinese data. The NDB will also take over regulation of China's digital economy and the implementation of national plans, such as its national big data strategy, which seeks to build digital infrastructure and promote China's global role in AI and data analytics.[263]

Aside from centralized management of data, the NDB is to play a direct role in facilitating China's development of AI.[264] Part of the scope of the new bureau's responsibility includes coordinating data sharing with AI firms and helping to manage the data samples being used to train AI models.[265] This could provide China's new data regulators another channel to influence the development of AI. While CAC will retain its regulatory and censorship powers, the NDB is also expected to support the CAC in promoting China's global data governance regime, state-centric rules, and standards for data that compete with existing U.S.- and EU-backed approaches as part of the CCP's efforts to promote "cyber sovereignty" and "data sovereignty."† [266]

Implications for the United States

China's economy is confronting slowing growth, a fiscal crisis, and financial turbulence. The central government is responding to China's debt buildup and the excesses of its industrial policy initiatives by strengthening CCP oversight and further centralizing authority. However, Chinese financial regulators' past efforts to address systemic financial risks have repeatedly done more to shift moral hazard within the financial system rather than fundamentally reform it. Initial steps to unwind China's acute debt suggest a similar game plan: force the banking system to write down debt gradually while ignoring the true extent of the crisis and shifting nonperforming assets off banks' books to other corners of China's financial system.

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*The legal framework governing cross-border data transfers includes China's Cybersecurity Law enacted in 2017, the 2021 enactment of the Data Security Law, and the Personal Information Protection Law. Major rules published by the Cyberspace Administration of China to implement the measures of these laws came into effect in 2022 and 2023. These measures establish procedures for conducting a security assessment before transferring data and personal information overseas (effective September 2022), a third-party certification process for conducting cross-border data transfers (effective November 2022), and a standard contract for facilitating the data transfers overseas (effective June 2023); Qiang Tong and Wang Xintong, "How China Is Tightening Controls over Cross-Border Data Transfers," *Caixin Global*, June 14, 2023; Womble Bond Dickinson, "Cross-Border Data Transfers under China's Personal Information Protection Law," May 31, 2023; Todd Liao, "China's Cross-Border Data Transfer Security Assessment Measures Take Effect September 1," *Morgan Lewis*, August 1, 2022.

†In September 2020, China released its Global Initiative on Data Security that requires that data gathered locally should be stored locally for the protection of data sovereignty and national security, while opposing the "weaponization" of data against China and other states. The initiative has been endorsed by some countries that also practice the centralized and closely monitored approach of internet governance advocated by China, including Russia, Tanzania, Pakistan, and the Arab League. Jian Xu, "What Does China's Newly Launched National Data Bureau Mean to China and Global Data Governance?" *Internet Policy School*, April 25, 2023.

As it confronts slowdown and crisis, Beijing continues to look to exports to and encourage direct investment from the United States and other developed countries to boost short-term growth, and in the long term seeks to deepen global dependence on Chinese manufactures. It continues to open its capital account selectively and develop novel and often opaque methods to manipulate the value of the RMB, seeking foreign portfolio investment to fund development priorities. In short, China's policies look to foreign firms, capital, and markets to mitigate the consequences of its economic mismanagement while deepening global exposure to this mismanagement and systemic risks from China's financial system.

For the United States, this exposure poses two distinct challenges. First, lack of transparency in China's fiscal and financial system makes it difficult to gauge the scale of the problems and the true extent of U.S. exposure. Central and local governments buy, sell, and transfer debt within China's financial system, making it difficult to gauge potential risks and contagion from a failing institution. Second, China's overtures to U.S. business are increasingly overt in their aims to advance specific policy goals. Attempts to increase U.S. investment and maintain access to U.S. and other advanced industrial countries technology ecosystems, in areas that would improve China's competitiveness vis-à-vis the U.S. economy, heighten perennial questions about the consequences of offshoring and the cumulative erosion of U.S. domestic capabilities and capacity.

Appendix: Bureaucratic Reorganization Points to Focus on Local Debt Challenges

The year 2023 marked the start of a new five-year session for China's National People's Congress and a major reorganization of the Party-state's administrative structure. In addition to announcing the year's slate of economic goals, new congresses fill key roles within the state bureaucracy (like Premier Li's announcement as nominal head of economic affairs) and serve as venues for China's state bureaucracy and the CCP to announce major structural changes. This congress's structural changes focused on two primary areas—debt and financial issues as well as technology development—foreshadowing the thrust of Beijing's efforts for the next five years.* As was the case this year, these changes typically involve either creating or dissolving government agencies or CCP oversight commissions and are important indicators of CCP priorities, often presaging major policy initiatives or regulatory campaigns to be launched by the newly formed bodies.

Three new Party commissions were created at the very top of China's Party-state bureaucracy in 2023, two dealing with financial issues and a third dealing with science and technology to orchestrate policy in those domains.[267] These changes are the strongest signal the Party-state can send regarding its priorities, reflecting the importance that handling debt and financial risks and development of technology and scientific breakthroughs will play in the Party's economic policies over the next five years. Beijing is likely to leverage its newly established central financial commissions as part of a comprehensive strategy to steer capital away from conventional sectors like property and toward increasingly prioritized areas such as advanced manufacturing. At the same time, the greater top-down control capacity will likely be used to try and manage any systemic risks that may arise as implicit guarantees are removed from local governments and property developers, an intrinsically risky process. Below is an overview of the two new finance commissions (for discussion of the science and technology commission, see "Beijing's Evolving Technology Ambitions").

- The first new finance commission, the Central Financial Commission, is now China's highest body in charge of financial policy and is responsible for "top-level design" and "overall coordination." This puts it on equal footing with the powerful Central Finance and Economic Affairs Commission, formerly headed by outgoing vice premier and Xi-confidant Liu He, and which called the shots on major economic initiatives during Liu's tenure.† Of

*Extensive changes in 2018 were largely seen as efforts to expand General Secretary Xi's and the CCP's authority. The structural changes announced at the 14th National People's Congress in March 2023 work in the same direction, though they are less sweeping, reflecting that Xi has already consolidated power.

†Leading Small Groups, of which commissions are a direct outgrowth, have been referred to as Xi's "signature governance innovation." Although they have long been used by the CCP, his extensive utilization of this bureaucratic coordinating mechanism has allowed him to take on greater personal coordinating power and overall influence over China's vast bureaucracy. Analysts believe Xi is likely to chair this new Central Finance Commission personally, as he does with many other commissions. One among his new team of trusted economic advisors—either Li Qiang (premier), Ding Xuexiang (executive vice premier), or He Lifeng (vice premier)—is likely to run the general office of the commission, dealing more directly with implementation, regulatory coordination, and substantive day-to-day issues. Christopher K. Johnson, Scott Kennedy, and Mingda Qiu, "Xi's

note, this new CCP apparatus will absorb the responsibilities of the Financial Stability and Development Commission, a similarly tasked commission within the state bureaucracy that was dissolved at the March congress.[268]

- The second new CCP commission is the Central Financial Work Commission, a revived body formerly in operation from 1998 to 2003 to deal with the fallout of the Asian Financial Crisis. The Financial Work Commission's new mission is "Party-building" throughout the financial system, working to ensure personnel within every unit and at every administrative level of China's financial bureaucracy adhere to central directives. In conjunction with the increased oversight from the CCP's internal watchdog, the Central Commission for Discipline and Inspection, the financial sector will now be subject to even stronger top-down guidance, monitoring, and control.[269]

The centralization of authority under these new finance commissions indicates that the Party is girding itself to deal with potential instability that may arise from debt restructuring and limits on local debt accumulation. As China's most recent debt restructurings in Guizhou foreshadow, the financial system, in particular the banks and household depositors, will need to bear the brunt of these costs, either through delayed interest and principal payments or outright write-down.[270] And it is precisely at the moment of reform that risks tend to be greatest. The Party will rely on its two new financial commissions to oversee controlled chaos within the system, allowing for additional defaults and market pricing. Beijing's increasing exertion of top-down control over the financial system will thus likely coincide with further efforts to remove moral hazard,* allowing more defaults and accurate pricing of risk to enter certain parts of the system.†[271] At the same time, however, Beijing will rely on certain parts of the system to cushion and absorb some of the impact, as per reports that it has sent state-owned asset manager Cinda to help Guizhou deal with its LGFV debt.[272]

The congress also oversaw three changes to implementing bureaucracies that will have important implications for financial, corporate, and technology issues, respectively. The first change is the creation of the National Financial Regulatory Administration (NFRA), which will function as the primary implementer of policy related to financial conduct-of-business supervision and will be under the State Council. Beijing's creation of the NFRA is likely intended to

Signature Governance Innovation: The Rise of Leading Small Groups," *Center for Strategic and International Studies*, October 17, 2017; Frank Tang, "China's Financial Overhaul Brings More Power to the Party, with US$58 Trillion in Assets at Stake," *South China Morning Post*, March 18, 2023.

* Dr. Wright characterizes moral hazard as "a condition in which decisionmakers or investors either seek out additional risk or avoid managing risk because they believe they are protected from losses" and notes that it has become a pervasive aspect of China's financial system due to authorities' routine interventions to stabilize markets. Logan Wright, "Grasping Shadows: The Politics of China's Deleveraging Campaign," *Center for Strategic and International Studies*, April 10, 2023, 15.

† A central aim of Beijing's deleveraging and de-risking campaign that began in 2016 has been to remove the moral hazard underpinning China's financial system. The Party-state has progressively allowed more and more areas of the economy to default. As Trivium notes, the ongoing reforms reflect that "policymakers are not satisfied with the results of the financial de-risking campaign that has been underway since 2017" and will become increasingly forceful in resolving debt and risk accumulation at local levels. *Trivium China*, "2023 Two Sessions: China's Government Restructuring," March 2023.

claw back control over financial regulatory functions from local governments, centralizing top-down control over financial risk and deleveraging priorities.* [273] The second is the creation of a new Social Work Department under the Party's Central Committee that will take responsibility for extending the Party-state's tendrils into the private sector and into local governance, specifically by overseeing formation and work of Party cells within private firms, industry alliances, and grassroots-level governance functions.† [274] Third, MOST has been simultaneously streamlined—with specific functions mostly related to industrial policy given to other departments—as well as upgraded in terms of importance by becoming the implementing agency for the new Central Science and Technology Commission's top-level designs (for more on MOST's restructuring, see "Beijing's Evolving Technology Ambitions" above).[275] The key throughline from bureaucratic restructuring is that the changes seek to enable more top-down command and control so the center can steer the economy in desired directions.

Exerting control over local governments to rein in debt growth will be among the top priorities of the new financial regulator and top-level financial commissions. In order to control the localities, Beijing is centralizing finances, increasingly "cutting off easy financing at the local level, such as debt financing through LGFVs."[276] State bureaucratic reforms in 2023 will also alter China's center-local financial governance relationship, likely giving the center greater control. Beijing is requiring local governments to restructure their local financial regulatory bodies, typically called Financial Work Bureaus or Offices. These local bodies, although charged with overseeing and regulating the local finance industry, also often wear dual hats as economic development coordinators and promoters, which creates conflicts of interest that can contribute to debt accumulation and undermine top-down capital allocation preferences and financial de-risking efforts. These local finance bodies are thus to be reorganized as subunits of the new NFRA, meaning the local financial regulator will no longer report to officials at the same level in China's governance hierarchy but instead to the higherups in the NFRA administrative bureaucracy. In other words, rather than take orders from city-level officials in the local government and Party group, a city-level branch of the NFRA will instead be responsive to the provincial-level NFRA.‡ [277] Local governments will have until the end of 2024 to implement these changes.[278]

*The NFRA is absorbing the Central Banking and Insurance Regulatory Commission, taking over responsibility for oversight of the banking and insurance sectors. According to Trivium China, a research firm focused on China policy, the new NFRA will be a "beefed-up version" of its former self, as it will also take on responsibilities formerly under the PBOC for regulating financial holding companies and consumer protection as well as responsibility for investor protection from the China Securities Regulatory Commission. Trivium China, "The Financial Sector Regulatory Overhaul: What It Means and How Things Will Change," *Trivium Markets Deep Dive*, March 10, 2023.

†The COVID-19 pandemic witnessed an expansion in governance functions to the grassroots that had not been seen in China for decades. A new governance architecture has been established, particularly in cities, that gives subdistrict-level governments and residential committees far greater ability to intervene in the lives of citizens. A key task of the new Social Work Department will be in formalizing and securing top-down control over these local agents. These changes, combined with increasing technological capacity, effectively lay the groundwork for unprecedently thorough penetration and control of society. Yutian An and Taisu Zhang, "Pandemic State-Building: Chinese Administrative Expansion since 2012," *SSRN*, February 12, 2023.

‡China's bureaucracy is characterized by two major types of authority relationships: leadership relations (*lingdao guanxi*) and advisory relations (*yewu guanxi*). Leadership relations are for-

The Party-state's ability to manage debt issues through its new efforts is nonetheless dubious, given the continued desire to both direct credit to priority sectors and maintain some amount of growth. Beijing will struggle going forward to limit debt while continuing to rely on a system that uses GDP growth targets, promotion metrics that prioritize growth, and local-level infrastructure deployment to boost employment and economic activity. Even if the center is able to limit local-level officials' ability to pile up debts in support of nonstrategic but job-supporting local zombie firms,* Beijing will use its greater top-down control to lean on the financial system to provide cheap capital to strategic and technological priority areas, independent of market rationales.

mal and binding, whereas advisory relations are suggestive. Formerly, local government financial regulatory offices had leadership relations with Party-state officials at the same administrative level (e.g., at the same county or city level), but following reforms it appears that leadership relations will now be with the bureaucratic unit higher up in the administrative hierarchy (e.g., the city-level finance office will be led by the province level). For more on the bureaucratic process, see Andrew Mertha, "China's "Soft" Centralization: Shifting Tiao/Kuai Authority Relations," *China Quarterly*, December 2005.

*A zombie firm is a company that keeps operating despite being unprofitable and often unable to repay its existing debts, instead relying on outside support and constant new borrowing to stay afloat. In China's case, most zombies are loss-making local firms that provide employment and possess good ties to local lenders and Party-state officials. For more on the problem of zombie firms in China, see W. Raphael Lam et al., "Resolving China's Zombies: Tackling Debt and Raising Productivity," *International Monetary Fund Working Paper*, November 27, 2017.

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