

Chapter 3: Two Cases of Multi-Objective Macroeconomic Policy

Coordination in China

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Building on the preceding discussion, this chapter further analyzes macro policy coordination under multiple objectives through two typical case studies: local infrastructure construction and real estate market development. Both local infrastructure and real estate serve multiple objectives—improving people's livelihoods, stimulating economic growth, stabilizing employment, and ensuring debt sustainability—while being influenced by fiscal, monetary, financial, and land policies. These sectors have also been focal points of China's economic development in recent years. Therefore, examining the balancing of multiple objectives and the coordination of different policies during their development can help summarize important historical lessons and provide insights for improving macro policy coordination under multiple objectives.

Over the past three decades, both local infrastructure construction and the real estate market have achieved rapid development, fulfilling numerous socioeconomic objectives.

Regarding local infrastructure, China has significantly expanded its stock of urban and rural infrastructure in transportation, communications, energy, water supply, waste management, and environmental governance. This has enhanced the convenience of people's lives, boosted total factor productivity, and stimulated employment and economic growth through infrastructure investment.

In the real estate sector, China has substantially increased housing supply, significantly raised per capita living space, markedly improved residential conditions for citizens, enabled household wealth preservation and appreciation through property ownership, enhanced the efficiency of land resource allocation across society, generated substantial fiscal revenue for governments through land use rights transfers, and simultaneously stimulated upstream and downstream industrial development, supporting economic growth and job creation.

During China's high-growth economic phase, the coordinated implementation of fiscal, financial, investment, and land policies in advancing market-oriented reforms provided indispensable support for local infrastructure and real estate market development.

In 1993, the Third Plenary Session of the 14th CPC Central Committee established the goal of building a socialist market economy. In the following years, reforms in fiscal, tax, financial, and land sectors rapidly progressed, laying a crucial institutional foundation for local infrastructure and real estate development. In 2001, China's accession to the World Trade Organization accelerated industrialization and urbanization, sustaining rapid economic growth and creating ample space for local infrastructure and real estate development.

From a fiscal perspective, efficient land use rights conversion and substantial land transfer revenues provided crucial support for local governments to develop economies, attract investment, and improve public welfare. From a monetary and financial perspective, the expansion of the central bank's foreign exchange reserves underpinned the growth of monetary credit, creating a relatively accommodative

monetary environment for financing local infrastructure and real estate projects. From a social development perspective, rising household incomes fueled demand for improved housing conditions, urban environments, and transportation facilities.

It was against this backdrop that fiscal, financial, investment, and land policies converged to facilitate the coordinated advancement of multiple objectives within local infrastructure and real estate sectors.

Regarding local infrastructure, since the 1990s, the government has gradually reformed the practice of solely relying on government investment, construction, and operation of local infrastructure projects. Urban investment companies (UICs) were introduced as independent legal entities dedicated to local infrastructure projects. Based on the government's medium-to-long-term plans, these companies leverage "raw land (undeveloped land collected from farmers)" and other government-injected resources to borrow funds in financial markets. They complete primary land development and other infrastructure construction, recouping funds through methods such as selling "developed land" and capturing land appreciation gains. Simultaneously, the central government has focused on balancing infrastructure-driven economic growth with debt sustainability by regulating local government financing methods, adjusting financing sources and costs for urban investment companies, and controlling project approval processes.

Regarding the real estate market, over the past three decades, the government has progressively reformed and ultimately abolished the "welfare housing allocation" system. Residential land use rights transitioned from free allocation to "tender-bid-auction" processes. Real estate developers specializing in residential construction replaced employers as the primary housing providers. The government established and refined the housing provident fund system, permitted banks to issue real estate development loans and personal housing loans, and gradually built a social housing system to ensure citizens' "right to housing". Simultaneously, the government has focused on achieving a balance between encouraging real estate development investment and stabilizing housing prices. This has been accomplished through measures such as adjusting land supply scales, modifying conditions for property-related deed tax, individual income tax, and value-added tax exemptions, adjusting mortgage costs, and modifying purchase and sales restriction policies in various regions.

As China's economy enters a stage of high-quality development, local infrastructure and real estate sectors face new circumstances, with policy priorities shifting amid multiple objectives.

Over two decades of development since the late 1990s, high investment in infrastructure and real estate has generated substantial assets, filling many gaps while also accumulating significant debt. Against the backdrop of China's economic transition from high-speed growth to high-quality development, continuing real estate expansion through high-investment, high-leverage models will trigger a series of problems.

On one hand, factors such as slowing macroeconomic growth, downward revisions in household income expectations, and shifting financial conditions could trigger liquidity crises, leading to debt defaults and severely disrupting macroeconomic and financial order. On the other hand, amid slowing urbanization and a rising elderly population, the continued large-scale concentration of financial resources in local infrastructure and real estate will negatively impact financing for manufacturing and productive services, hindering the release of China's economic transformation and upgrading.

Therefore, controlling debt and resolving financial risks have become key policy priorities in the local infrastructure and real estate sectors in recent years.

Regarding local infrastructure, the impact of rapidly growing infrastructure-related local government debt on fiscal sustainability has become increasingly evident. Despite repeated central government emphasis on maintaining fiscal discipline, broad-based local government debt has continued to expand in recent years, with rising pressure to service principal and interest payments. Some regions have begun experiencing technical defaults on municipal bonds.

The accumulation of local infrastructure debt reflects that some officials and managers of urban investment companies prioritize the role of infrastructure in stimulating the economy while neglecting debt sustainability goals. Simultaneously, this debt accumulation is highly correlated with the imperfect mechanism for dividing fiscal authority and expenditure responsibilities between the central and local governments. Finally, it also reflects the pursuit of "implicit guarantees" by some financial institution investors, as well as negligence by relevant departments in processes such as "project approval" and "feasibility studies".

Fundamentally resolving local government debt requires further fiscal and tax system reforms, establishing and gradually improving long-term mechanisms to prevent and mitigate local debt risks, and creating local government debt management frameworks compatible with high-quality development. Debt sustainability must be integrated into infrastructure decision-making by relevant government departments, while simultaneously advancing reforms in fiscal, financial, investment, and state-owned enterprise management sectors.

Debt and leverage issues in the real estate sector have also become prominent. In recent years, the leverage ratios of real estate developers themselves have risen rapidly, while property purchases have driven up household sector leverage, and the scale of financial resources flowing into the real estate sector has continued to expand. Against the backdrop of the "housing for living, not speculation" policy and the "three red line" campaign to win the battle against financial risks, the government has begun to curb debt accumulation in the real estate sector through a series of financial policy adjustments.

Since 2017, relevant authorities have progressively tightened restrictions on real estate companies' equity refinancing, non-standard financing, and offshore bond issuance. They implemented the "Fund Monitoring and Financing Management Rules for Key Real Estate Enterprises" (commonly known as the "three red lines") and the

"Real Estate Loan Concentration Management System for Banking Financial Institutions". These measures effectively curtailed financial support for real estate but also objectively triggered issues such as debt defaults among some developers, stalled construction projects, declining commercial property transactions, and reduced real estate development investment. Since 2022, the government has gradually optimized and adjusted certain policies, leading to a gradual stabilization of the real estate market. However, risks of further contraction persist.

This round of real estate market volatility demonstrates that transforming the sector's high-leverage model requires coordinated and steady advancement of financial policies alongside public service policies in areas such as land, taxation, and education. Relying solely on financial policies, on one hand, fails to fundamentally resolve the deep-seated contradictions driving high leverage, and on the other, risks excessive force that could inflict disproportionate negative impacts on other economic and social objectives.

The cases of local infrastructure and real estate offer the following insights for improving policy coordination under multiple objectives:

First, advancing market-oriented reforms through coordinated policies, leveraging the decisive role of the market, and nurturing emerging markets can unlock industry potential. This facilitates socioeconomic goals such as optimizing resource allocation, enhancing public welfare, stimulating economic growth, and creating jobs. Adhering to market-oriented principles should be the overarching direction for future policy coordination aimed at achieving diverse objectives.

Second, achieving multiple objectives requires understanding the stage of macroeconomic development and adjusting policy priorities accordingly. During periods of rapid growth, focus should be on driving development; during phases of high-quality development, emphasis should shift to enhancing quality and managing risks. Policies must align with prevailing trends, avoiding scattered efforts that lose focus.

Third, prioritizing policy focus according to different development stages does not equate to reducing multiple objectives to a single one. At any stage, policymakers must avoid neglecting one objective for another. Particularly during transitions between development phases, smooth transitions should be pursued—establishing new priorities before dismantling old ones. To achieve this, institutional incentives should be established to ensure all levels of government and departments treat "achieving coordinated development of multiple objectives" as the starting point for policy formulation and implementation.

Fourth, given the high complexity of the macroeconomy, achieving any single objective requires the coordinated interplay of fiscal, monetary, financial, land, investment, and social security policies. Relying on a single policy to "go it alone" often fails to address problems at their root. Therefore, the role of coordination mechanisms among government departments should be further enhanced. Communication between different departments must be strengthened, and the alignment of policy tools in

terms of orientation, intensity, and timing should be explored. This approach aims to avoid both the counterproductive cancellation of opposing policies, which leads to insufficient impact, and the excessive reinforcement of aligned policies, which risks overreach.

Fifth, the economic actions of both central and local governments jointly influence the efficiency and effectiveness of policy coordination. Reforms in areas such as fiscal authority, administrative responsibilities, and official evaluation systems should be pursued to mobilize the initiative of both central and local governments, thereby forming a synergistic force to achieve multiple objectives.

Case Study 1

Local Infrastructure Development and Policy Coordination Under

Multiple Objectives

(1) Overview

Local infrastructure construction serves multiple objectives, including improving people's livelihoods, enhancing the investment environment, promoting economic growth, providing countercyclical support for the macroeconomy, and maintaining the debt sustainability of infrastructure projects. Simultaneously, local infrastructure development is closely intertwined with numerous macro policies, including: - Fiscal policies such as government investment, debt issuance methods, and financing platform management; - Monetary and financial policies including macro interest rates, credit growth rates, shantytown renovation re-lending, and trust loan allocation directions; - Investment policies covering project feasibility studies, approval procedures, and environmental impact assessments; - Land policies such as land use rights allocation methods; - Local state-owned enterprise management policies targeting urban investment companies.

Since the reform and opening-up, Chinese local governments have comprehensively utilized fiscal, credit, and land policies to support local infrastructure development. This has improved economic infrastructure like transportation, communications, and energy to stimulate corporate investment, while enhancing social infrastructure such as water supply, gas, waste management, and green environments to boost public welfare. These efforts have achieved goals including increased productivity, expanded employment, accelerated economic growth, and improved livelihoods, forming a crucial experience in China's economic development. However, after more than four decades of development, debt from local infrastructure projects has steadily accumulated, increasingly impacting fiscal sustainability. In response to successive rounds of debt control measures imposed by the central government, local governments have often found countermeasures such as platform financing, equity

disguised as debt, non-standard financing, and urban investment liabilities. This has led to gradually rising debt pressures in some regions, resulting in defaults and debt restructuring. A policy framework that balances multiple objectives—such as leveraging local infrastructure to drive economic growth while achieving debt sustainability—urgently requires refinement.

The accumulation of debt in local infrastructure projects reflects four key issues. First, some local government officials and urban investment company managers often prioritize stimulating the economy through infrastructure spending while neglecting debt sustainability. Second, fiscal authority and expenditure responsibilities between central and local governments remain mismatched. While local governments bear responsibility for coordinating infrastructure projects, their limited fiscal capacity forces them to borrow for funding. Third, financial institutions pursue implicit guarantees, neglecting the financial sustainability of infrastructure projects themselves when providing financing. Fourth, investment departments conduct insufficiently rigorous evaluations of local infrastructure projects and lack robust post-project assessment and accountability mechanisms. These issues collectively indicate the need to further refine policy coordination related to local infrastructure development, guided by achieving a balance of multiple objectives. Specifically: Accelerate fiscal and tax system reforms to improve the allocation mechanism of fiscal powers and responsibilities between central and local governments, as well as the fiscal system below the provincial level; further efforts should be made to eliminate implicit guarantees and enhance financial institutions' risk assessment and pricing capabilities; strengthen reviews of feasibility studies and environmental assessments for local infrastructure projects, urging relevant departments to fulfill their responsibilities and rigorously evaluate projects' economic viability and debt sustainability.

(2) Diverse Macroeconomic Objectives and Policy Tools Related to Local Infrastructure

Urban infrastructure development is closely intertwined with socioeconomic progress while influencing multiple macroeconomic objectives. Improvements in roads, transportation, and other infrastructure significantly enhance the business environment, thereby boosting industrial capital investment efficiency and fostering long-term economic growth. Upgrades to drainage systems, urban greening, gas supply, and other facilities substantially elevate residents' quality of life and well-being, serving as vital pathways for ensuring equitable sharing of development benefits. Urban infrastructure significantly stimulates upstream industries like cement, steel, and equipment manufacturing while creating numerous jobs. During economic downturns, it serves as a countercyclical buffer, providing robust support to the macroeconomy. Furthermore, given the close link between infrastructure investment and financing activities, local infrastructure projects substantially impact the debt sustainability of governments and state-owned enterprises.

Among these objectives, achieving long-term economic growth, improving people's livelihoods, and providing countercyclical support () necessitates expanding the scale

of local infrastructure construction. Ensuring the debt sustainability of infrastructure investment, however, requires local governments and relevant investors to live within their means, enhance the quality and efficiency of infrastructure investment, and rigorously review project feasibility and economic viability.

Given the public or quasi-public goods nature of local infrastructure projects, governments play a crucial role in infrastructure development, with local infrastructure being influenced by multiple government policies. From a fiscal policy perspective, governments can directly support infrastructure projects through general public budget investments, or indirectly via capital injections into local urban investment enterprises, government procurement of services, and public-private partnerships (PPPs). From a monetary and financial policy perspective, the macroeconomic interest rate level directly impacts borrowing costs for infrastructure projects, while government regulations on the use of funds from banks, bonds, and shadow banking affect financing channels. Regarding planning, development, and land policies, infrastructure investment relies on the government's overall layout for land use, urban spatial planning, and industrial support systems. Regarding investment policies, the review processes for infrastructure project approval, feasibility analysis, environmental and social impact assessments, and preliminary design influence the scale of infrastructure investment, construction cycles, and operational models.

(3) Synergistic Promotion of Fiscal, Financial, and Investment Policies Driving China's Local Infrastructure Development in the New Century

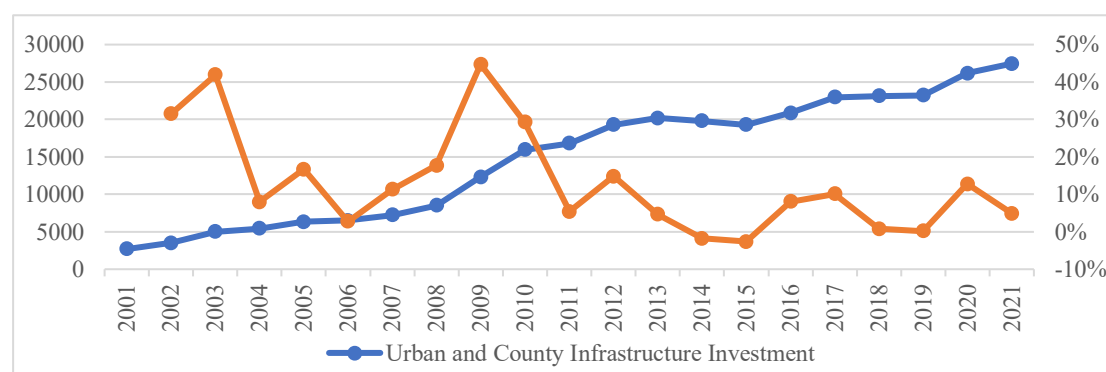
Since the 1990s, Chinese local governments have developed a model of coordinated fiscal, financial, and investment policies to drive local infrastructure development, yielding positive results. Against the backdrop of rapid urbanization, local governments first establish land use through regional development plans. Centered on primary land development, they acquire and store land parcels. Using fiscal funds and credit financing, they then complete foundational infrastructure—including transportation, energy, communications, and water utilities—such as "seven utilities and one leveling." Subsequently, they sell land use rights to attract industrial, service enterprises, and real estate developers for further land development. Funds recovered through land transfer fees and corporate taxes are then reinvested in other projects. Throughout this process, the government's medium-to-long-term planning provides guidance, fiscal investments serve as foundational capital, and coordination among investment review departments—including finance, development and reform, land resources, and environmental agencies—ensures smooth project execution. Diverse financial instruments, such as development financing, bank loans, and bond financing, provide construction capital for infrastructure projects.

To further standardize decision-making, financial management, and procurement practices among infrastructure project implementers, local governments established urban investment (or urban construction) companies as independent legal entities dedicated to land development and infrastructure project execution, following recommendations from development financial institutions. During the 1990s, when reforms to the government fiscal investment system were still in their early stages,

government investment activities suffered from inefficiency, sluggish pace, and lack of standardization. Against this backdrop, urban investment companies in cities like Huzhou and Shanghai pioneered operations based on modern corporate governance principles. They gained autonomy in decision-making and accounting, assumed responsibility for their own financial health, and ensured the efficiency and quality of infrastructure construction. This earned them the trust of financial institutions and investors, establishing them as vital forces in local infrastructure development. It should be noted, however, that as local state-owned enterprises, these companies undertake infrastructure projects under local government authorization. Their operations remain subject to local government regulation, and their infrastructure development still relies on the coordination of macro policies such as fiscal, monetary, investment, and land-use planning.

Against the backdrop of rapid urbanization, robust investment in the real economy, and a thriving real estate market, the coordinated implementation of fiscal, financial, and investment policies has accelerated local infrastructure development. According to data from the Ministry of Housing and Urban-Rural Development, China's fixed-asset investment in municipal public facilities (combining cities and county towns) reached 2.8 trillion yuan in 2021, 10.2 times the 2001 figure, accounting for 5.0% of total fixed-asset investment nationwide. From 2001 to 2021, total investment in municipal public infrastructure reached 31.3 trillion yuan, with an average annual growth rate of 12.3% (Figure 3.1). Within this, urban public infrastructure investment totaled 26.5 trillion yuan, primarily directed toward roads and bridges (43%), public transportation (21%), landscaping (9%), and drainage (7%) projects. Investment in county-level municipal infrastructure totaled 4.8 trillion yuan, primarily directed toward roads and bridges (45%), landscaping (14%), and drainage (10%).

Figure 3.1 Fixed Asset Investment and Growth Rate in Municipal Public Facilities Construction (trillion yuan; %)

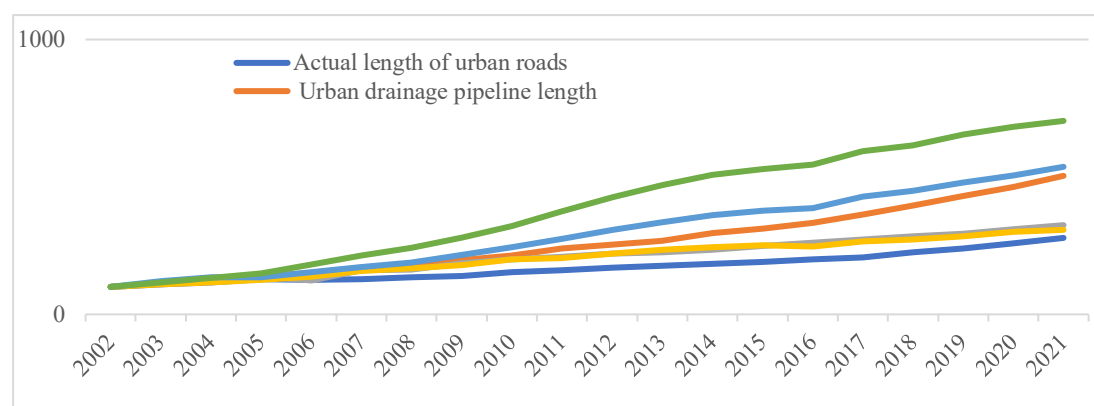


Data Source: Ministry of Housing and Urban-Rural Development; Wind China Macroeconomic Database; Author's Calculations

The aforementioned investments have significantly enhanced the quantity and quality of China's local infrastructure. Data released by the Ministry of Housing and

Urban-Rural Development shows that by the end of 2021, China's urban road network had expanded by 180% compared to 2002, drainage pipelines had increased by 400%, daily sewage treatment capacity increased by 250%, and green space area expanded by 230%. Urban water and gas coverage rates rose from 78% and 67% in 2002 to 99% and 98% in 2021 (Figure 3.2). During the same period, infrastructure development in county-level cities also saw substantial improvements. By the end of 2021, the length of roads in China's county towns had increased by 210% compared to 2002, the length of drainage pipelines had grown by 440%, sewage treatment capacity had surged by 1180%, green space in built-up areas had expanded by 600%, and water and gas coverage rates had risen from 81% and 50% in 2002 to 97% and 90% in 2021.

Figure 3.2 Representative Infrastructure Quantities in Chinese Cities and Counties (2002=100)



Data Source: Ministry of Housing and Urban-Rural Development; Wind China Macroeconomic Database

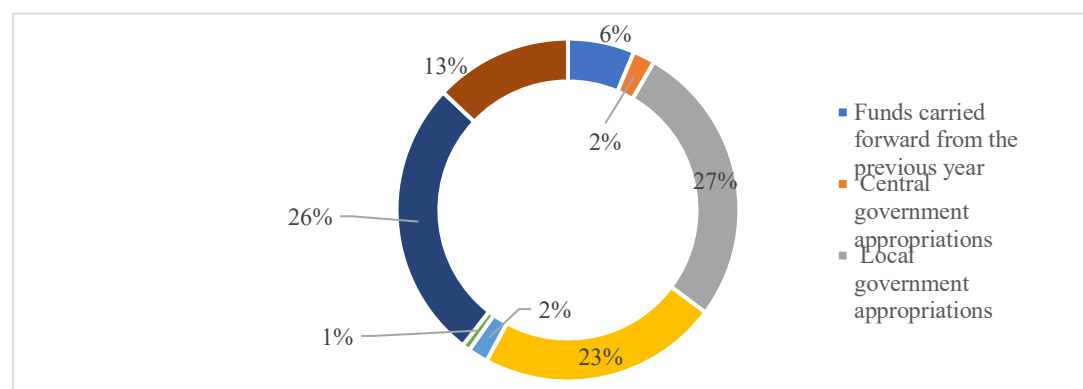
The rapid improvement in infrastructure has driven the achievement of diverse socioeconomic objectives. Infrastructure investment has maximized the multiplier effect of fiscal funds, enhanced land resource utilization efficiency, improved the business investment environment and living conditions for citizens, created jobs, and stimulated economic growth. Concurrently, local municipal infrastructure investment has played a crucial countercyclical role. During the 2000 Asian Financial Crisis, the 2009 Global Financial Crisis, and the 2020 COVID-19 pandemic, local infrastructure investment growth rates all increased significantly (Figure 3.1), playing a vital role in stabilizing employment and the economy.

(4) "Debt stabilization" has become an integral part of the multifaceted objectives in local infrastructure development in recent years.

Debt financing, including development financing, loans, and bonds, has played a crucial role in the rapid development of infrastructure. Of the 31 trillion yuan invested in municipal public infrastructure at the city and county levels from 2001 to 2021, national budget funds totaled 9.2 trillion yuan, accounting for 29% (Figure 3.3, including 659.4 billion yuan from central government allocations, representing 2%,

and 8.49 trillion yuan from local government allocations, representing 27%); debt financing totaled approximately 8 trillion yuan, accounting for 25% (domestic loans: 7.2 trillion yuan, 23%; bond financing: 600.1 billion yuan, 2%); self-raised funds from enterprises and institutions amounted to 8.4 trillion yuan, representing 26%; and other funds totaled 4.1 trillion yuan, accounting for 13%. It should be noted that the above statistics may underestimate debt financing, as some urban investment projects are implemented by subsidiaries established by urban investment companies, and the parent company's equity investment in subsidiaries often includes debt financing borrowed by the parent company itself. Assuming an asset-liability ratio of 40% for urban investment companies, the proportion of debt financing in municipal infrastructure project investments would reach approximately 35%.

Figure 3.3 Funding Structure for Municipal Public Facility Construction (%)



Data Source: Ministry of Housing and Urban-Rural Development; Wind China Macroeconomic Database; Author's Calculations

Local infrastructure debt is closely tied to local governments' financing activities.

Beyond raising funds through local government bonds for infrastructure projects, local governments may also borrow through or provide guarantees for state-owned enterprises under their control (such as local government financing platforms and urban investment companies). They may conceal debt within Public-Private Partnership (PPP) contracts (e.g., by stipulating unconditional subsidies to private partners or share buybacks at a future date). Additionally, they may accumulate liabilities by delaying payments to contractors and construction entities. Once local infrastructure debt issues arise, they directly impact local government fiscal revenues and expenditures, causing shocks to local and even national financial markets and affecting macro-financial stability.

Under the local government financing system established in 1994, local government financing platforms (and some urban investment companies) gradually became key vehicles for assuming local infrastructure debt. The 1994 Budget Law stipulated that "budgets at all local levels shall be formulated according to the principle of balancing revenues and expenditures based on actual income, without running deficits," and

further declared that "except as otherwise provided by law or by the State Council, local governments shall not issue local government bonds." This effectively prohibited local governments from borrowing from banks and issuing local bonds independently¹. To counter the 2008 global financial crisis, the state launched a comprehensive plan to expand domestic demand and stimulate economic growth, significantly increasing government investment to accelerate public welfare projects, infrastructure development, ecological conservation, and post-disaster reconstruction. Of the planned 4 trillion yuan in new investment, approximately 1.18 trillion yuan came from central government expenditures, with the remainder coordinated by local governments and other entities².

As the scale of local government bonds issued on behalf of the central government was relatively small (200 billion yuan each in 2009 and 2010)³, borrowing from banks through local government financing platforms (and urban investment companies) became a key channel for expanding infrastructure funding sources. In March 2009, the People's Bank of China and the China Banking Regulatory Commission issued the "Guiding Opinions on Further Strengthening Credit Structure Adjustment to Promote Steady and Relatively Rapid Development of the National Economy" (Document No. 92 [2009]), proposing to "support qualified local governments in establishing investment and financing platforms, issuing corporate bonds, medium-term notes, and other financing instruments to broaden financing channels for central government investment projects." According to estimates, in 2009 alone, over 5,000 new financing platforms were established nationwide, with the outstanding loan balance of local financing platforms reaching 7.38 trillion yuan, a year-on-year increase of 70.4%.⁴

The surge in platform debt has drawn significant attention from the central government. Since 2010, the central government has repeatedly emphasized the need to strike a balance between stimulating the economy through infrastructure investment and maintaining debt sustainability. It has required local governments to strictly adhere to fiscal discipline, borrow prudently, and invest moderately. In 2010, the State Council issued a directive (State Council Document No. 19 [2010]) calling for enhanced oversight of local government financing platforms to prevent systemic fiscal and financial risks. This tightening of constraints on local government financing platforms continued through 2011 and 2012. The new Budget Law enacted in 2014 established a local government debt mechanism centered on local government bonds.

¹ National People's Congress of China, "Budget Law of the People's Republic of China" (Effective January 1, 1995), http://www.npc.gov.cn/zgrdw/npc/lftz/2014/2000-12/05/content_1875785.htm.

² China Development Gateway, "NDRC: 4 Trillion Yuan in New Central Investment Has Four Major Sources," http://cn.chinagate.cn/economics/2009-05/22/content_17817564.htm.

³ China National People's Congress Website, "Ministry of Finance Explains Local Government Bonds," http://www.npc.gov.cn/npc/c2/c188/c219/201905/t20190522_171001.html; An Bei, He Yuxin, Zheng Xiaoyi, "Interpreting the Two Sessions Reports: Three Questions on the 2010 200 Billion Yuan Local Debt," <https://finance.sina.com.cn/roll/20100306/16453237418.shtml>.

⁴ Wang Chunfeng, Yao Shouyu, Cheng Feiyang, and Fang Zhenming, "Local Government Financing Platform Debt and Governance: Retrospective and Prospects," *Tsinghua Finance Review*, October 2023.

That same year, the State Council issued a document prohibiting local governments from borrowing through enterprises and institutions, banning new government debt via financing platforms, and requiring the gradual divestiture of government financing functions from these platforms (State Council Document No. 43 [2014]). However, infrastructure projects involve lengthy construction cycles. Without sustained follow-up funding after initial capital investment, projects risk becoming abandoned, leading to wasted social resources and non-performing bank loans. Consequently, as platform financing requirements tightened, platform (urban investment) loans gradually shifted from bank balance sheets to the shadow banking system. Combined with guarantees and commitments, this created new forms of explicit and implicit debt.

In response, the central government has intensified efforts in recent years to regulate local government financing, focusing on identifying and investigating hidden debt. Measures such as debt swaps have been employed to mitigate local debt risks. Since 2016, the central government has further strengthened financial risk prevention measures, clarifying emergency response plans for local government debt risks (State Council General Office Document No. 88 [2016]), rectifying illegal borrowing practices, and proposing local government fiscal restructuring plans. In 2017, the central government further regulated government borrowing activities in government procurement services and PPP models (Document No. 87 [2017] of the Ministry of Finance); Subsequently, the central government clearly defined local government hidden debt, emphasizing the prevention and resolution of such risks (Document No. 27 [2018] of the Central Committee). It introduced a "lifetime accountability and retroactive responsibility tracing" system (Document No. 46 [2018] of the General Office of the Central Committee); initiated hidden debt replacement programs (Document No. 40 [2019] of the General Office of the State Council); further restricted non-compliant debt issuance in PPP projects (Document No. 10 [2019] of the Ministry of Finance); and launched pilot programs for debt-free zones (with Guangdong, Shanghai, and Beijing as the first batch of pilot regions).

Under the aforementioned stringent management measures, debt growth related to local infrastructure projects has been somewhat contained. However, achieving debt sustainability for infrastructure projects still faces significant challenges.

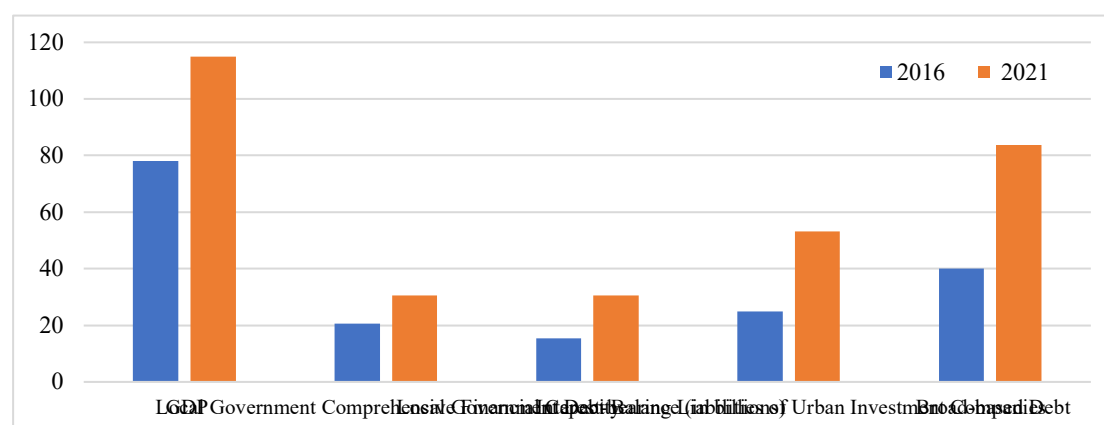
On one hand, the scale of local government debt continues to expand. From 2016 to 2021, the broad definition of local government debt⁵ surged from 40.2 trillion yuan to 83.7 trillion yuan, a 109% increase that far exceeded the 47.3% growth in GDP and the 48.3% rise in local government comprehensive fiscal capacity⁶ during the same period (Figure 3.4). Within this broad-based government debt, the outstanding balance

⁵ Broad-based debt scale refers to the sum of local government debt balances (general bonds, special bonds) and interest-bearing liabilities of urban investment companies, sourced from Wind Database's Urban Investment Bonds Special Research.

⁶ Comprehensive fiscal capacity of local governments is the sum of general public budget revenue, transfer income, government fund revenue, and state-owned capital operation revenue. Data sourced from Wind Database's Urban Investment Bond Special Research.

of local government debt (i.e., the sum of special-purpose bonds and general bonds) grew from 15.3 trillion yuan to 30.5 trillion yuan. Meanwhile, the outstanding interest-bearing debt of urban investment companies increased from 24.8 trillion yuan to 52.3 trillion yuan. The growth in urban investment companies' interest-bearing debt accounted for 65% of the increase in broad-based local government debt.

Figure 3.4 China's GDP, Comprehensive Local Government Financial Capacity, and Broad Debt (trillion yuan)



Data Source: Wind Database, Special Research on Urban Investment Bonds; Author's Calculation⁷

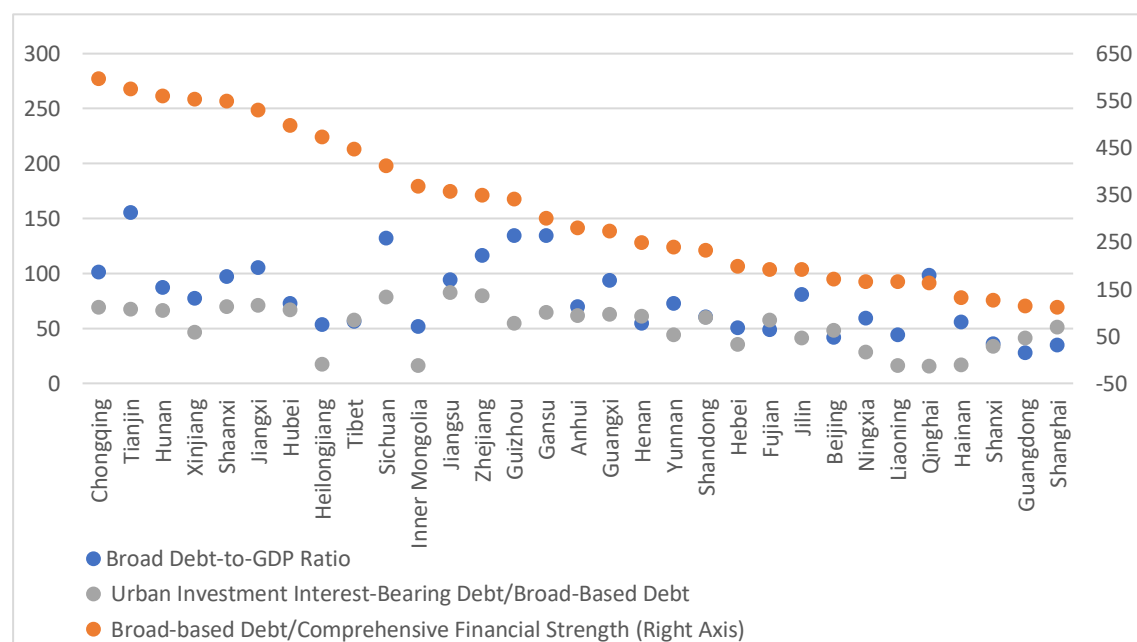
On the other hand, debt interest payments have placed significant pressure on local finances. In 2021, the broad-based debt ratio of local governments reached 273.9%, an increase of 79 percentage points from 2016. Even at a relatively low interest rate of 3%, the funds required for interest payments would account for 8.2% of local governments' comprehensive fiscal capacity. In fact, even excluding urban investment debt, local government interest payments reached 1.12 trillion yuan in 2022, accounting for 3.7% of local comprehensive fiscal capacity and exerting considerable pressure on local finances. Considering that local government land transfer revenues are transitioning from a period of rapid growth to a stabilization phase (3.5% in 2021 and -23.3% in 2022), the repayment pressure for infrastructure-related government debt will intensify further.

Simultaneously, local government debt burdens vary considerably across provinces, with economically weaker regions bearing heavier debt loads. Economically developed provinces like Shanghai and Guangdong maintained broad-based debt levels at 30% of local GDP in 2021—relatively low—while regions including Tianjin, Guizhou, Gansu, and Sichuan exceeded 140% (Figure 3.5). When comparing debt to fiscal revenue, six regions—Chongqing, Tianjin, Hunan, Xinjiang, Shaanxi, and Jiangxi—had broad-based

⁷ Broad-based debt ratio is the ratio of broad-based debt scale to local government comprehensive fiscal capacity.

debt exceeding 500% of their comprehensive fiscal capacity by the end of 2021, while Shanghai and Guangdong stood at around 110%⁸. From a debt structure perspective, interest-bearing liabilities of urban investment companies in Jiangsu, Zhejiang, and Sichuan accounted for approximately 80% of their broad-based debt, while in Heilongjiang, Hainan, Inner Mongolia, Liaoning, and Qinghai, this proportion was below 20%.

Figure 3.5 Broad Debt Scale by Region (%)



Data Source: Wind Database; Author's Calculation

Although no substantive defaults have occurred to date on local government debt or standardized publicly issued bonds from urban investment companies, credit risk events closely tied to infrastructure and these companies have been occurring periodically.

For instance, in March 2022, interest payments on debt guaranteed by Lanzhou Urban Development Investment Co., Ltd. (Lanzhou Urban Investment) for its affiliated company (Lanzhou Plateau Summer Vegetables Co., Ltd.) defaulted. Lanzhou Urban Investment failed to honor its guarantee obligations. Subsequently, creditors and debtors reached an extension agreement, temporarily averting the default crisis. In August 2022, Lanzhou City Investment's debt instrument "19 Lanzhou City Investment PPN008" experienced a technical default. Although resolved through proper measures, it again shook market confidence. By late December 2022, Lanzhou Plateau Summer Vegetables Company's extended debt defaulted once more, with Lanzhou City

⁸ Data sourced from Wind Database's Specialized Research on Municipal Investment Bonds.

Investment still failing to honor its guarantee obligations as the guarantor. The situation remains evolving⁹. Another example is Zunyi Road & Bridge Construction (Group) Co., Ltd. (hereinafter referred to as "Zunyi Road & Bridge," the largest municipal investment bond issuer in Zunyi City). On December 30, 2022, it announced the restructuring of RMB 15.594 billion in bank loans, extending the repayment term to 20 years and reducing the interest rate to 3% to 4.5%. Under the arrangement, only interest payments will be made for the first ten years, with principal repayment scheduled in installments over the subsequent ten years. (This restructuring covers only one-third of Zunyi Road & Bridge's interest-bearing debt. Resolving the remaining liabilities, particularly non-standard financing such as trust loans and fixed-term financing, remains an unresolved challenge).

According to statistics from Guosen Securities Economic Research Institute, 232 urban investment companies experienced negative credit risk events in 2022. Among them, 163 companies saw their China Bond implied ratings downgraded, while 36 companies had their ratings postponed or were placed on watch lists by rating agencies¹⁰.

According to statistics from China Chengxin International Research Institute, from 2020 to 2021, a total of 80 CITEs experienced non-standard financing defaults, primarily involving trust plans and asset management plans. These defaults mainly affected county-level platforms and were concentrated in Guizhou, Henan, Hunan, Inner Mongolia, and other regions¹¹.

(V) Macroeconomic Policy Coordination Issues Underlying Local Debt Problems

In recent years, despite the central government's high priority on local debt issues and the introduction of multiple measures, the fundamental challenge of balancing diverse objectives related to local infrastructure projects remains unresolved. There is room for improvement in the coordination of macro policies—including fiscal, monetary and financial, investment, and local state-owned enterprise supervision—that underpin local infrastructure projects.

From a fiscal perspective, while local governments' spending and borrowing behaviors have become increasingly standardized with the clarification and refinement of relevant rules, they still exhibit characteristics of "behavior and rules engaging in mutual bargaining." When direct debt issuance is restricted, local governments resort to implicit borrowing through means such as issuing guarantee letters, commitment letters, and signing repurchase agreements. When implicit debt is constrained, they attempt to incur liabilities by adding backstop clauses in

⁹ Yang Zhijin, "Lanzhou City Investment Guaranteed Non-Standard Debt Extends Maturity but Defaults Again, Triggering Accelerated Maturity Clauses," January 13, 2023, 21st Century Business Herald; CBN, "Lanzhou City Investment Bond Repayment Delayed but Finalized, Technical Default Tests 'City Investment Faith,'" August 30, 2022.

¹⁰ Dong Dezhi, "Review of 2022 Municipal Investment Credit Risk Events: Commercial Bill Delinquencies Require Continued Monitoring," Guosen Securities.

¹¹ Lu Lu, "Comprehensive Analysis of Non-Standard Debt Defaults by Urban Investment Companies in 2021," April 2022, China Chengxin International Research Institute.

government procurement service contracts and PPP agreements. Simultaneously, they inject non-operational public welfare assets controlled by the government into urban investment companies, which then use these assets as collateral for loans. This dynamic of "policies at the top, countermeasures at the bottom" reflects that some local government officials fail to fundamentally grasp the importance of achieving a balanced approach to various macro objectives in local infrastructure development. They tend to prioritize infrastructure's role in stabilizing growth and safeguarding people's livelihoods while neglecting the issue of debt sustainability in infrastructure projects.

The debt sustainability of CITs constitutes a critical facet of local government debt issues. Superficially, as local state-owned enterprises with independent legal status, CITs' debt-financed infrastructure investments do not increase the government's current nominal debt burden. However, since these companies bear responsibilities for infrastructure construction and operation closely tied to local economic development and public welfare, local governments often find themselves compelled to provide financial support to their subordinate CITs in the event of debt defaults, based on broader considerations of local economic, social, and financial stability. This implies that unsustainable investment and financing practices by CITs not only undermine the preservation and appreciation of state-owned assets but may also increase future fiscal expenditure pressures for local governments.

Simultaneously, there is room for improvement in how governments support infrastructure projects through special bonds. Currently, local governments often adopt a "special bonds + project unit self-raised funds" model when investing in infrastructure projects using special bonds. When calculating the project's cash flow break-even point, fiscal departments typically only consider whether the project's cash inflows can cover the future principal and interest payments on the special bond funds. In other words, these calculations treat "self-raised funds" as project equity, disregarding whether they can recover the investment or repay the principal and interest on the debt. However, most entities undertaking these projects are urban investment companies or their subsidiaries. The "self-raised funds" often correspond to a certain proportion of non-standard financing such as bank loans, urban investment bonds, and trust asset management products. If the infrastructure project's cash flow can only meet the principal and interest payments of the special bonds, the "project unit's self-raised funds" cannot obtain sufficient returns. This means the urban investment company cannot obtain sufficient funds from the project to repay its debts. As previously noted, debt pressures on urban investment companies often translate into expenditure pressures for local governments. Therefore, overlooking debt repayment issues within a project's "self-raised funds" fails to comprehensively and accurately reflect the project's long-term impact on local government finances.

It should also be noted that the government's "borrowing impulse" is closely tied to the distribution of fiscal authority and responsibilities between the central and local governments, as well as issues within the fiscal system below the provincial level. The

tax-sharing reform of the 1990s centralized fiscal resources at the central government level. Over two decades, the central government's share of national fiscal revenue surged from 22.0% in 1993 to 55.7% in 1994, before gradually declining to around 45% (46.6% in 2022). Concurrently, the central government's share of national fiscal expenditures rose from 28.3% in 1993 to 34.7% in 2000, then rapidly declined to 15.1% in 2001, stabilizing around 14% thereafter (13.1% in 2022)¹² .

The disparity between these two sets of figures reflects the mismatch between local fiscal capacity and their expenditure responsibilities. For instance, expenditures related to urban and rural infrastructure development (excluding cross-regional national key projects) largely depend on local governments for coordination. However, the fiscal resources directly controlled by local governments, particularly those subject to discretionary spending, are significantly insufficient. Given that central transfer payments are primarily allocated to foundational expenditures such as government operations, basic livelihood support, and social stability, local governments at all levels have been compelled to rely on a "debt-financed development—land-sale-backed debt repayment" model to fund development projects.

This drives local governments to meticulously "study" the central government's various debt constraint policies, striving to find new borrowing avenues not explicitly prohibited, while prioritizing socioeconomic development goals over debt sustainability targets. Simultaneously, the mismatch between fiscal authority and administrative responsibilities also exists among local governments at various levels. According to Lü Bingyang (2022), county-level governments account for approximately 40% of local tax revenue but shoulder over half of local fiscal expenditures¹³ .

This represents a significant underlying reason for the massive borrowing by urban investment companies affiliated with county and district-level governments. Therefore, fundamentally resolving the debt sustainability issue in local infrastructure requires reforms in the distribution of fiscal and administrative powers between central and local governments, as well as reforms in the fiscal system below the provincial level.

From a monetary and financial perspective, the micro-level investment behavior of financial institutions and investors chasing "implicit guarantees" urgently requires adjustment. Infrastructure project financing is influenced not only by macro-financial conditions such as interest rates and credit growth but also by investors' micro-level investment decisions. Given the close ties between infrastructure projects and local governments, coupled with the significant impacts that defaults by infrastructure projects or urban investment companies could have on local economies, livelihoods, and financial environments, financial institutions and investors often harbor a "faith in urban investment companies." They believe that local infrastructure projects,

¹² General public budget revenue and expenditure data sourced from Wind China Macroeconomic Database.

¹³ Lü Bingyang, 2022, *Central-Local Relations: Infusing Vitality into Order*, Commercial Press. County-level government tax revenue share, see Table 6-2 in Chapter 6; fiscal expenditure share, see Figure 11-1 in Chapter 11.

financing platforms, and urban investment companies will not experience substantive defaults, expecting local governments—or even the central government—to ultimately cover related debts. Under this expectation, investors have an incentive to continuously channel funds into infrastructure projects.

After policy constraints limited access to bank loans, municipal bonds, bills, and short-term financing certificates, some investors turned to non-standard channels like trusts, asset management plans, wealth management products, and government-backed fixed-income products to invest in municipal infrastructure projects and urban investment companies, earning higher interest rates. This has become a major driver behind the continuous expansion of local infrastructure debt. However, this pursuit of implicit guarantees violates prudent investment principles. It fails to screen, supervise, or constrain debtors while accumulating systemic financial risks. The aforementioned bank loan restructuring incident involving Zunyi Road & Bridge should serve as a warning to infrastructure debt investors. Financial regulators should guide investors to objectively and rationally assess the debt risks of infrastructure projects and their sponsors, while allocating provisions for potential losses in related investments.

From an investment policy perspective, there is room for improvement in the project initiation, design, and evaluation processes for infrastructure projects. Municipal infrastructure projects typically require review by investment authorities such as the National Development and Reform Commission (NDRC) for project initiation, feasibility studies, and preliminary designs. This review assesses technical feasibility, financial sustainability, economic viability, and impacts on social and environmental development. It is a systematic process, with reports often prepared by third-party institutions like design institutes and planning agencies. These reports are complex, contain numerous assumptions, and demand high levels of expertise. In practice, investment authorities like the NDRC face challenges conducting rigorous, professional, and efficient reviews due to heavy workloads and limited staffing. Additionally, as integral parts of local governments, these departments find it difficult to adjust or reject projects strongly promoted by higher-level leaders or other departments. Therefore, enhancing the evaluation and review of municipal infrastructure projects by investment departments necessitates deep-seated reforms in the investment system.

(VI) Lessons Learned and Policy Recommendations

Local municipal infrastructure development serves as a vital means to enhance total factor productivity, improve people's livelihoods, and stimulate economic growth. High-quality infrastructure investment is a key driver of long-term economic expansion. Since the reform and opening-up, China's local municipal infrastructure has undergone significant improvement, achieving multiple objectives including growth promotion, efficiency enhancement, livelihood benefits, and economic stabilization. Nevertheless, China still possesses considerable room for further infrastructure advancement. The World Economic Forum's Global Competitiveness Index for Infrastructure indicates that China's infrastructure conditions still lag behind developed economies: China's 2019 index score of 77.9 points exceeded the 65.9

average for upper-middle-income economies but remained below the 80.8 average for high-income economies. At this critical juncture of building a new development paradigm and achieving high-quality development, it is vital to continue leveraging local infrastructure investment to enhance the business environment and living conditions for residents.

Over the past three decades, development experience has demonstrated that coordinated macroeconomic policies form an indispensable foundation for local infrastructure construction. Looking ahead, whether addressing shortcomings in traditional infrastructure projects such as roads, utility tunnels, and water systems, or advancing new infrastructure initiatives like renewable energy, communication base stations, and data centers, will inevitably require enhanced coordination among fiscal, financial, and investment policies. Under forward-looking medium-to-long-term planning, it is essential to leverage the foundational investment role of fiscal expenditures, leveraging financial resources including development investment, private capital, banks, insurance, and bonds. Under efficient project approval, feasibility studies, environmental impact assessments, and social impact evaluations, all efforts should be concentrated to achieve high-quality investment outcomes.

Concurrently, utmost attention must be paid to the debt sustainability of infrastructure projects, balancing multiple objectives: stimulating growth, improving people's livelihoods, providing countercyclical support, and stabilizing infrastructure debt. This is a critical requirement for preventing financial risks and implementing the new development philosophy.

To this end, macro-policy coordination mechanisms related to local infrastructure construction should be further refined in the following six areas.

First, establish and gradually refine a long-term mechanism for preventing and resolving local debt risks, alongside a local government debt management system compatible with high-quality development. The risks stemming from accumulated local government debt represent a long-term challenge as China's economy transitions from high-speed growth to high-quality development, requiring responses through deepening institutional and systemic reforms. On one hand, a "de-escalation and prevention" mechanism should be established to prevent liquidity crises in regions with high debt levels and low repayment capacity, which could impact regional and national fiscal and financial stability. On the other hand, a "risk identification and mitigation" mechanism should be implemented by increasing transfer payments, improving the local tax system, integrating various local debts into a unified regulatory framework, and curbing the impulse for large-scale local borrowing. In this regard, the central government has already undertaken several beneficial initiatives, such as exploring emergency liquidity loans from the central bank to regions with relatively heavy debt burdens, appropriately expanding the central government's debt scale through the issuance of ultra-long-term government bonds, and strengthening government investment management in regions with high debt levels. Moving forward, it is essential to build upon these efforts by summarizing experiences, refining mechanisms, and developing detailed implementation plans.

Second, accelerate fiscal and tax system reforms to improve the "central-local" distribution of fiscal authority and responsibilities, as well as the fiscal system below the provincial level. A key underlying cause of accumulated local infrastructure debt is that governments bear investment and expenditure responsibilities for urban-rural infrastructure within their jurisdictions despite insufficient fiscal capacity. Fundamentally addressing the sustainability of local infrastructure debt requires further reform in delineating fiscal responsibilities and expenditure obligations between central and local governments. On one hand, exploring increased central government funding for local infrastructure is essential. On the other hand, refining the local tax system through reforms such as linking property taxes and implementing back-end consumption taxes will ensure that socioeconomic benefits—like improved living standards and enhanced residential environments—generated by infrastructure projects can contribute long-term, stable revenue to debt servicing beyond land sales. Simultaneously, reforms to the fiscal system below the provincial level should continue, establishing and refining a dynamic adjustment mechanism for the division of fiscal responsibilities and expenditure obligations among provinces, cities, and counties. This will clarify the expenditure responsibilities of local governments at all levels for urban and rural infrastructure development.

Third, institutional incentives should be established to ensure that principal leaders of local governments prioritize debt sustainability objectives in the infrastructure sector. Infrastructure development has far-reaching impacts on local economic and social progress, involving multiple sectors including finance, banking, development planning, land management, and environmental protection, as well as local state-owned enterprises such as urban investment companies and financing platforms. This necessitates high-level coordination by responsible officials at the local government level. Therefore, only when local leaders strategically prioritize balancing multiple objectives—such as leveraging infrastructure projects to boost the economy and improve people's livelihoods while ensuring debt sustainability—and treat debt sustainability as a hard constraint in planning and allocating infrastructure investments can the problem of "prioritizing investment over debt" be fundamentally resolved.

Fourth, for municipal infrastructure projects supported by fiscal funds, local finance departments should explore comprehensive financial sustainability analysis. The ability of future cash inflows from infrastructure projects to repay principal and interest on fiscal debt is merely a necessary but insufficient condition for debt sustainability. When evaluating project financial plans, further analysis should be conducted on the sources of self-raised funds by project entities (especially local state-owned enterprises like urban investment companies), assessing the principal and interest repayments required for debts that need to be repaid by the local government. This ensures a full understanding of the potential pressure urban investment company debt issues pose to local finances.

Fifth, enhance financial institutions' risk assessment and pricing capabilities. Strengthen corporate governance within financial institutions such as banks, insurance companies, trusts, and asset management firms. Eliminate the

pursuit of implicit guarantees and promote more rational and standardized investment decisions by the financial sector regarding local infrastructure projects. This approach prevents both the reckless expansion of investment scale and the indiscriminate withdrawal of loans or suspension of funding. It requires financial institutions to heighten risk awareness, enhance risk assessment and pricing capabilities, evaluate project feasibility and sustainability based on their professional expertise, and establish provisions to bear corresponding losses in accordance with market principles.

Sixth, improve the quality of investment assessments for municipal infrastructure projects. High-quality project preparation is fundamental to achieving sustainable infrastructure investment. To this end, specialized investment review authorities should rigorously oversee the project initiation, feasibility studies, preliminary designs, economic benefit analyses, and financial sustainability assessments of infrastructure projects. They should ensure objective, impartial, and stringent reviews, urging project units, consulting firms, design institutes, and other stakeholders to fulfill their responsibilities diligently, thereby maximizing the developmental effectiveness of investments.

Case Study 2

Policy Coordination for Real Estate Market Development and Diverse

Objectives

(1) Overview

The real estate sector is a pillar industry of China's economy, its development intertwined with numerous macroeconomic objectives. These include economic goals such as supporting economic growth, employment, and local fiscal revenue; social objectives like ensuring adequate housing for citizens and stabilizing housing prices; and financial stability objectives aimed at maintaining leverage levels and preventing systemic risks. Simultaneously, the real estate sector is influenced by multiple policy dimensions: land policies (e.g., land use rights allocation methods), fiscal policies (e.g., deed tax, income tax, property tax), monetary and financial policies (e.g., mortgage interest rates, equity/debt financing channels for real estate enterprises, bank loan concentration ratios), and industry-specific policies (e.g., purchase restrictions, price caps, sales restrictions).

Since the 1990s, the government has coordinated multiple measures—including reforming the land allocation system, collecting land transfer fees as local fiscal revenue, permitting financial institutions to issue housing mortgages, and establishing affordable housing systems—to phase out the "welfare housing allocation" system. This approach gradually cultivated and promoted the development of the real estate market. Entering the new century, particularly after the 2008 global financial crisis, the government implemented multiple policies to balance the dual objectives of leveraging real estate investment to drive economic growth while maintaining

fundamental price stability. These included controlling the pace of land supply, adjusting tax and fee collection conditions for real estate, modifying macro interest rate levels, introducing purchase, sale, and loan restrictions, and accelerating affordable housing construction. Overall, the Chinese government has promoted real estate market development through the coordinated use of diverse policy tools, achieving multiple objectives: improving people's living conditions, preserving and increasing the value of residents' housing assets, transforming land resource utilization methods, stimulating upstream and downstream industrial development, expanding employment, and providing fiscal revenue for the government.

Since 2016, against the backdrop of "housing for living, not speculation" and "winning the battle to prevent and defuse financial risks," curbing the rapid rise of leverage in the real estate sector and preventing excessive concentration of financial resources in the industry have become new policy priorities amid multiple objectives. To this end, the government has taken steps to reduce non-standard and shadow banking investments in real estate, restrict equity refinancing for real estate companies, limit the use of offshore debt issuance by real estate firms, and implement measures such as the "Fund Monitoring and Financing Management Rules for Key Real Estate Enterprises" (the Three Red Lines) and "Bank Real Estate Loan Concentration Management." These measures have effectively curbed credit, capital market, and off-balance-sheet funding support for real estate.

However, they have also led to corporate defaults, stalled construction projects, declining commercial property transactions, and reduced real estate development investment. Objectively, this has negatively impacted the real estate market's role in stimulating the economy and ensuring housing for the people, as outlined at . Since 2022, confronting new dynamics in the real estate market's supply-demand relationship, the government has supported the sector through measures including: adjusting the "concentrated land supply" policy; optimizing city-specific policies on purchase restrictions, sales restrictions, and loan restrictions; and modifying tax reduction policies for deed tax, individual income tax, and value-added tax. These efforts have gradually eased financing restrictions in the real estate sector. Particularly in 2024, real estate policies underwent further adjustments: most cities discontinued "purchase restrictions," while first-tier cities like Beijing, Shanghai, Guangzhou, and Shenzhen significantly scaled back such measures. Down payment ratios for mortgage loans were lowered, and some local governments acquired commercial housing through state-owned enterprises to convert into affordable housing.

Reflecting on China's real estate market development, three key characteristics and lessons emerge.

First, the government cultivated China's real estate market through coordinated policies spanning land use, fiscal, monetary, and social security measures, achieving multiple socioeconomic objectives through the sector's growth and prosperity.

Second, achieving these diverse goals requires both timely prioritization—avoiding a "one-size-fits-all" approach—and maintaining balance while addressing primary

contradictions, preventing "neglecting one aspect while focusing on another."

Third, achieving multiple objectives in economic development is a complex process. Realizing any single objective requires coordinated policy efforts to drive reforms across various domains. Overreliance on any single policy will likely result in either insufficient impact to achieve the goal or unintended consequences from excessive force.

These lessons hold significant implications for optimizing macroeconomic policy coordination under multiple objectives today.

(2) Primary Macroeconomic Objectives for Real Estate Market Development and Related Policy Tools

Under a market economy system, real estate possesses multiple attributes. From a residential perspective, it forms the foundation for citizens' "access to adequate housing." As a form of property assets held by residents, real estate serves as a vehicle for wealth preservation and appreciation. Regarding land use, real estate involves the conversion of usage rights from agricultural or industrial land to residential land, generating fiscal revenue for governments during this process. From a macroeconomic perspective, as a pillar industry of the national economy, real estate supports macroeconomic growth and drives employment by stimulating sectors such as steel, cement, furniture, and appliances.

Given the multifaceted and complex nature of real estate, the macroeconomic objectives associated with its market development are equally diverse. These objectives include: 1) Providing sufficient, high-quality housing supply to ensure the fulfillment of public housing needs; 2) Driving economic growth and employment, particularly providing countercyclical support to the macroeconomy during downturns; 3) Achieving efficient allocation of land resources to support urbanization; 4) Generating fiscal revenue for local governments through the sale of land use rights under the public ownership system; 5) Preventing significant fluctuations in real estate prices that could erode household wealth and create macro-financial risks.

Given these multifaceted objectives, policies influencing real estate market development span multiple dimensions and take various forms. Regarding land use rights allocation policies, national land planning and land use rights transfer methods impact the real estate market by affecting developers' costs of acquiring land resources. From a fiscal policy perspective, tax policies such as deed tax, urban land use tax, land appreciation tax, personal income tax, and property tax, along with non-tax revenue policies like land transfer payment methods, also influence the real estate market. From the perspective of monetary and financial policies, macro-level credit and interest rates, as well as meso- and micro-level financial policies (such as the flow of entrusted and trust loans, conditions for real estate developers to issue stocks and bonds, and approval criteria for personal mortgage loans) also affect the real estate market by influencing the scale and cost of capital flowing into it. From the perspective of policies related to residential transactions, restrictions on homebuyer eligibility (such as residency status, existing property ownership, and social security

contributions) and limitations on transaction prices (such as price filing mechanisms for new homes and reference price systems for second-hand homes) similarly affect market supply and demand. From the perspective of public service policies, issues related to housing—including education, healthcare, and elderly care (such as school enrollment policies)—also influence the real estate market.

(3) Since the 1990s, multiple policies have synergistically promoted real estate market development while achieving diverse objectives.

The development of China's real estate market was advanced through the coordinated implementation of multiple policies. During the 1990s and earlier, urban housing in China was primarily allocated through the "welfare housing" system. Under this system, governments, state-owned enterprises, and other employers obtained land use rights allocated by the government free of charge. They invested funds to construct residential buildings, which were then allocated to employees for occupancy at low rental rates. Due to the limited capital employers could commit to housing construction, the welfare housing system resulted in significant shortfalls in both the quantity and quality of housing supply. Living conditions for the populace remained poor, and the government was unable to leverage this publicly owned resource—land—to generate funds for urban development.

Beginning in the 1990s, China implemented a series of reforms to achieve a market-oriented real estate sector. Regarding land policy, the previous practice of free allocation of residential construction land was replaced by the "tender-bid-auction" system, requiring developers to pay land transfer fees to obtain land use rights. In terms of housing supply and demand entities, real estate developers specializing in residential construction and supply replaced employers as the primary housing builders. Urban residents purchased homes from developers in monetary form and acquired corresponding land use rights. Financial policies established and refined the housing provident fund system, permitting banks to issue real estate development loans and personal housing loans, enabling developers and buyers to finance development investments and home purchases with future income. Social security policies provided basic housing guarantees through initiatives like allowing employees to purchase public housing at cost ("housing reform"), as well as affordable housing, rental housing for low-income residents, and shantytown redevelopment.

Overall, these land, fiscal, monetary, and social security policies were highly coordinated during the gradual cultivation of the real estate market. Establishing a market where developers supply housing and residents purchase it required resolving issues such as how developers acquire land and how buyers secure financing, while also addressing how governments facilitate land use conversion. During the reform explorations of the 1990s, the paid sale of land use rights enabled developers to acquire residential construction land through market mechanisms while simultaneously stimulating the government's initiative to transform land resources and advance high-quality urbanization. Local governments generated fiscal revenue by selling residential land, which not only provided crucial funding for infrastructure development but also underpinned their ability to maintain low industrial land prices.

This objectively reduced manufacturing costs, propelling China's industrialization process. Mobilizing financial resources to support real estate development and home purchases boosted both supply and demand in the housing market. Simultaneously, the financial sector gained substantial high-quality assets and considerable profits by participating in the real estate market's growth. The establishment of the housing security system, focused on addressing low-income families' access to housing services under market conditions, represents a crucial manifestation of the socialist market economy system. It is an indispensable supporting measure for advancing real estate market reforms in a socialist country like China.

Entering the new century, while adhering to the overarching direction of market-oriented reform, the Chinese government prioritized balancing multiple objectives through a coordinated set of policy tools. On one hand, it encouraged real estate development investment and housing transactions to leverage their role in improving living standards, stimulating the economy, supporting employment, and advancing urbanization. On the other hand, it sought to stabilize housing prices and increase the supply of affordable housing to ensure that all citizens have access to adequate housing.

From 2003 to 2007, confronting overheating in the real estate sector, the government tightened land supply through reforms promoting the "tender-bid-auction" system for land use rights. It also imposed a full business tax on individuals selling homes within two years and raised medium-to-long-term loan interest rates to stabilize housing prices.

From 2008 to 2009, amid the global financial crisis, guided by documents such as the State Council General Office's *Several Opinions on Promoting the Healthy Development of the Real Estate Market* (State Council General Office Document [2008] No. 131), the central government supported the real estate market through measures including accelerating affordable housing construction, allowing buyers of second homes with lower per capita living space to enjoy down payment and interest rate incentives, and shortening the period for personal housing transfer business tax exemption.

From 2010 to 2013, to curb excessive price increases in certain cities, the central government issued the "Notice of the State Council on Resolutely Curbing Excessive Growth in Housing Prices in Certain Cities" (State Council Document [2010] No. 10). This accelerated the construction of affordable housing and promoted the renovation of shantytowns, restricted developers' access to public offerings, refinancing, and major asset restructuring, raised down payment ratios and interest rates for personal mortgages, and guided key cities to implement purchase restrictions to curb real estate demand.

From 2014 to 2015, amid slowing economic growth and high real estate inventories in some third- and fourth-tier cities, the central government adopted a "city-specific policy" approach. This was complemented by measures such as monetized compensation for shantytown renovations and supplementary mortgage loans from

the central bank to help reduce real estate inventories. From the perspective of coordination between central and local governments, local authorities often prioritize encouraging home purchases and expanding real estate development investment to bolster local economies and expand fiscal revenue. However, the central government has incorporated price stability into the political accountability and performance evaluation systems of local officials, thereby compelling local governments to balance multiple objectives.

Around the time of the 19th CPC National Congress, facing new circumstances, the central government provided further guidance on real estate market development.

The 2016 Central Economic Work Conference emphasized adhering to the principle that "housing is for living in, not for speculation," and called for the comprehensive use of financial, land, fiscal, investment, and legislative tools to accelerate research on establishing foundational systems and long-term mechanisms suited to national conditions and market dynamics. This approach aims to curb real estate bubbles while preventing drastic market fluctuations.¹⁴ In 2019, the Political Bureau meeting declared that "real estate should not be used as a short-term stimulus for the economy"¹⁵, further affirming that market regulation would prioritize ensuring housing for all, preventing market bubbles, and avoiding excessive concentration of financial resources in the real estate sector.

In this round of regulation, the government employed various tools including adjusting macro-credit and interest rates, modifying sales restrictions, purchase restrictions, and loan restrictions policies, altering residential land supply volumes and auction methods (such as the "two centralizations" policy piloted in key cities in 2021, which involves centrally releasing land transfer announcements and organizing land transfers), accelerating the construction of rental housing and affordable housing, and implementing "multi-school zoning" (to curb speculation on school district housing).

Furthermore, this round of regulation places particular emphasis on using financial policies to recalibrate the relationship between real estate and finance. This aims to curb debt accumulation in the real estate market, prevent excessive financial resources from flowing into the real estate sector, and avert systemic financial risks stemming from the real estate market (see the next section for detailed discussion).

Overall, over the past 30 years, the government has comprehensively employed multiple policy tools—including land, fiscal, financial, social security, and purchase restrictions—to promote real estate market development. This has achieved multiple objectives: improving people's living conditions, stimulating upstream and downstream industries to support economic growth, creating employment opportunities, generating local fiscal revenue, enabling efficient land resource

¹⁴ Communist Party of China Website, "Central Economic Work Conference Held in Beijing; Xi Jinping and Li Keqiang Deliver Important Speeches," <https://news.12371.cn/2016/12/16/ART1481886083189302.shtml>.

¹⁵ Li Yanxia, Wang Youling, and Zhang Qianqian, "Avoiding Real Estate as a Short-Term Economic Stimulus: Insights into Real Estate Market Development from the Political Bureau Meeting," https://www.gov.cn/xinwen/2019-07/31/content_5417630.htm.

allocation, advancing urbanization, and maintaining stable value of residents' assets.¹⁶

In terms of improved living conditions, according to the Seventh National Population Census data, the per capita residential floor area for urban households in China reached 36.52 square meters in 2020, approximately double the 1998 level (18.66 square meters)¹⁷.

Regarding wealth preservation and appreciation, housing assets account for nearly 70% of total household assets for China's urban families. With a homeownership rate reaching 96%, housing assets contribute nearly 70% to household wealth growth.¹⁸

In terms of economic contribution, the real estate sector's value-added share of GDP rose from 4.02% in 1998 to 7.24% in 2020 (slightly declining to 6.10% in 2022); Real estate development investment as a share of urban fixed-asset investment rose from 16.1% in 1998 to 27.3% in 2020 (declining to 23.2% in 2022); The real estate sector continues to exert significant pull effects on upstream and downstream industries. In 2015, the full consumption coefficient of the real estate industry for the machinery and equipment manufacturing sector was 0.2 (0.26 in 1997), while its full consumption coefficient for finance reached 0.15 (0.04 in 1997). The full consumption coefficient for other manufacturing sectors was 0.11 (0.12 in 1997), while the full consumption coefficient for wholesale and retail trade, accommodation, and food services is 0.11 (0.10 in 1997).

In terms of employment, the proportion of real estate sector workers among urban non-private sector employees rose from 0.7% in 1998 to 3.1% in 2021. When combined with construction, the employment share increased from 7.6% in 1998 to 18.4% in 2018 (declining to 14.7% in 2021)¹⁹.

Regarding fiscal revenue, the proportion of state-owned land use rights transfer fees in local government revenue (the sum of general public budget revenue and government fund revenue) rose from 37.6% in 2010 to 41.2% in 2021. While the share of state-owned land use rights transfer fees in central and local government revenue (the sum of general public budget revenue and government fund revenue) increased from 17.5% in 2010 to 20.6% in 2021.

¹⁶ The complete consumption coefficient refers to the complete consumption quantity of one product when producing one unit of another product's final output. See http://www.stats.gov.cn/zs/tjws/tjfx/202301/t20230101_1903477.html.

¹⁷ 2020 data sourced from Table 1-12a of the China Population Census Yearbook 2020; 1998 data sourced from Wind China Macroeconomic Database.

¹⁸ Data on the share of housing assets and homeownership rates are sourced from the People's Bank of China's Survey on the Assets and Liabilities of Urban Households in China (2019). The contribution rate of housing assets to total wealth assets is derived from the China Household Finance Survey and Research Center at Southwestern University of Finance and Economics and Ant Group Research Institute's joint publication, Trends in Chinese Household Wealth Changes During the Pandemic: China Household Wealth Index Research Report (2020).

¹⁹ "Non-private enterprises" here refers to "persons working in various types of legal entities and receiving remuneration from their employers, including active employees and other practitioners," irrespective of ownership structure. See https://stats.tj.gov.cn/zwfw_52013/tjzn/tjzbjs/202007/t20200705_2780306.html.

Regarding land resource allocation, the average transaction price per square meter of residential land nationwide in 2008 was 3.4 times that of industrial land. By 2022, this ratio had risen to 15.0 times. Between 2008 and 2022, the average price of industrial land nationwide decreased by approximately 23%, while residential land prices increased by nearly 240%. The development of the real estate sector has objectively provided crucial funding for land acquisition and infrastructure construction in China's urbanization process. To a certain extent, it has also promoted manufacturing development by stabilizing industrial land prices.

(IV) In recent years, as China's economy has transitioned to a stage of high-quality development, curbing the excessive accumulation of debt in the real estate market has become a key policy priority amid multiple objectives.

During periods of rapid economic growth, mobilizing financial resources to support real estate development and individual home purchases served as crucial measures to dismantle the welfare housing allocation system and foster the growth of the real estate market. Historical analysis reveals that the rapid expansion of China's real estate market around the year 2000 was inextricably linked to the backdrop of the nation's high-growth economic phase.

From a macro perspective, China's accession to the World Trade Organization (WTO) initiated a new phase of industrialization and urbanization, while sustained high economic growth provided ample room for real estate market development.

From a reform perspective, since the 1990s, China's socialist market economy system has gradually matured, with trading mechanisms for production factors like land and finance progressively established, laying the institutional foundation for real estate market growth.

From a fiscal perspective, the efficient conversion of land use rights and substantial revenues from their transfers provided crucial support for local governments to develop economies, attract investment, and improve public welfare.

From a monetary and financial policy standpoint, the continuous expansion of trade surpluses led to increased foreign exchange holdings by the central bank, which robustly supported the growth of money and credit supply, creating a relatively accommodative monetary environment for real estate-related financing.

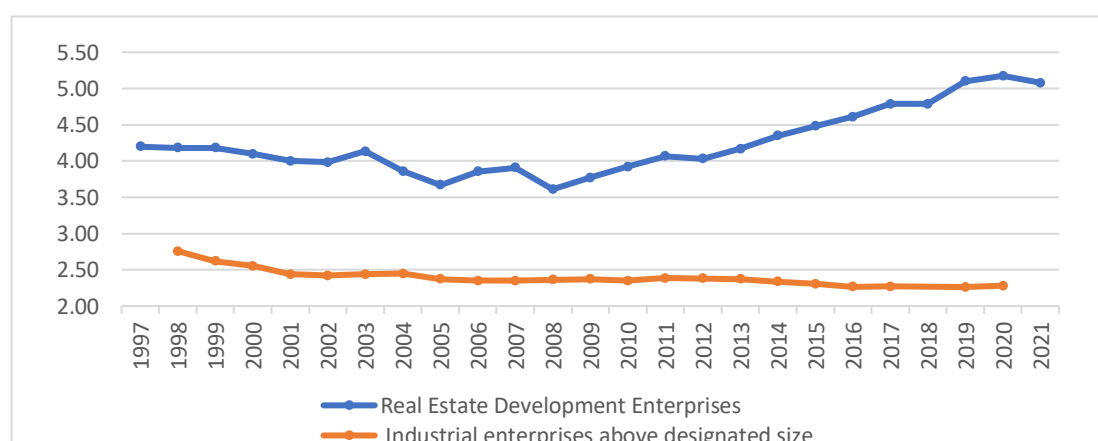
From a social development perspective, rising household incomes contrasted with insufficient and substandard housing stock, coupled with a relative scarcity of stable investment channels beyond savings deposits. Consequently, there was significant demand among citizens to use their own funds or mortgage loans to purchase properties, improve living conditions, and preserve and increase wealth.

It is against this backdrop that coordinated policies introduced funding channels—including credit, stocks, and bonds—to support real estate developers' investments. Personal housing mortgages facilitated homeownership for citizens, while the pre-sale system enabled developers to supplement liquidity and enhance capital turnover efficiency using down payments and mortgage loans. These financial arrangements

robustly supported the real estate market's expansion and played a crucial role in achieving diverse objectives within the sector.

However, after over two decades of development, debt accumulation in the real estate market has continued to climb. On one hand, the leverage ratios of real estate developers themselves have risen steadily. Their debt sources are diverse, encompassing accounts payable (to upstream suppliers), advance receipts (from pre-sales of off-plan properties that capture buyers' down payments and mortgage loans), as well as real estate development loans, domestic and international bond issuances, and entrusted trust loans. According to data released by the National Bureau of Statistics, the equity multiplier (total assets divided by owners' equity) for China's real estate developers increased from 3.61 in 2008 to 5.17 in 2020 (slightly declining to 5.08 in 2021, Figure 3.6). In contrast, the equity multiplier for industrial enterprises above designated size decreased from 2.36 in 2008 to 2.28 in 2020.

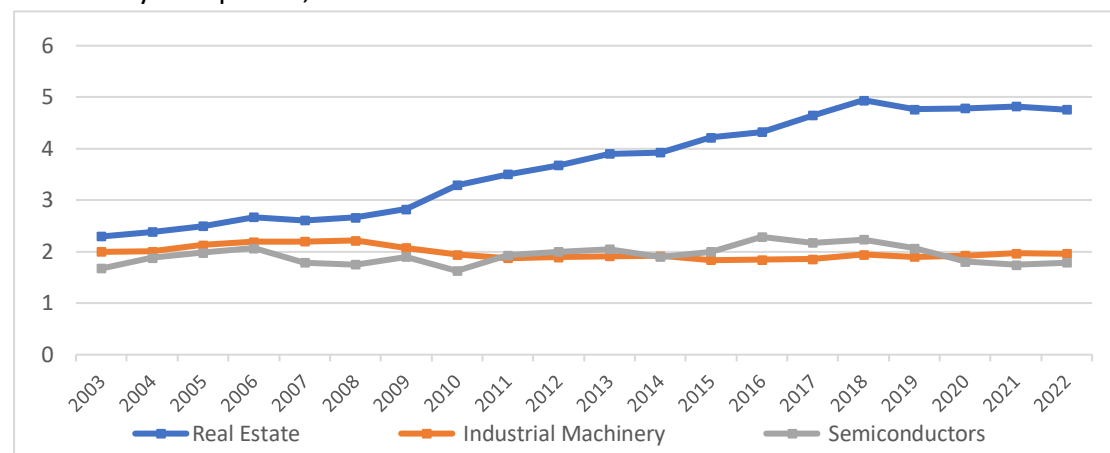
Figure 3.6 Equity Multiplier of Real Estate Development Enterprises vs. Industrial Enterprises Above Designated Size (%)



Data sources: National Bureau of Statistics, Wind China Macroeconomic Database; author's calculations

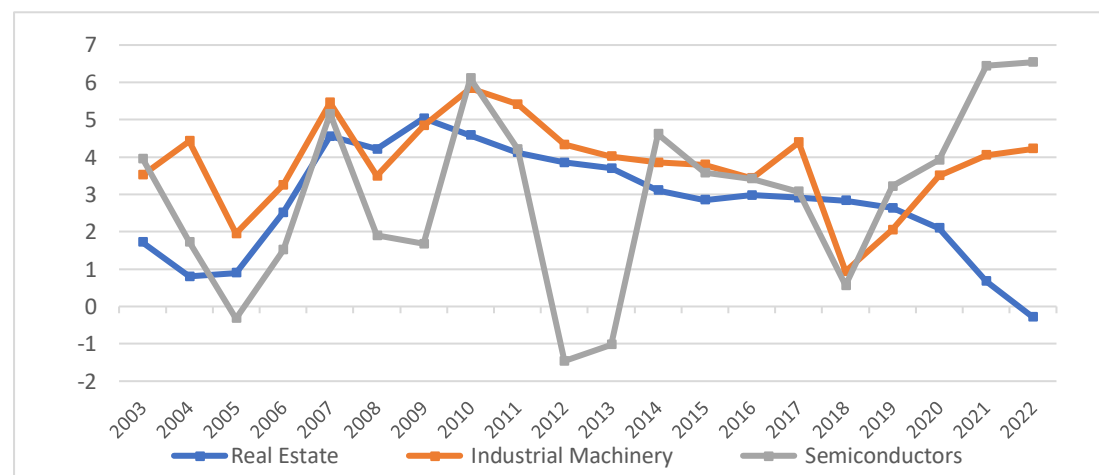
For listed companies, the equity multiplier of real estate enterprises climbed from 2.3 in 2003 to 4.9 in 2018, remaining largely stable thereafter (Figure 3.7). During the same period, the equity multipliers of industrial machinery and semiconductor enterprises remained stable around 2.0. Concurrently, the profitability of real estate enterprises has trended downward over the past decade, with the return on total assets (ROA) declining from 5.04% in 2009 to 2.1% in 2020 (Figure 3.8). In contrast, while the ROA of industrial machinery and semiconductor enterprises decreased between 2010 and 2017, it rebounded rapidly thereafter. The combination of declining profitability and high debt levels not only signals potential financial sustainability risks for real estate developers but also reflects reduced efficiency in financial resource allocation—where capital flows into lower-profitability sectors through debt financing.

Figure 3.7 Equity Multiplier (%) for Listed Real Estate Developers, Industrial Machinery Companies, and Semiconductor Firms



Data Source: Wind Stock Industry Analysis Database; Author's Calculation

Figure 3.8 Return on Total Assets (%) for Listed Real Estate Developers, Industrial Machinery Companies, and Semiconductor Firms

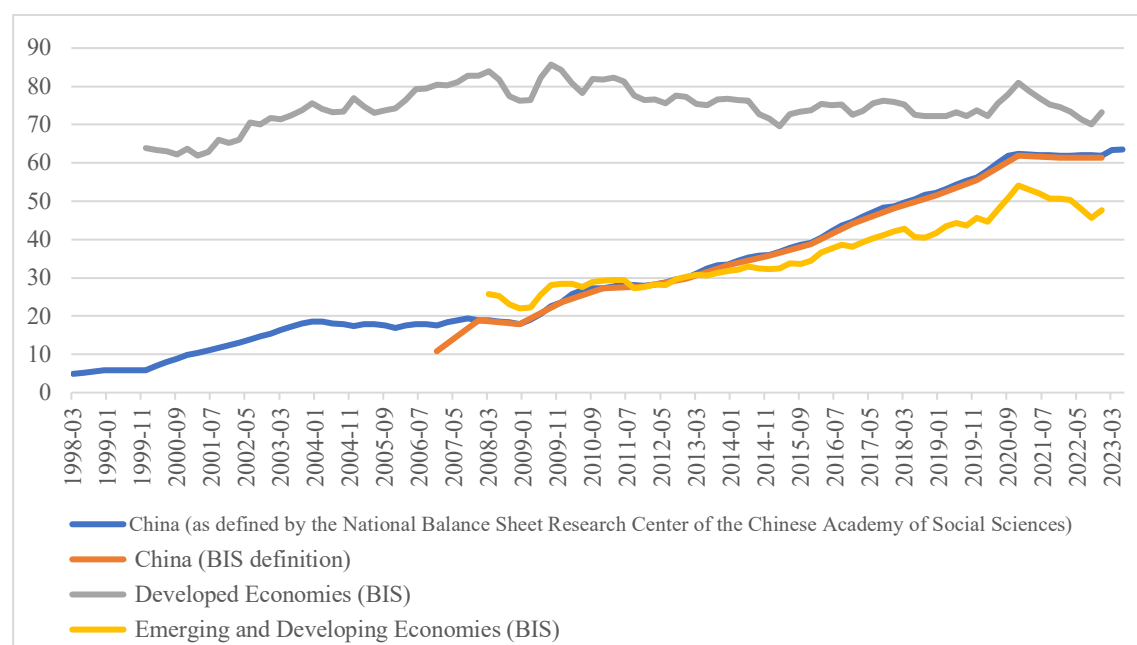


Data source: Wind Stock Industry Analysis Database

On the other hand, property purchases have driven up household sector leverage. According to estimates by the National Balance Sheet Research Center at the Chinese Academy of Social Sciences, China's household sector leverage ratio (debt-to-GDP ratio) climbed from 4.9% at the end of 1998 to 61.9% at the end of 2022 (Figure 3.9), closely matching the 61.3% measured by the Bank for International Settlements (BIS). From 2008 to 2019, China's household leverage growth exceeded the average for emerging market economies. By the end of 2022, it stood approximately 15 percentage points above the emerging economies' average and only about 11 percentage points below the developed economies' average. Housing loans constitute the bulk of Chinese household debt. According to the People's Bank of China's 2019 Survey on the Assets and Liabilities of Urban Households in China, 76.8% of all indebted households carried

housing loan liabilities, with the average household's outstanding housing loan balance accounting for 75.9% of total household debt. Mortgage loans impose significant principal and interest repayment pressures on households, affecting consumption and other investment expenditures within the household sector. Simultaneously, these loans expose households to substantial risks from fluctuations in property prices and mortgage interest rates. The rapid rise in household sector leverage warrants vigilance.

Figure 3.9 Household Debt-to-GDP Ratio (%)



Data sources: National Balance Sheet Research Center, Chinese Academy of Social Sciences; Bank for International Settlements (BIS); Wind China Economic Database; International Macroeconomic Database

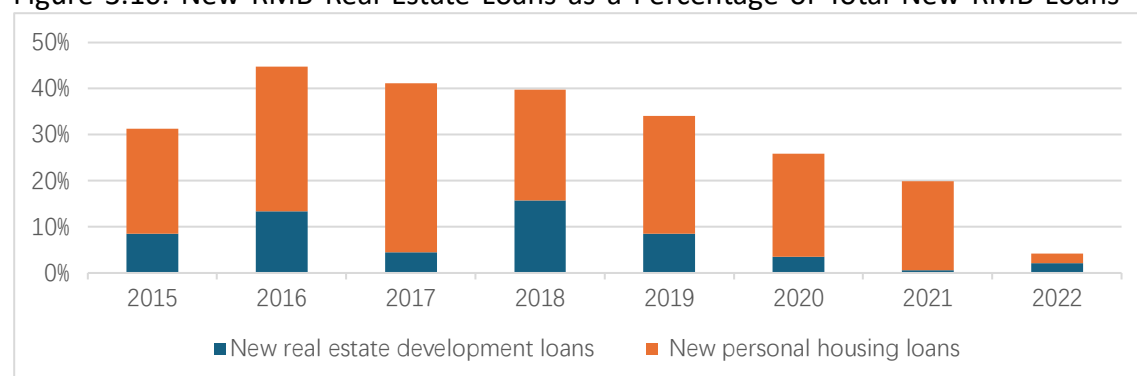
Concurrently, the proportion of financial resources flowing into the real estate sector has continued to rise. According to the "Statistical Report on Financial Institutions' Loan Allocation" published by the People's Bank of China, new real estate loans (including real estate development loans and personal home purchase loans) nationwide reached 5.7 trillion RMB in 2016, accounting for approximately 45% of all new RMB loans. This means nearly half of credit resources flowed into real estate development and the mortgage market. With the government imposing restrictions on real estate financing, financial support for the sector has weakened.

By 2020, the share of new real estate loans in total new RMB loans had fallen to 26%, while the outstanding balance of real estate loans accounted for 28.7% of all RMB loans. However, considering that the real estate sector's value-added contribution to GDP was only 7.3% in 2020 (with the combined value-added of real estate and

construction accounting for 14.5%), the proportion of credit allocated to the real estate sector remains disproportionately high.

By comparison, in 2020, new medium- and long-term loans in both domestic and foreign currencies to industrial enterprises accounted for approximately 21% of new medium- and long-term loans to non-financial enterprises in both domestic and foreign currencies, and 9.3% of all new loans in both domestic and foreign currencies. The outstanding balance of medium- and long-term loans in both domestic and foreign currencies for industrial enterprises accounted for 16.7% of the total medium- and long-term loans for non-financial enterprises in both domestic and foreign currencies, and 6.2% of all loans in both domestic and foreign currencies, which is significantly lower than the proportion of industrial value-added in GDP (30.8% in 2020).

Figure 3.10: New RMB Real Estate Loans as a Percentage of Total New RMB Loans



Data source: People's Bank of China, author's calculations

Against the backdrop of China's economic transition from high-speed growth to high-quality development, continuing to develop the real estate sector through a high-investment, high-leverage model will bring about a series of problems.

On the one hand, the high-leverage model poses significant financial risks. Factors such as slowing macroeconomic growth, downward revisions in household income growth expectations, changes in financial conditions due to adjustments in the central bank's monetary policy tools, and potential shifts in real estate speculation and investment behavior could easily trigger a liquidity crisis in the real estate sector. This would lead to debt defaults by real estate companies and households, further causing issues such as rising bank non-performing loans, declining household asset quality, and suppliers to real estate companies being unable to collect receivables. Such developments would severely disrupt the macroeconomic and financial order.

On the other hand, against the backdrop of slowing urbanization and an aging population, continuing to allocate substantial financial resources to support large-scale real estate development may create future supply-demand imbalances. This could divert financial support away from manufacturing and productive services sectors, hindering China's economic transformation and upgrading.

Simultaneously, soaring housing prices and high mortgage leverage have substantially increased homeownership costs for citizens. This not only hinders the achievement of the social goal of "ensuring housing for all" but also impedes the release of China's economic consumption potential.

In recent years, the issue of high leverage in the real estate sector and its potential to trigger systemic financial risks has drawn significant attention from the central government.

Against the backdrop of the "housing for living, not speculation" policy and the "campaign to prevent and defuse financial risks," in July 2017, Wang Zhijun, Director of the Economic Bureau I of the Central Leading Group Office of Financial and Economic Affairs, interpreted the spirit of the Political Bureau meeting, explicitly stating that real estate bubbles, shadow banking, high leverage in state-owned enterprises, local government debt, and illegal fundraising all harbored "gray rhino" risks.²⁰ In August 2020, Guo Shuqing, then Chairman of the China Banking and Insurance Regulatory Commission (CBIRC), stated in his article "Resolutely Winning the Battle to Prevent and Defuse Financial Risks" that "real estate bubbles are the biggest 'gray rhino' threatening financial security." He later elaborated on this assessment in other forums and²¹.

Recognizing the financial risks in real estate, post-2017 regulatory efforts expanded beyond the dual objectives of "encouraging home purchases and real estate development investment to support the economy" and "stabilizing housing prices to ensure people have access to housing." Key targets now included controlling leverage in the real estate sector for both developers and households, preventing systemic financial risks triggered by real estate, and curbing excessive financial resources flowing into the property market.

To curb debt accumulation in the real estate sector, a series of financial controls were introduced to restrict capital flows into real estate. These measures built upon existing policies such as macro-credit volume and pricing controls, adjustments to tax incentives for property sales, land supply pacing, accelerated development of rental and affordable housing, and purchase/sale/mortgage restrictions.

In 2017, regulators standardized shadow banking capital flows into real estate. The Asset Management Association of China issued the "Regulation No. 4 on Filing Management of Private Asset Management Plans" in February that year, restricting trusts and private funds from illegally investing in "ordinary residential real estate projects in cities with excessively rapid price increases" through channels like

²⁰ People's Daily Online, "Shadow Banking, Real Estate Bubbles, High Leverage in State-Owned Enterprises, Local Government Debt, and Illegal Fundraising," <http://m.people.cn/n4/2017/0727/c120-9412535.html?from=groupmessage>.

²¹ Guo Shuqing, "Resolutely Winning the Battle to Prevent and Defuse Financial Risks," https://www.gov.cn/xinwen/2020-08/16/content_5535190.htm

entrusted loans, trust loans, or equity disguised as debt.²²

In 2018, refinancing for listed real estate companies was tightened. The China Securities Regulatory Commission issued the "Q&A on Reviewing Refinancing for A-Share Listed Companies" in October, suspending refinancing reviews for real estate enterprises or companies involved in real estate to prevent raised funds from being diverted to the sector.²³

That same year, restrictions on overseas bond issuance by real estate companies were further tightened. In June, the National Development and Reform Commission and the Ministry of Finance issued the "Notice on Improving Market Constraint Mechanisms and Strictly Preventing Foreign Debt Risks and Local Government Debt Risks," stipulating that funds raised through overseas bonds by real estate companies must primarily be used to repay maturing debts. It "restricted real estate companies from investing foreign debt funds in domestic or overseas real estate projects or supplementing working capital, and required companies to submit commitments on fund usage"²⁴.

In 2019, bank lending support for the real estate sector faced constraints. The People's Bank of China convened a symposium on optimizing credit structure for banking financial institutions in July that year, explicitly calling for "reasonable control over real estate loan disbursements." "strictly prohibit the misuse of consumer loans for property purchases," and "enhance management of funds flowing into real estate through channels such as bank wealth management products and entrusted loans." It also called for "strengthening supervision and risk warnings regarding the financing activities of large real estate enterprises with high leverage, and reasonably controlling the scale of interest-bearing debt and the debt-to-asset ratio of enterprises."²⁵

Building upon the aforementioned measures, since 2020 the central government has further constrained credit support for real estate by targeting both property developers and financial institutions.

In August 2020, the Ministry of Housing and Urban-Rural Development (MOHURD) and the People's Bank of China (PBOC) jointly convened a symposium for real estate enterprises to implement the "Fund Monitoring and Financing Management Rules for

²² China Securities Investment Fund Association, "Implementing Central Real Estate Regulation Policies and Standardizing Private Fund Investment Practices — China Securities Investment Fund Association Releases 'Private Asset Management Plan Filing Management Specification No. 4'," https://www.amac.org.cn/aboutassociation/gyxh_xhdt/xhdt_xhgg/201702/t20170214_2124.html

²³ Ding Ning, "Breaking News! Listed Real Estate Companies Reopen Refinancing Channels!", Beijing Business Today, <https://baijiahao.baidu.com/s?id=1750742550833783534&wfr=spider&for=pc>.

²⁴ Xinhua News Agency, "Two Ministries Issue Document Restricting Real Estate Companies' Use of Foreign Debt Funds for Domestic and Overseas Real Estate Projects," China Government Network, https://www.gov.cn/xinwen/2018-06/28/content_5301719.htm.

²⁵ People's Bank of China, "Symposium on Credit Structure Adjustment and Optimization Held in Beijing for National Banking Financial Institutions," China Government Network, https://www.gov.cn/xinwen/2019-08/01/content_5417776.htm.

Key Real Estate Enterprises" (known as the "Three Red Lines")²⁶. These rules require key real estate enterprises to maintain a debt-to-asset ratio (excluding advance receipts) not exceeding 70%, a net debt-to-equity ratio not exceeding 100%, and a cash-to-short-term-debt ratio below 1.

On December 28, 2020, the People's Bank of China and the China Banking and Insurance Regulatory Commission issued a notice implementing the "Real Estate Loan Concentration Management System for Banking Financial Institutions" effective January 1, 2021. This system categorizes institutions into five tiers, specifying the maximum proportion of real estate loans to total RMB loans and the maximum proportion of personal housing loans to total RMB loans for each tier.²⁷

The aforementioned measures have yielded significant results, effectively curbing real estate financing. From a credit perspective, the year-on-year growth rate of outstanding real estate development loans declined from a peak of 24.5% in Q3 2018 to -0.2% in Q2 2022. Meanwhile, the year-on-year growth rate of outstanding personal housing loans fell from a peak of 38.1% in Q4 2016 to -0.7% in Q2 2023.

Regarding bond financing, net domestic credit bond financing for real estate companies fell from a peak of RMB 104 billion in Q4 2018 to -RMB 80.8 billion in Q2 2023²⁸; Yields on overseas dollar bonds issued by real estate companies surged significantly. By the end of 2022, the three-year yields on dollar bonds issued by Chinese real estate companies rated BBB+, B+, and CCC+ stood at 6.61%, 17.38%, and 30.49% respectively, representing increases of 0.81, 12.0, and 11.55 percentage points compared to the end of 2019.²⁹

Regarding funding sources for real estate development, China's actual funds for property development grew at an annual rate of 14.1% in 2014, declining to 3.7% in 2021 and falling to -19.3% in 2022. In absolute terms, the 2022 funds totaled 22.2 trillion yuan, equivalent only to the 2018 level (22.5 trillion yuan).

The crackdown on financing has dealt a significant blow to the real estate sector.

On one hand, some real estate companies have begun facing liquidity crises. According to statistics from the China Index Academy, 42 real estate enterprises nationwide

²⁶ People's Bank of China, "Ministry of Housing and Urban-Rural Development and People's Bank of China Jointly Convene Symposium with Real Estate Enterprises," China Government Network, https://www.gov.cn/xinwen/2020-08/23/content_5536753.htm; People's Bank of China, "PBOC Holds Press Conference on Third Quarter 2020 Financial Statistics," China Government Online, https://www.gov.cn/xinwen/2020-10/15/content_5551454.htm.

²⁷ People's Bank of China, "Notice of the People's Bank of China and the China Banking and Insurance Regulatory Commission on Establishing a Real Estate Loan Concentration Management System for Banking Financial Institutions," China Government Network, https://www.gov.cn/zhengce/zhengceku/2021-01/01/content_5576085.htm.

²⁸ Data source: Bond issuance and maturity statistics under the Wind Bonds section, industry category "Wind Real Estate (Credit Bonds)".

²⁹ Data sourced from China Bond Information Network (<https://yield.chinabond.com.cn/>).

defaulted on their debts in 2022, a sharp increase from 15 in 2021 and 4 in 2020³⁰. If overdue payments to upstream suppliers are included, the number and scale of defaulting enterprises would be even larger.

On the other hand, insufficient funds to continue construction have led to stalled projects. According to calculations by the E-House Research Institute, by mid-2022, the total area of stalled projects nationwide reached approximately 231 million square meters, with a stalling rate of 3.85%. The stalled projects involve about 0.9 trillion yuan in mortgage funds and have already triggered "mortgage payment suspensions" by affected homebuyers.³¹

Simultaneously, developer defaults and stalled projects have severely eroded buyer confidence. Compounded by pandemic control measures, the cumulative year-on-year growth rate of national commercial housing sales area plummeted from 63.8% in March 2021 to -24.3% in December 2022. Over the same period, the cumulative year-on-year growth rate for pre-sale housing area dropped from 68.4% to -28.1%.

Finally, insufficient capital and weak sales have dragged down real estate investment and led to increased unemployment in the sector. Nationwide real estate investment growth slowed from 38.3% in February 2021 to -10.0% in December 2022. According to estimates by the Institute of Finance at the Chinese Academy of Social Sciences, unemployment in China's real estate and construction industries reached approximately 4.15 million people in 2022, an increase of 1.56 million compared to 2019.³²

It should also be noted that the decline in real estate development investment has reduced developers' demand for land, thereby impacting government fiscal revenues. In 2022, local governments' revenues from the transfer of state-owned land use rights fell by 23.3% compared to 2021.³³

In response to the above circumstances, starting from the third quarter of 2022, the government began optimizing and adjusting financing policies for real estate enterprises.

In August 2022, the Ministry of Housing and Urban-Rural Development, the Ministry of Finance, the People's Bank of China, and other departments promoted the use of special loans from policy banks to support the construction of sold residential projects that were overdue and difficult to deliver. However, they emphasized that the relevant

³⁰ China Index Academy, "Lessons from Fuyuan: Research on Real Estate Development Models Under Deep Adjustment," July 2023.

³¹ E-House Research Institute Think Tank Center, "2022 National Study Report on Unfinished Buildings," July 2022.

³² Macro-Financial Analysis Team, Institute of Finance, Chinese Academy of Social Sciences, "China Macro-Financial Analysis (Q2 2023)," July 2023.

³³ Xinhua News Agency, "Multiple Departments Introduce Measures to Advance 'Ensuring Building Completion and Stabilizing Livelihoods' Work," China Government Network, https://www.gov.cn/xinwen/2022-08/19/content_5706085.htm.

funds must be strictly limited to unfinished projects, implementing closed-loop operations and dedicated use of funds.

In November of the same year, the People's Bank of China and the China Banking and Insurance Regulatory Commission issued the "Notice on Strengthening Financial Support for the Stable and Healthy Development of the Real Estate Market."

Regarding credit, it proposed "stabilizing real estate development loan disbursements, supporting reasonable demand for personal housing loans, stabilizing credit disbursements to construction enterprises, and supporting reasonable extensions for existing financing such as development loans and trust loans." Regarding bonds, it proposed "supporting high-quality real estate enterprises in issuing bonds for financing. Promote specialized credit enhancement institutions to provide credit enhancement support for bond issuances by real estate enterprises that are financially sound overall but facing short-term difficulties."

Regarding off-balance-sheet financing such as trust loans, it proposed "encouraging trust and other asset management products to support reasonable financing needs of the real estate sector."while extending the transition period for real estate loan concentration management policies and temporarily optimizing financing policies for real estate project mergers and acquisitions (including policies supporting reasonable extensions for existing financing such as development loans and trust loans, and encouraging financial institutions to provide financing support for ensuring project delivery, which were extended in July 2023)³⁴.

In November of the same year, the China Securities Regulatory Commission (CSRC) released capital market measures to support real estate enterprises' financing through a "Q&A with reporters" format.

These measures permitted qualified real estate enterprises to implement restructuring and listing, allowed listed real estate companies to conduct private placements for refinancing, permitted H-share listed companies primarily engaged in real estate to refinance, and authorized qualified private equity fund managers to establish private real estate investment funds.³⁵

In August 2023, the People's Bank of China and the National Financial Regulatory Administration eased mortgage restrictions, uniformly setting down payment ratios nationwide at 20% for first homes and 30% for second homes (lower than previous

³⁴ People's Bank of China, "Notice of the People's Bank of China and the China Banking and Insurance Regulatory Commission on Strengthening Financial Support for the Steady and Healthy Development of the Real Estate Market," China Government Online, https://www.gov.cn/xinwen/2022-11/23/content_5728454.htm?eqid=a9261ebb00007e8c000000026462eefd;Xinhua News Agency, "Two Departments Extend Two Financial Policies to Provide Continuous and Stable Support to Real Estate Companies," China Government Network, https://www.gov.cn/lianbo/bumen/202307/content_6891056.htm.

³⁵ China Securities Regulatory Commission, "CSRC Spokesperson Answers Questions on Capital Market Support for Stable and Healthy Development of Real Estate Market," China Government Online, https://www.gov.cn/zhengce/2022-11/29/content_5729451.htm.

ratios in some hotspot cities)³⁶ . They also reduced interest rates on existing first-home mortgages³⁷ , further relaxing constraints on real estate loans and alleviating residents' mortgage burdens.

In January 2024, the Ministry of Housing and Urban-Rural Development (MOHURD) and the Financial Regulatory Administration issued the "Notice on Establishing a City-Level Real Estate Financing Coordination Mechanism." This directive mandates the establishment of coordination mechanisms in prefecture-level and above cities, requiring local authorities to "compile lists of real estate projects eligible for financing support and share them with financial institutions within their jurisdictions." The goal is to "build a communication platform among government, banks, and enterprises to facilitate precise matching between real estate developers and financial institutions," ensuring equitable access to reasonable financing for real estate enterprises of all ownership types.³⁸

In May 2024, the Ministry of Housing and Urban-Rural Development, the Ministry of Natural Resources, the People's Bank of China, and the China Banking and Insurance Regulatory Commission jointly introduced multiple measures to stabilize real estate development. These included establishing a 300 billion yuan re-lending facility for affordable housing to support local state-owned enterprises in acquiring unsold completed commercial properties for use as affordable housing; supporting local governments in reclaiming idle land for affordable housing construction through the issuance of special local government bonds; The minimum down payment ratio for first and second home mortgages nationwide was lowered, and the interest rate for housing provident fund loans was reduced.³⁹

In September 2024, the People's Bank of China, the China Banking and Insurance Regulatory Commission, and other departments continued to introduce incremental policies. The minimum down payment ratio for second home mortgages was further reduced, the central bank's contribution ratio for affordable housing re-lending was increased to 100%, and interest rates on existing mortgages were gradually lowered.⁴⁰ Meanwhile, in 2024, local governments further adjusted purchase restriction policies.

³⁶ People's Bank of China, "Notice of the People's Bank of China and the National Financial Supervision and Administration Bureau on Adjusting and Optimizing Differentiated Housing Credit Policies," People's Bank of China website, <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/5050293/index.html>.

³⁷ People's Bank of China, "Notice of the People's Bank of China and the National Financial Supervision and Administration Bureau on Matters Related to Reducing Interest Rates for Existing First-Home Mortgages," [Chinese Government Website, https://www.gov.cn/zhengce/zhengceku/202309/content_6901351.htm](https://www.gov.cn/zhengce/zhengceku/202309/content_6901351.htm).

³⁸ Ministry of Housing and Urban-Rural Development, "Notice of the Ministry of Housing and Urban-Rural Development and the National Financial Regulatory Administration on Establishing a Coordination Mechanism for Urban Real Estate Financing," Chinese Government Website, https://www.gov.cn/zhengce/zhengceku/202401/content_6925683.htm.

³⁹ China Government Network, "Regular Policy Briefing by the State Council," <https://www.gov.cn/xinwen/2024zccfh/16/index.htm>.

⁴⁰ China Government Network, "State Council Information Office Holds Press Conference to Introduce Financial Support for High-Quality Economic Development," https://www.gov.cn/lianbo/fabu/202409/content_6976186.htm.

Most cities no longer enforce "purchase restrictions," and major cities like Beijing, Shanghai, Guangzhou, and Shenzhen have significantly relaxed their purchase restriction measures.

The aforementioned measures, together with the optimization and adjustment of the "centralized land supply policy," the refinement of city-specific policies on purchase restrictions, sales restrictions, and loan restrictions, tax relief policies for deed tax, individual income tax, and value-added tax, and reductions in mortgage interest rates, collectively provide support for the real estate market. These efforts have, to a certain extent, stabilized the expectations of real estate companies and homebuyers.

However, from the perspectives of sales, development investment, and real estate enterprise financing, China's real estate market has yet to fully stabilize. Some real estate developers—particularly those facing significant pressure to deliver completed buildings—continue to grapple with considerable funding constraints. As of November 2024, the cumulative year-on-year growth rates for real estate development investment and commercial property sales area remained negative. Local government revenues from state-owned land transfers for January-November 2024 reached only 64% of the same period in 2022. Although yields on dollar-denominated bonds issued by Chinese real estate companies declined in 2024, market volatility remains substantial. The potential for the real estate market to trigger macroeconomic fluctuations and systemic financial risks should not be underestimated.

(V) Lessons Learned

Reflecting on China's real estate market development, three key characteristics and lessons emerge.

First, the government fostered China's real estate market through coordinated policies across land, fiscal, monetary, and social security sectors, achieving multiple socioeconomic objectives via the market's growth and prosperity.

In the 1990s, the government gradually dismantled the "welfare housing allocation" system through coordinated reforms. These included restructuring the land allocation system, collecting land transfer fees as fiscal revenue, permitting financial institutions to issue housing mortgages, and establishing affordable housing programs. These measures collectively nurtured and accelerated the real estate market's development.

Entering the new century, particularly after the 2008 global financial crisis, the government balanced objectives such as leveraging real estate to stimulate the economy and stabilizing housing prices through coordinated policy measures. These included controlling the pace of land supply, adjusting tax and fee collection conditions for real estate, modifying macro-credit and interest rate levels, adjusting purchase, sale, and loan restrictions, and accelerating affordable housing construction. Through the development of the real estate market, the government has achieved multiple socioeconomic objectives: improving housing conditions for citizens, preserving and increasing residents' wealth, transforming land resource utilization methods, promoting urbanization, stimulating the economy through upstream and downstream

industries, expanding employment, and generating fiscal revenue for the government. This represents a crucial summary of lessons learned from China's real estate market development journey.

Second, achieving multiple objectives requires a firm grasp of the macroeconomic context at each stage of development. Policy priorities must be tailored to the specific circumstances of the time and issue, avoiding a "one-size-fits-all" approach. While addressing primary contradictions, other objectives must also be considered to prevent neglecting one area for another.

Overall, over the past 30 years, the government has focused on adjusting its policy priorities based on the macroeconomic environment and the primary challenges facing the real estate sector.

In the 1990s, with low per capita living space and severe shortages of high-quality housing, nurturing and encouraging the real estate market became the most critical policy focus. Entering the new century, alongside accelerated industrialization and urbanization alongside a generally accommodative monetary and financial environment, the emphasis shifted to leveraging real estate's role in stimulating upstream and downstream industries, creating employment, and expanding local government revenue sources— —became the policy focus.

Since 2017, against the backdrop of China's economic transition from high-speed growth to high-quality development, and in light of changes such as significantly increased per capita housing space, a homeownership rate exceeding 90%, and a marginal slowdown in urbanization, the long-term sustainable development of the real estate market requires a gradual shift away from the high-leverage model. Consequently, curbing further debt accumulation in the real estate sector and preventing systemic financial risks triggered by real estate have become the new policy priorities.

However, implementing targeted policies does not mean reducing multiple objectives to a single one. While addressing primary contradictions, it remains essential to constantly monitor whether other aspects of these multiple objectives are being severely impacted.

Take recent efforts to mitigate financial risks in the real estate sector as an example. While stabilizing the leverage of real estate developers and homebuyers and preventing excessive financial resources from flowing into the sector, attention must still be paid to the economic and social objectives of real estate market development. This includes avoiding severe drag on investment and employment, preventing large-scale construction abandonment from triggering social conflicts, and maintaining public and investor confidence in China's economy.

Third, achieving multiple objectives in economic development is a complex process requiring coordinated policy efforts to advance reforms across various domains. Overreliance on any single policy approach is likely to either fall short of objectives due to insufficient intensity or produce unintended consequences from excessive force.

China's real estate market development over the past 30 years offers both positive and negative examples. During the 1990s transition from welfare housing allocation to a market-based system, failing to reform land use rights distribution and fiscal revenue mechanisms would have deprived the government of incentives to convert agricultural land into residential plots and deprived local governments of crucial funding for infrastructure development. Without liberalizing personal mortgage lending, public housing demand would remain constrained by current income and historical savings; without introducing real estate developers and continuing to rely on employers to build housing, the efficiency and quality of housing supply would be significantly compromised.

It was precisely through the coordinated adjustment of land, fiscal, tax, monetary, and financial policies that the real estate market achieved rapid development and prosperity. By the same token, the current exploration of new models for real estate industry development also requires coordinated policy adjustments across all fronts. The high leverage issue in the real estate sector is fundamentally a financial problem, but it cannot be resolved solely through adjustments to financial policies. Increasing residential land supply in key cities, diversifying local government revenue sources, advancing property tax pilot programs, reforming the pre-sale system for commercial housing, expanding affordable housing stock, decoupling public services like education from homeownership, and promoting equal rights for renters and buyers—exploring and implementing these measures will help rebalance housing's residential function with its wealth accumulation and social security attributes. This will fundamentally achieve the goal of "housing for living, not speculation" and stabilize leverage in the real estate sector.

These experiences hold significant implications for optimizing macroeconomic policy coordination under multiple objectives today.