Which Way Forward?
Navigating China's Post-Pandemic Growth Path

Special Topic - Investment Shifts and Demand Shortfalls

WORLD BANK GROUP

China Economic Update - December 2023

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List of Abbreviations

AE	Advanced Economy
ASEAN	Association of Southeast Asian Nations
BOP	Balance of Payments
CAR	Capital Adequacy Ratio
CCB	City Commercial Banks
CFPS	China Family Panel Survey
CHN, CN	China
CHFS	China Household Finance Survey
COVID-19, COVID	Coronavirus Disease 2019
CO_2	Carbon Dioxide
CPI	Consumer Price Index
DRC	Development Research Center of the State Council
EMDE	Emerging Market and Developing Economies
EU	European Union
EV	Electric Vehicles
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GW	Gigawatt
H1	First Half Year
H2	Second Half Year
HH	Household
HIC	High-Income Country
ICE	Internal Combustion Engine
IMF	International Monetary Fund
JSB	Joint-Stock Banks
LGFV	Local Government Financing Vehicle
LMIC	Lower-Middle Income Country
LSB	Large State Banks
LUR	Land-Use Right
MOF	Ministry of Finance
m/m	Month-on-Month
MSME	Micro, Small, and Medium Enterprises
NBS	China National Bureau of Statistics
NIM	Net Interest Margin
NPL	Non-performing Loan
ODI	Overseas Direct Investment
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Square
PBC	People's Bank of China
PMI	Purchasing Manager Index

POE	Private-Owned Enterprise
PPI	Producer Price Index
PPP	Purchasing Power Parity
PSM	Propensity-Score Matching
q/q	Quarter-on-Quarter
Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
RCB	Rural Commercial Banks
RHS	Right Hand Side
RMB	Renminbi
ROA	Return on Assets
ROE	Return on Equity
ROIC	Returns on Invested Capital
RURS	Rural-Urban Resident Scheme
sa	Seasonally Adjusted
SAFE	State Administration of Foreign Exchange
SOE	State-Owned Enterprise
TWh	Terawatt Hour
UMIC	Upper-Middle Income Country
US	United States
USD	US Dollar
UWPS	Urban Worker Pension Scheme
VAT	Value-Added Tax
WBG	World Bank Group
WDI	World Development Indicators
WHO	World Health Organization
WITO	World Intellectual Property Organization
WTO	World Trade Organization
y/y	Year-on-Year
ytd	Year-to-Date
4qma	Four-quarter Moving Average
3yma	Three-year Moving Average

Executive Summary

Economic activity in China has picked up in 2023, but the recovery remains fragile. Real GDP growth accelerated to 5.2 percent y/y in the first three quarters of 2023, driven by demand for services, resilient manufacturing investment, and public infrastructure stimulus. The initial phase of economic reopening triggered a surge in economic activity in Q1, but growth momentum decelerated rapidly in Q2 before recovering modestly in Q3. The volatile growth performance, compounded by persistent deflationary pressures and still weak consumer confidence, suggests continued fragility in the recovery.

Real GDP growth is projected to recover to 5.2 percent in 2023—0.4 percentage points lower than projected in the June 2023 China Economic Update. While growth momentum is expected to stabilize in the near term, propelled by a gradual recovery of consumer sentiment and the impact of policy stimulus, continued weakness in the real estate sector and persistently tepid external demand dim the short-term outlook. China's growth is projected to slow to 4.5 and 4.3 percent in 2024 and 2025, respectively, reflecting short term headwinds but also growing structural constraints to growth, including high levels of debt, population ageing and persistent economic imbalances (see also the Special Focus section of this report).

China Economic Outlook	*2020*	*2021*	*2022*	*2023f*	*2024f*	*2025f*
Real GDP growth (%)	2.2	8.4	3.0	5.2	4.5	4.3
Consumer Price Index (% change, average)	2.5	0.9	2.0	0.5	1.6	2.1
Current account balance (% of GDP)	1.7	2.0	2.2	1.5	0.7	0.3
Consolidated fiscal balance (% of GDP) *	-8.5	-4.0	-6.4	-6.5	-6.4	-4.2

Source: World Bank.
Note: f = forecast (baseline). * World Bank staff calculations.

The outlook is subject to considerable downside risks. The property market downturn could last longer than expected, weighing on consumer sentiment and spending and adding pressure on upstream suppliers and creditors. This would further squeeze local government revenue and dampen public investment. Externally, the economy is vulnerable to softer global demand due to tighter-than-expected financial conditions and heightened geo-political tensions. Climate change and associated extreme weather events, the frequency of which has increased in recent decades, also pose a downside risk. In contrast, stronger-than-expected policy support and further progress on structural reforms could present upside risks.

Sustained policy support and deeper structural reforms are needed to hedge against downside risks to growth, stem deflationary pressures, and restore confidence. Given acute fiscal constraints at the subnational level, shifting a larger share of stimulus financing measures to the national government would expand the necessary fiscal space. The recently adopted budget amendment which envisages the use of national treasury bonds to finance natural disaster recovery and enhance relief capabilities is a welcome development in this regard. Nevertheless, deeper reforms of the intergovernmental fiscal system are necessary to resolve structural imbalances in local government finances and effectively tackle the local government financing vehicles (LGFV) debt problem. This should include corporate and financial restructuring of LGFVs, for example by unbundling—and possibly divesting from—purely commercial assets. Similarly, in the real estate sector, short-term regulatory easing and liquidity support need to be complemented by the development of a framework to resolve the corporate debt overhang.

Special Focus: Investment Shifts and Demand Shortfalls

China's investment deceleration has been one of the key drivers of the overall growth slowdown in recent years. Together with the decline in aggregate investment growth, there has been a marked shift in the composition of investment. The prolonged real estate slump has led to a sharp and persistent decline in real estate investment which fell by a cumulative 18 percent in the past two years. In contrast, investment in the manufacturing sector, where returns are generally higher, has been much more resilient, expanding by a cumulative 16 percent in the same period. The resilience of manufacturing investment, to a certain degree, is a response to surging demand for products such as electric vehicles (EVs), batteries, and other low carbon technologies, but also reflects growing government support for priority manufacturing sectors such as semiconductors.

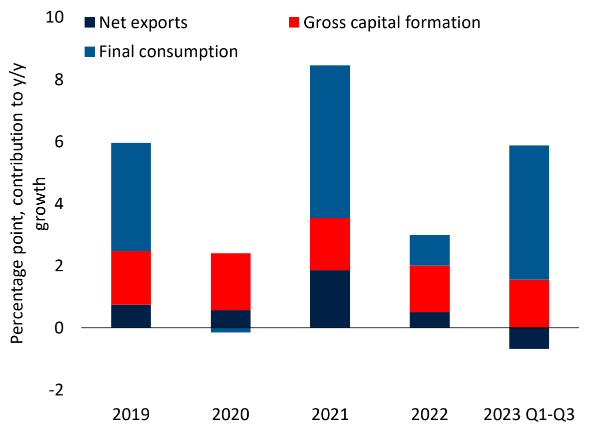
However, robust GDP growth over the medium term will require more than solid manufacturing investment—it will depend on stronger consumption growth. With real estate investment expected to remain muted due to property developer balance sheet constraints and a secular decline in housing demand, China’s overall investment rate is likely to stabilize at a lower level than before the pandemic, even if manufacturing investment remains resilient. While lower investment is part of the necessary adjustment of China’s economy, consumption growth will need to accelerate to compensate for slower growth in aggregate demand. In addition, while the investment shift towards manufacturing has led to short-term improvement in the efficiency of capital allocation, there is some risk that the rapid scale-up of investment and growing state support could lead to overcapacity and inefficiency in certain sectors.

Structural reforms are crucial both to accelerate rebalancing towards higher consumption and to mitigate risks of inefficiencies in capital allocation. Following recent statements by policymakers, a renewed focus on structural reform implementation with specific measures strengthening the rule of law, independent enforcement of regulations, fostering competition, and ensuring a level-playing field could help ensure that resources are allocated to the most productive sectors and firms. Deepening financial sector reform will enhance market-based financial intermediation. Measures to improve the progressivity of the fiscal system, reform the hukou system, and foster inclusive finance will support household consumption growth.

Figure 1. The *China Economic Update* at a glance

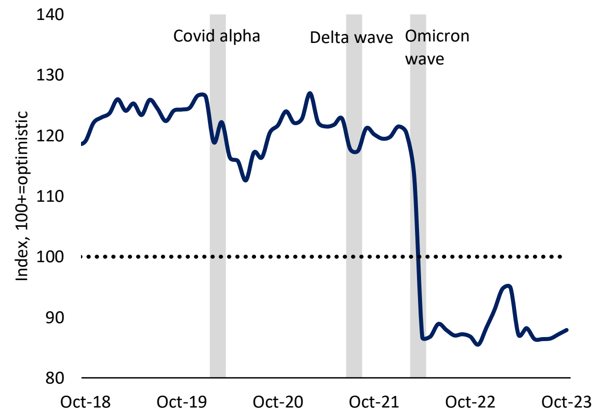
China's economic activity has picked up in 2023 from the low pace of the previous year

A. GDP demand components



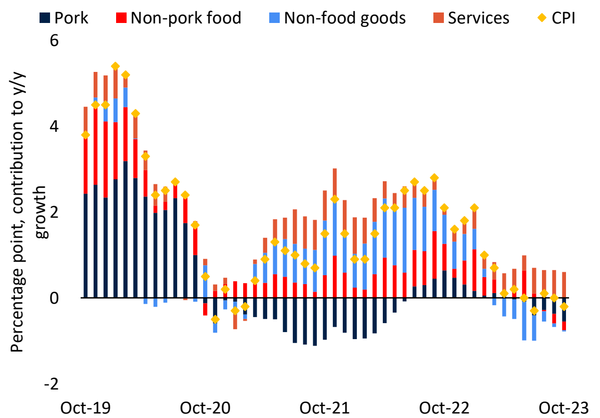
Nonetheless, the recovery from the pandemic remains fragile, as evidenced by weak consumer confidence …

B. *Consumer confidence index*



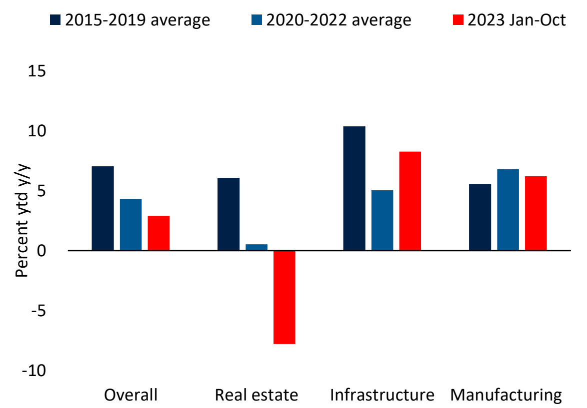
… as well as still subdued inflation

C. Consumer price inflation



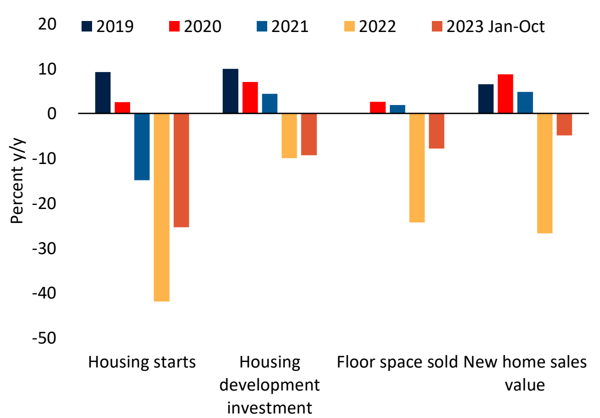
Domestic investment growth slowed due to severe property sector downturn

D. Fixed asset investment by sector



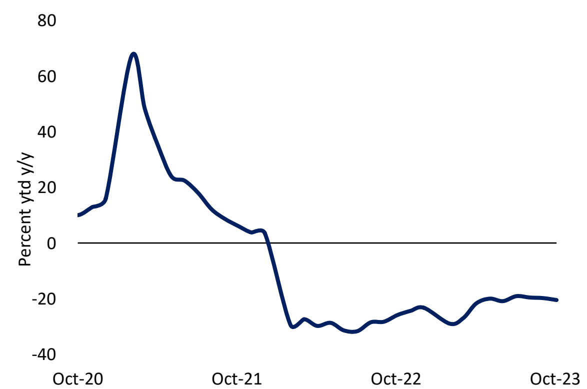
Property sector faces intertwined short-term and structural challenges

E. Property sector indicators



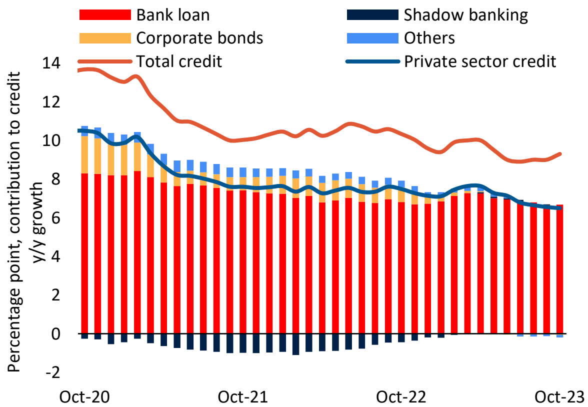
Weak land leases, amid property sector downturn, have constrained local government fiscal spending

F. Land leases revenue



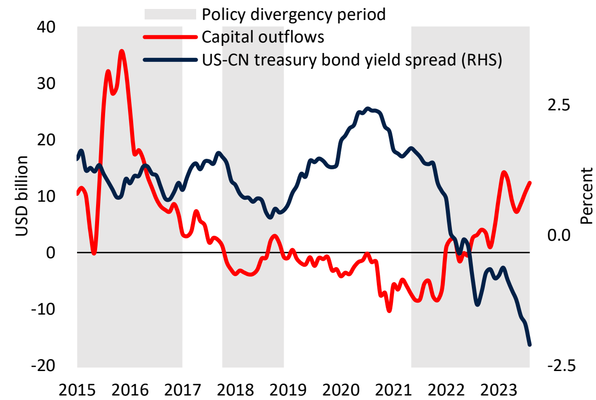
Stronger fiscal support and increased transfers from central government helped ease local government financing constraint and drove up credit growth

G. Contribution to credit growth



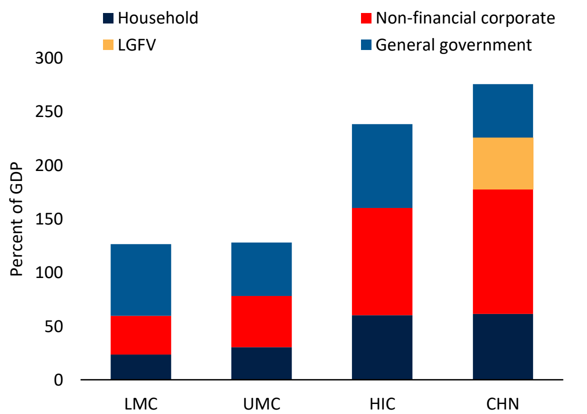
Monetary easing continued but, together with higher interest rates in other major economies, led to capital outflows

H. Policy divergence and capital outflows



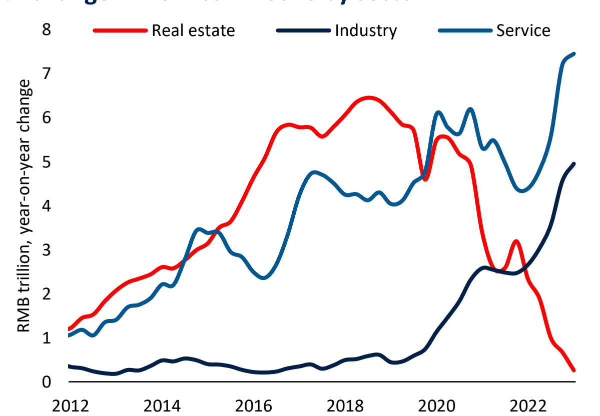
Continued fragility in the recovery also reflects a structural deceleration, in part due to persistent economic imbalances

I. Debt-to-GDP ratio



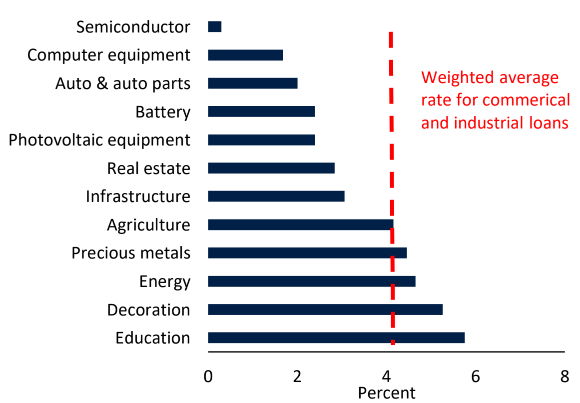
Investment shift has occurred in recent years, shifting away from leveraged property sector…

J. Change in new bank loans by sector



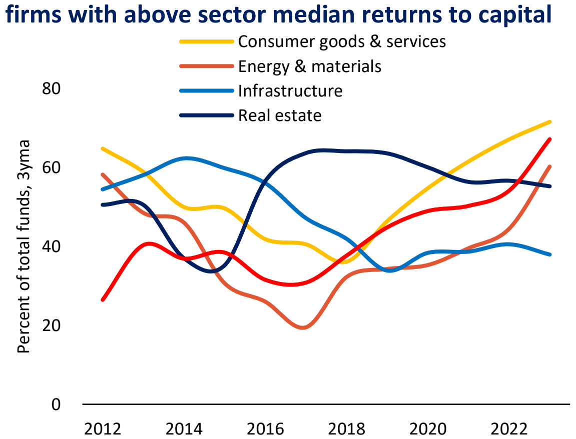
… partially driven by government support for channeling resources to priority manufacturing sectors

K. Implied interest rates for listed firms in 2022



This process may improve capital allocation across and within sectors

L. Within sector share of fundraising going to listed firms with above sector median returns to capital



Source: NBS, China Customs, SAFE, PBC, MOF, NBS Household Survey Yearbook, WDI, IMF Global Debt Statistics, Wind, CEIC, World Bank staff estimates.

Note: See notes on each figure below.

I. Recent Economic Developments

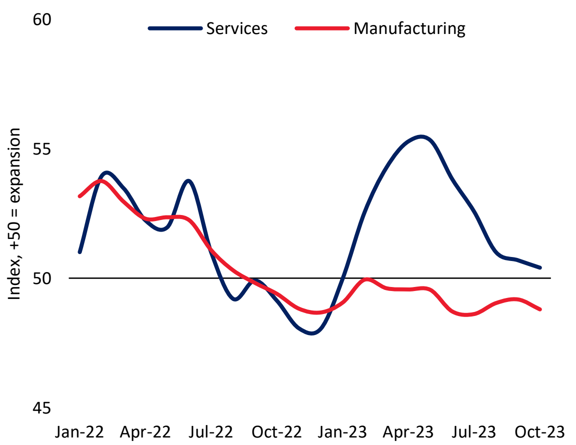
Global activity continues to moderate

Global activity continues to moderate with recent purchasing manager indexes (PMI) suggesting weakness in manufacturing is broadening to the services sector, including in the major advanced economies (Figure 2A). While growth in the United States has been surprisingly resilient, bolstered by robust consumption, there are recent signs of softening activity and labor market cooling. In the euro area, growth was largely stagnant early in the year and turned negative in the third quarter, while core inflation remains well above the European Central Bank target. In Japan, while services activity remains solid, leading indicators of manufacturing activity have been weak while inflation has been high by historical standards.

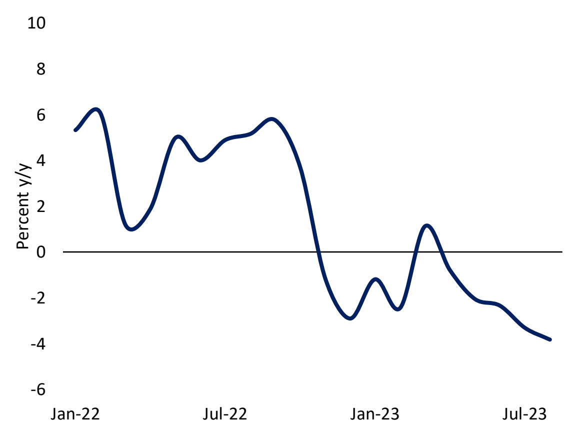
The volume of global goods trade continued to contract into the second half of 2023 in year-on-year terms, while global industrial production growth has been soft (Figure 2B). Leading indicators point to further global trade weakness, with PMIs for new export orders recently in contractionary territory. In addition, while a recovery in global tourism has helped lift services trade, there are signs that the recovery is fading. Commodity prices remain relatively high, about 45 percent above the 2015-2019 average in nominal terms with the escalating conflict in the Middle East creating additional upside risks to prices (World Bank 2023a). Financial markets have been volatile with global financial conditions tightening recently amid rising U.S. government bond yields and a stronger U.S. dollar.

Figure 2. Global activity continues to moderate

A. Global PMIs



B. Global trade volumes



Source: CPB World Trade Monitor, Haver, World Bank staff estimates.

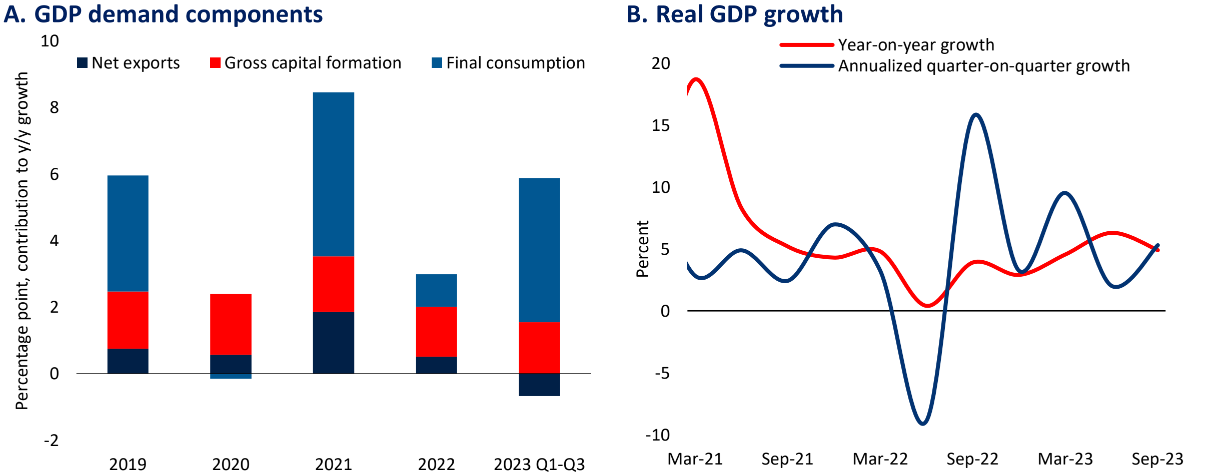
China's growth improved but the recovery remains fragile

GDP growth has picked up in 2023 from the low pace of the previous year, driven by demand for services, resilient manufacturing investment, and public infrastructure stimulus. In year-on-year terms, GDP expanded by 5.2 percent in the first three quarters of 2023, from a low base of 3 percent in 2022 (Figure 3A). Consumption was the main growth driver, bolstered by pent-up demand for services after the pandemic, while goods consumption lagged. Investment contributed positively to growth, as resilience in manufacturing and infrastructure investment offset the decline in real estate investment. Meanwhile, net exports contracted as weak external demand weighed on exports while imports improved (Figure 3A).

Nonetheless, the recovery from the pandemic remains fragile. The initial phase of economic reopening triggered a surge in economic activity in Q1, but growth momentum decelerated to an annualized 2 percent in Q2 before recovering to 5.3 percent in Q3 (Figure 3B). This volatile growth path suggests continued fragility in the recovery, reflecting short-term headwinds, including weak consumer sentiment, persistent property market slump, and subdued exports but also structural factors, including persistent economic imbalances (See Special Focus for further discussions).

Figure 3. GDP growth remains volatile amid fragile recovery

A. GDP demand components **B. Real GDP growth**



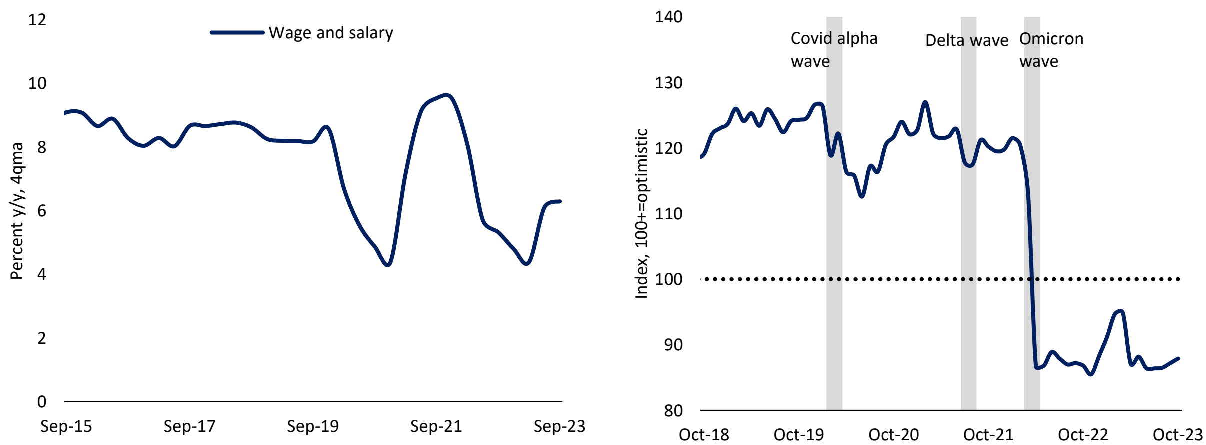
Source: NBS, World Bank staff estimates.
Note: Panel B: Dark blue line refers to annualized quarter-on-quarter seasonally adjusted GDP growth rate.

The consumption recovery benefited from labor market improvement and the release of pent-up services demand but was tempered by weak income growth and consumer confidence. Labor market conditions are improving, with the unemployment rate falling to 5.0 percent in October — returning to pre-pandemic levels — from its February peak of 5.6 percent. The net increase of urban employment accumulated to 10.2 million from January to September.

However, these employment gains, largely driven by increased recruitment within the low-skill services sector, have not translated proportionately to income growth. Wage growth, at 6.8 percent y/y in the first three quarters of 2023, remains below the pre-pandemic level of above 8 percent (Figure 4A). Furthermore, some households have experienced a sharp decline in wealth, as secondary market home prices in lower-tier cities dropped more than 10 percent below the 2021 peak.[1] These factors, coupled with the time lag in translating labor market gains into improved sentiment, continue to weigh on consumer confidence and spending (Figure 4B). Retail sales growth decelerated from an average monthly rate of 1.4 percent m/m SA in the first half of the year to a mere 0.1 percent from July to October. Structural factors such as limited social protection and persistent inequality have also held back consumption (see Special Focus).

Figure 4. Slower wage growth and falling housing prices have dampened consumer confidence

A. Nominal wage growth **B. Consumer confidence index**



Source: NBS, World Bank staff estimates.

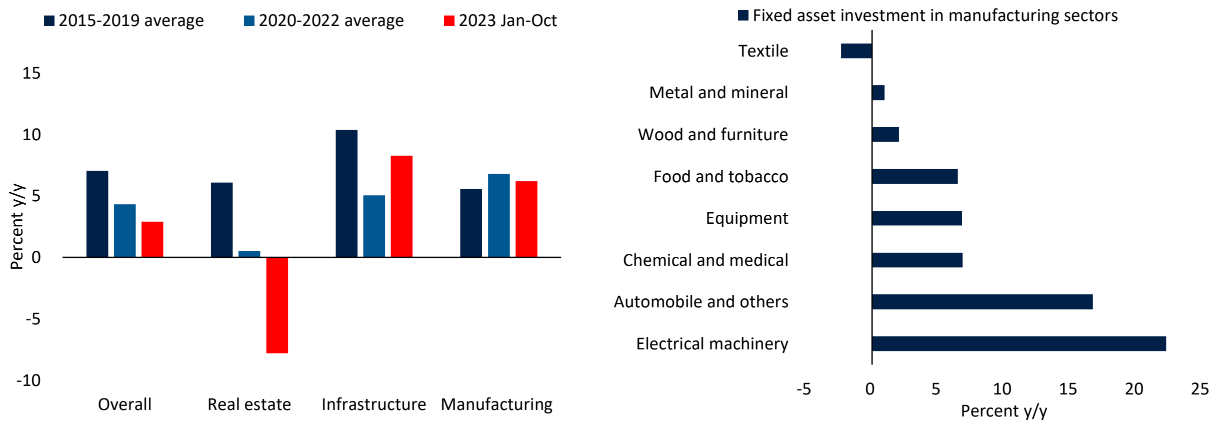
Domestic investment expanded at a slower pace compared to 2020-22, primarily due to ongoing challenges in the property sector. Real estate investment fell by 7.8 percent in the first ten months of 2023, after falling by 8.4 percent last year (Figure 5A), owing to weak housing demand and debt distress among property developers. Investment in upstream sectors that supply inputs to real estate (e.g., construction materials) has also been declining. In contrast, manufacturing investment overall has remained resilient, especially in automobiles, electric and electronics machinery, in part due to relatively robust demand and policy support (see Special Focus). Meanwhile, infrastructure investment is held up by policy support (Figure 5B).

[1] Property is a key component of household wealth in China, accounting for 65 percent of total assets (Bayoumi and Zhao 2021).

Figure 5. Domestic investment growth has slowed down due to severe property sector downturn

A. Fixed asset investment by sector

B. Manufacturing investment in Jan-Oct 2023



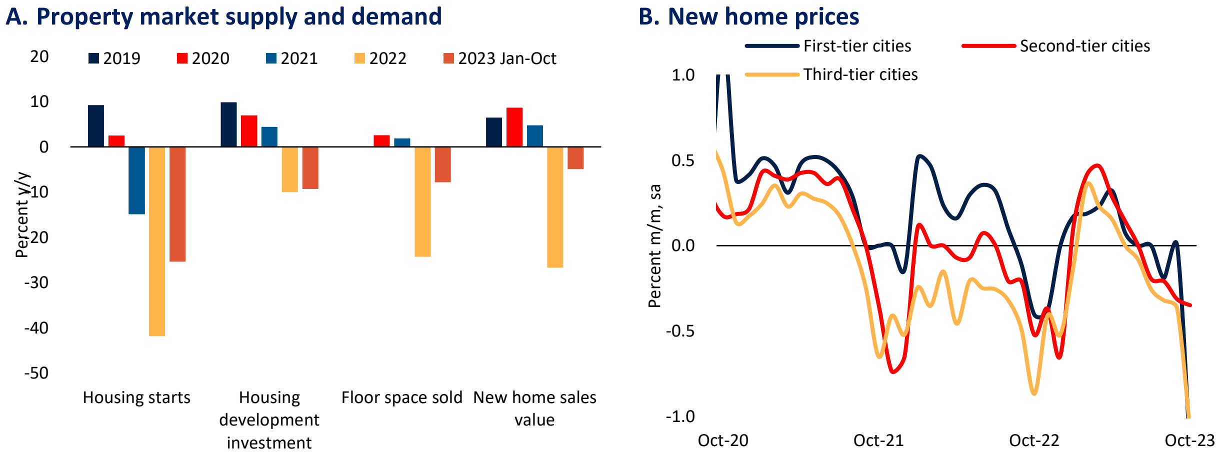
Source: NBS, World Bank staff estimates.

The property sector faces intertwined short-term and structural challenges

Despite policy easing, China's housing demand remains sluggish as structural challenges persist. New property sales declined by 4.9 percent y/y in value and 7.8 percent y/y in volume, respectively, during the first ten months of this year (Figure 6A). The slump is more pronounced in second- and lower-tier cities, which account for about 80 percent of China's housing market, where housing prices continued to fall on a month-on-month basis (Figure 6B). Despite the implementation of demand-side easing measures such as reduced downpayment ratios and lower loan interest rates, the market has not stabilized, indicating that these policies have yet to effectively address the subdued demand for housing. The weakness in demand can be partly attributed to lingering uncertainties about post-pandemic income prospects and concerns about housing delivery, but structural issues such as demographic changes and a slower urbanization process exacerbate the problem (see Special Focus).

Slowing housing demand and high leverage faced by developers overshadowed recent policy support. Property completions increased by nearly 20 percent y/y in the first ten months of this year, thanks to the policy support of more than RMB 500 billion for pre-sold but stalled projects. Meanwhile, developers continued to face funding pressure, with funds raised declining by more than 13 percent y/y. This decline is largely attributed to high debt distress of developers and a slowdown in housing demand, and the latter is further aggravated by a loss of homebuyer's confidence in timely completion of the pre-sold housing. Thus, real estate investments continued to contract, with housing development investments and new property starts plunging by 9.3 and 25.4 percent, respectively, in the first ten months.

Figure 6. Property sector downturn persisted



Source: NBS, World Bank staff estimates.

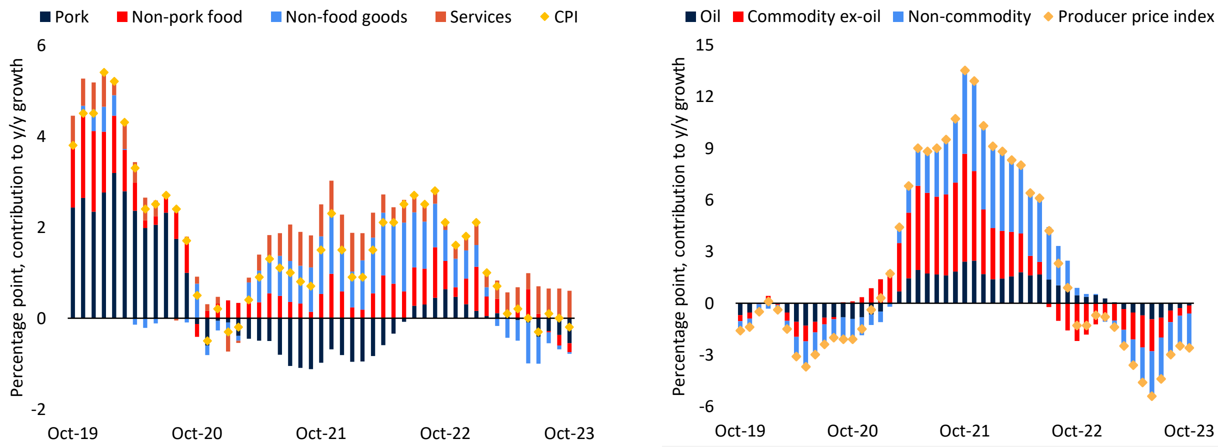
Inflation remains subdued amid the fragile recovery

Consumer price inflation remains low amid a fragile and uneven recovery. Headline inflation barely grew since April 2023, compared to 2.0 percent growth in 2022. It slipped into deflationary territory for the first time in more than two years in July and again in October (Figure 7A). The decline was driven by falling goods prices offsetting stronger services inflation, reflecting divergent trends in consumer demand. The weak property sector contributed to subdued rental costs and household appliance prices, while automobile price cuts amid car makers' competition for market share added to downward price pressure. Excluding volatile food and energy prices, core inflation hovered around 0.7 percent during the same period, persistently lower than the pre-pandemic level of 1.6 percent.

Producer price deflation has persisted but somewhat eased in recent months, driven by an upturn in global commodity prices. PPI inflation has stayed in deflationary territory for a year (Figure 7B), largely due to the continued sluggishness in domestic industrial demand. The prolonged downturn in the property sector has contributed to demand weakness, especially in upstream industries such as metals, cement, and construction machinery. However, the recent upward trend in global energy prices has tempered the contraction in factory-gate prices at home.

Figure 7. Inflation remains subdued amid the fragile recovery

A. Consumer price inflation **B. Producer price inflation**



Source: NBS, World Bank staff estimates.

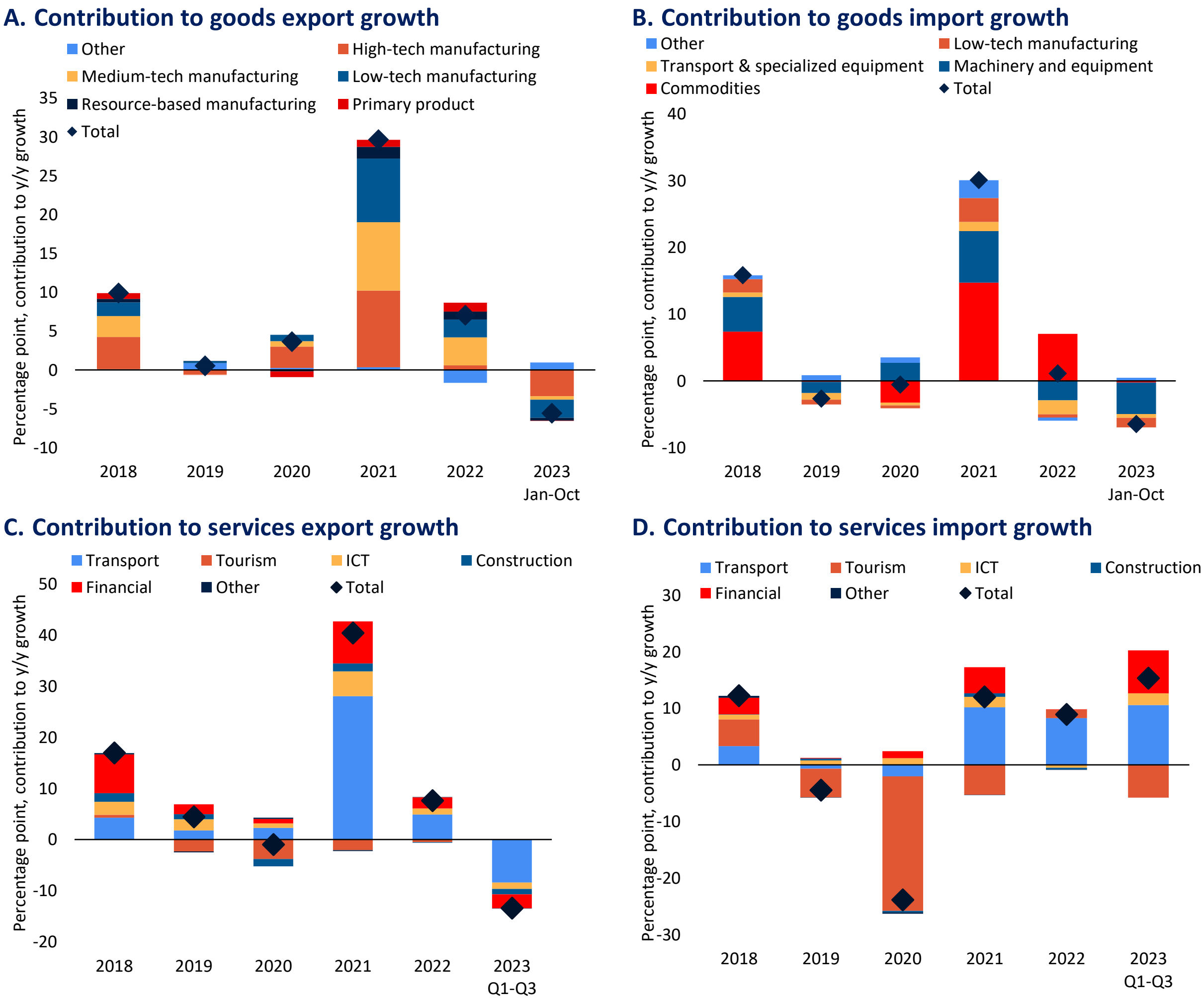
Exports continued to contract amid weaker global demand

Goods exports continued to decline, reflecting weak external demand amid a rotation in global demand away from tradeable goods. In the first ten months of 2023, goods exports declined by 5.6 percent y/y, from an 11.1 percent growth in the same period last year. The deterioration in exports has been broad-based across sectors and across trading partners but has been strongest for exports to ASEAN countries and the EU. The contraction was experienced across product groups but was strongest for high-tech manufacturing (Figure 8A). In contrast to overall merchandize exports, automobile exports, including EVs, have grown at double-digit rates since August 2020 with China's auto industry gaining global market share.

Goods imports also continued to decline. In the first ten months of 2023, imports contracted by 6.5 percent y/y, from a 3.5 percent growth in the same period last year (Figure 8B). Subdued demand for processing imports from the export sectors, sluggish domestic consumption of goods, and weak property investment have contributed to the overall import decline.

Reflecting a decline in transportation services, services exports contracted, while services imports grew due to a recovery in outbound tourism. In the first three quarters of 2023, services exports contracted by 13.5 percent y/y, primarily due to the continued decline in financial services, inbound tourism, and transport services exports that mirrored the decline in goods exports and freight prices (Figure 8C). Services imports, by contrast, registered growth of 15.3 percent, as outbound tourism rebounded following the resumption of international travel but has not yet reached the pre-pandemic levels (Figure 8D).

Figure 8. Goods trade and services exports continue to contract, while services imports grew



Source: China Customs, SAFE, World Bank staff estimates.

The current account surplus is narrowing to pre-pandemic levels

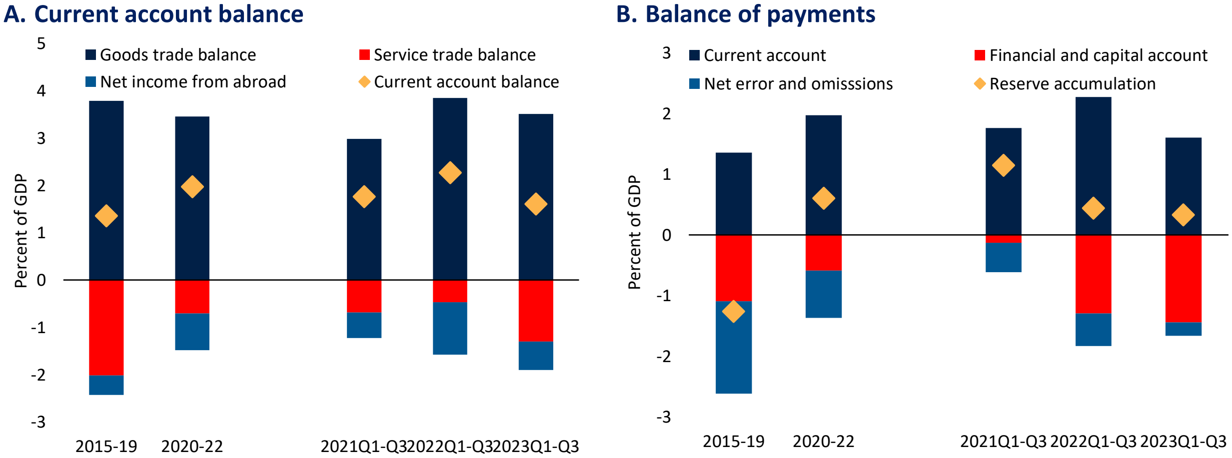
The current account surplus declined in the first three quarters of 2023, returning to pre-pandemic levels, as the resumption of outbound tourism pushed up the services trade deficit. The one-off boost to China's net exports during the pandemic has now waned alongside the decline in global demand for goods and pick up in outbound tourism. These narrowed the net export surplus to 2.2 percent of GDP in the first three quarters of 2023 from 3.4 percent of GDP in the same period in 2022 (Figure 9A). Net income from abroad improved with a lower deficit of 0.6 percent of GDP from a deficit of 1.1 percent of GDP. As a result, the current account surplus declined to 1.6 percent of GDP, from its elevated level of 2.3 percent in the first three quarters of last year. This reflects a gradual reversion of the current account surplus to pre-pandemic levels.

The financial and capital account deficit widened on the back of capital outflows, as well as higher outward investments.[2] Widening interest rate differentials with other major countries, still-high business uncertainty, and geopolitical tensions have tempered foreign capital flows to China. FDI inflows declined to 0.1 percent of GDP in the first three quarters of 2023 from 1.1 percent in the same period last year. Following the reopening, FDI outflows also increased to 1.1 percent of GDP in the first three quarters. Non-FDI net outflows, comprising of portfolio investments, financial derivatives, and other investments, by contrast, are estimated at a combined total of only 0.4 percent of GDP in the first three quarters of 2023, lower than their 1.6 percent of GDP during the same period in 2022. Overall, the financial and capital account deficit rose to 1.4 percent of GDP in the first three quarters of 2023, up from 1.3 percent in the first three quarters of 2022 (Figure 9B).

Net capital outflows and broad US dollar strength continue to exert pressures on RMB. Despite a robust current account surplus, the RMB has depreciated by an average of 4.5 percent y/y against the US dollar but remains stable in trade-weighted terms in the first 11 months of 2023. Meanwhile, China's foreign reserves decreased slightly but remained ample at US$3.1 trillion.

Figure 9. The current account surplus is shrinking back to pre-pandemic levels, while the financial account deficit has widened

A. Current account balance **B. Balance of payments**



Source: SAFE, Wind, World Bank staff estimates.

[2] Portfolio investments data in Q3 2023 are not yet available.

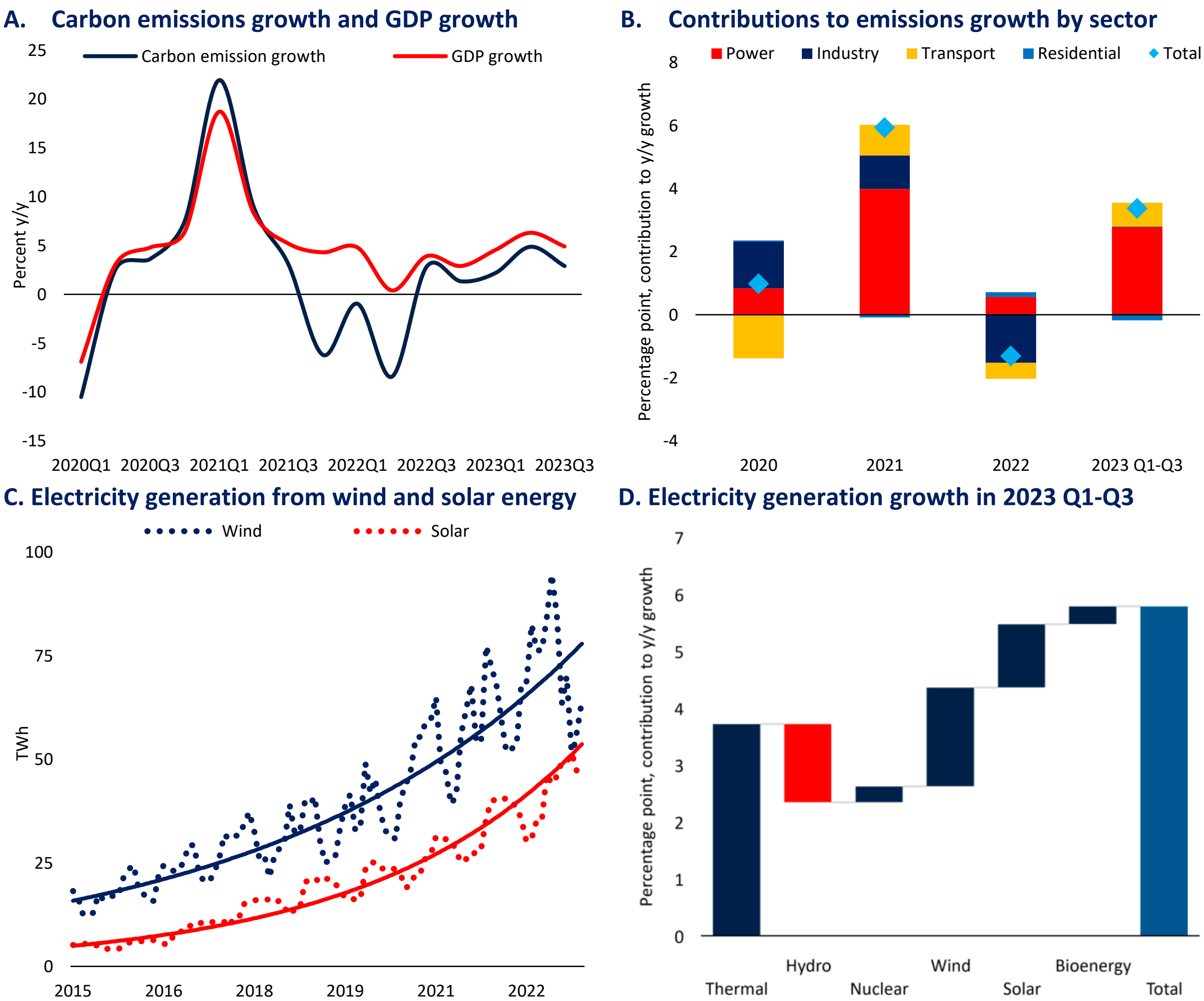
Carbon intensity of growth declined as industrial emissions slowed and amid a rapid scale up of renewable energy

Carbon emissions grew moderately in 2023 at below the GDP growth rate, reflecting slowing industrial emissions. China's carbon dioxide (CO_2) emissions are estimated to have increased by 3.4 percent y/y in the first three quarters of 2023, a lower rate than GDP growth, showing signs of a gradual relative decoupling of growth from emissions (Figure 10A). Emissions growth during the first three quarters of 2023 was driven predominantly by higher power sector emissions, while industrial emissions have flatlined relative to the same period in 2022 (Figure 10B). This slowing of industrial emissions reflects falling output from the two highest-emitting industries, steel, and cement, as the construction of real estate has slumped.

The scale-up of variable renewable energy generation capacity continued to grow at exponential rates. Capacity additions for solar and wind continue to set new record highs. Solar power generating capacity additions grew by 140 percent in the first nine months of 2023 compared to the same period in 2022, and additions in 2023 are projected to be four times the level added in 2020, with half of them installed on rooftops as part of the 'whole county solar' program. This growth in capacity installations translated into a 22 percent increase in electricity generated from solar energy in the first nine months of 2023 relative to the same period in 2022. Wind capacity additions also grew by 70 percent in the first three quarters y/y, translating into a 21 percent increase in electricity generation from wind energy (Figure 10C). Electricity generation from hydropower declined by 9 percent y/y in the first nine months of 2023, however, due to severe droughts in the first half of the year.

At the same time, electricity generation from fossil fuels also continued to grow, albeit at a slower pace than generation from solar and wind, to meet growth in electricity demand. Total electricity generation also grew rapidly by 5.8 percent y/y in the first nine months of 2023 (Figure 10D). This rapid growth in electricity demand reflects rising electrification of transport and manufacturing, as well as the composition shift of GDP from heavy industry to manufacturing, which has lower process emissions because it is largely using electricity rather than fossil fuels as energy input. To meet this growing demand and offset the weather-induced decline in hydropower generation, thermal electricity generation, which accounted for two thirds of all generation in the first nine months of 2023, also grew by 6 percent y/y. In addition, the recent acceleration in the permitting of new coal-fired power plants continued with an estimated permitting of 25 GW in the third quarter, putting the total new capacity in 2023 that is under construction or permitted at 243 GW, equivalent to over twenty percent of installed coal capacity in 2022. This means that China is accelerating the additions of new coal power capacity during the current five-year plan period (2021–25) compared to either of the preceding two five-year plan periods, raising risks of locking in carbon intensive infrastructure and potential stranded assets.

Figure 10. The power and transport sectors drove emissions growth in 2023 and the carbon intensity of growth declined amid a rapid scale up of variable renewable energy



Source: Carbon Monitor, Ember, Wind, World Bank staff estimates.

Faced with fragile growth, the government stepped up fiscal support

Weak land leases have constrained local government fiscal spending. Consolidated fiscal revenue grew by 2.5 percent y/y in January-October. Despite tax revenue expansion of 10.7 percent y/y,[3] the consolidated revenue growth was tempered by a significant 20.5 percent decrease in land leases in the first ten months (Figure 11A), leading to growing concerns on the LGFVs' debt sustainability (Box 1). Weak land leases revenues, the main revenue source to finance infrastructure, continued to hinder local government capital spending. Consolidated fiscal expenditure declined by 1.2 percent y/y in January-October. Overall, fiscal policy has been

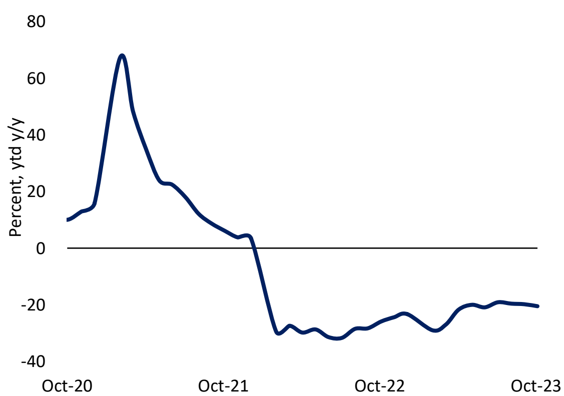
[3] High tax revenue growth in 2023 was partly due to a low base effect from large VAT rebates provided in 2022.

less accommodative compared to last year, with the consolidated fiscal deficit at 4.5 percent of GDP as of October, compared to 5.5 percent of GDP during the same period in 2022 (Figure 11B).

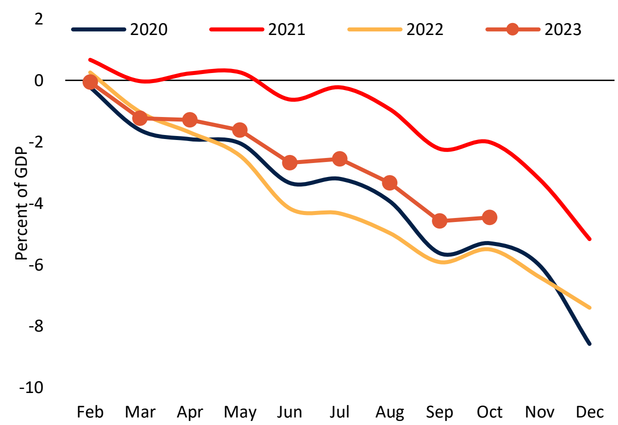
In response to ongoing fragility, fiscal support was increased, with higher central government transfers helping to ease local government financing constraints. China's legislature approved the issuance of RMB 1 trillion (0.8 percent of GDP) of special central government treasury bonds to support natural disaster recovery, prevention, and mitigation, effectively raising the consolidated fiscal deficit target from 6.4 percent to 7.2 percent of GDP this year (Table 2).[4] Notably, the central government will fully shoulder the principal and interest repayments on these bonds, sparing local governments from an increased financial burden.[5]

Figure 11. Weak land leases have constrained local government fiscal spendings

A. Land leases revenues



B. Consolidated fiscal deficit



Source: MOF, NBS, World Bank staff estimates.

Note: China's budget system consists of (i) the General Public Budget which includes tax and non-tax revenues, current expenditures, and a portion of capital expenditures; (ii) the Government Fund Budget which reflects mainly land-lease revenues of local governments and expenditures for specific infrastructure and social projects; (iii) the Social Security Fund Budget which records social insurance contributions and disbursements; and (iv) the SOE Fund Budget which is the state-owned assets operation budget. The consolidated budget balance refers to the sum of (i), (ii), (iii), and (iv) minus net withdrawals from the government's stabilization fund. Data on (iii) and (iv) are only reported at annual frequency. In the General Public Budget, local government revenues exclude transfers from the central budget, and central government expenditures exclude transfers to local governments.

[4] This is the fourth time China has issued new special government bond at central level, following the RMB 270 billion issuance in 1998 to supplement the capital of four major state-owned banks, the RMB 1.55 trillion issuance in 2007 to purchase foreign exchange reserves from the central bank to establish the China's sovereign wealth fund, and the RMB 1 trillion issuance in 2020 to respond to COVID-19.

[5] In contrast, the 2020 special bond issuance for COVID-19 required local governments to repay 70 percent of the principal.

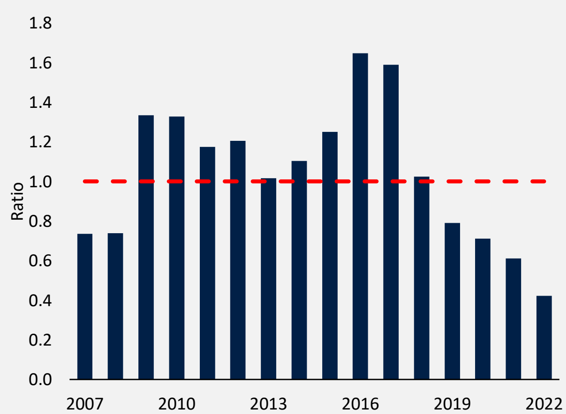
Box 1. LGFV's growing debt risks

China's rising debt risk is, in part, attributed to vulnerabilities associated with local government financing vehicles (LGFVs). Extensive use of LGFVs for infrastructure development and counter-cyclical stimulus has significantly increased the LGFV debt-to-GDP ratio, reaching about 50 percent of GDP, which in turn propelled China's overall debt ratio beyond the average level of high-income countries (Figure 16B). An analysis of over 1,800 bond-issuing LGFVs reveals a substantial increase in total liabilities (including debt and various other payment obligations, such as payables) to around 80 percent of GDP in 2022, with short-term liabilities due for repayment within a year constituting 31 percent of GDP. Notably, loans taken by LGFVs account for more than 15 percent of total loans on balance sheets of China's banks, showcasing the banking sector's substantial exposure to LGFV-related risks.

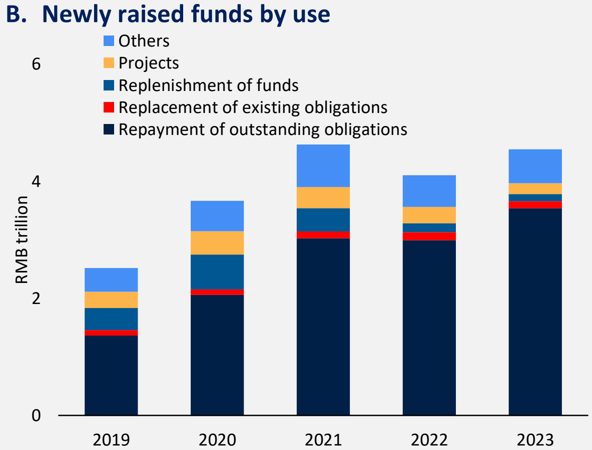
China's LGFVs are facing growing liquidity strains. As of 2022, the proportion of cash and cash equivalents on LGFVs' balance sheets, essential for meeting short-term liabilities, has significantly diminished to just 6.1 percent of total assets, down from 10.5 percent in 2017 (Table 1). The declining liquidity is further highlighted by the sharp drop in the ratio of available cash to cover short-term debt and the rising share of short-term obligations in total liabilities. Over half of the LGFVs now possess less than half the required liquid assets to settle their imminent liability obligations (Figure 12A). Moreover, a sizable portion of LGFVs' income, sourced from infrastructure projects, is only received as credit rather than cash, likely representing local governments' arrears (IMF, 2021). The growing liquidity strain on China's LGFVs heightens the risk of defaults and pressures on the health of financial sector.

Figure 12. LGFVs are facing increasing pressure

A. Cash to short-term liabilities



B. Newly raised funds by use



Source: Wind, IMF Global Debt Statistics, PBC, World Bank staff estimates.

LGFVs are increasingly constrained in funding new investment projects due to high leverage, undermining their role in driving local development. As of mid-September 2023, nearly 80 percent of new funds[6] raised by LGFVs year-to-date are directed towards repaying existing debt rather than financing new projects. In addition, LGFV balance sheets also show a slowdown in the growth of physical

[6] Funds here include notes, bonds, commercial paper, and other non-standard debt instruments, but does not include bank loans. New bank loan data for LGFVs is not available.

assets, particularly construction, with the share of physical assets edging down to 54.2 percent of total assets in 2022 (Figure 12B). At the same time, there has been a drop in the equity-to-asset ratios of LGFVs, reflecting a growing dependence on debt financing, as well as a gradual decline in the return on assets, suggesting more inefficient capital allocation and investment management (Table 1; Figure 17B). As such, LGFVs' traditional role as key drivers of local infrastructure investment and economic growth is being undermined, as they prioritize managing and repaying their accumulated liabilities over pursuing new and potentially productive projects.

Table 1. LGFV balance sheet

(Percent of total assets, weighted average)

Asset	2017	2022	Liability	2017	2022
Financial and other	***45.0***	***45.8***	***Short-term***	***19.4***	***24.8***
Cash & cash equivalents	10.5	6.1	Loans	2.3	3.6
Receivables	24.4	21.0	Payables	2.9	4.1
Intangible	3.5	5.8	Other	14.2	17.1
Other	6.6	12.9			
Physical	***55.0***	***54.2***	***Long-term***	***37.2***	***36.5***
Inventories (including land)	32.2	26.3	Loans	21.2	20.0
Fixed asset	7.4	13.8	Bonds	9.2	9.5
Construction in progress	11.1	8.6	Other	6.8	7.0
Real estate	4.4	5.5	***Owners' equity***	***43.3***	***38.7***
Total assets	100.0	100.0	Total liabilities & owners' equity	100.0	100.0

Source: Wind, World Bank staff estimates.

Recent measures to address LGFV debt risks have helped ease liquidity pressures, but may be insufficient in the long term given the size of the liability and LGFVs' strong linkages to the real estate sector. Since October this year, local governments have issued more than RMB 1.2 trillion of special refinancing bonds, equivalent to 1.0 percent of GDP, to clear local governments' arrears to LGFVs and refinance existing LGFV debt. However, this amount is relatively modest compared to the high leverage of LGFVs. Significantly, around a third of LGFV assets are closely linked to the real estate market, including investment properties and land held as inventories (Table 1). With the prolonged downturn in the real estate sector, LGFVs' balance sheets are expected to deteriorate further with declining asset values, which could in turn escalate a liquidity challenge into a solvency issue.

Effectively tackling the LGFV debt problem requires accelerated restructuring and reforms. The government could divest from purely commercial assets on LGFV balance sheets (for example, real estate investment). Public assets like infrastructure should be included in consolidated government financial reports. This process requires coordinated efforts among central and local governments and financial institutions. Although, the current strategy to overhaul LGFV borrowing terms may alleviate short-term liquidity pressure, restructuring of LGFV functions and structural reforms to ease revenue and financing constraints for local governments are needed to address the underlying causes of the LGFV debt challenge.

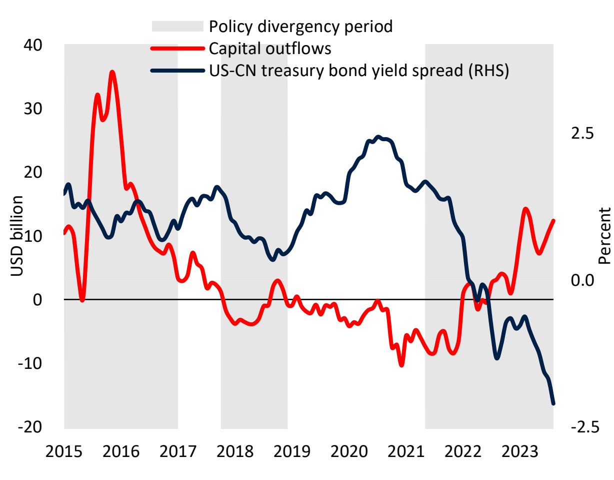
Monetary policy remains accommodative but policy space is constrained

The People's Bank of China (PBC) continued accommodative monetary policy this year, but the scope for further easing is limited. With low inflation pressures, key monetary policy rates were lowered moderately to support the economy. Meanwhile, the PBC has kept ample liquidity in the market. Earlier in March, the PBC lowered the required reserve ratio by 25 bps, which was cut further by another 25 bps in September. Nonetheless, higher interest rates in other major economies and the risk of capital outflows could potentially constrain the room for monetary easing. The spread between China's 10-year central government bond yield and the corresponding US Treasury yield has been negative since April 2022 (Figure 13A).

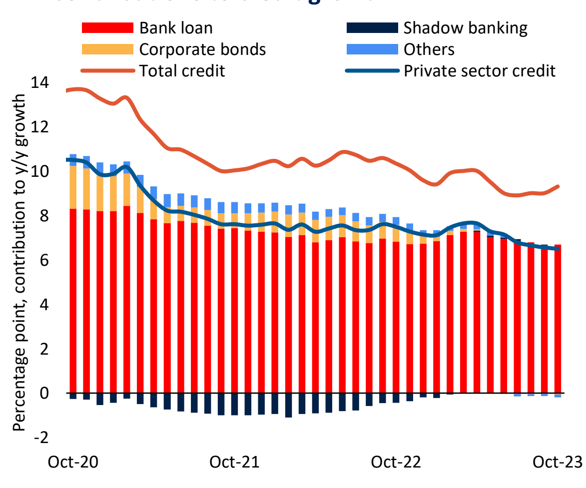
Strong government bond issuance has driven credit growth. Growth in credit to the non-financial sector has improved to 9.3 percent y/y in October, albeit lower than 9.5 percent y/y in 2022 (Figure 13B). The surge in government bond issuance was the primary driver of credit growth in recent months. In contrast, growth in corporate loans and corporate bond issuance slowed, reflecting soft credit demand especially from property developers and local government financing vehicles. Despite the modest increase in credit demand spurred by interest rate cuts on existing mortgages and a decrease in downpayment ratios (Figure 13C), the expansion of long-term loans to households continues to lag its historical trajectory. Meanwhile, as credit growth outpaced tepid nominal GDP growth, China's non-financial sector debt-to-GDP ratio (including external borrowing) has risen to around 300 percent of GDP (Figure 13D).

Figure 13. Monetary policy easing under constrained space

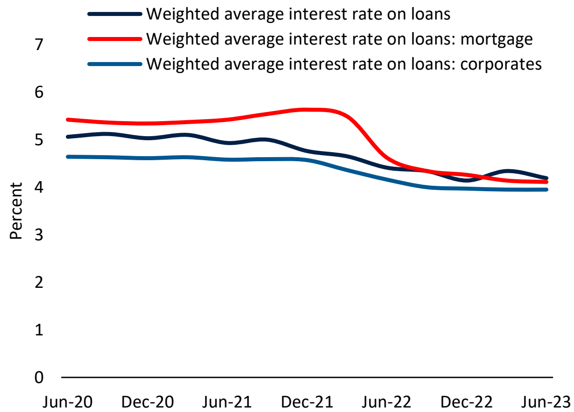
A. US-China 10-year government bond yield spread



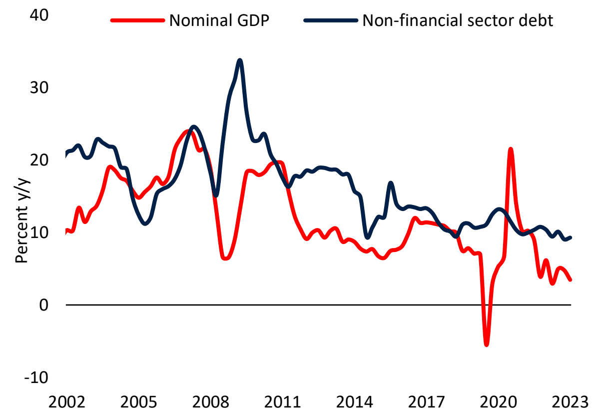
B. Contributions to credit growth



C. Financing cost for corporates and households



D. Debt and nominal GDP growth rate



Source: NBS, PBC, CEIC, World Bank staff estimates.
Note: Panel B: Total credit growth refers to year-on-year growth of total social financing excluding equity.

Banking sector buffers remain adequate amid increased risk exposure

High property developer leverage, combined with slower growth, exposes banks to increased risks. Mortgages make up 16.4 percent (RMB 38.4 trillion in September 2023) and loans to developers for real estate development 5.6 percent of total outstanding loans. Developer loans are more sensitive to the continued turmoil in the property sector: non-performing loans (NPLs) to property developers at 16 large banks grew by 7.9 percent to RMB 292.5 billion in the first half of the year, resulting in an NPL ratio of 4.4 percent, yet this constitutes less than 0.1 percent of the total outstanding loans.[7] Meanwhile, the aggregate mortgage NPL ratio has stayed below 0.5 percent.[8] The overall NPL ratio of the commercial banking sector was 1.6 percent in September 2023 (Figure 14A), and the overall provision coverage was at a highly conservative level of 207.9 percent. Rural commercial banks, with higher NPL ratios and lower capital buffers, remain more vulnerable to weakening debt service capacity of their borrowers, especially in the property-related sector.

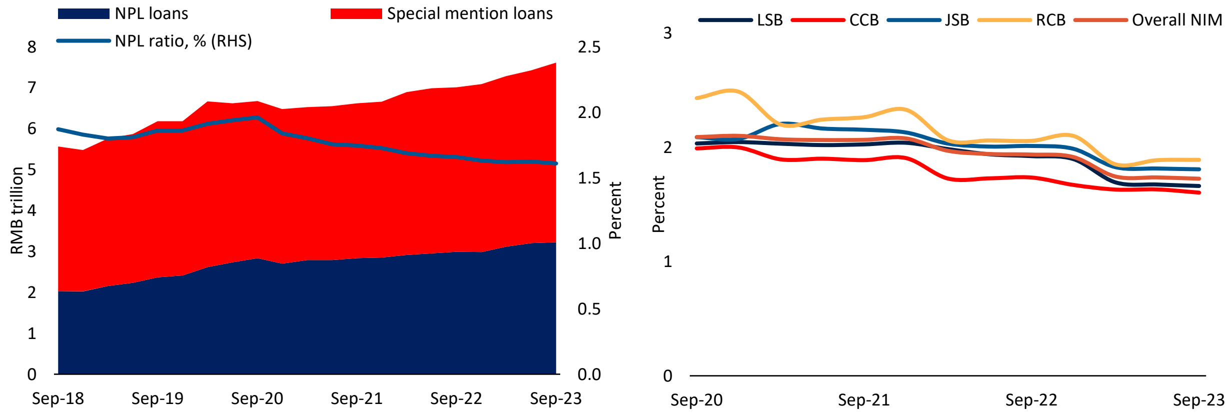
Bank profitability has declined, in part due to lower interest income and higher funding costs. The sector's net interest margin declined below 1.8 percent since the beginning of the year from 1.9 percent last year, with the reduction more pronounced for large state-owned banks - a result of policy measures effected by the banks to reduce lending rates (Figure 14B). Meanwhile, depositors are saving more and increasingly tapping fixed-term deposits that command higher interest payments than regular savings.[9] More recently, banks have lowered their deposit rates, especially the rates on fixed-term deposits, to support their net interest margin.

[7] Source: World Bank staff estimates based on data from half year reports.
[8] Ibid.
[9] Estimates based on financial reports from 33 banks reveals a 20.5 percent y/y increase in fixed-term deposits and a 25.4 percent y/y growth in fixed-term household deposits.

Figure 14. Bank non-performing loan remains manageable, but net interest margin has declined

A. Non-performing and special mention loans outstanding

B. Net interest margin of banks



Source: National Administration of Financial Regulation, World Bank staff estimates.
Note: Panel B: Official categorization of banks according to the National Administration of Financial Regulation: LSB – large state banks; JSB – joint-stock banks; CCB – city commercial banks; RCB – rural commercial banks

Overall banking sector buffers remain adequate. Banks remain adequately capitalized, with overall capital adequacy ratio (CAR) at 14.8 percent in September 2023, above the minimum regulatory requirement of 10.5 percent. Substantial divergence exists between well capitalized large state banks and less capitalized smaller city and rural banks. The government is proactively supporting capital replenishment of the latter. This year's issuance of government special bonds designated for mid- and small-sized banks' capital increased,[10] reaching RMB 152.3 billion by November 2023, more than double the amount issued in 2022 and equivalent to 27.1 percent of the total assets of banks deemed 'high risk' by the PBC. In January 2024, the authorities will officially implement China's version of *Basel III: Finalizing post-crisis reforms*. With a more granular system for assigning risk weights to banks' assets, the adoption of the new rules is expected to result in a net increase in CAR for China's banking system, with large state banks likely to benefit the most from an increase in Core Tier 1 capital adequacy.

[10] The capital injection is key in helping mid-small size banks which don't have access to public equity market to replenish capital, especially in an environment where the industry-wide decline in ROA and ROE has reduced availability of banks' retained earnings for capital growth.

II. Outlook, Risks, and Policy Implications

Global and China outlook

With overall activity expected to continue softening towards the end of the year, global growth is projected to fall this year and remain tepid next year (World Bank 2023b). The weak outlook reflects the lagged effects of substantial monetary policy tightening in both advanced economies and emerging market and developing economies in response to high inflation. Since the start of the US monetary policy tightening cycle in early 2022, the Federal Reserve has raised policy interest rates by around 5 percentage points, one of the largest increases in the past four decades. Moreover, with core inflation stubbornly high, interest rates are expected to remain higher for longer than expected earlier in the year.

China's growth is projected at 5.2 percent in 2023, from a low base in 2022, before declining to 4.5 percent in 2024 (Table 2). Growth momentum is expected to stabilize in the near term, propelled by a gradual recovery of consumer sentiment and the impact of policy stimulus. However, there remains the likelihood of a protracted recovery in the real estate sector and persistently tepid external demand. To bolster growth, the government is expected to uphold a moderately expansionary fiscal and monetary policy stance in 2024.

Table 2. China selected economic indicators, 2020-2025

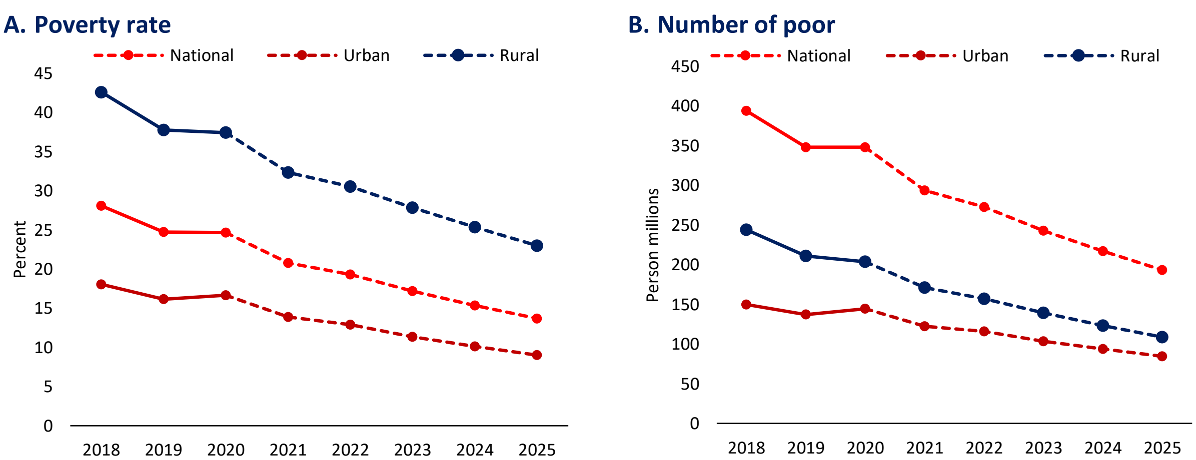
Annual percentage change, unless otherwise indicated	***2020***	***2021***	***2022***	***2023f***	***2024f***	***2025f***
Real GDP growth, at constant market prices	2.2	8.4	3.0	5.2	4.5	4.3
Private consumption	-1.7	11.7	0.5	10.4	6.2	5.6
Government consumption	3.1	3.3	4.8	2.7	3.2	2.9
Gross fixed capital formation	3.2	3.1	3.3	3.3	4.1	4.0
Exports, goods and services	1.7	18.4	-2.3	-0.1	1.6	2.0
Imports, goods and services	-1.4	10.3	-6.0	3.3	2.8	2.7
Real GDP growth, at constant factor prices	2.2	8.4	3.0	5.2	4.5	4.3
Agriculture	3.1	7.1	4.1	2.9	3.0	3.0
Industry	2.5	8.7	3.8	3.7	3.4	3.2
Services	1.9	8.5	2.3	6.6	5.5	5.2
Inflation (Consumer price index)	2.5	0.9	2.0	0.5	1.6	2.1
Current account balance (% of GDP)	1.7	2.0	2.2	1.5	0.7	0.3
Net foreign direct investment (% of GDP)	0.7	0.9	0.2	-0.6	-0.3	0.1
Consolidated fiscal balance (% of GDP) *	-8.5	-4.0	-6.4	-6.5	-6.4	-4.2
Government debt (% of GDP)	45.4	46.9	50.5	54.9	58.3	59.1
Primary balance (% of GDP) *	-7.5	-3.0	-5.3	-5.2	-5.1	-2.7

Source: World Bank.
Note: f = forecast (baseline). * World Bank staff estimates.

Headline inflation is expected to increase moderately. Headline inflation is projected to rise to 1.5 percent y/y, as services inflation upticks are expected to persist amid ongoing consumption recovery, while food price is projected to rebound due to bottoming out of pork prices and diminishing high base effect.

The pace of poverty reduction accelerated in 2023 but will slightly moderate in 2024. While rural extreme poverty following the national definition (US$ 2.3/day per person in 2017 purchasing power parity (PPP)) has effectively been eliminated, about 17 percent of the population (243 million people) is estimated to have consumption levels below the World Bank's upper-middle-income poverty line of US$ 6.85/day per person (2017 PPP) in 2023 (Figure 15A). The accelerated pace of poverty reduction in 2023 would imply that 30 million people were lifted out of poverty that year, compared with 21 million estimated for 2022 (Figure 15B). The declining growth outlook for the economy suggests that the pace of poverty reduction is likely to decelerate in 2024, with 26 million people estimated to be lifted out of poverty. Continued urbanization means that the share of the poor residing in urban areas is projected to continue to grow.

Figure 15. Poverty reduction will continue, albeit slower than in previous years



Source: World Bank staff estimates using tabulated data from China's National Bureau of Statistics (NBS) and World Bank's GDP growth projections.

Note: Poverty line = $6.85 per person per day. Last grouped data available to calculate poverty is for 2020. Projections based on per capita GDP growth estimates, using a neutral distribution assumption with pass-through 0.85 to per capita household consumption.

Risks

There are considerable domestic downside risks to the outlook. The property sector downturn could last longer than expected, with large and protracted falls in prices and activity reducing household wealth and putting pressure on developers and their creditors and suppliers. This would further squeeze local government revenue, dampening investment and subnational debt servicing capacity. The persistent property sector turmoil could spur protracted weakness in consumer sentiment that could lead to persistently high precautionary savings and dampen consumption growth. Persistent uncertainty could erode sentiment, exacerbating challenges in investment and the labor market. However, stronger-than-expected policy support and further progress on structural reforms could enhance sentiment, thereby lifting growth higher than expected.

On the external side, the economy is vulnerable to softer global demand, tighter-than-expected financial conditions, and an intensification in geo-political tensions. Softer external demand could weigh on exports and have adverse effects on domestic activity, particularly investment and employment in export-oriented sectors. Geopolitical risks have risen markedly in the wake of the conflict in the Middle East, with potentially significant implications for commodity markets if the conflict escalates. History suggests that a substantial escalation of the conflict could lead to significant oil supply disruptions and soaring energy prices (World Bank 2023a). Higher energy prices would raise production costs for other commodities, particularly energy intensive commodities including some metals and food. Rising trade protectionism represents additional risks, particularly if they constrain China's imports of critical technology, slow the transfer of productivity-enhancing innovations, and lead to a decoupling of high-tech supply chains. Climate change and associated extreme weather events, the frequency of which has increased in recent decades, pose a downside risk to the outlook as underscored by damaging heatwaves and floods in China through 2023.

Policy implications

China's fragile recovery calls for sustained policy support to safeguard its economic gains from downside risks. Despite the recent improvement in domestic activity, China's economic recovery remains fragile, dragged by weak sentiment, a prolonged property sector slump and continued geo-economic tension. Addressing the fragility necessitates (i) sustained policy accommodation to entrench a more robust recovery, (ii) structural reforms to help restore confidence, and (iii) remedying the vulnerabilities of the real estate sector and LGFVs to mitigate financial stability risk. Economic rebalancing from investments towards domestic consumption, as well as boosting innovation and productivity, are key to addressing the binding constraints to China's long-term growth.

Continued monetary accommodation, along with measures to stimulate credit demand, are appropriate to support the recovering private sector. An accommodative policy stance is appropriate to support consumption demand and stem deflationary pressure given the negative output gap. However, the magnitude of policy easing should factor in interest rate differentials with other major economies to curb the risk of large capital outflows. Moreover, to ensure greater policy effectiveness and transmission, accommodative monetary and credit policies should be accompanied by steps to bolster confidence, including structural reforms to stimulate private investment (see below).

While monetary policy space is constrained, there is fiscal space to provide stimulus but given existing local government debt challenges, financing should be mobilized by the central government. Increased central government transfers could ease the financing constraints of local governments and unlock additional fiscal stimulus, including spending on climate mitigation and adaptation measures and on social protection. The RMB 1 trillion fiscal stimulus, financed by treasury bonds to support natural disaster recovery and enhance relief capabilities, is a step in the right direction. Beyond current stimulus, reform measures to improve the inter-governmental transfer mechanism and strengthen the revenue base of local governments could help address fiscal sustainability concerns. Direct transfers from central government to cash-strapped cities and county governments would cut transaction costs and help ensure monies reach the units that need them the most.

Accompanying supportive fiscal and monetary policies, a renewed focus on structural reform implementation could help restore confidence in the short run and improve growth prospects in the longer run. The authorities have recently issued guidance about facilitating private enterprises' access to financial resources, reducing barriers to market entry, and promoting fair competition. Despite these recent policy statements, investors seem to remain cautious. To enhance policy credibility, specific implementation details and measures are needed on strengthening the rule of law, independent enforcement of regulations, fostering competition, and ensuring a level-playing field by treating private—foreign and domestic—enterprises and SOEs equally in terms of access to resources, credit, and market opportunities. Moreover, consultations, forward guidance, and adequate transition periods could help enhance the predictability of regulatory changes.

To unlock productive private investment, high leverage and excess capacity in some property markets also need to be addressed. Complementing short-term regulatory easing and liquidity support with more decisive efforts to develop a framework for dealing at scale with the debt overhang could help return the property sector to more robust and sustainable growth. During the course of the restructuring, the timely completion of real estate projects needs to be prioritized and closely monitored, especially for real estate developers that are receiving public support. At the same time, homebuyers, especially those whose houses are under construction, need to be temporarily protected from the risk of non-delivery. The authorities' short-term liquidity support to fund project completion is a reasonable solution. Household confidence and housing sales could improve when housing is completed and delivered on time. This would help stabilize property demand and, in turn, developers' funding for debt repayment.

At the same time, the authorities need to monitor and mitigate potential financial stability risks. While banks continue to report adequate capital and liquidity, their net interest margins and NPLs have come under pressure as property-related loans to developers slowed, repayment capacity in the overleveraged sectors weakened, and policy measures led to reduction of banks' lending interest rates. Furthermore, regional banks are increasingly exposed to LGFV debt. Policies need to support an orderly unwinding of the pockets of excessive leverage, while maintaining adequate financial sector liquidity. The quality and efficacy of new lending need to be prioritized over volume. Implementing plans to harmonize financial asset classification and risk management at commercial banks, corporates, and LGFVs are important to assess their true financial health. Stronger institutions to manage insolvency, firm restructuring, and bankruptcy are vital for both firms and banks to resolve non-performing loans, write off debt, and improve the allocation of credit.

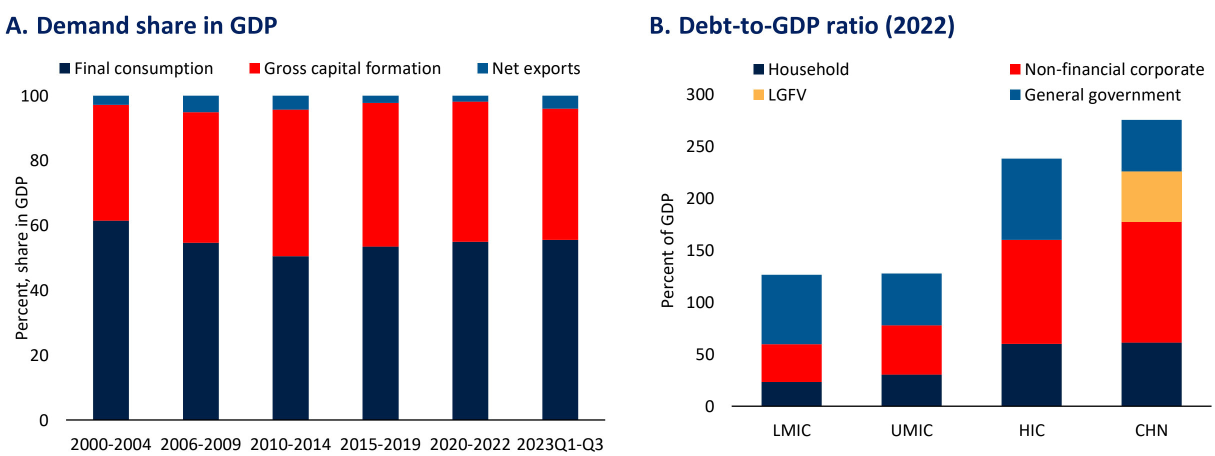
Finally, rebalancing from investment towards consumption, as well as boosting innovation and productivity, will help address the structural challenges in the economy and achieve more sustainable growth. China is confronted with declining potential growth that reflects slowing productivity and a fading demographic dividend. Growth remains overly reliant on investment but high debt and diminishing returns on physical capital accumulation constrain the space for investment-driven growth. As such, the future drivers of growth anchors on China's economic rebalancing along two dimensions: (i) a focus on innovation and productivity through policies that enhance capital reallocation to productive sectors, and advance market openness and competition; and (ii) a shift from investment to domestic consumption through policies to revive job creation, enhance the social protection system, improve the progressivity of the fiscal system, reform the hukou system, and promote inclusive finance (See Special Focus for further discussions).

III. Special Focus: Investment Shifts and Demand Shortfalls

Rebalancing – an unfinished agenda

Over the decade before COVID-19, China made progress in rebalancing from exports to domestic demand, but this external rebalancing was associated with a growing internal imbalance including overreliance on investment and rapid debt accumulation. Before the global financial crisis in 2008, export-driven growth contributed to large external imbalances, with the current account surplus peaking at 10 percent of GDP in 2007. This reflected both an undervalued exchange rate and structural distortions that depressed consumption (such as financial and wage repression). Consequently, China exported its domestic savings in the form of current account surpluses. After the GFC, as external demand collapsed, the current account surplus gradually declined to 0.7 percent in 2019. However, the narrower external imbalance came at the expense of growing internal imbalances, with the investment ratio surging to an average of 45 percent of GDP in 2009-19, from about 38 percent in the decade before 2008 (Figure 16A). This expansion of investment sustained high GDP growth but led to a huge and sustained surge in debt, predominantly to non-financial corporations, including off-balance sheet local government financing vehicles.

Figure 16. China's macroeconomic imbalances have become a growing constraint on growth



Source: NBS, WDI, IMF Global Debt Statistics, World Bank staff estimates.

Three years of pandemic have exacerbated these pre-existing economic imbalances. Consumption growth weakened, reflecting the adverse impact of the pandemic and limited income support from the government. Regulatory tightening measures were implemented to promote deleveraging in the property sector, subsequently leading to a reduction in its investments. With elevated national savings, subdued domestic demands echoed a renewed increase in the current account surplus. Meanwhile, debt increased from 259 percent of GDP in 2019 to 287 percent of GDP in 2022, notably higher than the average of upper middle-income countries and even high-income countries (Figure 16B). The surge in consumption driven by the release of pent-up demand after reopening has contributed to some rebalancing this year.

China's macroeconomic imbalances have become a growing constraint on growth. China's already well-developed physical infrastructure means that additional investments are contributing less to growth today than in the past. Excess real estate investment in many parts of the country and high property developer leverage have led to a severe downturn and financial stress in the sector. The real estate sector will contribute less to GDP growth in the future, as housing demand will increase at a slower pace. Weaker demand for China's exports due to slower global growth, China's already dominant export market share, as well as heightened geoeconomic tensions, constrain the scope for net exports to boost growth. As a result, consumption will have to become China's main driver of growth.

A consumption-driven economy may not necessarily lead to more rapid GDP growth than observed in recent (pre-pandemic) years, but it will lead to more sustainable growth. Investments create productive capacity for future growth. However, excess investment contributes to China's already high debt burden, which increases financial vulnerabilities and the risk of disorderly deleveraging. This risk has already materialized in the property sector. Construction with its upstream industrial linkages also contributes more to carbon emissions compared to most other sectors of the economy (World Bank 2022). Hence, reducing the contribution of investment to growth could contribute to greener, more sustainable growth and reduce financial risk. Excess investment also reduces people's welfare and inter-generational equity. According to Phelps' Golden Rule of capital accumulation, a country should save and invest in a way that maximizes consumption over the long term (Phelps 1961). This will ensure that present generations do not save more and consume less than future generations. China's exceptionally high savings and investment rates, together with the low returns on marginal investments, imply that it may be possible to increase current consumption without reducing the consumption levels of future generations.

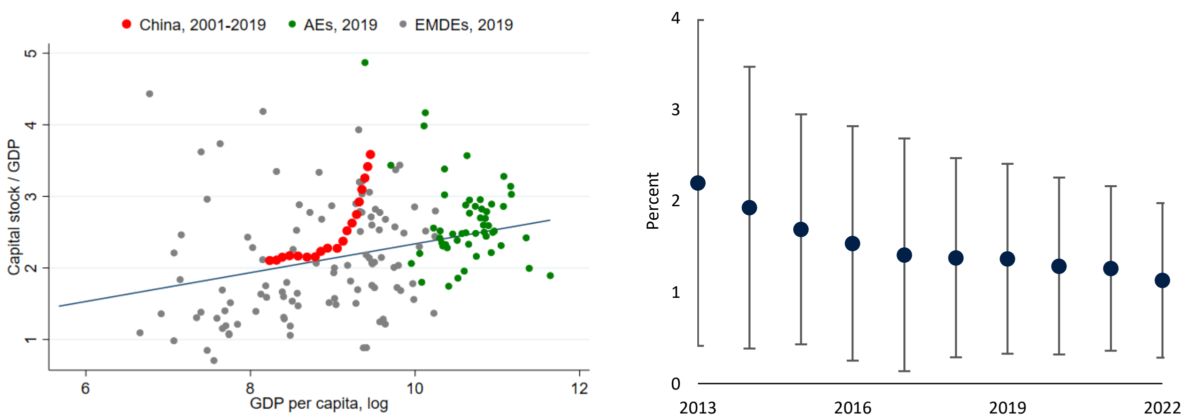
Structural investment slowdown and shifts

Investments in China have yielded diminishing returns, driven both by increasingly saturated capital stocks and the misallocation of capital. As the economy matures, higher levels of physical capital naturally run into diminishing returns to further capital accumulation. In China, this situation is compounded by inefficiencies in financial intermediation, contributing to credit misallocation. For instance, extension of high volumes of credit to sectors with high leverage and diminishing returns -especially property and infrastructure- has been shown to crowd out financing available to other private enterprises who could otherwise bring more innovation and efficiency into the system (Wei 2021). Consequently, China has witnessed a substantial decline in returns on capital investment, marked by a swift ascent in capital-to-output ratios compared with countries at similar levels of income (Figure 17A).

Especially infrastructure investment has seen declining returns. Over the past two decades, China has experienced a significant rise in its capital-output ratio within the infrastructure sector, mainly due to asset accumulation in transport and urban development, contributing to an increase in the country's overall capital-output ratio (Herd 2020). Meanwhile, the return on assets of LGFVs, which were originally set up to invest in infrastructure, has fallen from 2.2 percent in 2013 to 1.1 percent in 2022, further highlighting China's diminishing returns on infrastructure investment (Figure 17B; Box 1). Nowadays, China's public capital stock per worker has reached levels similar to that of OECD countries, suggesting that the traditional infrastructure gap is closing.

Figure 17. Investments, especially infrastructure investments, has seen diminishing returns in China

A. Capital output ratio **B. Average LGFV return on assets**



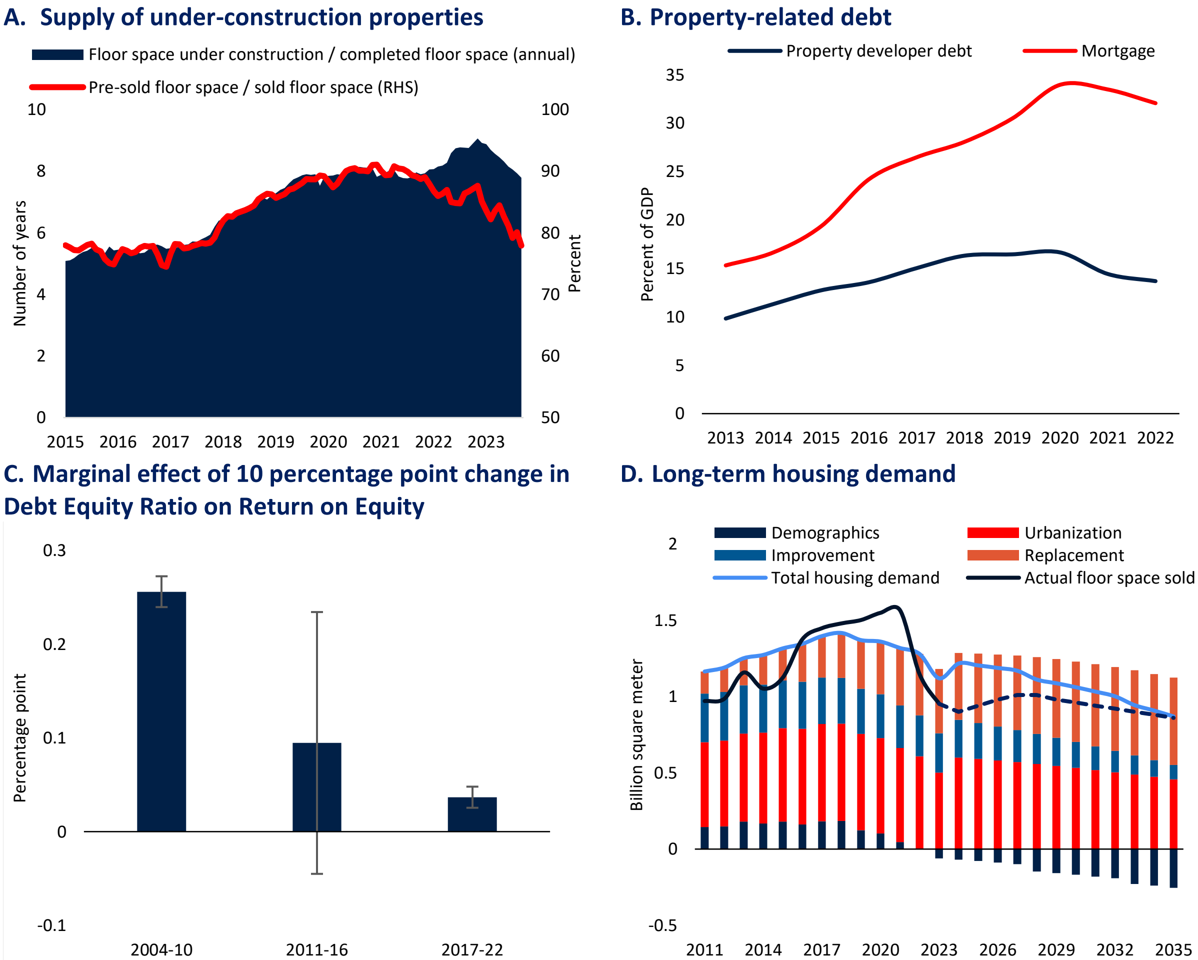
Source: IMF Investment and Capital Stock Dataset, Wind, World Bank staff estimates.
Note: Panel B: average LGFV return on assets is calculated as the asset-weighted mean of bond-issuing LGFVs.

The real estate sector has also been grappling with reduced returns and high leverage. The profitability of property developers has been declining since the early 2010s from 2.5 percent in terms of return on assets to less than one percent recently.[11] The diminished returns are partly due to rising housing stock especially in lower tier cities (Rogoff & Yang 2023). The volume of housing under construction became nine times larger than housing completions in 2022, although it decreased in 2023 on the back of policy support (Figure 18A). Recent estimates suggest that more than half of provinces would face housing oversupply once accounting for existing unfinished housing (IMF 2023). Meanwhile, property sector liabilities amounted to close to 17 percent of GDP in 2020, before receding to less than 14 percent of GDP recently (Figure 18B). Household mortgage stock as percentage of GDP has also moderately decreased since

[11] Based on the median of public and private firms in real estate sector (S&P Capital IQ database).

2020. This deleveraging follows policy shift in 2020, but returns from additional debt have been waning since the 2010s, suggesting that the debt-fueled high turnover growth model has matured (Figure 18C; Box 2).[12]

Figure 18. The property sector has become less of a growth driver



Source: S&P Capital IQ, CEIC, PBC, Wind, World Bank staff estimates.

Note: Panel C. Bar height denotes coefficient of the regressions where dependent variable is return on equity and independent variable is debt equity ratio interacted by period dummy. Whiskers show 90 percent confidence intervals. Samples include 963 real estate developers between 2004 and 2022. Regression controls for lagged return on equity, firm- and year- fixed effect. Panel D: Assumption of housing demand projection is as follows: population follows UN low variant case, urbanization rate becomes 75 percent in 2035 reflecting government target, per capita floor space becomes 45.8 square meters in 2035 following the current trend (quadratic extrapolation) and housing replacement/demolition peaks 50 years after the construction (30 years for those build before 2000) and the year of demolition follows normal distribution with standard deviation of 25 years (15 years). Data on construction year of existing households is from Rogoff and Yang (2023), 50 percent of existing houses are improved (increase in floor space), and base year of housing stock is 2010.

[12] More than 80 percent of new housing were sold before completion in China, much higher than in other countries.

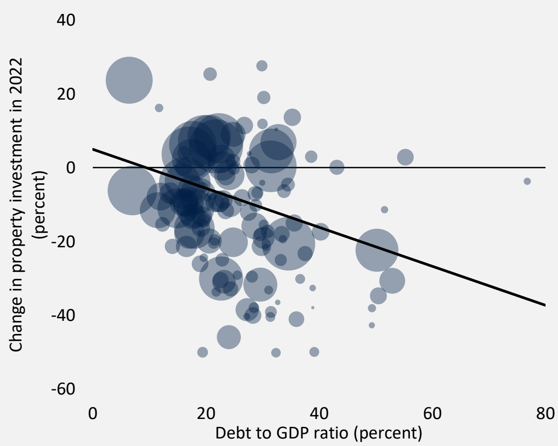
The property sector's growth contribution is expected to diminish amid a structural decline in housing demand. Structural changes such as a shrinking population, maturing urbanization, and China's per capita floor space nearing advanced economies' levels would lower housing demand from the peak of about 1.5 billion square meters in 2018 to less than 0.9 billion square meters in 2035 (Figure 18D). The ensuing structural decline in demand will reduce home sales, though a cyclical recovery may occur next year, and weigh on upstream and downstream sectors, including construction materials, furniture, and finance.

Box 2. The link between local debt and property investment

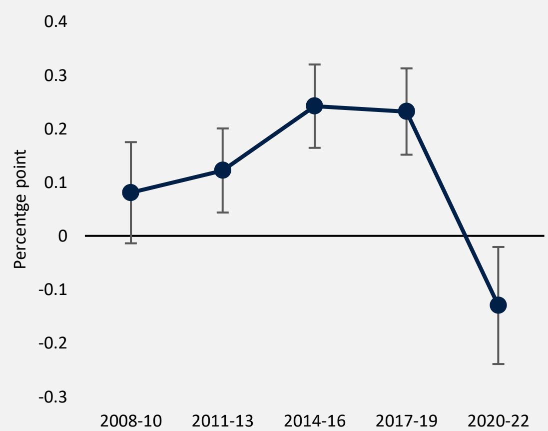
China has achieved high economic growth over the past decades, in part due to its land finance system. Rapid infrastructure investment growth supported China's growth and development over the past four decades. The land finance system helps local governments raise revenues to invest in infrastructure. Local governments create new urban land-use rights (LURs) via land acquisition from rural residents, sell LURs to land users and developers, and utilize revenues from land leases (Gyourko et al. 2022). As the legal entity allowed to convert rural land to urban land or adjust usage of occupied urban land, local governments were able to secure sizable revenue amid rising land prices until recently.

Figure 19. Increased debt burden has undermined investment growth while investment is facing diminishing returns

A. City-level correlation between property investment growth and debt accumulation



B. City-level correlation between GDP growth and property investment



Source: CEIC, World Bank staff estimates.
Note: Panel A: Debt refers to direct local government debt. Bubble size denotes the size of property investment in each city in 2022. Fitted line accounts for the size of investment. Panel B: Figure shows the regression coefficient and 90 percent confidence intervals of city-level GDP growth on the property investment as a share of GDP, interacted by each period in the x-axis. Regression controls for lagged GDP growth, population, city- and year- fixed effects.

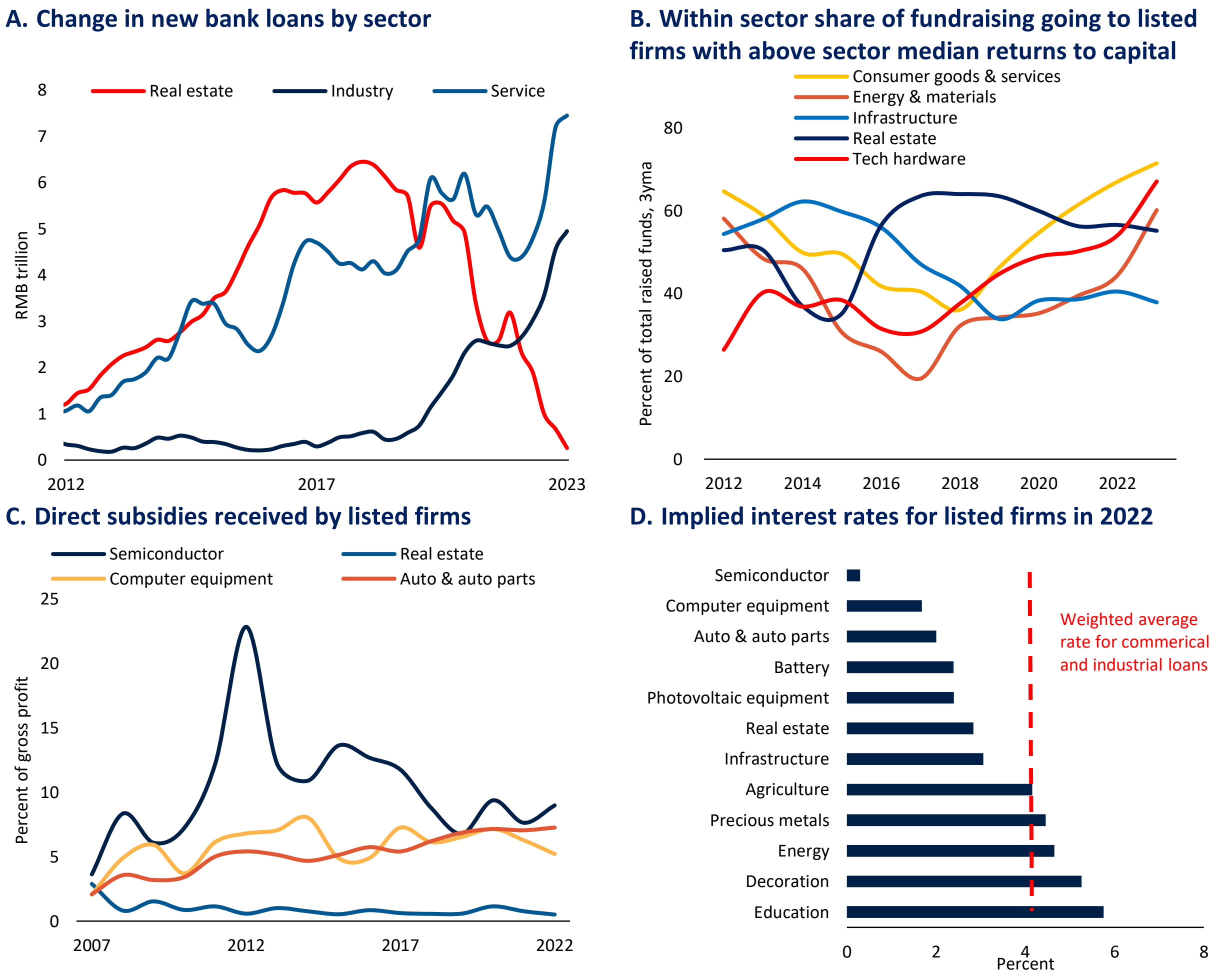
Property investment and local government debt are interlinked through the land finance system. Incentives for local governments to invest in infrastructure to meet local GDP growth targets ensured that land was made available for urban property investment. At the same time, land and future land lease revenues served as key collateral for local governments to raise debt either directly or through LGFVs (Liu and Xiong 2018). Property investments are sustained when local governments can issue new debt, and local government can issue debt when the profitability of land finance system is guaranteed. In 2022, however, property development investment in China dropped by 10 percent, which was more severe in cities with higher debt-to-GDP ratios (Figure 19A). The literature demonstrates the link between housing market and local government debt by showing how exogenous housing price increases have a positive impact on LGFV bond ratings and a negative impact on LGFV bond yield spreads (Ambrose et al. 2015).

The land finance system may be reaching its limit as a revenue source for local governments. Property investment has been positively associated with city-level economic growth, but the accumulation of housing stock over time has led to diminishing returns (Figure 19B, Rogoff & Yang 2023). The recent downturn of property market, partially policy-induced, also reflects structurally weaker housing demand (see main text). Demand for land from property developers continues to decline, and depressed sales of LURs limit the fiscal space for local government investment. It will therefore be important for local governments to diversify their revenue sources, as well as to redirect investment away from traditional infrastructure to finance other priorities such as climate adaptation and mitigation and social spending.

Shifting investment away from the real estate sector, driven by both push and pull factors, may have improved capital allocation. Credit allocation has shifted away from the less productive real estate sector to the industrial and services sectors since 2017 (Figure 20A). Meanwhile, there are signs of improvement in capital allocation within the industrial and services sectors, excluding property and infrastructure. Funds raised in the capital markets for these sectors have been increasingly flowing towards firms that have a higher return on invested capital (ROIC) than the sector median (Figure 20B). These developments likely suggest push factors to divest investments from the less productive real estate sector towards outperforming firms in more productive sectors. On the other hand, policy support for manufacturing serves as pull factors, further enticing investments away from the real estate. Manufacturing sectors such as semiconductors receive direct subsidies and borrow on more favorable terms (Figure 20C and D). The latter could be attributed, in part, to government support mechanisms, such as lower-cost lending through the PBC's structural lending facilities and China's policy banks.[13]

[13] More recently, some LGFVs are shifting their focus from infrastructure investment to fostering industrial development in the capacity of equity investors. Since 2019, around 90 new LGFV bonds were issued with a purpose to set up equity funds to invest in starts-up and industries, according to Wind database.

Figure 20. The investment shift may have improved capital allocation

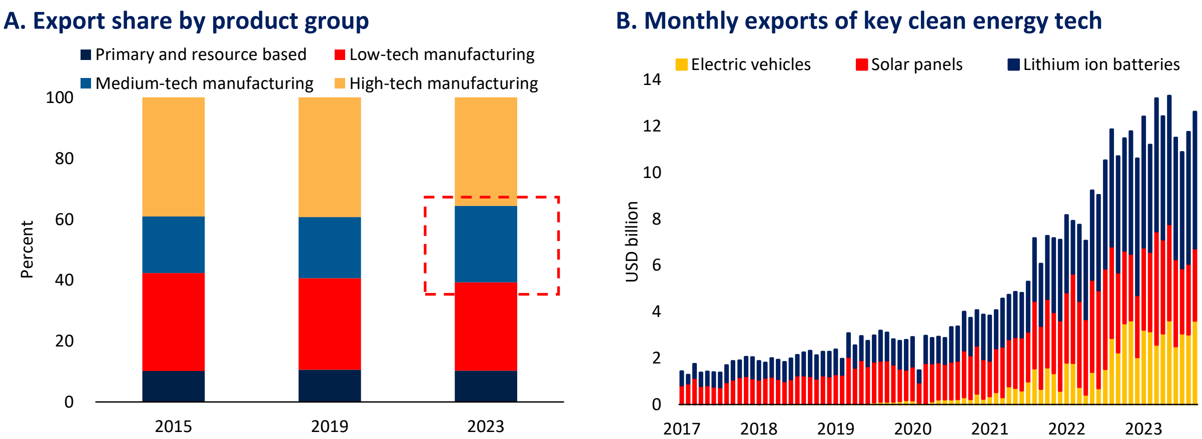


Source: PBC, Wind, World Bank staff estimates.
Note: Panel A: The lines show the year-on-year change in newly increased bank loans. Panel B: The fundraising activities encompass the issuance of additional shares and debt financing. The figures for the year 2023 are projections. Panel D: Implied interest rate is calculated using interest expense/interest-bearing liabilities, and median value for each industry is reported.

Investment shift was, in part, driven by robust external demand, particularly in green sectors. China's export basket has shifted from low-technology to medium-technology manufacturing, with the share of medium-tech manufacturing in total exports increasing from 19 percent in 2015 to 25 percent in the first nine months of 2023 (Figure 21A). Three product groups account for the bulk of this rise: automobiles, processed chemicals, and general machinery. Automobiles, for example, increased their share from 4.6 percent of exports in 2015 to 7.0 percent in the first nine months of 2023. EVs accounted for around half of all vehicle exports. In addition, exports of clean energy technologies such as solar panels and lithium-ion batteries–both of which are classified as medium-tech exports–have also been important drivers of the growth (Figure 21B). However, these products still accounted for under 5 percent of all exports in 2023 and have been insufficient to offset the slowing growth of high-tech exports.

Stronger domestic demand and increasing onshoring have, to a certain extent, mitigated the impact of slower growth in high-tech manufacturing exports. High-tech manufacturing export growth has stalled, and remained significantly under its trend growth in 2022-23, reflecting a cyclical downturn in the high-tech sector and a structural shift in supply chain. In contrast, domestic demand for these products has increased, partly due to self-sufficiency needs and restricted access to imports. The onshoring–the substitution of imported intermediate inputs with domestic production–has accelerated, with the ratio of processing imports to exports declining. Notably, domestic investments in electric, electronics and telecoms machinery surged to 22.3 percent in the first ten months of this year.

Figure 21. Medium-technology goods are driving export growth



Source: NBS, Ember, World Bank staff estimates.

However, further investment rebalancing may lead to emerging challenges stemming from risks associated with overcapacity and inefficiency. Channeling resources primarily into selected manufacturing sectors may lead to inefficiency, including overcapacity in some sectors. Past instances indicate that government direct subsidies and financial support have contributed to overcapacity and inefficiency in the steel sector (DRC 2015; Ma et al. 2018). These challenges could potentially escalate, especially in the presence of a less favorable external environment where market access in some global markets may become more constrained.

Escalating uncertainty and an increasingly adverse external environment have given rise to additional risks. Empirical evidence suggests that higher policy uncertainty has contributed to lower investment, with the effect more pronounced in sectors that have experienced regulatory changes (World Bank 2023c). Moreover, the confluence of more limited access to cutting-edge technology and a decrease in foreign direct investment (FDI) inflows is placing constraints on investment and productivity spillovers (Box 3).

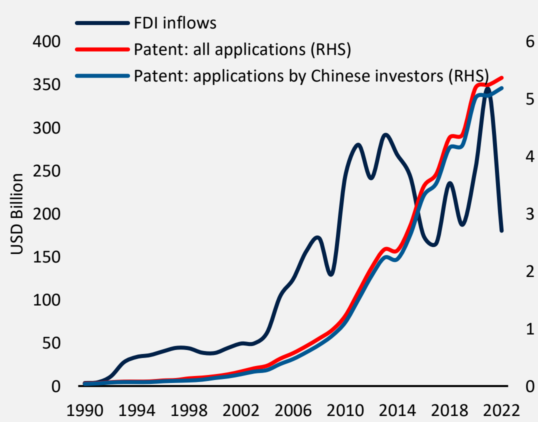
Box 3. Role of FDI in technology adoption

FDI inflows boost host country economic growth through technology and skill spillovers. Spillovers can be divided into horizontal spillovers, which affect firms in the same industry, and vertical spillovers, which affect firms in downstream or upstream industries. The positive impact of FDI on the development of the local upstream intermediate market (backward spillovers) is well documented (see Javorcik 2004; Blalock and Gertler 2008; Gorodnichenko et al. 2014; Kee 2015; and Eslava et al. 2015). Backward spillovers take place when foreign customer firms transfer knowledge to local suppliers, require higher product quality and on-time delivery, and/or increase demand for intermediate products, allowing local suppliers to reap the benefits of scale economies. The literature, however, shows mixed or weak results on horizontal and downstream intermediate markets (forward spillovers), because competition effects could work both positively and negatively in the case of horizontal spillovers, and there are likely little technology transfers in the case of forward spillovers.

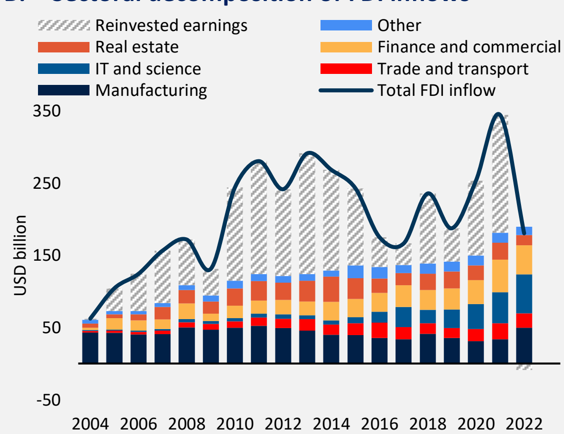
To develop local industries through FDI spillovers, China has long implemented a policy of requiring foreign firms to set up joint ventures (the quid) in return for market access (the quo). FDI inflows significantly increased especially after China's WTO accession in 2001. At the same time, domestic innovation measured by the number of patent applications also surged (Figure 22A). Several studies found evidence of positive spillovers by the increased FDI inflows. In the automobile sector under quid pro quo, the malfunction rates of car models produced by domestic automakers fell by more than 75 percent from 2001 to 2014, demonstrating impressive quality improvement through knowledge spillovers (Bai et al. 2020). Using data on manufacturing firms from 1998 and 2005, Lin et al. (2009) found forward and backward vertical spillovers to both state-owned and private firms. The literature also suggests the economy-wide positive impact of FDI combined with the quid pro quo policy (e.g. Holmes et al. 2015; Whalley and Xin 2010).

Figure 22. FDI inflows surged since the 2000s, fostering skill spillovers in China

A. FDI inflows and patents in China



B. Sectoral decomposition of FDI inflows



Source: CEIC, WIPO, World Bank staff estimates.
Note: Panel B: Reinvestment earnings category could include other flows which are not included in utilized FDI flows reported by the Ministry of Commerce but included in BOP's FDI definition, such as offshore listings of Chinese companies and intercompany debt flows. Other includes agriculture, energy, construction and other services.

The recent decline in FDI inflows into China is worrying in the context of positive FDI spillovers. The decline is largely driven by a decrease in reinvested earnings and other flows rather than greenfield FDI. Greenfield FDI was more stable and kept increasing until 2022, but January - October 2023 data show a 9 percent decline compared to the same period in 2022. In some sectors where domestic industries are well developed, FDI might not be as important as before for technological progress. However, in emerging industries, the gains from FDI can be significant. In fact, greenfield FDI inflows in manufacturing peaked by early 2010s, followed by large inflows in services, especially in IT and scientific research (Figure 22B). China's continued efforts to open up its financial and other services industries may be the driving force behind the increase in FDI.

Low consumption trend persists due to high household savings

Despite the pickup this year, consumption remains structurally low. The share of household consumption in GDP rose from 34.6 percent in 2010 to 39.1 percent in 2019 and 37.2 percent in 2022, but is still lower than 45.5 percent of upper middle-income country (UMIC) average. While consumption drove the growth this year following the reopening, it remains structurally low, as was the case before the pandemic. The extended period of low consumption points to two potential structural drivers—a low share of disposable household income to national income and a high savings rate, with the former less of a constraint nowadays.

Household disposable income is less of a constraint on household consumption today. Among income components, the labor income share has steadily risen since the early 2010s, reversing the trend in the previous decade,[14] due to increased labor demand and a shrinking labor force (Huang and Lardy 2016). Other income sources including from social security benefits and property have risen in the past decade, allowing China’s GDP share of household disposable income to rise from 55.8 percent in 2010 to 60.6 percent in 2021, surpassing the average of EU countries and Japan (Figure 23A).

Low consumption reflects China’s high household savings rates. While income serves as the primary determinant of household consumption, it falls short in fully explaining recent trends. The elasticity of household consumption to short-term disposable income in China remains high at 0.7 by international comparison.[15] The high elasticity suggests that while over their lifetime, Chinese households’ marginal propensity to consume is lower than in other countries, they are

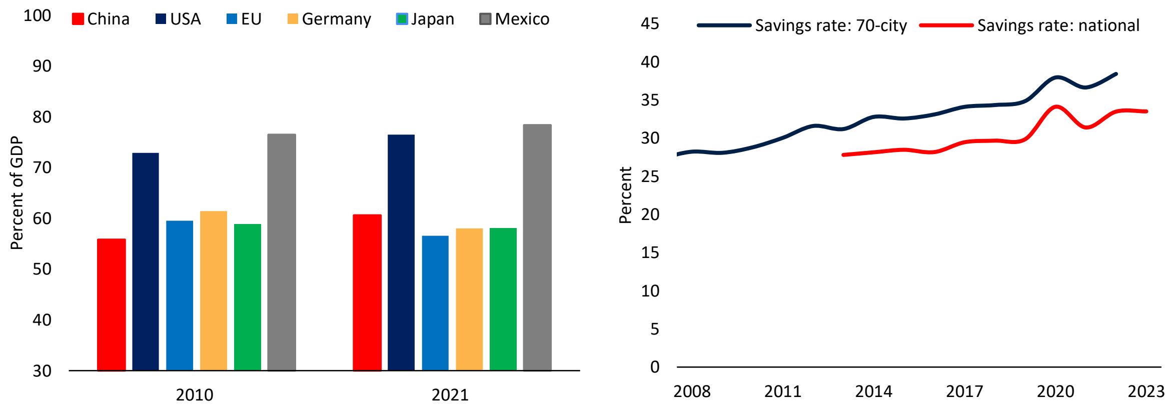
[14] Household disposable income as a share of GDP dropped significantly from 65 percent in 2000 to below 56 percent in 2010. The movement of surplus rural laborers to urban areas likely constrained the growth of wages in cities (Perkins 2015). The transition of workers from agriculture, where labor compensation is a significant proportion of value added, to the industrial and services sectors, where the share of labor income is considerably lower, was likely another contributing factor (Bai and Qian 2010).

[15] Estimates from Arellano-Bond System GMM estimation of lagged consumption growth on income growth, using annual data for 68 major cities in China from 2013 to 2022. Control variables include lagged saving, lagged property price growth, and lagged fiscal expenditure. Estimated coefficient is statistically significant at 1 percent level, and its robustness holds across various alternative estimation methodologies.

more sensitive to short term changes in income and will lower their consumption levels by more in response to cyclical declines in incomes. This, together with mobility restrictions, supply distortions, and heightened uncertainty, explains the sudden rise in China's household savings during the pandemic (Figure 23B).Yet beyond the pandemic, there are structural factors that explain the elevated household savings in China, including past demographic trends, precautionary savings, and income inequality.

Figure 23. Low consumption persists, independent of an increased income share

A. Disposable income share to GDP **B. Household savings rates: 70-city**



Source: WDI, OECD, World Bank staff estimates.
Note: Panel B: 70-city savings rate refers to the simple average of household savings rate for 70 tier 1-3 cities, derived from Urban Household Survey data. National savings rate is calculated using quarterly expenditure and income data from the NBS Household Income, Expenditure and Living Conditions Survey. The savings rate for 2023 is calculated using data for Q1 to Q3 only.

1) Demographic changes

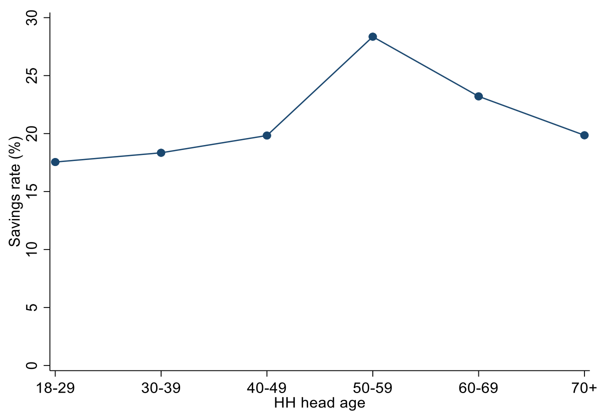
Demographic changes such as declining birth rate and rising working-age population contributed to higher savings in the past. The decline in birth rate resulted in fewer children, translating to reduced spending on education, healthcare, and child-rearing, and thus higher household savings. Along with fewer children, increased life expectancy led to a fast-aging population, which created incentives for individuals to save more for retirement. These dynamics previously led to increased aggregate savings, as the working-age population saved more than the old dissaved (Modigliani and Cao 2004). Recent snapshots of the savings rate over the life cycle confirm this saving pattern. Household savings dip during child-raising ages (for household heads), start climbing post 40, eventually reaching a peak around the early retirement ages of 50-59. After that, savings rate starts to decline at a relatively steep pace, though remaining in the positive territory even among those over 70 (Figure 24A).[16]

[16] Analysis of savings rate over the life cycle, particularly in high income and OECD countries, show the elderly starting to dissave after a certain age. There are two possible reasons why we don't see the same pattern in China. First, in

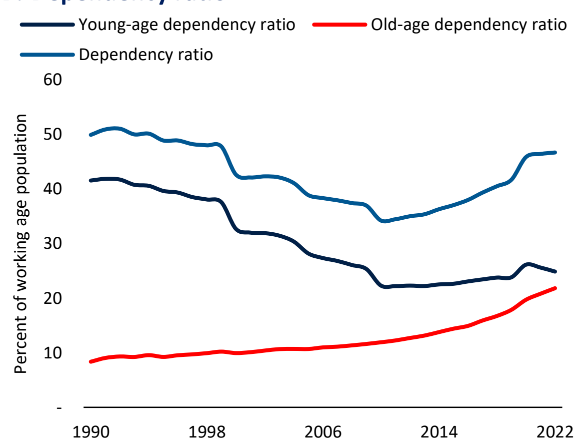
Going forward, rapid aging will put downward pressure on savings. China's now aged population (with share of those 65 and older at 14.9 percent) is reversing the favorable downward trend in the dependency ratio. While the youth dependency ratio has roughly stabilized since 2008, the old-age dependency ratio is increasing (Figure 24B).[17] Fewer individuals of working age will save, while larger numbers of retirees will spend their accumulated savings. The IMF estimates that these demographic changes, all else equal, would reduce the household savings rate by 6 percentage points of disposable income between 2015 and 2030 (IMF 2018).

Figure 24. Rising dependency ratio could reduce savings

A. Savings rate over a life cycle



B. Dependency ratio



Source: NBS, CEIC, World Bank staff estimates from 2022 MOHRSS Statistical Bulletin, Tiwari, S., V.S.M. Talledo, and K. Zhang (forthcoming) using data from China Family Panel Survey (CFPS) 2018.
Note: Panel A: The plotted values are linear predictions of savings rate based on an ordinary least square (OLS) regression of savings rate on the dummy variable for each age group. The regression specification also includes a control for household size. Panel B: Young-age refers to the population of children and adolescents aged 0-14 years, while old-age refers to individuals aged 65 years and older.

2) Precautionary savings

The precautionary savings motive remains an important driver of savings in China, despite the significant improvements of the social security system in the past decades. Households save to protect themselves against potential future shocks due to old age, illnesses and accidents, and unanticipated decline in labor-related earnings.

higher income countries this analysis is often conducted using data on income and expenditure and hence savings at the *individual* level while for China, the information on consumption and savings are at the household level which we paired with age of the household head, so in a context where multigenerational households are prevalent we are not able to observe the life-cycle changes in savings dynamics even when they are present. Second, for those above a certain age who choose to remain an independent household unit could have certain special characteristics that are not representative of the overall elderly population.

[17] China's dependency ratio stayed below the averages of upper middle income and high income countries during the past two decades. It has risen since 2010 and is now approaching the average of UMIC.

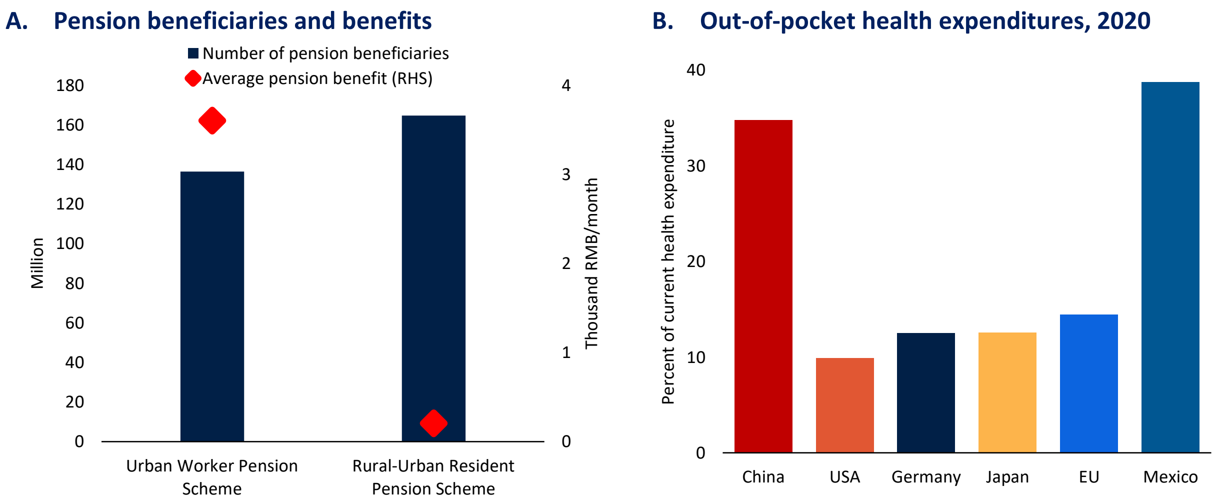
Despite high pension coverage, the average basic pension benefits remain relatively low. In 2022, 86 percent of the working-age population contributed to either the Urban Worker Pension Scheme (UWPS) or the Rural-Urban Resident Scheme (RURS), split almost in half.[18] For pensioners, 44 percent–136 million–received an average pension benefit of RMB 3,605/month from the UWPS system (Figure 25A). This benefit level represents a replacement rate of 41 percent of urban workers' wages, which is equivalent to the rates found in the US and Canada. However, for those covered by RURS, pension benefits are typically low and, on average, below the national poverty line. In 2022, the monthly average basic pension of the RURS was RMB 205, approximately 12 percent of average rural income. Thus, households in the RURS system have an incentive to save to compensate for the limited benefits for retirement. In addition, the decentralized administration of pensions and social insurance by locality hinders benefit portability, which is essential for labor mobility.

Furthermore, the pension system faces substantial financial sustainability risks, which could also be contributing to high savings. Financial sustainability challenges stem from high legacy costs, population aging, and low retirement age, among other factors (World Bank 2017). The urban worker scheme, in particular, has a defined benefit/pay-as-you-go component, and population aging threatens its sustainability in the long run. With sustainability concerns and increasing demand for long-term care, households may have to rely on self-insurance, which results in over-saving compared to a collective pension scheme.

While out-of-pocket spending on healthcare has declined, the exclusion of many costs from social health insurance means households continue to bear a high burden for ill health. Before the pandemic, growth in health spending per capita at 15.8 percent per year was higher than growth in GDP per capita at 11.4 percent. As a result, households relied on savings to cover high healthcare expenditures. The government has made efforts to provide more generous basic public health services to meet demand (World Bank and World Health Organization, 2019). The share of health expenditure financed by the general government doubled to 55 percent between 2000 and 2020, while the share paid by households out of pocket declined from 59 percent in 2000 to 35 percent in 2020 (WHO Global Health Expenditure Database). Still, the latter is an order of magnitude higher than those observed in EU (14.4 percent), Japan (12.6 percent) or United States (10 percent) (Figure 25B). Furthermore, general government spending on health still accounts for only 3 percent of GDP, compared to an average of 7.8 percent in the OECD in 2019. While the majority of Chinese adults have some health insurance, with only 3.2 percent uninsured, the effective coverage is much lower, with two-thirds having to pay many healthcare costs out-of-pocket, particularly for medicines (Lee et al. 2022).

[18] China has two main pension systems: the Urban Worker Pension Scheme (UWPS), mandatory for urban workers in the private sector, and the Rural-Urban Resident Scheme (RURS), a voluntary scheme with elements of social pension covering rural migrants, informal sector workers, and the self-employed.

Figure 25. Pension benefits remain relatively low while out-of-pocket health expenditures high



Source: NBS, WDI, World Bank staff estimates from 2022 MOHRSS Statistical Bulletin.

Finally, households save to ensure themselves against potential employment-related shocks. Unemployment insurance is tied to labor contracts and covers 51.8 percent of urban employees. Work injury insurance covers 63.4 percent of urban employment. Migrant workers are largely uninsured by the urban social protection system. Social assistance also plays a limited role in protecting households whose earnings may unexpectedly fall due to loss of employment or business. Only 4 percent of the population is covered by the social assistance flagship program, *Dibao*, and most households in the program are those whose members are unable to work due to age or disabilities. This compares to the average coverage rate of cash transfer programs of 17.6 percent of the population in upper-middle income countries, and 23.6 percent in high-income economies.

3) Income inequality

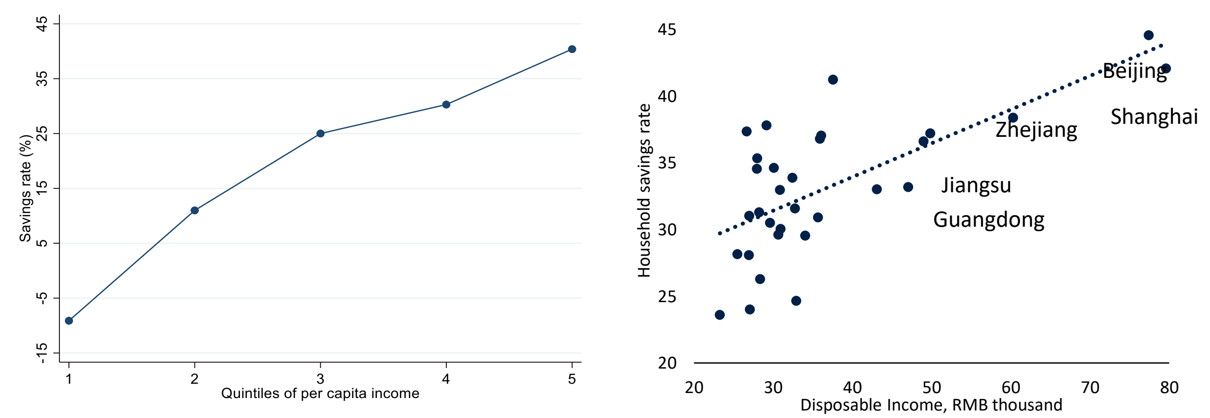
High inequality can contribute to high savings rates because wealthier households tend to save a larger share of their income. Income inequality in China is high for the country's level of development. The Gini coefficient was 46.6 in 2021. The household savings rate is higher among households at higher levels of income (Figure 26A). A growth process that results in larger shares of income accruing to the upper deciles of the income distribution will continue to keep aggregate savings rate high. This dynamic also has a spatial dimension. The average household savings rate is higher in the relatively prosperous provinces in the country (Figure 26B). Prefecture-level data suggest that the household savings rates increase with income levels (IMF 2022). Lowering these vertical and horizontal inequalities would not only ensure that relatively less well-off Chinese households benefit from growth but also become strong contributors to it.

While existing policies and investments will continue to remain important to boost economic opportunities and growth everywhere, reducing inequality may also require better use of instruments of fiscal policy to redistribute incomes. China continues to make great efforts to achieve balanced development, by bringing greater market connectivity to lagging places and continuing to focus on the revitalization of its rural areas. These efforts have borne fruit in the form of elimination of extreme poverty. But inequality has remained high, which calls for a greater role for fiscal policy in redressing inequalities created in the market. Recent analysis shows that China's fiscal system makes a sizeable dent on inequality through in-kind benefits provided in the form of health and education services. However, on a cash basis, large segments of the relatively less well-off households are net payers into the fiscal system, paying more in the form of taxes than the benefits they receive. This weighs on consumption today by putting less cash in the hands of those who would spend. But it also weighs on consumption spending tomorrow by amplifying economic insecurity and precautionary savings.

Figure 26. Richer households and wealthier provinces save more

A. Household savings rate across the income distribution

B. Savings rate and income by province



Source: NBS, CEIC, Tiwari, S., V.S.M. Talledo, and K. Zhang (forthcoming) using data from China Family Panel Survey (CFPS) 2018.
Note: Panel A: The plotted figures are linear predictions of savings rate based on OLS regression of raw savings rate on categorical variables.

Beyond these structural factors, incentives associated with the real estate market have increasingly influenced household consumption and savings behavior. The rapid growth in housing demand has increased household savings for mortgage downpayment, contributed to household debt, and eroded the budget for non-housing related consumption expenditures. Housing ownership could affect household consumption through four key channels, namely, savings for downpayment, mortgage debt burden, wealth effect, and property income effect.

1) **Savings for downpayment.** Home purchases in China can be driven by factors like competition in the marriage market and the demand for quality education, healthcare, and

other public services tied to home addresses. Higher home purchases are associated with higher household savings.[19] Rising housing prices, especially in cities with more stringent requirements for acquiring a registration certificate (hukou), make home purchases more pressing, which contributes to rising household savings (Figure 27A). In rural areas, 70 percent of funds used to construct a house come from household savings, which is equivalent to 51 months of household income.[20]

2) **Debt burden.** Household debt has steadily risen from 30 percent of GDP a decade ago to 62 percent of GDP in 2023. On average, 62 percent of household debt relates to house purchases, including mortgages and borrowing from relatives.[21] After home purchases, household expenditures (excluding mortgage) drop on average by 22 percent, with spending on food (likely restaurants) and rent falling sharply (Figure 27B).
3) **Wealth effect.** Rising property values could lead to an increase in consumer spending, while a decrease may induce the opposite outcome. However, the empirical evidence is mixed on the significance of housing wealth effect (Wang and Wen, 2012; Chen, Yang, and Zhong 2016). The positive impact on consumption due to property appreciation may be countered by the negative impact due to increased household debt. In addition, the wealth effect impact on homeowners and downpayment savings effect on non-homeowners potentially offset each other at the aggregate level.
4) **Property income effect.** Empirical evidence suggests that households with property income have a consumption expenditure 9.9 percent higher than those without.[22] This is because the marginal propensity to consume (MPC) for property income is higher than that for wage income (Fang and Zhang 2011). Moreover, households with property income tend to allocate a larger portion of their income to discretionary consumption rather than essential expenses (Figure 27C). However, the impact may be limited because, according to survey data, less than half of Chinese households have property income,[23] and property income is a small share of household income in China compared to advanced economies such as the United States (Figure 27D).

[19] Our estimates indicate that a one-percent rise in the household savings rate correlates with a 2 percent increase in housing sales six years later, using data from the NBS provincial-level household survey.

[20] Household-level estimates using CHFS 2019 database.

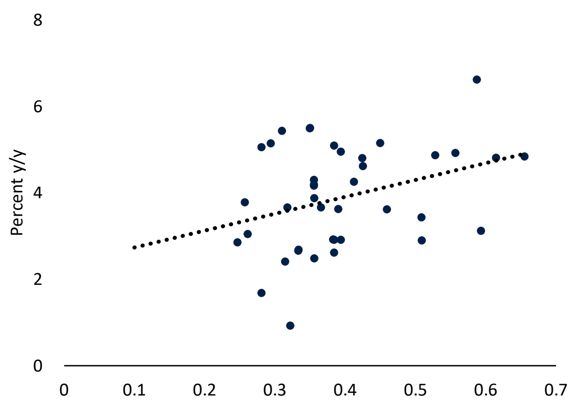
[21] Ibid.

[22] See note for Figure 27C.

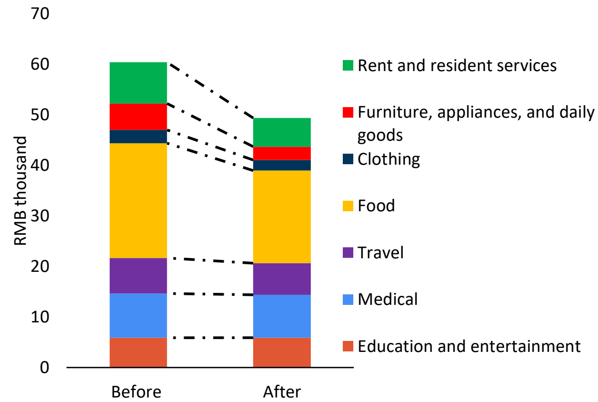
[23] Household-level estimates using CHFS 2019 database.

Figure 27. Incentives associated with the real estate market have increasingly influenced household consumption and savings behaviors

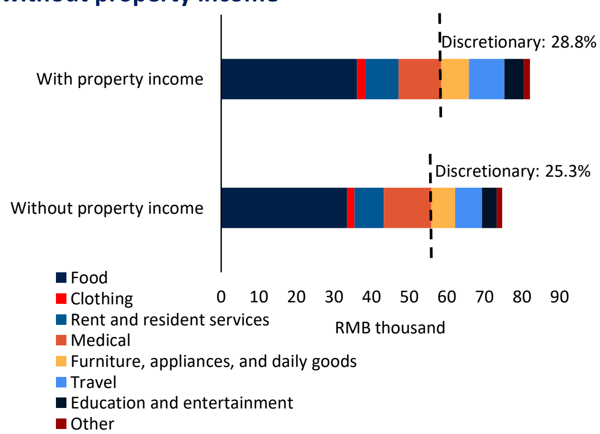
A. Housing price growth and Hukou-housing accessibility index



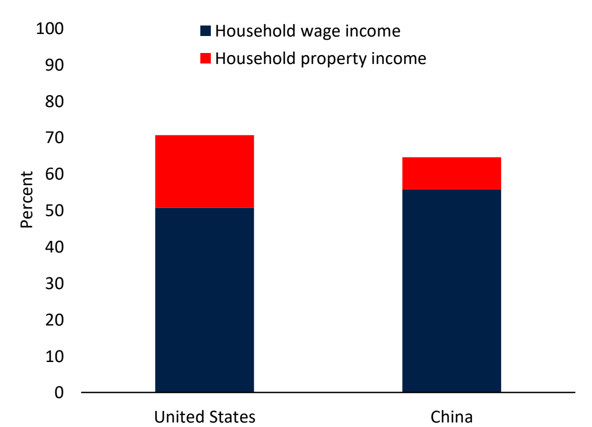
B. Consumption expenditure before and after a house purchase



C. Consumption structure of households with and without property income



D. Property and wage income's portion of total income



Source: CEIC, World Bank staff estimates using CHFS database 2017 and 2019.

Note: Panel A: Hukou-housing accessibility index measures the difficulty in obtaining a household registration (hukou) through house purchases. The index is compiled by Survey and Research Center for China Household Finance (Zhang et al. 2019). Panel B: The figure shows average by-category changes in consumption expenditure using coefficients from a PSM-DID pseudo-randomized experiment. We identified households that experienced increases in both housing-related debt and assets between sample years as the treatment group, and matched households in the control group using propensity-score matching (PSM) method. Household total assets, total liabilities, total income and wage income are controlled for when estimating DID coefficients with a two-way fixed effect regression. Panel C: Property income includes income from financial assets and rental income from housing, stores, or farmland. The difference in consumption structure is estimated by separately regressing consumption of each category (in log) on a dummy variable indicating whether households receive property income. Regression controls for household income, assets, debt and fixed characteristics including social protection status, using the CHFS database 2019.

Policy implications

While the economy is expected to encounter a structural deceleration in the medium term, it is important to manage an orderly slowdown, including by rebalancing the structure of aggregate demand. China needs to stabilize aggregate demand and sustain growth over the medium term to ensure continued convergence towards advanced economies. Achieving this objective will require a coordinated economic and institutional reform agenda, with a policy mix of fiscal, financial, and real sector reforms.

Facilitating rebalancing through fiscal policies and deepening intergovernmental reforms

Reforms of the fiscal system are crucial to China's rebalancing progress. Fiscal reforms should aim to reduce the reliance on extensive public investment and harden budget constraints of local governments. The strategy needs to shift from extensive resource and investment mobilization to one based on greater fiscal discipline, improved efficiency, quality service delivery, and sound risk management. This transition needs to be managed in a challenging cyclical environment with risks of growth slowing faster than expected. The pace of the adjustment in public investment therefore needs to calibrated taking into these cyclical risks.

Deepening intergovernmental reforms is warranted to ensure sustainable growth. The subnational governments' extensive spending responsibilities, coupled with their limited revenue autonomy, have given rise to substantial unfunded mandates. This has contributed to an unsustainable reliance on land leases and the build-up of debt and off-budget liabilities. Going forward, revenue reforms could help reduce the reliance on land leases revenue, including through revised tax sharing arrangements for VAT and the introduction of a recurrent property tax assigned to subnational levels at an appropriate time in the future.

De-risking the financial sector while enhancing efficient financial intermediation

Financial sector reforms should aim to contain risks to financial stability. Given the highly bank-centric financial system in China, market-supplied equity would likely need to play a stronger role in counterbalancing the high debt exposures across the economy. This would also help expand savings options for the population. High-risk sectoral balance sheets and especially liability structures, e.g., for the property developers, would also need to be carefully assessed and restructured through regulatory incentives and limitations. The purpose would be to ensure a better balance between risk exposures, risk management, liquidity, and consumer protection of the sectors' creditors, especially where retail savers are directly exposed to economic sectors without adequate risk assessments or protection.

Enhancing market-based financial intermediation could optimize the allocation of capital, directing towards more productive investment. As banks and markets underwrite new loans, bonds, and equity investments, they should prioritize exposures which deliver highest financial, economic, and social impacts – the triple bottom-line - directing finance to most efficient firms, expanding inclusive and green finance, taking proactive steps in optimizing systemic leverage, and generally aligning the quality and quantity of financial sector growth with that of the real economy and high-level national development objectives such as climate-related ones. Moreover, further liberalization of interest rates and the development of a comprehensive framework to address information asymmetry and credit data quality could improve credit allocation and reduce financing costs. Essential to these measures is a commercially oriented financing environment that enables a reduced reliance on state-led or government-guided capital allocation. This is crucial to avert the pitfalls of inefficiency, as illustrated by historical instances discussed earlier.

Enhancing regulatory reforms to boost competition and investment returns

A fair and competitive market and a predictable regulatory environment would help boost returns on investment. To achieve more efficient allocation of resources requires well-functioning product and factor markets -for capital and labor- to allow resources to move to most productive sectors and enterprises rather than being bottled up in low productivity uses. Domestically, this will require comprehensive institutional and policy changes that would facilitate firm restructuring and exit of less efficient firms while promoting entry of new efficient firms, and easing the most binding regulatory, institutional, and financial bottlenecks to allow successful firms to invest and expand. Externally, sustaining and deepening China's integration in global markets and supply chains would ensure that firms in China continue to converge to the global productivity frontier through greater competition and knowledge flows embedded in investment and trade.

There are strong linkages and complementarities between these different reform elements. The impact of partial reforms and isolated measures in individual policy areas would likely be limited and could lead to unintended consequences. Steps to harden budget constraints of local governments are intrinsically linked to the de-risking of the financial system. Reforms to liberalize and enhance formal financial intermediation through the banking system—and in the long run capital markets—could provide an environment that is conducive to commercially oriented financing with a reduced role for state-led or government guided capital allocation. The impact of financial sector reforms in turn will be reinforced by real sector reforms that would reduce risks and increase the returns, especially on private sector investment. Therefore, the whole of reforms will be more than the sum of the parts.

Accordingly, the investment shift must be accompanied by reforms to reduce high savings and invigorate consumption. Slowing real estate investment is part of the necessary adjustment for housing activities to converge towards sustainable demand levels and help reallocate resources to more productive sectors. However, the deleveraging process needs to be accompanied by steps to boost domestic consumption and contain excess savings so impacts on aggregate demand can be mitigated without inducing a re-emergence of external imbalances. Invigorating consumption requires structural policies to improve the progressivity of the fiscal system, enhance the social safety net, reform the hukou system, and promote inclusive finance.

Improving the progressivity of the fiscal system

Putting more money into the pockets of low-income households will lead to a rise in overall consumption. Lower-income households typically have a higher marginal propensity to consume compared to higher-income households. Consequently, aggregate consumption would increase if there were a transfer of funds from high-wealth to low-wealth households.

On the revenue side, the fiscal system could collect more from those who can afford to pay. This can be done by increasing the share of fiscal revenues collected through progressive taxes, where China's collection as a share of GDP lags the OECD and middle-income countries. Despite a progressive structure comparable to the OECD, China's PIT has relatively wide income brackets and a large personal allowance. Moreover, the tax base is small, given that most workers do not pay income tax at all, while those with slightly higher wages pay only a little, given the low introductory tax rates and the wide salary bands (World Bank 2023b).

On the expenditure side, the fiscal system already provides more support to those in greater need, but China has the resources (at the central level) to do more. This includes raising public expenditures on social services such as education, health, and social protection to improve equality of opportunity and reduce regional and urban-rural gaps. China's spending on education at 3.6 percent of GDP was lower than the average for the UMICs of 4.1 percent in 2020. Spending on health at 3.1 percent of GDP was similarly lower than the UMIC average of 3.5 percent. Further improvements could focus on closing the remaining gaps in access to high-quality public services for migrant workers and rural residents.

Enhancing social protection

Closing the remaining gaps in pension coverage and raising benefit levels for certain categories of retirees can help reduce precautionary household saving. High pension system contribution rates, low wages for some categories of workers, and low returns on individual accounts are key disincentives to higher participation. The rate of return for the RURS is only equivalent to the one-year deposit rate. Using 2011 data from the China Health and Retirement Longitudinal

Studies, Lei et al. (2013) found that individuals prefer shorter periods of participation and choose the lowest level of premiums for the RURS. Results from other survey data show that enrollment in the RURS is concentrated at age 45, leaving 15 years of contributions to meet the eligibility criteria. Furthermore, the large benefit gap between the UWS and the RURS raises benefit adequacy and equity concerns. Basic pension benefits in the RURS are low and need to be raised while taking into account fiscal affordability, given that this scheme is funded by central and local government revenues (World Bank 2021).

A more centralized, nation-wide pension system would facilitate labor migration to areas and industries with higher productivity and contribute to higher incomes and consumption. RURS funds are still pooled at county level, implying limited portability and high administrative costs. Recent measures have tried to tackle portability. Urban workers can transfer funds accumulated in the individual account and 12 percent of funds from the pooling account from one city to another city when they move. Another policy initiative from 2014 facilitated the transfer of pension entitlements within the RURS and between the RURS and the UWS. But implementation has been hindered by the decentralized administration of pensions by locality.

The temporary expansion of the unemployment insurance scheme could be made permanent. The expanded coverage, relaxation of qualification requirements, and relaxation of distinction between local and non-local hukou workers could be extended post-pandemic. The experience during the pandemic shows that expanding coverage to migrant workers and a wider spectrum of vulnerable population groups and increasing the value of transfers are both eminently affordable from a fiscal perspective.

Implementing hukou reforms to ensure social entitlements for migrant workers

Deepening hukou reform is essential to ensure that migrant workers have the same social entitlements as those with urban hukou. Given the urban population's rapid aging and low birth rates, as well as continued structural/green transformation, internal migration is expected to play a significant role in supporting local economies through added consumer demand and increased labor force and skill diversity.

Implementing a more ambitious hukou reform will facilitate the transformation of the migrant population into a driving force for China's economy in the upcoming decades. Migrant workers tend to have limited access to social protection compared to workers with urban hukou. In addition, migrant workers anticipate a decrease in future income upon returning to rural regions. Both of these factors can encourage precautionary saving behaviors. Empirical evidence indicates that the marginal propensity to consume of migrant workers was 16-20 percentage points lower than that of urban residents in 2007 (Chen et al. 2015). Reforms could extend hukou liberalization and better access to social protection beyond small and medium cities and enable migrants to have the freedom to choose hukou registration in all cities.

Improving inclusive finance

Further liberalizing interest rates and fostering greater financial inclusion could eliminate financial barriers to consumption. In the previous two decades**,** the limited availability of retail investment alternatives and small income from financial investments have incentivized households to increase savings to compensate for low returns (Carrol 2000). With the removal of the cap on deposit rates in 2015, wealth management products and internet finance proliferated. While these products offer higher returns to investors and contribute to increased consumption, they come with significant consumer protection, disclosure, and regulatory challenges. In addition, more can be done to expand access to the unserved and underserved community. Empirical evidence indicates that enhancements in inclusive finance and the broader coverage of financial products increases household consumption (Yi and Zhou 2018).

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