

Growing Beyond Property: Cyclical Lifts and Structural Challenges

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Special Focus: Aging China - Implications for Growth and Inequality

Acknowledgements

The June 2024 issue of the China Economic Update was prepared by a team comprising Yusha Li (Task Team Leader), Kevin Chua (co-Task Team Leader), Jun Ge, Maria Ana Lugo, Elitza Mileva, Sailesh Tiwari, Dewen Wang, Samuel Christopher Hill, Shichao Zhou, Veronica Montalva Talledo, Katherine Anne Stapleton, Marius Vismantas, Fang Yang, Yang Huang, Kate Mandeville, Liping Xiao, Salman Asim, Marcin Piatkowski, Wenting Wei, Danxu Cheng, Hongyi He, Jia Liu, and Zhang Zhang. Guidance and thoughtful comments from Mara Warwick, Lalita M. Moorthy, Aaditya Mattoo, Sebastian Eckardt, Zafer Mustafaoglu, Rinku Murgai, Cristian Aedo, Philip O'Keefe, John Giles, Elena Glinskaya, and Ergys Islamaj are gratefully acknowledged. The team would like to thank Tianshu Chen, Ying Yu, Luoyi Zhou, Xiaoting Li, Mingjie Li, and Yu Shang for support in the production and dissemination of this report. The team would also like to thank Xiaoyan Lei, Junni Zhang, Bo Zhao, Wei Huang, Qingyuan Li and Chunfeng Zhang from the National School of Development at Peking University for the discussion on the economic impact of population aging in China. The findings, interpretations, and conclusions expressed in this report do not necessarily reflect the views of the Executive Directors of the World Bank or the Chinese government. Questions and feedback can be addressed to Tianshu Chen (tchen@worldbank.org).

Table of Contents

Executive Summary	1
I. Recent Economic Developments	6
Favorable external demand drove China’s growth performance in early 2024.....	6
Trade activity and capital flows improved in early 2024.....	7
The property sector continues to undergo an adjustment.....	9
Demand and supply imbalances in some sectors have exerted downward pressure on prices.....	10
Carbon emissions increased moderately despite rapid scale-up of renewable energy.....	13
Announced fiscal measures will provide some support to domestic demand.....	14
Credit growth continues to moderate.....	16
The banking sector remains well capitalized, though profitability has fallen.....	17
II. Outlook, Risks, and Policy Implications	19
Outlook.....	19
Risks.....	21
Policy implications.....	21
III. Special Focus: Aging China—Implications for Growth and Inequality	24
China has become an aged society.....	24
Will population aging dampen long term growth?.....	26
Will aging exacerbate inequality?.....	32
Looking ahead – policy directions.....	37

Figures

Figure 1. Firmer external demand drove up China’s growth in early 2024.....	7
Figure 2. Trade activity and capital flows improved in early 2024.....	9
Figure 3. Home sales and prices continued to drop amid a necessary sectoral adjustment.....	10
Figure 4. Demand and supply imbalances in some sectors have exerted downward pressure on prices.....	11
Figure 5. Performance diverged within manufacturing sectors.....	12
Figure 6. Emissions driven by the power and residential sectors, while the utilization rates of renewable energy fell.....	14
Figure 7. Faster bond issuance will provide some fiscal support.....	15
Figure 8. The pace of monetary easing slowed in Q1.....	16
Figure 9. Banking sector capitalization increased despite declining profitability.....	18
Figure 10. Poverty reduction will continue, albeit slower than in previous years.....	20
Figure 11. China is an aged society, where the demographic window has closed.....	25
Figure 12. Aging impacts China’s growth trajectory through various channels.....	27
Figure 13. The working age population share has been declining for over a decade.....	27
Figure 14. In China, older cohorts save but less compared with middle-aged cohorts.....	29
Figure 15. Income, old-age dependency, and social security are significant determinants of household savings rates.....	29
Figure 16. Rising old age dependency is linked to a decline in total factor productivity, ...	30
Figure 17. ... but China has been leveraging innovation and technology to facilitate productivity growth	30
Figure 18. The share of healthcare to total expenditures rises across age cohorts.....	31
Figure 19. Fiscal subsidy to the pension schemes and medical insurance is already high in China, ...	31
Figure 20. ... significantly supporting the social security fund.....	31
Figure 21. Income inequality is higher among old households than young households.....	33
Figure 22. ...which is largely driven by location of birth and education attained.....	33

Figure 23. Lower income households are more likely to receive lower pension benefits	34
Figure 24. Over half of current workers contribute to the RURS	34
Figure 25. The burden on health spending is larger for old households than for young households.....	35
Figure 26. Enrolment in the basic medical insurance has declined in recent years	35
Figure 27. Care needs to rise rapidly with age.....	37
Figure 28. Women and less educated people are more likely to have depressive symptoms	37

Table

Table 1. China selected economic indicators, 2021-2026	19
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Box

Box 1. Emerging supply and demand imbalances in some industries	12
Box 2. Guidance on the Silver Economy from China’s Government.....	32
Box 3. Fertility policies – the international experience	38

List of Abbreviations

CCB	City Commercial Banks
CFPS	China Family Panel Survey
CHARLS	China Health and Retirement Longitudinal Study
CHN, CN	China
COVID-19, COVID	Coronavirus Disease 2019
CO ₂	Carbon Dioxide
CPI	Consumer Price Index
EAP	East Asia Pacific
ECB	The European Central Bank
EU	European Union
EV	Electric Vehicles
FAI	Fixed Asset Investment
FDI	Foreign Direct Investment
FRED	Federal Reserve Economic Data
GDP	Gross Domestic Product
GW	Gigawatt
HH	Household
IMF	International Monetary Fund
ILO	International Labor Organization
JSB	Joint-Stock Banks
LGFV	Local Government Financing Vehicle
LHS	Left Hand Side
LPR	Loan Prime Rate
LSB	Large State Banks
LUR	Land-Use Right
MLF	Medium-term Lending Facility
MOF	Ministry of Finance
m/m	Month-on-Month
NAFR	National Administration of Financial Regulation
NBS	China National Bureau of Statistics
NPL	Non-performing Loan
OADR	Old-Age Dependency Ratio
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
PWT	Penn World Table
q/q	Quarter-on-Quarter

Q1	First Quarter
Q2	Second Quarter
Q3	Third Quarter
Q4	Fourth Quarter
RCB	Rural Commercial Banks
R&D	Research and Development
RHS	Right Hand Side
RMB	Renminbi
ROA	Return on Assets
ROE	Return on Equity
RRR	Required Reserve Ratio
RURS	Rural-Urban Resident Scheme
sa	Seasonally Adjusted
SAFE	State Administration of Foreign Exchange
SOE	State-Owned Enterprise
TFP	Total Factor Productivity
UN	United Nations
US	United States
USD	US Dollar
VAT	Value-Added Tax
WBG	World Bank Group
WDI	World Development Indicators
y/y	Year-on-Year
ytd	Year-to-Date
4mma	Four-month Moving Average

Executive Summary

Economic activity picked up in China in early 2024. Real GDP growth accelerated to 5.3 percent y/y in the first quarter of 2024 buoyed by stronger exports amid firmer global demand. At the same time, domestic demand growth moderated. While growth in manufacturing and infrastructure investment, as well as consumer spending on services, remained robust, the property market correction continued, weighing on investment. In response to subdued domestic demand, the government has provided additional support to the property sector and budgeted higher fiscal spending.

GDP growth is projected at 4.8 percent in 2024, an upward revision of 0.3 percentage points from our December 2023 *China Economic Update*. The revision reflects stronger-than-expected exports and the impact of recent policy measures. Looking ahead, growth momentum is projected to taper, due to normalization of demand for services after the post-pandemic rebound, continued adjustment in the property sector, and headwinds to manufacturing investment from soft demand and deflationary pressures.

<i>China Economic Outlook</i>	2021	2022	2023e	2024f	2025f	2026f
Real GDP growth (%)	8.4	3.0	5.2	4.8	4.1	4.0
Consumer Price Index (% change, average)	0.9	2.0	0.2	0.9	1.5	2.0
Current account balance (% of GDP)	2.0	2.2	1.5	1.0	0.5	0.2
Consolidated fiscal balance (% of GDP) *	-4.0	-6.3	-5.8	-6.4	-4.4	-4.1

Source: World Bank.

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

Risks to the growth outlook are broadly balanced. On the upside, larger and more effective policy support to the property sector, alongside more active restructuring of property developer debt, could stabilize the property sector earlier than expected and boost household confidence. Higher-than-expected fiscal spending, possibly financed at the central level, could lift public investment above baseline expectations. Substantial progress on structural reforms, including of the enabling environment for the private sector, could boost short-term confidence and long-run productivity growth. Downside risks include a delay in the property sector recovery beyond 2024, persistent deflationary pressures, slower-than-expected global growth, and increased trade tensions.

Macroeconomic policies could support near-term growth if downside risks materialize, whereas deeper structural reforms are needed to address long-term economic challenges. Additional moderate monetary easing and more fiscal support could be provided, should the economy lose growth momentum. Subdued household confidence and under-execution of liquidity support

measures in the property sector underscore the need to expedite the restructuring of struggling developers. While market adjustment to supply-demand imbalances has been observed in some industrial sectors, reforms to strengthen the corporate insolvency framework could facilitate the exit of non-viable firms and the rescue of viable firms experiencing liquidity problems. Policies to accelerate the green transition could not only help China to progress toward its dual carbon targets—achieving peak carbon emissions before 2030 and carbon neutrality by 2060—but also absorb the growing supply of green technology products. A more sustained increase in household consumption requires reforms that go beyond short-term stimulus, such as improvements in social protection.

Special Focus: Aging China – Implications for Growth and Inequality

This edition's special topic section provides initial analysis of the impact of population aging on growth and inequality. Driven by China's rapid economic development and improved public health outcomes, life expectancy rose from 60.2 years in 1974 to 78.2 years in 2021. This is a major achievement. Yet, along with declining fertility, it has contributed to rapid population aging. China has now joined the ranks of aged societies, where individuals over the age of 65 years constitute 15-20 percent of the population. Over the next 20 years, the share is expected to rise to about 28.0 percent of the population, while China's total population is expected to fall to 1.35 billion by 2045.

Population aging will have an impact on China's economic growth through labor supply and productivity channels. With a declining working age population, the labor force is likely to decline. Unless labor participation increases, estimates suggest that the average labor force growth could fall from 0.3 percent in 2000-20 to the range of -1.1 to -1.4 percent in 2025-45. Preliminary empirical analysis also shows that rising old age dependency could be associated with a decline in factor productivity growth in China, as also observed in other countries based on existing studies. This underscores the need for policies to boost productivity growth including through technology and innovation.

The demographic transition may also present a challenge to common prosperity. Rapid aging could contribute to inequality in incomes, expenditure needs and, more broadly, well-being. Income inequality among households with old members is higher than among those without, driven largely by pension disparity. The expansion of pension system coverage has improved old-age income support for previously uncovered rural residents, self-employed and migrant workers. Today's pension coverage in China is among the highest in the developing world. Despite recent increases, the benefits for the above groups of people are, on average, less than 6 percent of those received by urban employees and less than 4 percent of those received by

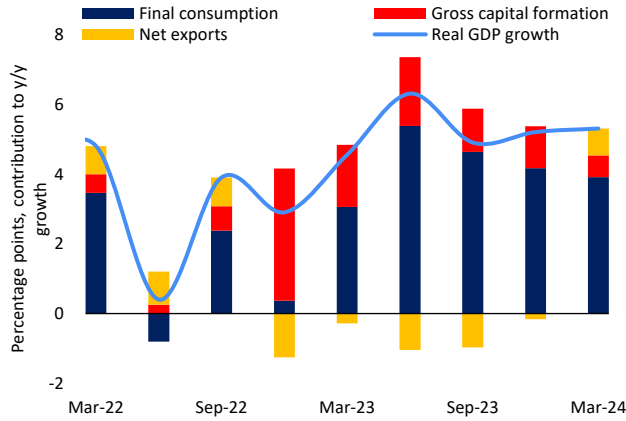
public sector workers. Household expenditures on health and aged care also increase with age. While medical insurance is near universal, low-income people remain less financially protected to face rising health costs, given differences in effective coverage across medical insurance systems. Finally, the differing lifestyle choices of young adults today will impact the health gaps of future older population. Smoking and depression are more prevalent among the less educated, potentially leading to increased costs and less healthy aging.

The good news is that demographics are not destiny. The economic challenges posed by population aging can be managed with the right policy and behavioral adjustments. Beyond efforts to increase fertility, which may have limited impact in the short term, policies such as those aimed at promoting affordable childcare and family-friendly policies to support work-life balance, reducing gender-based hiring biases, and supporting women's entrepreneurship can increase female labor force participation and thus mitigate the negative impacts of aging. Additionally, raising the retirement age and increasing human capital through skills upgrading and lifelong learning will extend productive working lives. Promoting market competition to draw in private sector participation can support innovation and the emerging silver economy. Finally, closing gaps in services – particularly healthcare, old-age pension insurance, and long-term care – and addressing early-life inequalities like educational disparities across the country will help safeguard common prosperity.

The China Economic Update at a glance

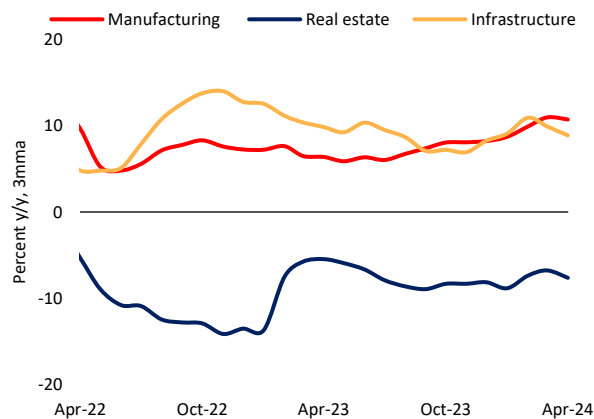
Economic activity picked up in China in early 2024, buoyed by stronger net exports

A. GDP demand components



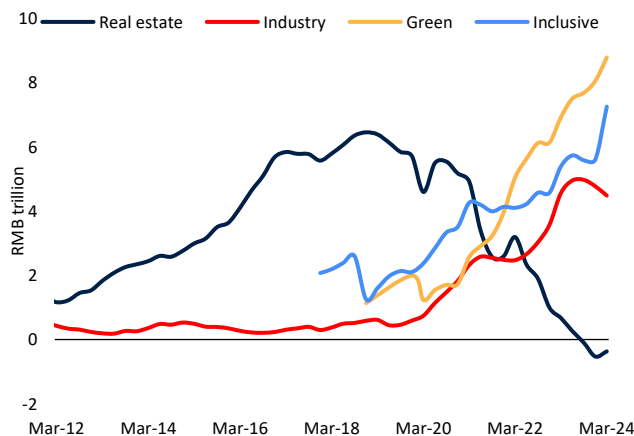
Manufacturing and infrastructure investment remain resilient, while the property sector continues to undergo an adjustment ...

C. Fixed asset investment by sector



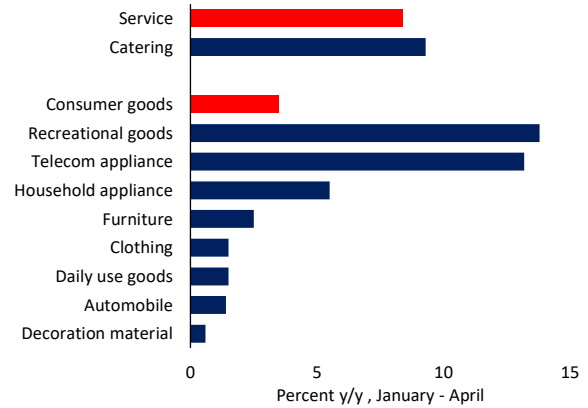
The strength in manufacturing investment is partly bolstered by credit support for prioritized sectors

E. Change in bank loan stock



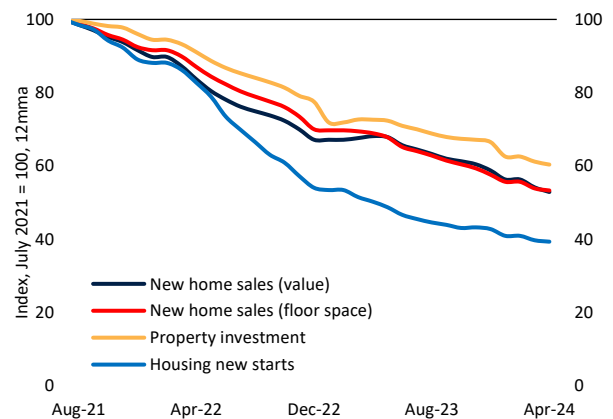
Domestically consumer spending on services remains robust while goods demand lags

B. Retail sales growth



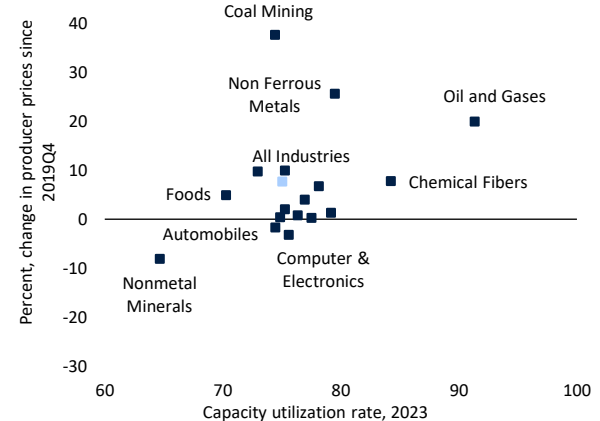
... with home price declining and sales and investment contraction deepening

D. Home sales, starts, and investment



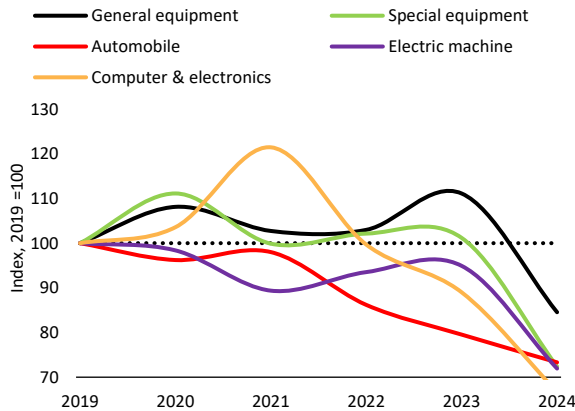
However, demand and supply imbalances in some sectors have exerted downward pressure on prices ...

F. Change in PPI and capacity utilization



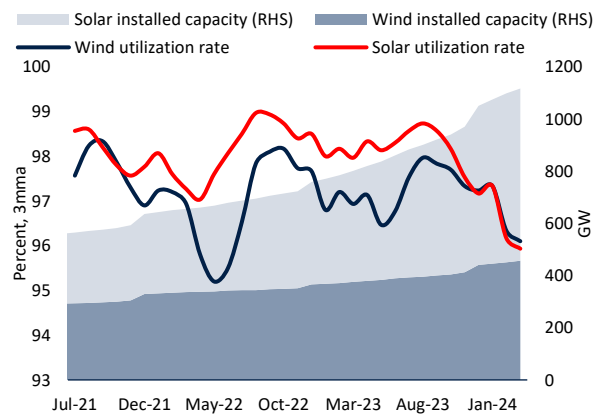
... which has eroded industrial profit margins

G. Profit margins



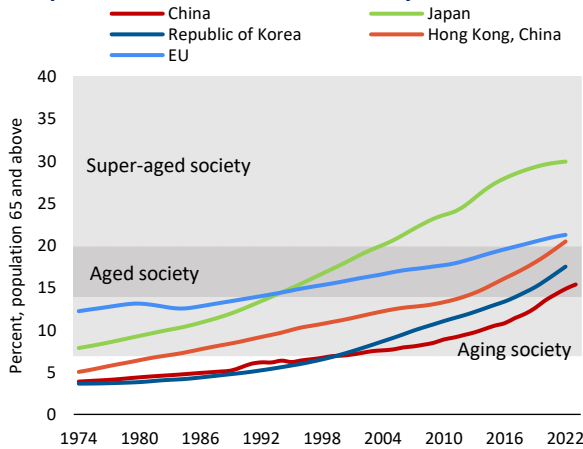
Carbon emissions increased moderately despite rapid scale-up of renewable energy

H. Utilization rate of wind and solar power



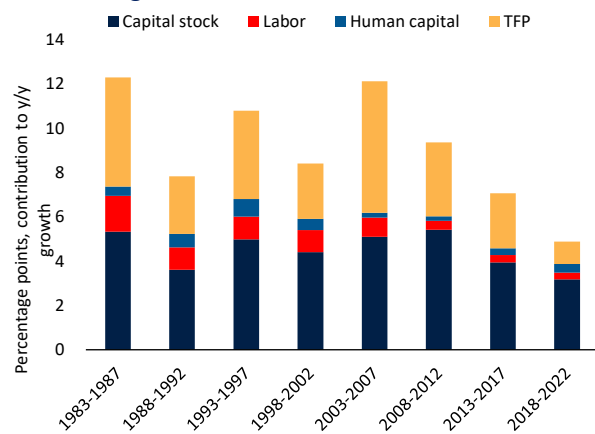
Rising longevity and declining fertility contribute to population aging in China, ...

I. Population share of individuals 65 years and above



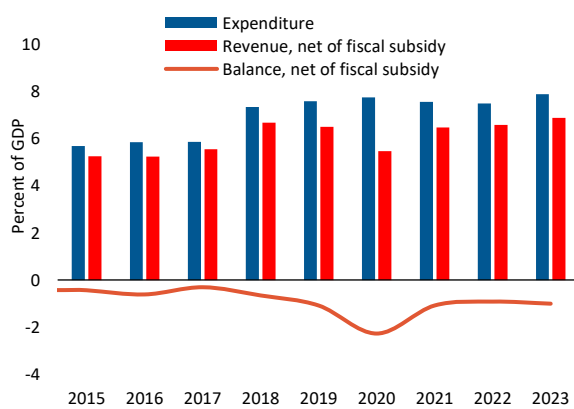
... which impacts the country's growth trajectory

J. Real GDP growth and contributions



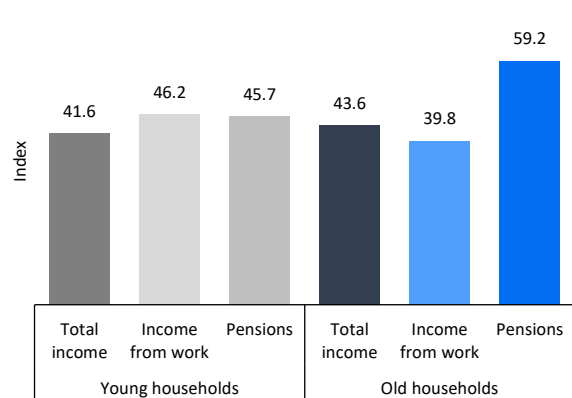
Population aging is also expected to increase spending on health and social security, ...

K. Social Security Fund balance



... and could contribute to inequality in the absence of mitigating measures

L. Gini and concentration indices



Source: NBS, PBC, National Renewable Energy Absorption Monitoring and Early Warning Centre, National Energy Administration, UN, WDI, PWT, ILO, Barro-Lee dataset website, Hanewald, Jia and Liu (2021), China Health and Nutrition Survey, World Bank staff estimates.

I. Recent Economic Developments

Favorable external demand drove China's growth performance in early 2024

Global economic activity has recently firmed, supported by an uptick in manufacturing and resilient growth in the United States. Global trade, which was largely stagnant last year—recording its worst outcome in the past 50 years outside global recessions—also showed signs of improvement. In early 2024, global goods trade increased for the first time in almost a year and leading indicators point to further near-term strengthening. Both the manufacturing and services components of the global new export orders PMIs have shown improvements in recent months (Figure 1A).

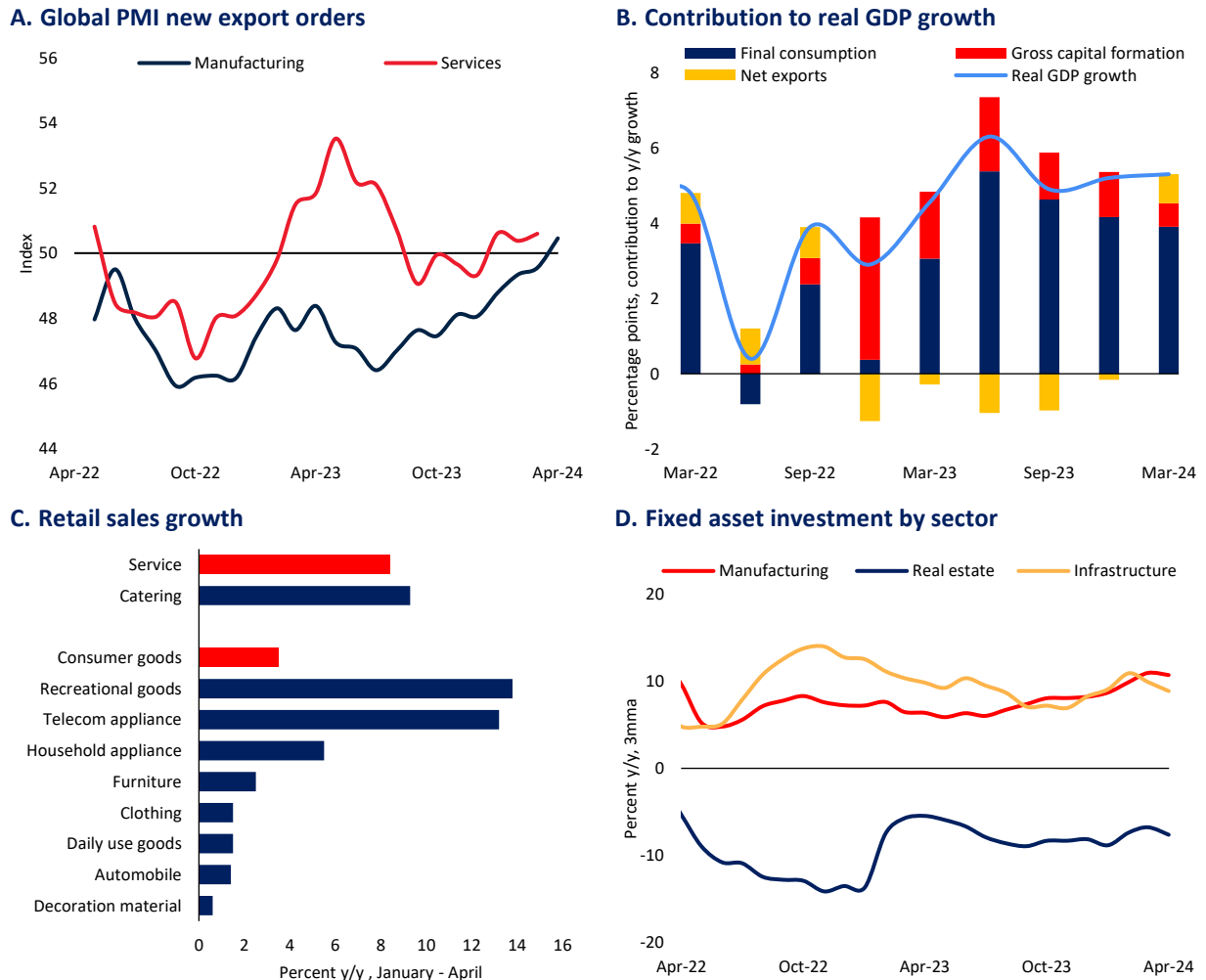
Against the backdrop of firmer external demand, economic growth in China picked up in the first quarter, buoyed by strong net exports despite softer domestic demand. On a seasonally adjusted annualized basis, growth accelerated to 6.6 percent in the first quarter of 2024, from 4.9 percent in the fourth quarter last year. In year-on-year terms, GDP growth rose to 5.3 percent from 5.2 percent during the same period. Firmer external demand drove growth in the first quarter, with net exports expanding 12.7 percent y/y and contributing 0.8 percentage points to overall growth (Figure 1B). At the same time, domestic demand growth moderated from the post-pandemic rebound, and performance remains uneven across sectors.

Domestically, consumer spending on services remained robust, while growth in demand for goods stayed below the pre-pandemic trend. Goods retail sales expanded by 3.5 percent in the first four months of 2024, lower than the 7.9 percent growth in 2019, with the deceleration largely attributed to subdued sales in durable goods (Figure 1C). The reluctance of consumers to make significant big-ticket purchases partly reflects their weak confidence, which is yet to recover due to the negative wealth effect from the property sector correction and uncertainty in income prospects. While surveyed unemployment declined to 5.0 percent in April from 5.2 percent in January, nominal household income increased by 6.8 percent y/y in the first quarter, still below the 8.0 percent average of the pre-pandemic years.

Capital spending in manufacturing and infrastructure remained resilient, even as real estate investment contracted. Manufacturing investment was lifted by policy measures on equipment upgrades and other support to priority sectors, while infrastructure investment benefited from the remaining balance of RMB 500 billion in disaster recovery and resilience stimulus announced last year. Real estate investment declined by 7.9 percent y/y in the first quarter of the year. In contrast, manufacturing and infrastructure investments remained resilient, increasing by 9.9 and 8.8 percent y/y, respectively, during the same period (Figure 1D).

Domestic demand has shown signs of moderation since April. Retail sales increased by 2.3 percent y/y in April, moderating from 4.7 percent in the first quarter. Meanwhile, fixed asset investment growth slowed to 3.6 percent in April from 4.5 percent in the first quarter, with the real estate contraction deepening and infrastructure investment moderating.

Figure 1. Firmer external demand drove up China’s growth in early 2024



Source: FRED, ECB, NBS, World Bank staff estimates.

Note: Figure D. The infrastructure sector includes transport, storage and postal service, water conservancy, environment and utility management, and electricity, gas and water production and supply.

Trade activity and capital flows improved in early 2024

Merchandise exports have gained some momentum, benefiting from near-term strength in external demand, especially from emerging markets. After a 4.7 percent contraction in goods exports in 2023, exports grew by 1.5 percent y/y in the first four months of this year, propelled

by stronger demand from developed markets and Asian economies. Export volumes have rebounded, in part due to declining export prices and real effective exchange rate depreciation (Figure 2A). By product, the uptick in exports was broad-based, with low-tech consumer goods, medium-tech machinery, and high-tech IT products all experiencing higher growth. While exports of green-tech products continue to outperform, they represent a small fraction of total exports and thus contribute modestly to overall export growth.

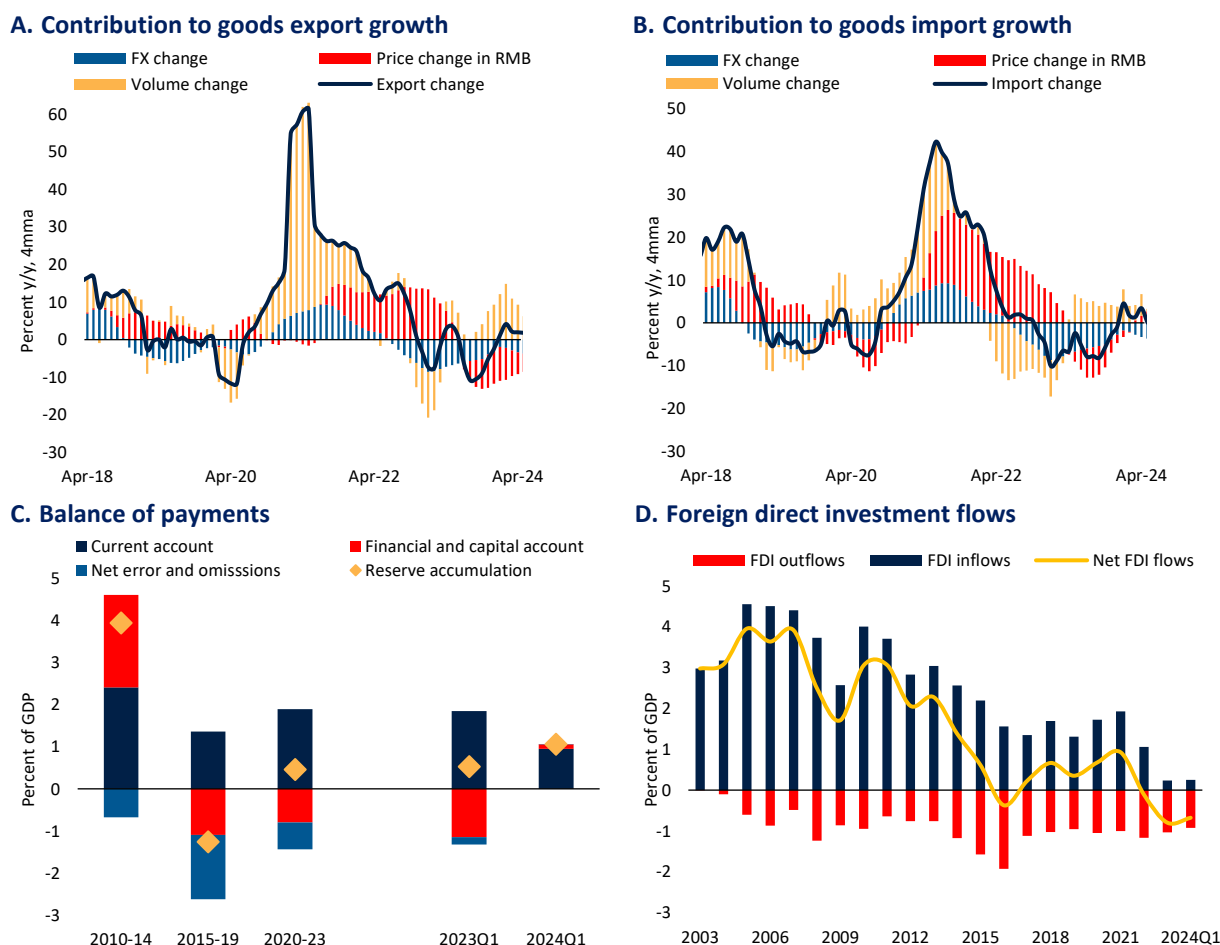
Robust export demand and higher global energy prices lifted imports in early 2024. Goods imports expanded by 3.2 percent y/y in the first four months of the year, after a contraction of 5.5 percent in 2023. Higher global energy prices have contributed to the increase, while goods import volumes rose by an average of 3.6 percent y/y in the first quarter of 2024 (Figure 2B). Solid industrial activity and stronger exports underpinned import demand, while the domestic property sector continues to weigh on imports.

Trade in services improved due to a recovery in inbound and outbound tourism. Services exports increased by 6.4 percent y/y in the first quarter of 2024, as inbound tourism started to recover and transport services stabilized in line with higher goods exports and rising shipping costs. Concurrently, services imports saw an increase of 14.5 percent y/y, driven by the recovery in outbound tourism.¹ This helped narrow the current account surplus to 0.9 percent of GDP in the first quarter of 2024, compared with 1.8 percent of GDP in the same period last year, signaling a continued return to pre-pandemic levels (Figure 2C).

Capital inflows resumed in the first quarter of 2024, alleviating exchange rate depreciation pressures. After experiencing two years of net capital outflows, due to differences in economic conditions and interest rates between China and other major economies, and a general retreat of capital from emerging markets, China's financial and capital account shifted to a modest surplus in the first quarter of 2024. Foreign direct investment (FDI) inflows remained subdued (Figure 2D), with foreign firms cautious in the face of economic uncertainty and geopolitical risks. Conversely, China's outbound direct investments demonstrated resilience. Portfolio outflows, which were significant in 2023 amid wide interest rate differentials with major economies, eased in the first quarter of 2024. Accordingly, the Renminbi depreciated by 1.8 percent against the US dollar in the first four months of 2024.

¹ However, the post-pandemic tourism recovery has been gradual, and tourism spending has not yet returned to pre-pandemic levels.

Figure 2. Trade activity and capital flows improved in early 2024



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

Note: Figure D shows the annual data from 2003 to 2023 and the quarterly data for 2024.

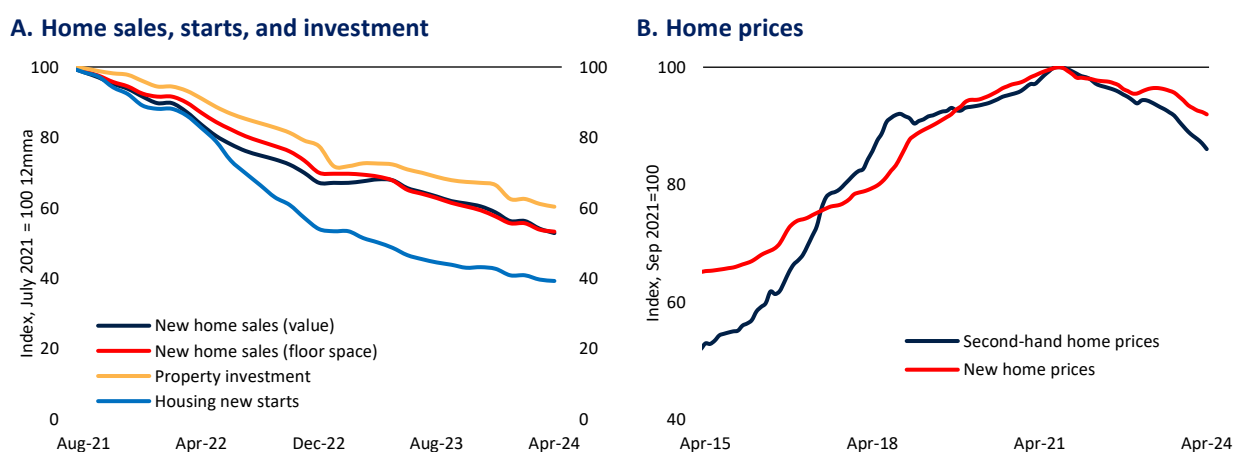
The property sector continues to undergo an adjustment

Weak housing demand and high debt of property developers continue to dampen activity in the property sector. The difficulty in stabilizing the market underscores the challenge of propping up housing demand due to household concerns about timely housing delivery and uncertain income prospects. Weak demand has contributed to a decline of new home sales by 47.2 percent in value and 46.8 percent in volume terms by April 2024, compared to their peak levels in July 2021 (Figure 3A). New home prices for 70 cities had decreased by 8.0 percent from their peak levels by April 2024, while second-hand home prices, which better reflect market conditions, contracted by a steeper 14.0 percent (Figure 3B). Real estate investment continues to contract, as many property developers are constrained by high debt. On the supply side, the continued weakness in housing sales prompted further pull back from new projects, resulting in 24.6

percent y/y decline on housing starts in January-April 2024. Housing completion slowed, falling by 20.4 percent y/y in January-April 2024.

The government has unveiled new measures to support the ailing property sector. Recently, the authorities have announced new demand-side easing measures, including lowering the minimum down payment ratios and interest rates on housing provident fund loans and eliminating the residential mortgage rate floor.² They also adopted measures to reduce housing inventories and provide liquidity to developers, including an RMB 300 billion (US\$42 billion) relending facility for local SOEs to purchase completed but unsold properties and a buyback of unused residential land. The size of the new facility accounts for about 13.3 percent of the inventories of completed homes.³

Figure 3. Home sales and prices continued to drop amid a necessary sectoral adjustment



Source: NBS, PBC, World Bank staff estimates.

Demand and supply imbalances in some sectors have exerted downward pressure on prices

Deflationary pressure in producer prices has persisted into early 2024, reflecting imbalances between demand and supply in some industrial sectors. Producer prices fell by 2.6 percent y/y during the first four months of 2024, following a 3.0 percent drop in 2023 (Figure 4A). Aside from volatile commodity prices, the decline in producer prices has been partly driven by industries with imbalances between supply and demand, as evidenced by their lower industrial capacity utilization rates (Box 1). These industries include non-metal minerals, ferrous metals, and electric appliance manufacturing, all of which are connected to the sluggish property sector (Figure 4B).

² The minimum downpayment ratio has been reduced to 15 percent for first homebuyers, and to 25 percent for second home purchases.

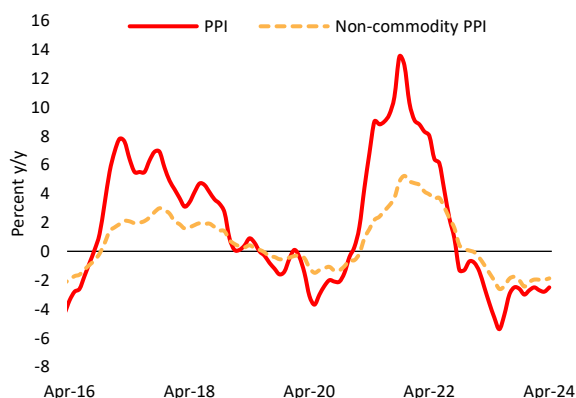
³ World Bank staff estimates.

In addition, lower factory-gate prices for electronics that have been experiencing post-pandemic normalization in demand and automobiles that have faced intense domestic price competition also contributed to deflationary pressure.

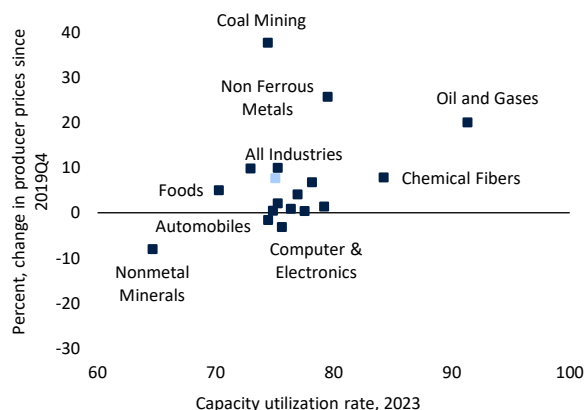
Lower food prices and subdued consumer demand for goods contributed to very low consumer inflation during the first four months of 2024. Headline CPI inflation stagnated at 0.1 percent y/y in January-April 2024, compared to a modest inflation of 0.2 percent in 2023. Although recent fluctuations in headline inflation were primarily attributed to volatile food and energy prices, core inflation, lingering at around 0.7 percent y/y, has consistently stayed below the pre-pandemic average of 1.5 percent (Figure 4C). The domestic automobile sector faced price pressure from intense competition for customers (Figure 4D). In services, flat rental prices were offset by stronger travel-related services inflation.

Figure 4. Demand and supply imbalances in some sectors have exerted downward pressure on prices

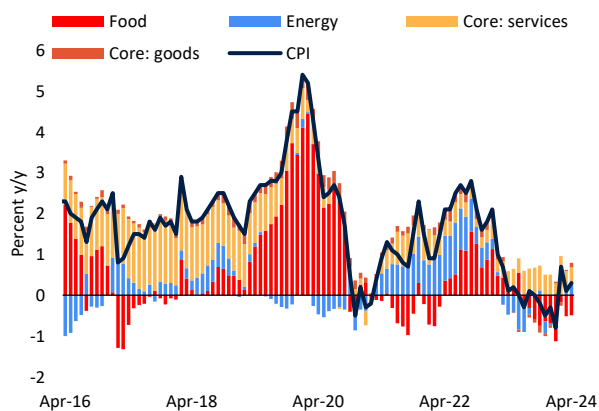
A. Producer price index



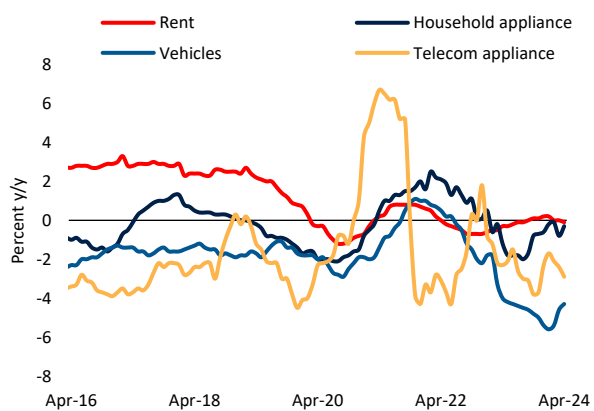
B. Change in PPI and capacity utilization



C. Consumer price index



D. Consumer price index in selected sectors



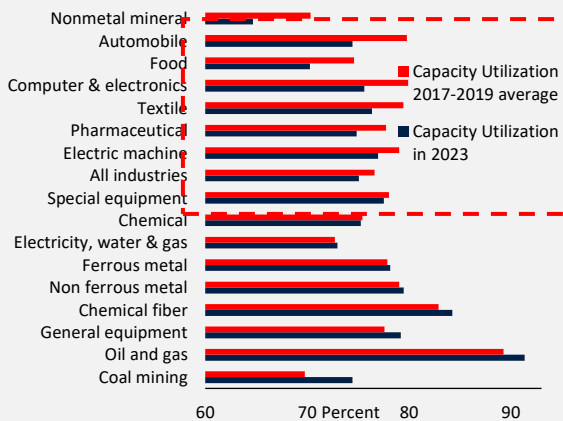
Source: NBS, World Bank staff estimates.

Box 1. Emerging supply and demand imbalances in some industries

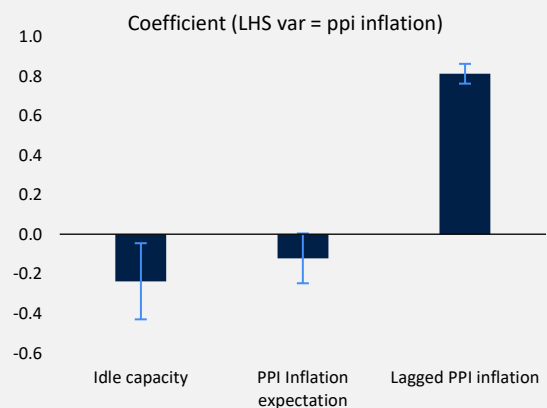
The decline in China’s industrial capacity utilization rates mainly reflects imbalances between demand and supply in a few specific sectors. The industrial capacity utilization rate has decreased to an average of 74.9 percent over the past four quarters, falling below the pre-pandemic average of 76.7 percent from 2017 to 2019. This decline has been concentrated in a few sectors, particularly those linked to the property sector (Figure 5A). These include non-metal minerals such as cement and glass, ferrous metals (steel), and electrical machinery (household appliances) in which supply capacity resulting from years of high property investment now exceeds diminished demand. Meanwhile, rapid production capacity expansion during the pandemic, along with the post-pandemic global demand normalization, has led to reduced capacity utilization in the electronics sector. This could partly reverse this year with the improvement in global trade. A structural shift in demand toward electric vehicles could be contributing to the decline in capacity utilization in the internal combustion engine (ICE) automobile sector. In 2023, the number of ICE passenger car sales in China stagnated at 0.1 percent growth, while the growth of EV sales jumped to 38.2 percent y/y.

Figure 5. Performance diverged within manufacturing sectors

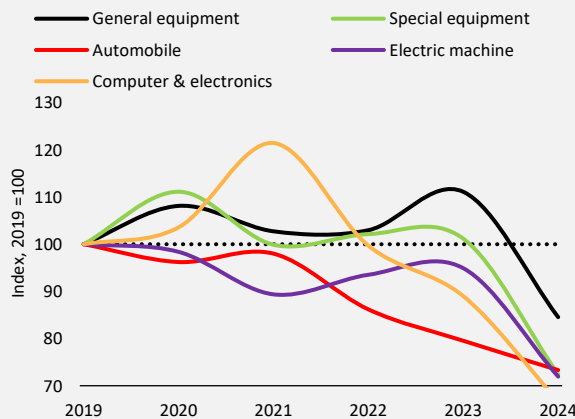
A. Capacity utilization rate by sector



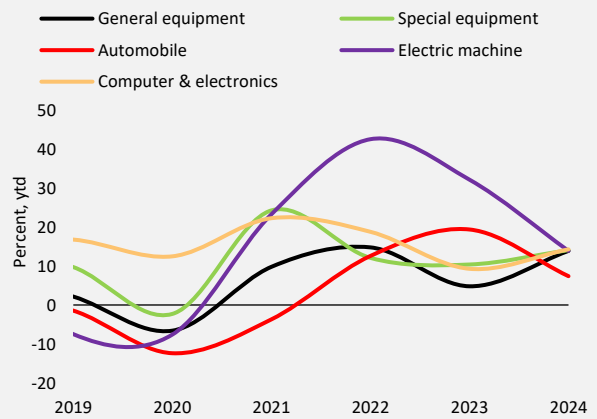
B. Capacity utilization and deflation



C. Profit margins in key manufacturing sectors



D. Fixed asset investment by key sectors



Source: NBS, World Bank staff estimates.

Note: Figure B: Idle capacity = 100-capacity utilization rate; PPI inflation expectation = 10-year average of PPI inflation before the pandemic. The regression analysis explores the relationship between China's PPI inflation (dependent variable) and idle capacity utilization, inflation expectation and lagged PPI inflation (independent variables), controlling for year and industry fixed effects, with standard errors clustered at industry level, using quarterly data from 2016Q1 to 2024Q1.

Lower capacity utilization rates in these sectors have contributed to producer price deflation, which has eroded industrial profit margins. Idle capacity, measured by the gap between the capacity utilization rate and full capacity utilization, is associated with lower producer prices (Figure 5B). Lower PPI inflation expectations, coupled with the persistence of inflation over time, have also contributed to weak PPI inflation in China. These negative price pressures have eroded profit margins in the sectors with lower capacity utilization rates (Figure 5C).

Investment growth in these sectors could slow, as firms hold back on expanding or upgrading facilities until demand catches up with supply. Automobile and electrical machinery manufacturing are already witnessing investment retrenchment, suggesting ongoing market adjustment to demand changes (Figure 5D). The other sectors with declining profits could experience a similar decline in investment in the coming quarters.

Carbon emissions increased moderately despite rapid scale-up of renewable energy

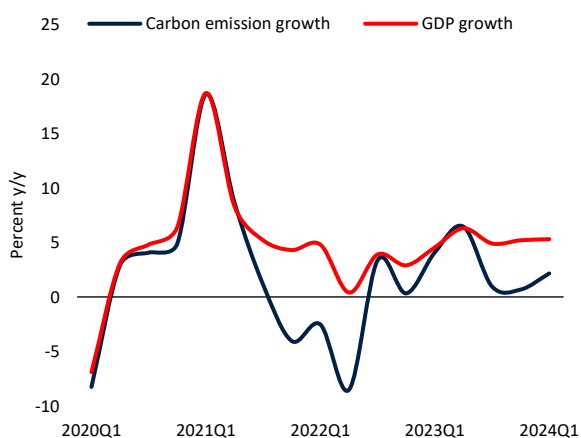
Carbon emissions increased at a rate below the rate of GDP growth for the third consecutive quarter, reflecting subdued growth of transport and property-related industrial emissions. China's carbon dioxide (CO₂) emissions are estimated to have risen by 2.2 percent y/y in the first quarter of 2024, slower than GDP growth, signaling continued relative decoupling of economic growth from emissions (Figure 6A). The power sector and residential emissions continue to drive emission growth, while transport emissions remained stable and industrial emissions contracted (Figure 6B). Lower transport emissions likely reflect increasing electrification in the sector, as evidenced by the 34.5 percent surge in the number of electric vehicles (EVs) sold in domestic market in the first quarter. The reduction in industrial emissions was attributed to the diminished output from the steel and cement industries, the two highest industrial emitters, amid the deepening property sector slowdown.

Power generation from fossil fuels continued to grow to meet rising electricity demand, despite rapid scale-up of renewable capacity. Total electricity generation grew by 8.8 percent y/y in the first quarter, with thermal sources contributing the most (Figure 6C). Although solar and wind electricity generation grew to meet more than 40 percent of the additional electricity demand in the first quarter, utilization rates—the ratio of consumption by end-users to generation—declined (Figure 6D). Even though China increased investment in the power grid by 14.7 percent y/y and in electricity storage capacity by 210 percent y/y in the first quarter of 2024, the reduction

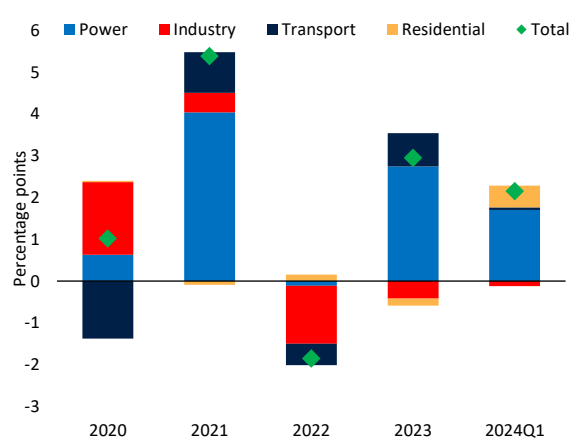
in solar and wind utilization rates could signal possible constraints to the integration of rapidly growing renewable energy in the power grid in recent quarters.

Figure 6. Emissions driven by the power and residential sectors, while the utilization rates of renewable energy fell

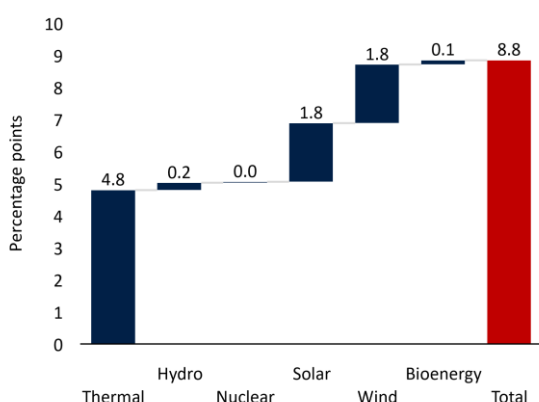
A. Carbon emissions growth and GDP growth



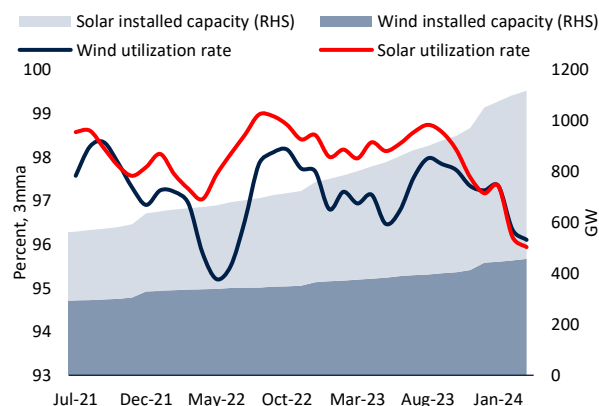
B. Contribution to carbon growth by sector



C. Electricity generation growth in the first quarter



D. Utilization rate of wind and solar power



Source: Carbon monitor, Ember, National Renewable Energy Absorption Monitoring and Early Warning Centre, National Energy Administration, World Bank staff estimates.

Announced fiscal measures will provide some support to domestic demand

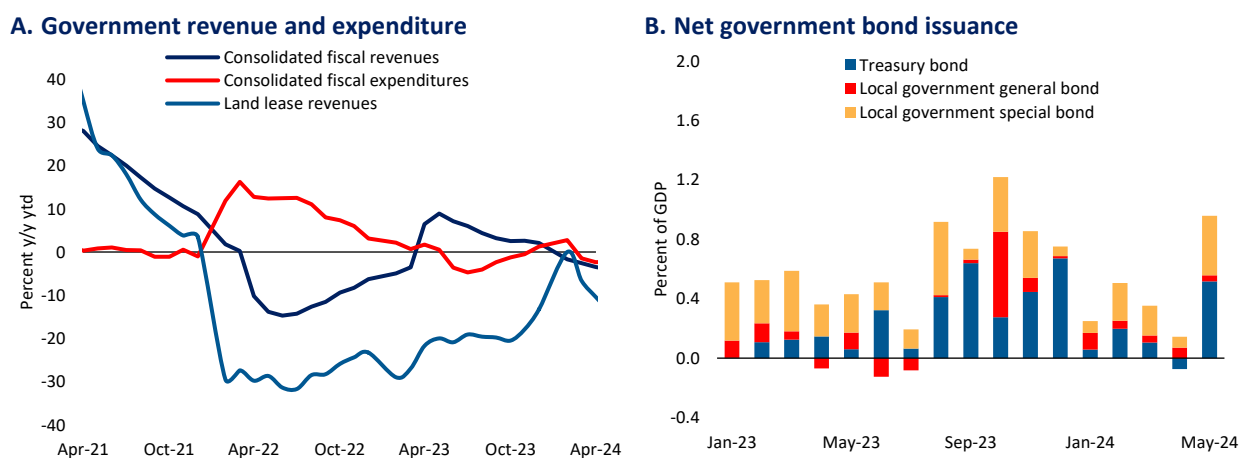
Subdued domestic demand and property sector woes weighed on fiscal revenues in the first four months of 2024, constraining spending. China’s consolidated fiscal revenue fell by 3.4 percent y/y in the January-April (Figure 7A). A drop in tax receipts was mainly driven by declines in domestic VAT, reflecting soft domestic demand, particularly for big-ticket items. Meanwhile, the persistent downturn in the property sector led to a 10.4 percent y/y decrease in land lease revenues. On the spending side, the consolidated fiscal expenditures declined by 2.3 percent y/y. This was mainly due to weak local government spending, reflecting normalization in health

spending from the high level during the COVID-19 exit wave early last year and local financial constraints in some cases. Meanwhile, the government spending on trade-in program and equipment upgrades, including RMB 11.2 billion (US\$ 1.6 billion) allocated for car trade-ins, will provide some support for domestic demand. Overall, the consolidated fiscal deficit stood at 1.4 percent of GDP at the end of April, only marginally larger from the same period last year. This could indicate a risk of budget under-execution.

The issuance of a new special Treasury bond will help support local government expenditures.

The pace of government bond issuance was slow during the first four months of this year (Figure 7B). Increased scrutiny of local debt could have contributed to delayed approvals of local projects eligible for bond funding. Central agencies issued revised guidance on funding for submitted local government projects in mid-April.⁴ The issuance of special ultra-long Treasury bonds worth a total of RMB 1 trillion (US\$ 141 billion) started in May. The transfer of some of these funds to local governments is expected to alleviate some of the financing constraints for the rest of the year.

Figure 7. Faster bond issuance will provide some fiscal support



Source: MOF, NBS, Wind, World Bank staff estimates.

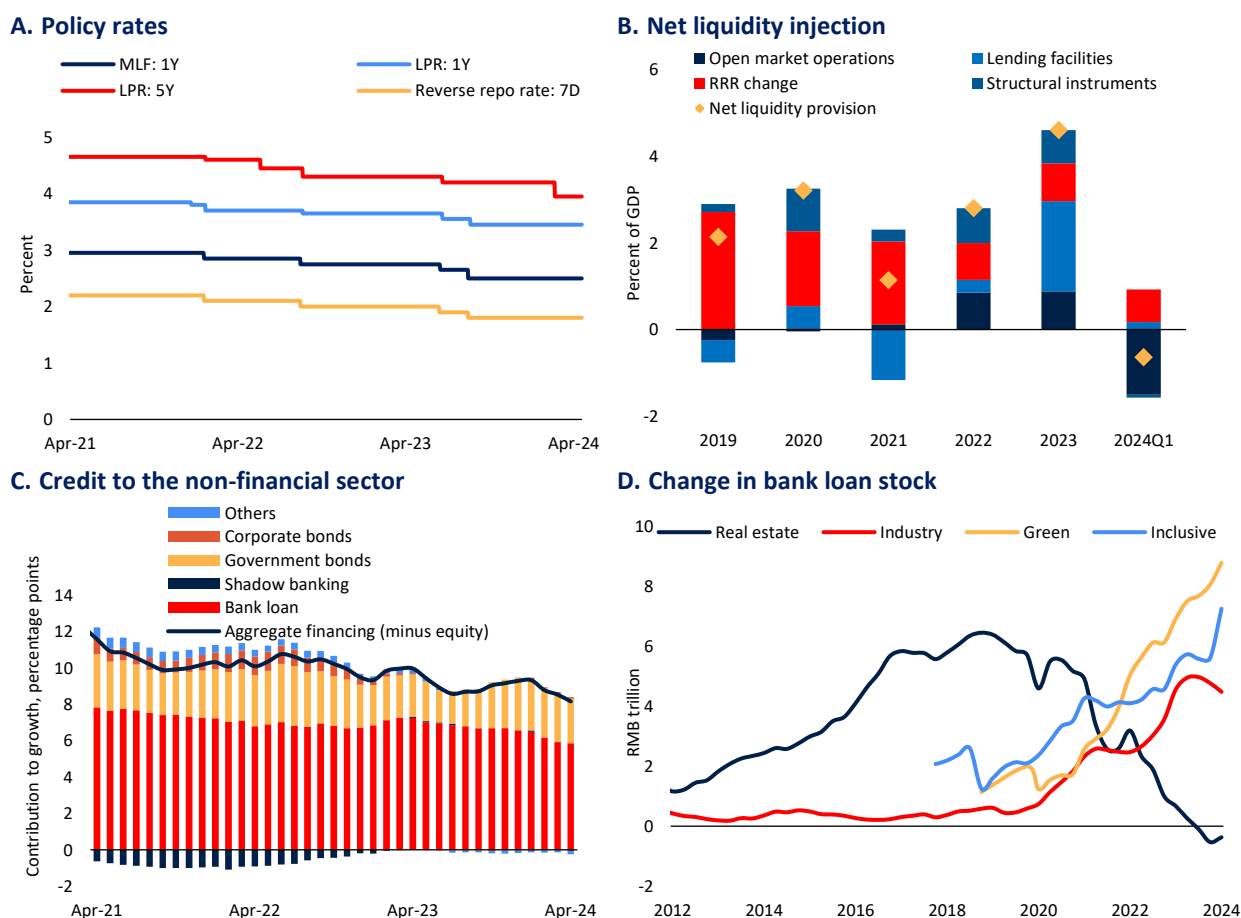
Note: China's budget system consists of (i) the General Public Budget which includes tax and non-tax revenues, current expenditures, and a portion of capital expenditures; (ii) the Government Fund Budget which reflects mainly land-lease revenues of local governments and expenditures for specific infrastructure 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 The State Council Information Office Press Conference on Macroeconomics Situation and Policies, April 18th, 2024. Available at: https://www.gov.cn/lianbo/fabu/202404/content_6946244.htm.

Credit growth continues to moderate

Monetary policy has been eased, although the size of the response has been constrained by a risk of exchange rate depreciation and capital outflows. Following last year’s rate cuts, the 5-year loan prime rate (LPR) – the benchmark rate for mortgages – was lowered by another 25 basis points (bps) in February (Figure 8A). The People’s Bank of China (PBC) lowered banks’ costs of holding reserves at the central bank by reducing the required reserve ratio (RRR) in February, but it withdrew RMB 0.8 trillion (0.6 percent of GDP) of liquidity from the banking system in net terms mainly through open market operations in the first quarter (more than offsetting the liquidity effect of the RRR cut) (Figure 8B). These actions reflect the PBC’s efforts to balance between providing policy support to the economy with mitigating risks of exchange rate depreciation and capital outflows, given wide interest rate differentials with other major economies.

Figure 8. The pace of monetary easing slowed in Q1



Source: NBS, PBC, National Interbank Funding Center, World Bank staff estimates.

Note: Figure D: Green loans support environmental initiatives and address climate change by financing projects in energy conservation, clean production, clean energy, ecological protection, green infrastructure upgrades, and

related services. Inclusive loans refer to loans to small and micro enterprises with a single credit limit of up to RMB 10 million.

Credit growth has continued to slow, with the PBC increasingly resorting to structural tools to support prioritized sectors. China's non-financial sector credit growth slowed to 8.2 percent y/y in April, primarily due to slower government bond issuance in early 2024 but also to a high base last year when credit was substantially front-loaded (Figure 8C). To support credit growth, the PBC has provided funds at low interest rates to priority sectors through structural lending facilities. This has contributed to a surge in green loans and "inclusive" loans to micro and small enterprises, with the combined outstanding amount tripling from 2019 to RMB 67.2 trillion in the first quarter of 2024, while bank loans to the property sector decreased (Figure 8D). More recently, a new relending facility with a quota of RMB 500 billion has been implemented to facilitate equipment upgrades in the manufacturing sector. Regarding the property sector, the PBC has provided targeted financing to China's policy banks and other low-cost credit support initiatives.⁵ However, fiscal pressures at the local level and risk aversion among banks may have affected the effectiveness of these policy measures.

The banking sector remains well capitalized, though profitability has fallen

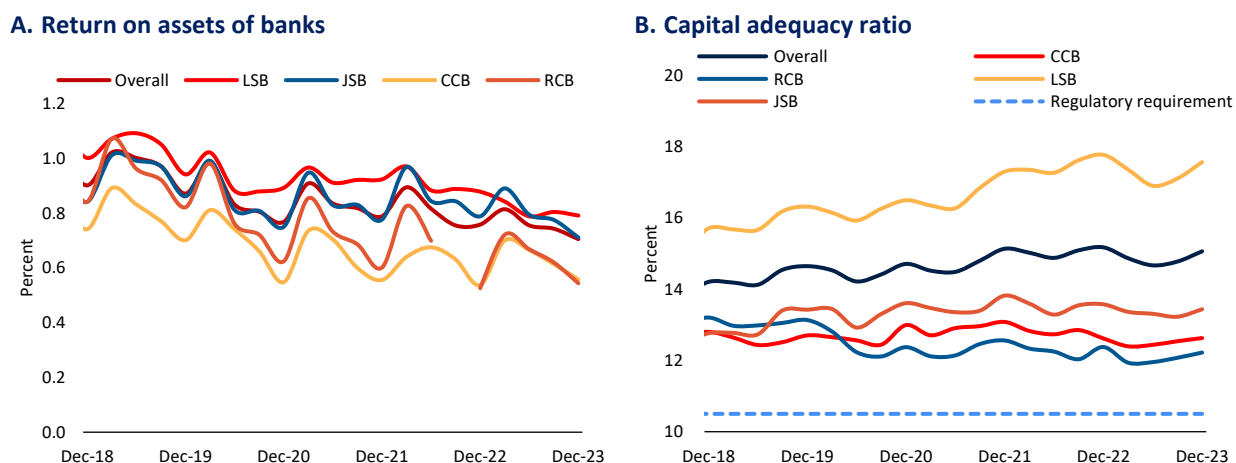
Aggregate net profit of the banking system grew at a somewhat slower pace, but adequate capitalization levels have been maintained. Lower retained earnings were offset by equity and rights offerings to replenish capital. Banks' return on assets (ROA) declined by 6 bps in 2023, driven by an ROA decline in large state banks and joint-stock banks (Figure 9A). On the asset side, a few factors contributed to the decline of banks' net income: reductions in the benchmark LPR, lower interest rates on existing mortgages, a decrease in long-term bond yields, and market competition for assets. On the liability side, depositors shifted to fixed-term deposits which commanded higher interest rates. Estimates based on data for publicly listed commercial banks show that fixed-term deposits grew at an annual rate of around 20 percent over the past two years in some banks. Despite banks lowering deposit rates in 2023, the reduction was insufficient to halt the decline in net interest margins from an average of 1.9 percent at the end of 2022 to 1.7 percent at the end of 2023. The sector's capital adequacy ratio improved by 20 bps, reaching 15.1 percent in 2023 (Figure 9B). This improvement was supported by equity and rights offerings and bond issuance.

While asset quality of commercial banks continues to face pressure from exposure to the property sector, reported system-wide NPLs remain manageable. The outstanding non-performing loans (NPL) of commercial banks grew by 8.1 percent y/y in 2023, reaching RMB 3.2

⁵ Measures include a RMB 200 billion credit support quota to guarantee home deliveries and a RMB 100 billion quota to purchase existing housing inventory for rental purposes, etc.

trillion which translates to an NPL ratio of 1.6 percent, broadly unchanged from 2022. The sector-wide loan loss provision ratio remained high at 205.1 percent of NPL. Asset quality varies across banks, with some city and rural commercial banks more exposed to asset quality risks due to their geographically concentrated loan portfolios and lower risk management capacity. The NPL ratio of rural commercial banks remained relatively elevated at 3.3 percent at the end of 2023, while the loan loss provision ratio decreased by 8.9 percentage points to 134.4 percent, still above the regulatory requirement. Estimates based on data for publicly listed commercial banks indicate that the property sector NPL ratio of banks increased to 3.8 percent at the end of 2023, while the mortgage NPLs remained around 0.6 percent⁶. Due to the prolonged contraction in the property sector, banks' property sector NPLs continued to increase. As of the end of the first quarter of 2024, the outstanding loans of property developers amounted to RMB 13.8 trillion (5.6 percent of total loans) and mortgage loans amounted to RMB 38.2 trillion (15.5 percent of total loans). The NPL ratio of total property (developer loans and mortgages) exposures is estimated to be 0.3 percent of total loans outstanding.

Figure 9. Banking sector capitalization increased despite declining profitability



Source: NAFR, World Bank staff estimates.

Note: LSB – large state banks, JSB – joint-stock banks, CCB – city commercial banks, RCB – rural commercial banks.

⁶ Measured as a ratio of NPLs for the segment against total loans for the segment.

II. Outlook, Risks, and Policy Implications

Outlook

The outlook for global growth this year remains tepid, and a modest pick-up is expected next year. Global growth is set to remain below the pre-pandemic average amid the effects of tight monetary policy and elevated geopolitical uncertainty (World Bank 2024a). Global trade growth is projected to pick up this year, supported by expanding goods trade, but is also anticipated to remain below the pre-pandemic average. Interest rates are expected to remain elevated for some time, as inflation returns to target only gradually. Assuming no escalation of ongoing conflicts, overall commodity prices are forecast to decline only slightly in 2024 and 2025, and to remain well above pre-pandemic levels (World Bank 2024b).

GDP growth is projected at 4.8 percent in 2024, an upward revision of 0.3 percentage points from our December 2023 *China Economic Update* (Table 1). The revision reflects stronger-than-expected exports and the impact of policy measures such as additional support the property sector and higher fiscal spending. Consumer price inflation is projected to rise to 0.9 percent in 2024, as the drag from falling food prices fades. However, inflation will likely remain below the policy target of 3 percent, given that demand is yet to catch up with the rapid expansion of supply.

Table 1. China selected economic indicators, 2021-2026

<i>Annual percent change unless indicated otherwise</i>	2021	2022	2023	2024	2025	2026
Real GDP growth, at constant market prices	8.4	3.0	5.2	4.8	4.1	4.0
Private Consumption	11.7	0.5	10.1	6.5	5.6	5.4
Government Consumption	3.3	4.8	2.9	3.4	2.9	2.8
Gross Fixed Capital Formation	3.1	3.3	3.7	3.9	3.7	3.6
Exports, Goods and Services	18.4	-2.3	-0.1	3.1	2.0	2.0
Imports, Goods and Services	10.3	-6.0	3.6	2.9	2.7	2.7
Real GDP growth, at constant factor prices	8.4	3.0	5.3	4.8	4.1	4.0
Agriculture	7.1	4.2	4.1	3.0	3.0	3.0
Industry	8.7	2.6	4.7	4.9	3.5	3.2
Services	8.5	3.0	5.8	4.9	4.7	4.6
Inflation (Consumer price index)	0.9	2.0	0.2	0.9	1.5	2.0
Current account balance (% of GDP)	2.0	2.2	1.5	1.0	0.5	0.2
Net foreign direct investment, Inflow (% of GDP)	0.9	0.2	-0.9	-0.6	-0.3	0.1
Consolidated fiscal balance (% of GDP)*	-4.0	-6.3	-5.8	-6.4	-4.4	-4.1
Government debt (% of GDP)	46.9	50.4	54.2	57.4	58.6	55.5
Primary balance (% of GDP)	-3.0	-5.2	-4.7	-5.4	-3.4	-3.2

Source: World Bank.

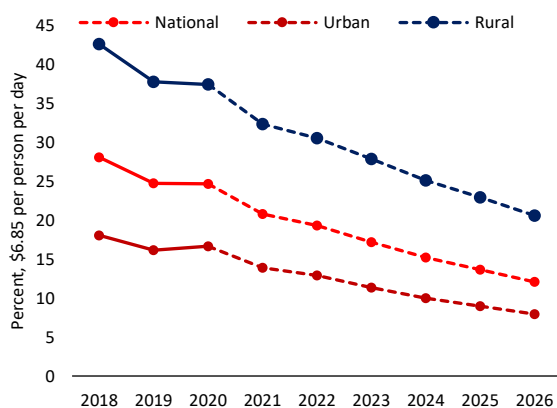
Note: f = forecast (baseline). * World Bank staff estimates.

Despite the uptick in early 2024, growth momentum is projected to taper. The pent-up demand for services is expected to normalize, while goods consumption could remain subdued. However, this trend is likely to be mitigated by the government's trade-in policy aimed at boosting the consumption of durable goods. While recent fiscal measures will provide some support to domestic demand, the adjustment in the property sector continues. Soft demand and deflationary pressures are anticipated to slow corporate revenue and profit growth, weighing on manufacturing investment in some sectors. On the external side, exports are poised to improve on the back of a recovery of global trade and strong demand for green technology.

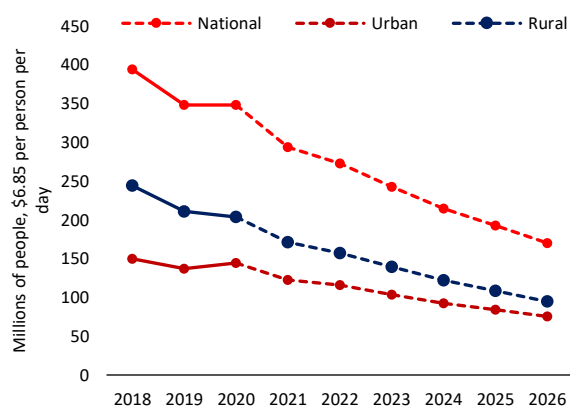
Over the medium term, slowing productivity growth, high debt levels, and an aging population are expected to weigh on GDP growth. GDP growth is projected to moderate to an average of 4.1 percent in 2025-26. Contributing to this deceleration are slower productivity gains, reduced efficiency of investment, and increasing public and private debt (non-financial sector debt reached 309 percent of GDP in March 2024). With a rising old-age dependency ratio and a low and declining fertility rate, demographic headwinds are set to intensify, further diminishing potential growth (See Special Focus for details).

Figure 10. Poverty reduction will continue, albeit slower than in previous years

A. Poverty rate (\$6.85 per person per day)



B. Number of poor (\$6.85 per person per day)



Source: World Bank staff estimates using tabulated data from NBS and World Bank's GDP growth projections.

Note: 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.

The pace of poverty reduction, evaluated at the World Bank's upper middle income poverty line of US\$6.85/day per person (2017 PPP), rose in 2023 but is expected to moderate. 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 US\$ 6.85/day per person, a higher

living standard benchmark used as a reference by the World Bank to compare progress across countries (Figure 10A). Based on this higher benchmark, 30 million people were lifted out of poverty in 2023, compared with 21 million in 2022 (Figure 10B). The pace of poverty reduction at this line is expected to slightly decelerate to 28 million in 2024, due largely to the slower economic growth projected for these years.

Risks

Risks to China's growth outlook are broadly balanced. On the upside, increased magnitude and effective implementation of existing measures, along with decisive policy action to restructure the property sector, could help boost household confidence and stabilize the property sector earlier than expected. Higher-than-expected fiscal spending, possibly financed at the central level, has the potential to lift public investment above baseline expectations. Further substantial progress in structural reforms, particularly for the private sector, would boost investor sentiment, productivity growth and China's growth potential (see below). On the downside, a further delay in the property sector recovery beyond 2024 could weigh on investment and place considerable financial strain on developers, their creditors, and suppliers. Financial stress in the property sector could spill over into the broader financial sector. This would also further squeeze local government revenue, dampening public investment. The negative household wealth effect from a longer-than-expected housing price decline, combined with a worse-than-expected labor market, could lead to a more persistent weakness in confidence and spending.

While recovering exports have provided near-term support, the economy remains vulnerable to slower global growth, tighter-for-longer financial conditions, and increased trade tensions. Monetary easing in advanced economies could be further delayed if progress toward returning inflation to targets slows. This could lead to slower-than-expected global growth and weigh on the demand for China's exports in turn dampening investment and employment in export-oriented sectors. Rising trade protectionism presents an additional risk, particularly if it constrains China's imports of critical technology, slows the transfer of productivity-enhancing innovations, and leads to a decoupling of high-tech supply chains. In contrast, stronger-than-expected external demand, especially faster-than-expected growth in the United States, could push China's near-term growth higher than in the baseline.

Policy implications

The government could increase macroeconomic policy support if downside risks materialize. Monetary policy could be further eased, should the economy lose growth momentum. On the fiscal side, given financial constraints at the local level, shifting a larger share of borrowing to the central government could help mitigate risks of under-execution of the budget. The recent

issuance of ultra-long special Treasury bonds and the transfer of some of these funds to local governments is a welcome move in this regard.

Managing the slowdown of the property sector and restoring household confidence warrant structural measures beyond short-term regulatory easing and liquidity support. While the government has taken demand-side measures—including relaxation of housing purchase restrictions and reduction of downpayment ratios and mortgage rates—the property sector downturn has persisted. The whitelist scheme and other liquidity support measures have provided some financing support for viable developers. Recently announced measures to support inventory destocking will increase affordable housing and aid in rebalancing supply and demand in the property sector. However, subdued household confidence and under-execution of some liquidity support measures underscore the need to implement supply-side initiatives such as expediting the restructuring of distressed developers to reallocate resources to more productive uses, greater price flexibility to stimulate housing demand, and strengthening the regulation of the housing pre-sale system to boost home-buyer confidence.

Market-oriented reforms remain important for redirecting resources to more productive uses and reducing the risk of imbalances between supply and demand in some sectors. The rapid increase in investment creates risks of emerging imbalances in industrial sectors where demand fails to catch up with supply expansion. While market adjustment to demand changes has been observed in sectors such as automobile and electrical machinery manufacturing, more active use of the corporate insolvency framework could enable the exit of non-viable firms and rescue of viable but distressed firms.⁷ Measures such as improving legal and institutional frameworks, streamlining reorganization procedures, and enhancing capacity for insolvency practitioners could improve insolvency procedures, thereby contributing to more efficient resource allocation.

Policies to accelerate the transition towards carbon neutrality could boost demand for green technologies. Through a scale-up of renewable energy investments and other low-carbon technologies, China could not only progress toward its dual carbon targets—achieving peak carbon emissions before 2030 and carbon neutrality by 2060—but also boost domestic demand and absorb its growing supply of green technology products. Energy market reforms to facilitate the integration of renewables in the energy mix, energy efficiency mandates, and green government procurement could support these efforts (World Bank 2022).

⁷ Well-functioning insolvency frameworks have been found to: (i) lower the cost of and increase the availability of credit; (ii) increase returns to creditors; (iii) promote job preservation through efficient restructuring tools; and (iv) encourage entrepreneurship (World Bank, 2014).

A more sustained increase in household consumption requires reforms that go beyond short-term stimulus, such as improvements in social protection. The government's trade-in programs for vehicles and household appliances could provide some support to consumption in the near term. However, short-term stimulus measures may not be adequate to increase China's structurally low consumption level. Reforms in areas such as broadening the coverage and raising the benefits of social security programs, adopting a more progressive tax system, redirecting fiscal spending from infrastructure to human capital, and lessening inequalities in access to quality healthcare and education could diminish households' inclination for precautionary savings and drive a more sustained and balanced growth path in the longer term (World Bank 2023).

III. Special Focus: Aging China—Implications for Growth and Inequality

This focus note presents an initial exploration into the impact of population aging on two selected issues—long-term growth and inequality. The following section examines the potential impacts of the demographic shift by analyzing its effect on the main sources of growth. The next section explores the effects of demographics on different dimensions of well-being and inequality, as they matter to achieving China’s common prosperity goal. The final section presents some considerations for future policy directions.

China has become an aged society

Rising longevity and declining fertility have contributed to population aging in China. Life expectancy in China has risen from 60.2 years in 1974 to 78.2 years in 2021. This is a major achievement. Yet, along with declining fertility, it has contributed to rapid population aging. The fertility ratio has declined from 4.2 children per woman in 1974 to 1.1 in 2022. Measures have been introduced to reverse the declining fertility, including a transition from a one-child to a three-child policy in 2021 and financial incentives for families to have more children, but the desired outcomes have not been achieved yet. In 2023, China became an aged society, defined as one in which individuals over the age of 65 years constitute 15-20 percent of the population (Figure 11A). Over the next 20 years, the share of people over 65 will rise to about 28 percent of the population, while the total population is expected to fall to 1.35 billion.

China’s demographic transition is unfolding at a relatively rapid pace, compared with other aged economies at higher levels of development. Family planning policy and improvements in female education led to a fall in fertility in the 1970s, from 6.5 in 1968 to 2.7 in 1980. Since the implementation of the one-child policy in 1980, as well as the increase in overall incomes and continued improvements in education (particularly for women), China’s fertility ratio has continued its fall, decreasing by 1.6 children per woman between 1980 and 2022, faster than the decline of 0.6 in Japan’s fertility ratio, but slower than the decline of 2.0 in the Republic of Korea’s. Both Japan and the Republic of Korea aged at a stage when their societies had already reached high-income levels and have had resources to service the needs of their aged population since then. China remains an upper middle-income country on the cusp of becoming a high-income country, but already with a fertility ratio that is lower than that of Japan (Figure 11B).

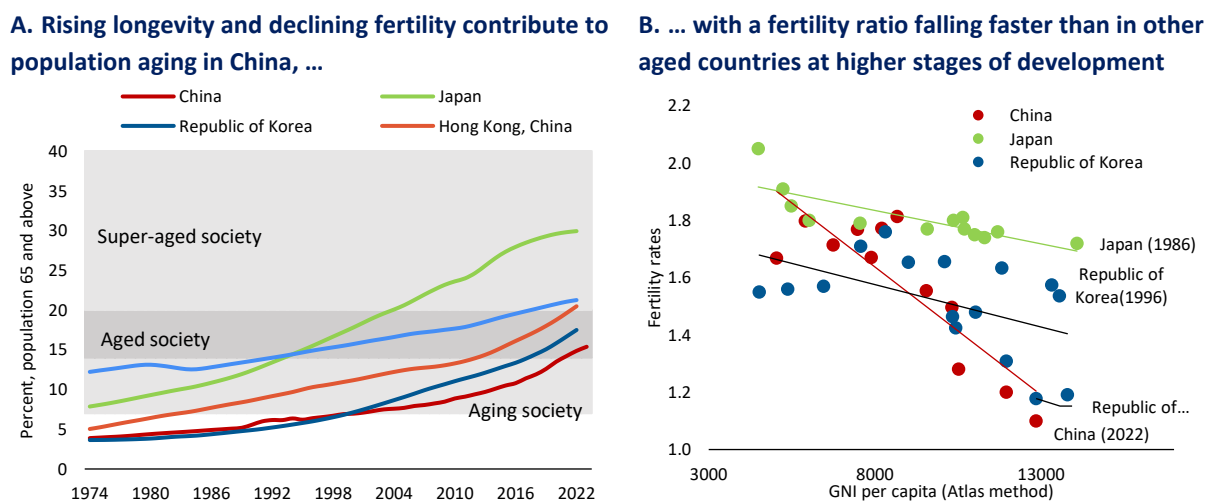
In China, the rising costs of raising a child have been arguably a key driver of declining fertility. Estimates suggest that the cost of raising a child could be as high as seven times per capita GDP, second only to Korea (Liang *et al.* 2024). In addition to the direct financial cost of childbearing and rearing, families also face the time cost of maternity leave, childcare, school pick-up, after-

school tutoring, household chores, and others and opportunity costs such as the “motherhood career penalty”—a decline in work skills, missing promotion opportunities, and lower wage rates.

The demographic landscape varies across China’s regions. Richer provinces and cities such as Jiangsu and Shanghai are seeing high rates of old age dependency (Figure 11C). However, some other wealthier provinces such as Guangdong and Fujian have younger populations due to the presence of migrant workers from other provinces (Glinskaya *et al.* 2022). While poorer provinces tend to have younger populations, given shorter life expectancy and higher fertility rates, some of the poorest provinces such as Gansu and Sichuan have a high share of older adults as well, due to outmigration of the working-age population. In terms of geography, the Northeast provinces of Liaoning, Jilin, and Heilongjiang are among the most aged, while Xinjiang Uygur Autonomous Region and Qinghai are among the youngest.

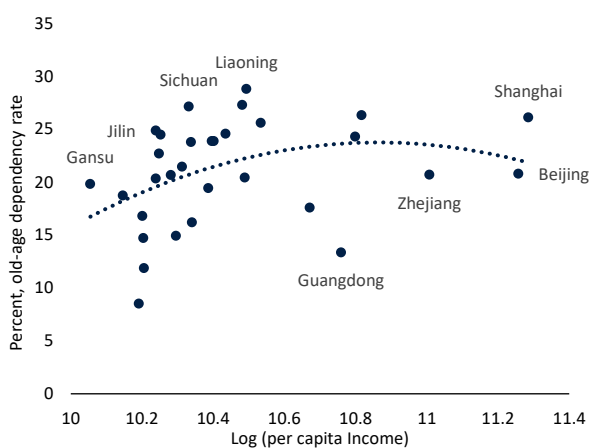
The steadily increasing old age dependency has raised the overall dependency ratio. China’s dependency ratio declined from 79 in 1974 to around 37 in the mid-2000s, tracking the decline in the youth dependency ratio as fertility decreased (Figure 11D). However, while the youth dependency ratio has continued to decline into the 2020s, the overall dependency ratio has started to rise reaching nearly 45 in 2022, pulled by rising old age dependency that steadily rose to 19.9 in 2022. As a result of these dynamics, the demographic window—the window of opportunity during which a country maximizes its work force due to a high work-ready population and a low dependent population—has run its course after roughly 15 years.⁸

Figure 11. China is an aged society, where the demographic window has closed



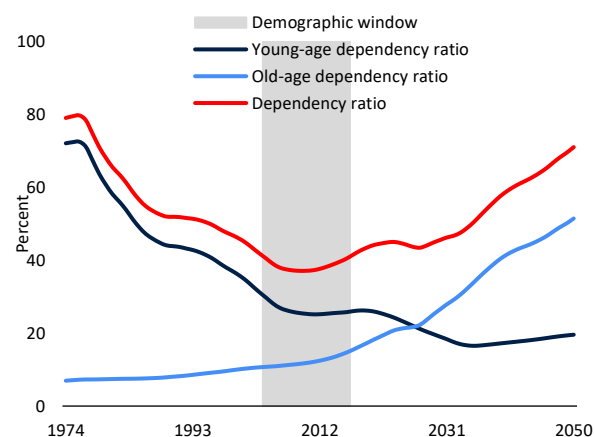
⁸ Dependency ratios were computed based on the UN population data. The demographic window follows the UN definition: the window is open when “the share of children and youth under 15 years falls below 30 percent of the population, and the share of people 65 years and older is still below 15 percent” (United Nations 2004).

C. Regional experiences have varied, but even some poorer provinces have already aged



Source: UN, WDI, NBS, World Bank staff estimates.

D. Steadily increasing old-age dependency has raised overall dependency ratios

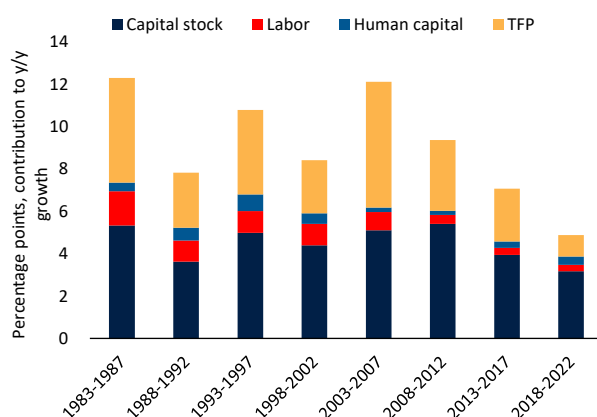


Will population aging dampen long term growth?

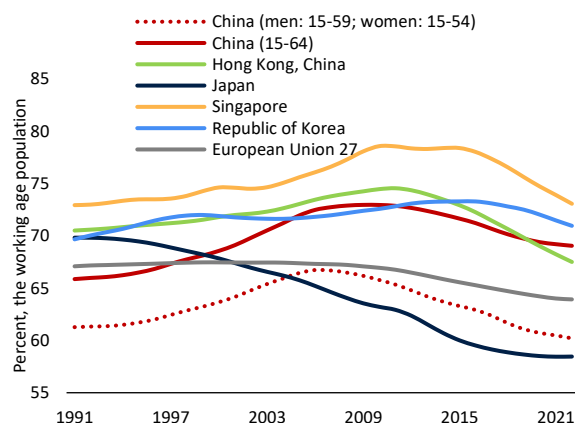
China succeeded in capturing the demographic dividend. Past changes in the demographic structure, particularly the decline in the overall dependency ratio and the expansion of working-age population, contributed to a demographic dividend, boosting economic growth. Estimates of the dividend vary but range between 15 and 25 percent of GDP growth across different periods (Cai and Wang 2005; Feng and Mason 2008; Wei and Hao 2010).⁹ Recent analysis, however, shows that the fall of labor force participation from the 1980s to the early 2010s reduced the demographic dividend (Meng 2023).

As China deals with an aged population, the question of its impact on long-term economic growth becomes important. Without mitigation measures, population aging could contribute to a deceleration in potential growth. China's economic growth slowed from an average of 10.5 percent in 2003-12 to 6.2 percent in 2013-22. Physical and human capital accumulation, labor, and total factor productivity, which were all drivers of past growth, have contributed less to growth in recent years (Figure 12). Population aging will impact growth through these same labor, human capital, physical capital, and productivity channels. Without mitigating policy and behavioral adjustments, aging could further shrink the size of the labor force, lower household savings that may reduce resources available for investment and support economic rebalancing, put pressure on the government's finances, and adversely affect productivity.

⁹ In several Asian countries, the demographic dividend contributed up to a third of economic growth between 1960s and 1990s (Bloom, Caning and Finlay 2010; Bloom and Williamson 1998).

Figure 12. Aging impacts China's growth trajectory through various channels

Source: NBS, PWT, WDI, ILO, Barro-Lee dataset website, World Bank staff estimates.

Figure 13. The working age population share has been declining for over a decade

Source: WDI, ILO, World Bank staff estimates.

A lower working-age population share and labor force participation rate could reduce labor supply. Previously, the growth of the working-age population in China ensured a labor cost advantage, aided by rural-urban migration since the 1980s, which released surplus labor from the countryside to cities. However, most of the cost advantage has already been exhausted, as rural surplus labor has largely been absorbed (Li *et al.* 2012). With a declining working age population, the labor force is likely to decline. Unless labor participation increases, estimates suggest that the average labor force growth could fall from 0.3 percent in 2000-20 to the range of -1.1 to -1.4 percent in 2025-45. Falling female labor force participation has compounded the effect of aging. The share of women active in the workforce fell from 73 percent in 1991 to 61 percent in 2023.¹⁰

Population aging also changes the workforce composition from younger to older individuals. Some studies suggest that older workers are less productive and less engaged in entrepreneurial activity than their younger counterparts. A rise in the proportion of older workers could consequently lead to a decline in overall labor productivity and further reduce growth, if the accumulation of experience does not make up for the depreciation of knowledge and the loss in the physical and mental capabilities of older workers (IMF 2019). However, in China this effect has been in part offset by increases in human capital. The continued expansion of education in the past decades has meant that young generations are more educated than the older ones

¹⁰ Part of this decline can be associated with the process of structural transformation, with industrialization favoring male employment, and rising incomes allowing for women to stop working for subsistence purposes. Yet, despite continued rapid economic growth and a shift to a service-based economy (where women have a revealed comparative advantage), gender gaps in terms of employment and wages continued to diverge (Brussevich and Dabla-Norris 2021).

exiting the labor force (Cao *et al.* 2020). The contribution of human capital to growth was larger in 2018-22 than in earlier decades.

China's retirement age—low compared to global standards—compounds the negative impact of aging on the size of the workforce. Set in 1951, China's statutory retirement ages for men at 60 years and women at 55 (white collar) and 50 (blue-collar) that apply to mostly urban residents are low by international comparison (Giles *et al.* 2023). Across OECD countries, the retirement age averages 64.4 years for men and 63.6 for women.¹¹ The low age for retirement means that the share of the effective working-age population is lower in China than in other East Asian countries such as the Republic of Korea and Singapore (Figure 13).

Besides the impact on labor, aging affects growth through household savings and, hence, the capital channel. Competing theories explain the impact of aging on household savings. On the one hand, aging in economies at the late stage of demographic transition, such as China, could lead to lower aggregate savings in line with the life cycle hypothesis where people save during their working years and dissave in retirement to smooth lifetime consumption (the compositional effect).¹² On the other hand, aging could also lead to higher savings over the course of life in anticipation of longer lives (the behavioral effect) and also due to altruism and bequest motives of households for the next generation. Household data for 2014, 2018, and 2022 show that older cohorts in China do still save (that is, at least the group aged 70+ does not dissave as expected under the life-cycle hypothesis), but less so compared with their middle-aged counterparts, who are at the prime of their working careers (Figure 14). On this basis, it is unclear whether the composition or the behavioral effect would dominate in the aggregate as the country continues to age.

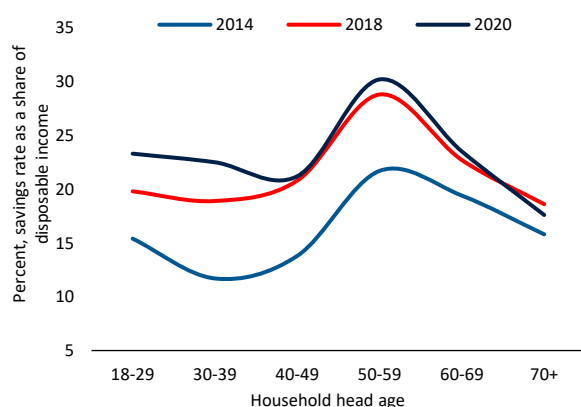
The saving pattern observed across provinces suggests that household savings may decline with the rise in old-age dependency. Panel regressions using provincial data reveal that household income, the old-age dependency ratio, and pension and medical insurance are significant determinants of the household savings rate (Figure 15). Higher-income households tend to have greater propensity to save, explaining the higher savings rate with rising income levels. Rising old-age dependency is associated with a decrease in aggregate household savings.

¹¹ Based on OECD website. Note that the restrictions in China do not apply to rural and informal workers who tend to work considerably longer, implying that potentially less productive parts of the old aged population work longer.

¹² Countries in the late stage of demographic transition are those countries where the working age population is about to decline or are already declining. Countries under the advanced stage demographic transition include those where the demographic dividend has ended or will end very soon. Countries under the early-stage demographic transition include those where fertility rates are declining but remain relatively high with the share of the working age population expected to peak in the coming decades (IMF 2019). Households at the early stage of the transition will likely experience increased savings.

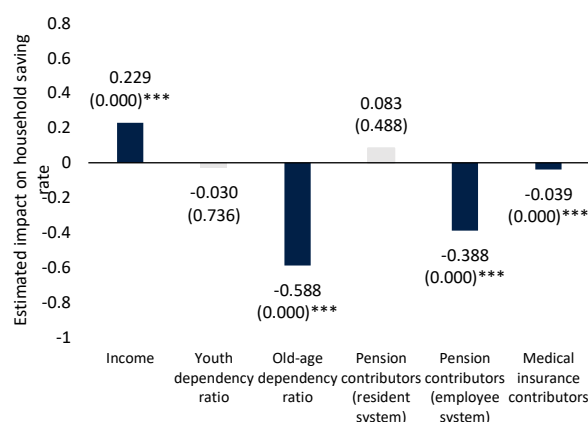
Controlling for population size, the higher the number of contributors to the urban employee pension system and to medical insurance, the lower the household savings rate. This suggests that social protection programs contribute to lower precautionary saving by households.

Figure 14. In China, older cohorts save but less compared with middle-aged cohorts



Source: Tiwari *et al.* (2024) forthcoming, analysis based on various years of the CFPS.

Figure 15. Income, old-age dependency, and social security are significant determinants of household savings rates



Source: NBS, UN, World Bank staff estimates.

Note: P-values in parentheses. Panel regression using provincial level data. Pension and medical insurance are denoted as contributors (in billions) to the systems. Regression also includes population, provincial and time dummies as control variables.

Lower household savings may reduce the resources available for investment and support economic rebalancing. Capital investments in the infrastructure and property sectors are yielding diminishing returns, due to already high capital stocks (World Bank 2023). A reasonable decline in China’s investment rate would thus be consistent with reduced macroeconomic imbalances and improved efficiency. While rebalancing the economy from an investment- and export-led model to a consumption-led model may not necessarily lead to more rapid GDP growth than observed in pre-pandemic years, it will lead to more sustainable growth and reduce financial risk.

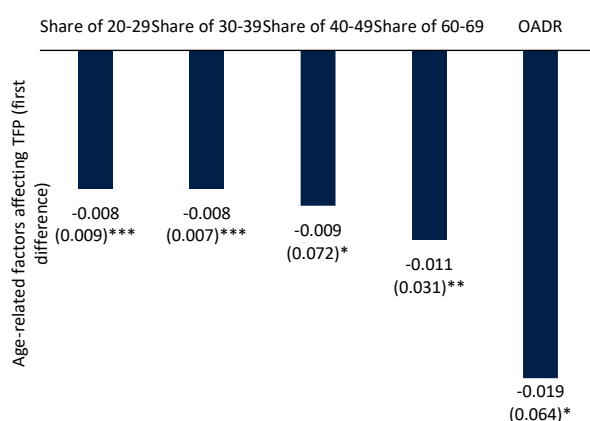
Rising old-age dependency is also linked to a decline in total factor productivity (TFP) growth.

The reasons discussed in the literature include the tendency of old people to be less entrepreneurial, have less appetite for risk and fewer incentives to invest in training, as they have a shorter time horizon to reap the benefits of such investments (IMF 2019; Yao *et al.* 2017). Dou (2019) found a negative relation between population aging and the number of patent applications in China which is a strong indicator of innovation. An inverted U-shaped productivity pattern emerges among age groups, with those aged 50-59, known to have accumulated

experience and expertise and usually in leadership and mentorship roles within organizations, being the most productive in China (Figure 16).¹³

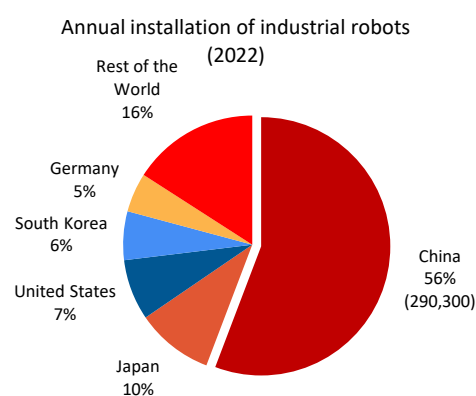
One way to offset the negative productivity effect of population aging is to leverage innovation and technology. Using U.S. data, Acemoglu and Restrepo (2022) show that aging is associated with greater use and development of industrial robots. Deng *et al.* (2018) find a similar effect using Chinese provincial panel data. China has already leveraged technology to facilitate productivity growth. China installed more than half of industrial robots globally in 2022 (Figure 17).

Figure 16. Rising old age dependency is linked to a decline in total factor productivity, ...



Source: World Bank staff estimates building on Liu and Westelius (2016), Aiyar *et al.* (2016) and Feyrer (2007). Note: P-values in parentheses. OADR: old-age dependency ratio. The 50-59 cohort is the reference age group. A constant term is found significant.

Figure 17. ... but China has been leveraging innovation and technology to facilitate productivity growth



Source: International Federation of Robotics.

Individual preferences and needs evolve with aging, leading to shifts in demand across various industries and a structural transformation of the economy. Data show that the share of healthcare in household expenditures in China rises from 3.3 percent for the young cohort to 15.1 percent for the elderly cohort, while allocations for education, transport, and communication drop significantly (Figure 18). Consequently, an aging population fosters a market environment that increasingly favors products and services geared toward health and comfort, encompassing healthcare provisions, retirement planning, and leisure pursuits, and specialized

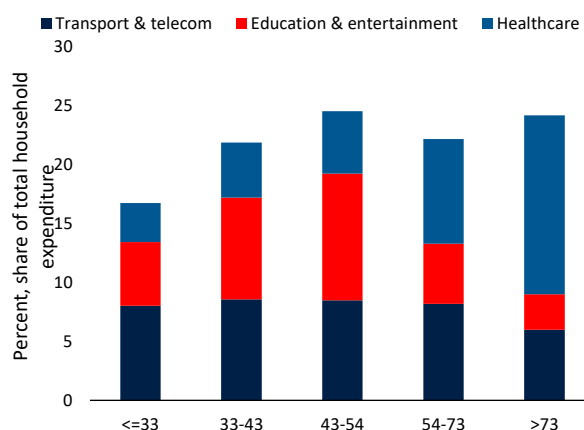
¹³ The inverted U-shaped pattern is similar to results found by Feyrer (2007) for 87 non-oil countries, and Liu and Westelius (2016) for Japan, but with the age group 40-49 found to be the most productive.

products like mobility aids and dietary supplements. This demographic transition also has broader implications for the housing market, transportation, and leisure facilities to suit the needs of an aging population. These evolving demands drive the emergence of new "silver economy" industries (Box 2).

Aging can also put pressure on fiscal expenditures. The fiscal subsidy to both the resident pension system and the urban employees and public sector scheme, as well as to medical insurance, is already high. In 2023, 22.3 percent of the social security fund budget came from fiscal subsidies of RMB 2.5 trillion, equivalent to 9.1 percent of expenditures in the public finance budget and 2.0 percent of GDP (Figure 19 and Figure 20). These expenditures are expected to increase with population aging.

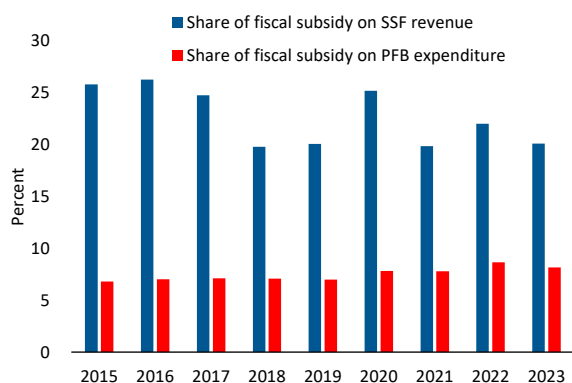
In the absence of fiscal support, the social security fund would have run constant deficits. If social security spending per person for each age group remained at current levels, population aging would put the sustainability of the social security fund at risk in the long term. Pension payments alone are projected to increase from 5.0 percent of GDP in 2017 to between 13.5 percent and 17.0 percent in 2050, depending on how much Chinese benefit levels converge toward OECD levels (Cai *et al.* 2018; Glinskaya *et al.* 2022). The Chinese Academy of Social Sciences has warned that, on the current trend, the funds would be depleted by 2035 (Zheng 2019).

Figure 18. The share of healthcare to total expenditures rises across age cohorts



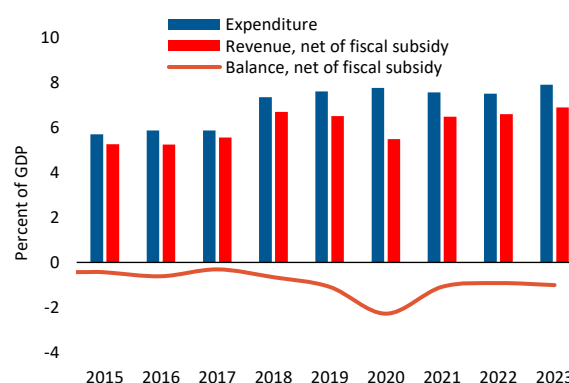
Source: World Bank Development Data Hub.

Figure 19. Fiscal subsidy to the pension schemes and medical insurance is already high in China, ...



Source: NBS, World Bank staff estimates.

Figure 20. ... significantly supporting the social security fund



Source: NBS, World Bank staff estimates.

Box 2. Guidance on the Silver Economy from China's Government

On 11 January 2024, the General Office of the State Council issued *Opinions on Developing the Silver Economy to Improve the Well-Being of the Elderly*. This policy initiative defines the concept of a silver economy as the aggregation of a range of economic activities that produce products or services that serve the elderly. It aims to address the challenges of aging with a national strategy and calls for collaboration between the government, industries, and civil society in four areas:

- **Accessibility for the elderly:** Policy measures include strengthening and expanding meal assistance, home- and community-based care, institutional care, coordinated health and long-term care, rural elderly services, and cultural and sports services.
- **Silver economy industrial clusters:** The government plans to build 10 silver economy industrial parks nationwide and use free trade zones, e-commerce platforms, and shopping festivals to promote the elderly's consumption, brand development, and standardized service delivery.
- **Technology and innovation:** Measures aim to support the development and use of information technologies, mobile devices, wearable devices, nursing and home service robots, anti-aging products, biotechnologies to alleviate age-related illnesses and facilitate a barrier-free environment.
- **Silver economy business ecosystem:** Policies include financial support for research and investment, land and facilities for elder care services and industries, favorable credit terms, talent development, data for monitoring and evaluation, and combating fraud targeting the elderly.

The Silver Economy policy initiative aims to support the welfare and quality of life of China's elderly while leveraging their economic potential. One recent study projects that the consumption of the elderly population could amount to RMB 12.0-15.5 trillion by 2030 (Dang *et al.* 2021). Another study estimated that the size of China's silver economy was about RMB 7.0 trillion (6 percent of GDP) in 2023 and would rise to RMB 30 trillion (10 percent of GDP) by 2035 (Ageing Research Institute 2024).

Will aging exacerbate inequality?

Beyond its impact on growth, China's aging may increase inequality in incomes, consumption and, more broadly, well-being. Income inequality in China is relatively high for its level of development. According to the most recent official statistics, the income-based Gini index in 2022 was 47.6, slightly higher than the average of the upper-middle income countries and several points above that found in high-income economies.

Evidence from China suggests that rapid aging could raise income inequality in the absence of other changes. The empirical literature suggests that income distribution within cohorts becomes more unequal as they age because of accumulated socioeconomic disadvantages

during the life cycle, which is consistent with the permanent income hypothesis.¹⁴ In the case of China, income inequality is higher among the old than those of working age (Figure 21). Hanewald *et al.* (2021) find that old age income inequality is driven by inequality in education (largely determined by the place of birth) and urban-rural gaps that determine wages during the working age and pensions after retirement, the two main components of the income of households with at least one person aged 60 and above (Figure 22). Similarly, using an overlapping generations model for China, Chen *et al.* (2018) find that aging worsens inequality of income and consumption.¹⁵

Figure 21. Income inequality is higher among old households than young households ...

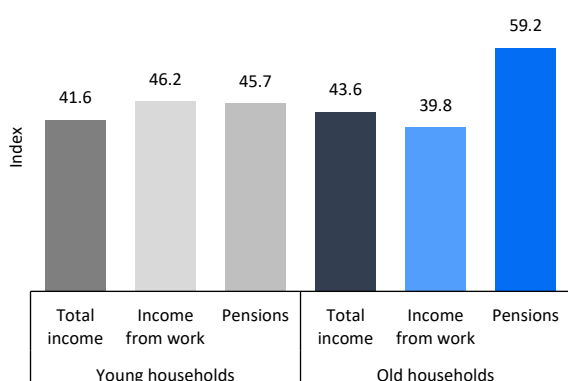
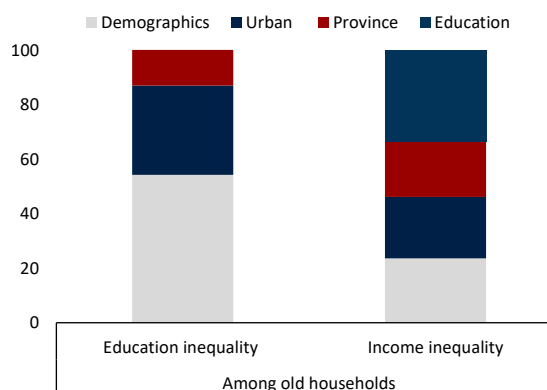


Figure 22. ...which is largely driven by location of birth and education attained



Source: Hanewald, Jia and Liu (2021). Analysis based on data from the China Health and Nutrition Survey for the period 1991-2015.

Note: Bars in figure 22 represent the Gini and concentration indices of different sources of income, and proportion of the Gini index explained by different sociodemographic factors. ‘Old households’ are defined as those with at least one household member aged 60 or more. ‘Young households’ have no members aged 60 or more. Other components of households’ income not included in figure 22 but incorporated in the authors’ calculations include capital income, private transfers, and subsidies – together, they represent less than 10 percent of total household income.

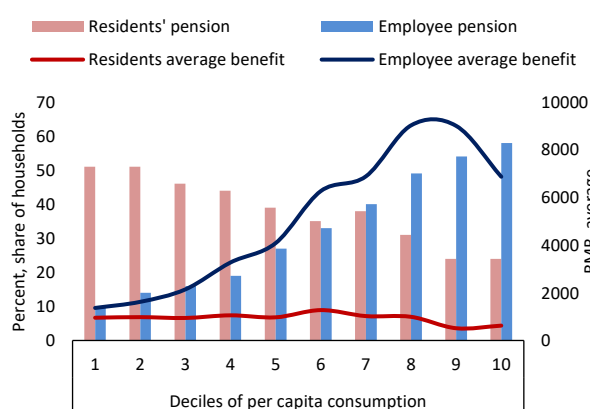
The variation in benefits between pension schemes contributes to overall income inequality (Li *et al.* 2020; Hanewald, Jia and Liu 2021). 55 percent of China’s pensioners, disproportionately in the lower income deciles, receive pension benefits from the largely subsidized Rural-Urban Resident Scheme (RURS) (Figure 23). The RURS covers rural residents and three fifths of China’s

¹⁴ For the United States and the United Kingdom, see Deaton and Paxton (1994), for Germany see Bonke, Shrode and Schulte (2010).

¹⁵ A fuller assessment of the impact of aging on overall inequality will need to consider the effect of demographic change on wages (and its inequality) as well as the inequality between the working population and the old. Chen *et al.* (2022) consider some of these aspects from a macroeconomic perspective. A microdata-based analysis could be done to confirm these results.

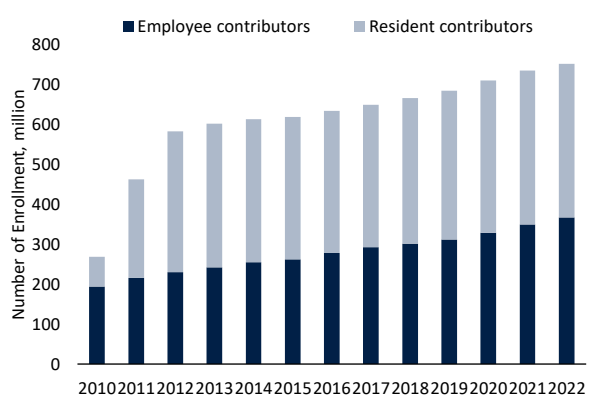
300 million rural migrants employed in cities (Wang *et al.* 2022). RURS benefits are, on average, less than 6 percent of the average pension benefit from the Urban Employee Pension Scheme and less than 4 percent of the average pension for public sector employees, China's two contributive pension schemes for formal workers (Figure 24).¹⁶ Compared to other countries in the region, China's social pension coverage is among the highest, but benefit levels are among the lowest relative to GDP per capita (Chomik *et al.* 2024; Asian Development Bank 2024).¹⁷ Gaps in average pension benefits are widening between formal and informal sector workers and between public and non-public sector workers under the Urban Employee Pension Scheme, after controlling for observable characteristics (Glinskaya *et al.* 2022; Wang *et al.* 2022; Wang and Huang 2023; Wang *et al.* 2023). In the future, without further expansion of the Urban Employee Pension Scheme to cover migrants, the existing social security system would worsen accumulated inequalities.

Figure 23. Lower income households are more likely to receive lower pension benefits



Source: World Bank staff estimates based on 2018 China Family Panel Survey.

Figure 24. Over half of current workers contribute to the RURS



Source: NBS.

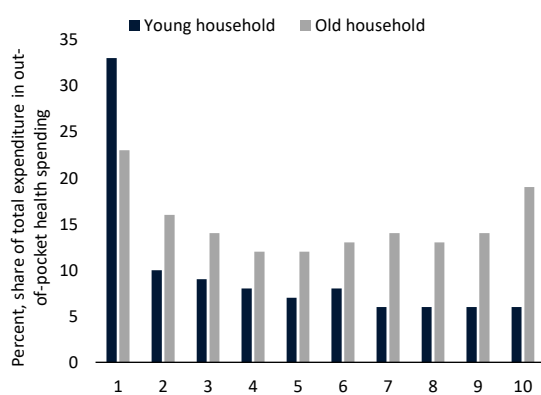
Aging may also put pressure on household budgets due to higher health expenditures. Based on medical insurance data for Beijing, healthcare expenditure among those aged 64 and above is almost twice as large as that among people aged 25-59 (Li *et al.* 2020). Out-of-pocket expenditure is higher on average among old-age households and represents a particularly high share of overall spending among households at the bottom of the distribution (Figure 25).

¹⁶ 2022 MOHRSS Statistical Bulletin. Urban Employee Pension and Public Sector Pension schemes is structured around a pay-as-you-go first tier for basic pension financed by employers, a second mandatory tier of a notional individual account financed by employee contributions. A third tier in the Urban Employee Scheme is a private voluntary pillar, introduced in 2022.

¹⁷ China's social pension system is a hybrid with modest individual contributions and predominantly budget financing, unlike most other countries where social pensions are largely non-contributory.

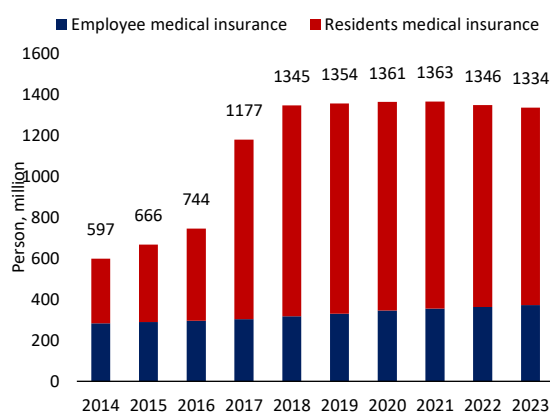
Lower-income families are less financially protected to face healthcare costs that rise with old age. The massive expansion of medical insurance since 2003 has allowed low-income families access to financial protection against health risks. But the depth of coverage varies by insurance scheme, city, and occupation. Generally, the public sector and urban employee medical insurance schemes offer more generous benefits than those provided under the residents' medical insurance scheme.¹⁸ The annual medical insurance premium is 8 times higher for urban formal employees and retirees than for those in the residents' medical insurance, and the average reimbursement rate is 85.2 percent for the former compared to 70 percent for the latter (Zhang *et al.* 2023). Furthermore, the resident insurance scheme covers only primary care, outpatient services, basic hospitalization, and essential medications, whereas the urban employee insurance covers a broader range of medical services.¹⁹ In recent years, enrollment in the resident insurance system has declined (Figure 26). The fall may reflect low willingness to pay insurance premiums among low-income groups in a context of rising premiums. A recent study found that migrant workers are willing to pay an average of RMB 136 for the medical premium, equivalent to about one third of the resident insurance premium expected for 2024 (Wang and Han 2022).

Figure 25. The burden on health spending is larger for old households than for young households



Source: World Bank staff estimates based on 2018 China Family Panel Survey.

Figure 26. Enrolment in the basic medical insurance has declined in recent years



Source: National Health Security Administration.

The lack of adequate financial protection against health shocks could exacerbate disparities in health outcomes among low-income populations as the country ages. Individuals with less

¹⁸ In 2016, the Resident medical insurance scheme emerged as the integration of the New Cooperative Medical Scheme for rural residents, and the Urban Resident Basic Medical Insurance. It covers urban and rural residents that are not employed or informally employed, elderly that did not contribute to the Employee medical insurance, children and students.

¹⁹ National Human Resources and Social Security Services, Social Security Online Service Platform Q&A Guide. Available at: <https://m12333.cn/>.

generous medical insurance are more likely to suffer from reduced access to essential health services and delayed treatment, leading to a widening gap in health outcomes across different socio-economic groups.²⁰ Economic pressure is the primary factor restricting access to medical services for the elderly, while the distance to healthcare facilities also affects the availability of services from the supply side (Qiu and Ran 2019). Accessibility of basic medical services has a greater effect on the health of low-income and geographically distant old aged individuals. In 2018, 24 percent of households had out-of-pocket health spending above 10 percent of total household spending, and 7 percent of households had health spending share of over 25 percent, the two Sustainable Development Goal indicators used to measure catastrophic health spending. With inadequate medical insurance, poorer families often must choose between healthcare and other essentials such as food, housing, and education.

In addition, the demand for long-term care is expected to increase with aging. The prevalence of older people with functional limitations and disability rises with age, particularly for women (Figure 27). China's improvements in healthcare access, age-friendly environment, and educational attainment have lowered the share of people who self-reported needing care from 2.9 percent of the population in 2010 to 2.3 percent in 2020, as reported in the Population Census. But household survey data suggest that old-age disability may be more prevalent and start earlier than self-reported. In 2020, the share of people that required help with daily activities was higher among less educated rural residents: 49 percent of illiterate older adults (more likely to be low-income) were functionally dependent, compared to 13 percent for high-school graduates (Chen *et al.* 2022). A recent study projects that by 2048 over a third of people aged 60 and above will be functionally dependent for at least one activity of daily living,²¹ with the share significantly higher for rural and less educated adults (Jiang and Li 2024). Care for older adults in China is typically done by family members (spouse, children, or in-laws) who may forego labor income to fulfill this duty. The rapid rise in life expectancy and the gradual increase in the gap between healthy and total life expectancy could increase pressure on families, especially women, to provide care.

Despite increasing access to long-term care, significant unmet care needs remain, particularly for poorer rural residents. Since 2011, China has started to build a multi-tiered long-term care system comprising home- and community-based care, institutional care, and coordinated and integrated social and health care for the elderly. The number of aged-care facilities has more than doubled, and the number of direct beneficiaries of public long-term care programs, including

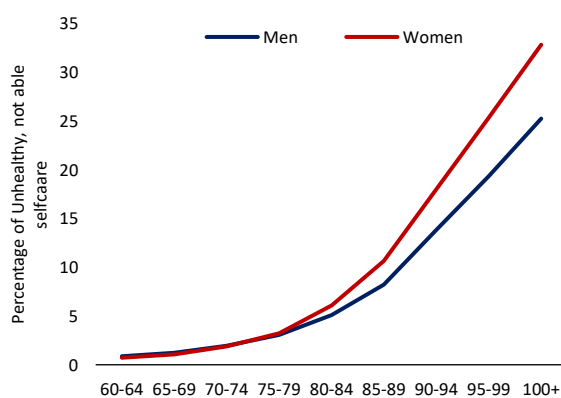
²⁰ Foregone care for physical examinations was found to be much higher (59 percent) than that of foregone outpatient and inpatient care among middle-aged and elderly people (10 and 7 percent, respectively) (Li *et al.* 2018).

²¹ Activities of daily living include dressing, bathing and showering, eating, getting in and out of bed, using the toilet, and controlling urination and defecation.

senior allowance for people aged 70 and older, nursing care and elderly care for the elderly people who have functional limitations, and comprehensive subsidies to provide income and in-kind support for people aged 65 and above, rose from 26.8 million (11.6 percent of the population aged 60 and above) in 2016 to 41.4 million (14.8 percent) in 2022.²² However, long-term care provision is still primarily dominated by informal care (NBS Population Census 2020), particularly for rural residents (Zhu and Osterle 2017; Hu *et al.* 2020; Zhang *et al.* 2022).

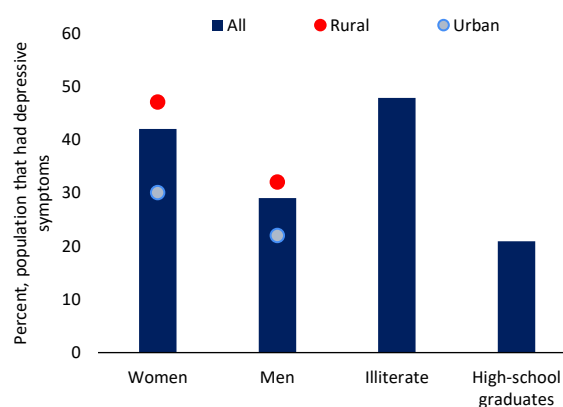
Finally, other aspects of a dignified life may deteriorate more for women and lower-income, less-educated households, as the country ages. Unhealthy lifestyles of young adults today will impact their health when they age. China has one of the highest male smoking rates worldwide, and the rate is higher among the less educated (Chen *et al.* 2022). On the other hand, more educated adults are more likely to drink and lead a sedentary life. By 2030, the cardiovascular age-adjusted mortality rate is expected to be the highest in the lagging western region, nearly double that in the eastern region (Yang *et al.* 2022). Depression is higher among less educated, rural residents and is particularly high among rural women, 47 percent of whom had depressive symptoms in 2018 (Chen *et al.* 2022) (Figure 28).

Figure 27. Care needs to rise rapidly with age



Source: NBS, Population Census 2020.

Figure 28. Women and less educated people are more likely to have depressive symptoms



Source: Chen *et al.* (2022), based on 2018 CHARLS.

Looking ahead – policy directions

The economic and social challenges posed by population aging can be managed with the right policy and behavioral adjustments. Policy directions can be grouped into three areas. First, policies could aim to expand the labor force both in the short and long term, and thus mitigate the potential impact on the country's growth potential. A second set of measures could increase productivity and promote private sector participation to support innovation and the silver

²² Ministry of Civil Affairs, Statistical Bulletins.

economy as additional sources of growth. Finally, several measures can be considered to close gaps in services and reduce the impact that aging can have on inequality.

1- Expanding the labor force

There are several ways to mitigate the shrinking size of the workforce and its impact on growth. Policies could aim to increase the future size of the labor force through fertility-related policies, to raise female labor force participation among the existing population and extend the productive working lives of workers.

Policies to increase the birth rate, if successful, can only partly offset the otherwise expected decline in the labor force. The government has introduced measures to improve pre- and post-natal medical services and child benefits and tax breaks in some localities, with no success so far in limiting the decline in fertility. Evidence from other countries suggest that additional measures to further lower the cost associated with childbearing could help (Box 3). These include higher subsidies and better childcare service provision in the first few years after birth, equitable leave policies, flexible work arrangements, and gender-equal labor conditions to reduce the motherhood career penalty. Regional and global experience suggests that gender norms are associated with low fertility rates, especially in other parts of East Asia where the relative female burden of child rearing and unpaid domestic work is very pronounced. And yet, even successful experiences have not seen an increase in fertility to the replacement rate.

Box 3. Fertility policies – the international experience

Many countries have implemented policy measures to slow the decline in fertility rates. These include policies that aim to lower the financial costs of having children (e.g. child allowances, childcare provision and education discounts, and tax support for families with children), lower the motherhood career penalty through gender-equal labor conditions (e.g. incentives for shared parental leave, lower workplace gender discrimination and benefits systems that support working parents), improve work-life balance (e.g. regulations on overtime, expanded leave policies, flexible working), and improve gender equality outside of work (e.g. by promoting equal sharing of childcare and housework between partners).

Across countries, there is a strong positive correlation between spending on family policies as a share of GDP and fertility rates (Sabotka, Matysiak and Brzozowska 2019). A country's fertility also often goes up when family policies become more generous (Buttner and Lutz 1990; McDonald 2006). Empirical evidence shows that accessible, affordable, high-quality childcare services across childhood, aligned with working hours have a strong positive effect on fertility (Goldstein *et al.* 2017; Luci-Greulich and Thévenon 2013; Rindfuss *et al.* 2010). Financial transfers typically have a small impact, possibly because transfers tend to cover only a small proportion of the costs of raising children and have greater impact

on lower-income households, who tend to already have higher fertility. One offs “baby bonuses” appear as largely ineffective, hence were abandoned in countries such as Australia, Spain and Canada.

Longer well-designed paid parental leave also has a positive impact on fertility, although effects also depend on leave type and context. Large parental leave reforms in Central Europe had significant and substantial effects on fertility (Lalive and Zweimüller 2009). The “use it or lose it” parental leave schemes in the mid-1990s pioneered in Nordic countries, substantially increased in leave uptake among men, and increased the likelihood of having a second child (Duvander *et al.* 2010). Sweden has managed to maintain a relatively high fertility rate, in part due to its heavily subsidized daycare and generous parental leave shared by both parents, though at 1.7 it is still way below replacement (Mörk *et al.* 2009).

Policies that improve the flexibility of working conditions have also been shown to have a strong effect. In Germany, for example, Billari *et al.* (2019) have shown that the roll out of broadband raised the fertility of highly educated women. Likewise, remote work has also been shown to raise fertility (Ozimek and Carlson 2023).

Few countries have succeeded at reversing declining fertility, with the exception being some Nordic and Eastern and Central European countries, where a combination of policies that support dual-earner families were implemented. Czech Republic and Romania have managed to maintain relatively high and steady fertility rates -around 1.8 births/woman - through a combination of childcare allowances and housing subsidies for families. Still, even the successful experiences have not been able to return to replacement rate.

Other countries such as Republic of Korea and Japan had more limited success of the initial set of policies and have now expanded the tool toward a more comprehensive approach, though evidence of their effects is still unclear. Since 2006, the government of Korea has tried a range of policies including tax incentives, expanded childcare, housing benefits, and improved parental leave policies. Measuring the causal impact of these policies poses a range of challenges, but most evidence suggests these policies have had only a muted effect (Sabotka, Matysiak and Brzozowska 2019). Since 2021 the government has changed approach to focus instead on improving working hours, promoting a more equitable distribution of housework and care duties and creating gender-equal labor conditions, such as by lowering workplace discrimination against pregnant women. Similarly, Japan started implementing policies to boost fertility in the 1990s, with limited success. In 2016, it launched a new “Plan for Dynamic Engagement of All Citizens”, focused on “work style reforms” to improve work conditions of temporary workers and to limit work hours of employees, measures to expand childcare provision and to provide childcare and higher education free of charge and reforms to increase mothers’ employment and men’s involvement in childcare. Evidence is still limited but suggests some small positive impacts on fertility (Jones 2024).

Measures to promote women’s labor force participation can increase the active labor force. Despite the expansion of the service sector where women tend to have a revealed comparative

advantage, female labor participation has continued to decline in the past two decades. In part, barriers associated with labor market regulations, discrimination, and affordable child and elderly care have been found at play (Brussevich and Dabla-Norris 2021; Wang and Klugman 2020; Zhang and Huang 2020). Policies to remove the women's productivity wedge, reduce gender bias, and increase service sector productivity can help boost female labor market participation. Affordable childcare and other family-friendly policies to support a work-life balance could serve a dual purpose—boosting fertility rates and encouraging women's labor force participation.

Several supply- and demand-side interventions can support the extension of productive lives.

Increasing healthy life expectancy can improve people's ability and incentives to remain in the labor force longer. This is especially true for urban workers with formal employment who are generally better educated but retire upon reaching retirement age, while rural workers often work longer informally to support themselves. Recent evidence shows that there is indeed a large untapped work capacity in the older urban population in China, especially for women (Chen and Park 2024) and without crowding out youth employment (Boheim and Nice 2019; Zhang and Zhang 2012). Progressively increasing the retirement age, especially for women, and offering flexible work arrangements can boost productive aging. The change of the retirement age could be complemented with reforms to create incentive-compatible social insurance and labor taxation, provide affordable care to free up older workers from informal care, and address aged-related barriers to finance (De Silva and Huang 2024). On the labor demand side, policies may include providing incentives to employers to retain or hire mature workers (e.g., offering performance-based wages instead of seniority wages), adapting working conditions to increase older people's productivity and willingness to work,²³ and investing in workers' productivity throughout their working life so that their skills remain relevant even in older age.

2- *Increasing productivity*

A second set of policies could be directed at raising productivity to counterbalance the negative impact of a shrinking labor force on growth. Human capital investment through skills upgrading, flexible education system, and lifelong learning will enhance labor productivity and raise workers' capability to meet the demands of current and future jobs. Promoting market competition to crowd in private sector participation will support innovation and the development of the silver economy. This will not only cater to the needs of an aging society but also support emerging growth areas in China.

Investing in younger generations and the current workforce will support a shift toward a more productive labor force. There is evidence of skills mismatch in the labor market. For instance,

²³ A low-cost, simple modification to work environment organization at BMW resulted in a remarkable surge in productivity. See EU-OSHA (2016) for more details.

half of job seekers on online platforms have been shown to be overeducated, resulting in a wage penalty (Zheng *et al.* 2021). Adult education or lifelong learning, traditionally delivered through open universities and vocational colleges, can shift from traditional academic-oriented programs to more flexible and demand-driven provisions, with stronger collaboration between educational institutions, industry, and technology providers to develop curricula that reflect current and future skill demands.

Promoting market competition to crowd in private sector participation will not only support innovation and productivity, but also the development of the silver economy. The private sector, with its market know-how, finances, and networks, is a natural partner in nurturing technology and innovation and developing the silver economy. China has made progress in improving the business environment over the past decade, including by using digital technologies for easier business registration and lower business compliance costs (Wei and Sanchez Ortega 2020). However, there continues to be significant regional divergence in the quality of the business environment between the first-tier cities and the rest, as well as between types of firm ownership.

3- Safeguarding common prosperity

The evidence reviewed suggests that some aspects of well-being may become more unequal as the demographic transition advances further. The following policy directions focus on closing existing gaps in human capital, social protection, and critical public services that contribute to inequality in incomes, consumption needs, and other aspects of wellbeing for a dignified life.²⁴

Closing educational gaps will help narrow inequality later in life. As shown, a significant part of inequality in older ages is determined by the place of birth, which impacts the person's education outcomes and employment prospects. Providing equal opportunities to access to similar quality education will not only help enhance equity but also increase future chances of economic mobility. China has made impressive improvements in universalizing access to compulsory education (grades 1-9). Yet, up to 45 percent of rural infants in China are at risk of experiencing cognitive delays due to low-quality early childhood education and development services, particularly among left-behind children (Emmers *et al.* 2021). Upper secondary enrollment and completion rates are substantially below universal levels, and large gaps persist across regions. At the same time, the demographic shift implies a rapidly declining student body, more acutely in some provinces where fertility is fast declining and outmigration accelerates. Thus, there is a

²⁴ A fuller assessment of the impact of demographics alone on income inequality -and its respective policy implications- will require also understanding the effect of the shrinking labor force on inequality within the working age population (particularly, of wages), and between the working age and the elderly. While crucial, this is beyond the scope of this analysis.

need to reassess the allocation of resources and school mapping plan at the local level, to be able to adjust management and resources to improve quality, while maintaining transfer programs from central and provincial governments targeting disadvantaged groups. Active and systematic involvement of families and communities is also crucial for successfully bridging the developmental gaps observed in early childhood.

Expanding the urban employee pension scheme coverage and further improving adequacy of the resident pension scheme can contribute to reducing overall household income inequalities.

Reducing wage inequality alone may be one of the most powerful measures to lower pension benefits inequality (and overall household inequality directly). But there are additional measures related to the pension systems that would also contribute to this agenda. Expanding the urban employee pension scheme to cover rural migrant workers would require strengthening and enforcing the labor contract and social insurance laws and reforming the existing urban employee pension scheme, to consider new forms of employment (i.e. gig and platform workers). Equalizing key pension parameters such as contribution base, contribution rate and benefit factors could help reduce pension inequality across and within each scheme. The current residents' pension scheme contains some elements of social pension in nature and relies on voluntary annual contributions (from RMB 200 to RMB 2000), while local authorities co-match RMB 30 to RMB 60 to individual accounts as incentives (the current government subsidy to the residents' pension is 21 percent of overall government subsidies to pension systems, and represents 62 percent of residents pension scheme revenues). Increasing residents' pension benefits to reach levels equivalent to those observed in other countries' social pension would require encouraging higher voluntary contributions from residents and for more years (currently, the minimum is set to 15 years), while also increasing public financial inputs from the central and local governments where subsidies are still relatively low compared to subsidies to the other systems in China.²⁵

The inequality in access to health care and disparity of health outcomes are likely to be further exacerbated by population aging. To address the challenges, comprehensive healthcare reforms are needed to prioritize resource allocation toward underserved regions and communities with limited access to healthcare facilities and services. This could involve targeted investments in infrastructure, workforce training, and telemedicine technologies to bridge the gap between age groups, and urban and rural areas. Policies focused on reducing financial barriers to healthcare by implementing insurance subsidy programs for low-income groups can be key. Additionally,

²⁵ There have been concerns that higher social pension would disincentive savings or work at older ages, but several papers found no or weak evidence of such effect, particularly rural resident's pension (Zhang *et al.* 2014, Giles *et al.* 2023).

supply-side reforms government can incentivize healthcare providers to establish outreach programs and mobile clinics to increase elderly people's access to primary care, screenings, and non-communicable disease management services. Finally, an integrated health-care system that emphasizes preventive care and promotes healthy lifestyles through demand-side incentives for physical activity, access to nutritious foods, and alcohol, sugary-sweetened beverages and tobacco control measures (including higher taxation) can mitigate the impact of growing incidence of non-communicable disease, improve population health outcomes, and ensure sustainable healthcare for its aging population.

Finally, deepening the long-term care policy reform agenda will help fill the gaps in unmet care for the elderly, prioritizing target population groups and lagging regions. Built on the national list of basic elderly care services, further long-term care policy reform should extend the existing programs to cover the near poor and low-income elderly who needs care services and assistance, promote coverage expansion in the rural areas and lagging regions where the coverage is very low, improve the scope and quality of care services with a focus on home- and community-based services to support aging in place, and strengthen professional nursing services for the elderly who are disabled and/or have cognitive impairments. To do so, a robust financing mechanism will be crucial to help finance coverage expansion and ensure financial sustainability. China has been piloting long-term care insurance in 49 cities. With lessons learned from those pilots and international experiences (such as Japan, Republic of Korea, and Germany) China could introduce a national framework to scale up the long-term care insurance. In the meantime, policy reform should shift the subsidy structure from the past subsidies of “bricks” and “beds” to more supplementing “people” and “services,” and foster private sector participation, to deliver better care services. Finally, strengthening policy coordination between social and health sectors can build effective mechanisms and promote an integrated long-term care system, which can help allocate scarce resources to fill unmet care gaps, enhance the quality of care, and meet increasing care needs when China becomes super-aged.

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