

APOLLO

Outlook for China:
Slowing exports, housing deflating, and demographics deteriorating

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Apollo Global Management

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Unless otherwise noted, information as of February 2024

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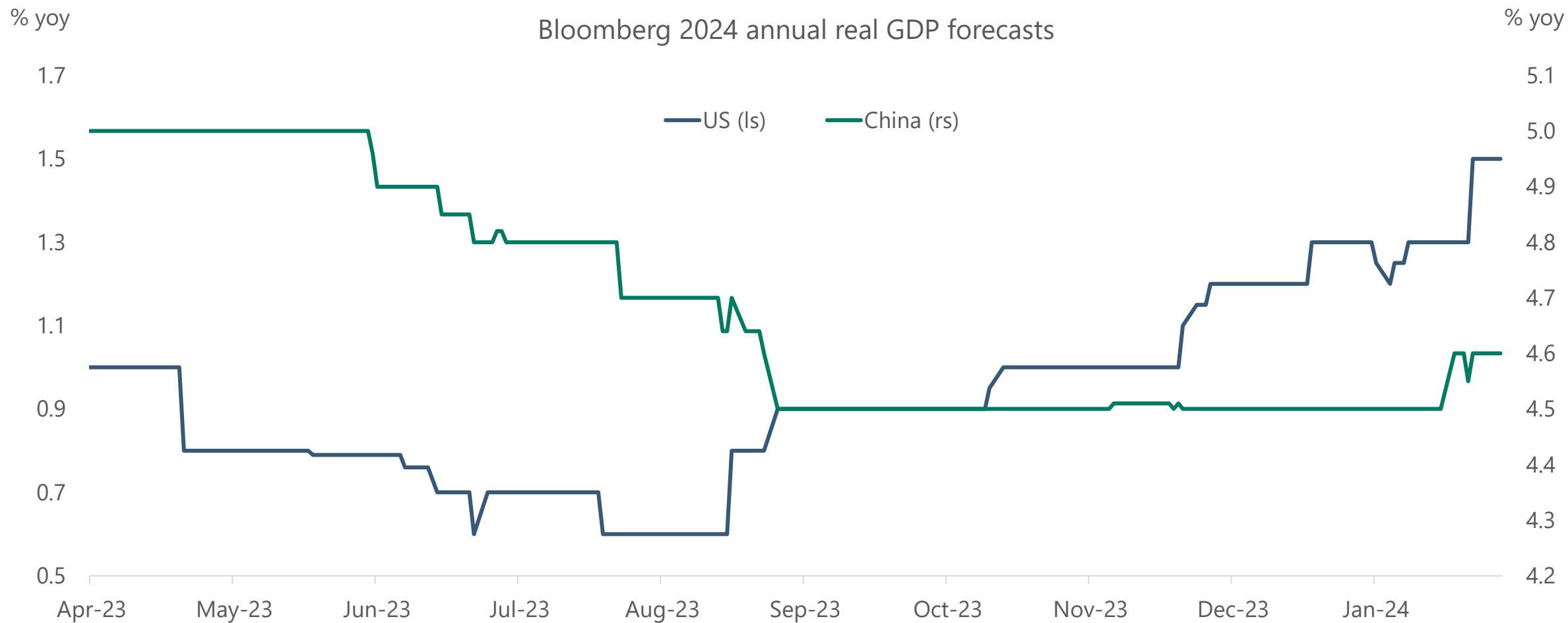
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China: Overview

Diverging growth trends in the US and China



China: Exports are picking up

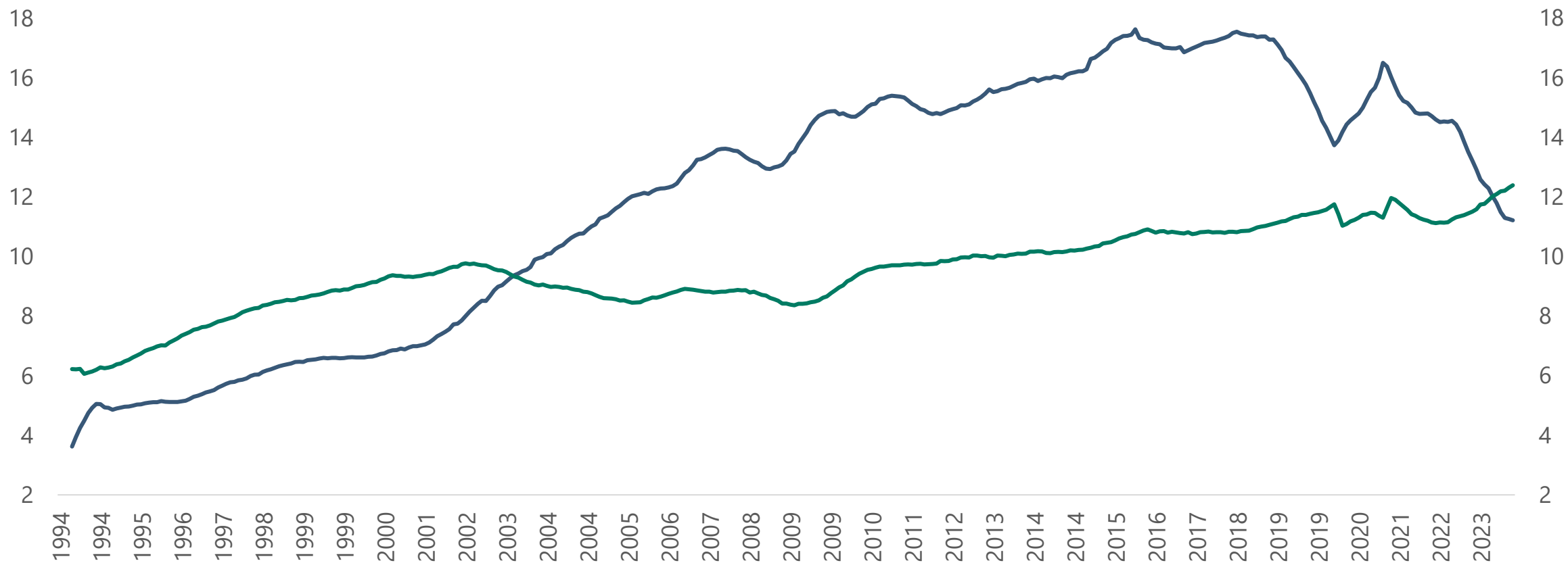


US importing more from Mexico than China

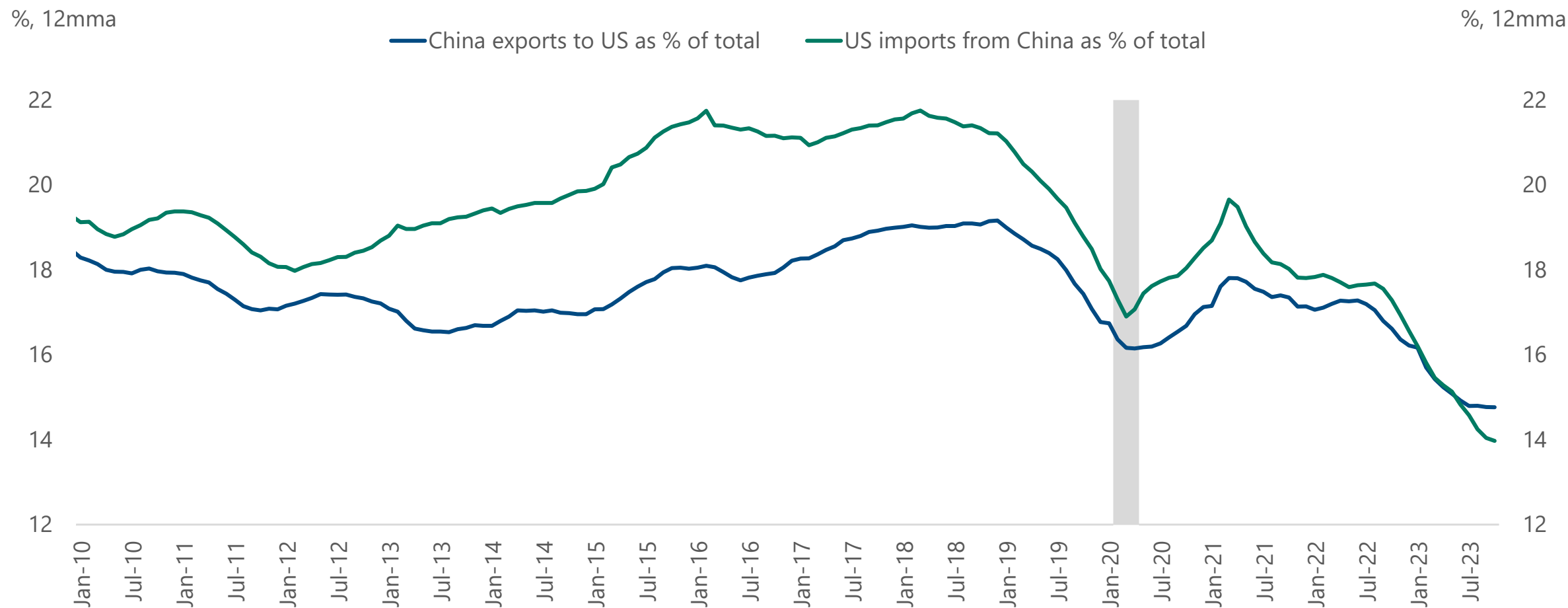
% of US imports, 12mma

% of US imports, 12mma

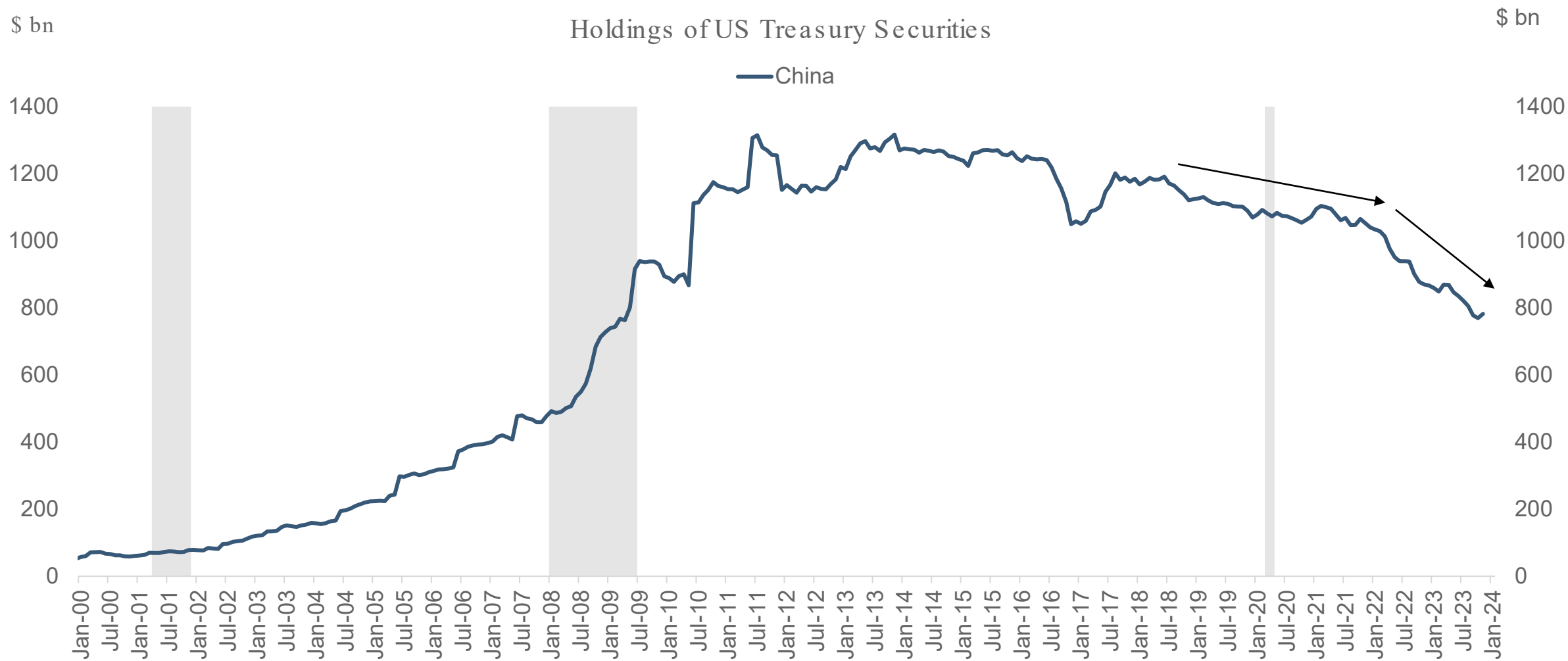
— China — Mexico



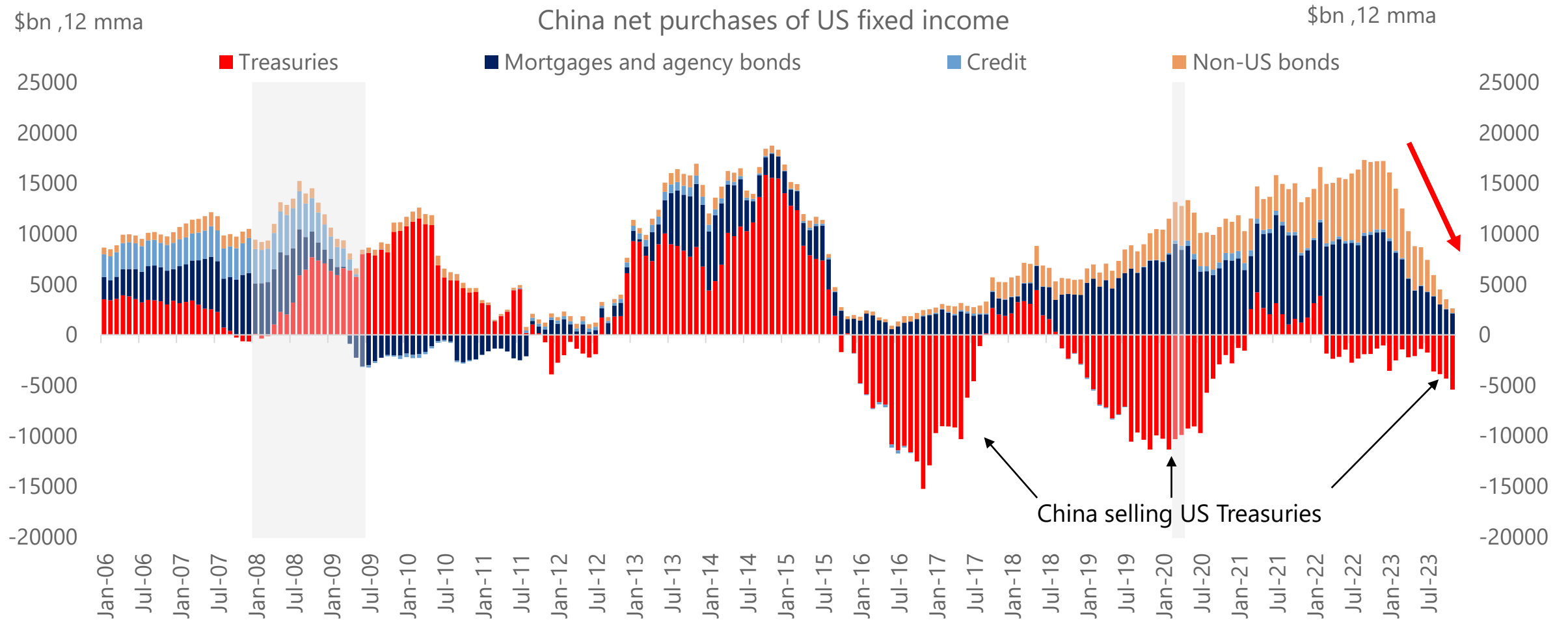
US and China less dependent on each other for trade



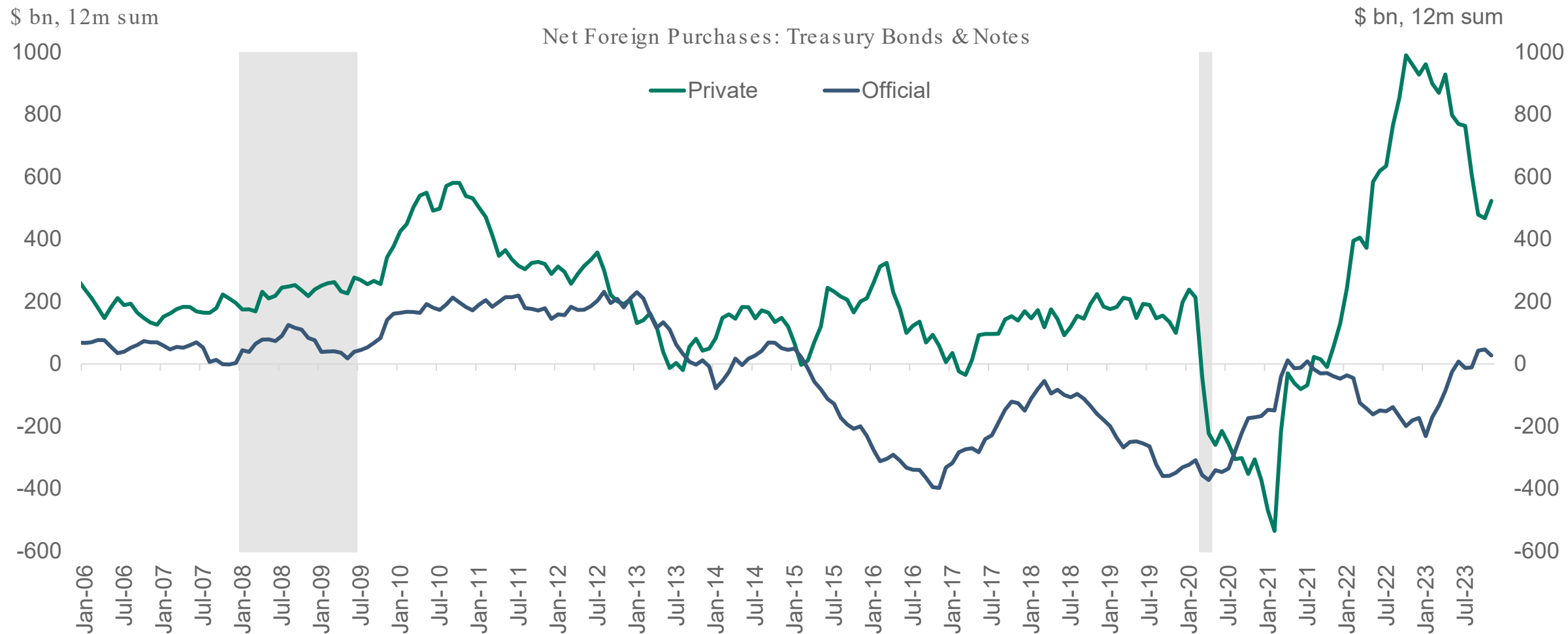
China holding \$300bn less in US Treasuries than in 2021



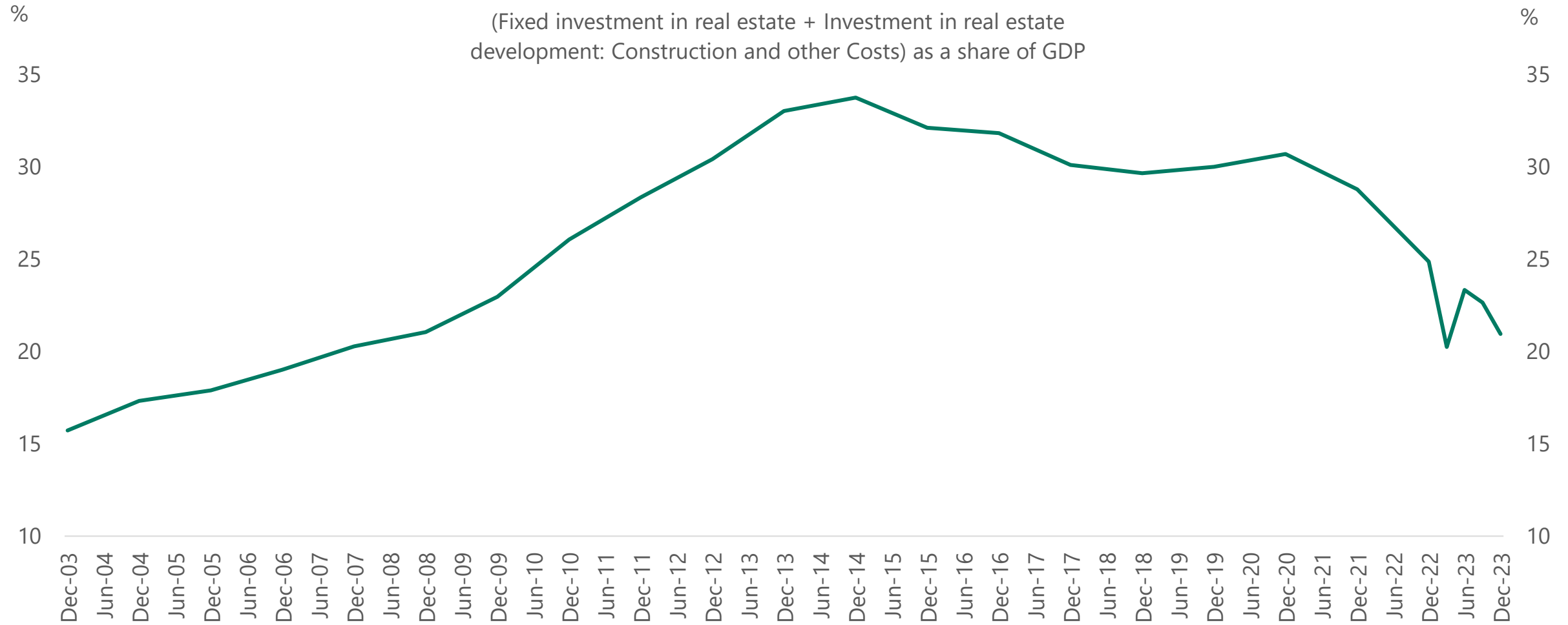
China is selling Treasuries and buying fewer mortgages and fewer non-US bonds



Foreign private sector is slowing its purchases of US Treasuries

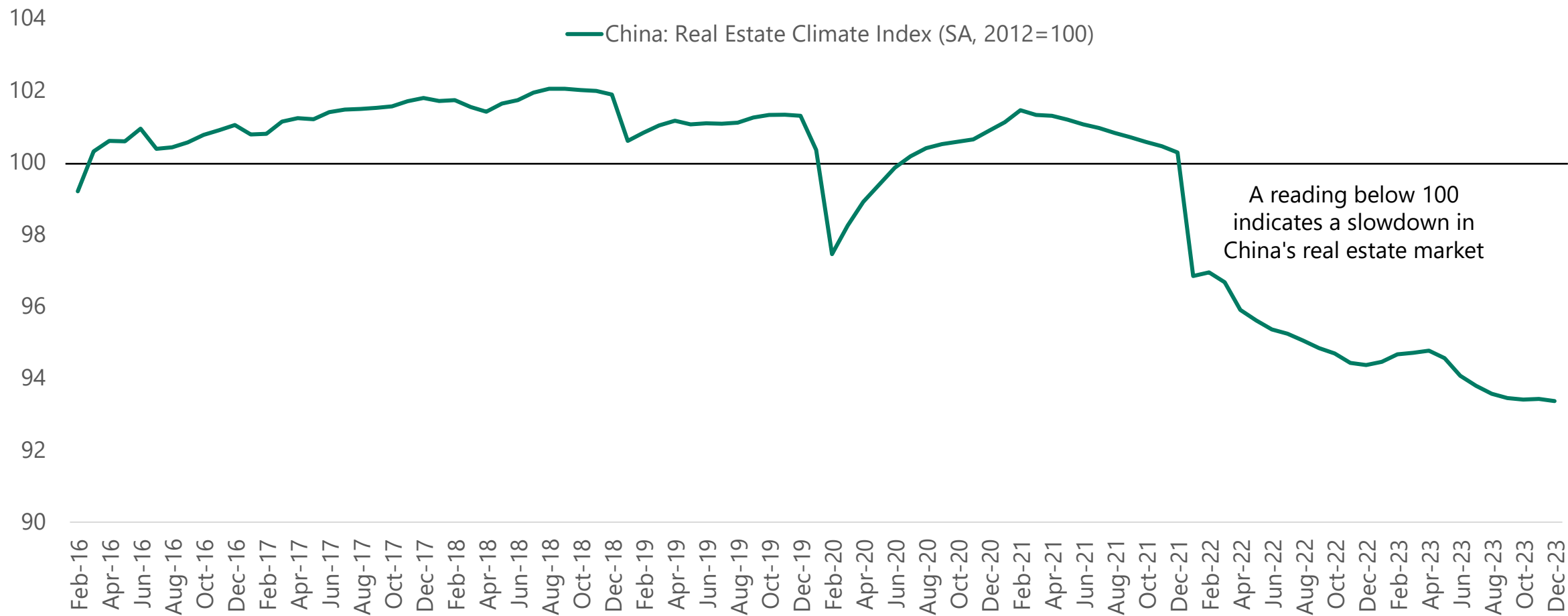


China: Housing makes up 21% of GDP



Source: Haver, Apollo Chief Economist. (Data as of Q3 2023)

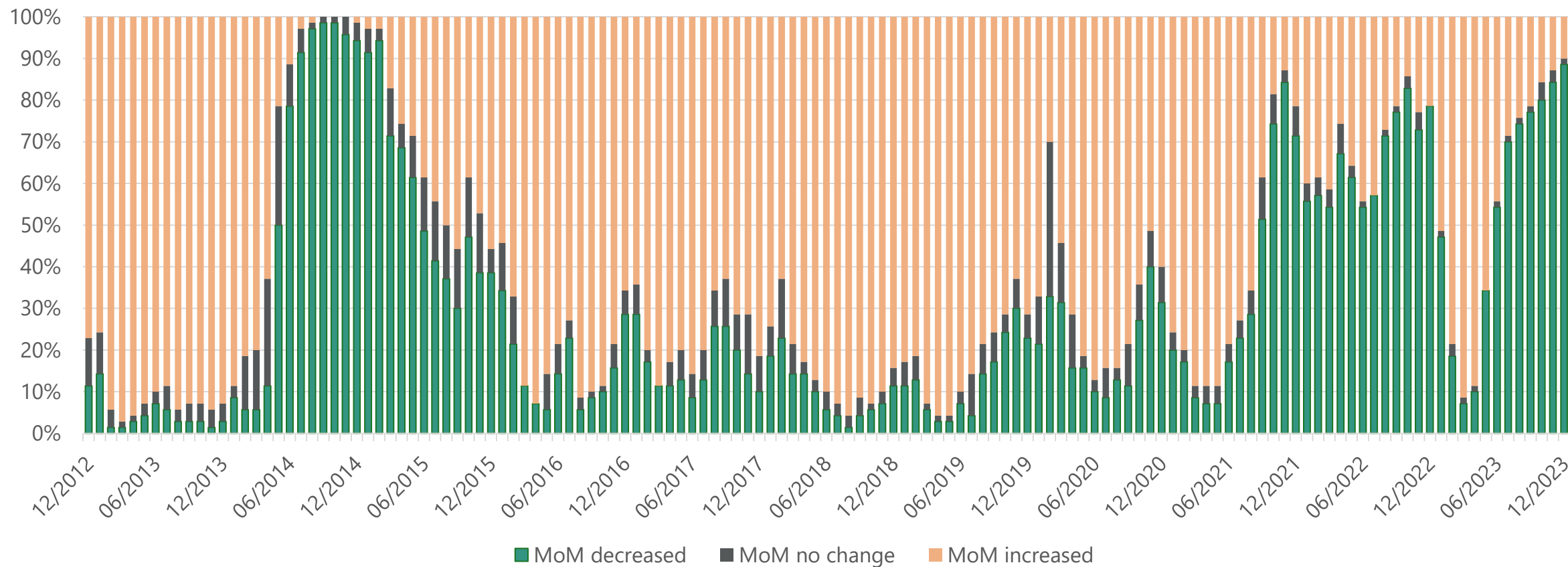
China real estate index in deep recession territory



Source: NBS, Haver, Apollo Chief Economist. Note: A reading above 100 indicates economic growth and a reading below 100 indicates a slowdown in China's real estate market.

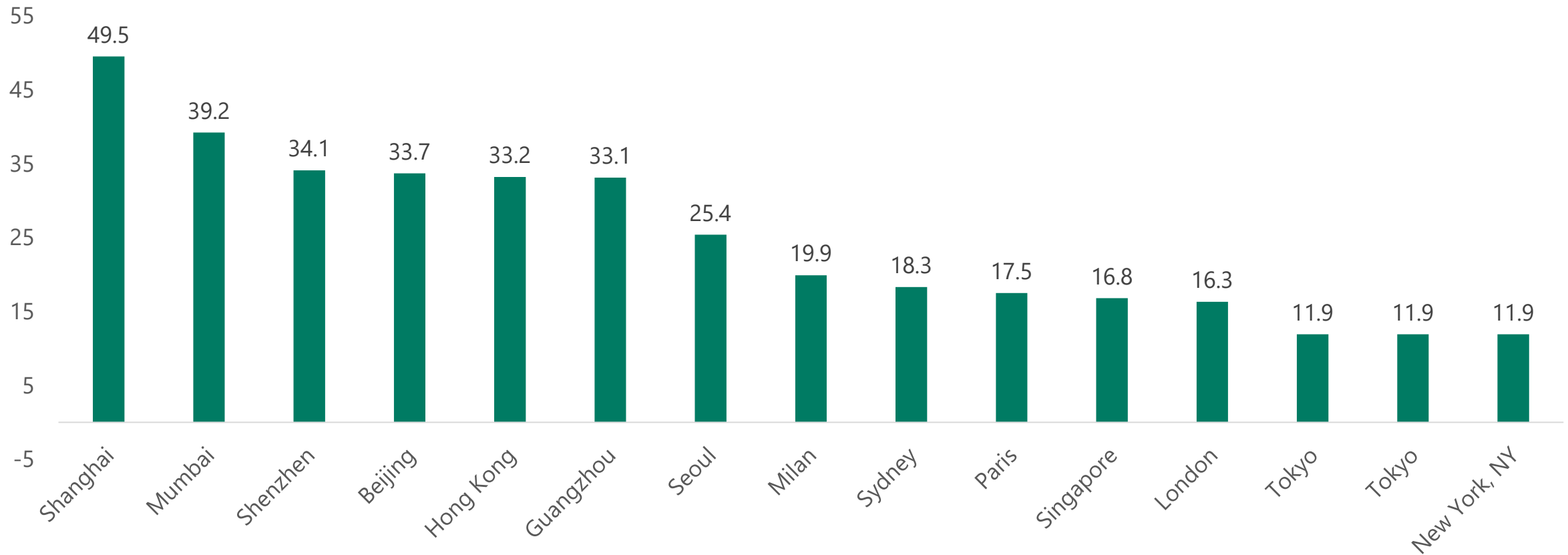
Housing market cooling down in China

Price changes in 70 major cities (new residential properties)



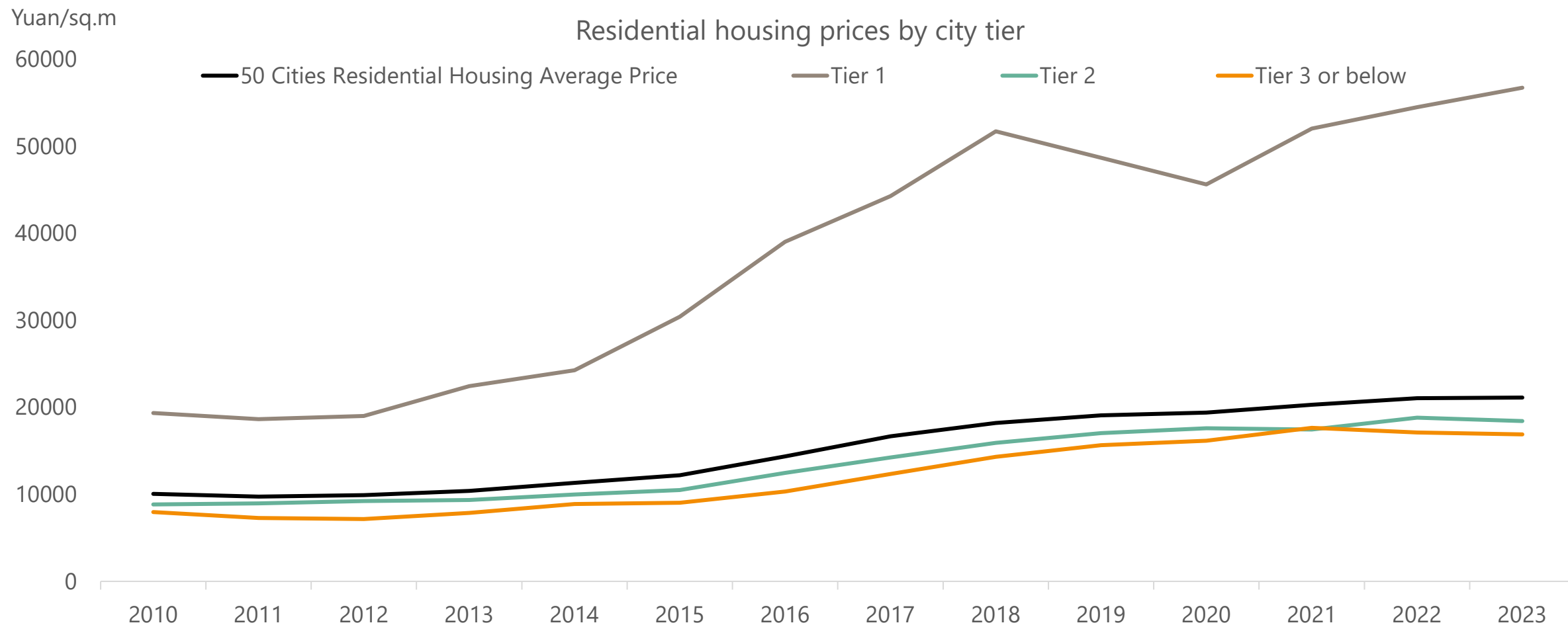
Home price-to-income ratio four times higher in Shanghai than in New York

Home Price-to-income Ratios in the World's Major Cities (2024)



Source: Numbeo, Apollo Chief Economist (<https://www.numbeo.com/property-investment/rankings.jsp?title=2021-mid>) Note: *Price to Income Ratio* is the basic measure for apartment purchase affordability. It is generally calculated as the ratio of median apartment prices to median family disposable income, expressed as years of income.

Homes cost three to four times more in Tier 1 cities than in Tier 2 and Tier 3 cities



Source: Bloomberg, Apollo Chief Economist (Note: 2023 is till June)

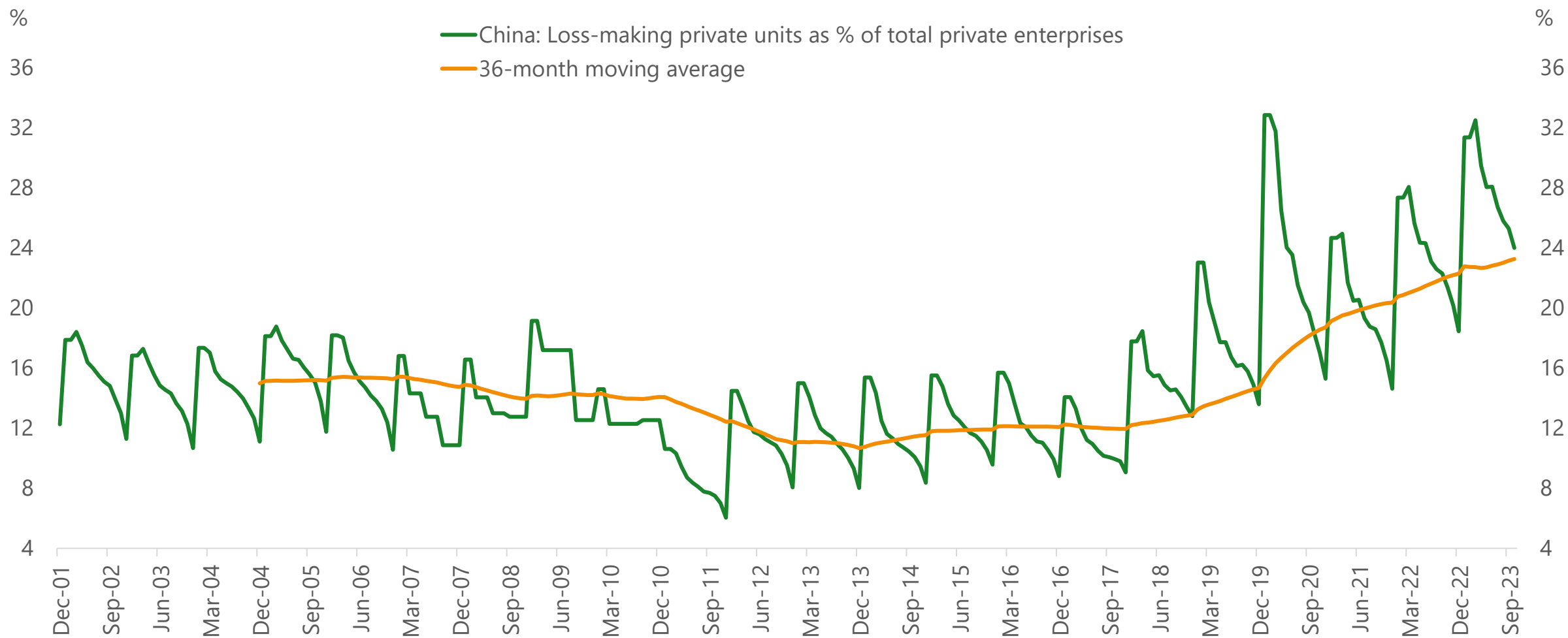
China IG and HY credit: Developers have been hit hard



China: In 2000 there were 10 workers per retiree. Today there are 5.

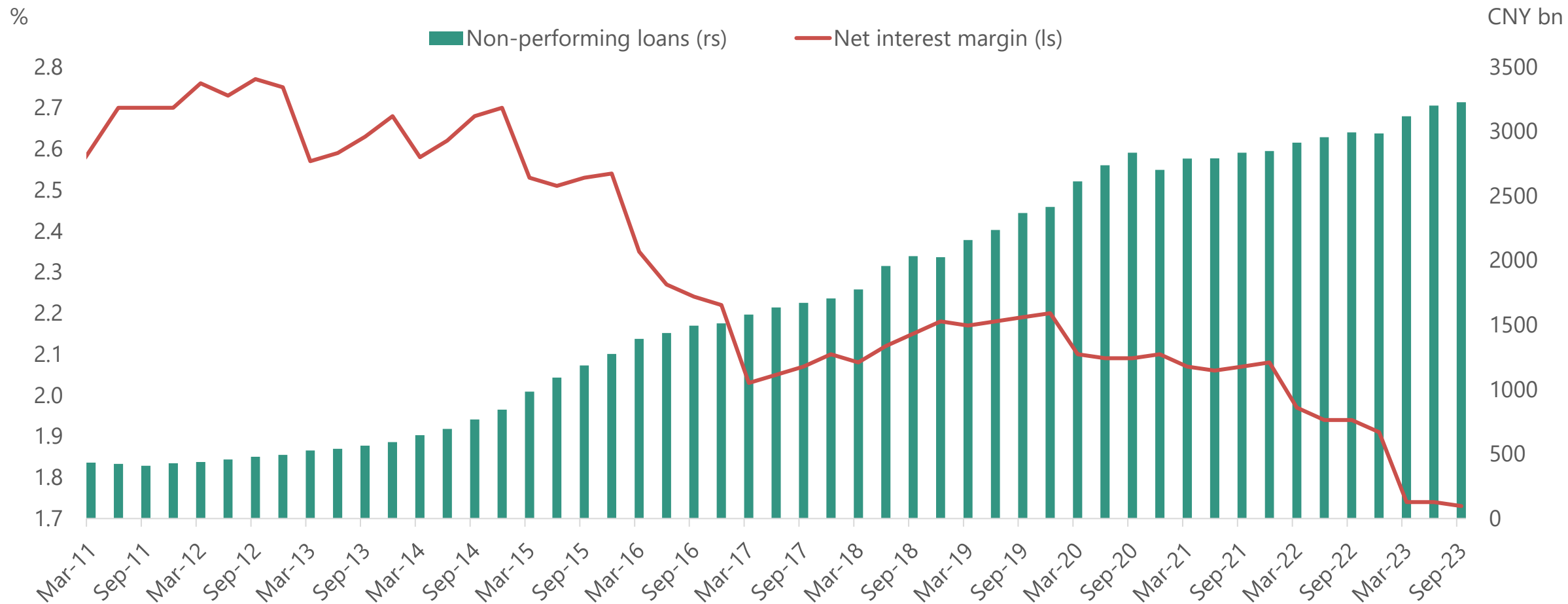


A trend increase in the share of Chinese private firms that are loss-making



Source: Bloomberg, Apollo Chief Economist (Note: CNBUPRTD Index, CNLBPRTD Index)

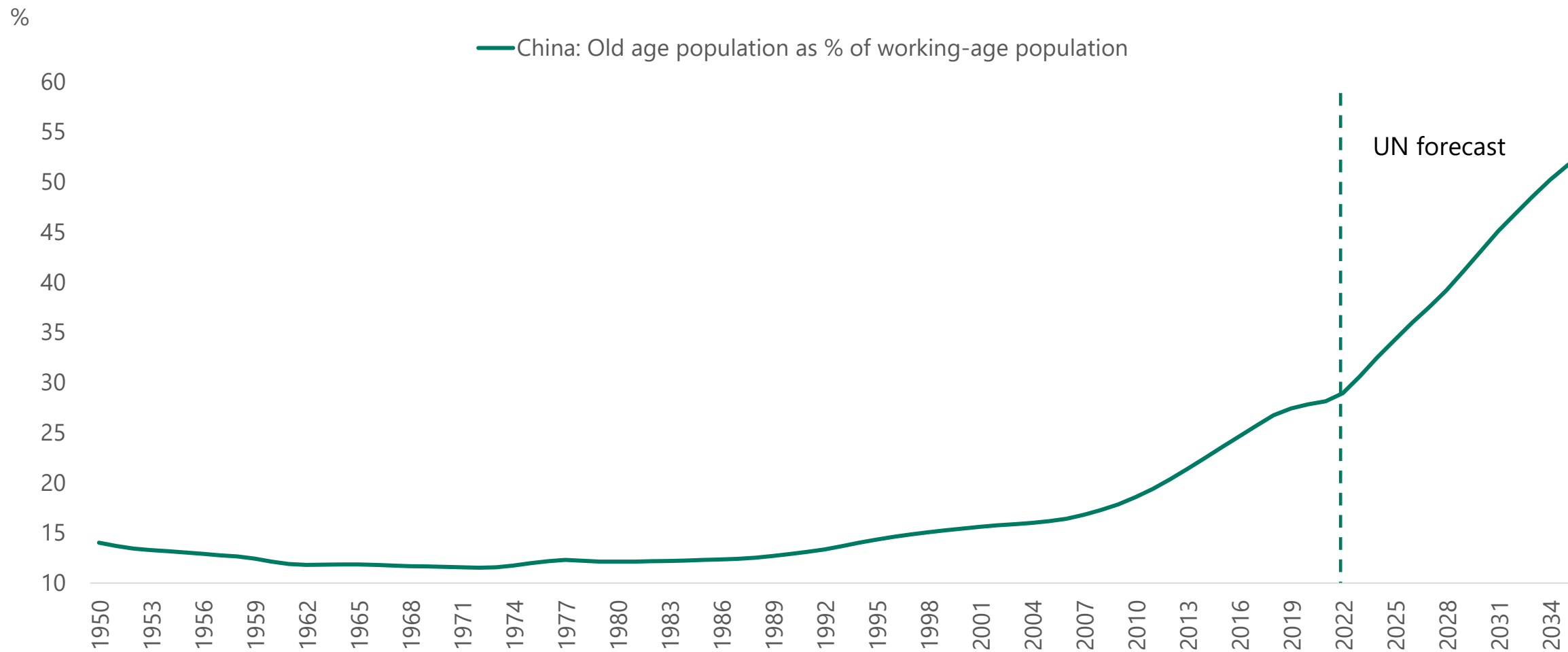
China banks: NPL has been rising



Source: China Banking Regulatory Commission, Bloomberg, Apollo Chief Economist

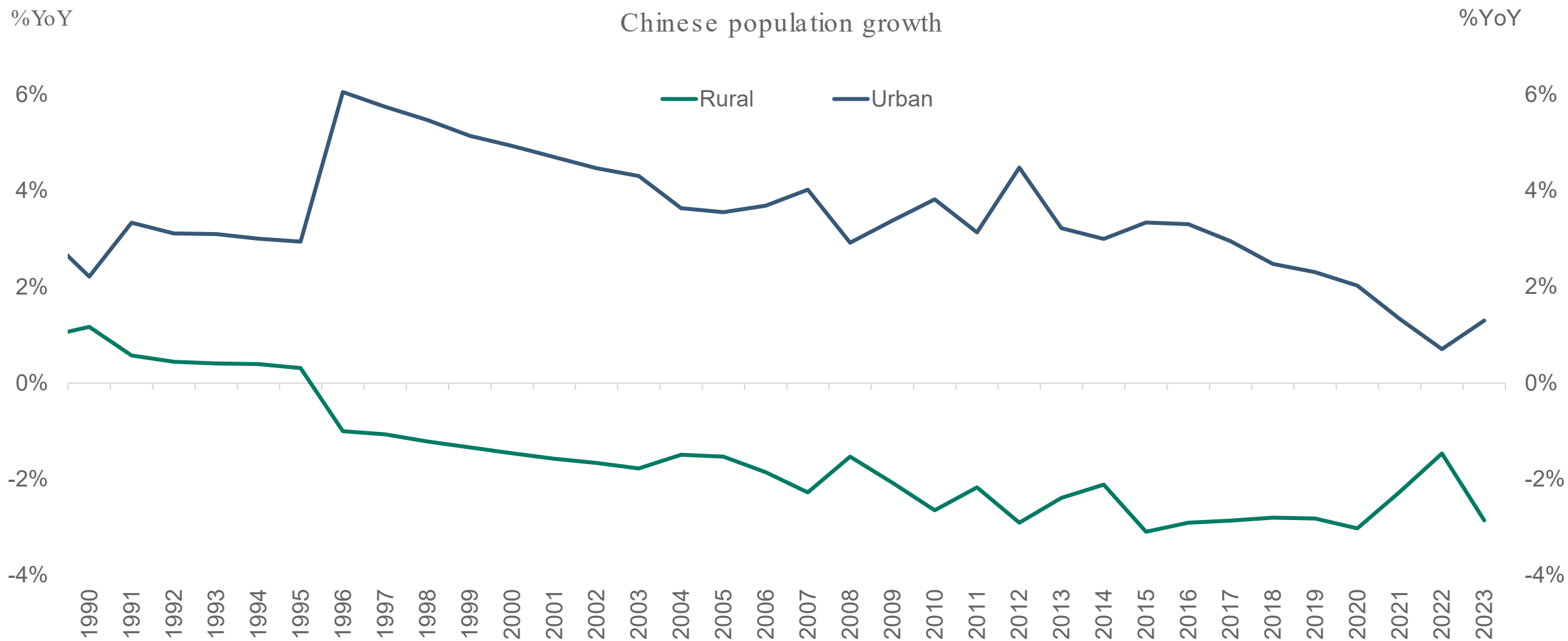
China: Demographics

China: Dependency ratio approaching 50% over the coming decade

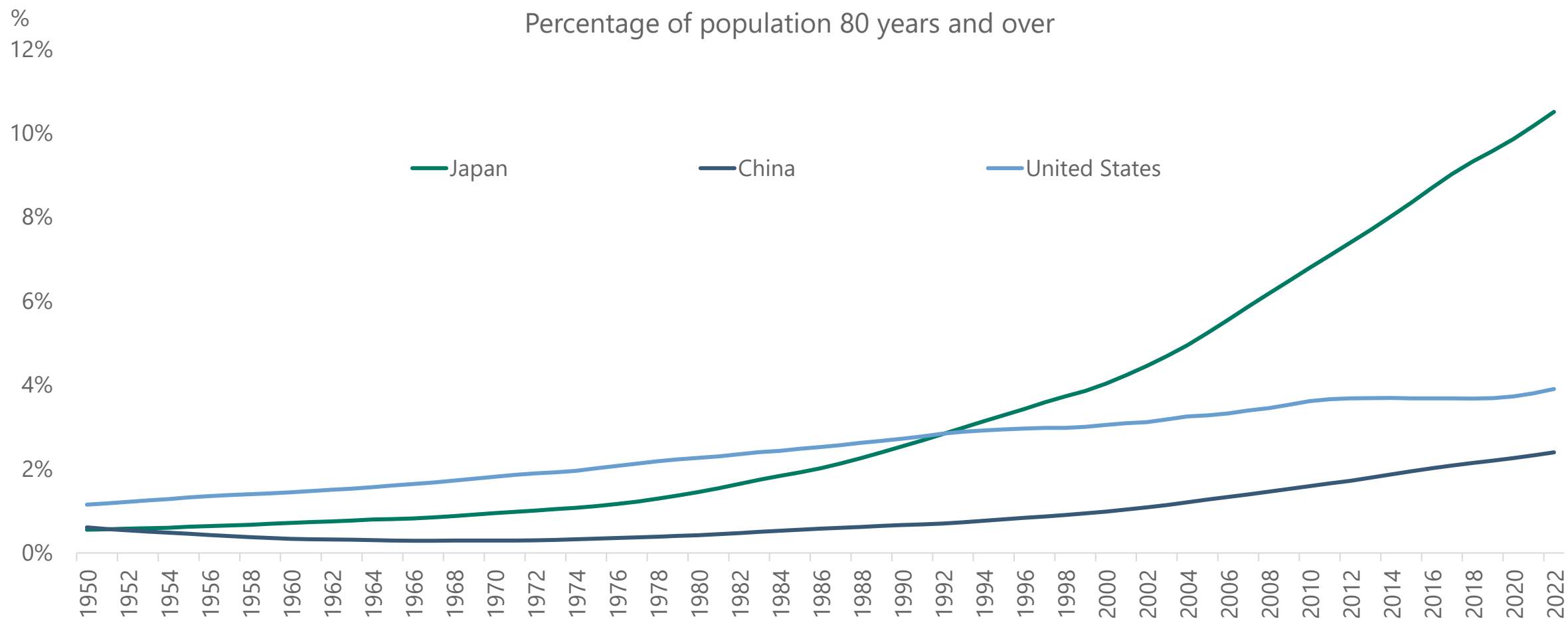


Source: UN, Haver Analytics, Apollo Chief Economist (Old age = 60 years and over; working-age = 15-59 years old)

Population growth declining

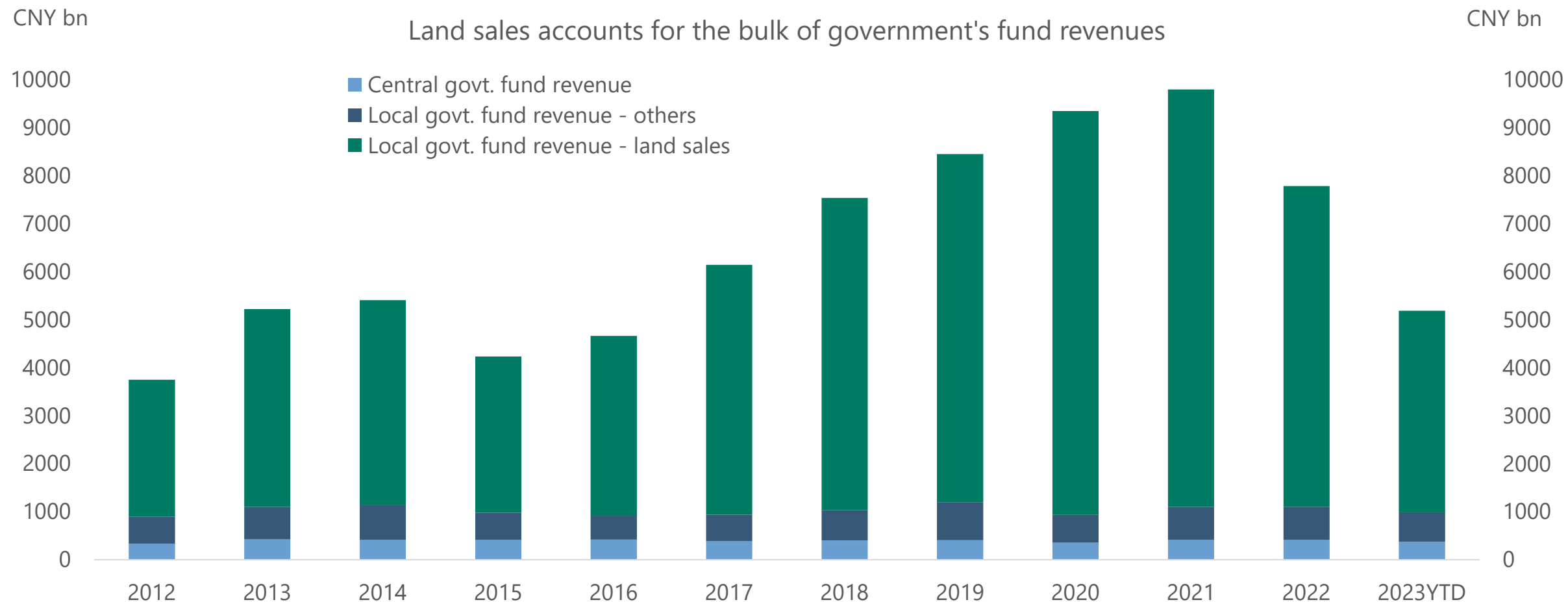


China demographics not similar to Japan



Real estate playing a key role in the Chinese economy

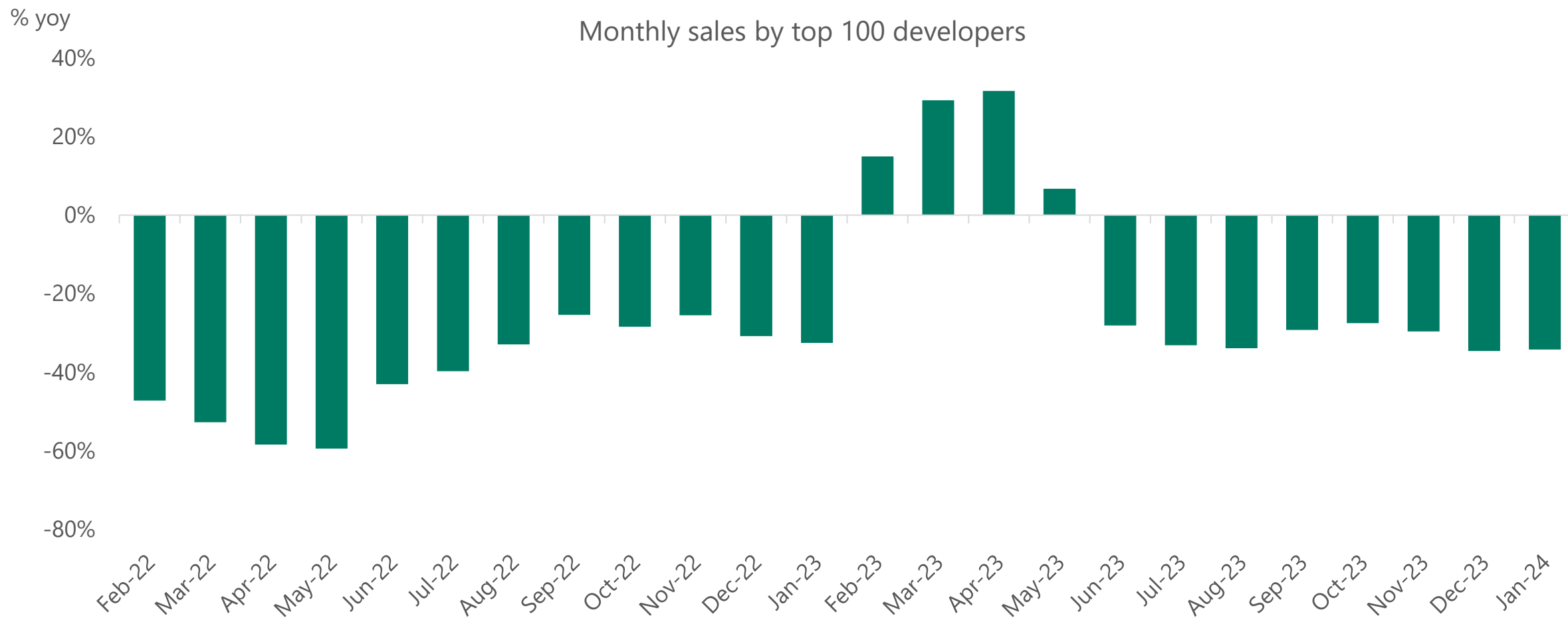
Land sales are a crucial source of local government revenue



Home sales slowing in Tier 1 and Tier 2 cities

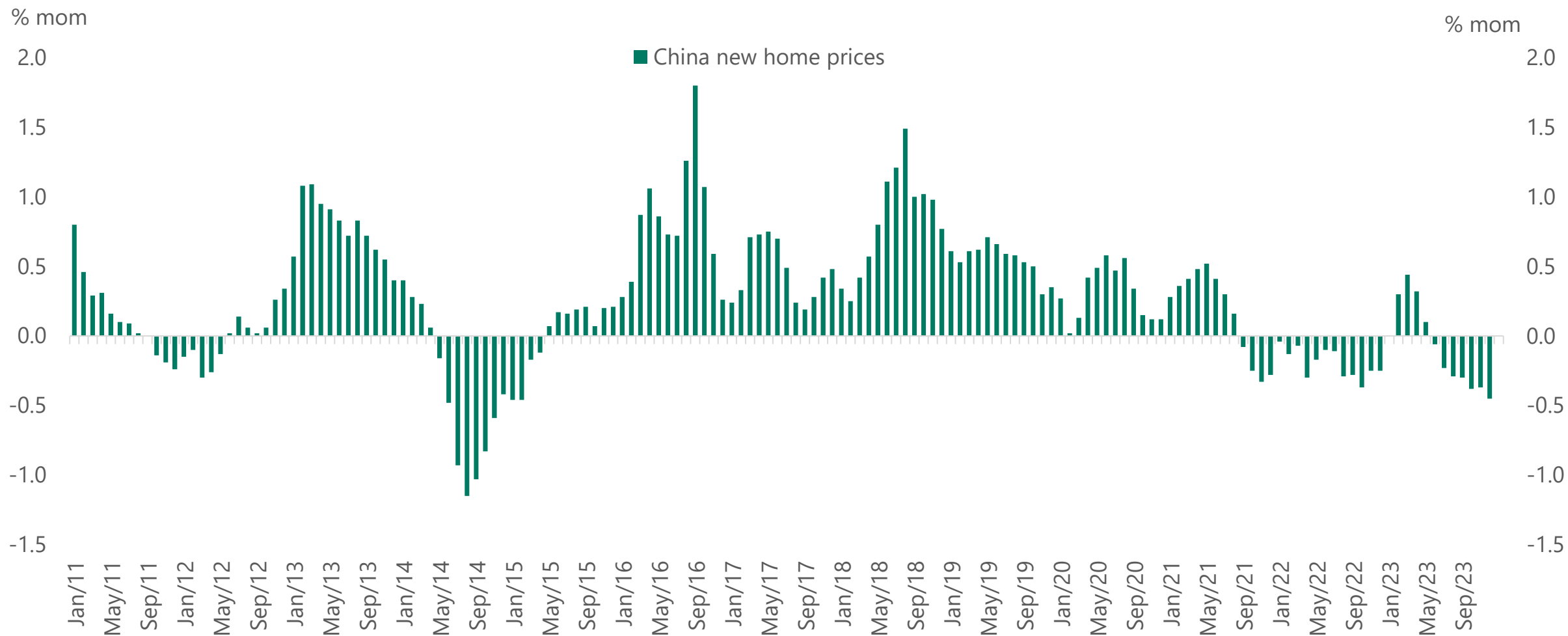


The value of new home sales among the 100 biggest real estate companies continue to decline

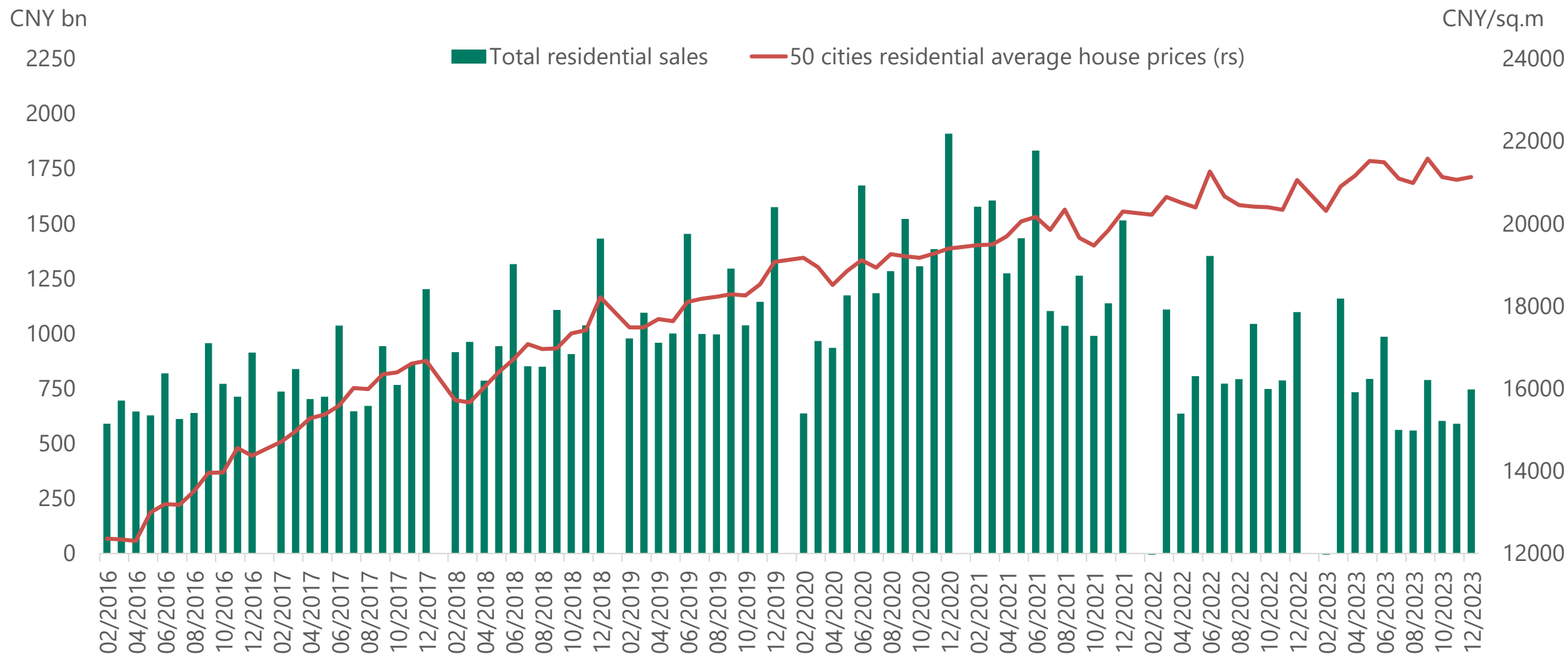


Source: China Real Estate Information Corp, Bloomberg, Apollo Chief Economist

Housing market cooling down in China: Home prices falling month-over-month

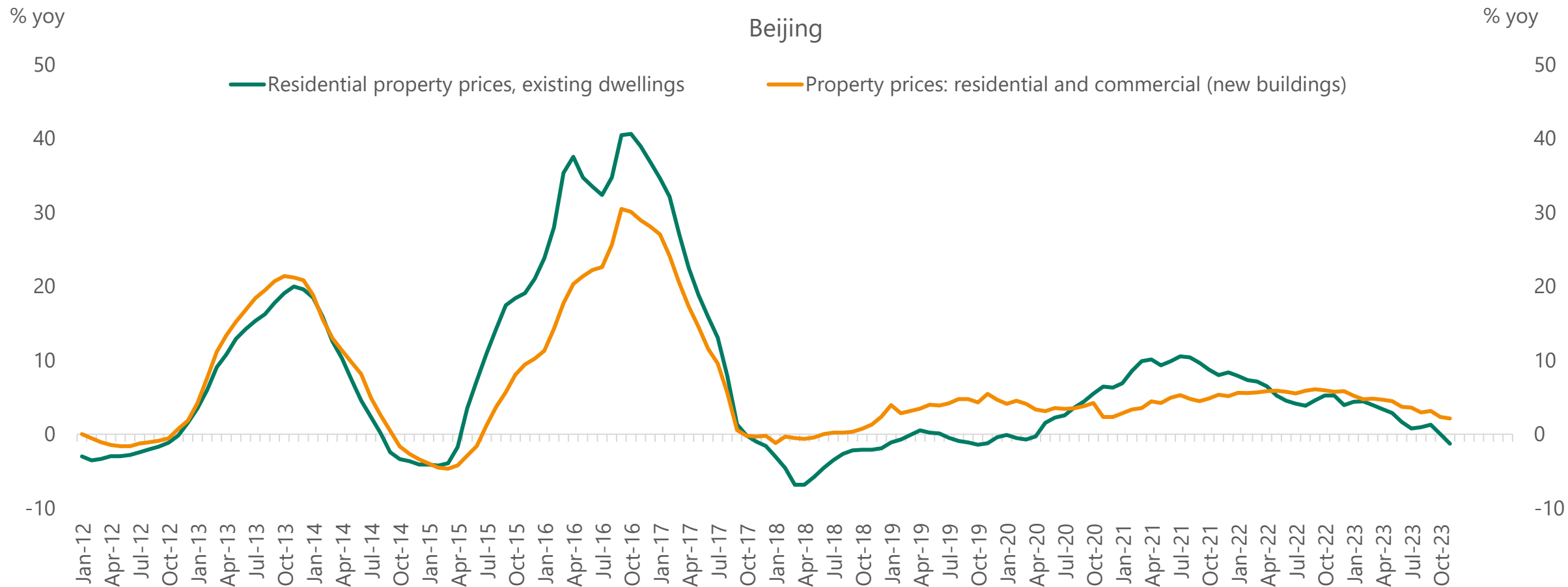


Housing market cooling down in China; Home sales declining

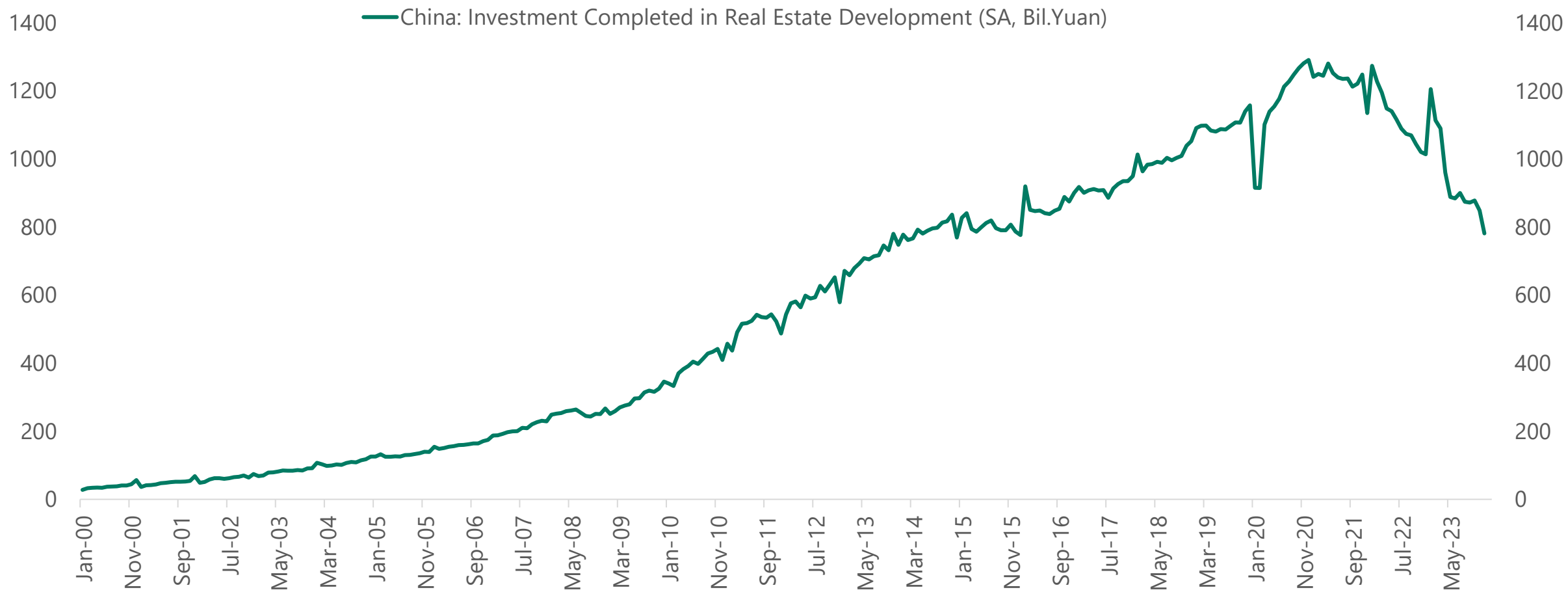


Source: CRIC, Bloomberg, Apollo Chief Economist

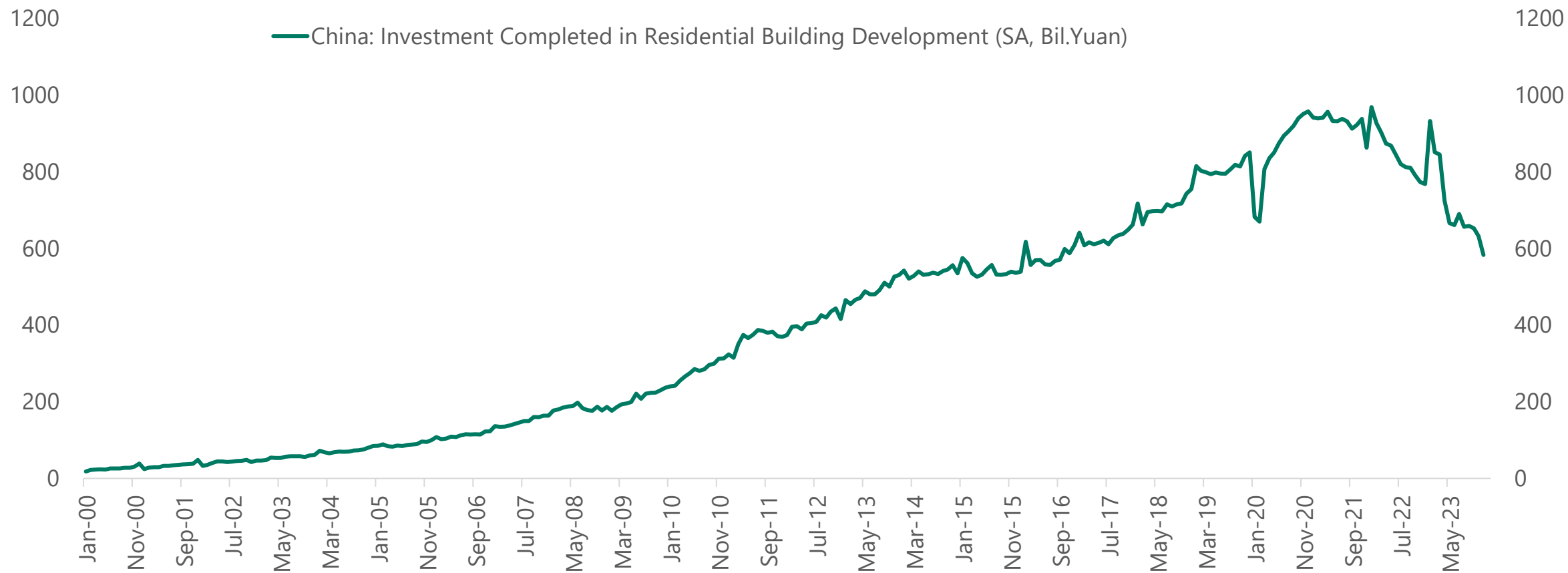
Beijing home price inflation slowing down



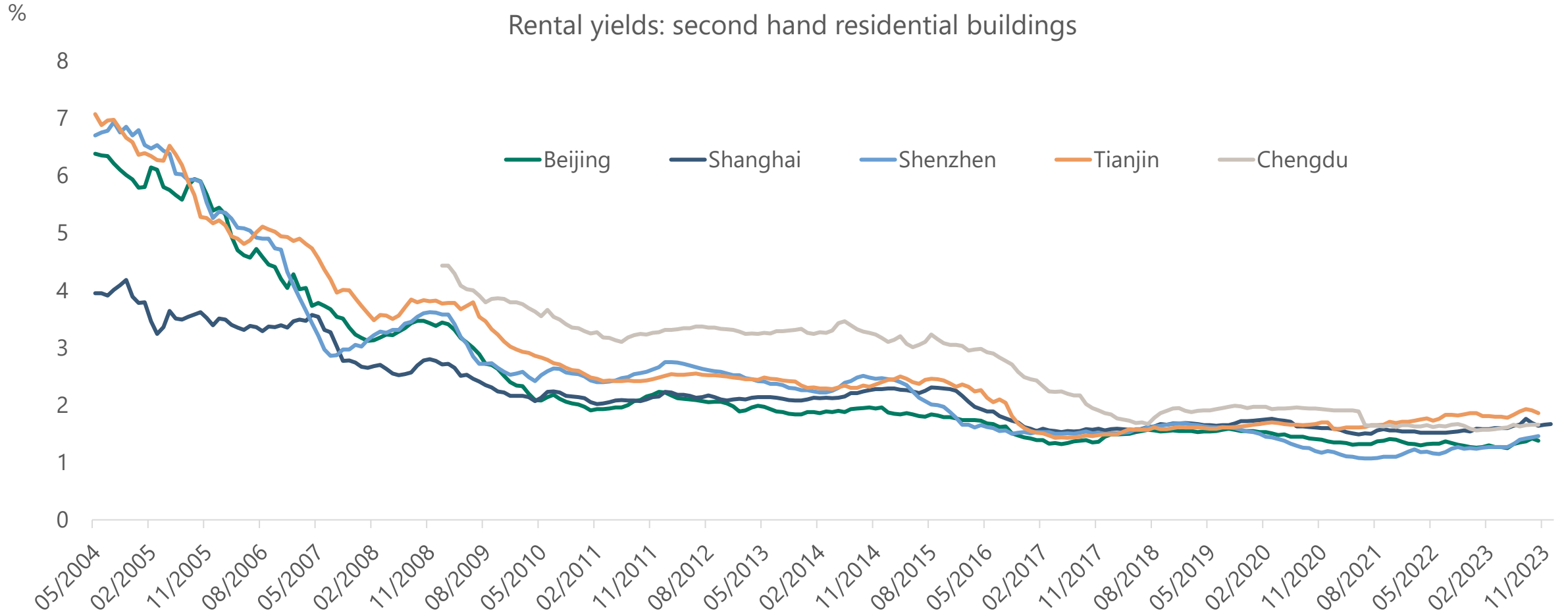
China: Real estate investment slowing



Residential real estate investment slowing



Rental yields at second hand residential buildings in major cities



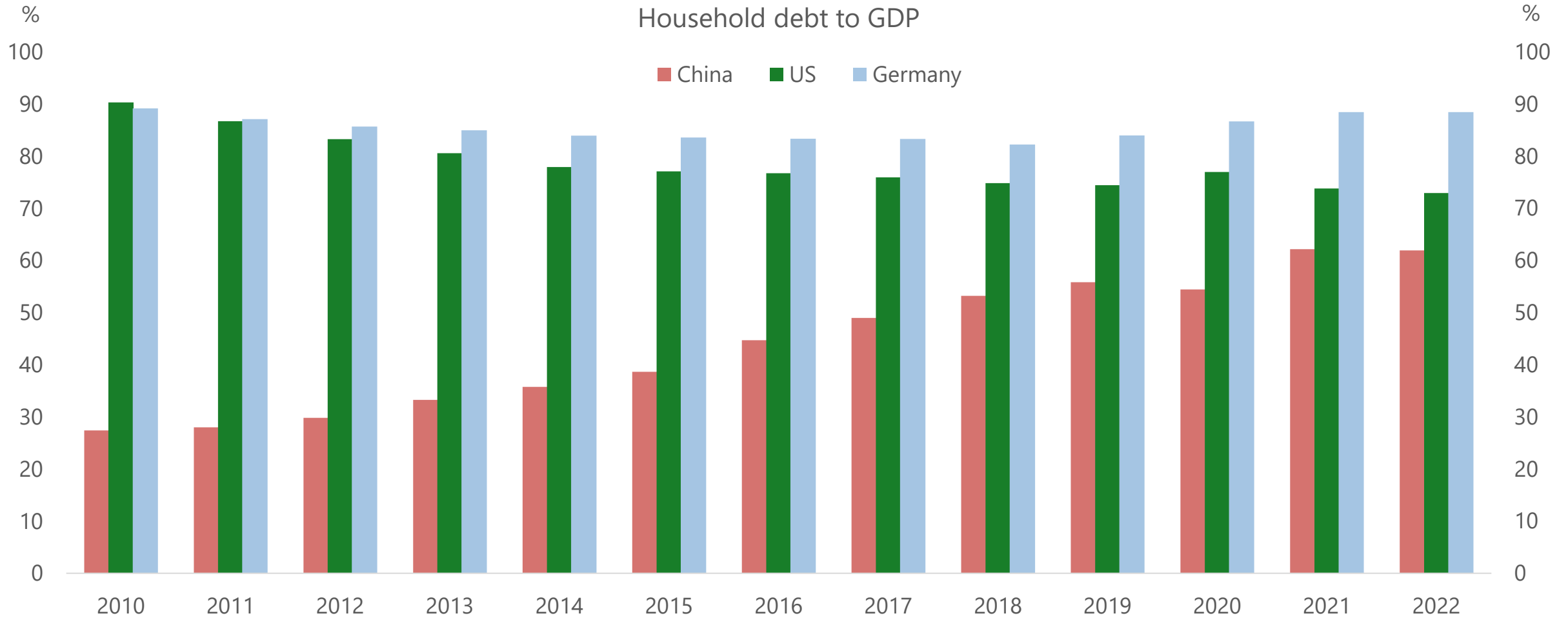
Source: Bloomberg, Apollo Chief Economist (Note: Rental yield is the rental income as a percentage of the property's value)

Interest rates declined to its at lowest level since 2009

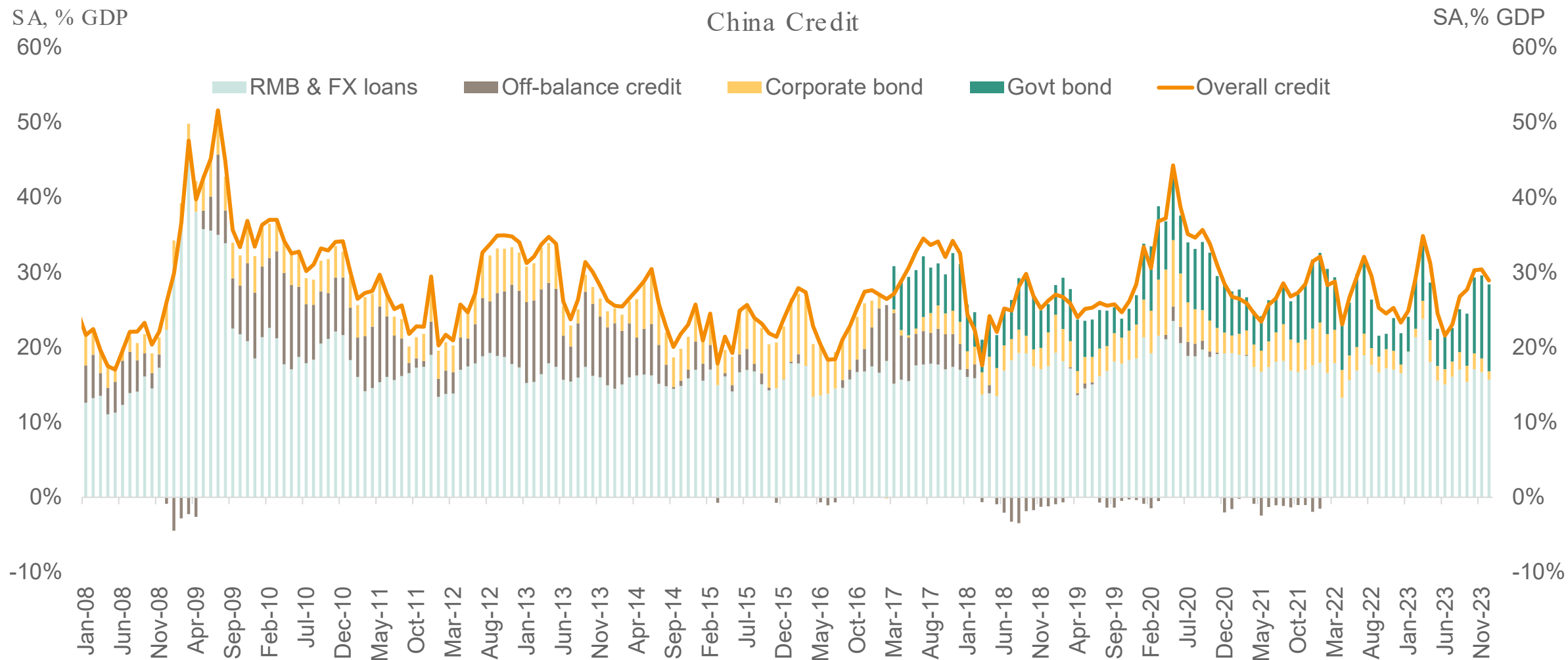


China: Debt and financing

Household debt to GDP has increased steadily in China

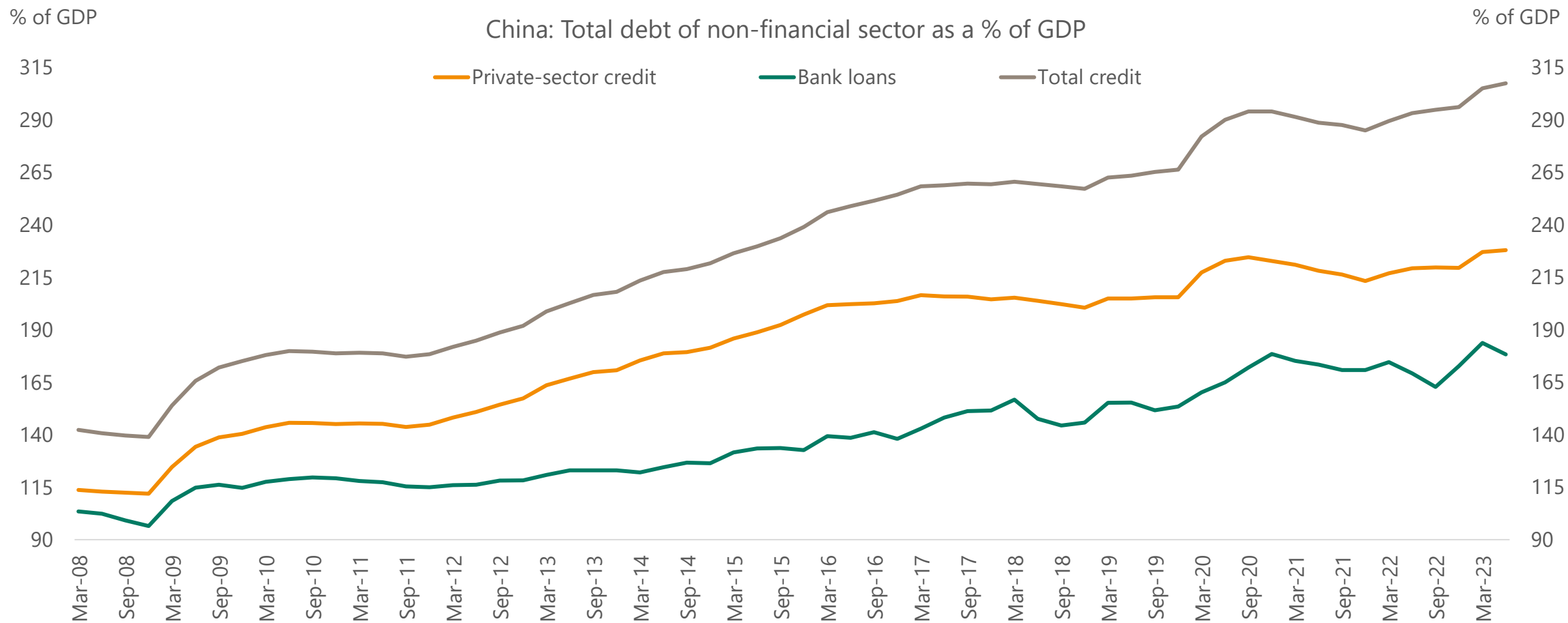


China credit growth

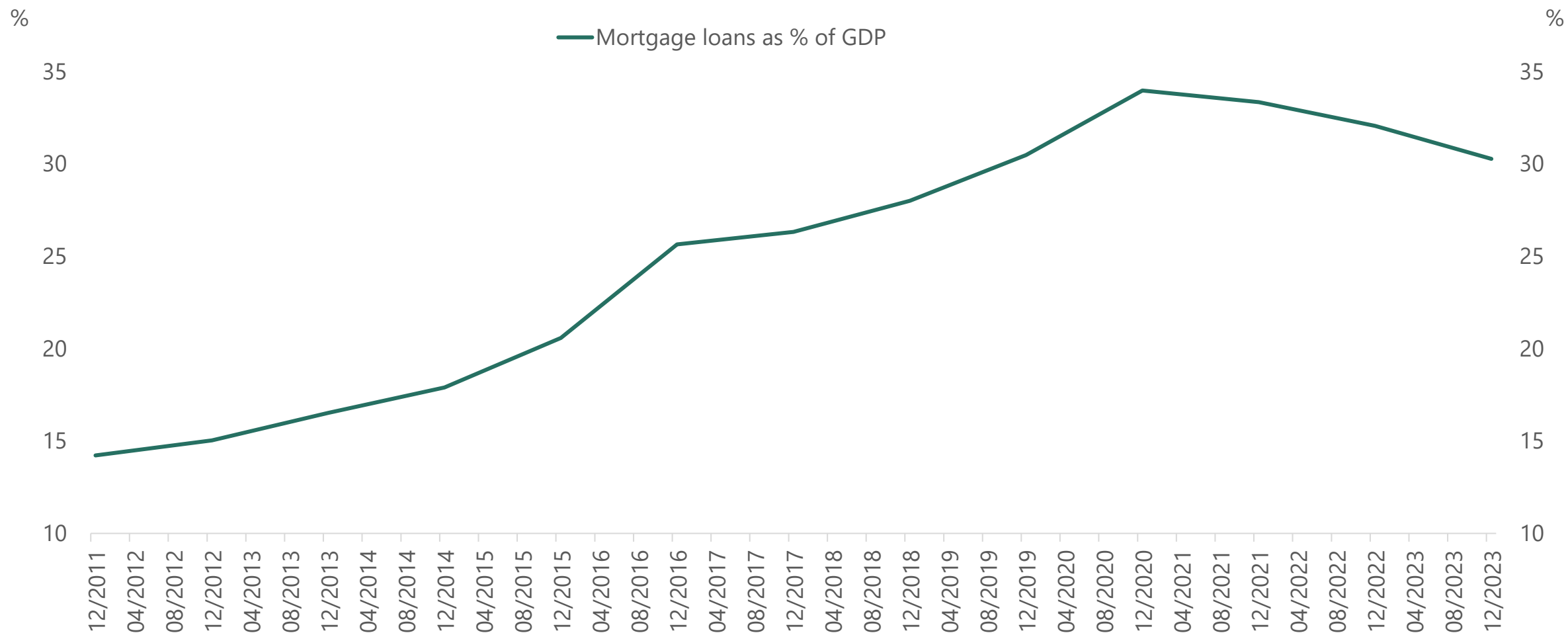


Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

China: Debt levels have increased in the private sector



China's mortgage liabilities as a share of GDP

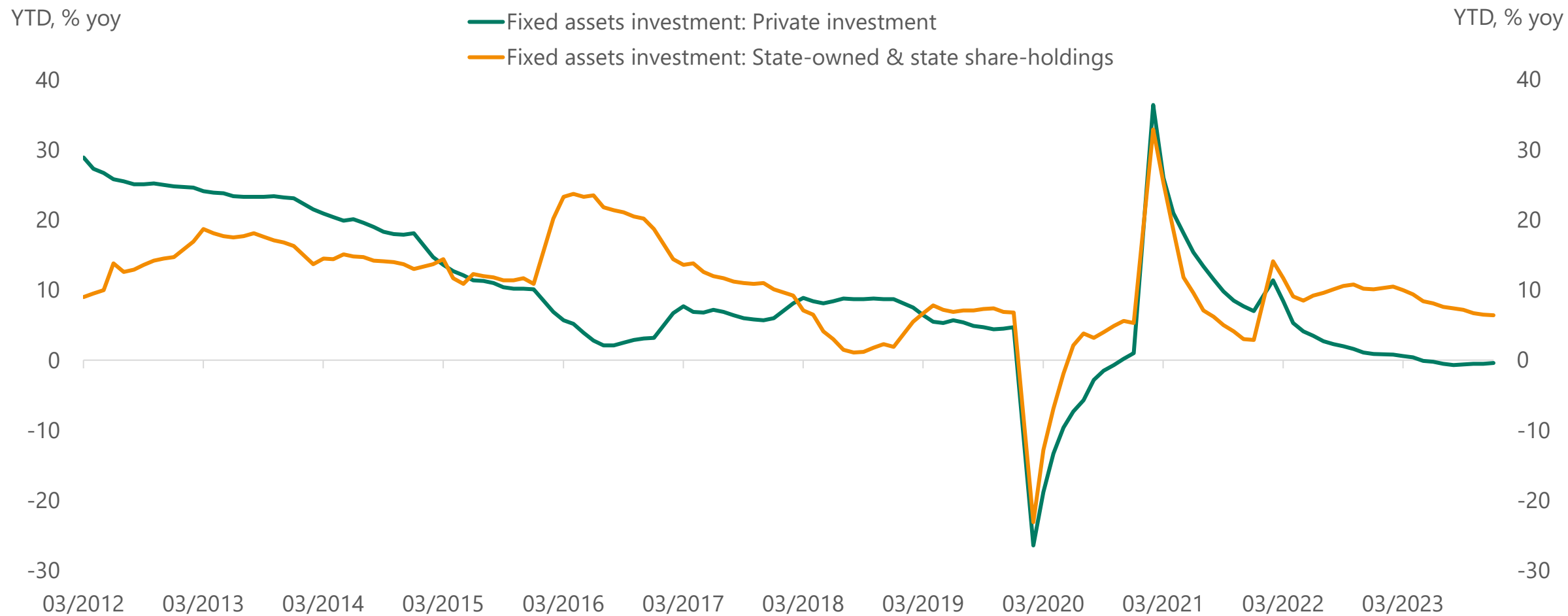


Source: PBoC, Bloomberg, Apollo Chief Economist (Q2 2023)

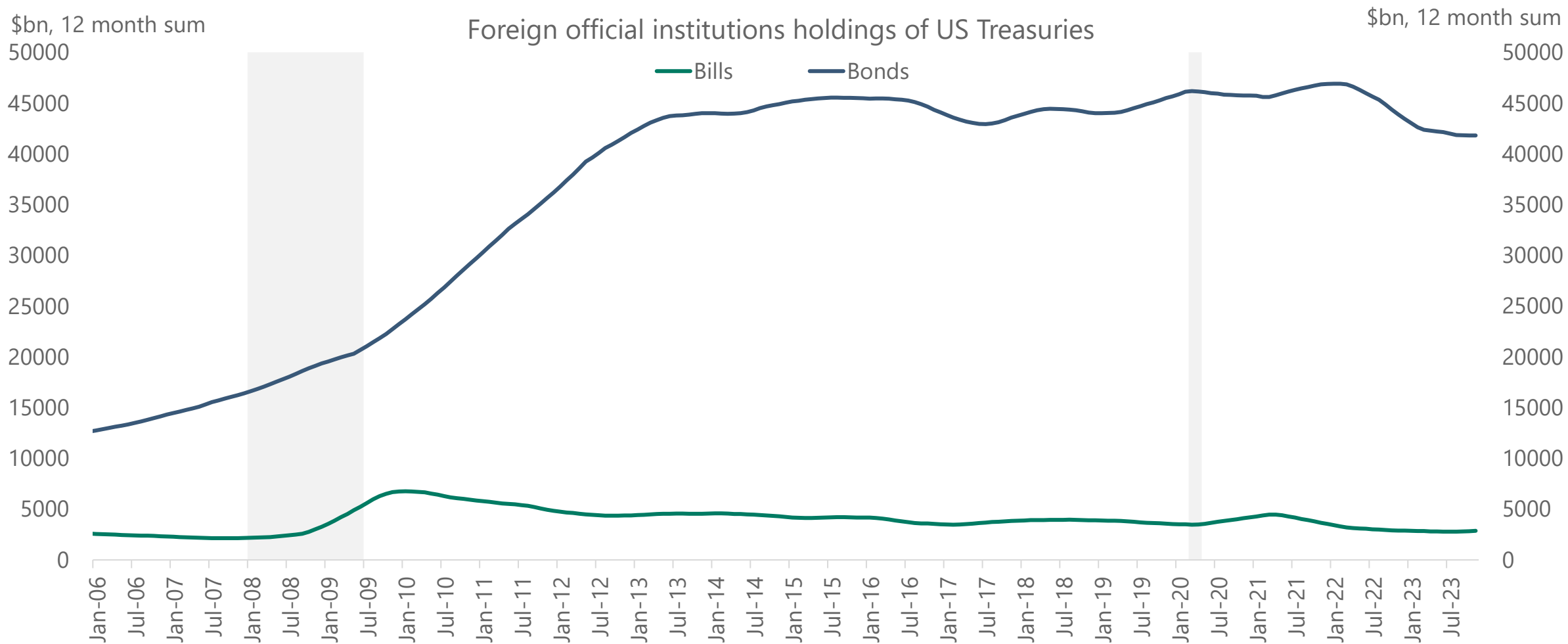
Real estate loans making up a smaller part of total lending by financial institutions



China: Private investment growth is declining



Foreign official holdings of US bonds is falling



Chinese trade with the US

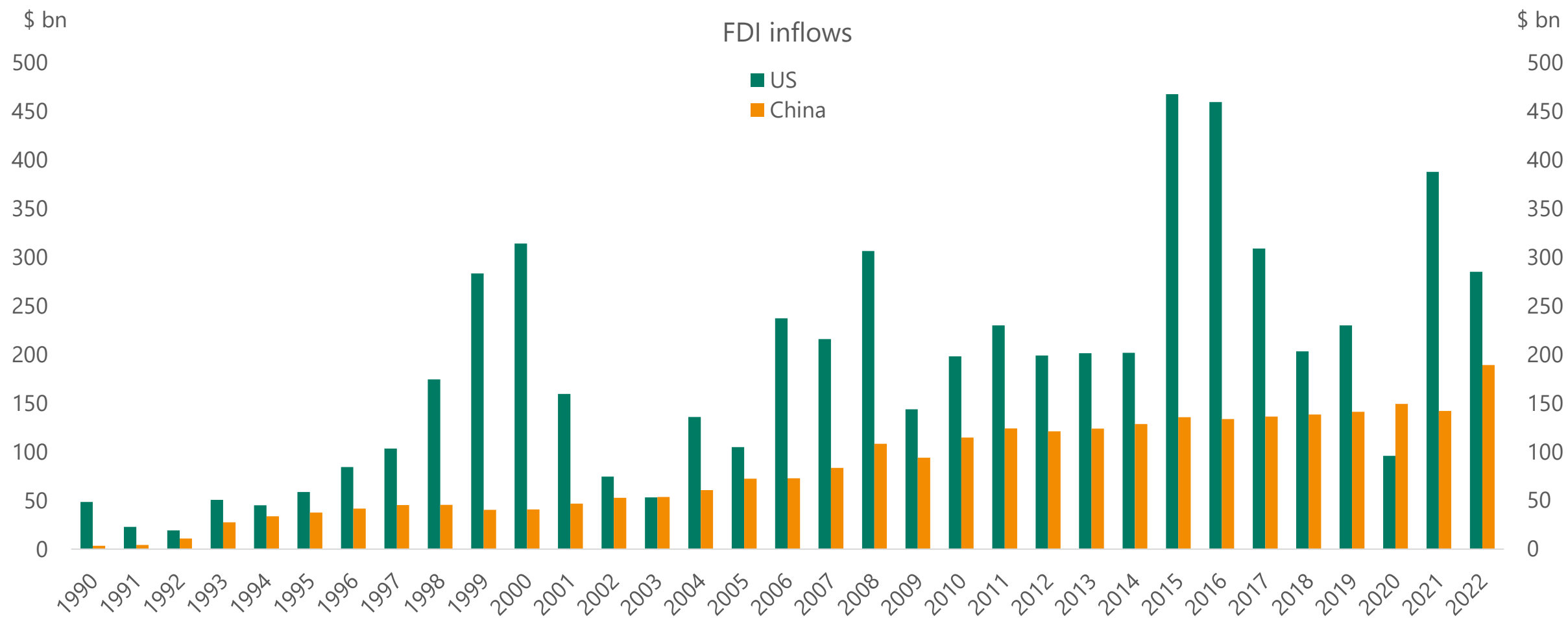
Chinese share of exports to US, EU, and Japan declining



US-China trade deficit



China and US: Comparing foreign direct investment



China IG and HY

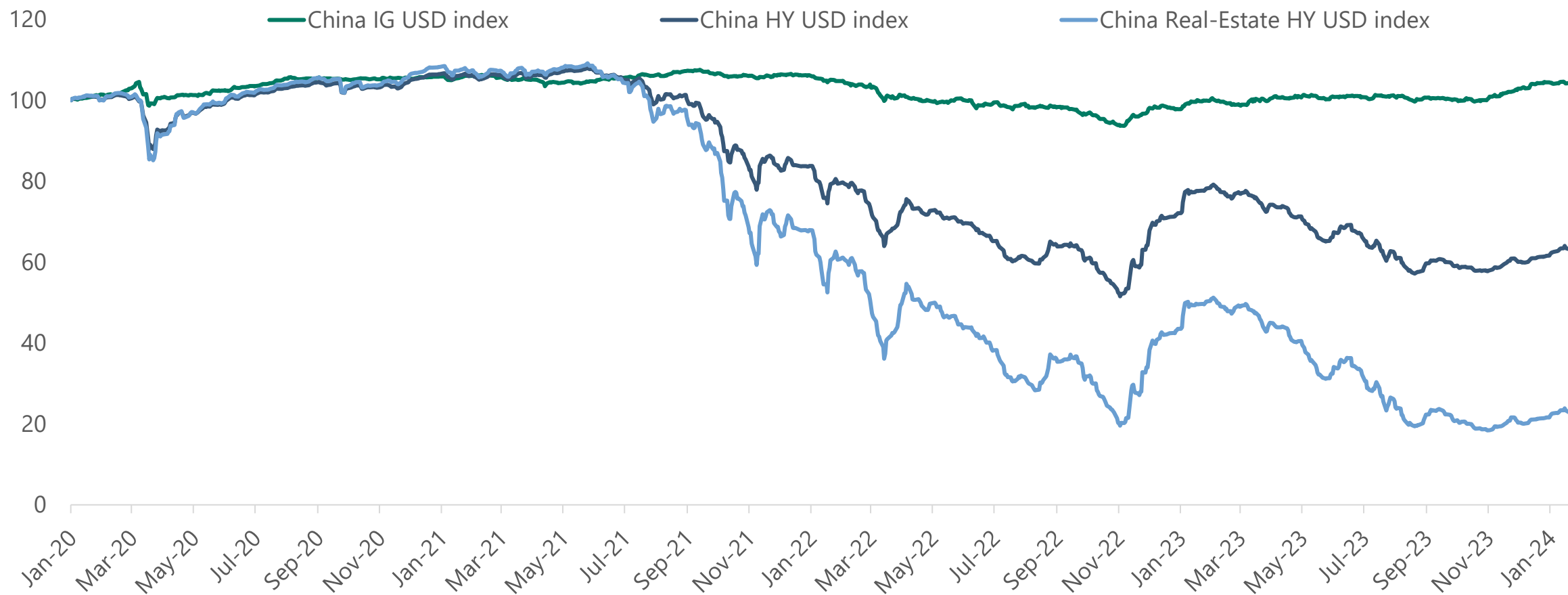
China's real estate sector under pressure



Source: Bloomberg, Apollo Chief Economist.

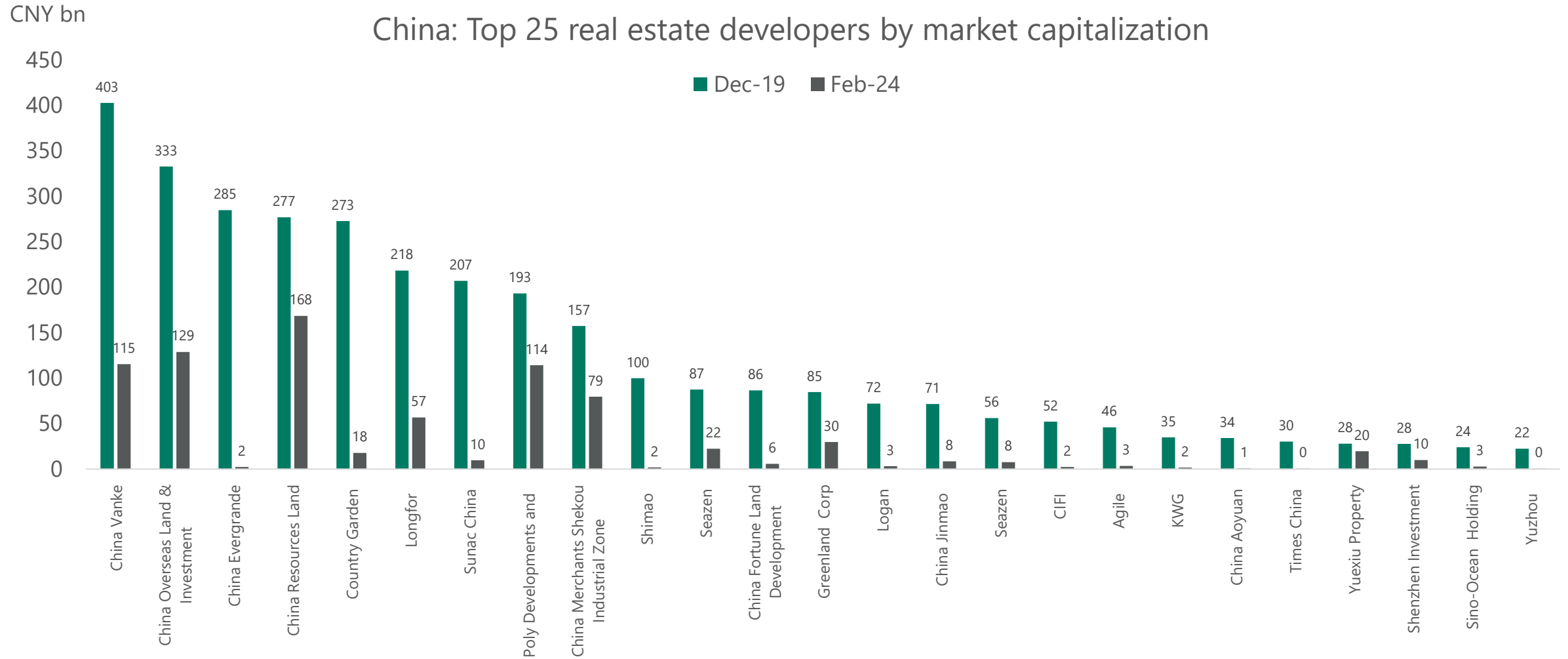
China: Within high yield, the real estate sector remains under pressure

Index, Jan 2020 = 100



Source: Bloomberg, Apollo Chief Economist.

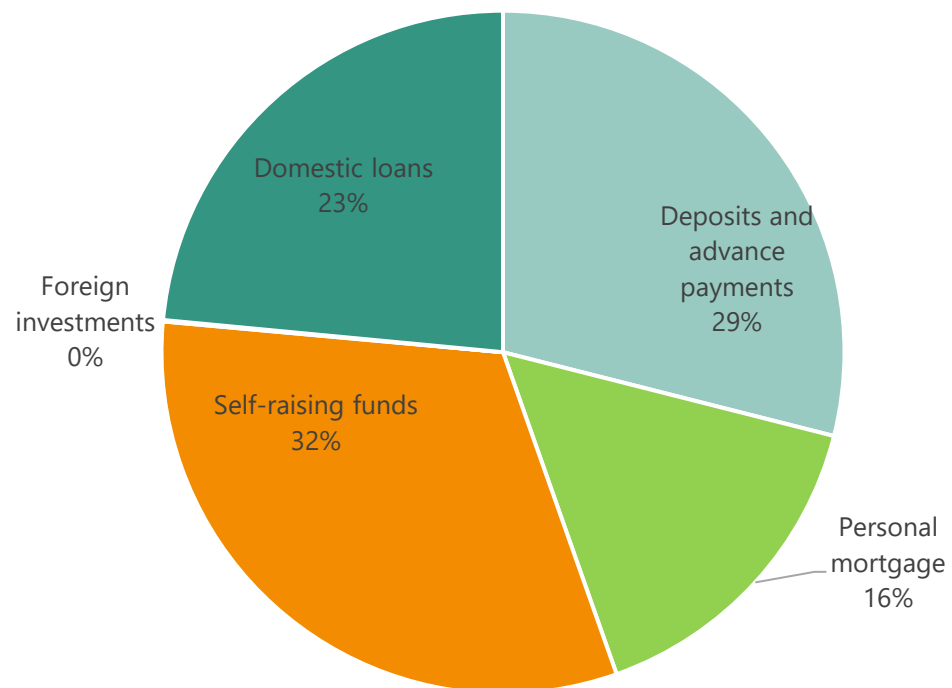
China: Market capitalization of real estate developers has declined significantly



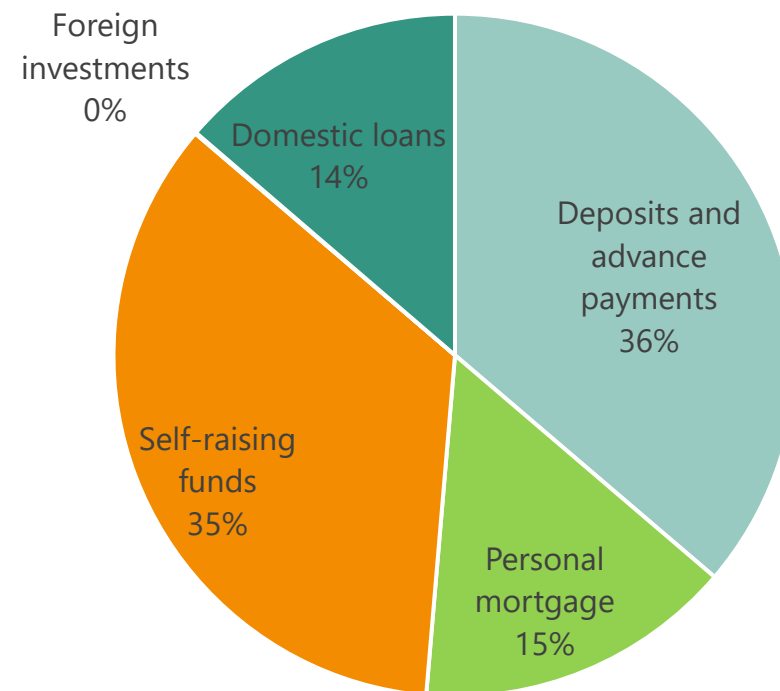
Source: Bloomberg, Apollo Chief Economist. (Feb 24 as of 01 February)

China: Sources of funds for real estate developers

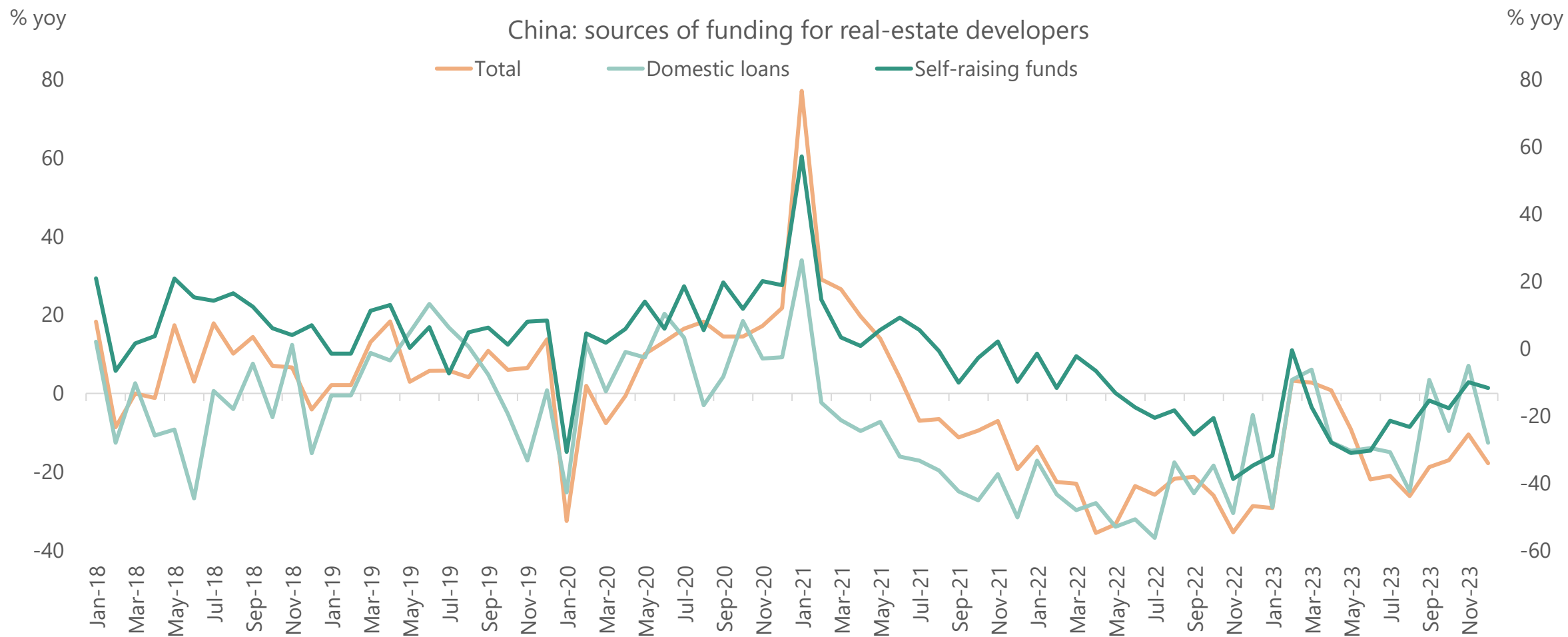
January 2020



December 2023

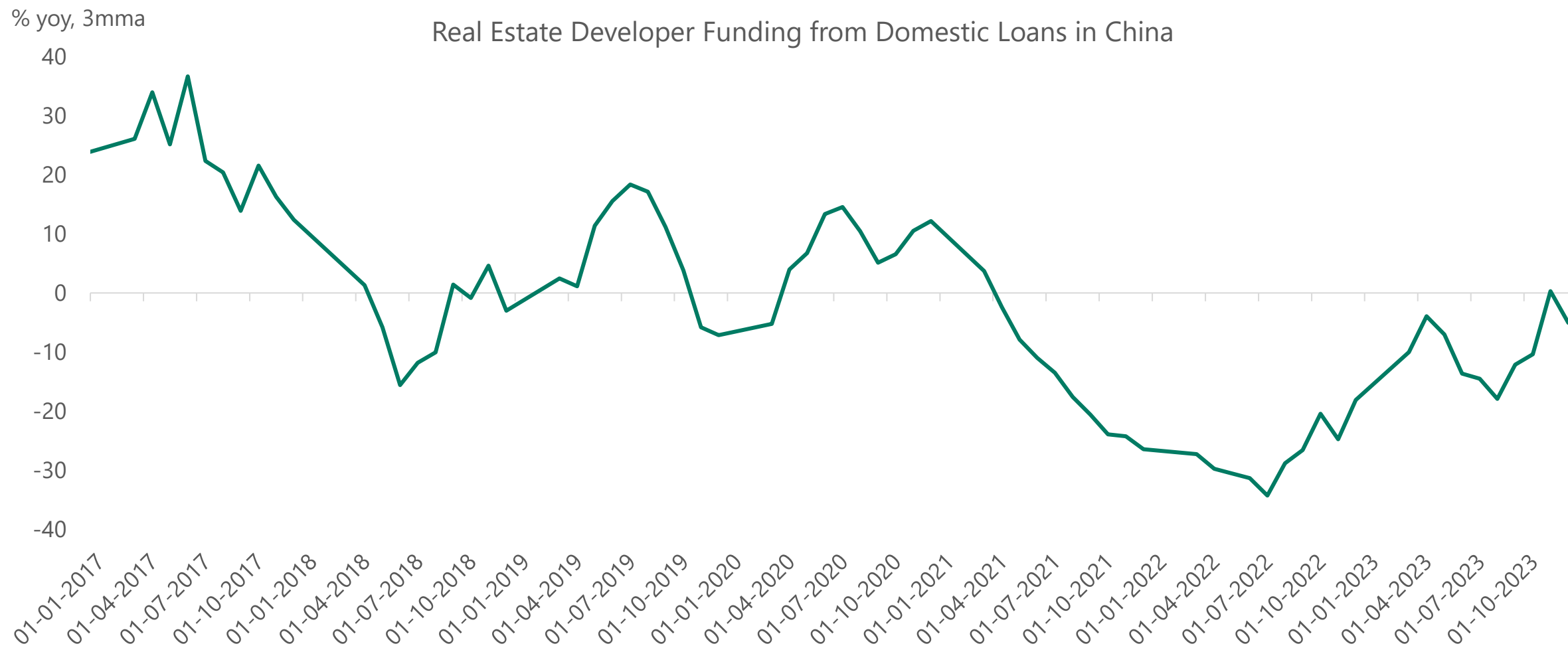


China: All types of funding declined



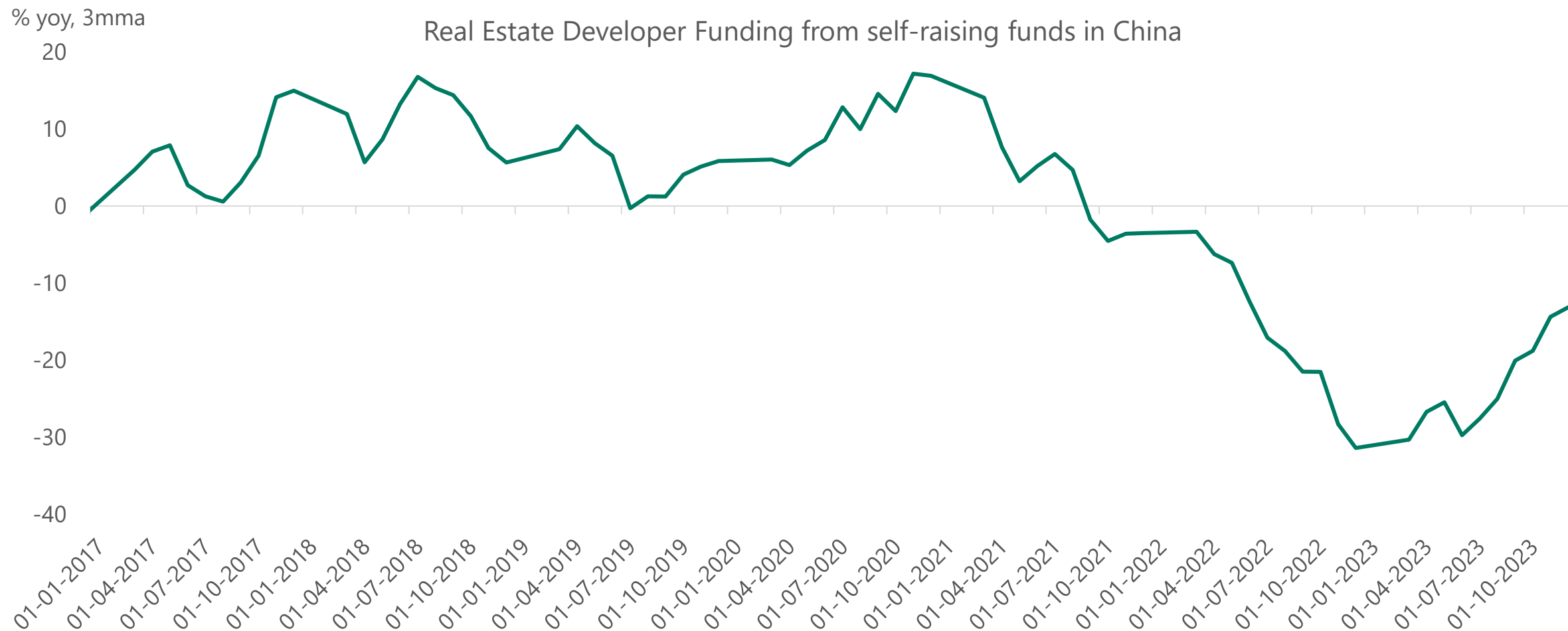
Sources: China National Bureau of Statistics, NBS, Haver, Apollo Chief Economist

China: Domestic funding conditions have deteriorated



Source: Bloomberg, Apollo Chief Economist.

China: Self-financing for real estate developers

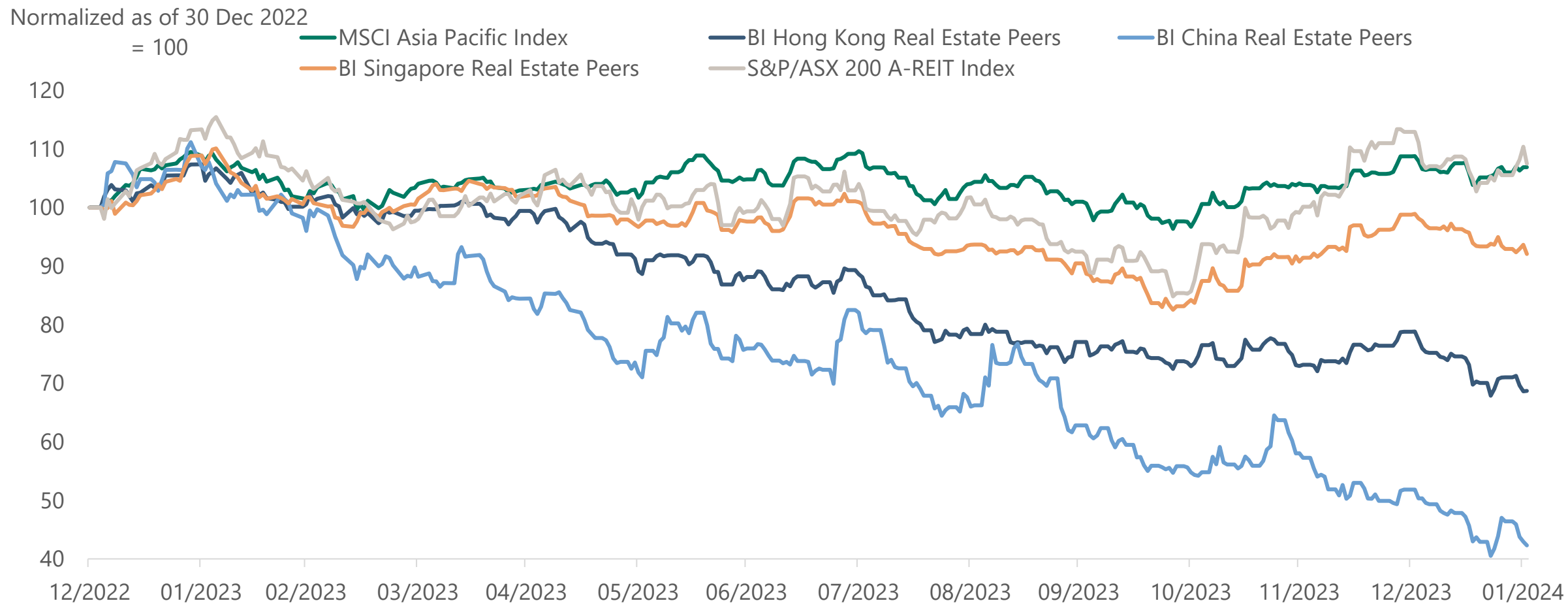


Source: Bloomberg, Apollo Chief Economist.

China: Stock prices of real estate developers



China real estate sector performance compared to other Asian countries

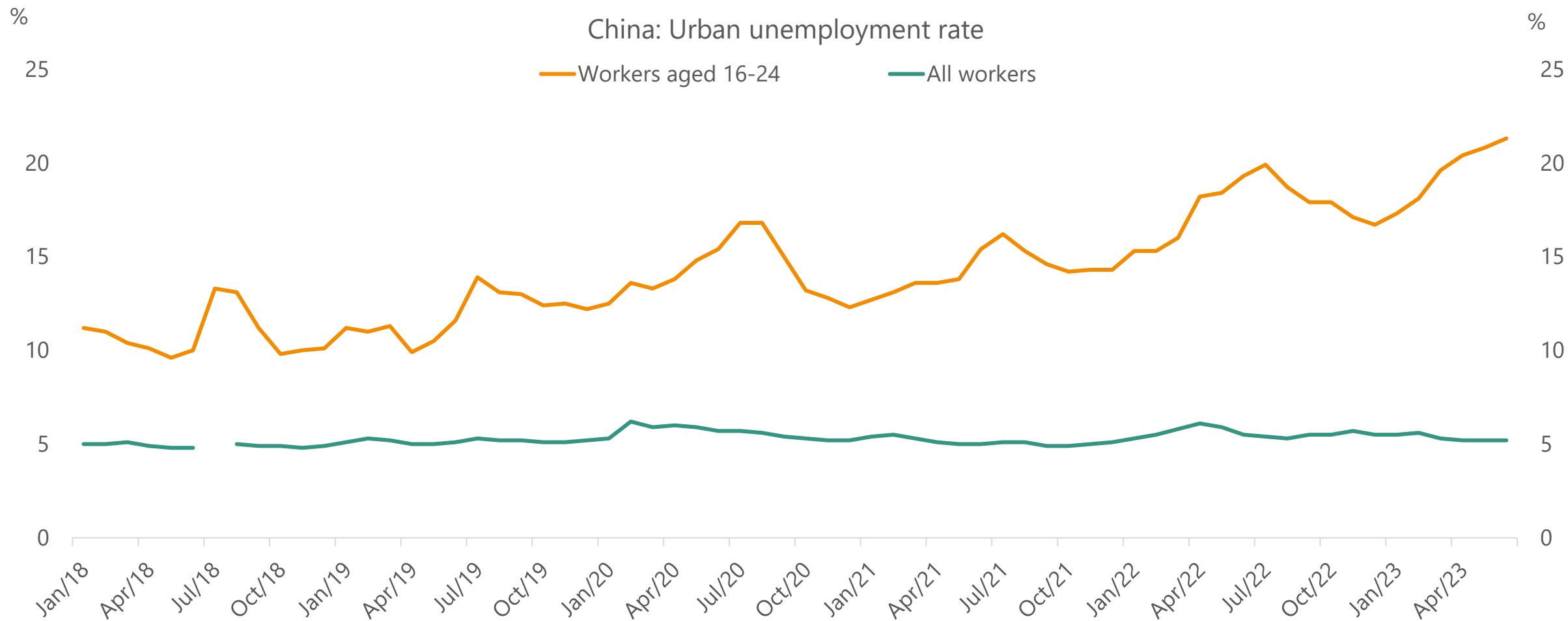


Global holdings of Chinese stocks and bonds



Source: The PBoC, Bloomberg, Apollo Chief Economist (as of September 2023)

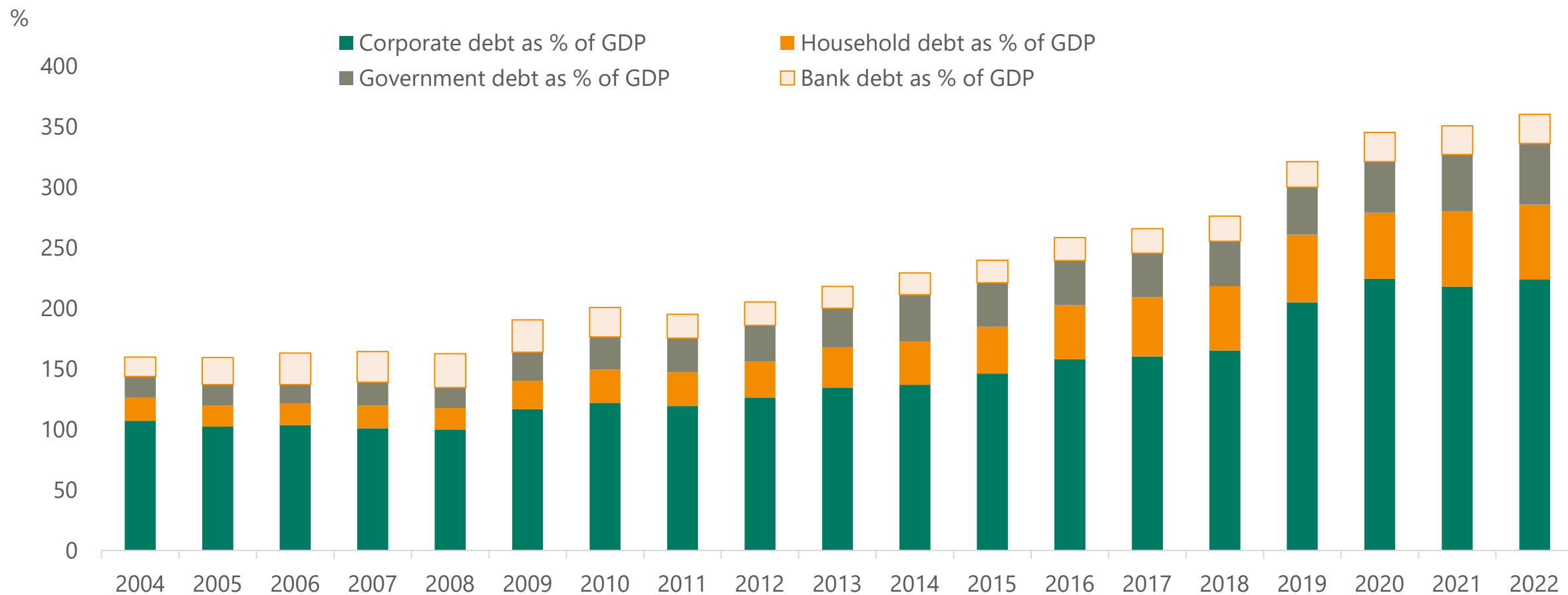
High and rising youth unemployment in China



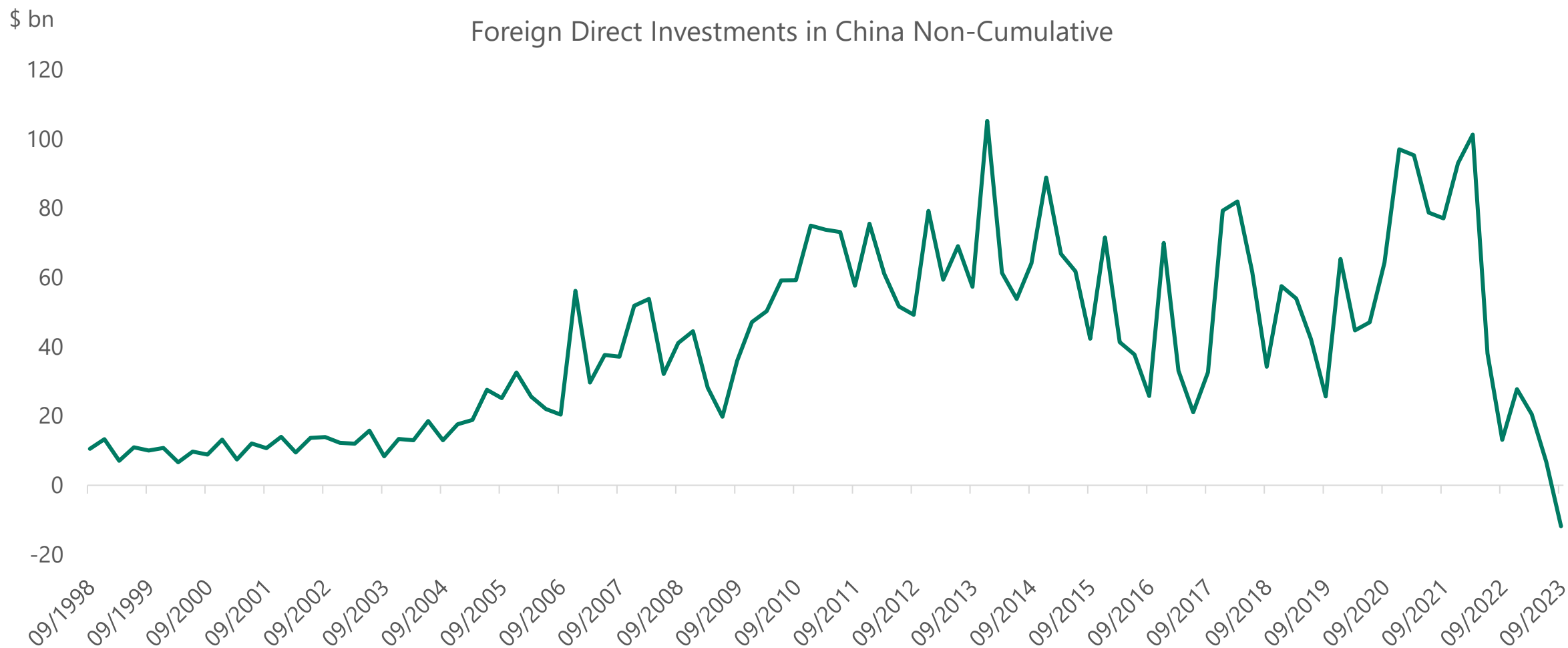
China: Consumer confidence is down



China: High debt levels



China: Negative FDI

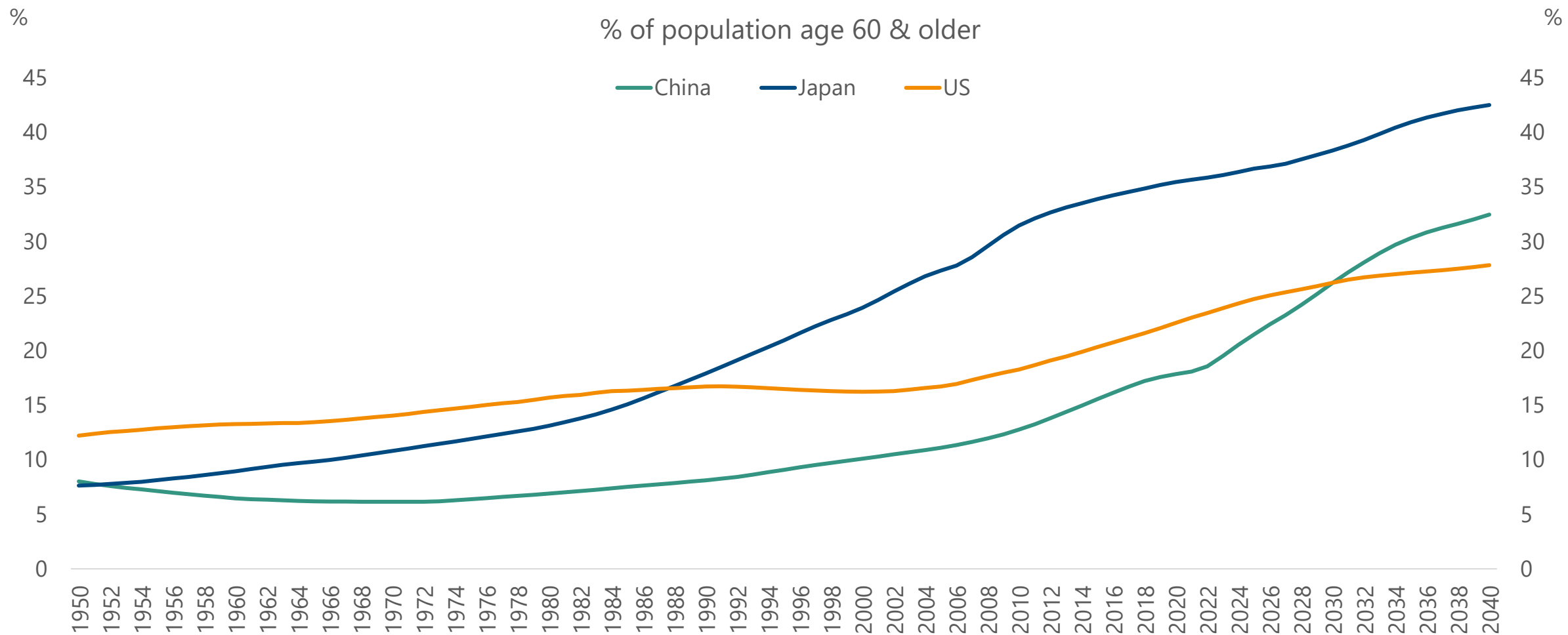


Source: Bloomberg, Apollo Chief Economist

China: Outstanding aggregate social financing



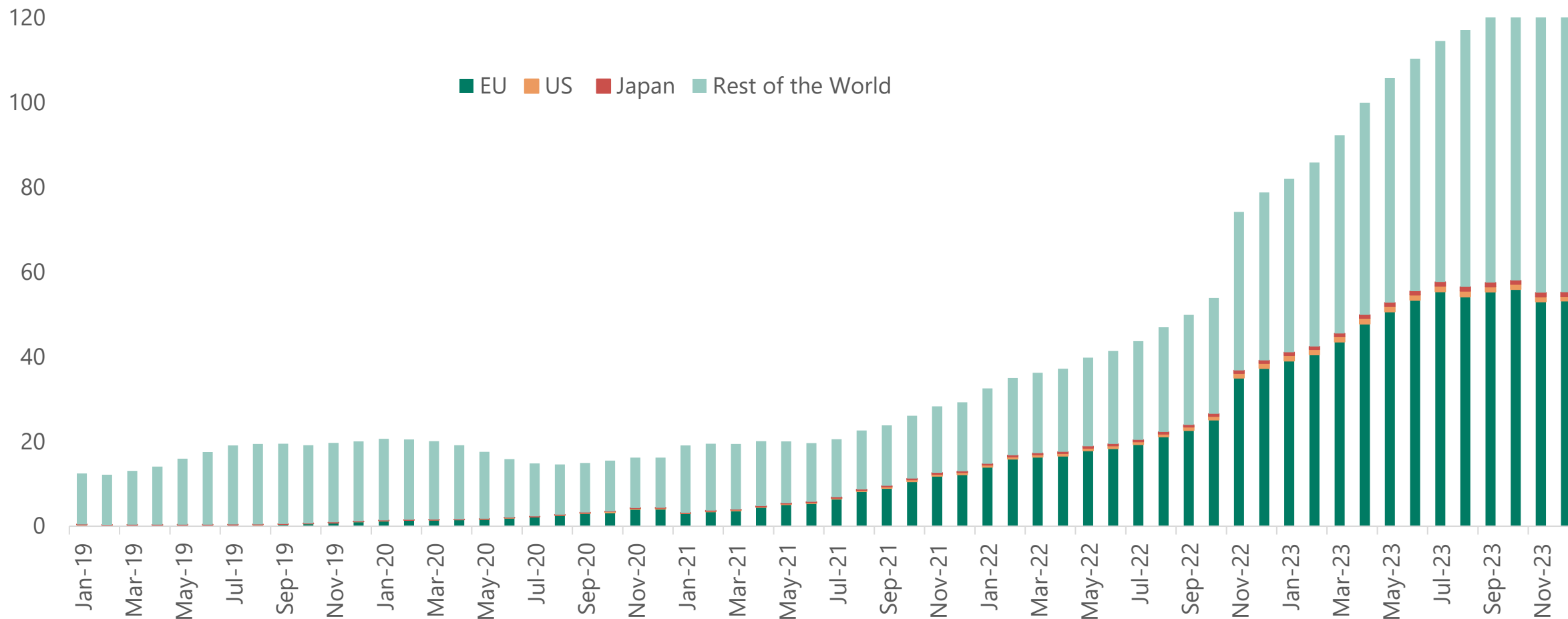
China aging faster than the US



Europe is now the main market for electric vehicle exports from China

Thous., 12mma

China EV's exports to:



Source: China customs data, Bloomberg, Apollo Chief Economist



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Torsten Slok joined Apollo in August 2020 as Chief Economist and he leads Apollo's macroeconomic and market analysis across the platform.

Prior to joining, Mr. Slok worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade. Prior to joining Deutsche Bank Mr. Slok worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Slok has a Ph.D in Economics and has studied at the University of Copenhagen and Princeton University.