

APOLLO

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

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Apollo Global Management

November 2023

Unless otherwise noted, information as of November 2023.

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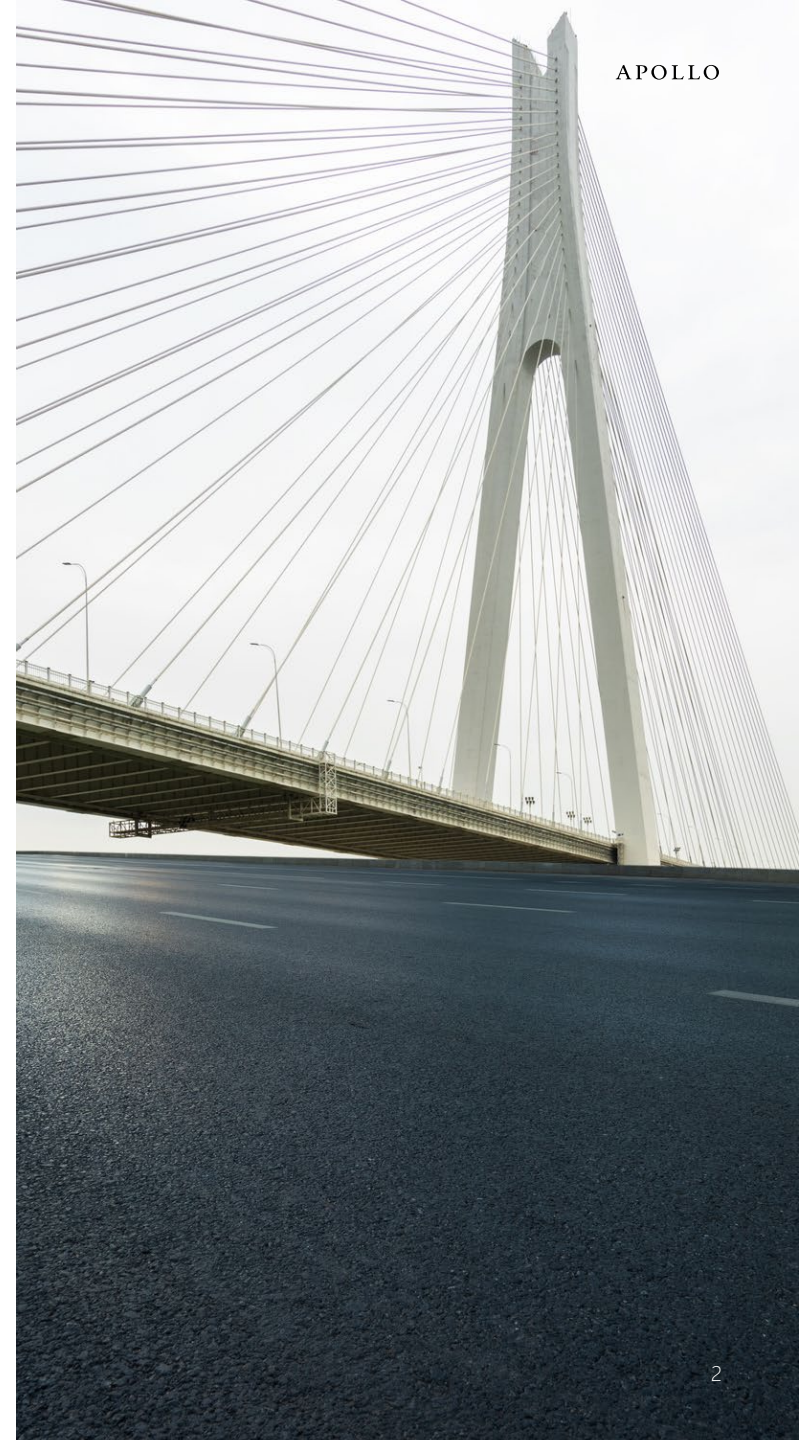
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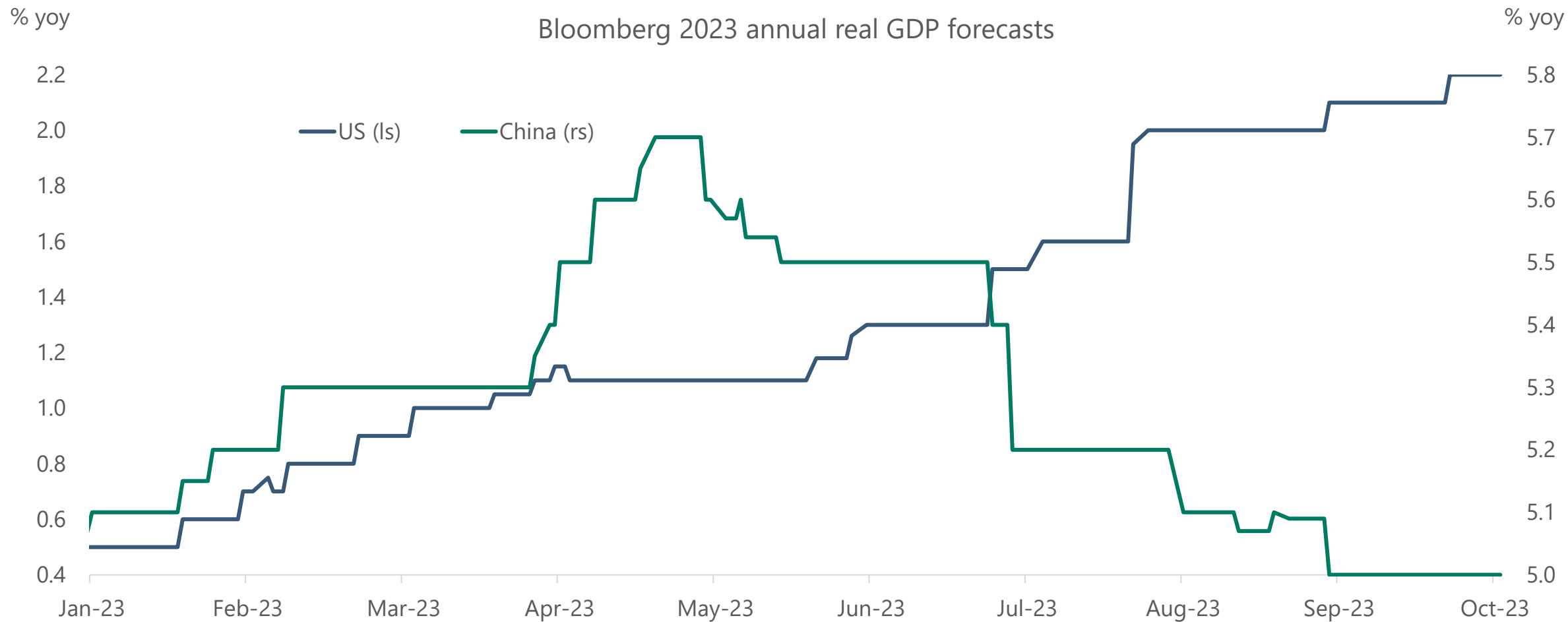
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China: Overview

Diverging growth trends in the US and China



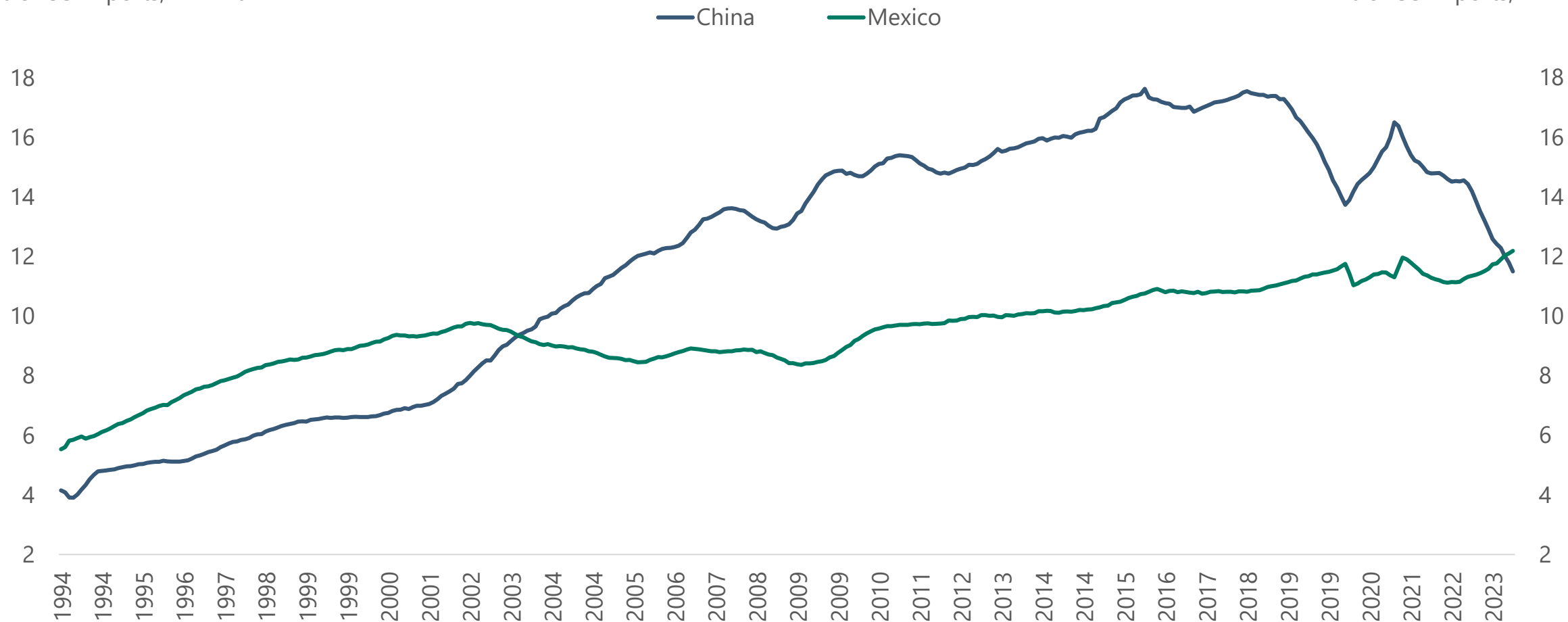
China: Exports are slowing



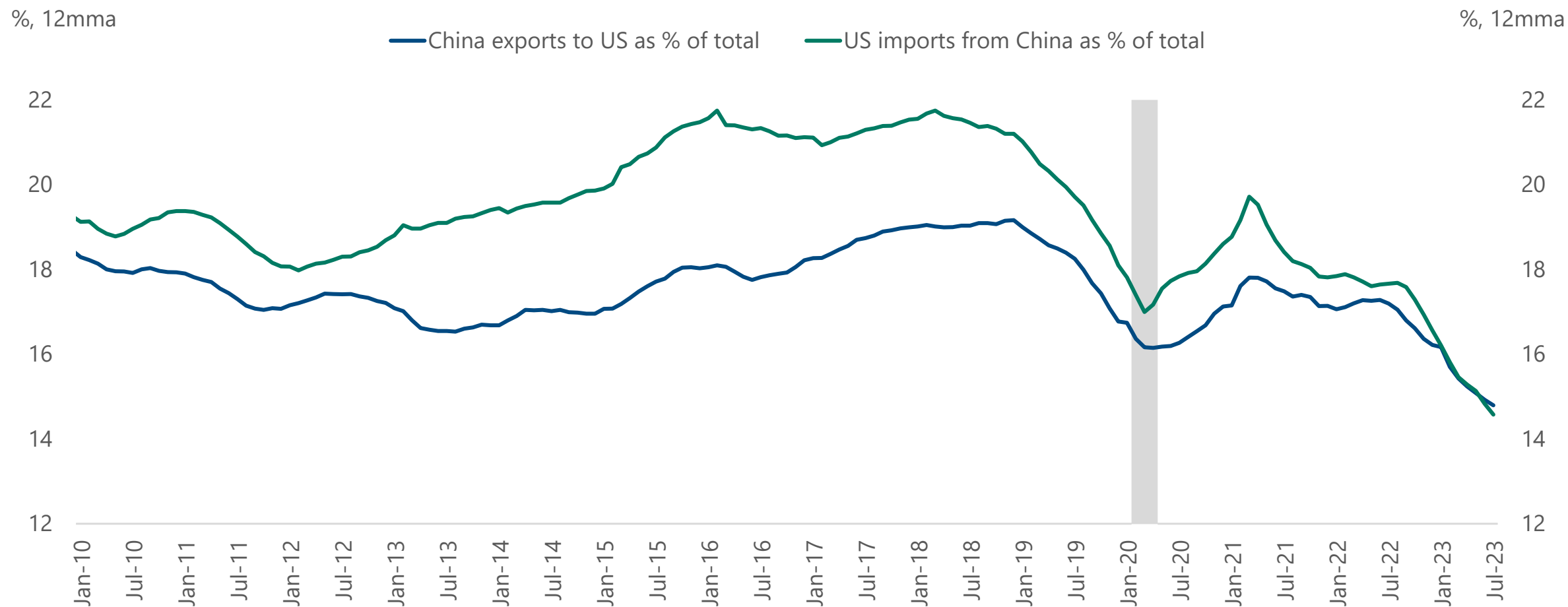
US importing more from Mexico than China

% of US imports, 12mma

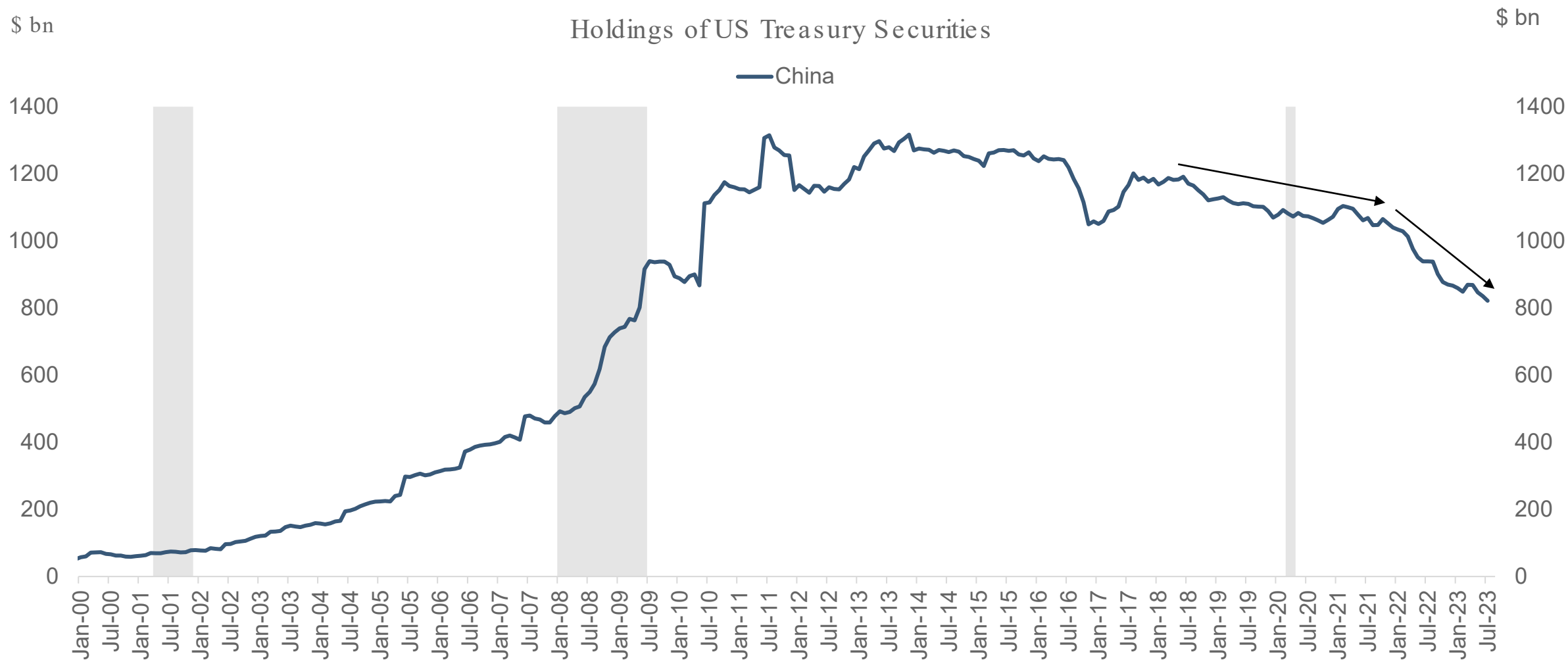
% of US imports, 12mma



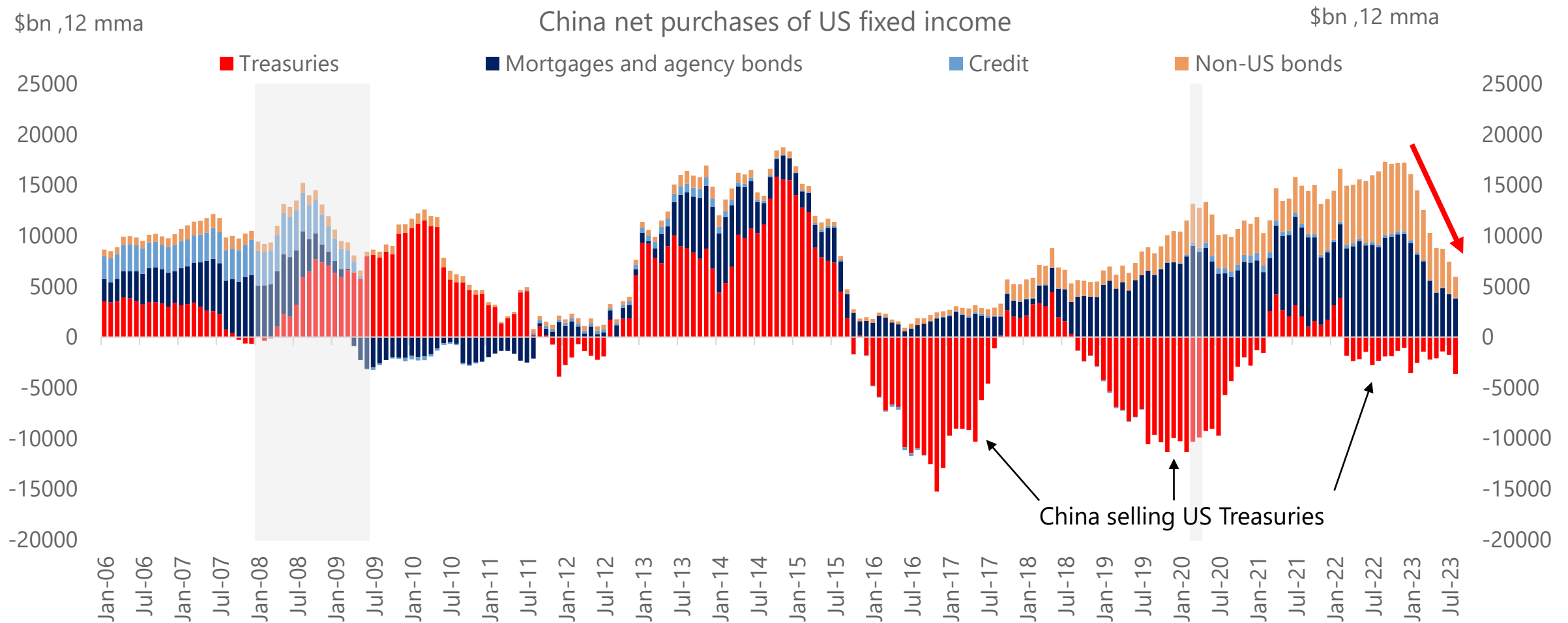
US and China less dependent on each other for trade



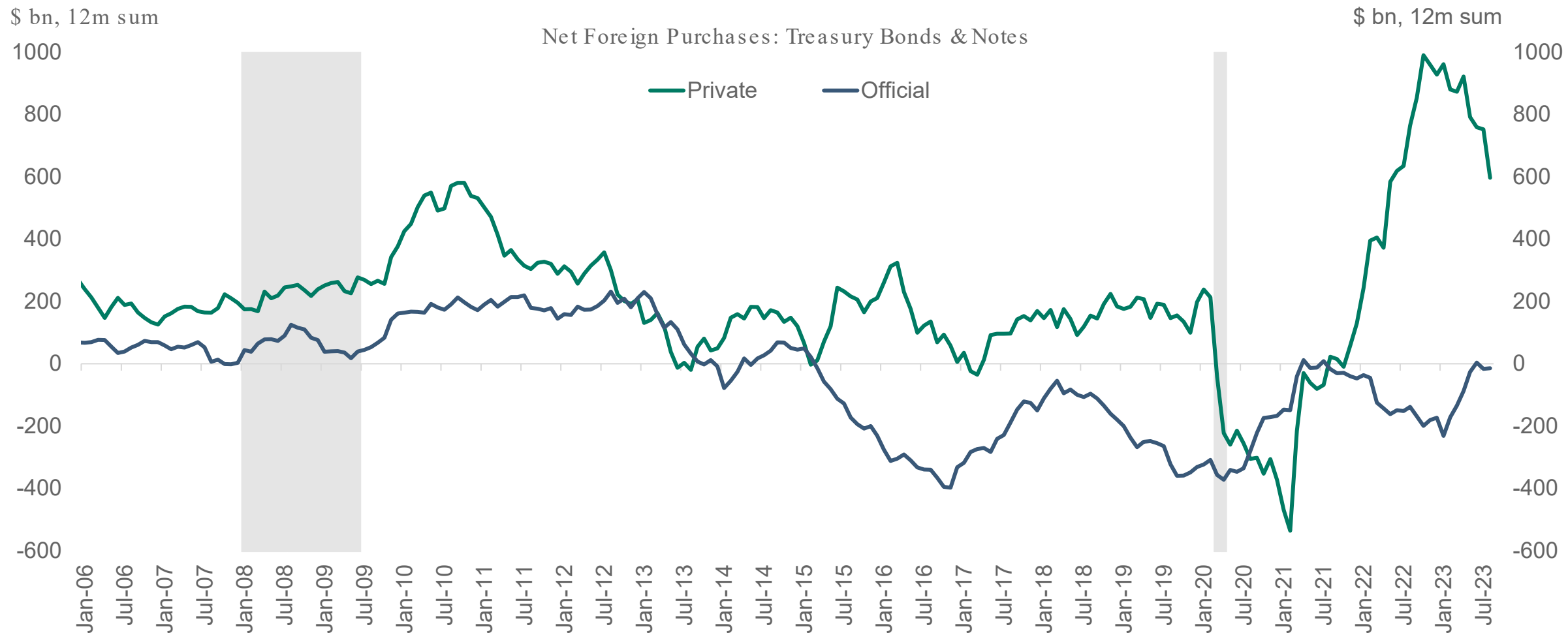
China holding \$300bn less in US Treasuries than in 2021



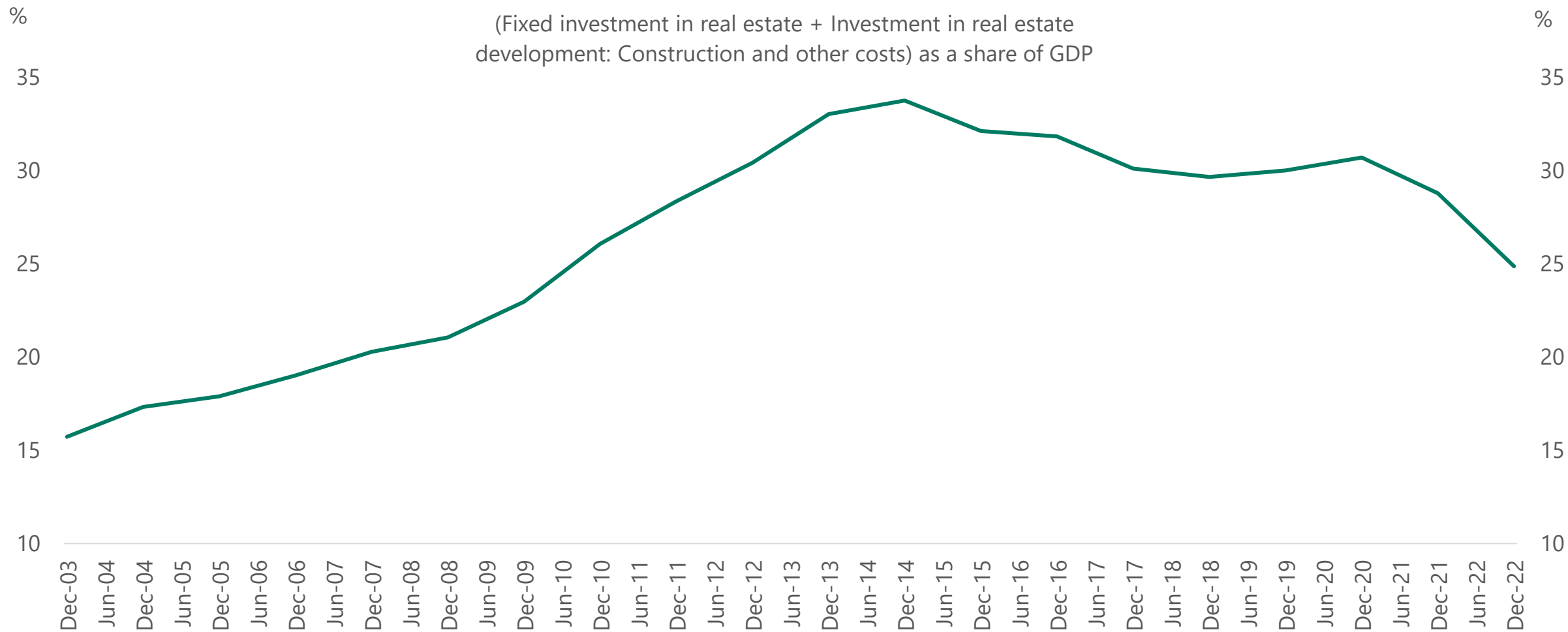
China is selling Treasuries and buying fewer mortgages and fewer non-US bonds



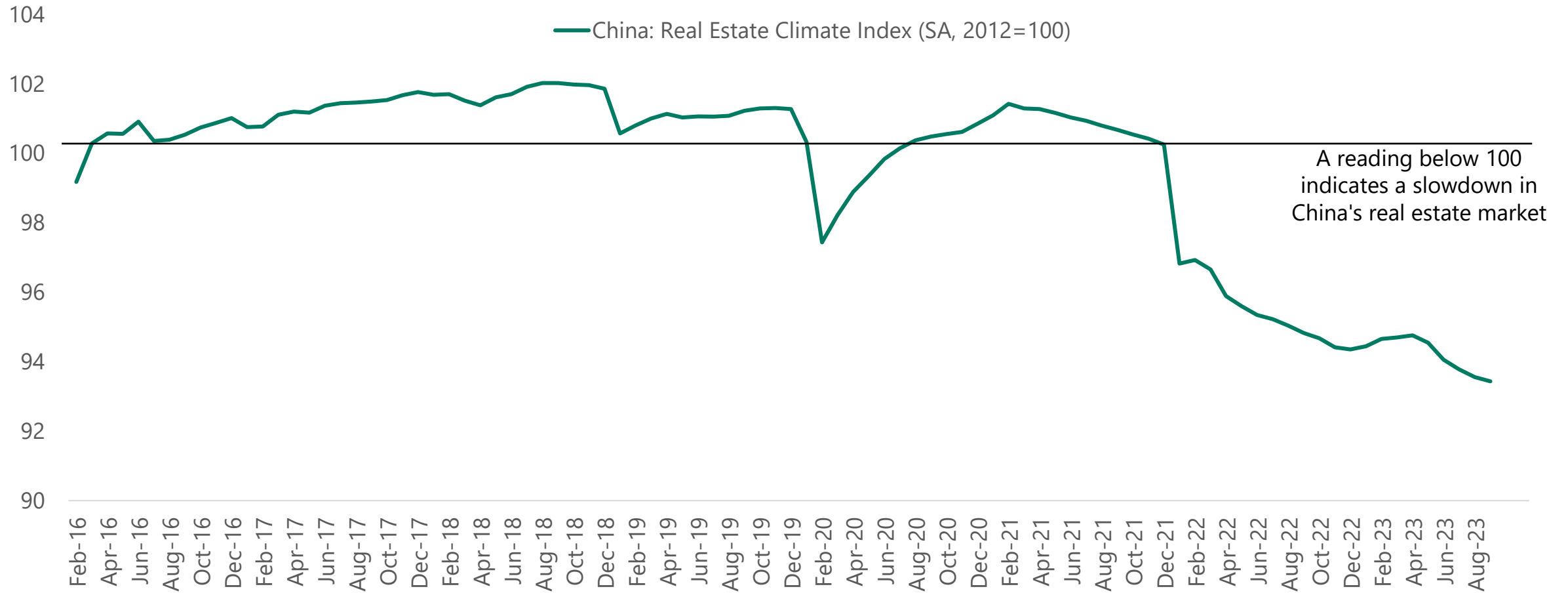
Foreign purchases of Treasuries come from the private sector



China: Housing makes up 25% of GDP



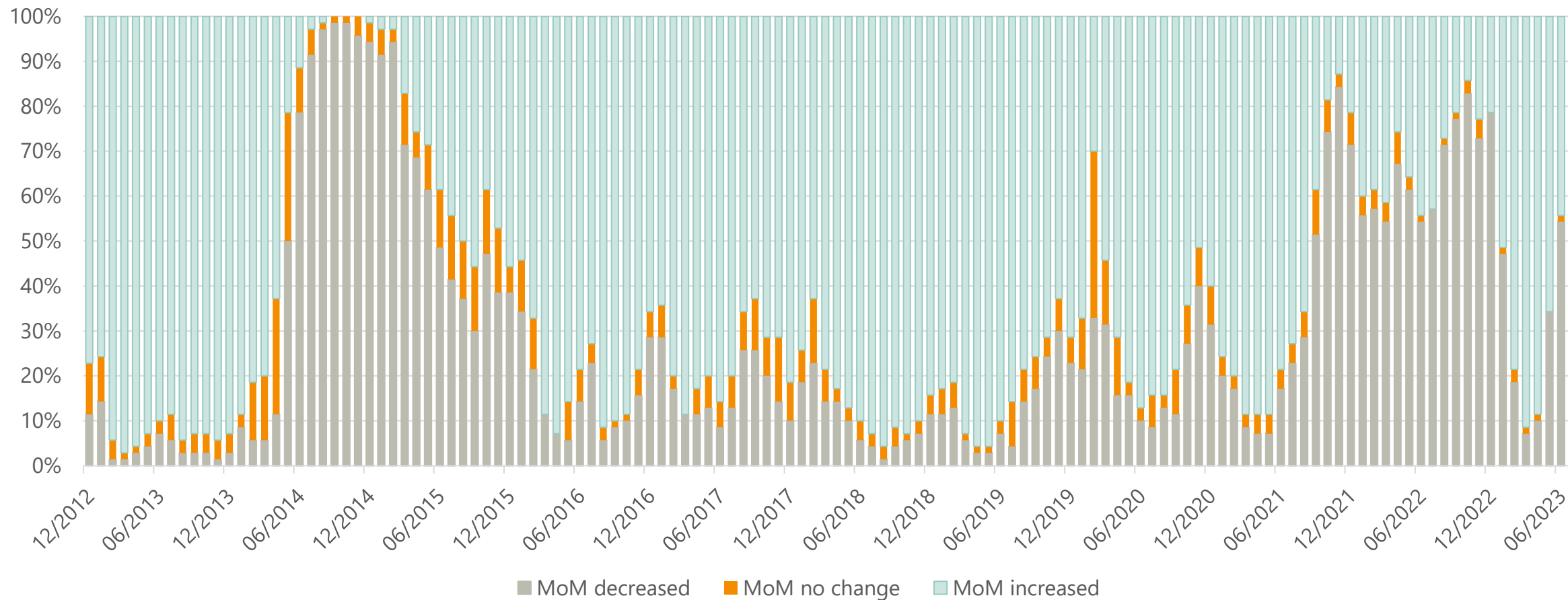
China real estate index in deep recession territory



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.

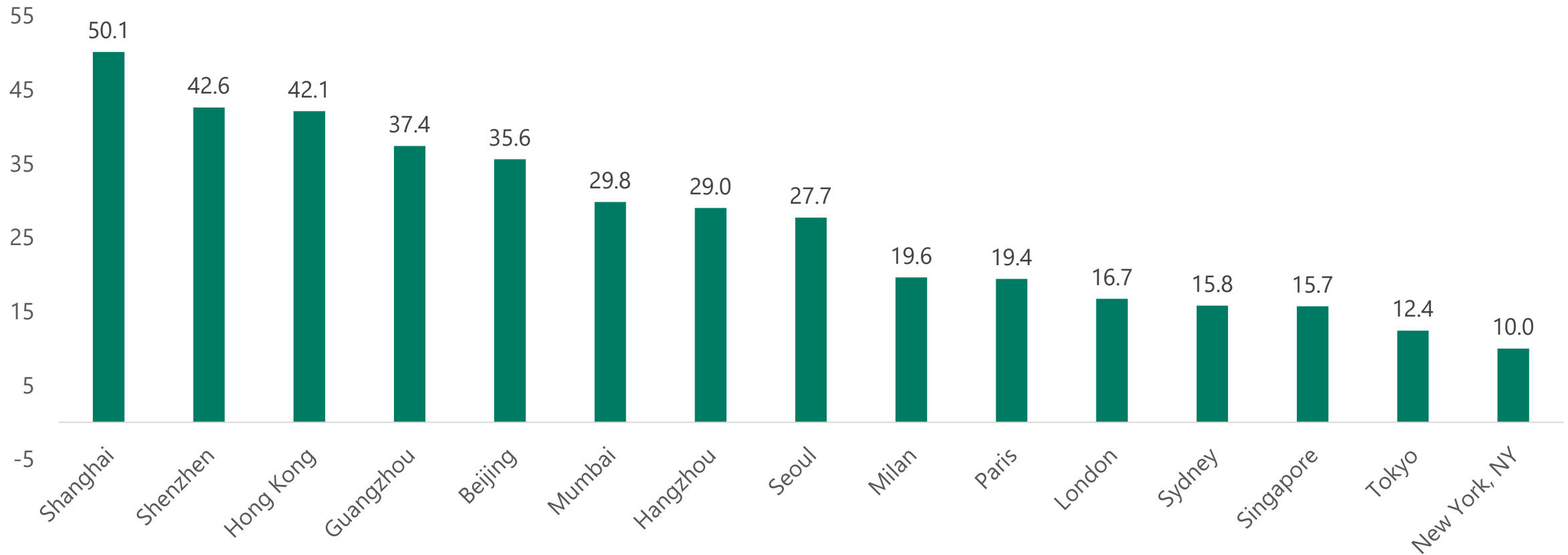
Housing market cooling down in China

Price changes in 70 major cities (new residential properties)



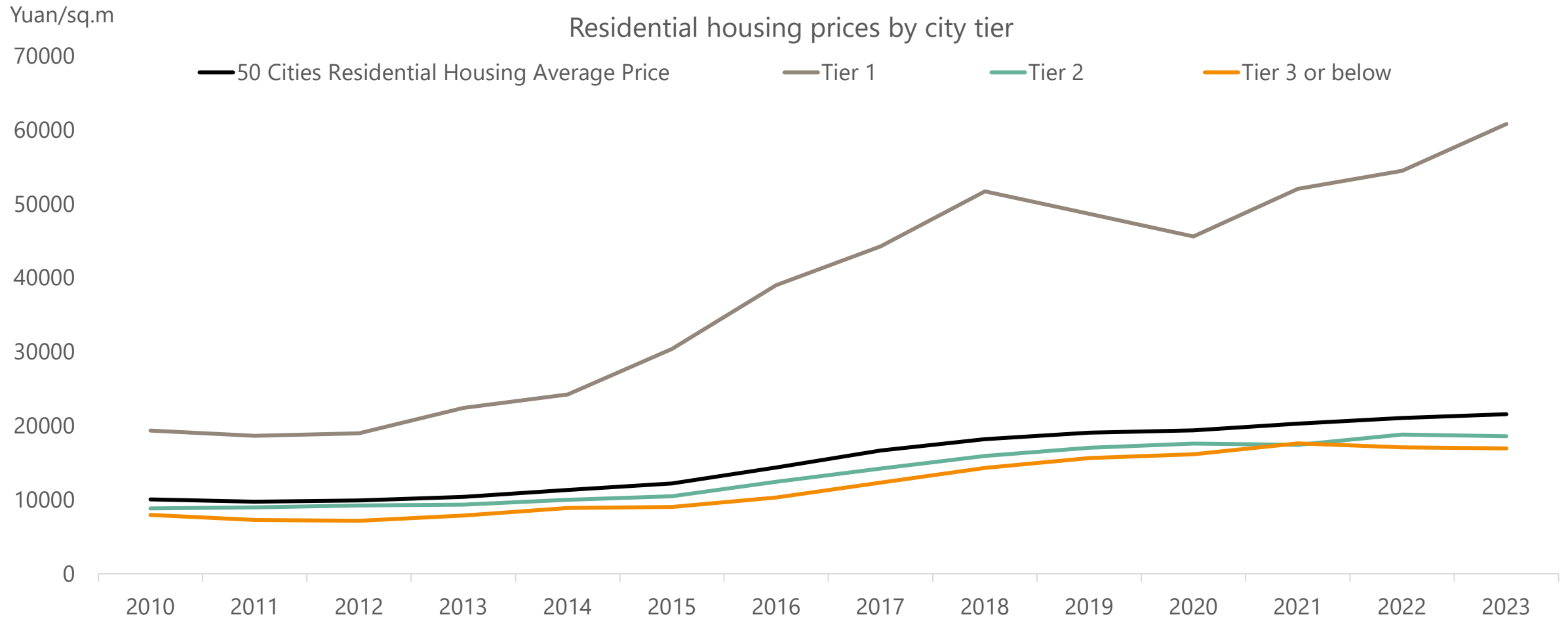
Home price-to-income ratio five times higher in Shanghai than in New York

Home Price-to-income Ratios in the World's Major Cities (Mid-year 2023)



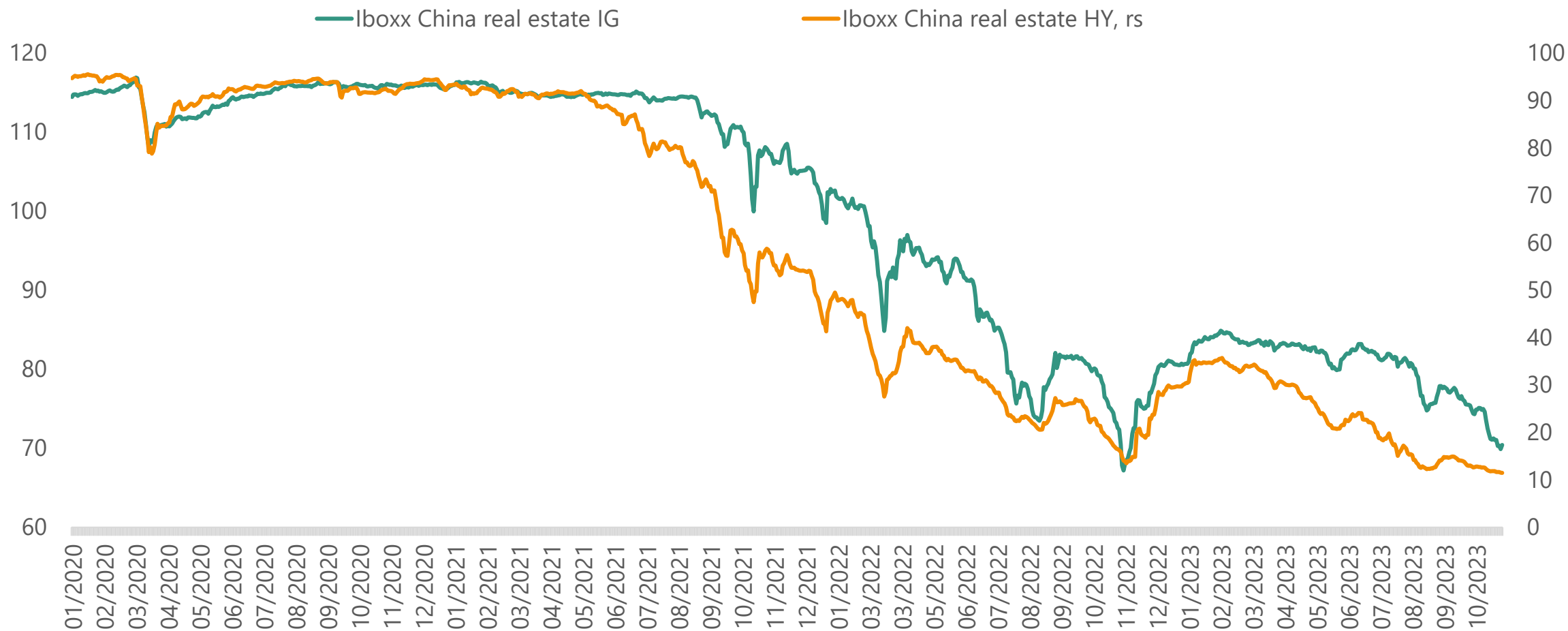
Source: Numbeo, Apollo Chief Economist (<https://www.numbeo.com/property-investment/rankings.jsp?title=2021-mid>) Note: Price to Income Ratio is the basic measure for apartment purchase affordability. It is generally calculated as the ratio of median apartment prices to median family disposable income,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

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

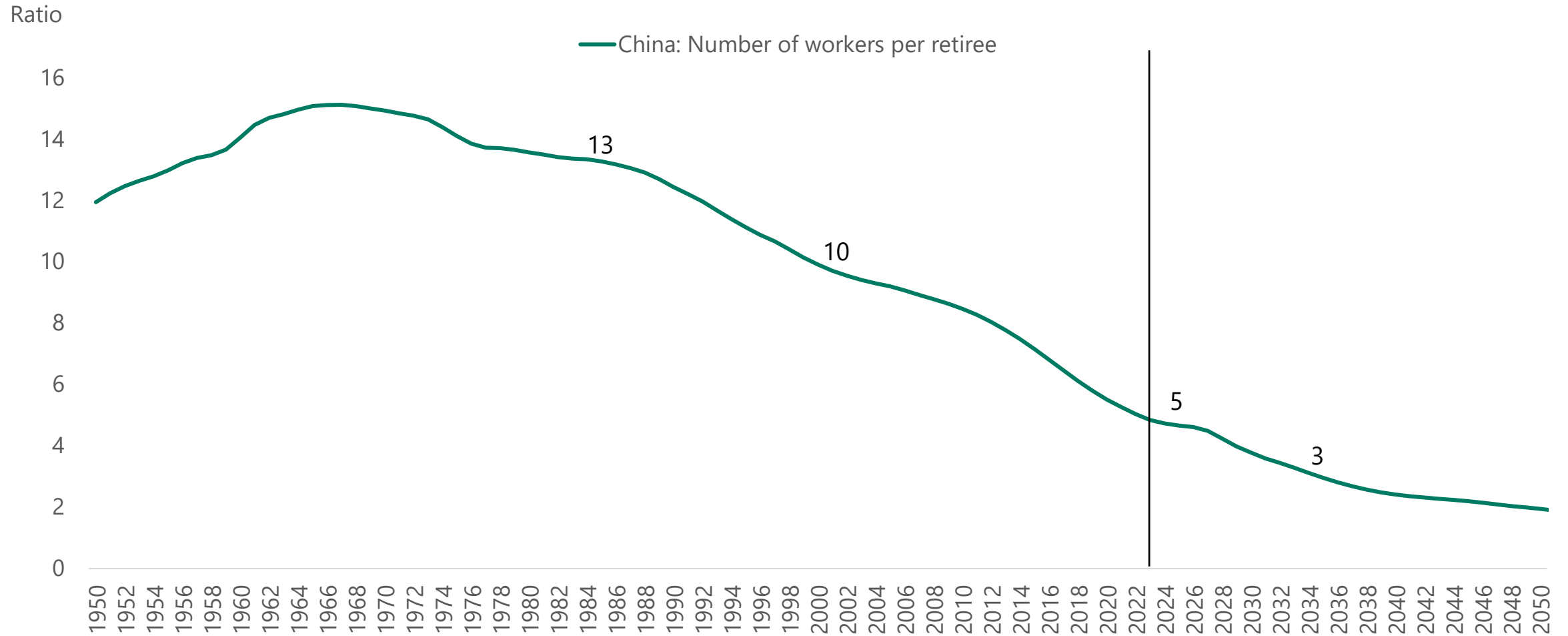


Source: Bloomberg, Apollo Chief Economist (Note: 2023 is till June)

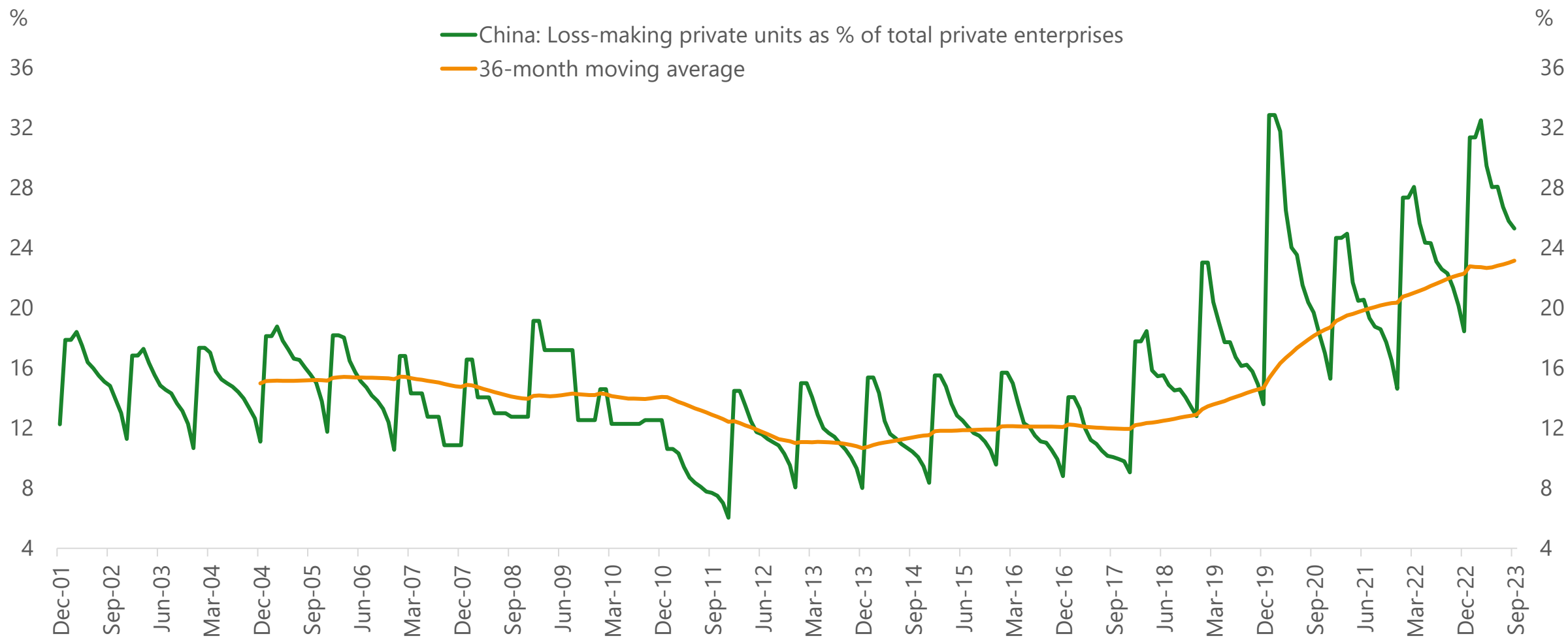
China IG and HY credit: Developers have been hit hard



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



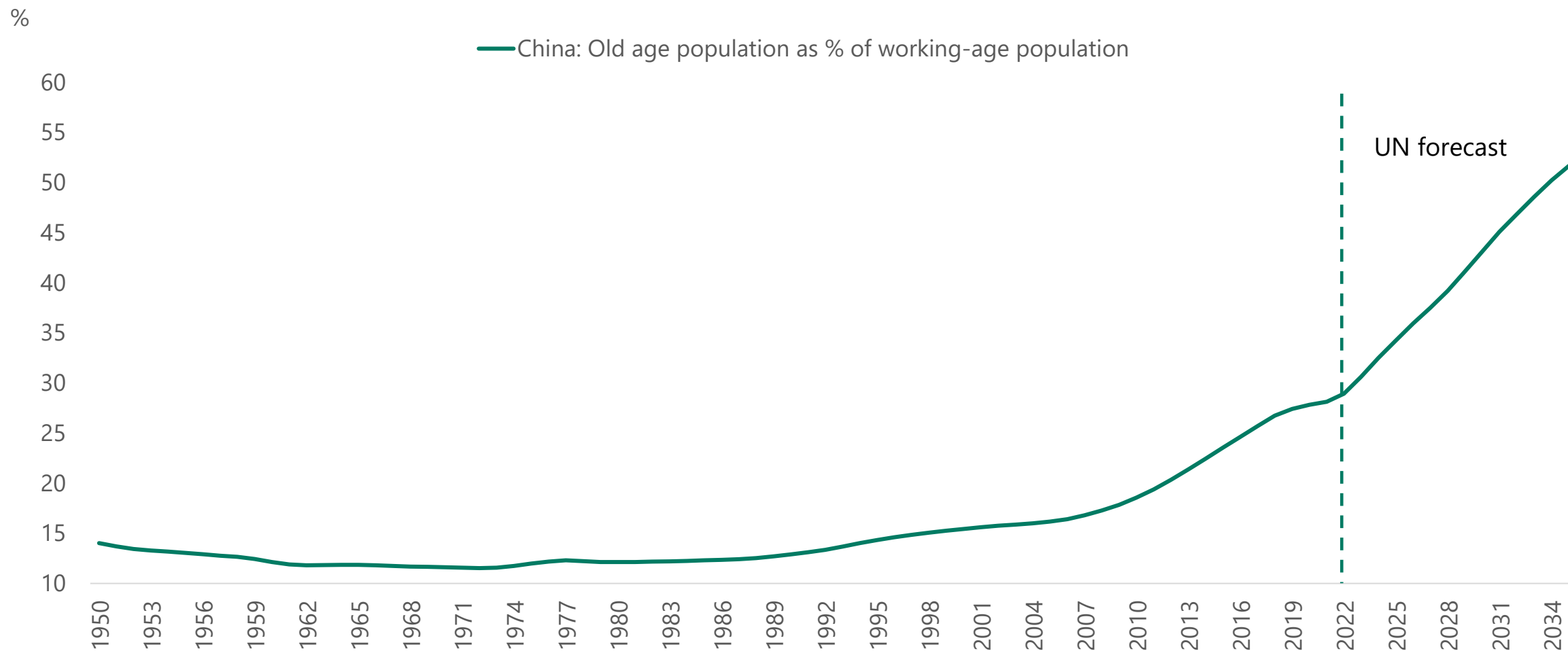
A trend increase in the share of Chinese private firms that are loss-making



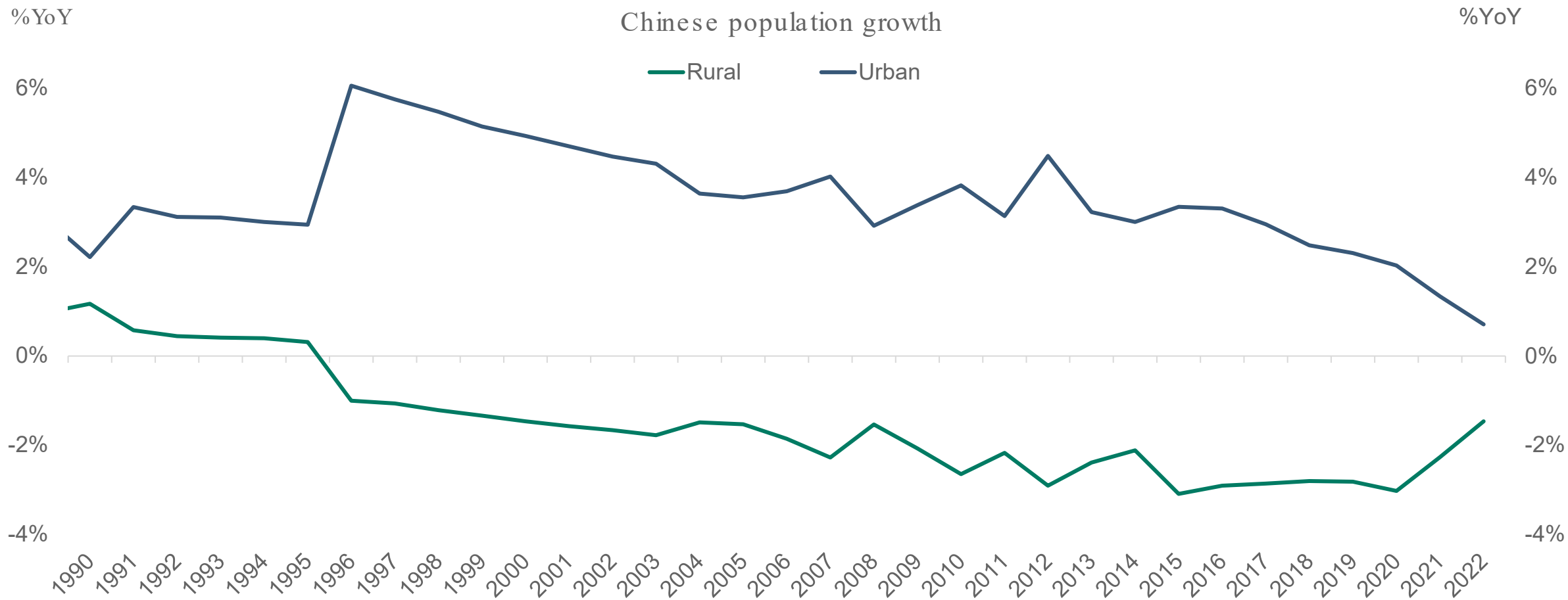
Source: Bloomberg, Apollo Chief Economist. Note: CNBUPRTD Index, CNLBPRTD Index used.

China: Demographics

China: Dependency ratio approaching 50% over the coming decade

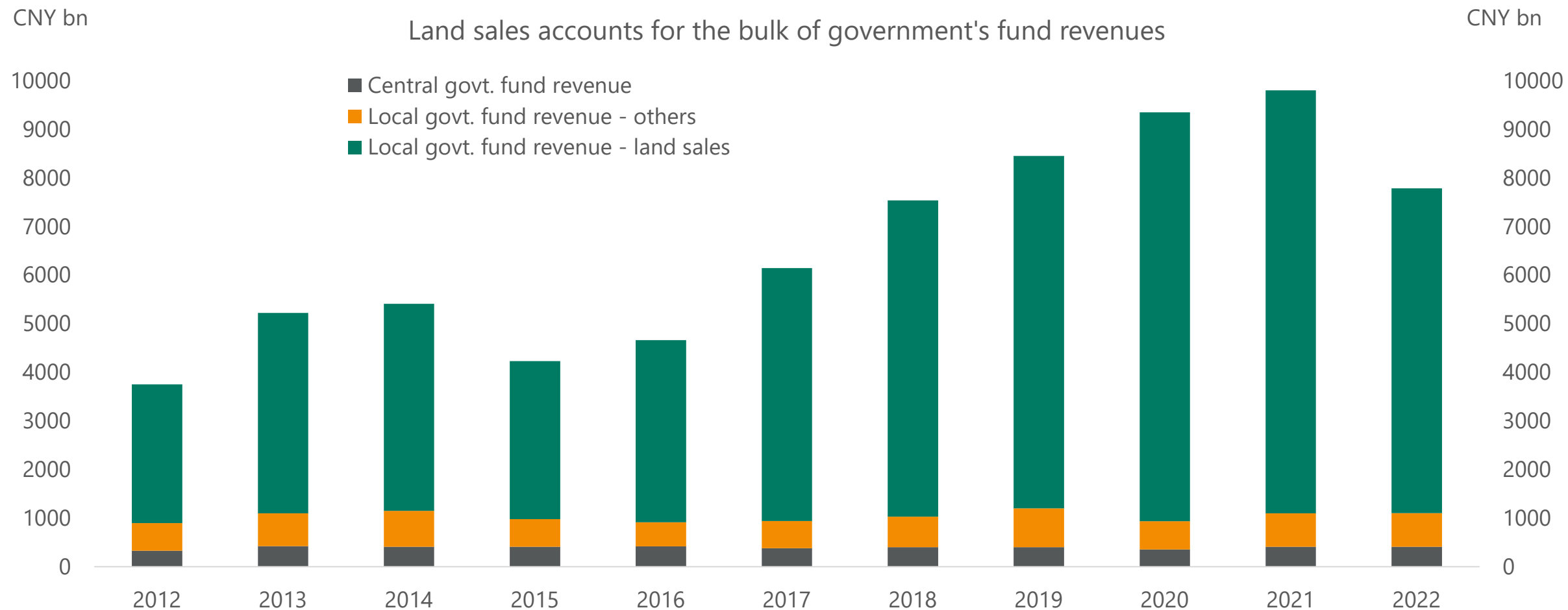


Population growth declining



Real estate playing a key role in the Chinese economy

Land sales are crucial source of local government revenue

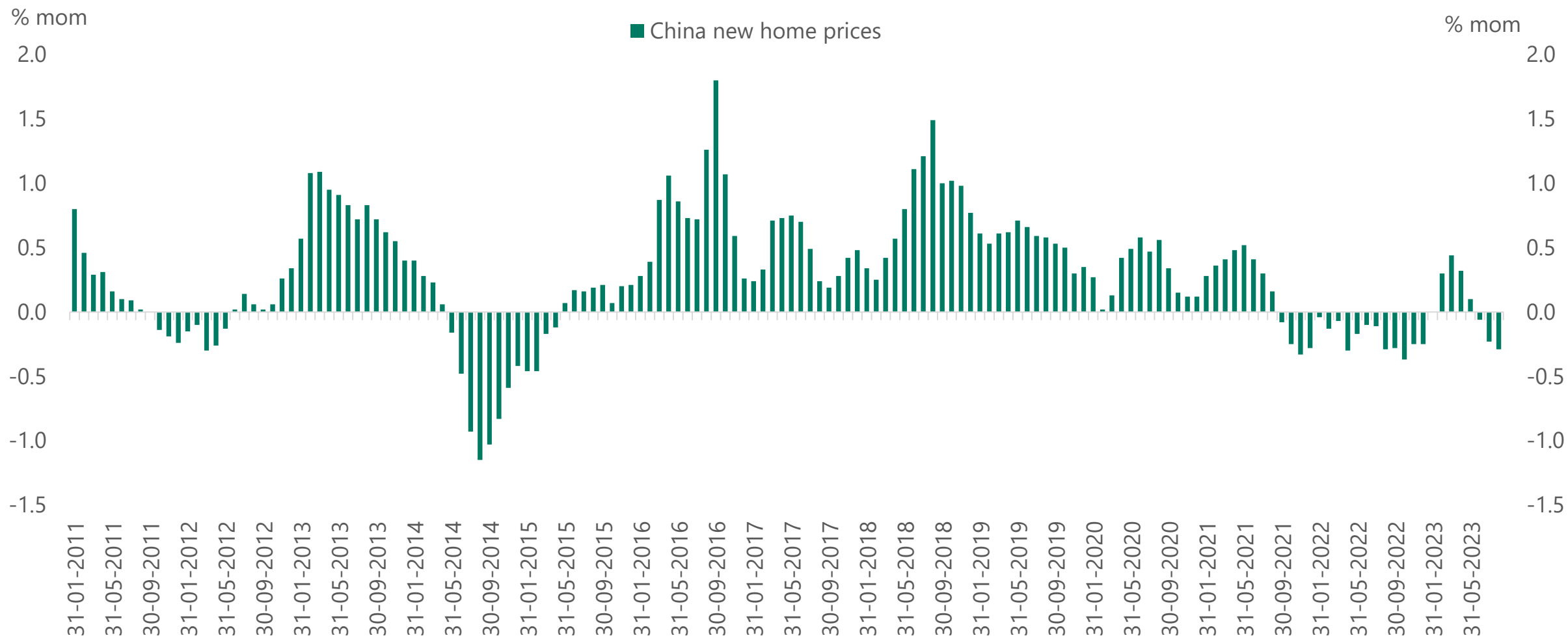


Source: Ministry of Finance of the People's Republic of China, Bloomberg, Apollo Chief Economist

Home sales slowing in Tier 1 and Tier 2 cities

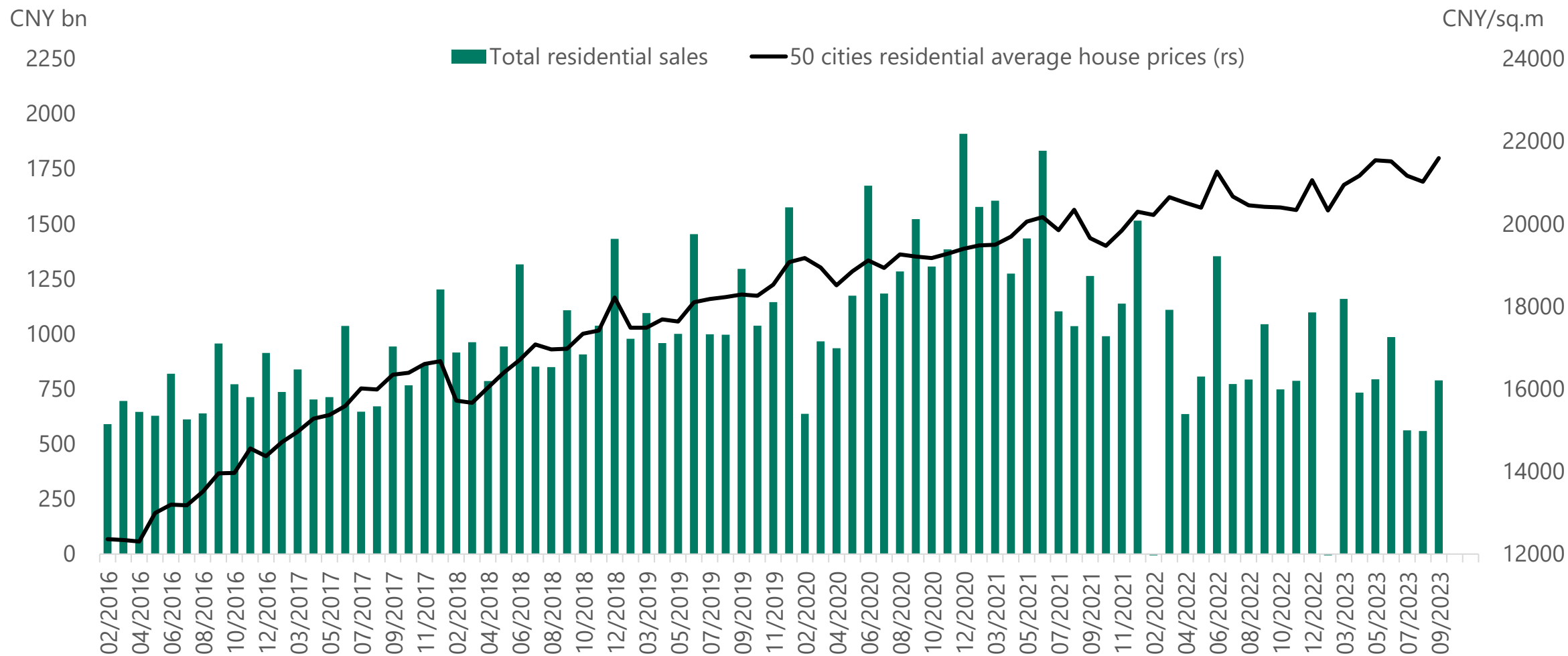


Housing market cooling down in China



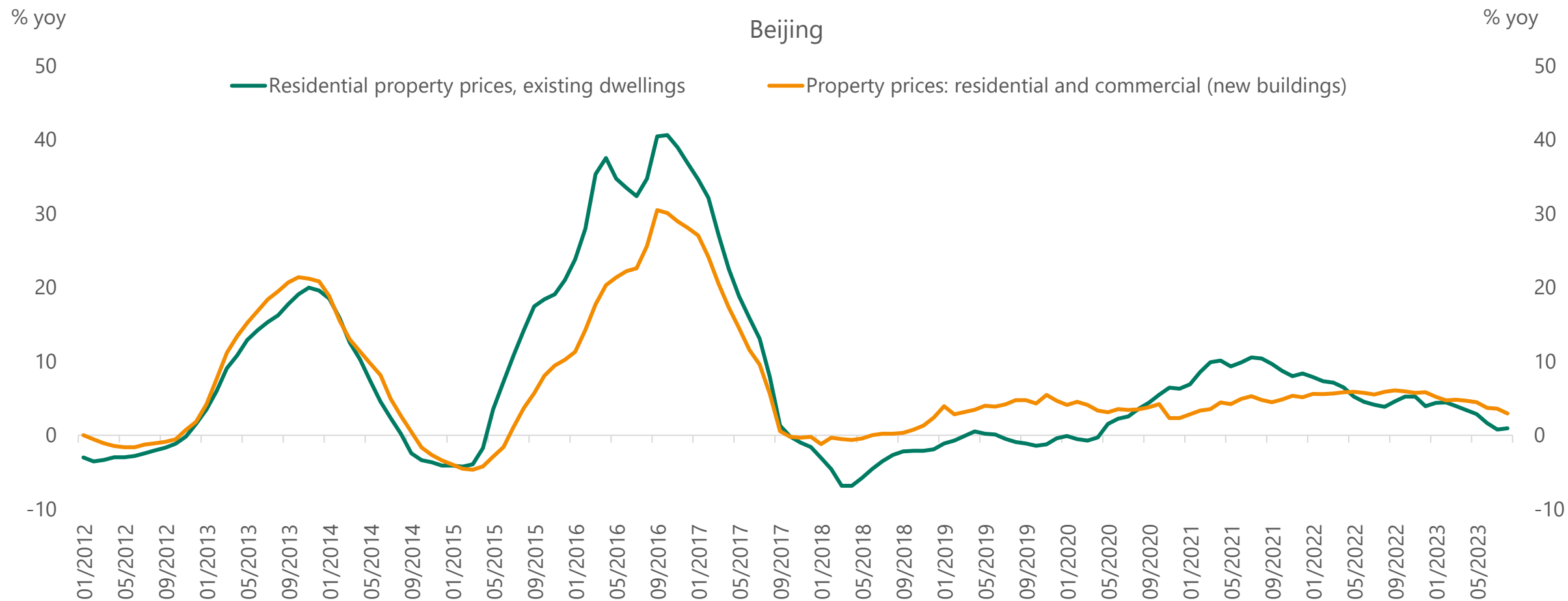
Source: Bloomberg, Apollo Chief Economist

Housing market cooling down in China

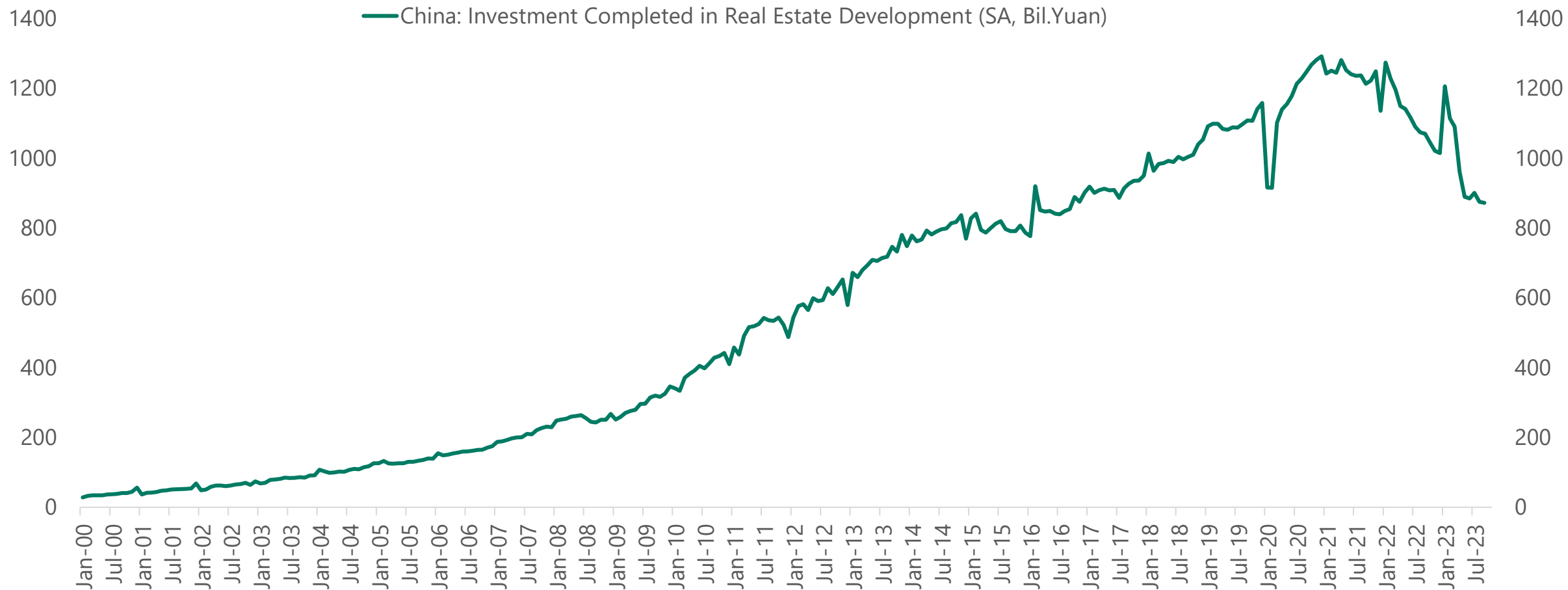


Source: CRIC, Bloomberg, Apollo Chief Economist

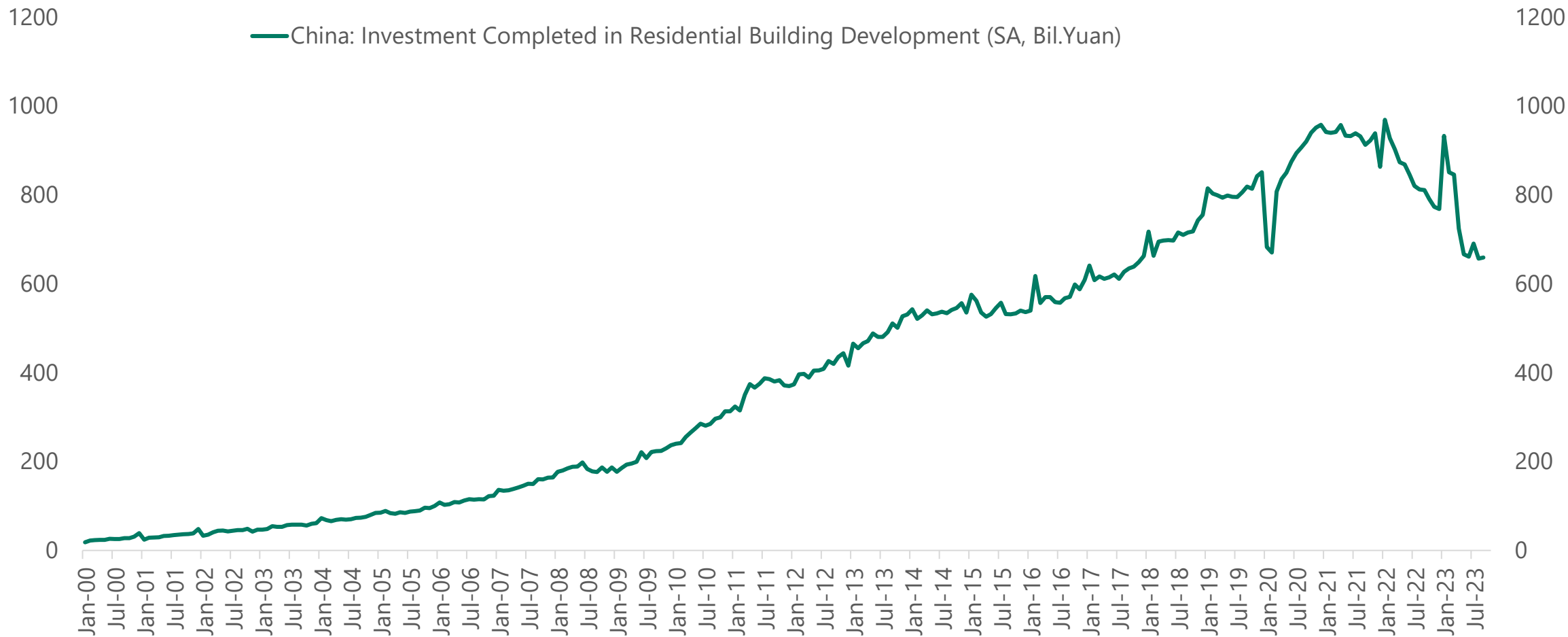
Beijing home price inflation slowing down



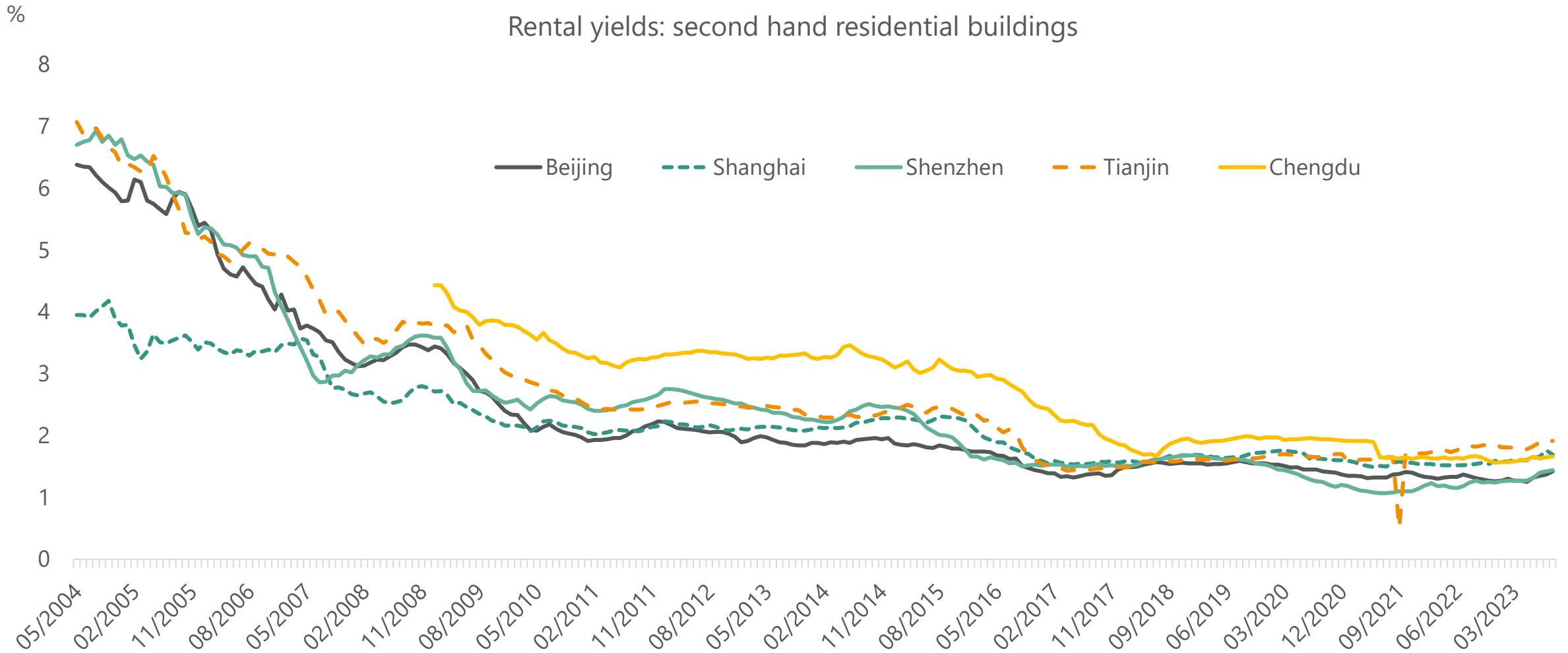
China: Real estate investment slowing



Residential real estate investment slowing



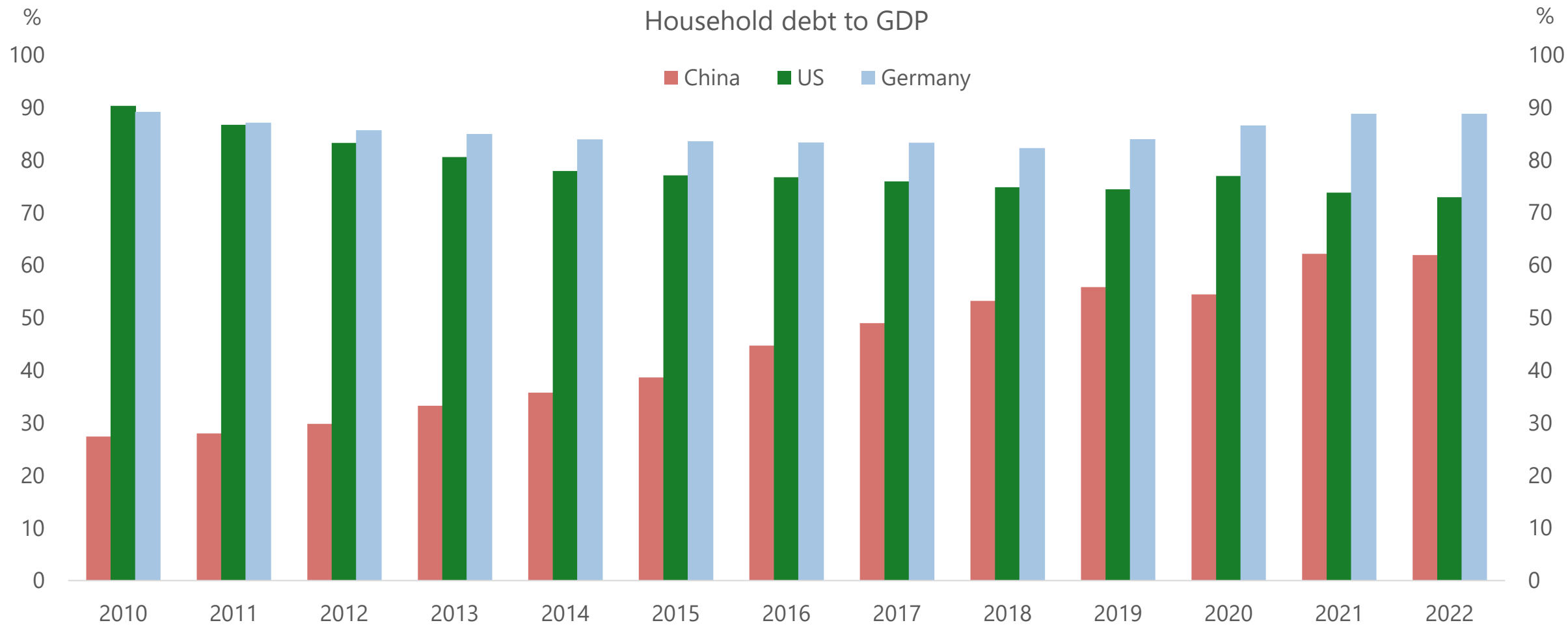
Rental yields at second hand residential buildings in major cities



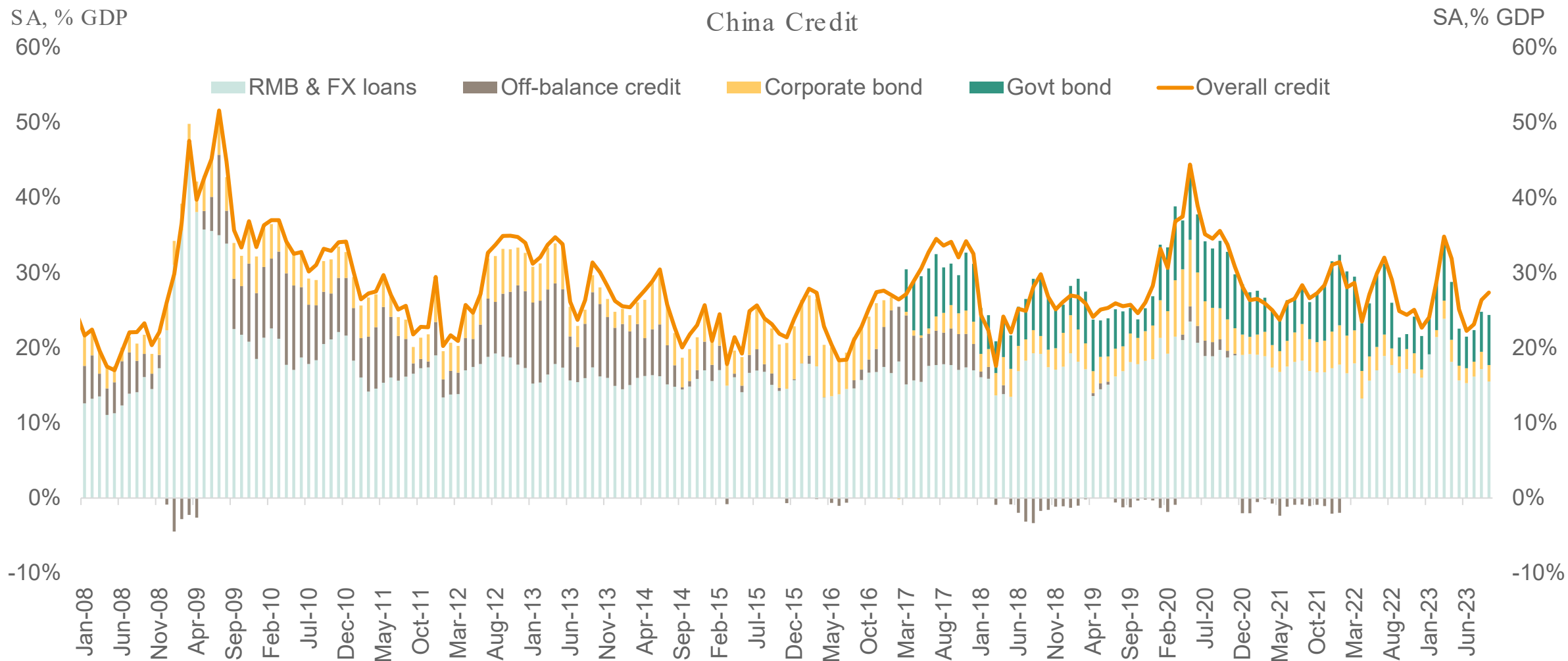
Source: Bloomberg, Apollo Chief Economist (Note: Rental yield is the rental income as a percentage of the property's value)

China: Debt and financing

Household debt to GDP has increased steadily in China

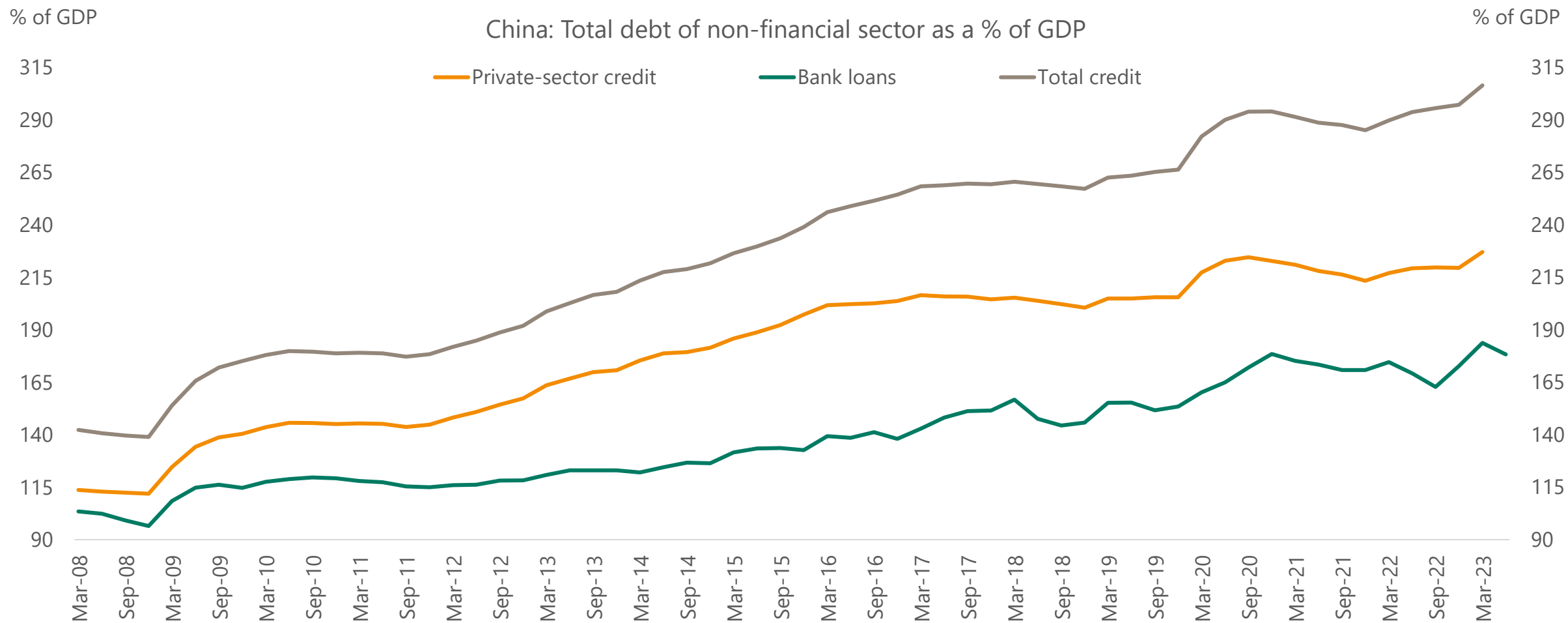


China credit growth

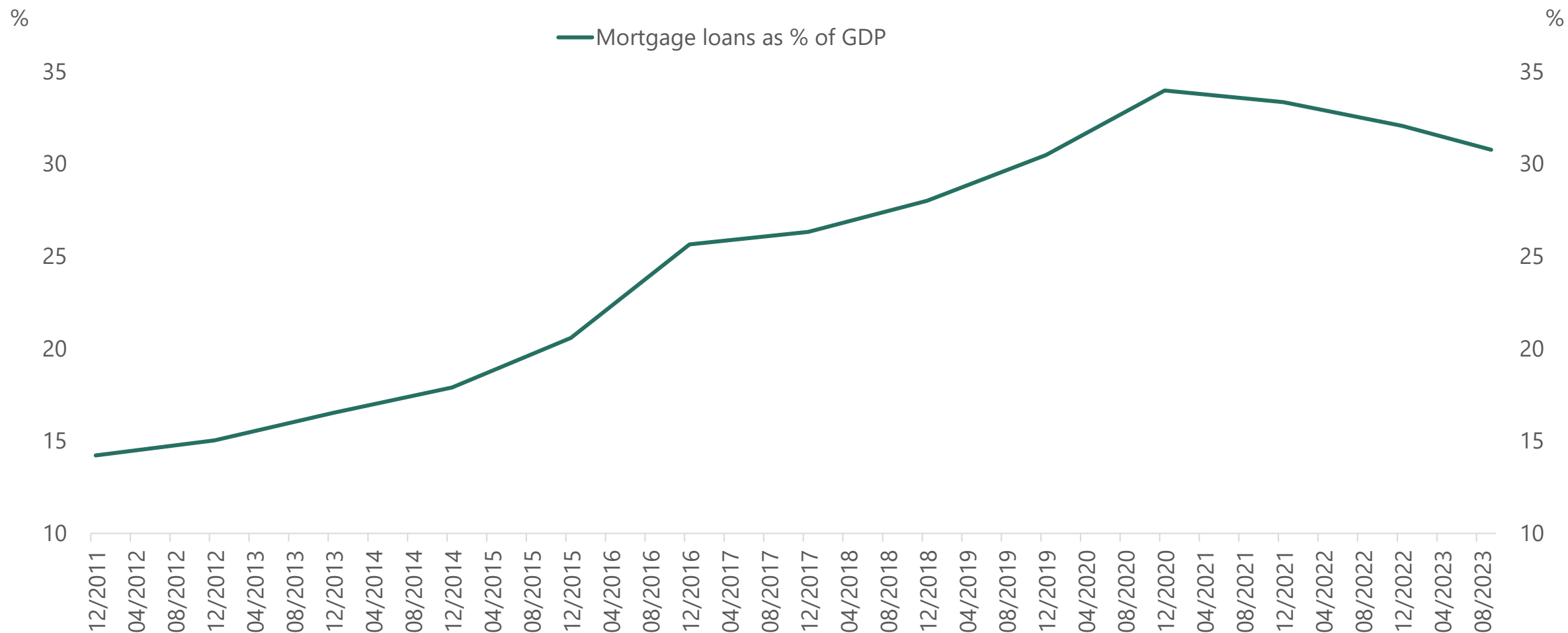


Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

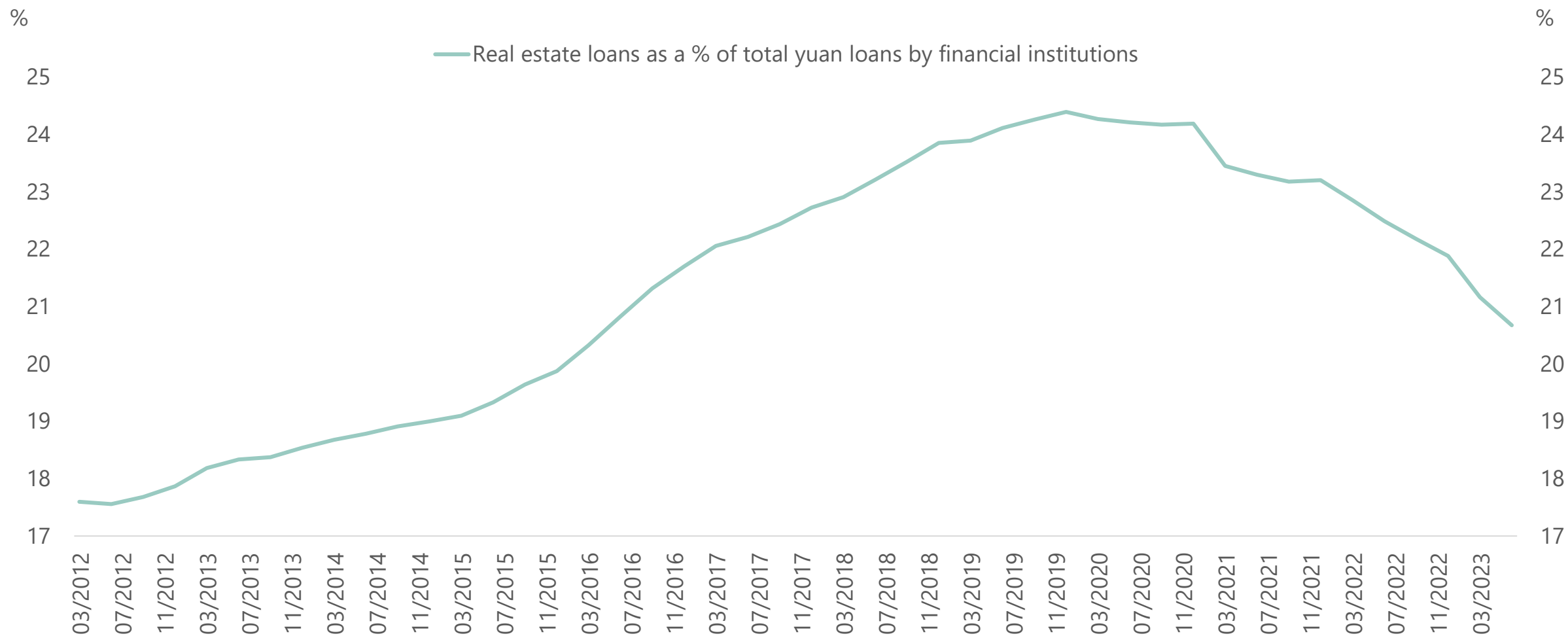
China: Debt levels have increased in the private sector



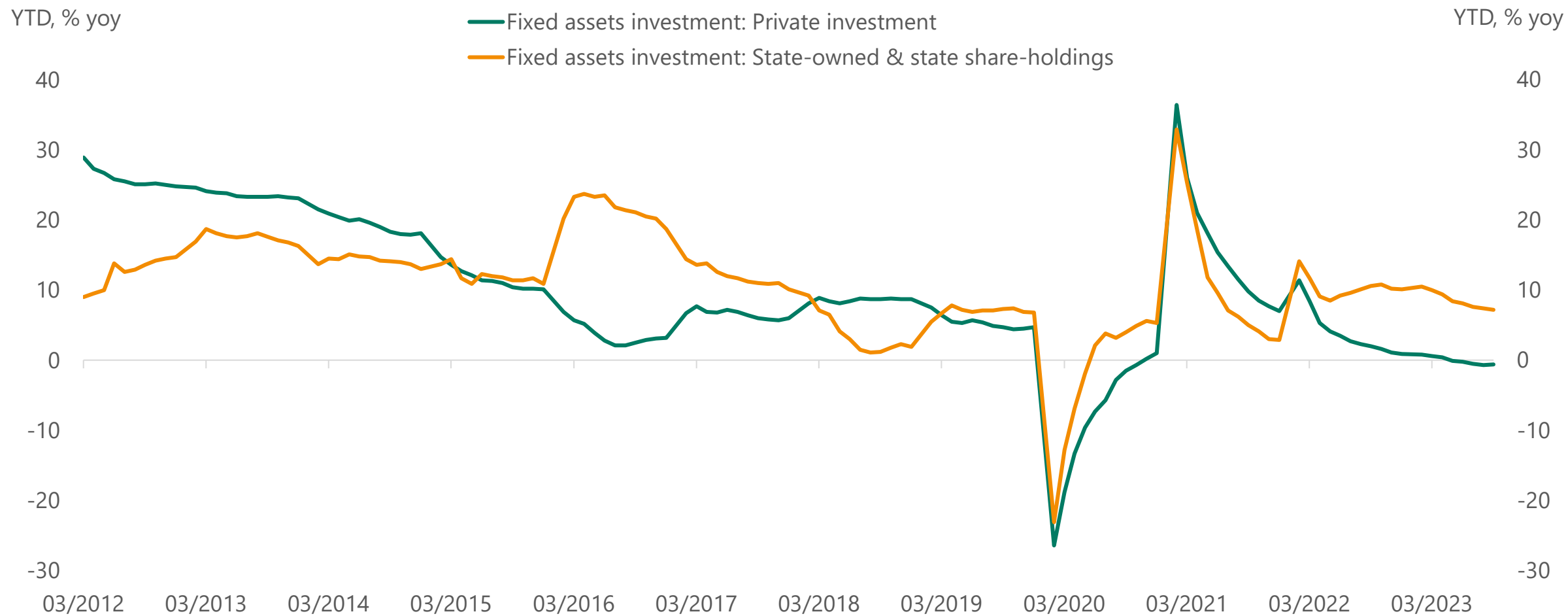
China's mortgage liabilities as a share of GDP



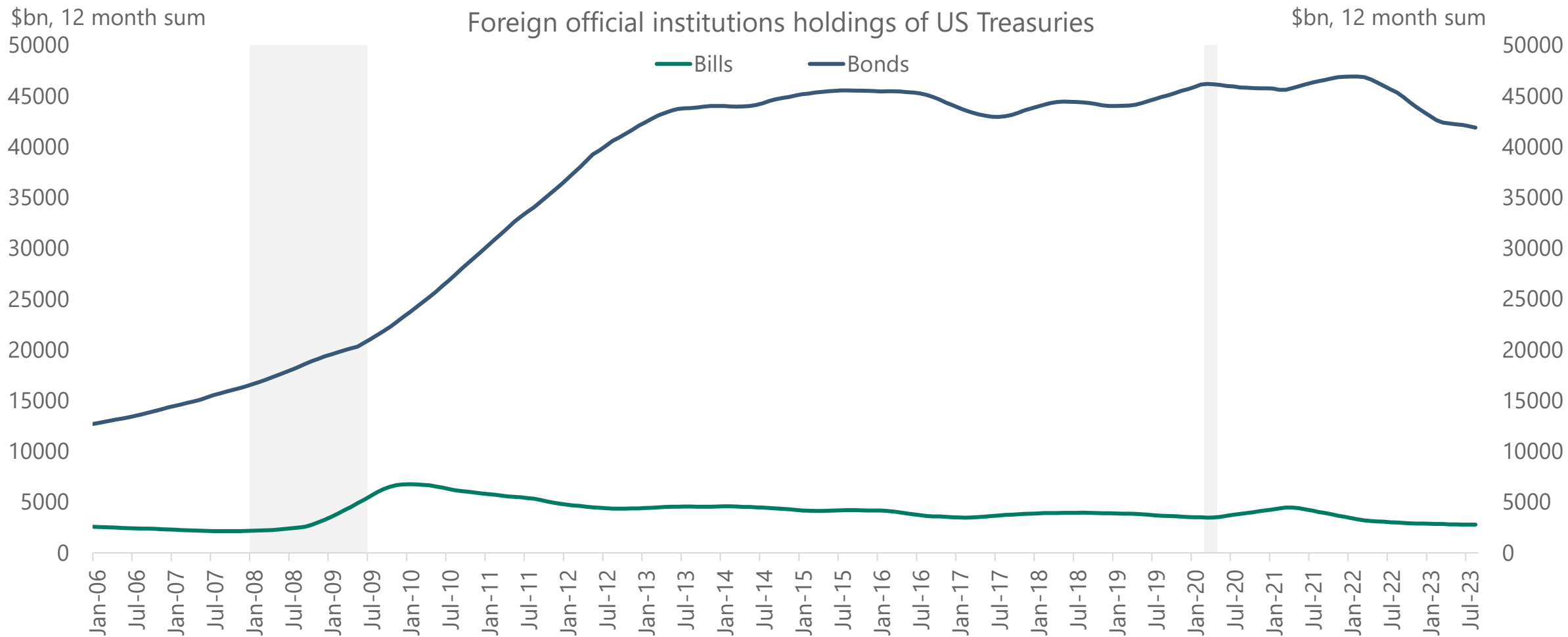
Real estate loans making up a smaller part of total lending



China: Private investment growth is declining



Foreign official holdings of US bonds is falling

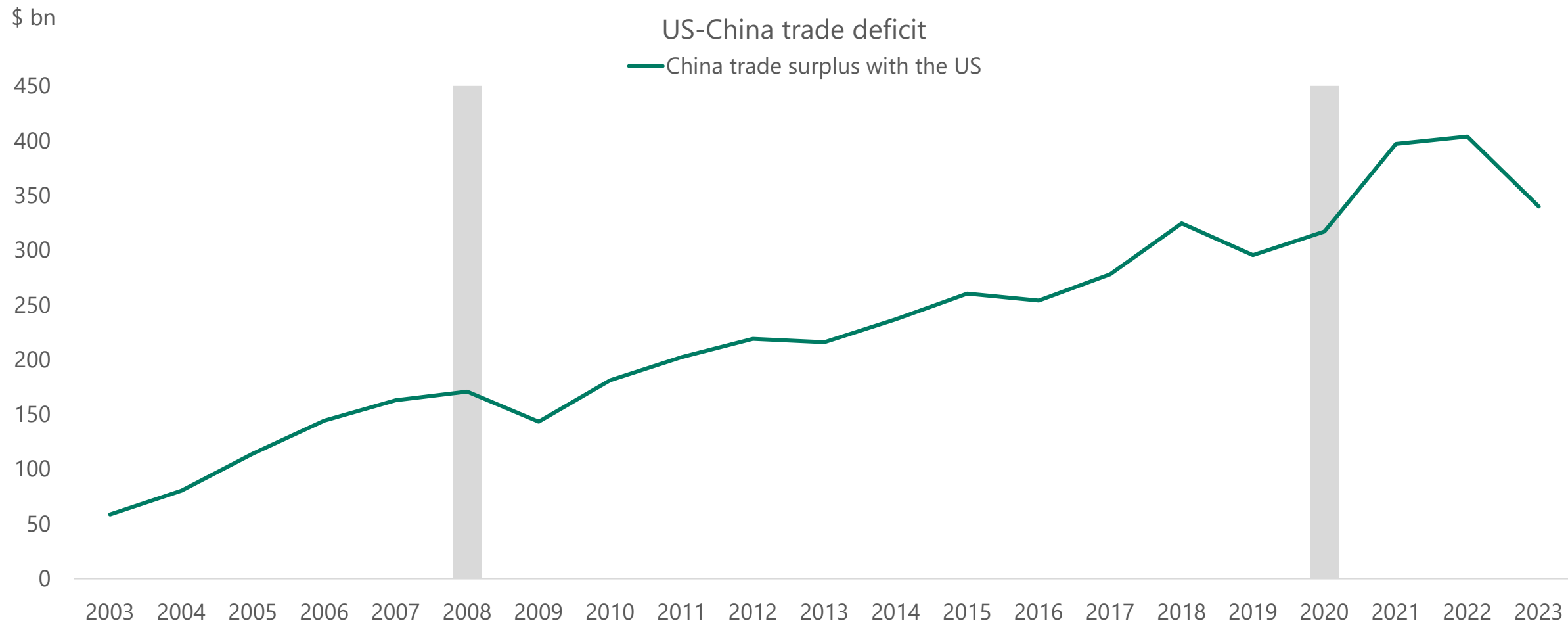


Chinese trade with the US

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

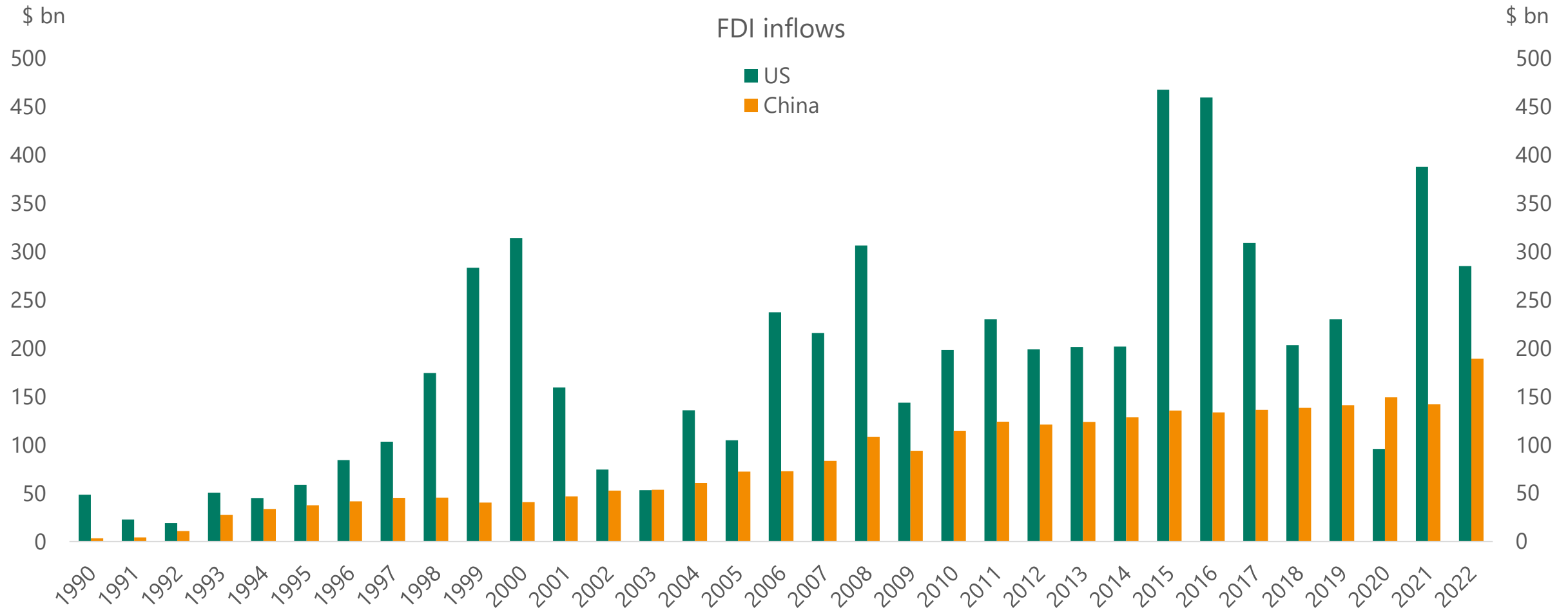


US-China trade deficit



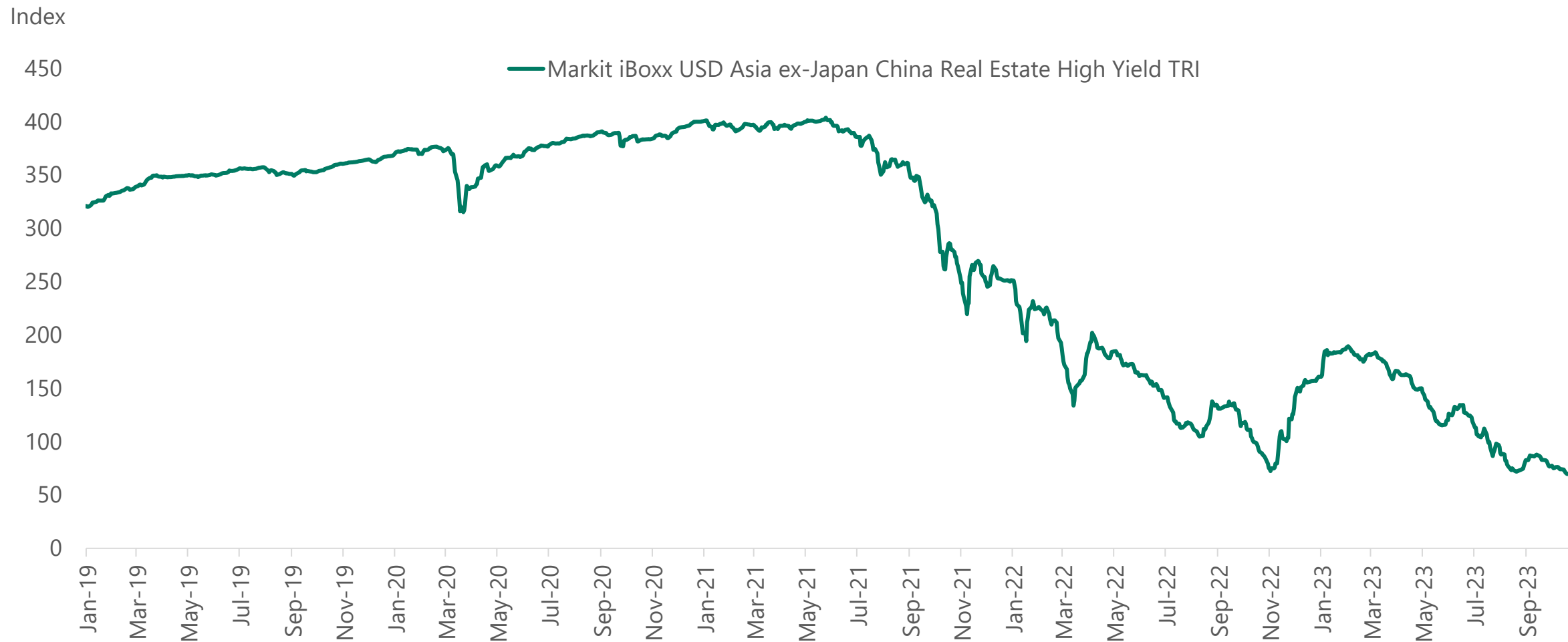
Source: Bloomberg, Apollo Chief Economist. Note: 2023 is annualized till July 2023.

China and US: Comparing foreign direct investment



China IG and HY

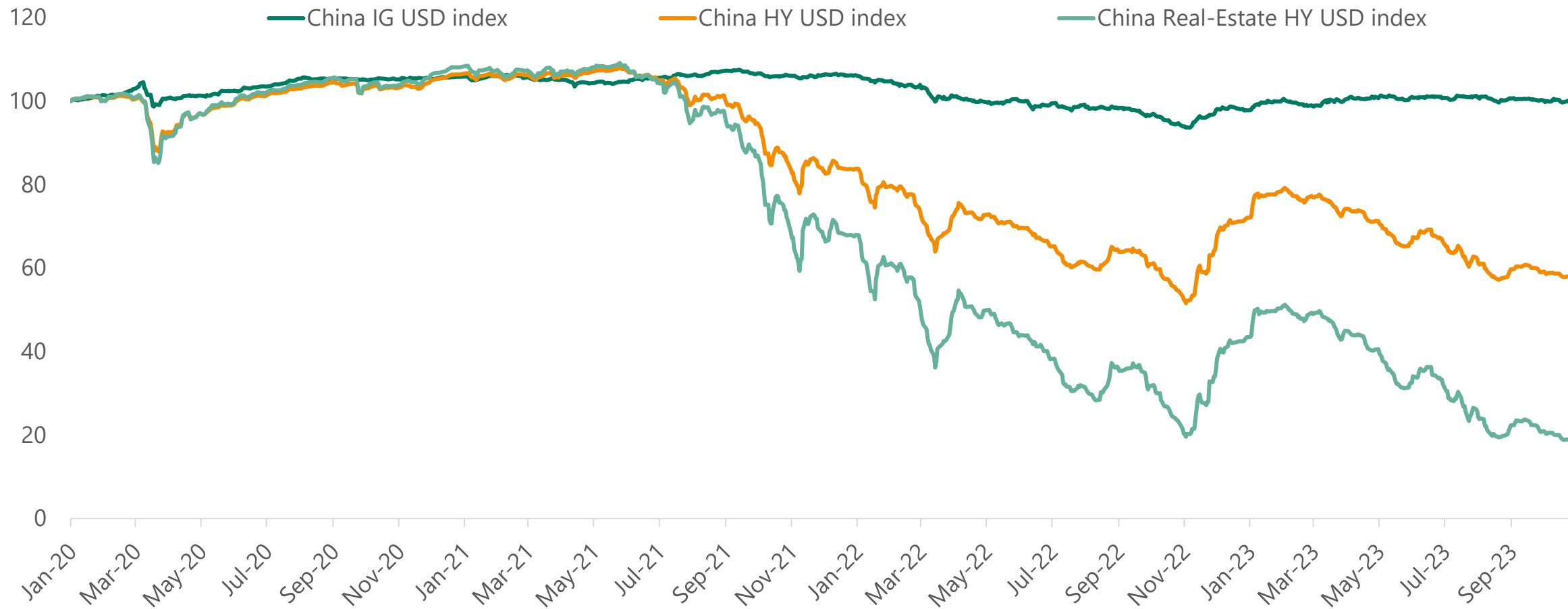
China's real estate sector under pressure



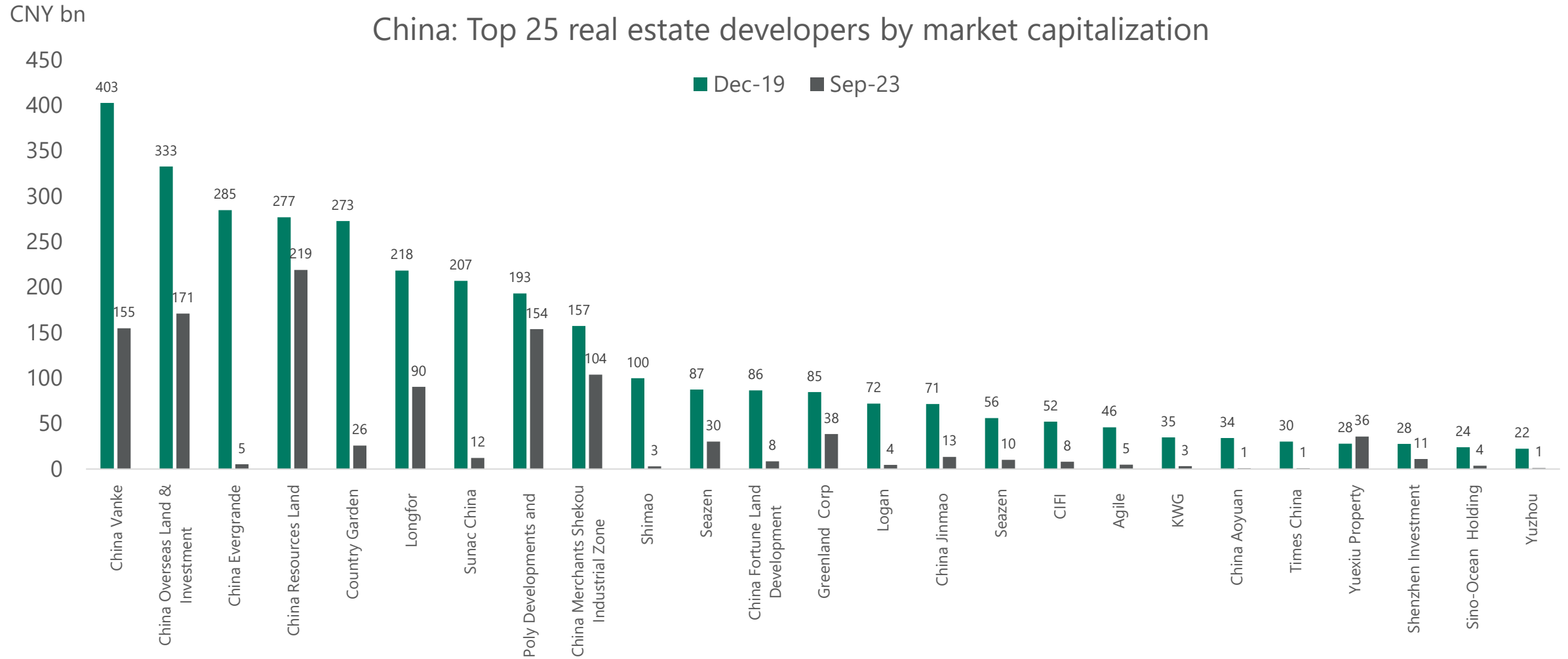
Source: Bloomberg, Apollo Chief Economist.

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

Index, Jan 2020 = 100



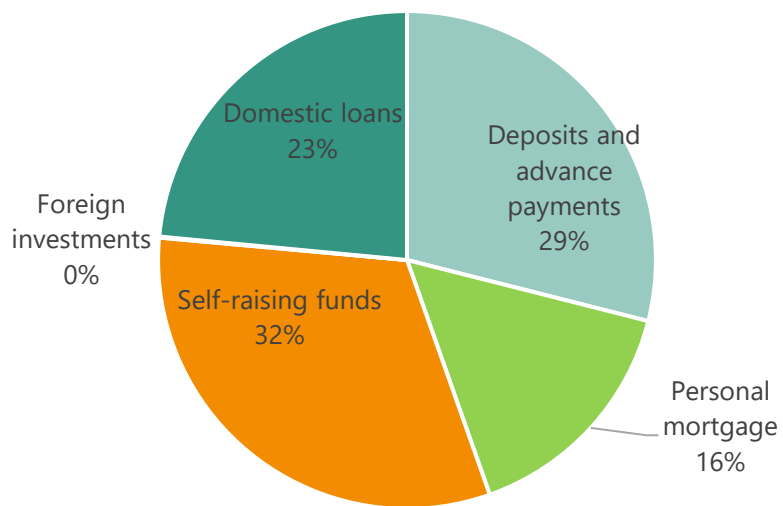
China: Market capitalization of real estate developers has declined significantly



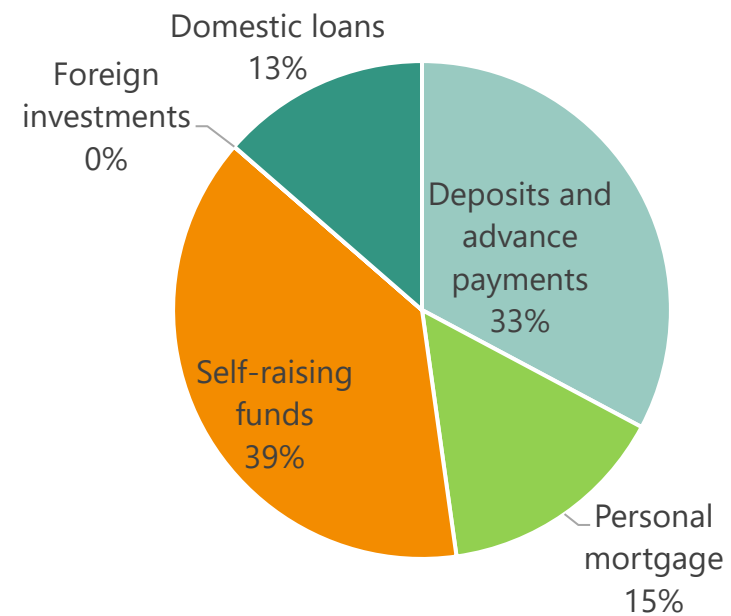
Source: Bloomberg, Apollo Chief Economist.

China: Sources of funds for real estate developers

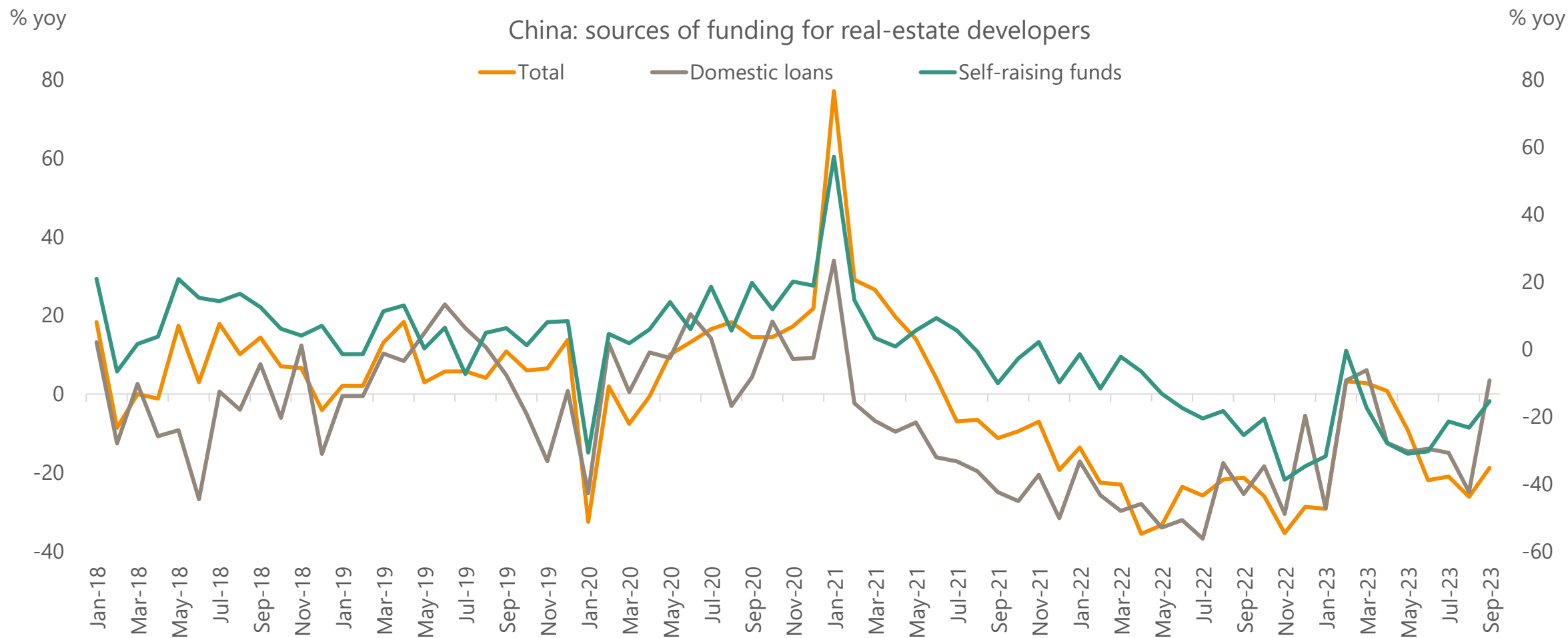
January 2020



September 2023



China: Sources of funds for real estate developers

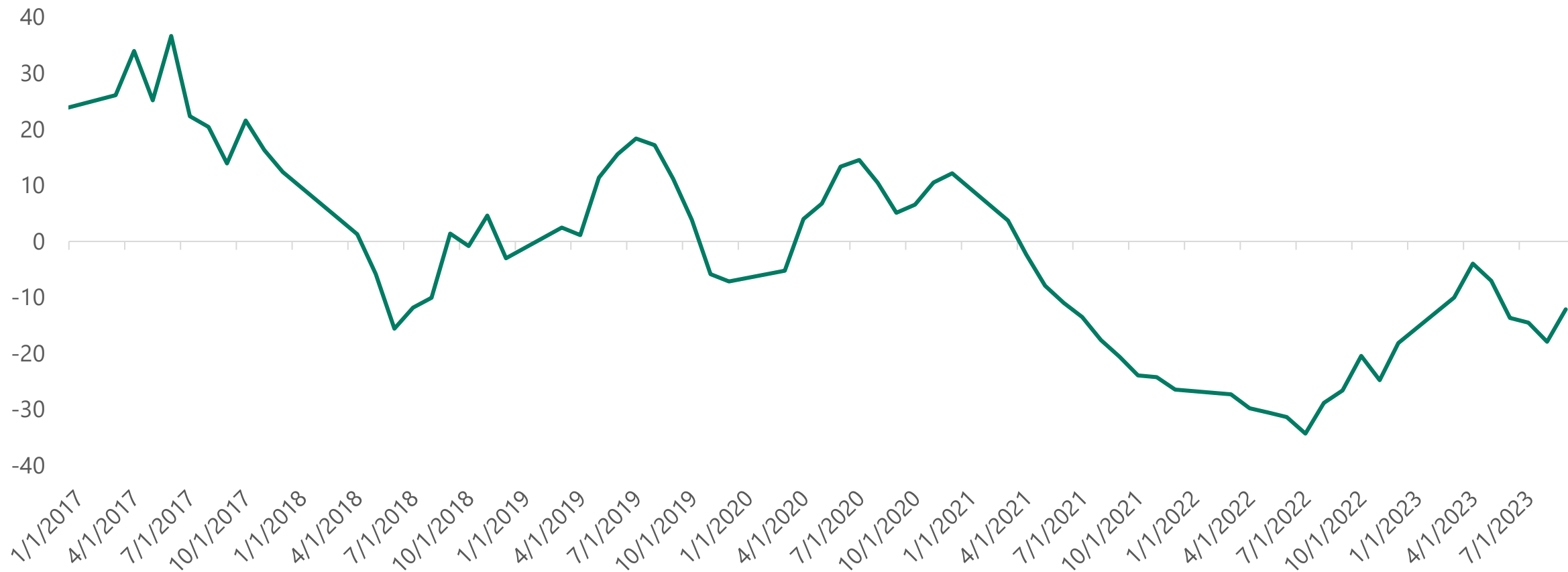


Sources: NBS, Haver, Apollo Chief Economist

China: Domestic funding conditions have deteriorated

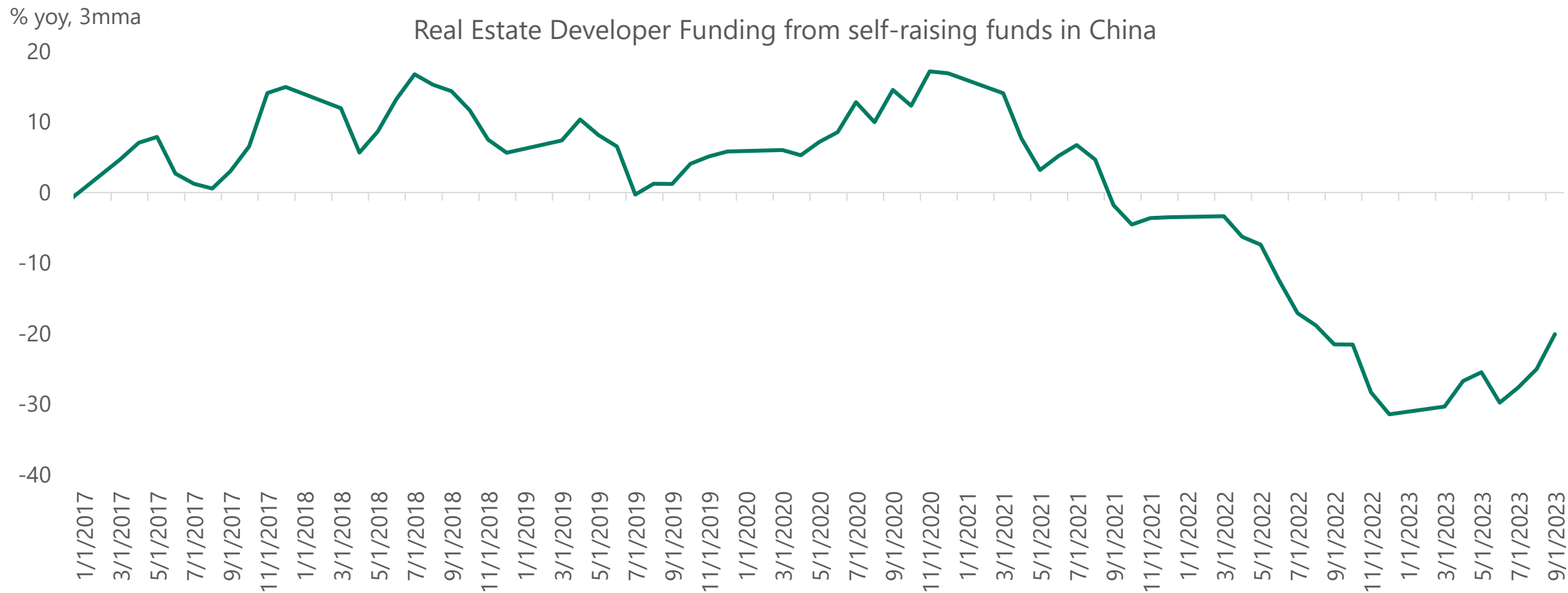
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Real Estate Developer Funding from Domestic Loans in China



Source: Bloomberg, Apollo Chief Economist.

China: Self-financing for real estate developers

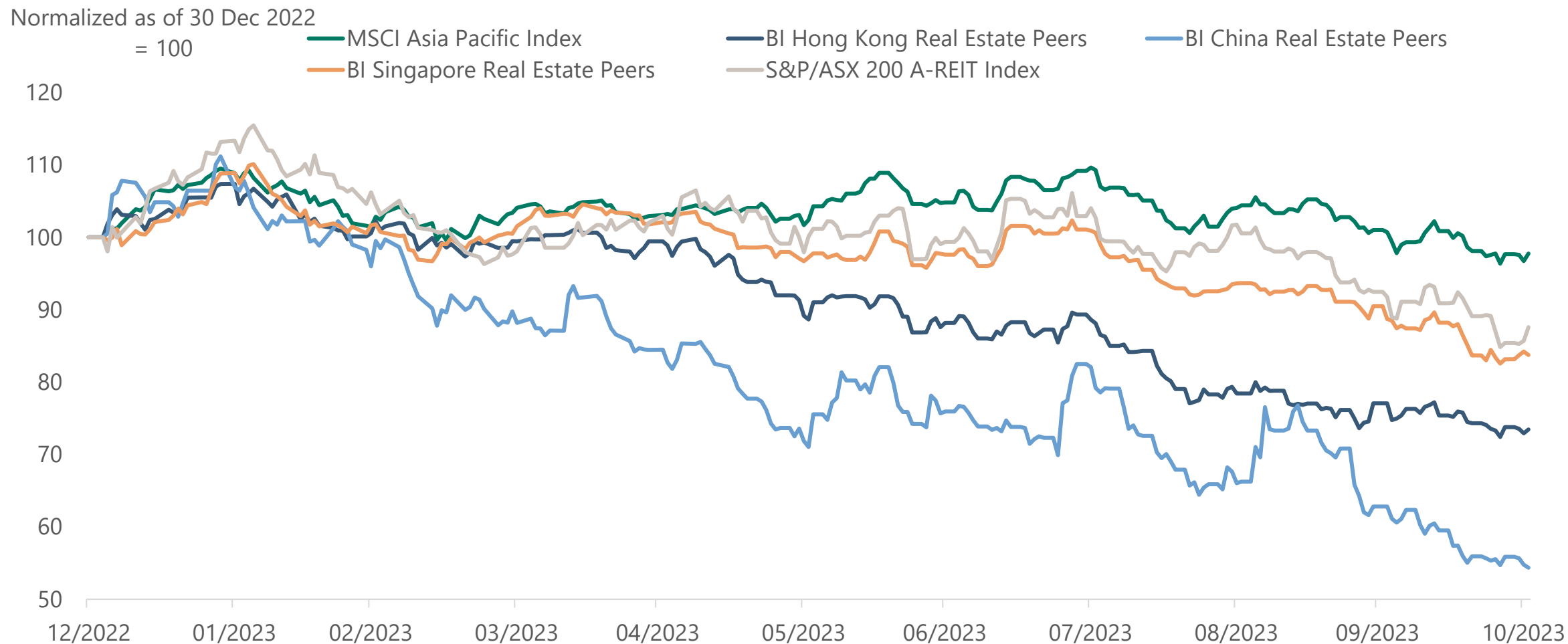


Source: Bloomberg, Apollo Chief Economist.

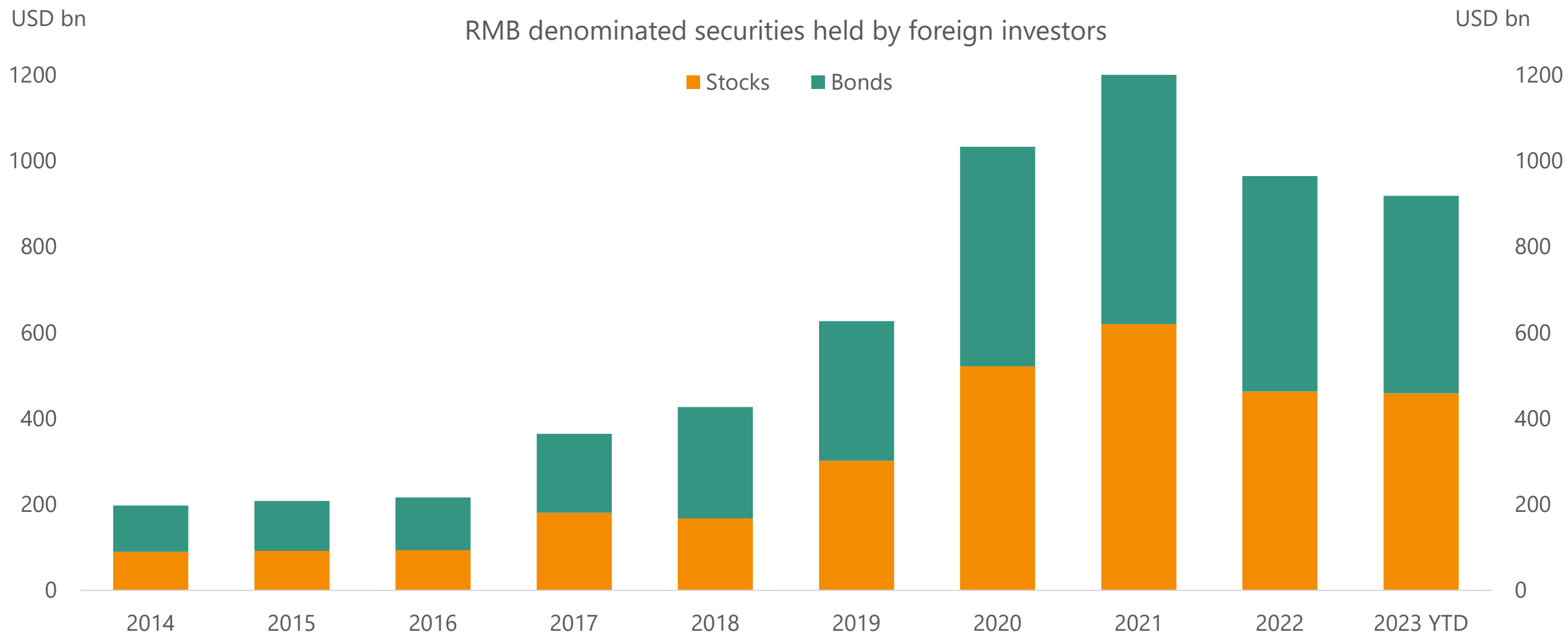
China: Stock prices of real estate developers declining



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)

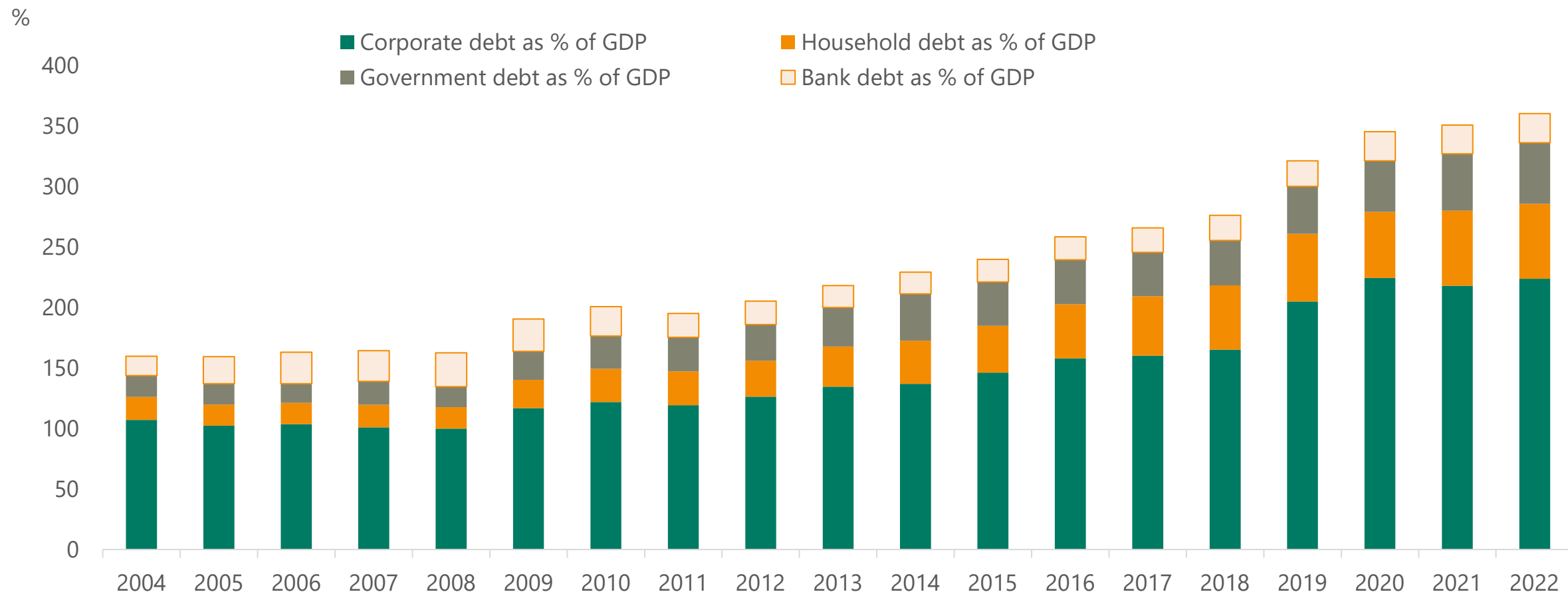
High and rising youth unemployment in China



China: Consumer confidence is down



China: High debt levels





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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.