

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 October 2023.

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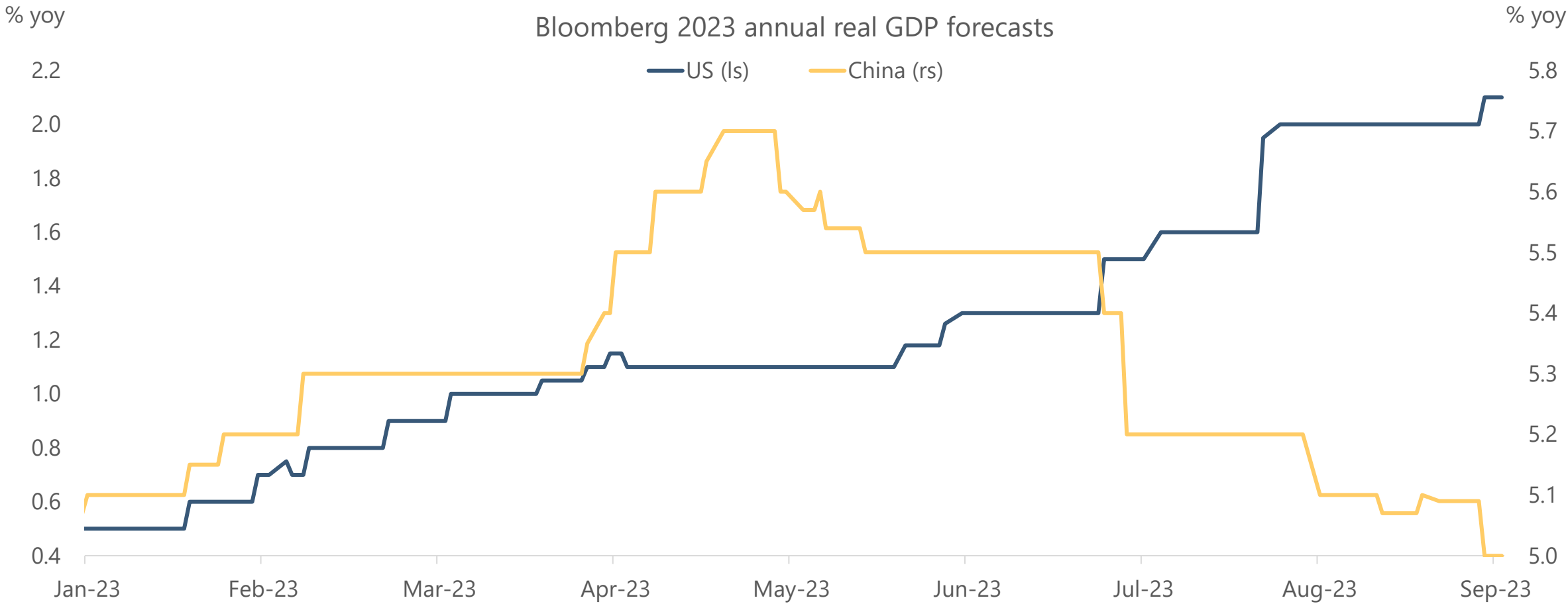
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China: Overview

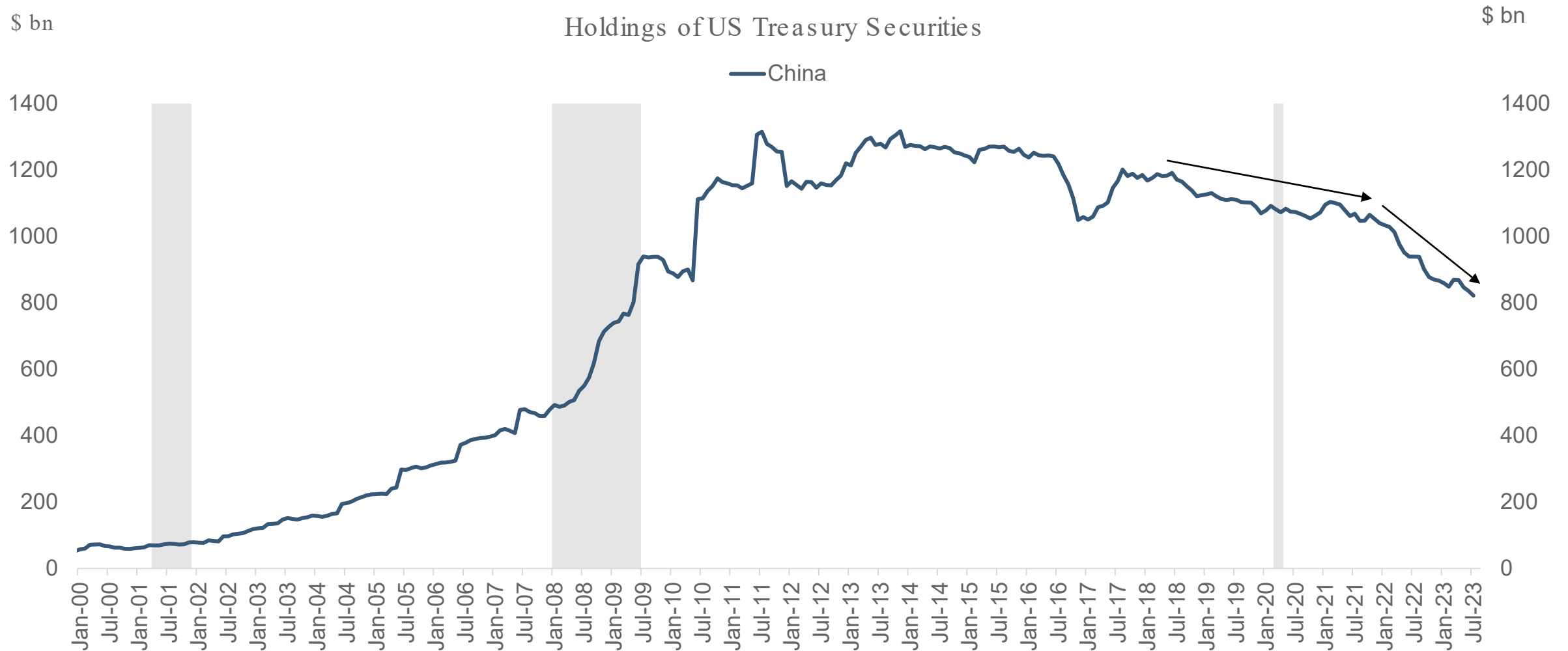
Diverging growth trends in the US and China



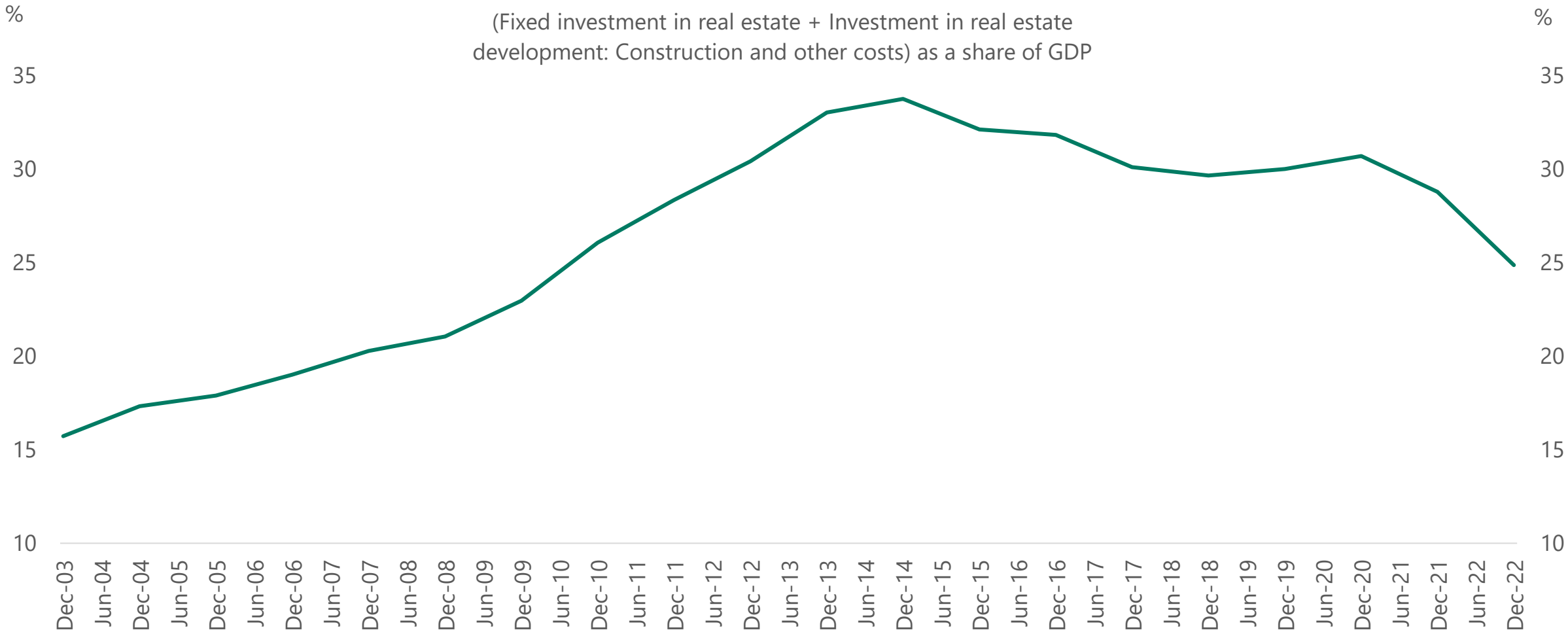
China: Exports are slowing



China has sold \$300bn in Treasuries since 2021, including \$40bn since April 2023

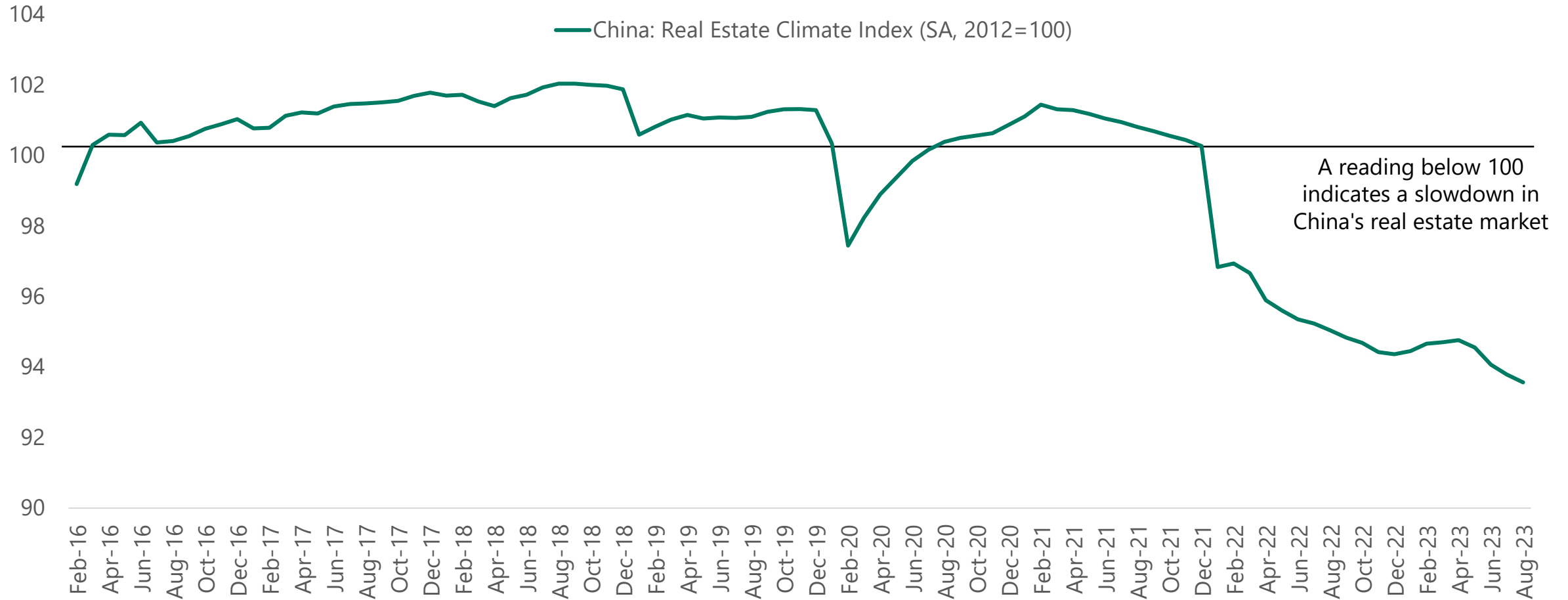


China: Housing makes up 25% of GDP



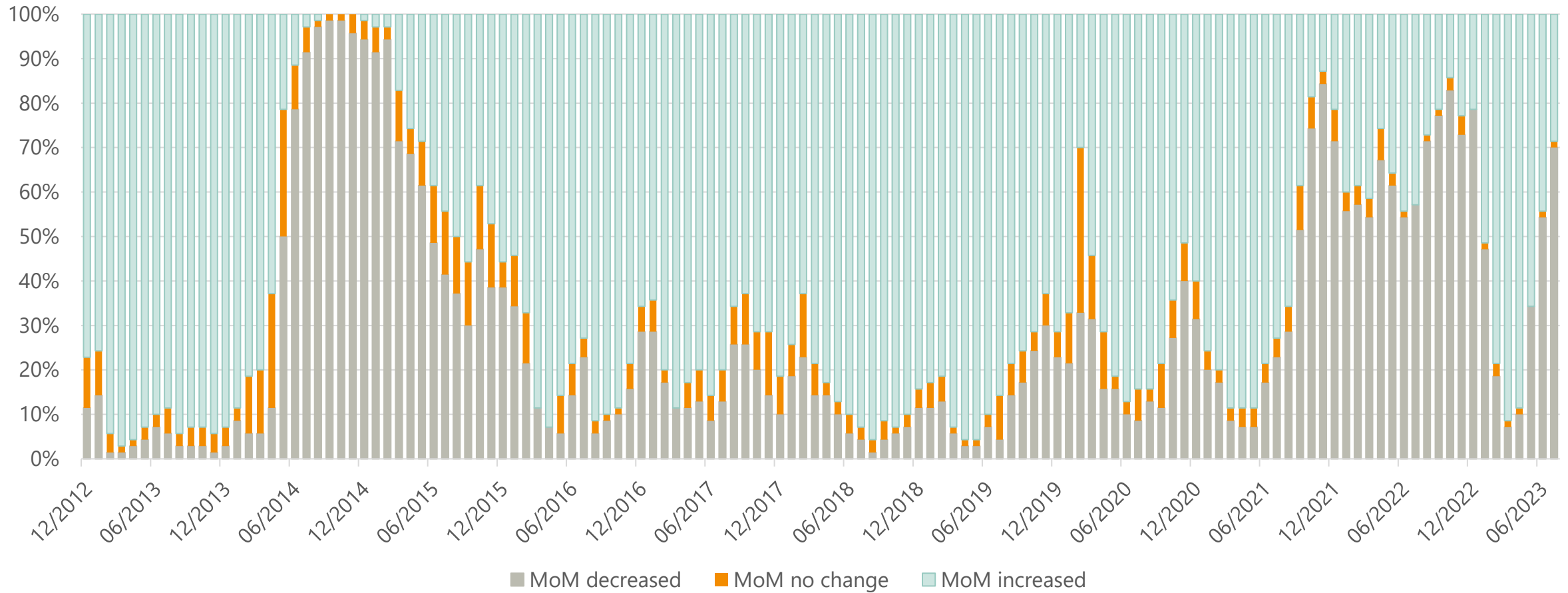
Source: Haver, Apollo Chief Economist.

China real estate index in recession territory



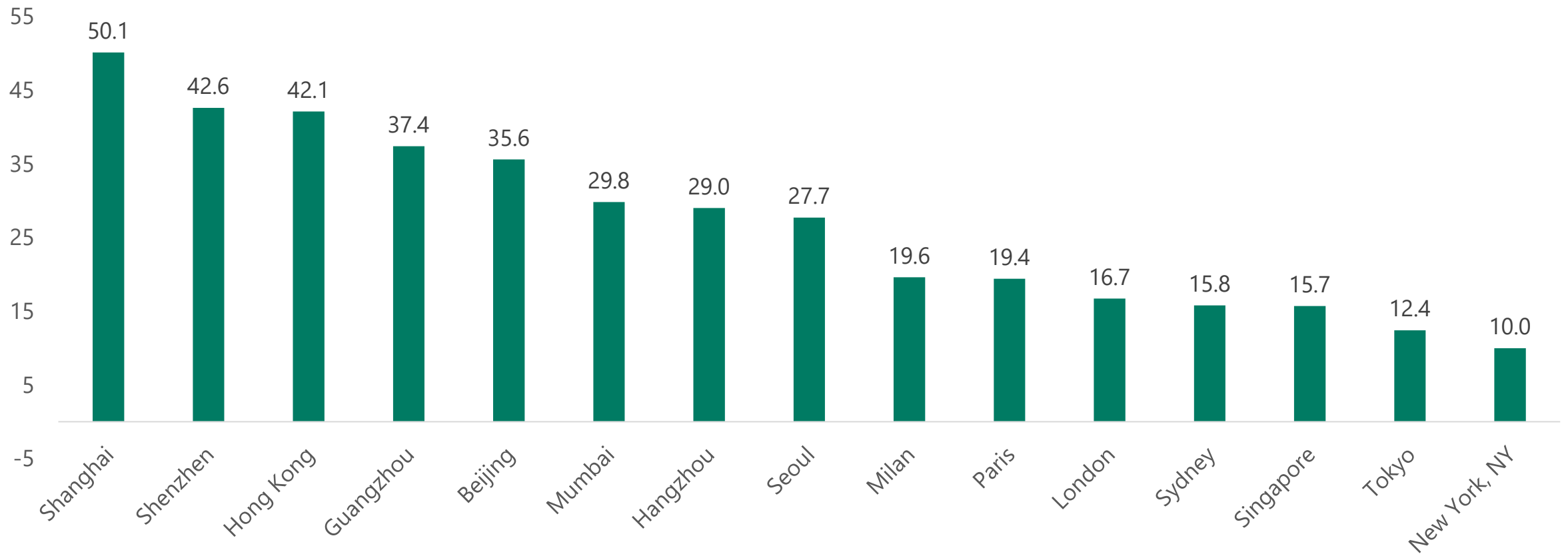
Housing market cooling down in China

Price changes in 70 major cities (new residential properties)



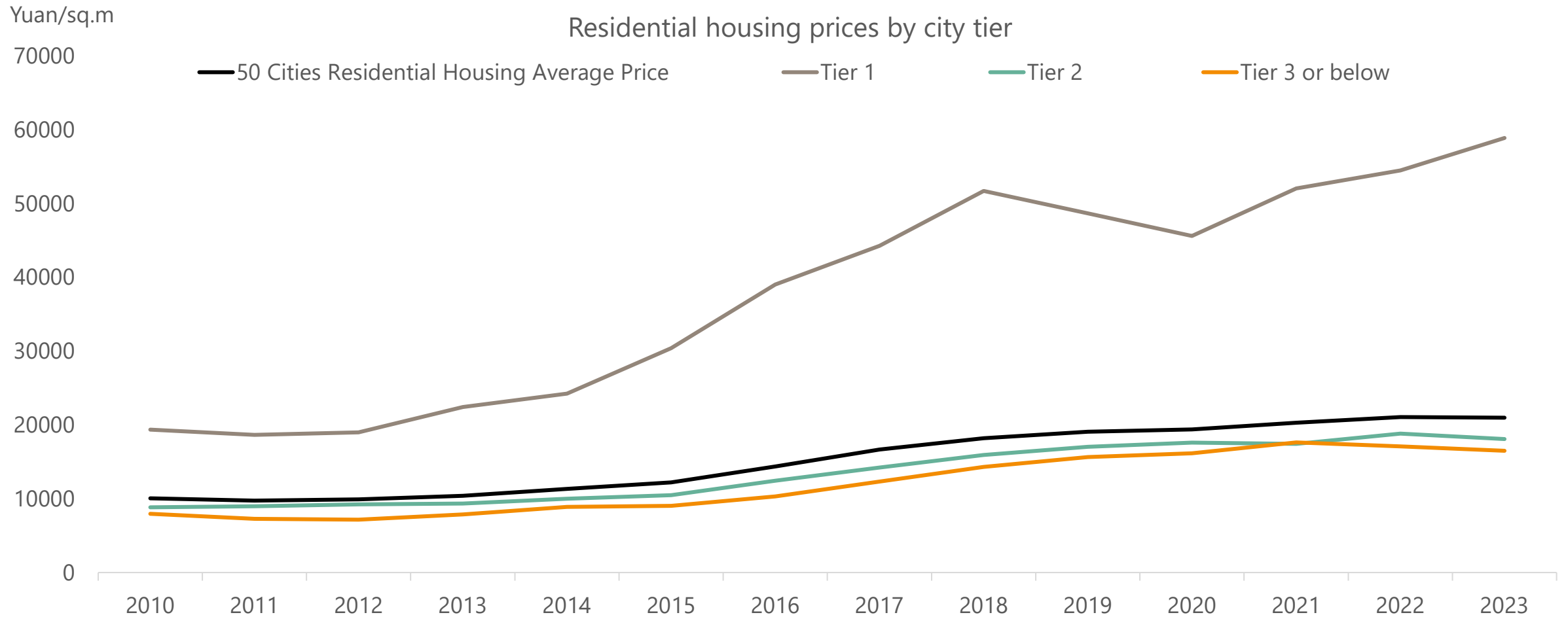
Home price-to-income ratio five times higher in Shanghai than in New York

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

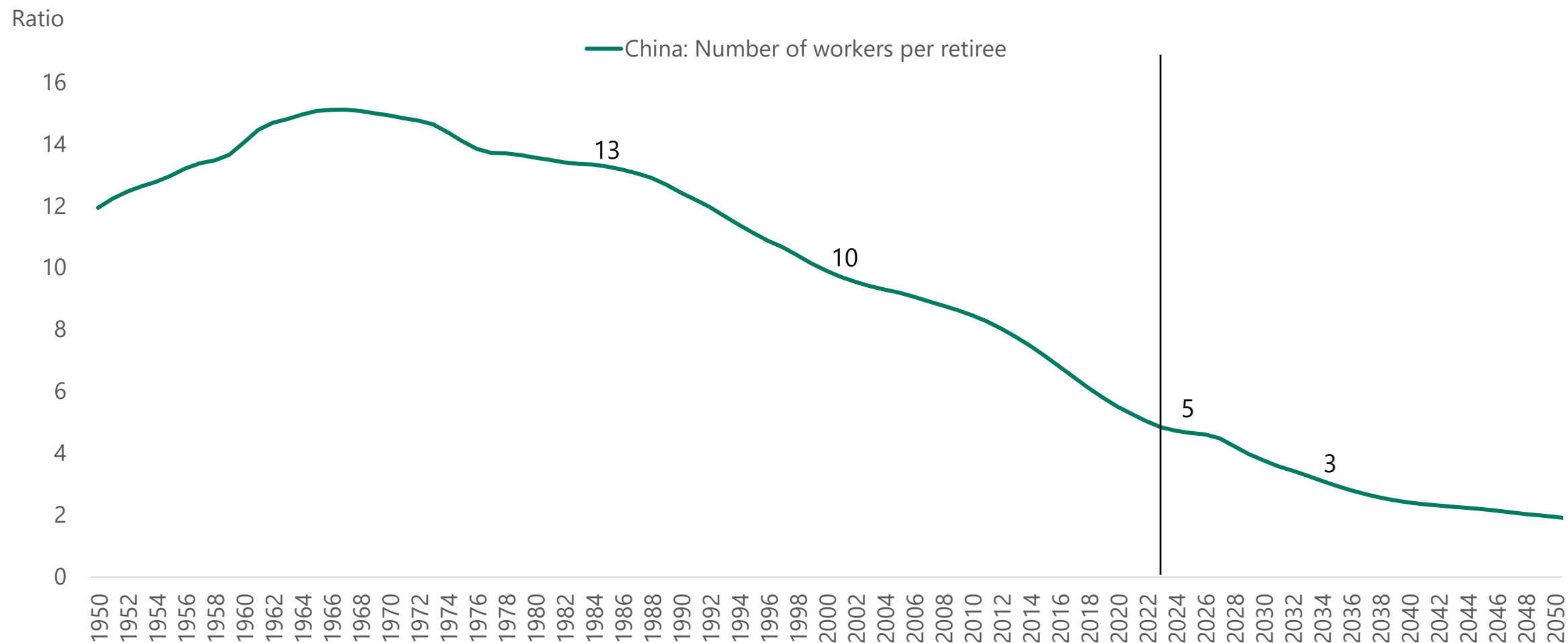


Source: Numbeo, Apollo Chief Economist (<https://www.numbeo.com/property-investment/rankings.jsp?title=2021-mid>) Note: *Price to Income Ratio* is the basic measure for apartment purchase affordability. It is generally calculated as the ratio of median apartment prices to median family disposable income,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

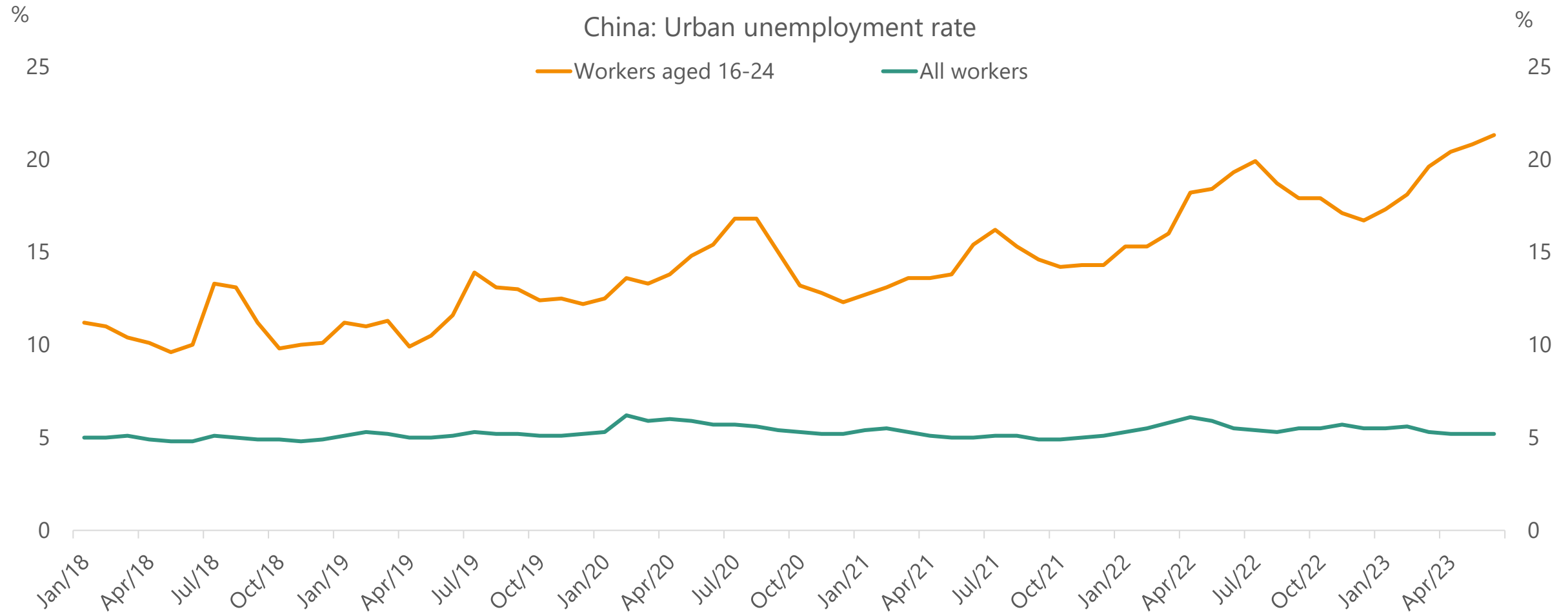
Homes cost three times more in Tier 1 cities than in Tier 2 and Tier 3 cities



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



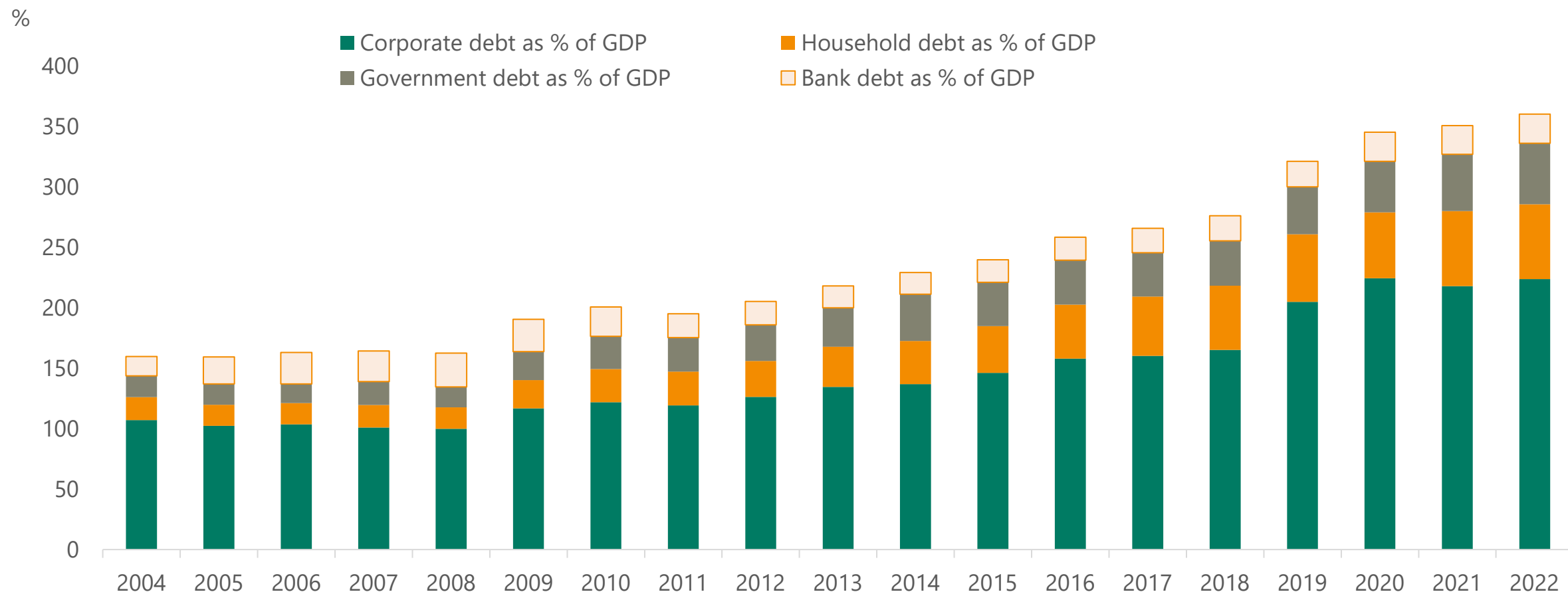
High and rising youth unemployment in China



China: Consumer confidence is down

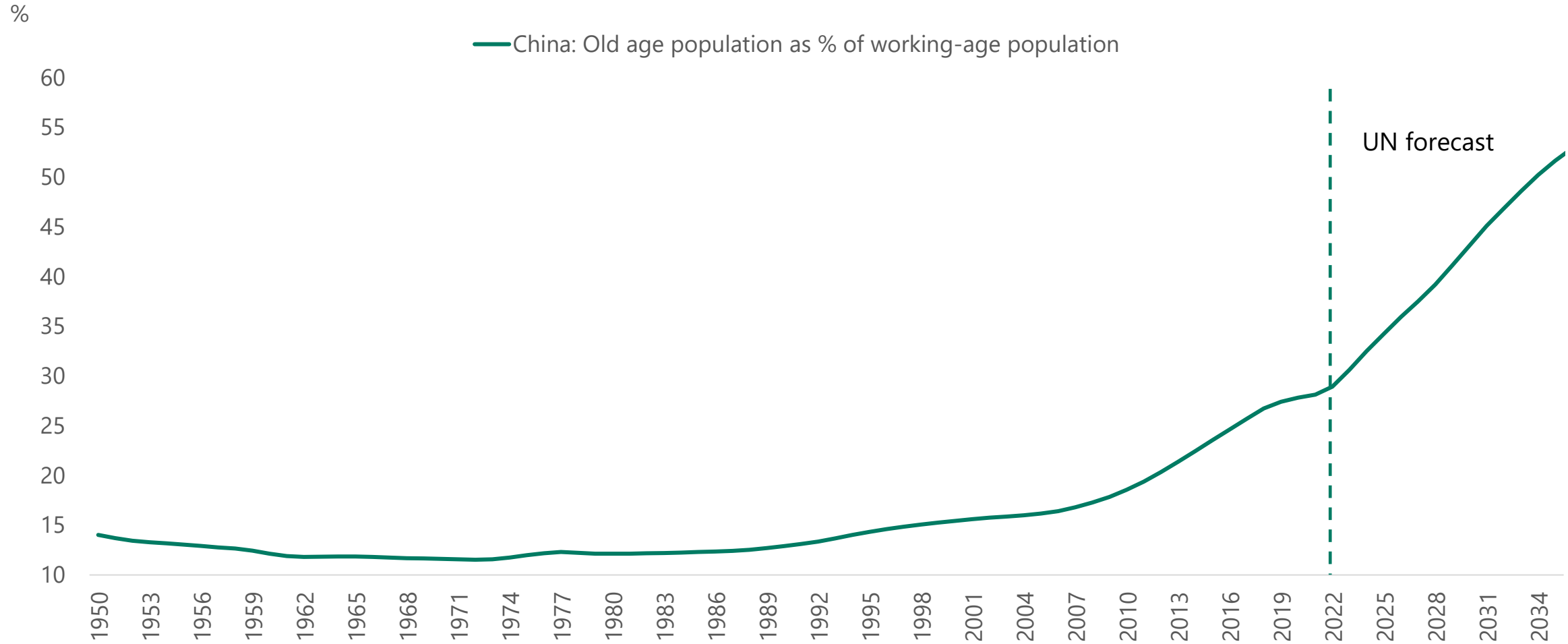


China: High debt levels

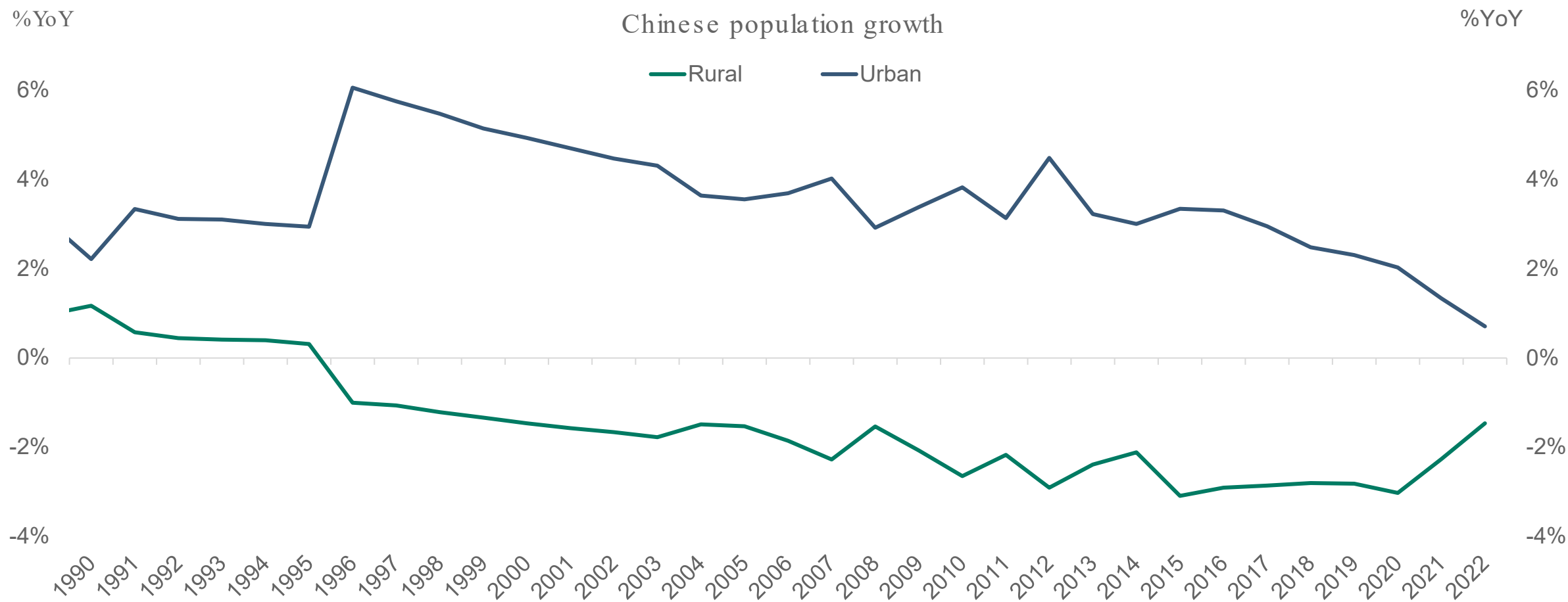


China: Demographics

China: Dependency ratio approaching 50% over the coming decade

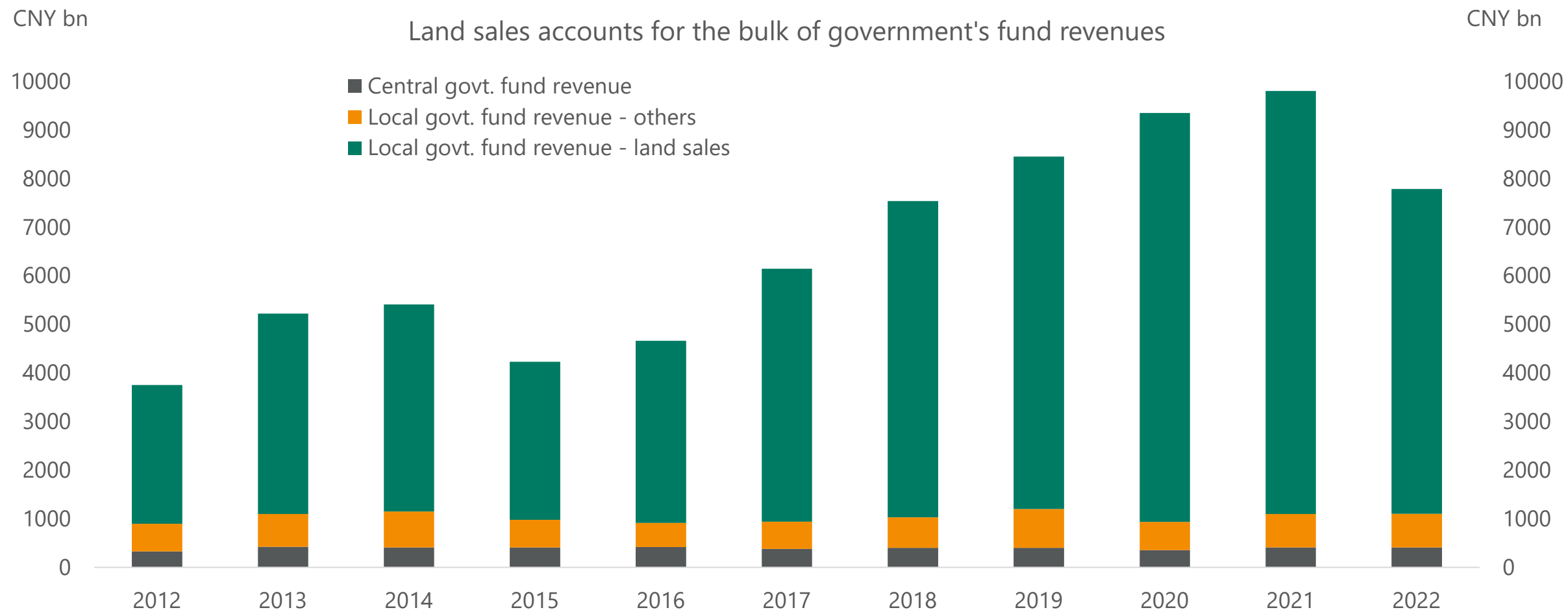


Population growth declining



Real estate playing a key role in the Chinese economy

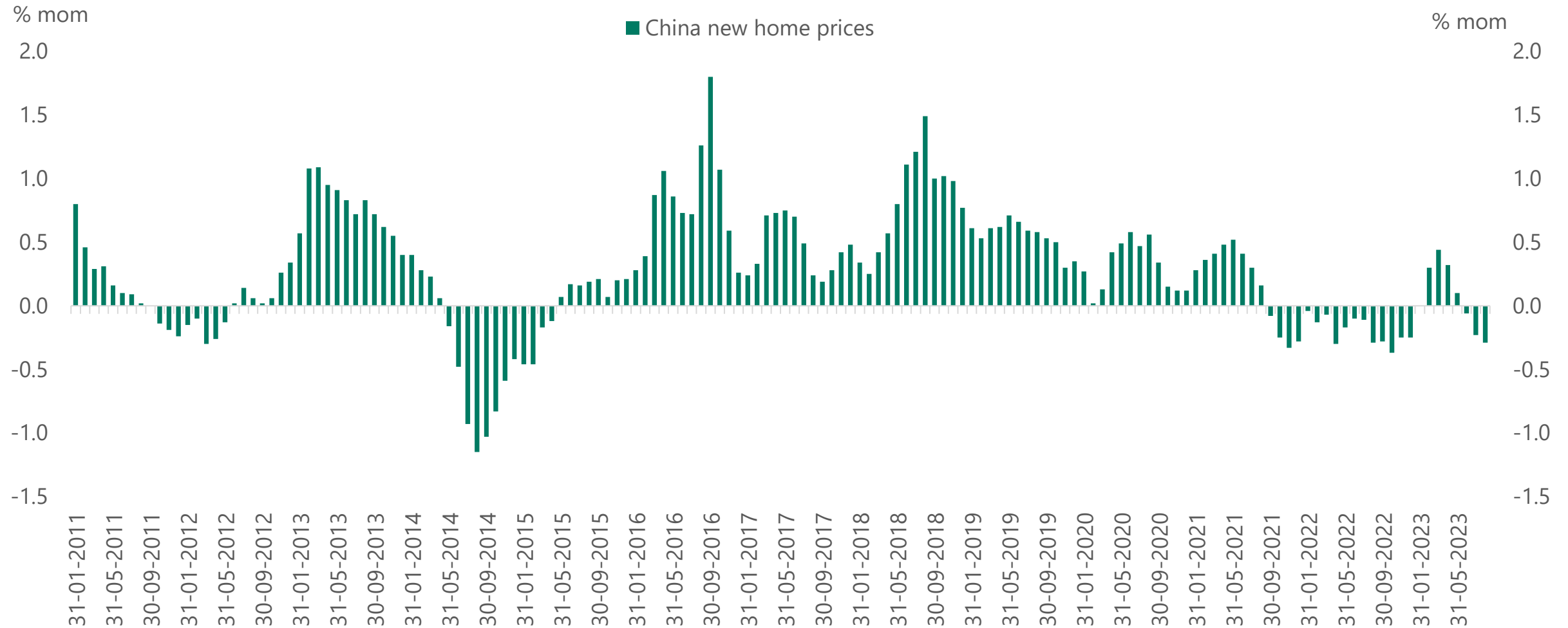
Land sales are crucial source of local government revenue



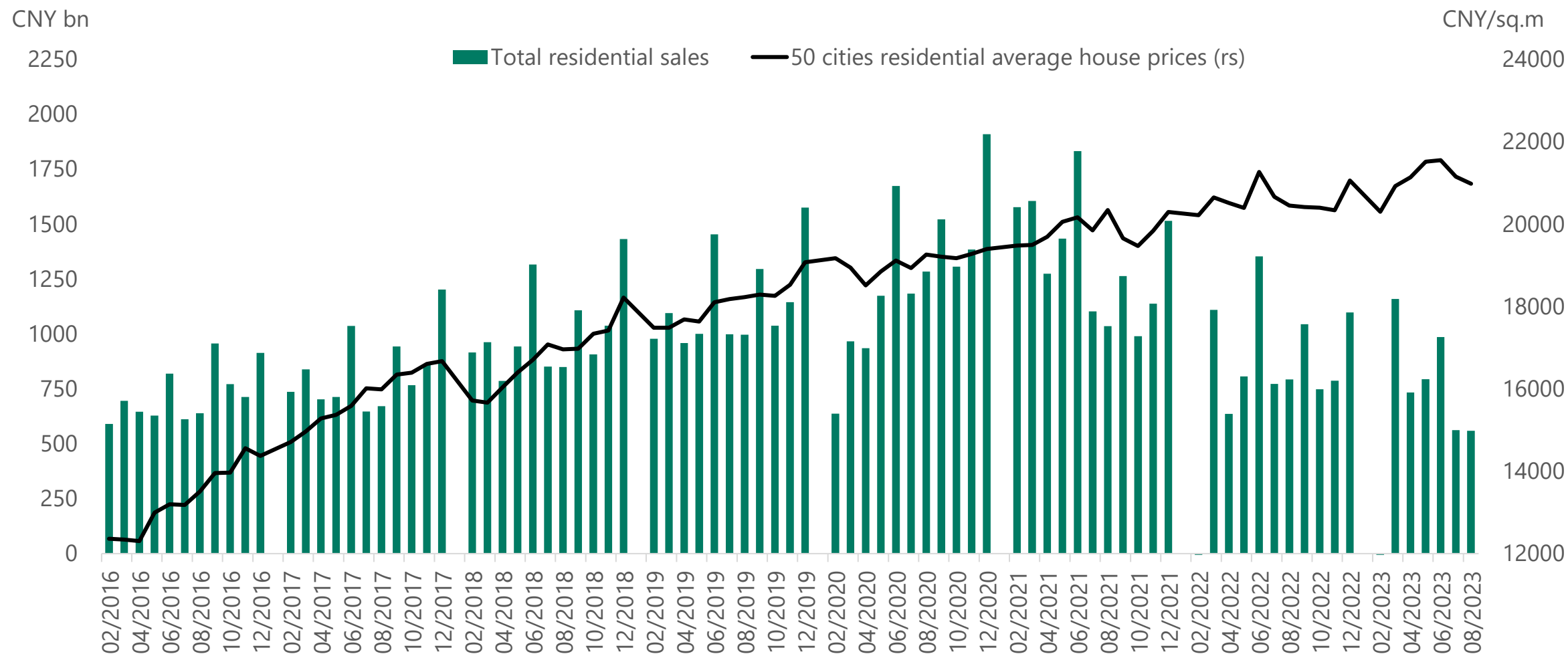
Home sales slowing in Tier 1 and Tier 2 cities



Housing market starting to cool down in China



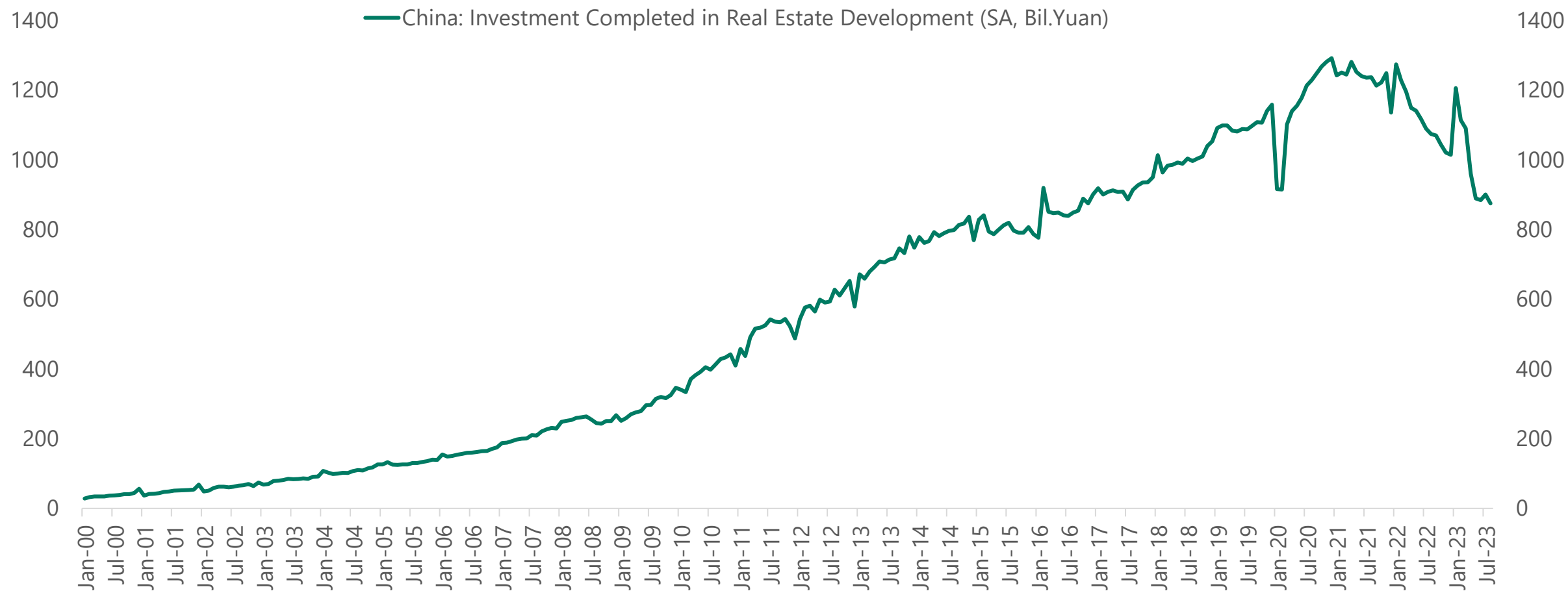
Housing market starting to cool down in China



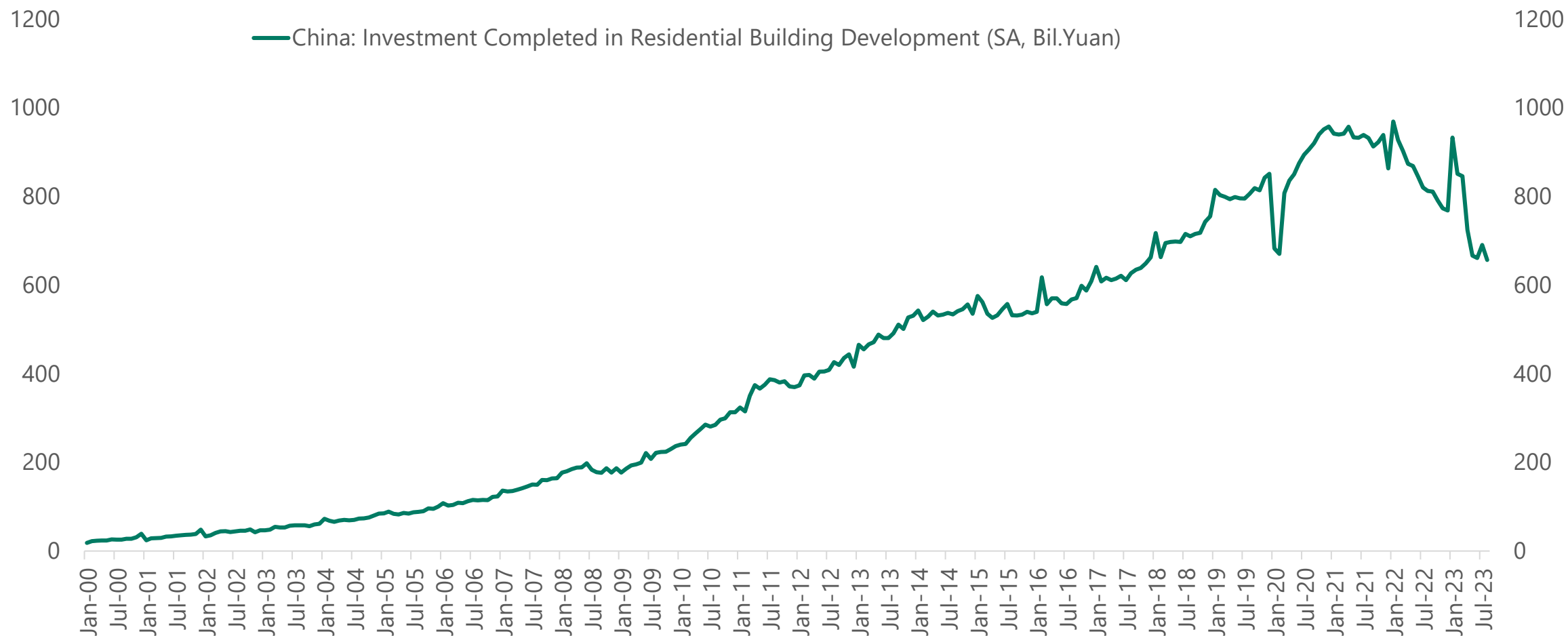
Beijing home price inflation slowing down



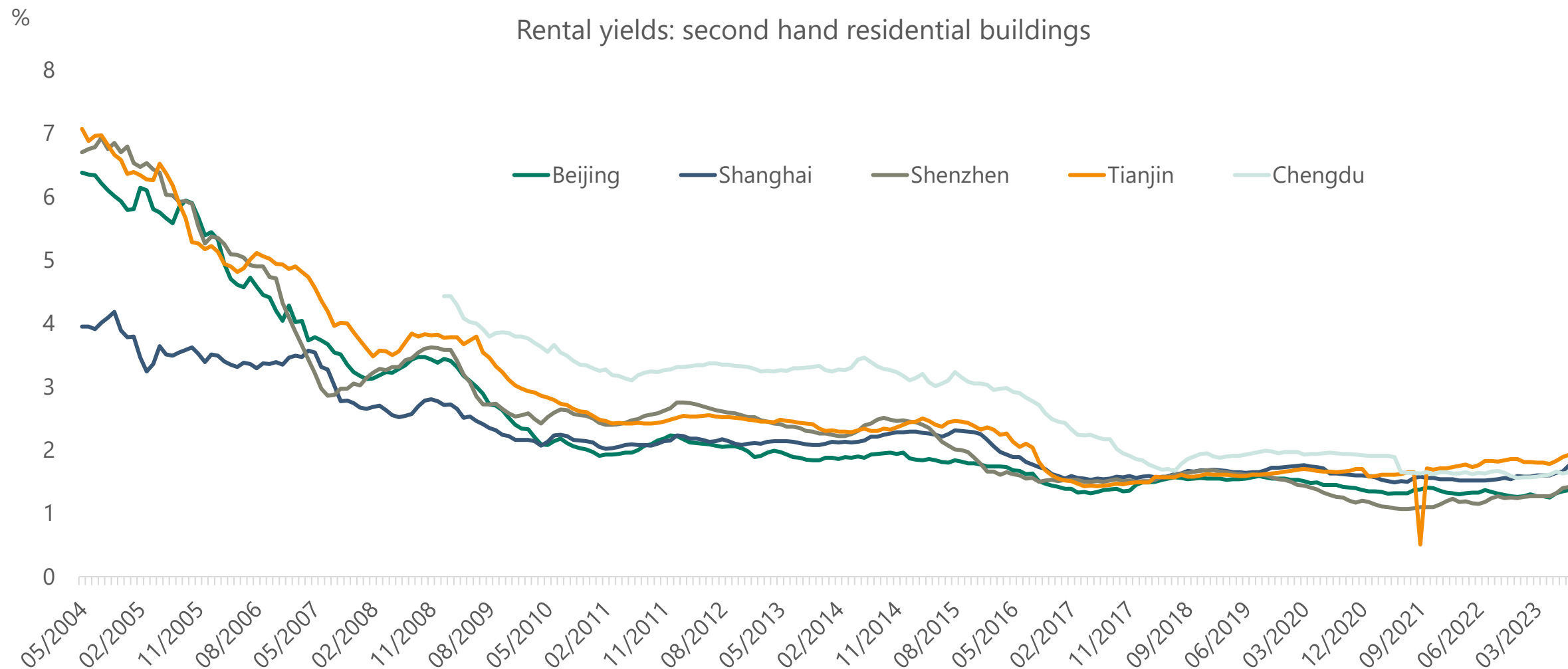
China: Real estate investment slowing



Residential real estate investment slowing

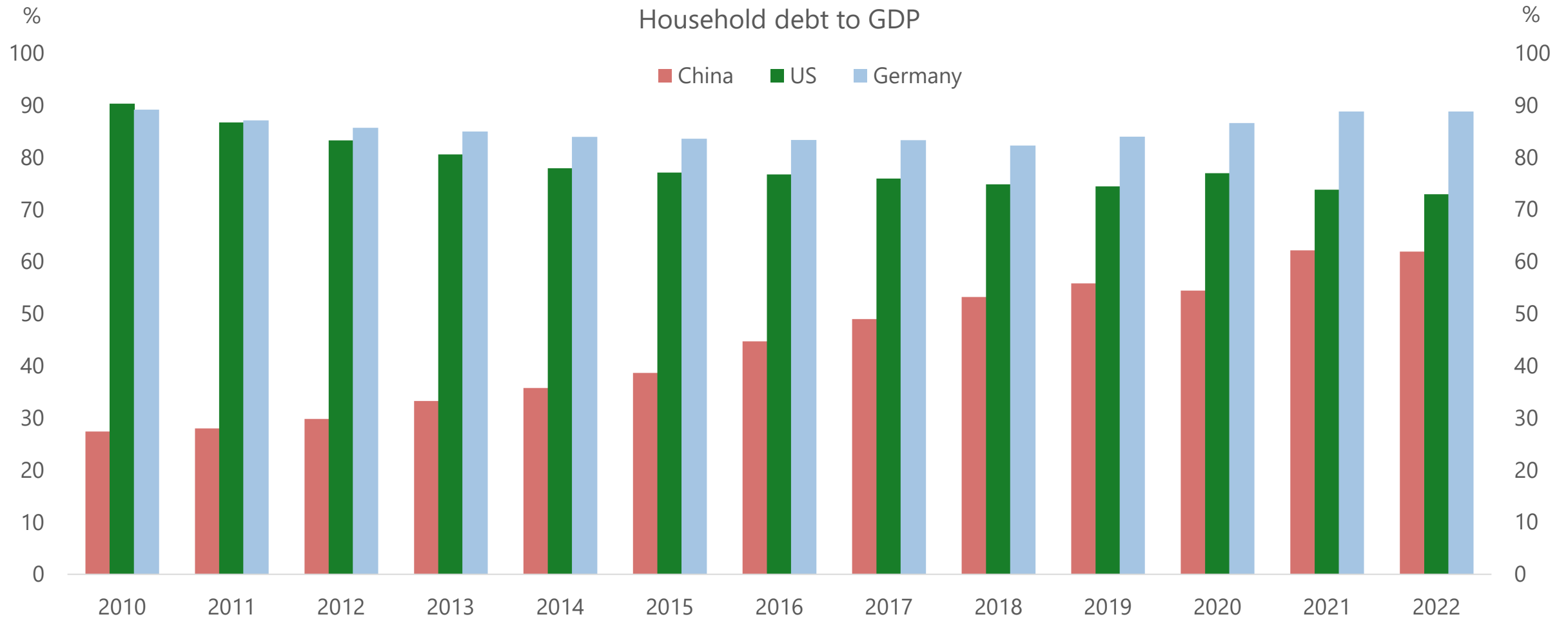


Rental yields at second hand residential buildings in major cities

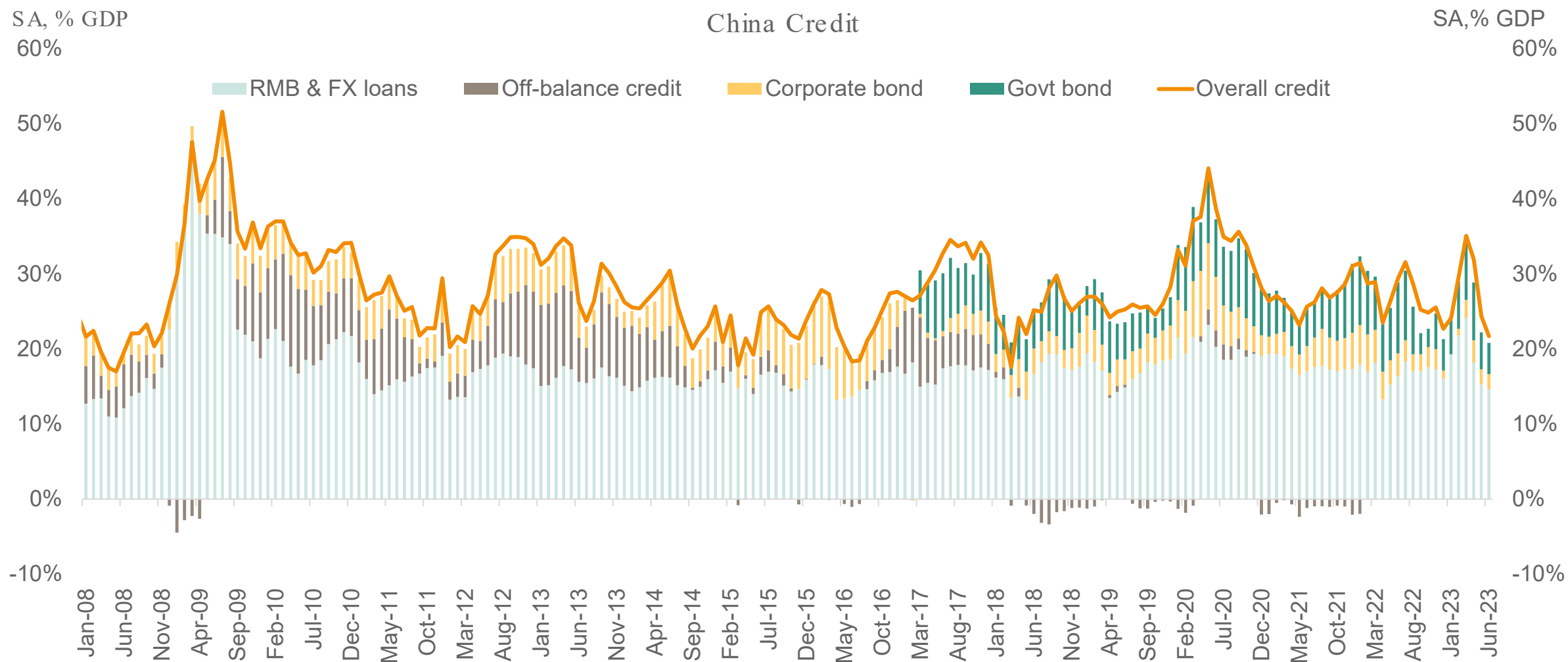


China: Debt and financing

Household debt to GDP has increased steadily in China

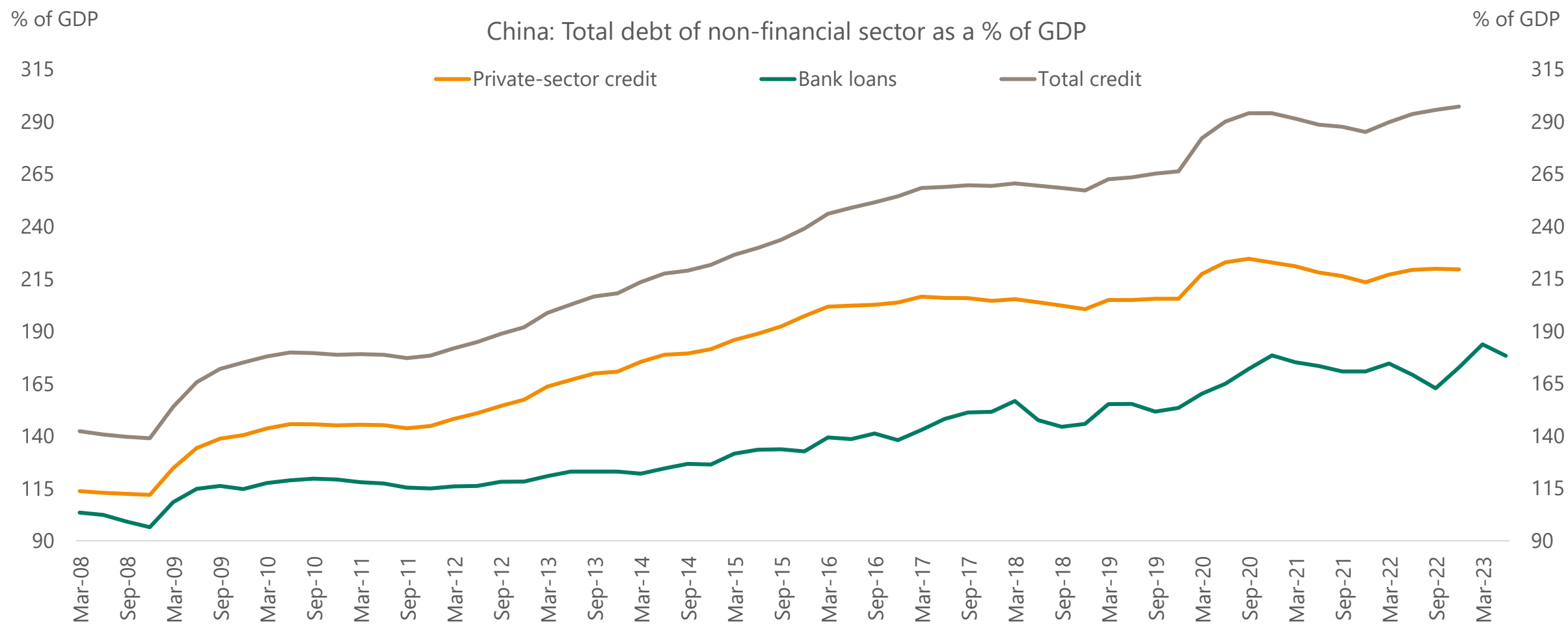


China credit growth

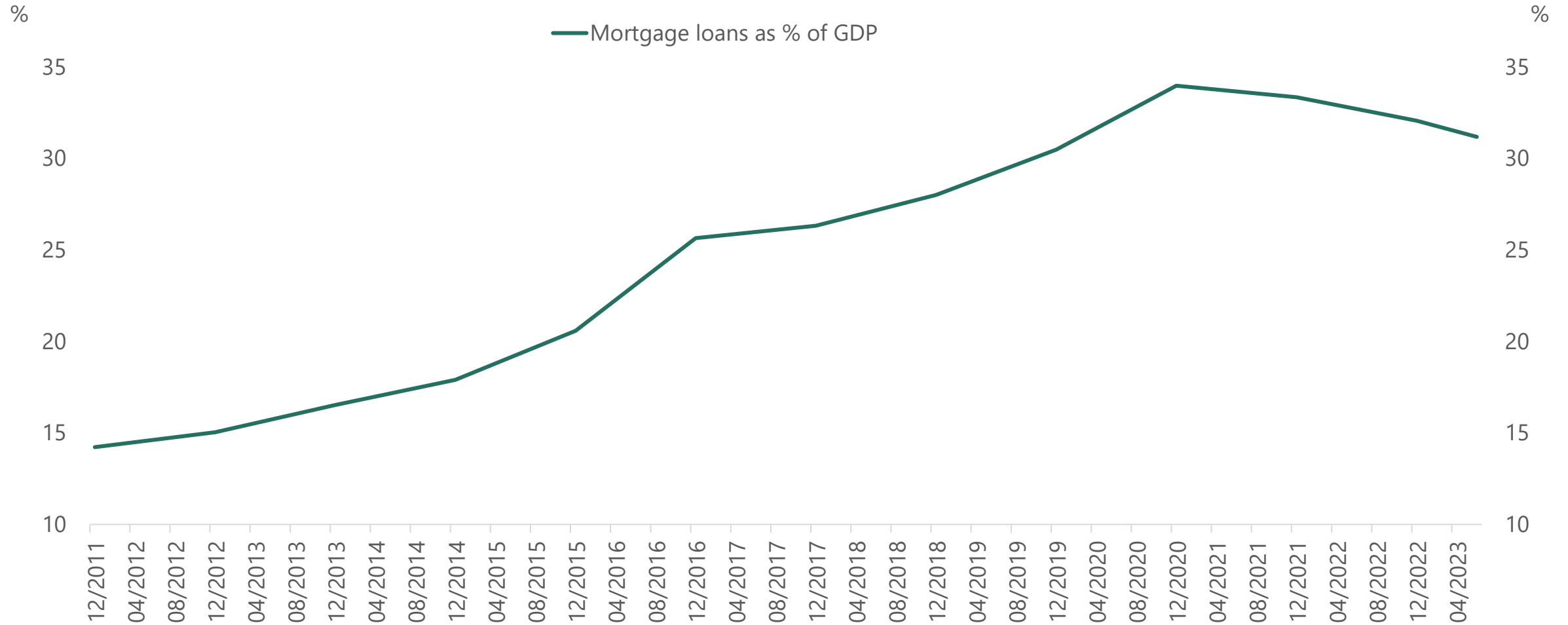


Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

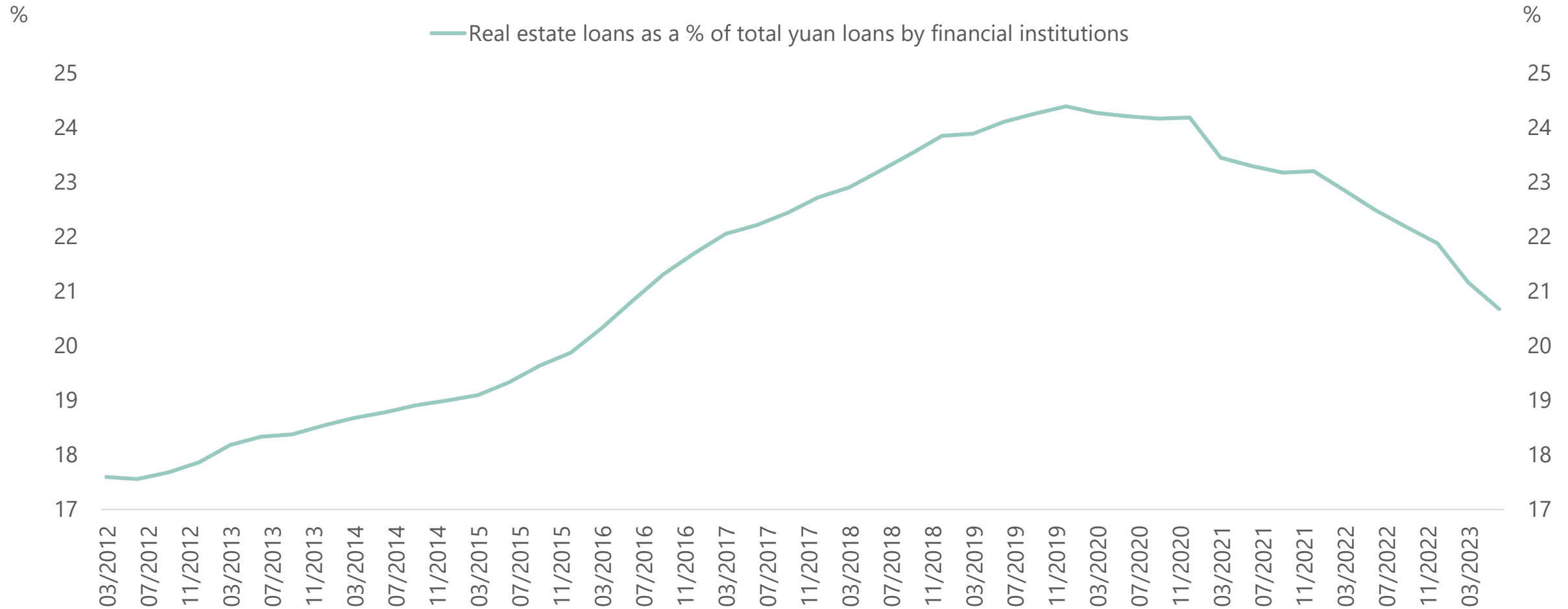
China: Debt levels have increased in the private sector



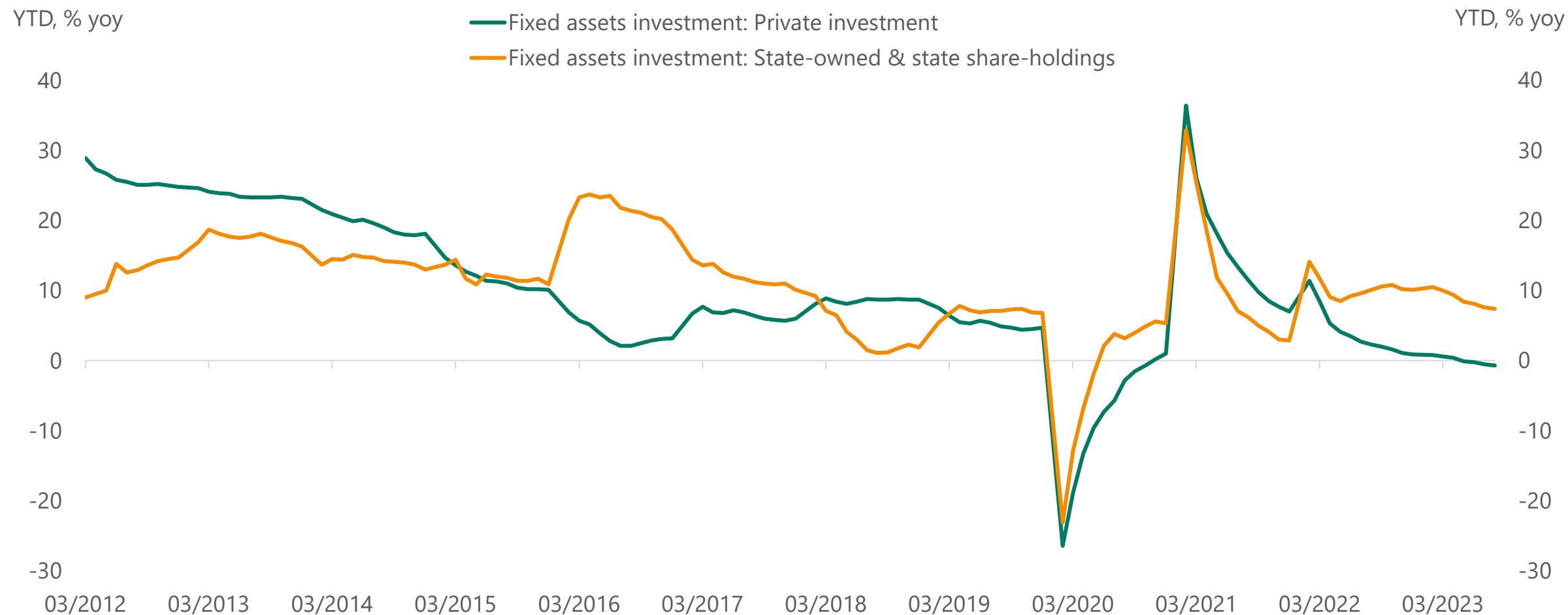
China's mortgage liabilities as a share of GDP



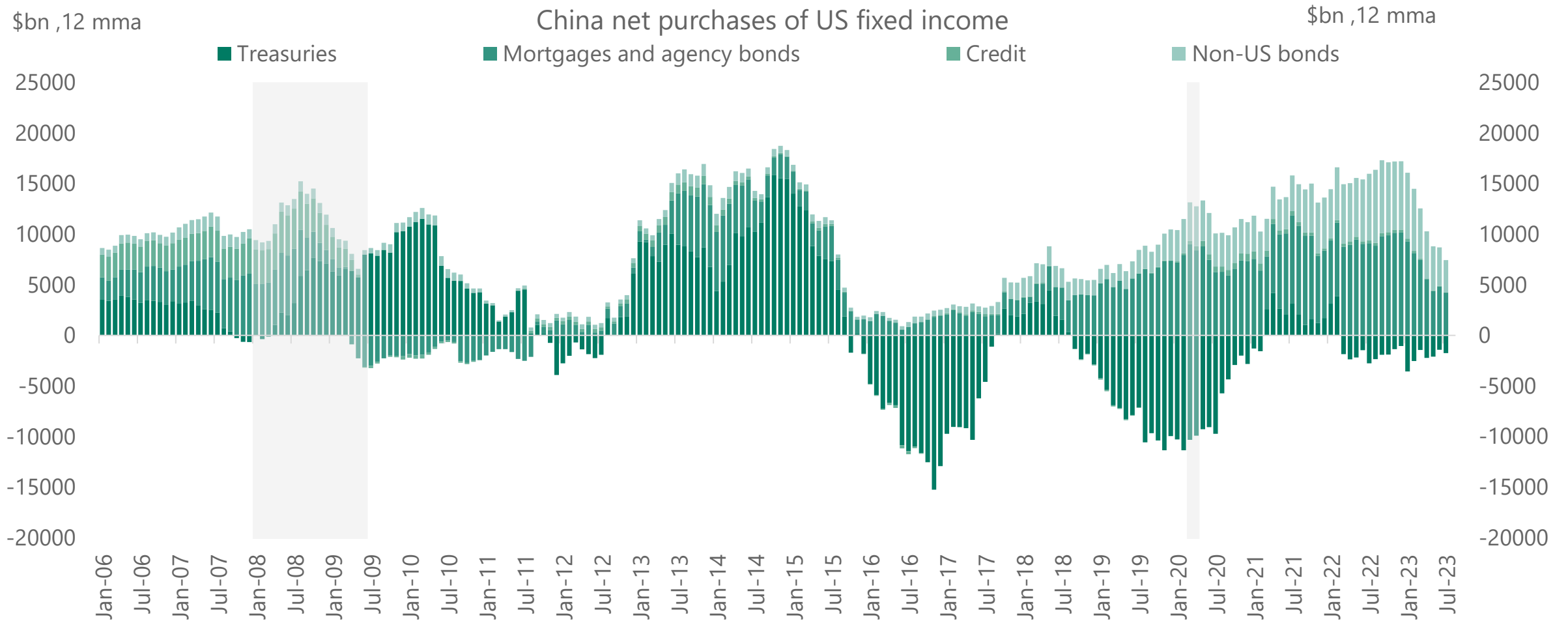
Real estate loans making up a smaller part of total lending



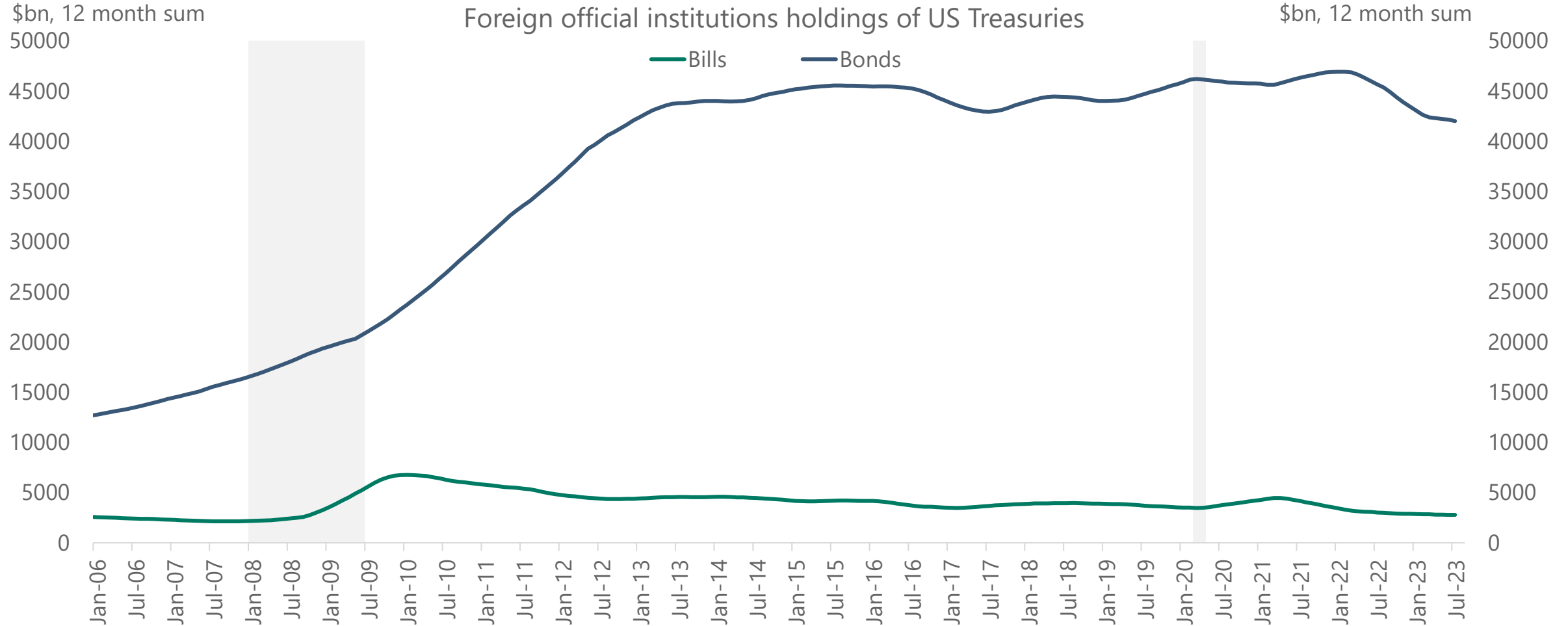
China: Private investment growth is declining



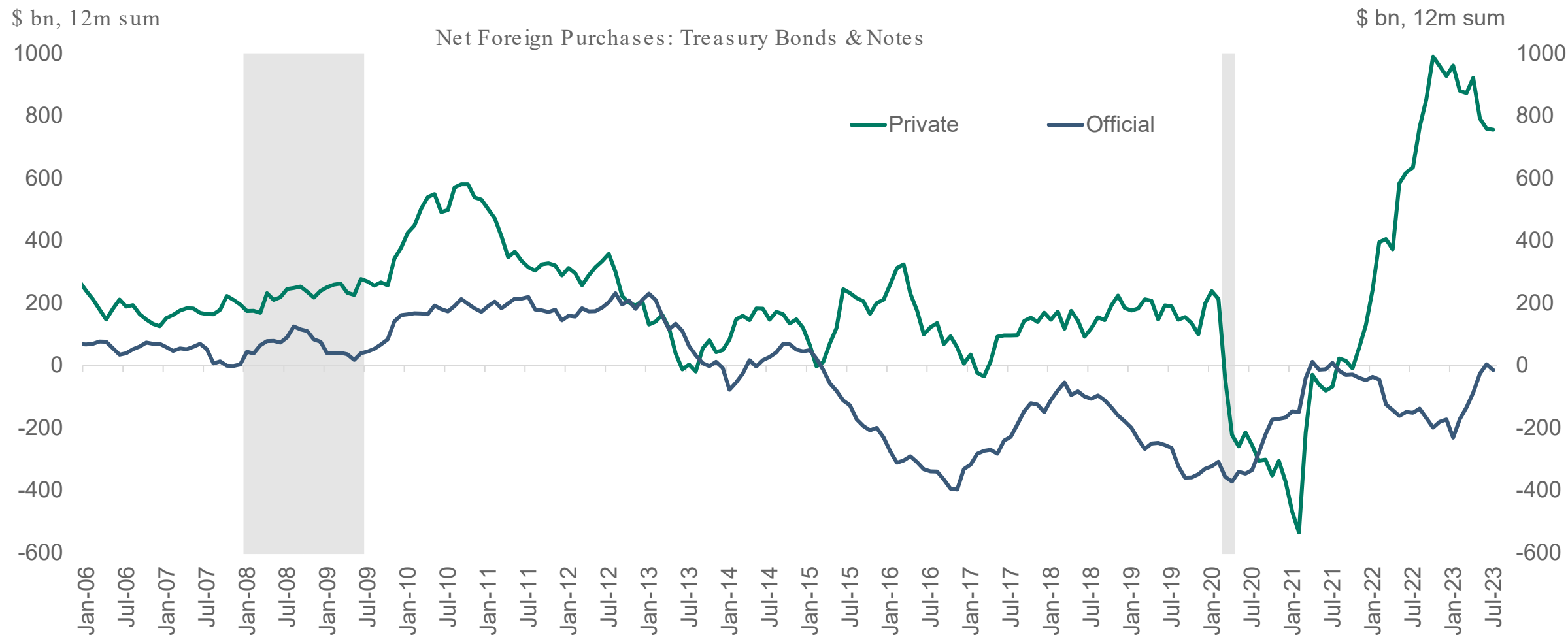
China net purchases of US fixed income



Foreign official holdings of US bonds is falling



Foreign purchases of Treasuries comes from the private sector



Chinese trade with the US

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

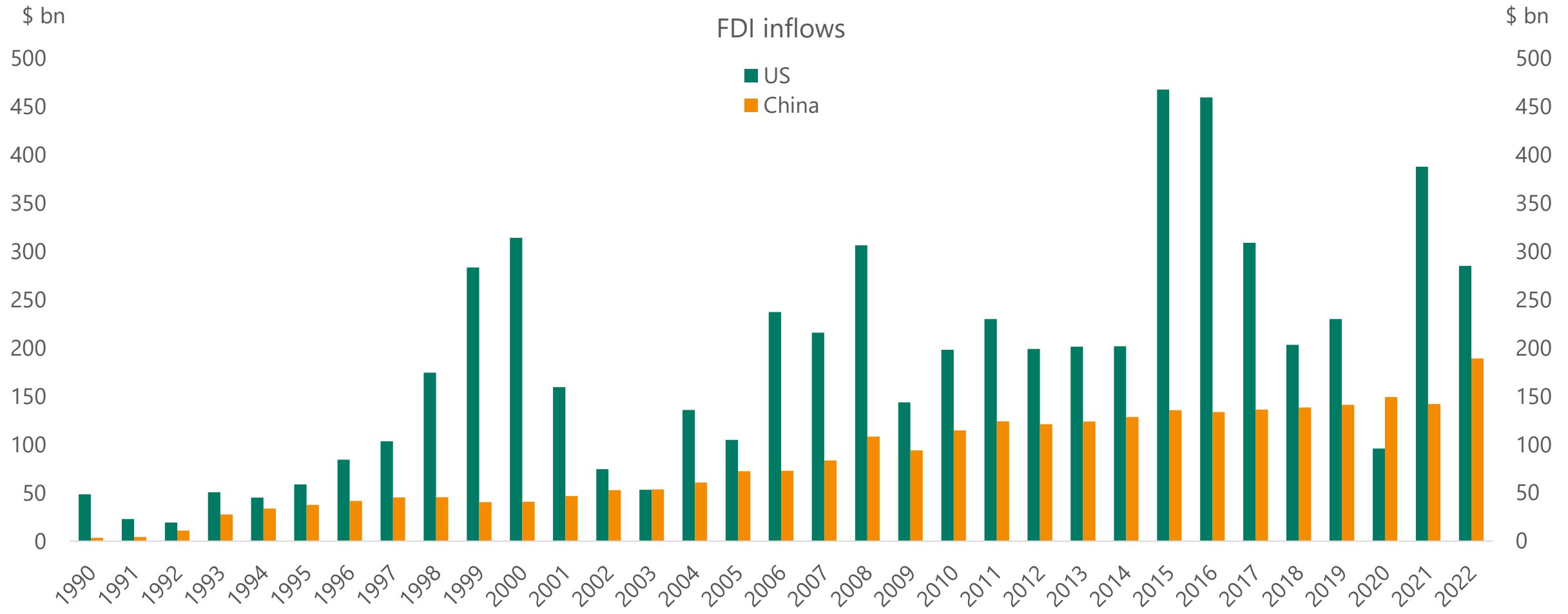


US-China trade deficit has been growing



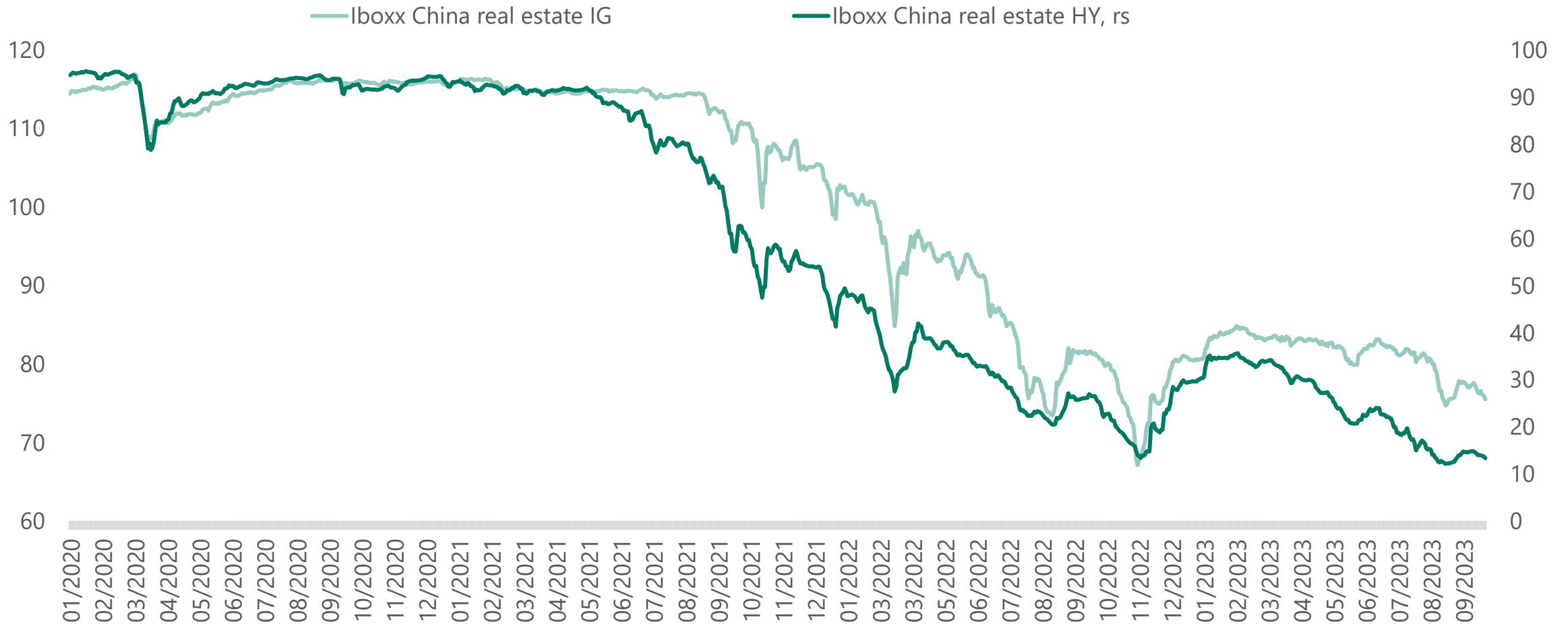
Source: Bloomberg, Apollo Chief Economist. Note: 2023 is annualized till July 2023.

China and US: Comparing foreign direct investment

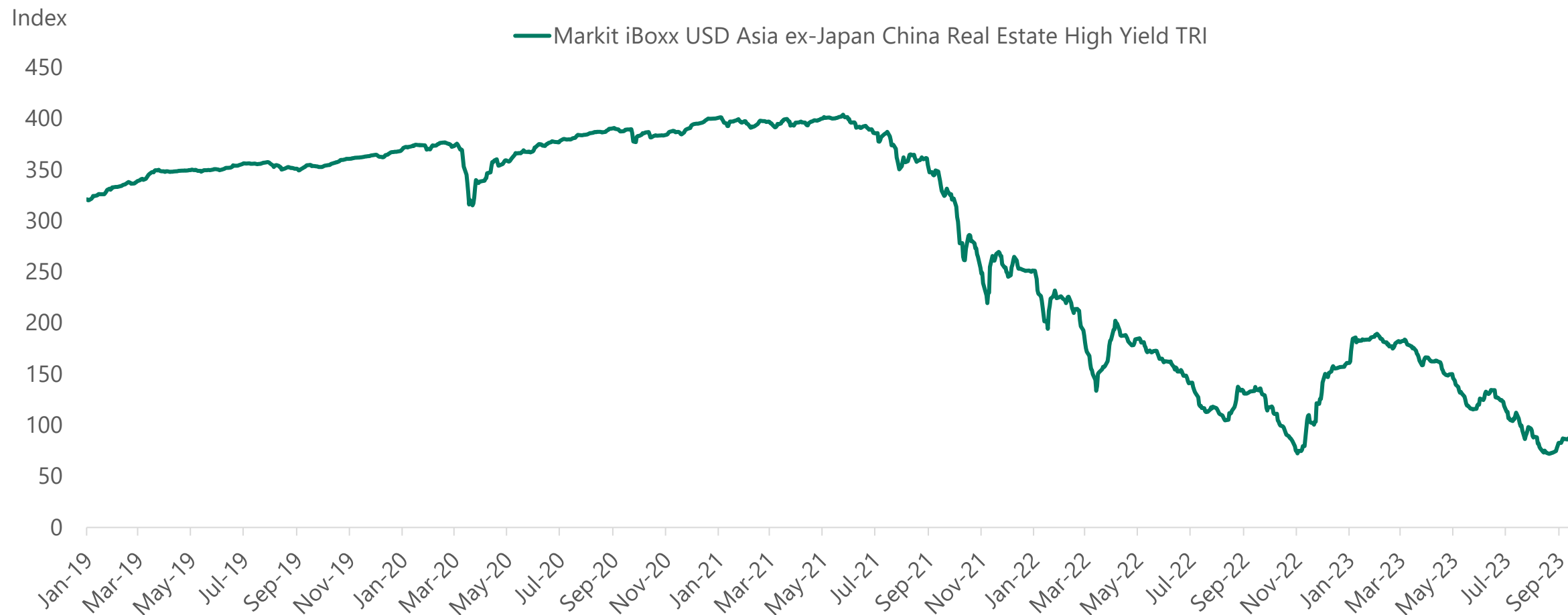


China IG and HY

China IG and HY credit: Developers have been hit hard

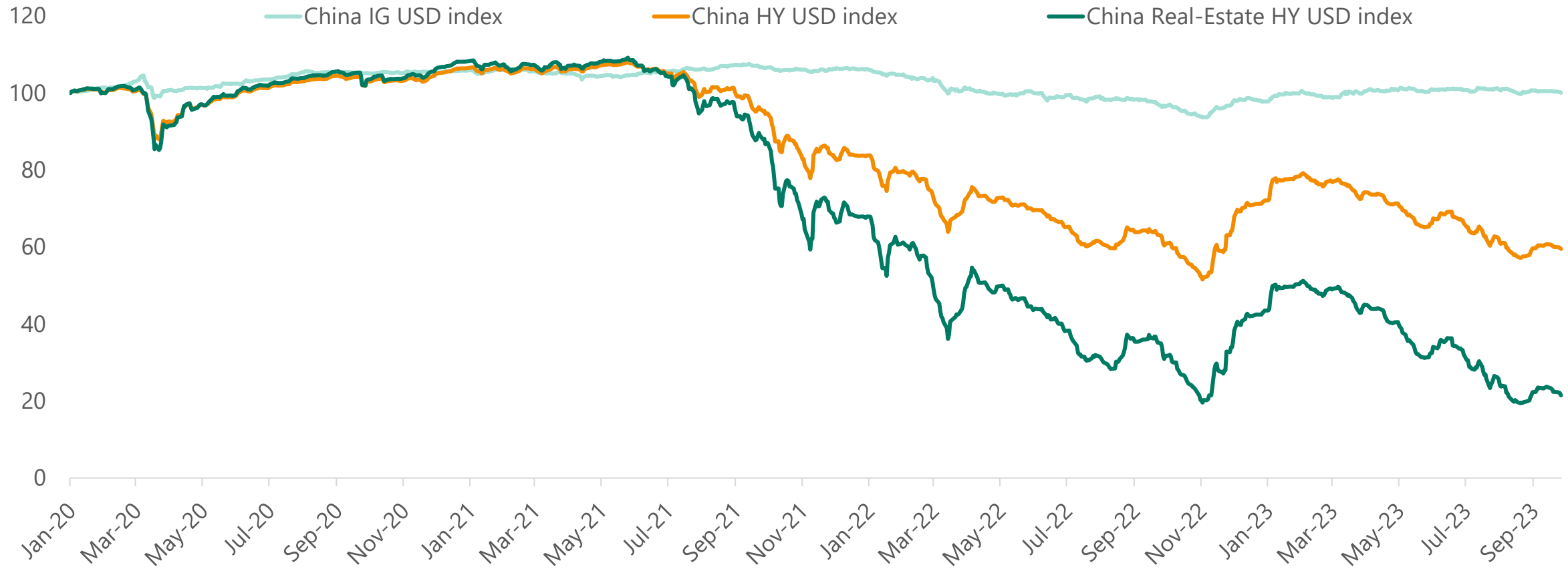


China's real estate sector under pressure

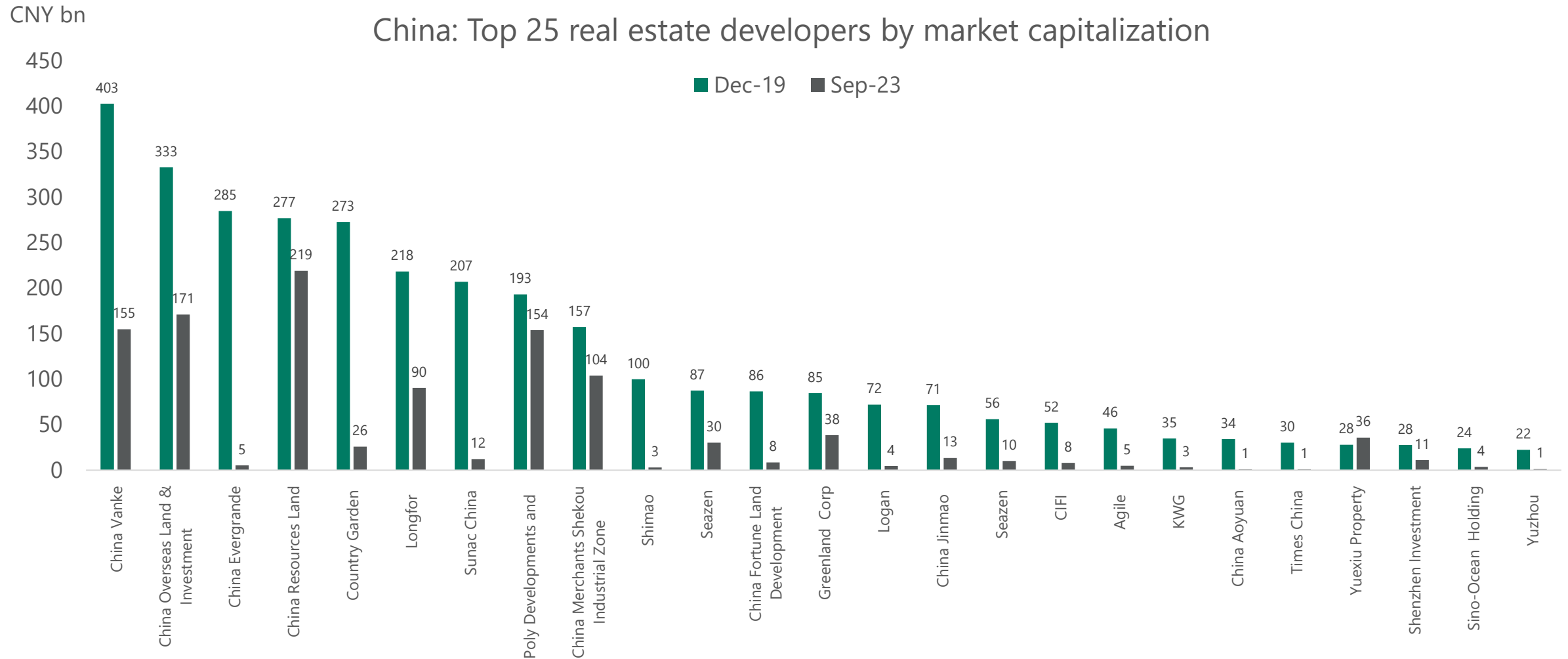


China: Within high yield, the real estate sector remains under pressure

Index, Jan 2020 = 100

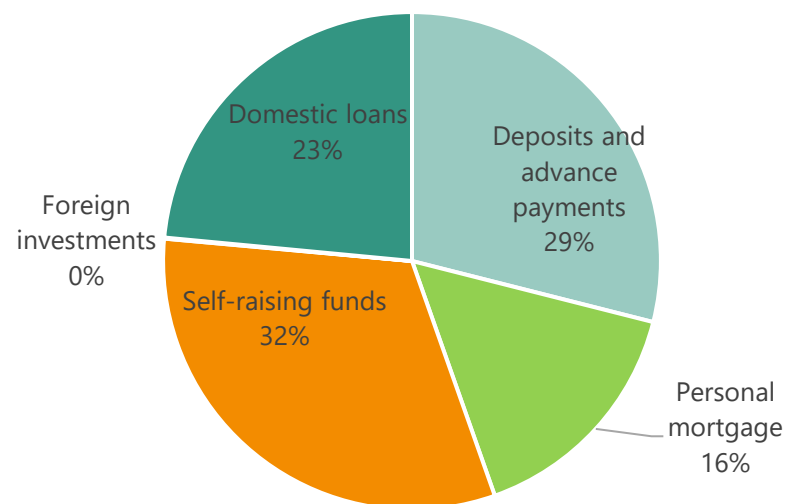


China: Market capitalization of real estate developers has declined significantly

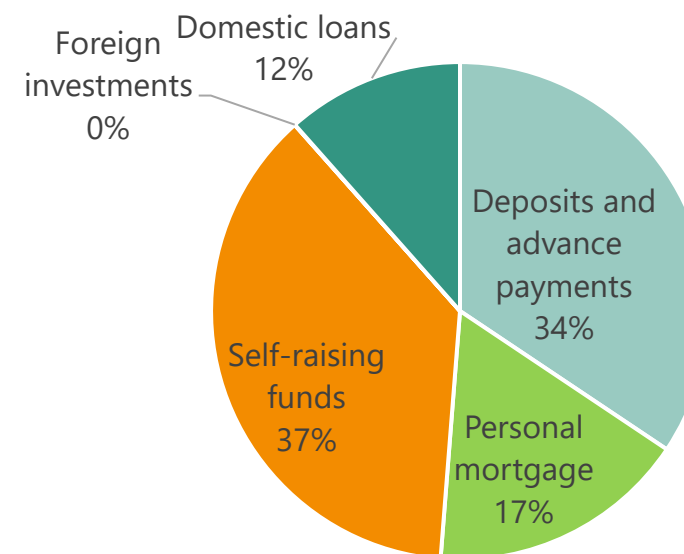


China: Sources of funds for real estate developers

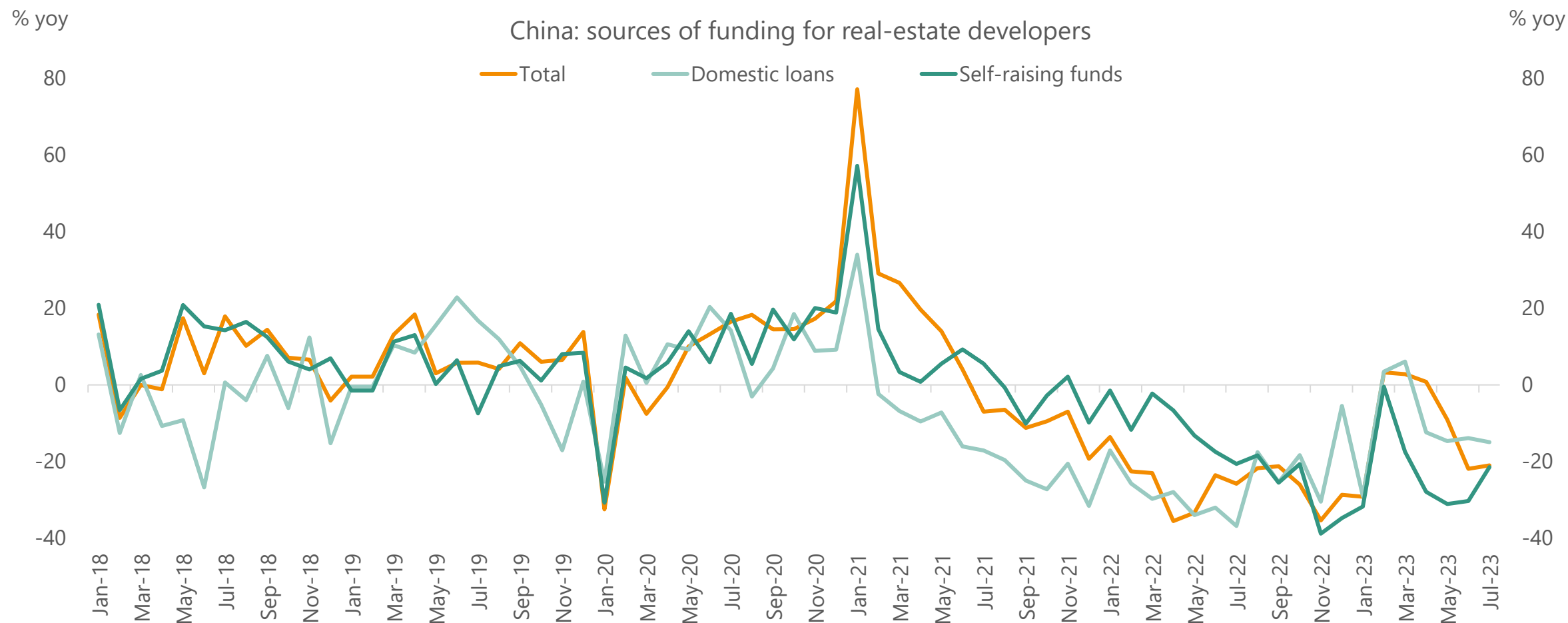
January 2020



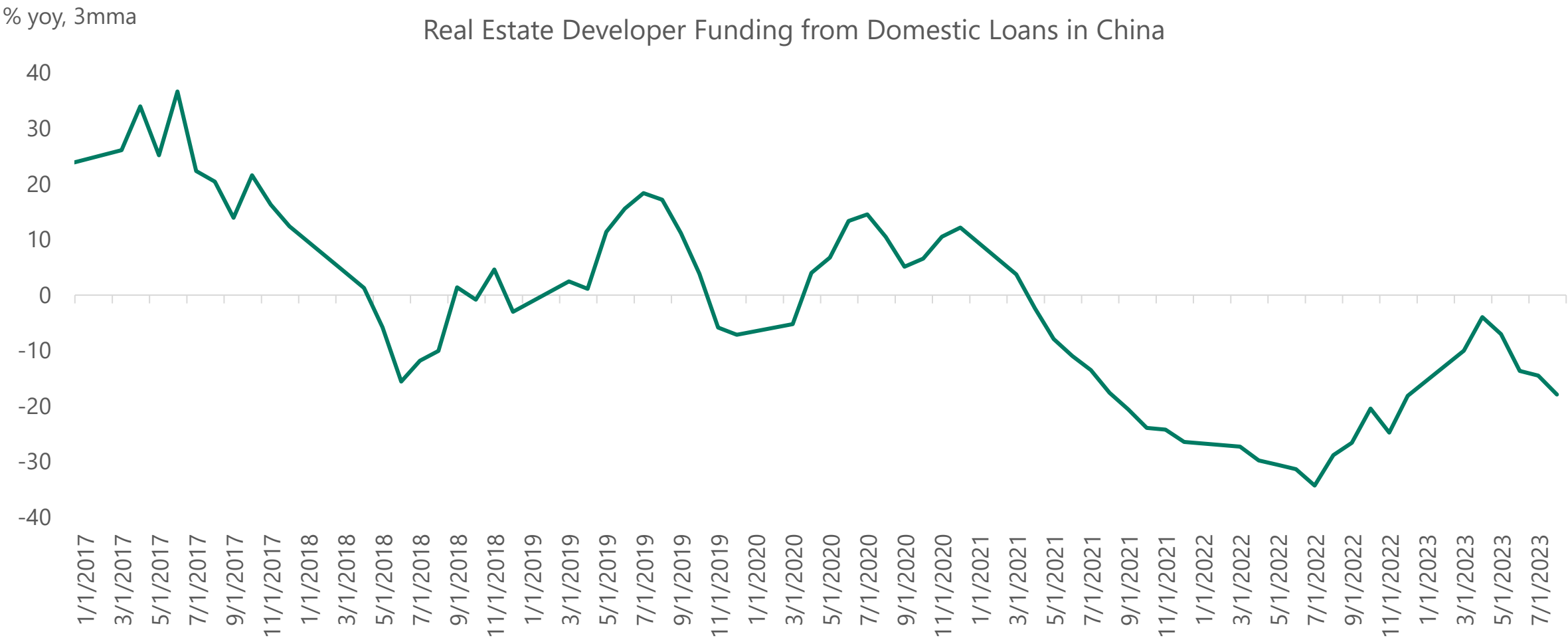
July 2023



China: Sources of funds for real estate developers

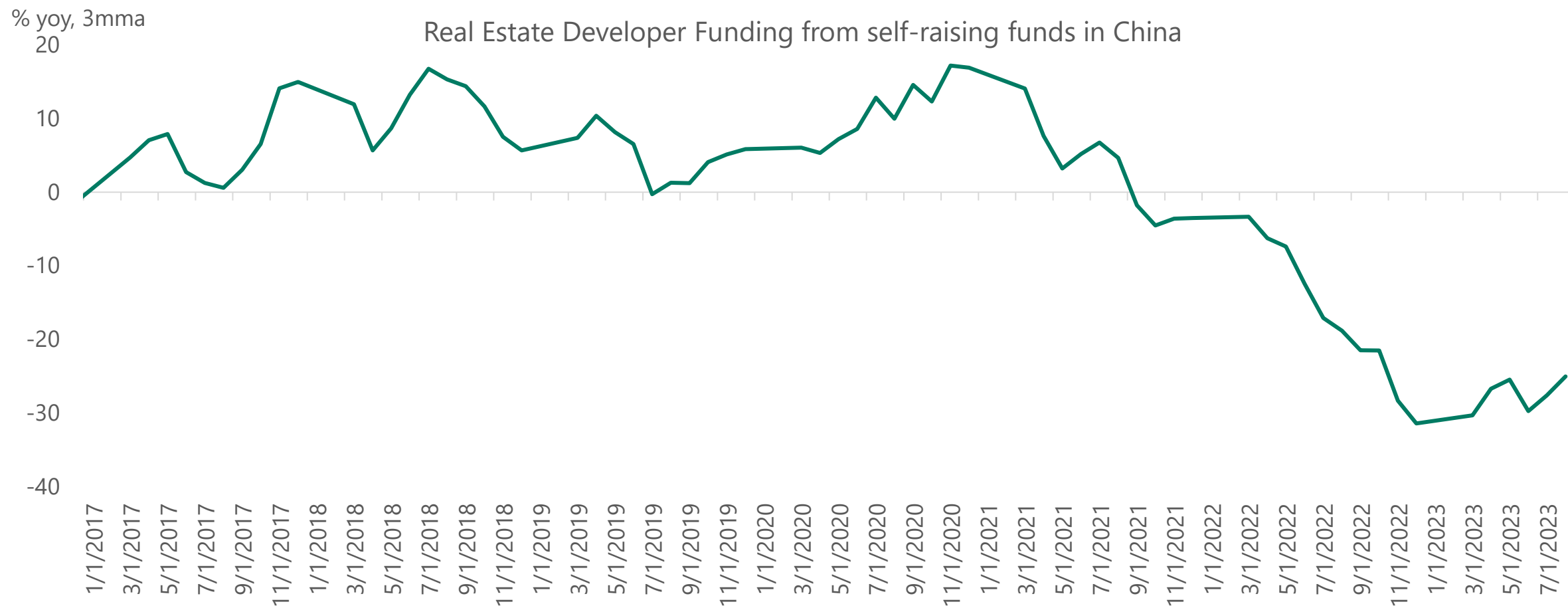


China: Domestic funding conditions have deteriorated



Source: Bloomberg, Apollo Chief Economist.

China: Self-financing for real estate developers

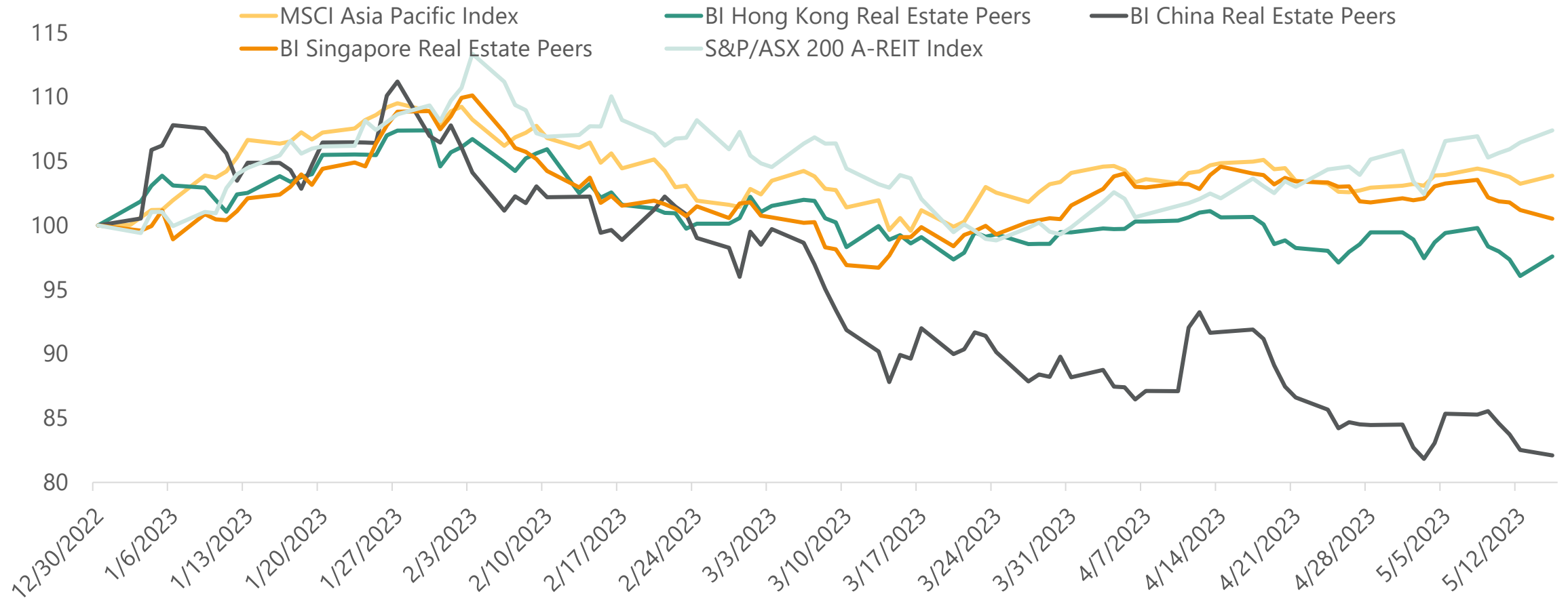


China: Stock prices of real estate developers declining

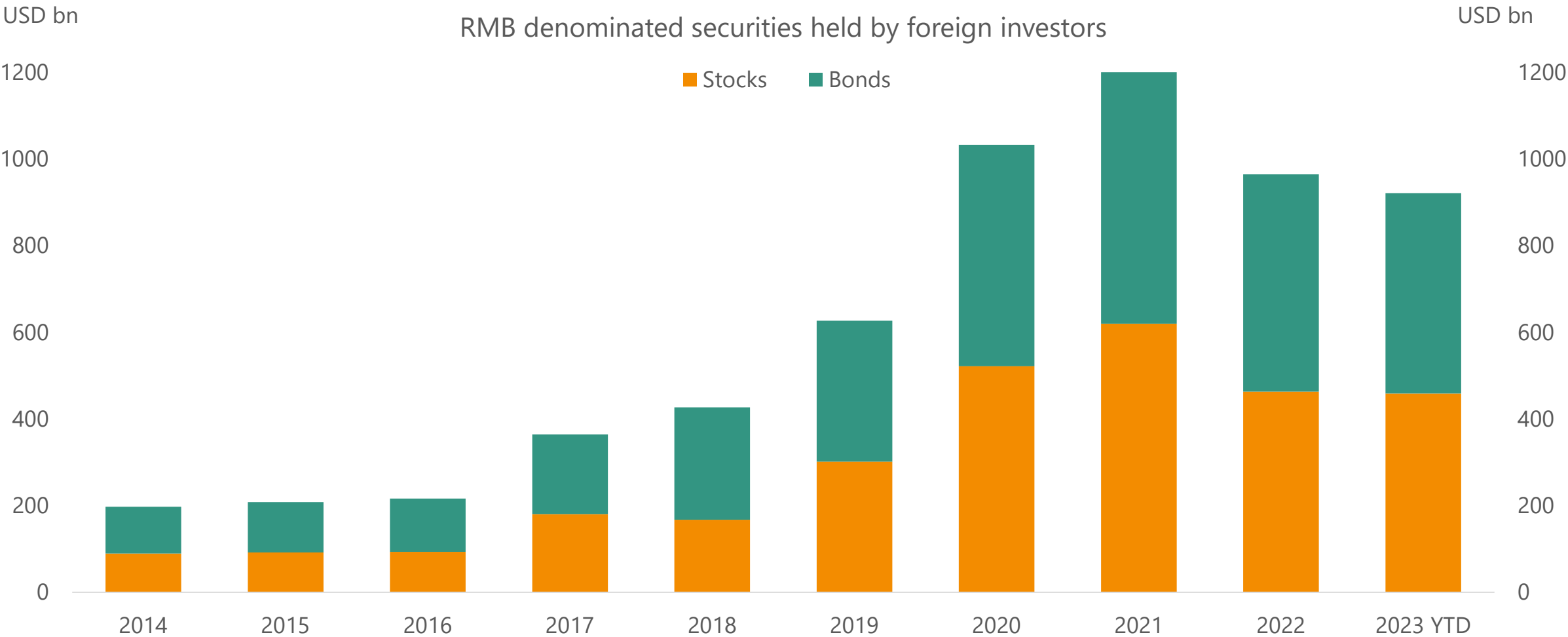


China real estate sector performance compared to other Asian countries

Normalized as of 30 Dec 2022
= 100



Global holdings of Chinese stocks and bonds



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

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





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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.