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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 September 2023.

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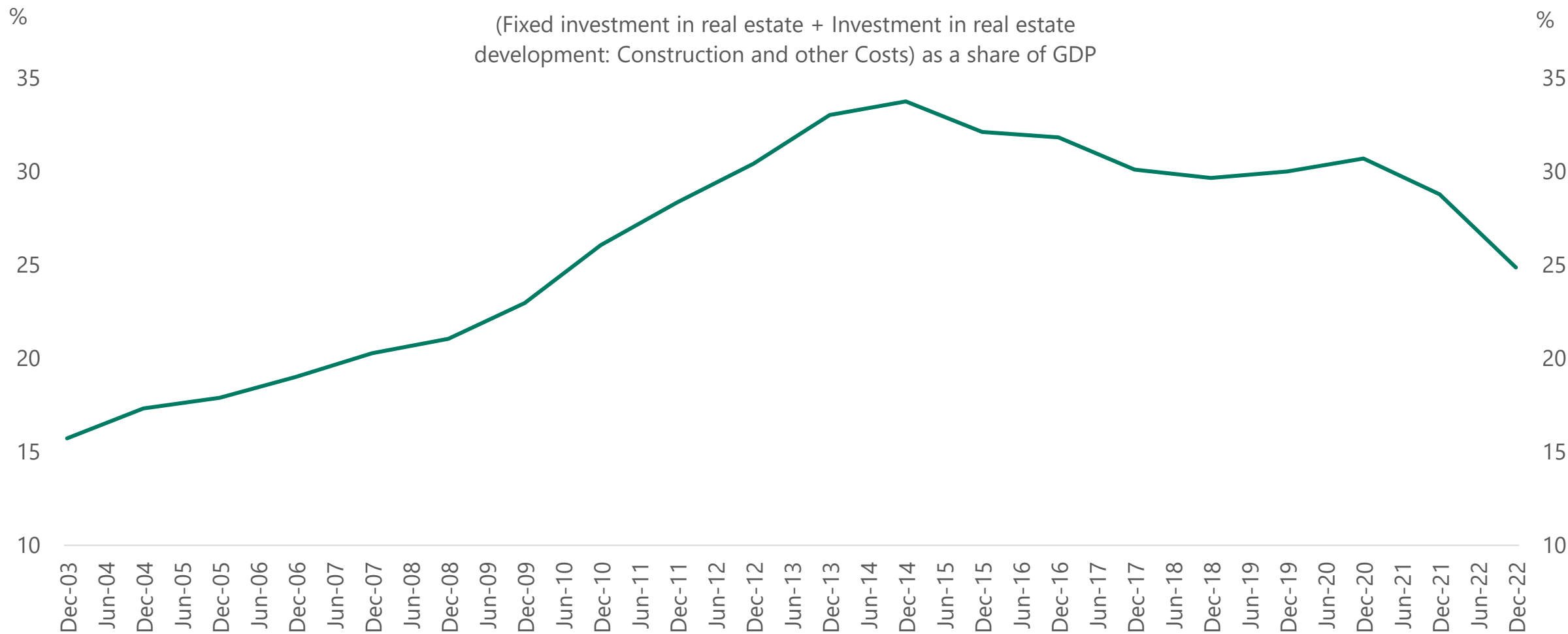


China: Overview

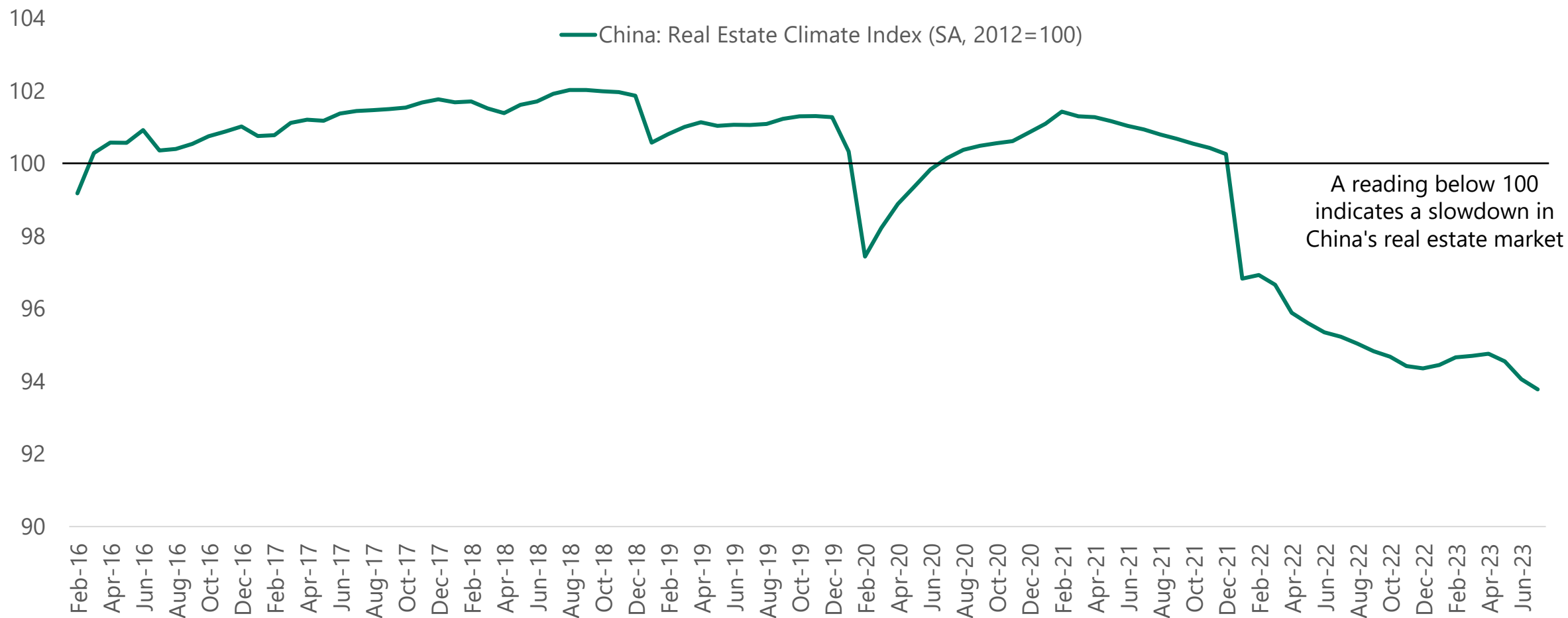
China: Exports are slowing



China: Housing makes up 25% of GDP



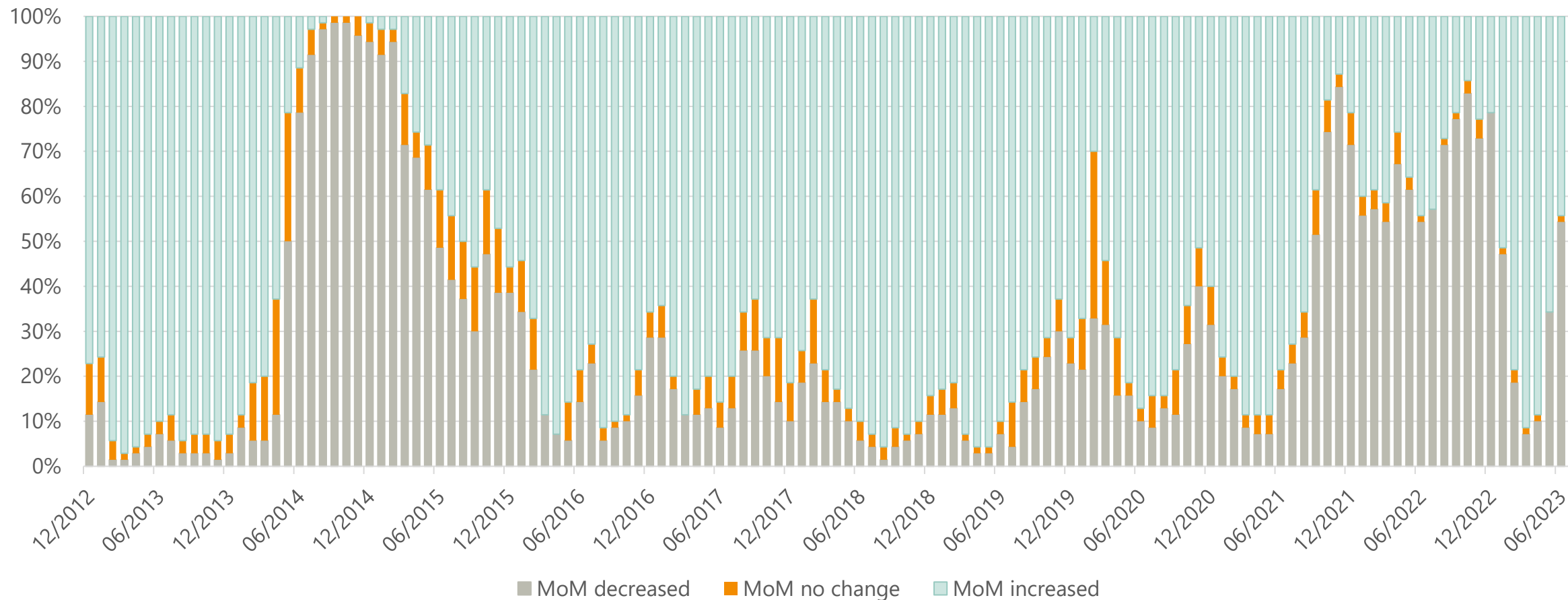
China real estate climate index in recession territory



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.

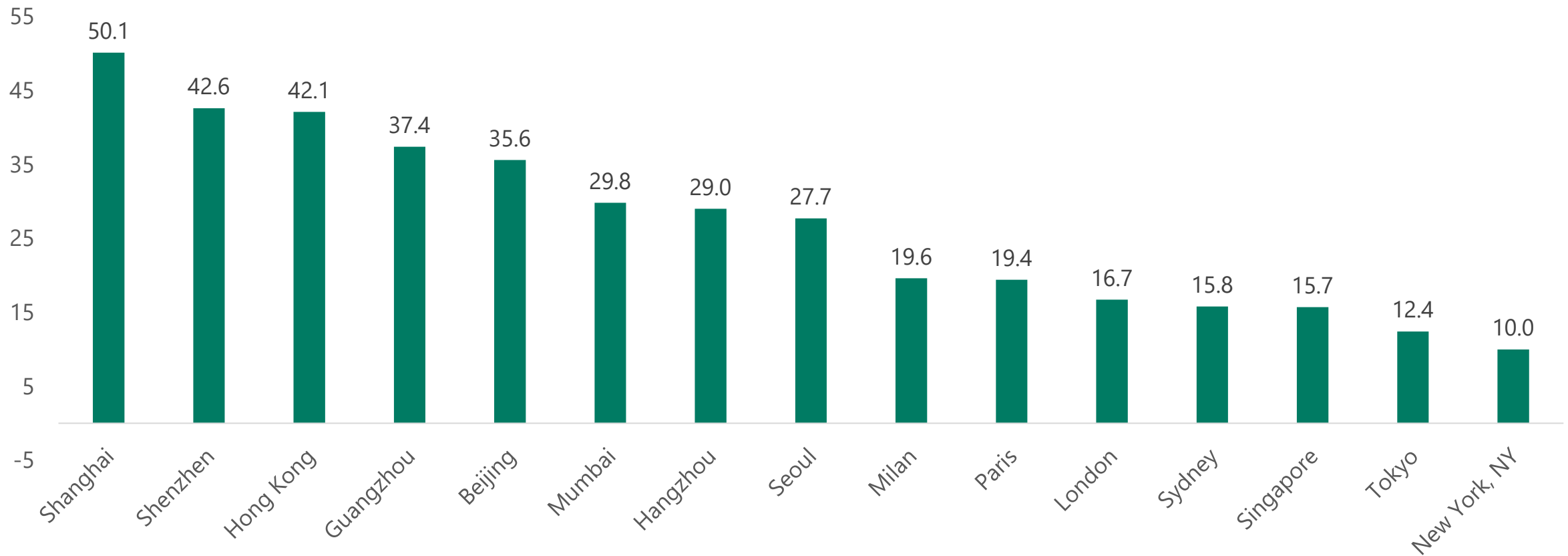
Housing market cooling down in China

Price changes in 70 major cities (new residential properties)



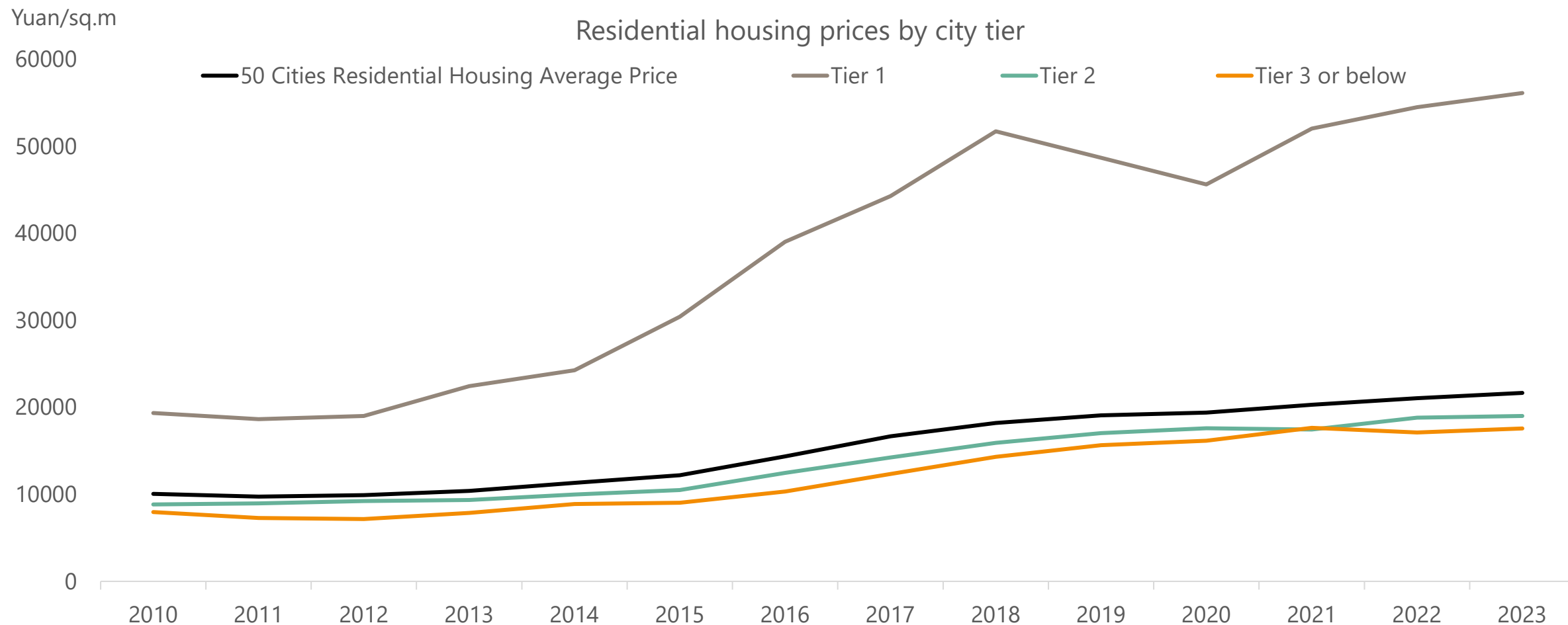
Home price-to-income ratio five times higher in Shanghai than in New York

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



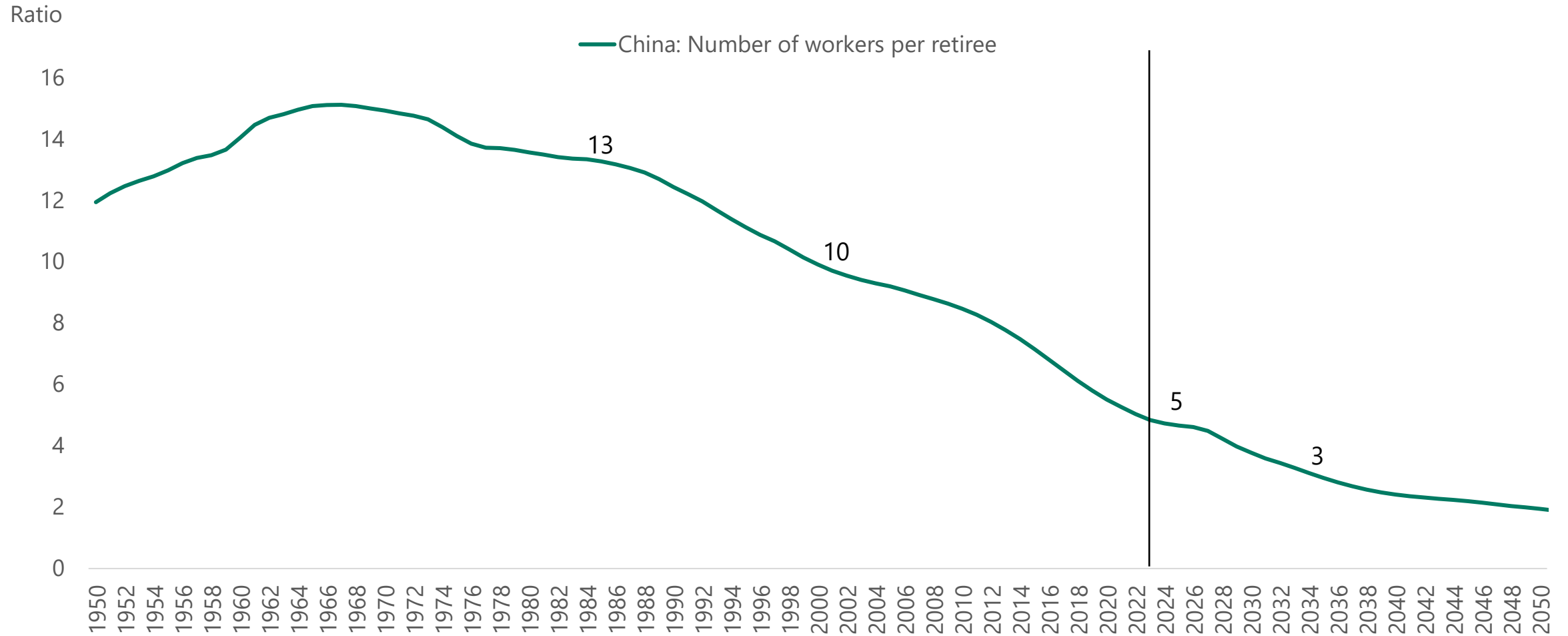
Source: Numbeo, Apollo Chief Economist (<https://www.numbeo.com/property-investment/rankings.jsp?title=2021-mid>) Note: *Price to Income Ratio* is the basic measure for apartment purchase affordability. It is generally calculated as the ratio of median apartment prices to median family disposable income,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

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

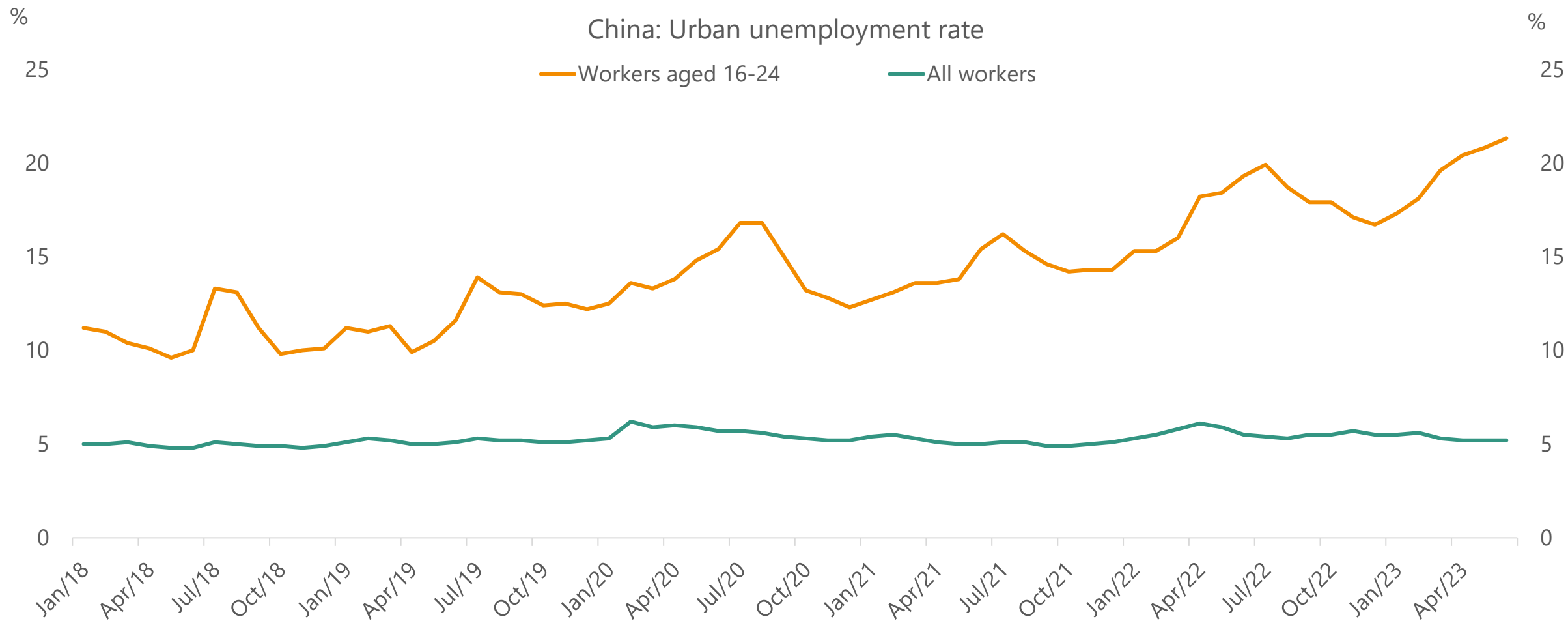


Source: Bloomberg, Apollo Chief Economist (Note: 2023 is till June)

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



High and rising youth unemployment in China

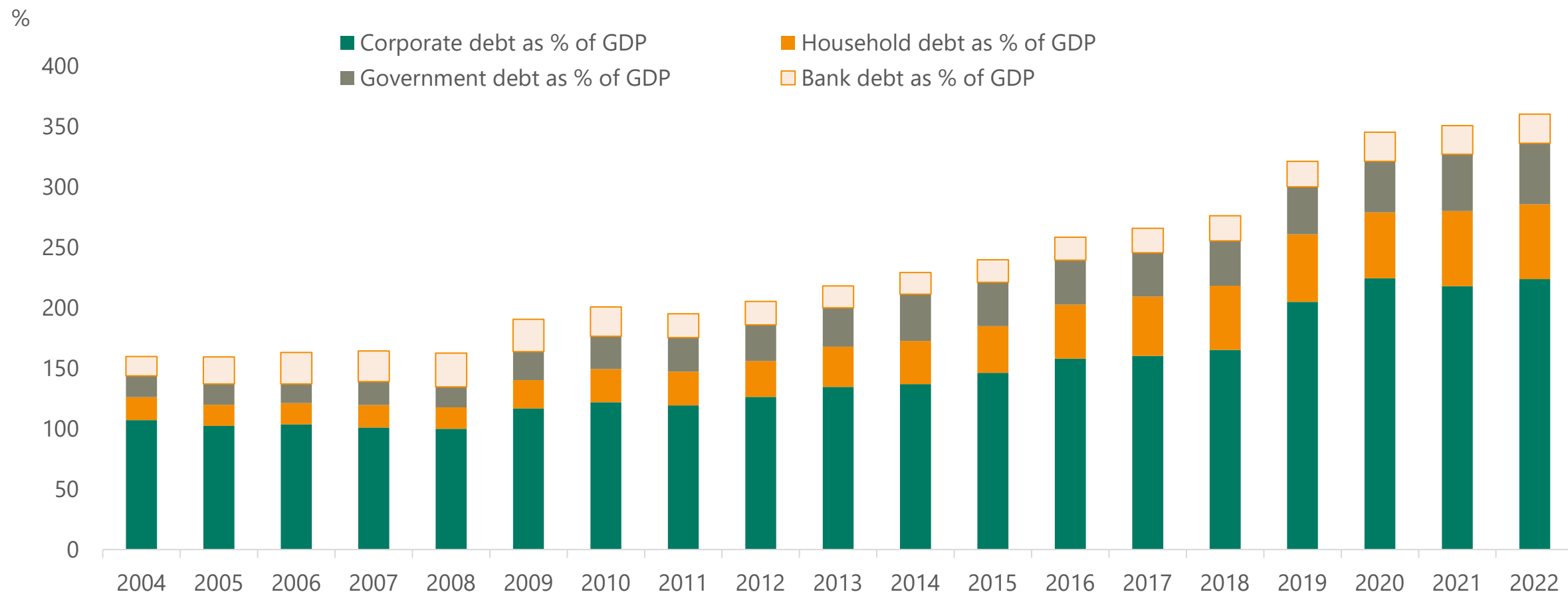


China: Consumer confidence is down

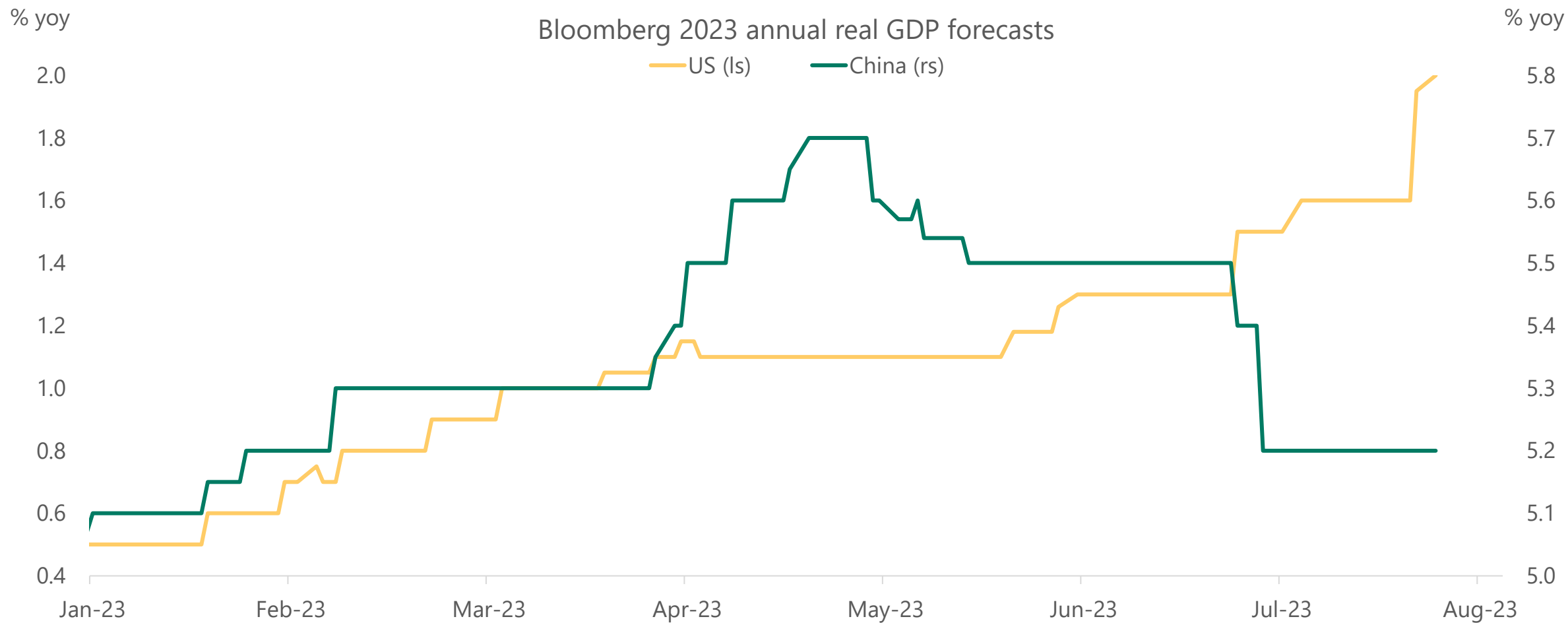


Source: NBS, Haver, Apollo Chief Economist

China: High debt levels

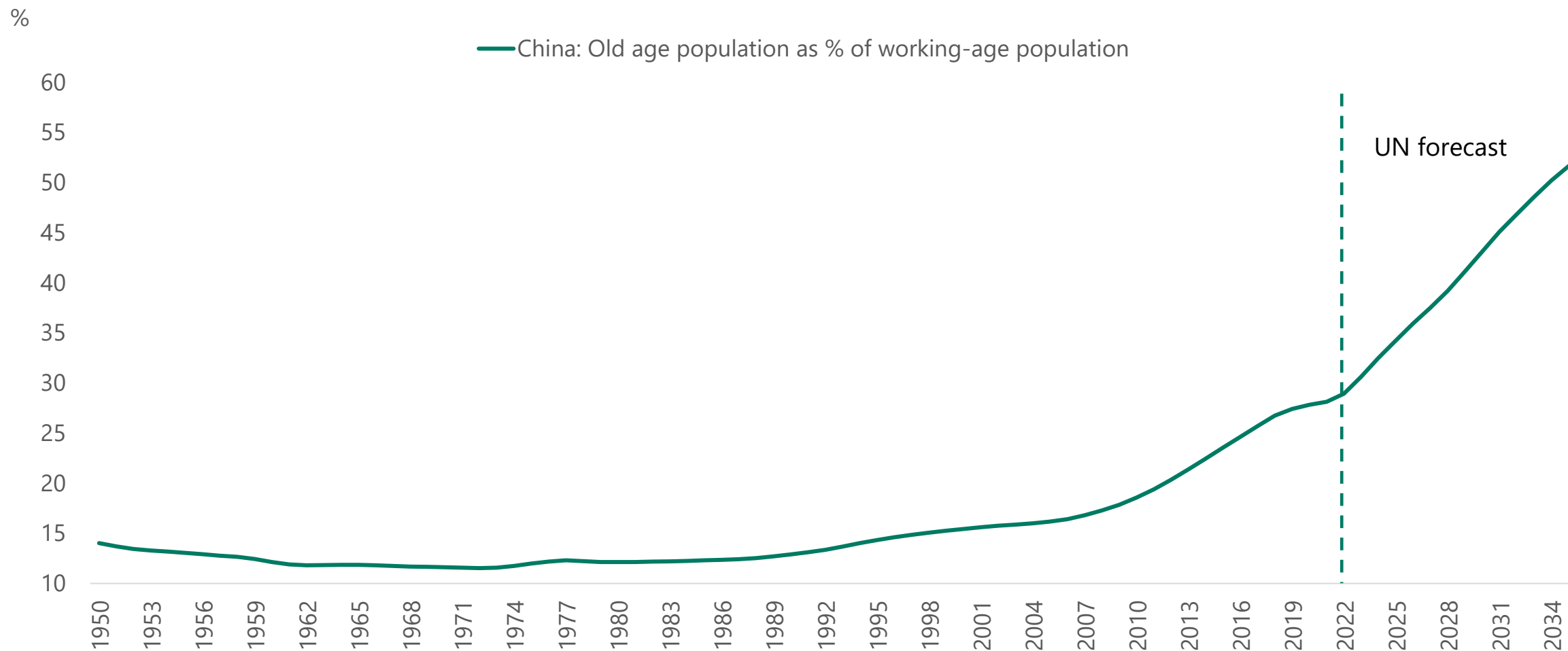


Near term growth outlook for China is deteriorating

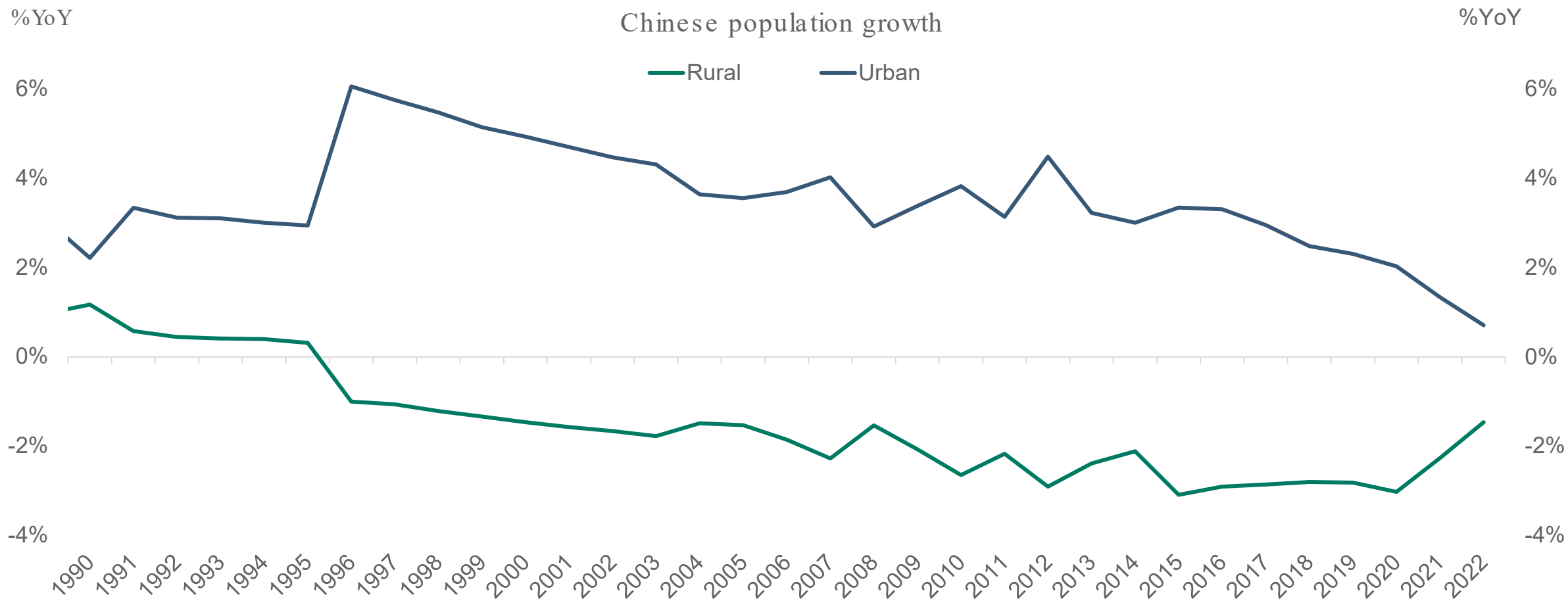


China: Demographics

China: Dependency ratio approaching 50% over the coming decade

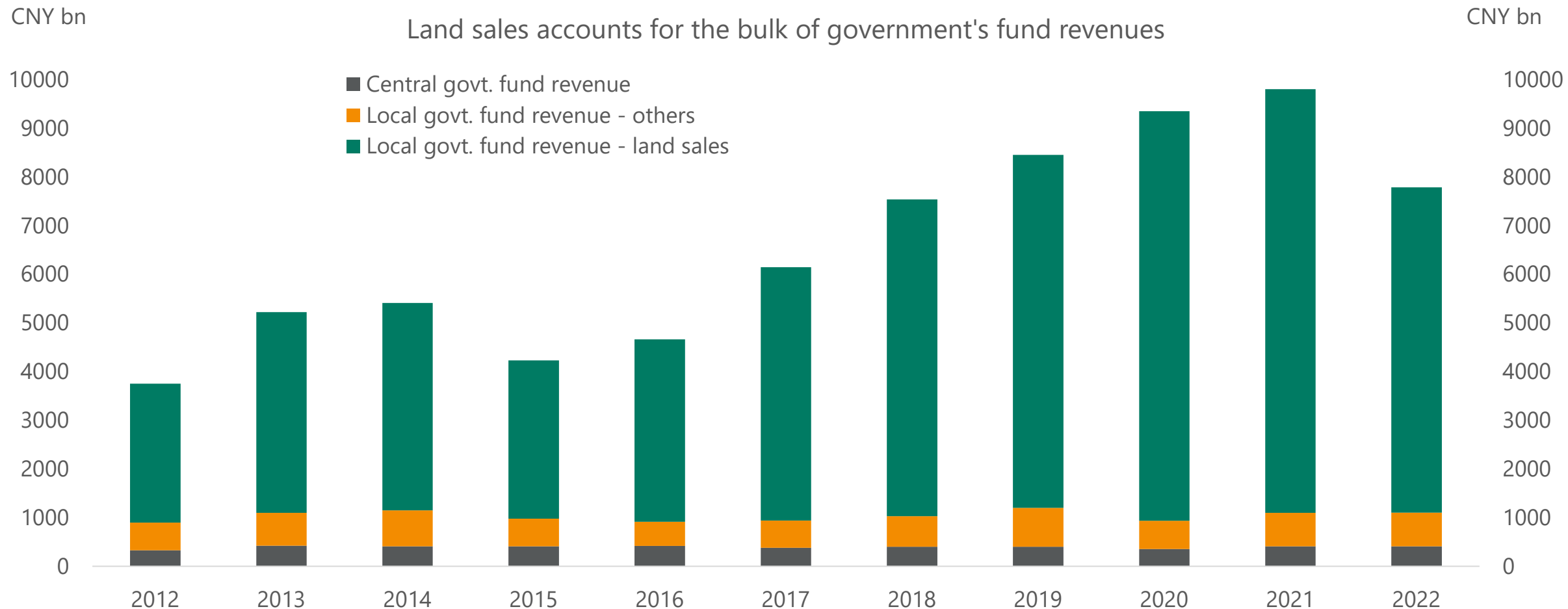


Population growth declining



Real estate playing a key role in the Chinese economy

Land sales are crucial source of local government revenue

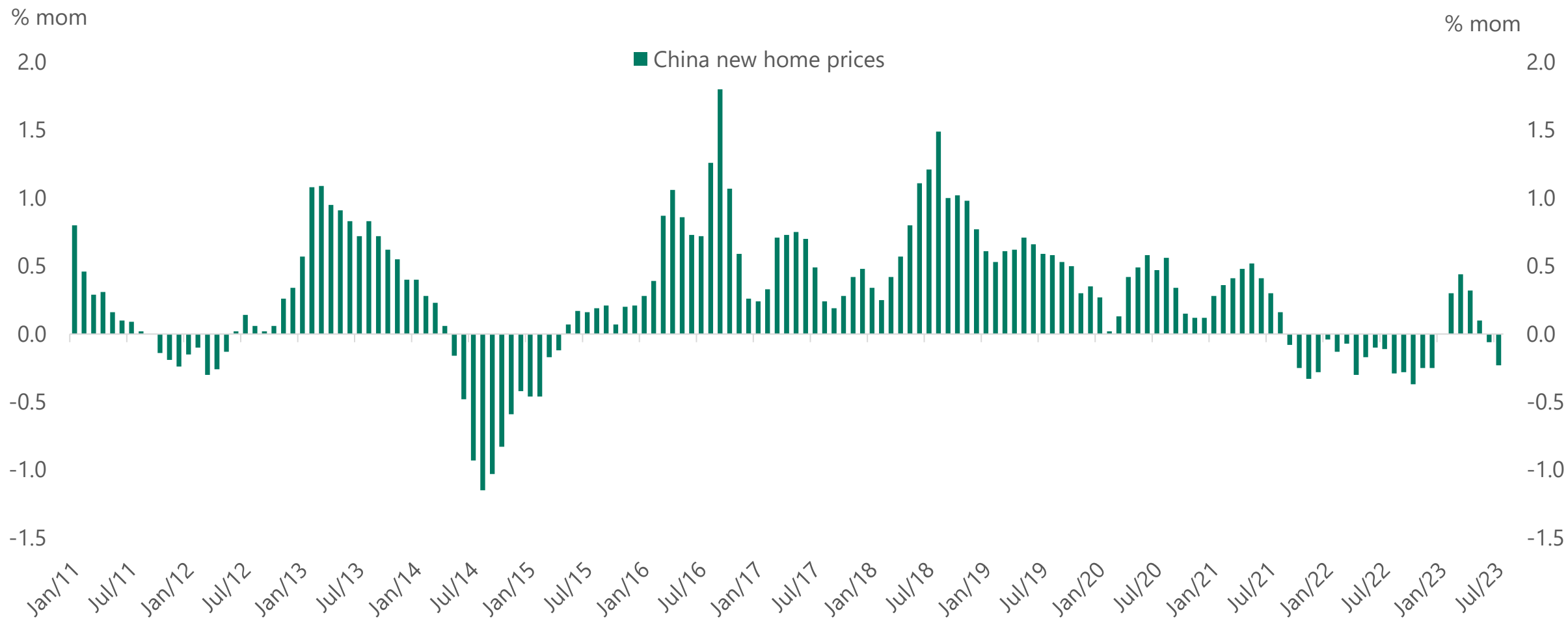


Source: Ministry of Finance of the People's Republic of China, Bloomberg, Apollo Chief Economist

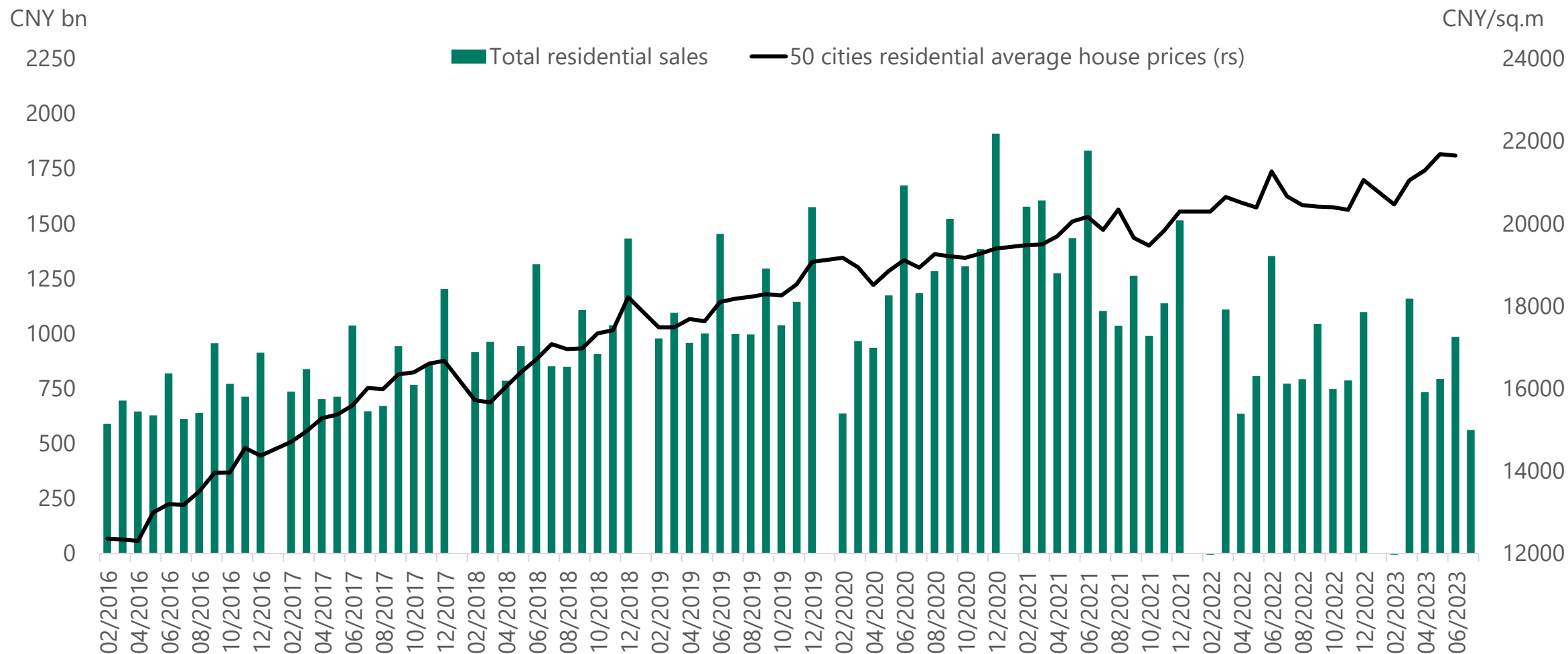
Sales slowing of homes in Tier 1 and Tier 2 cities



Housing market starting to cool down in China



Housing market starting to cool down in China

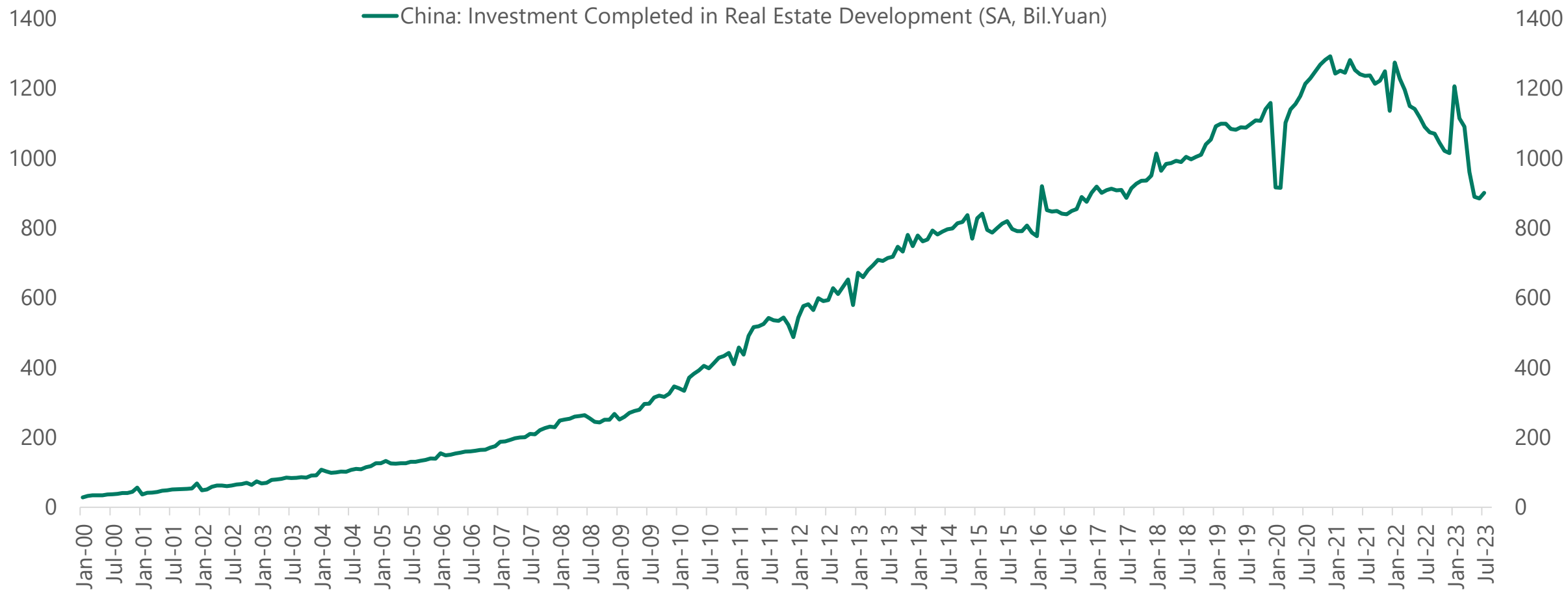


Source: CRIC, Bloomberg, Apollo Chief Economist

Beijing home price inflation slowing down

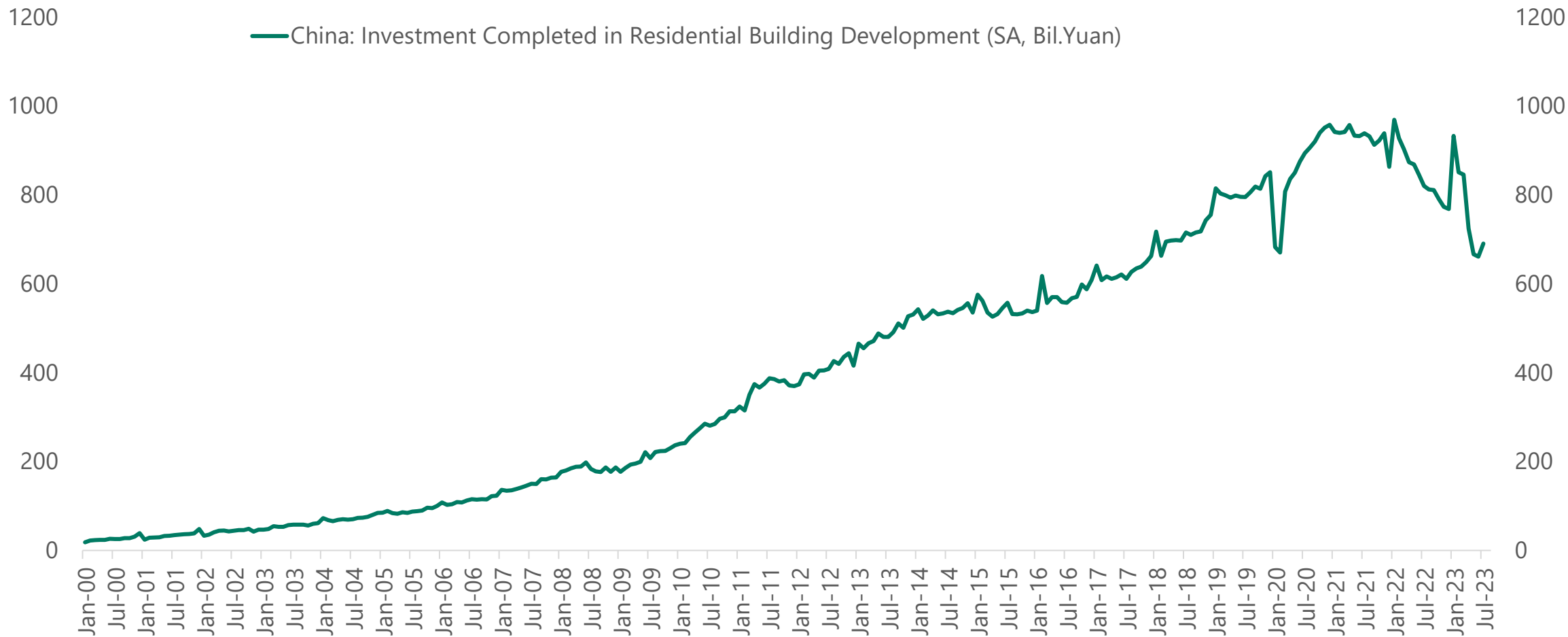


China: Real estate investment slowing

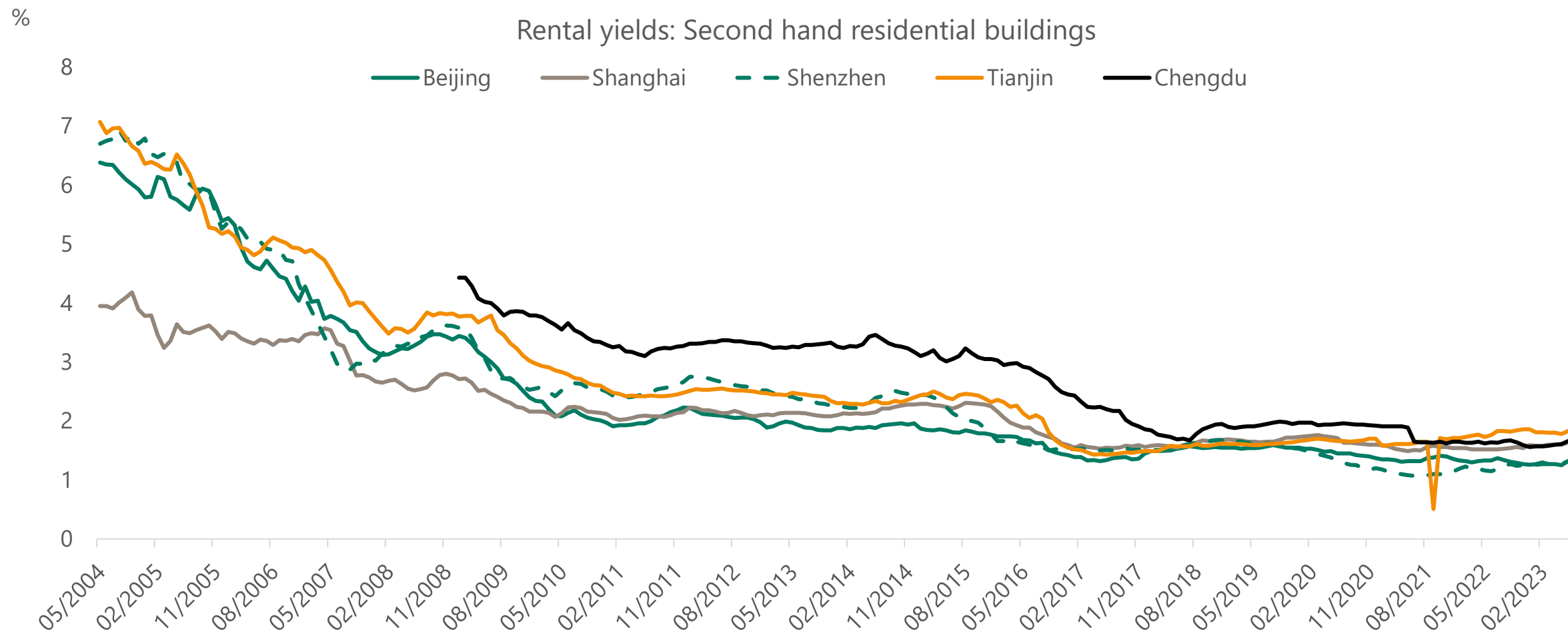


Source: Haver, Apollo Chief Economist

Residential real estate investment slowing

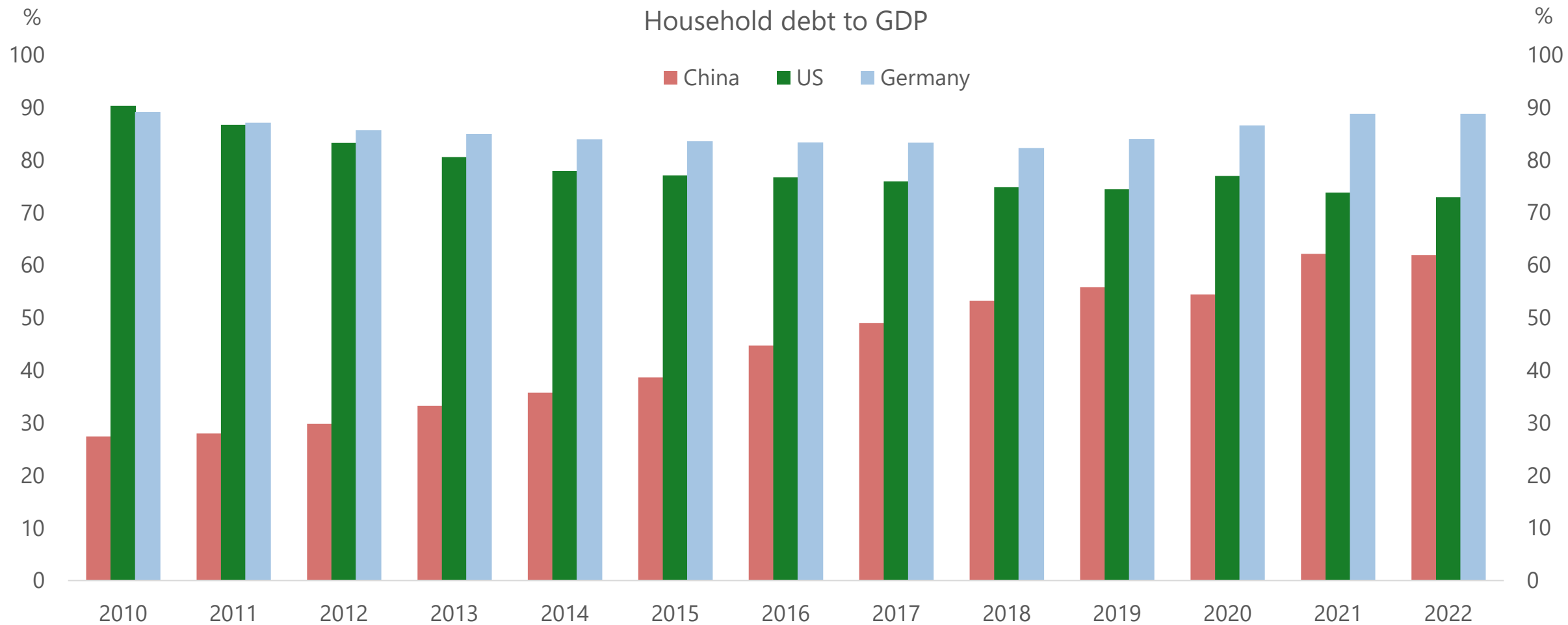


Rental yields at second hand residential buildings

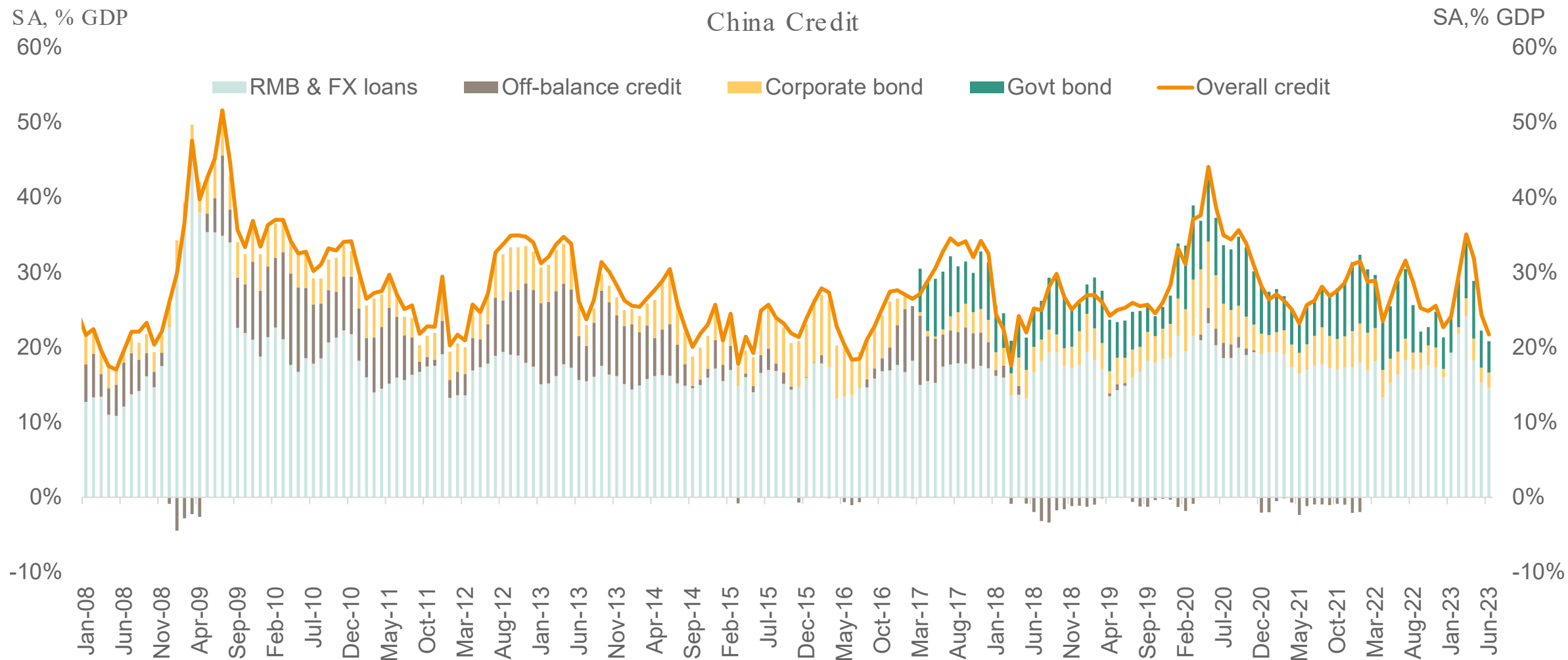


China: Debt and financing

Household debt to GDP has increased steadily in China

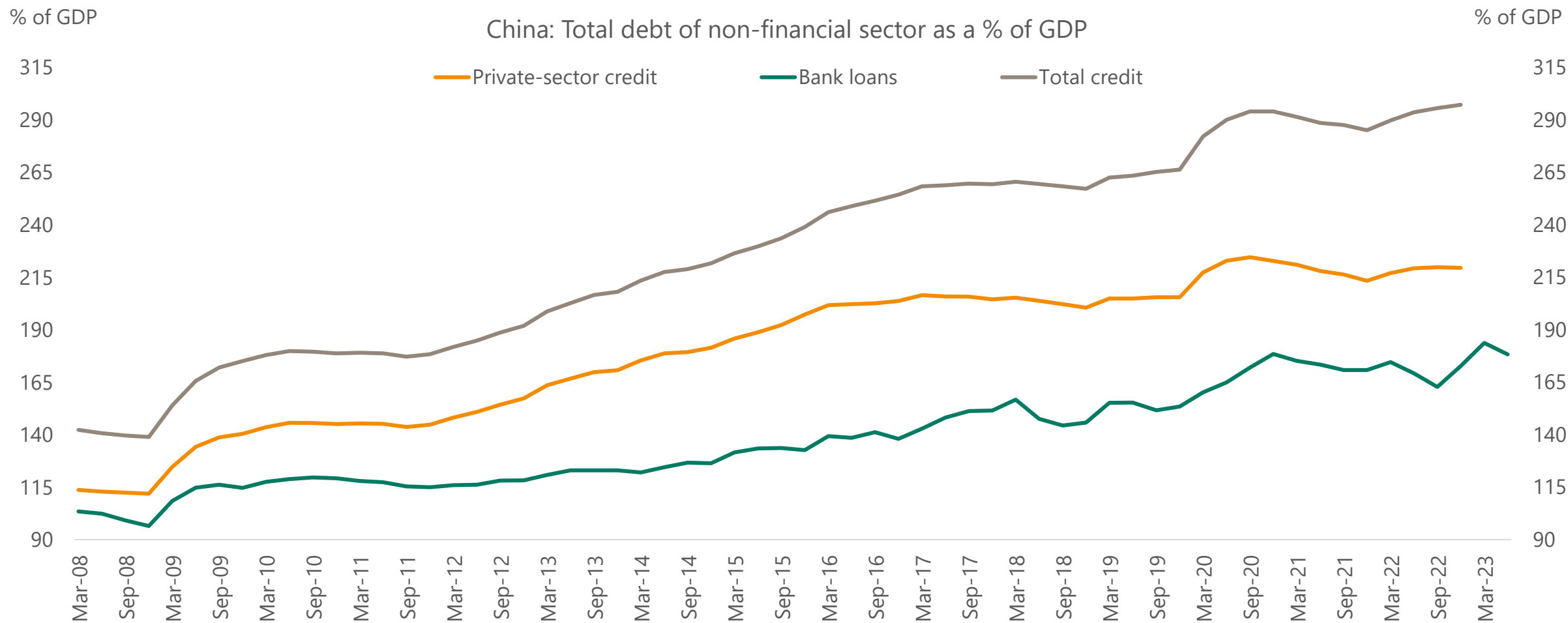


China credit growth

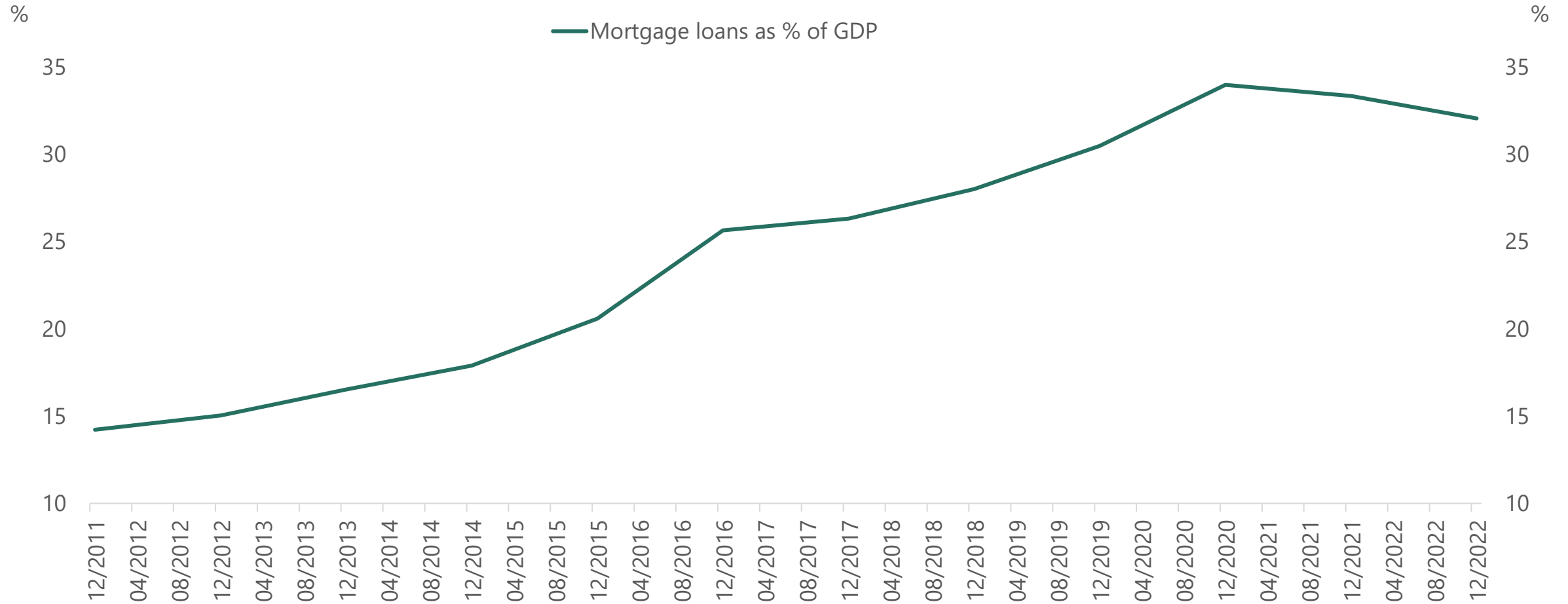


Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

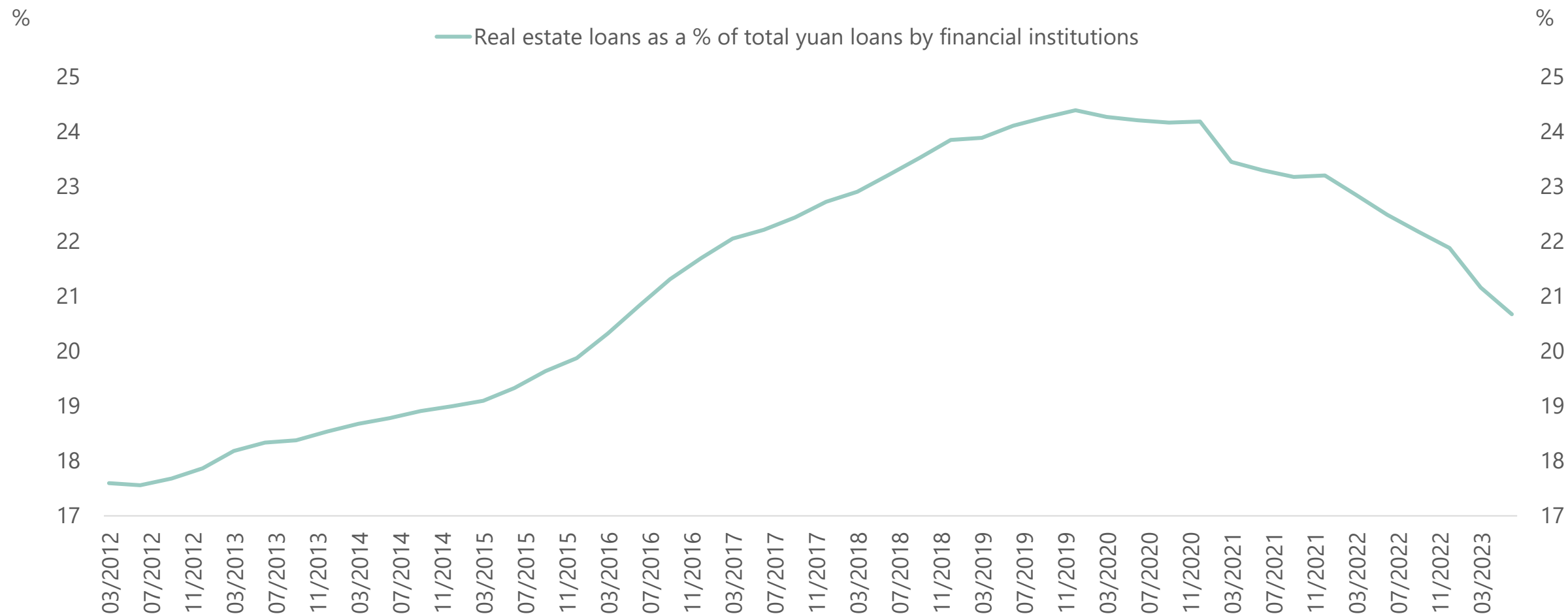
China: Debt levels have increased in the private sector



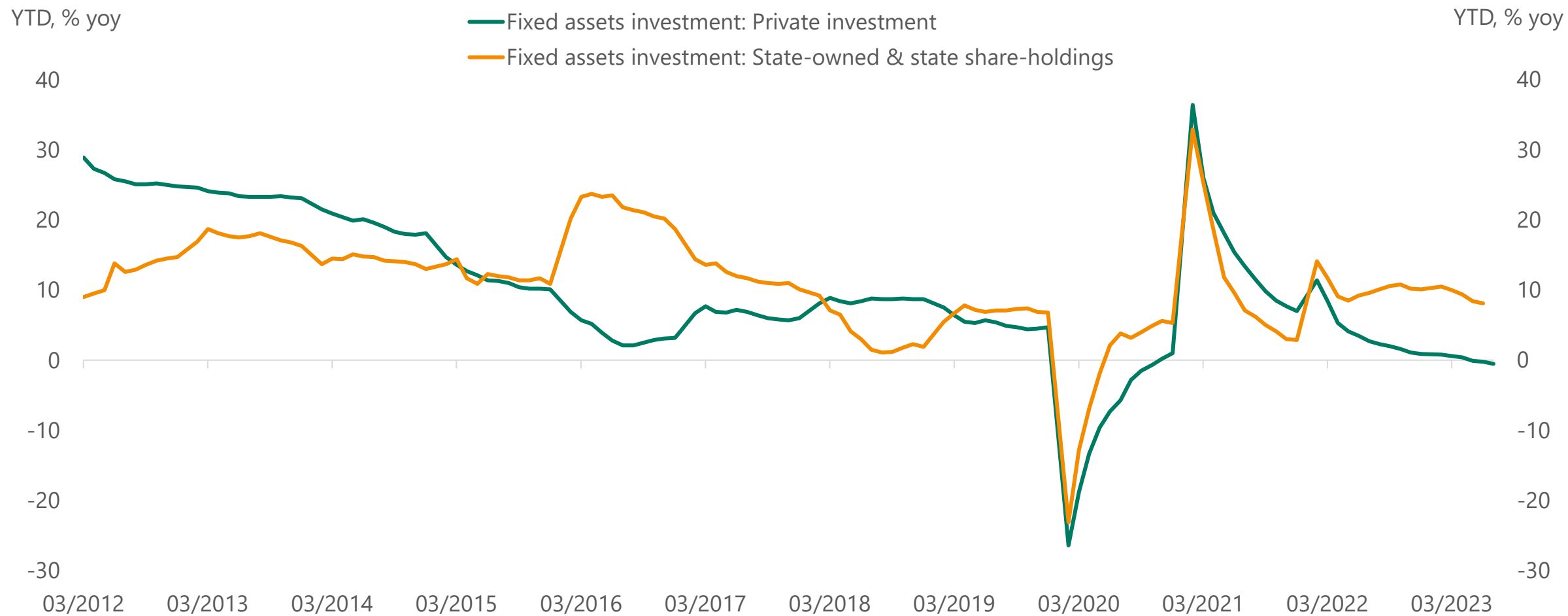
China's mortgage liabilities as a share of GDP



Real estate loans making up a smaller part of total lending

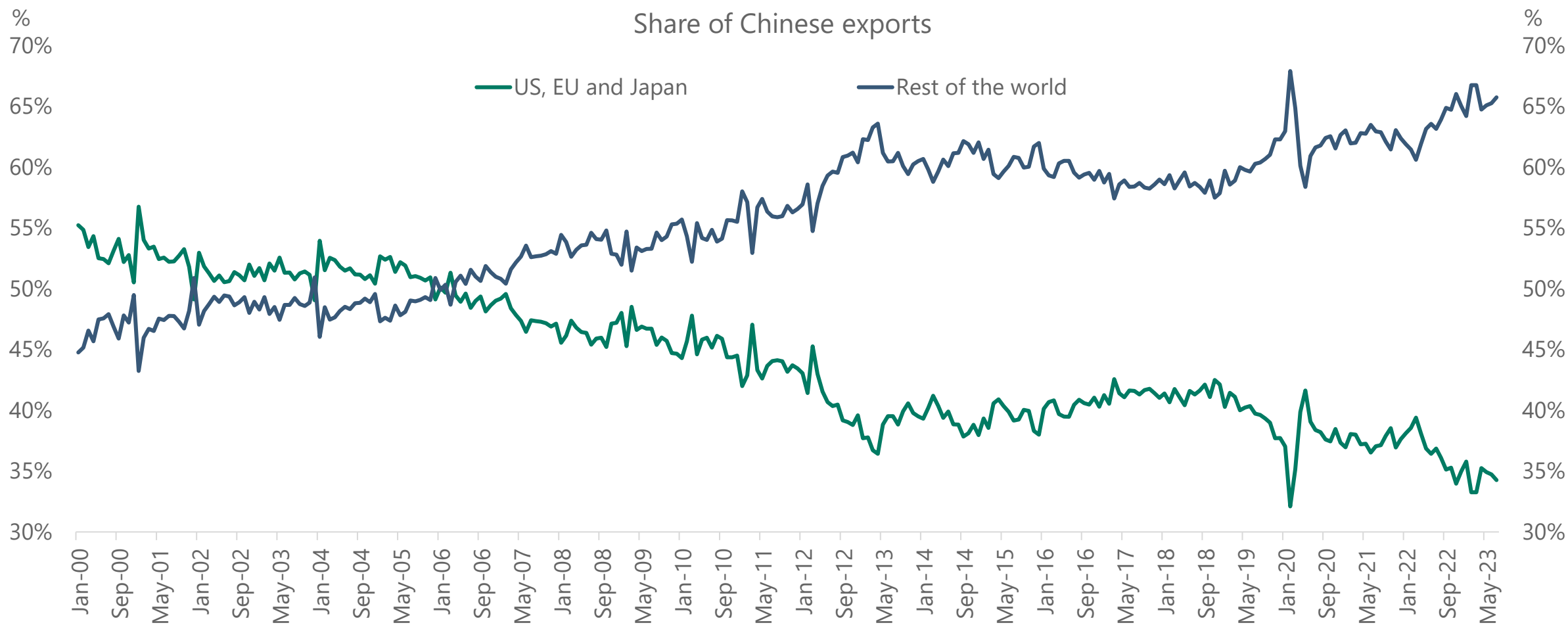


China: Private investment growth is declining

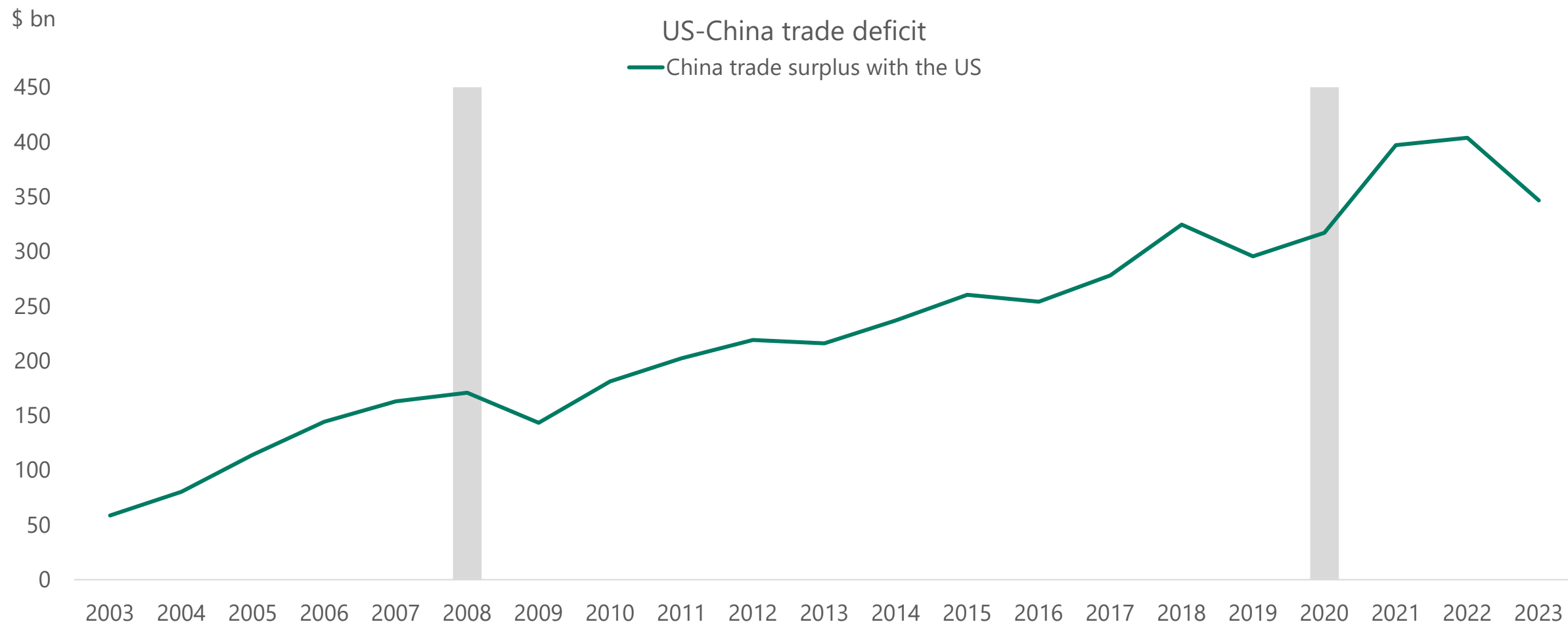


Chinese trade with the US

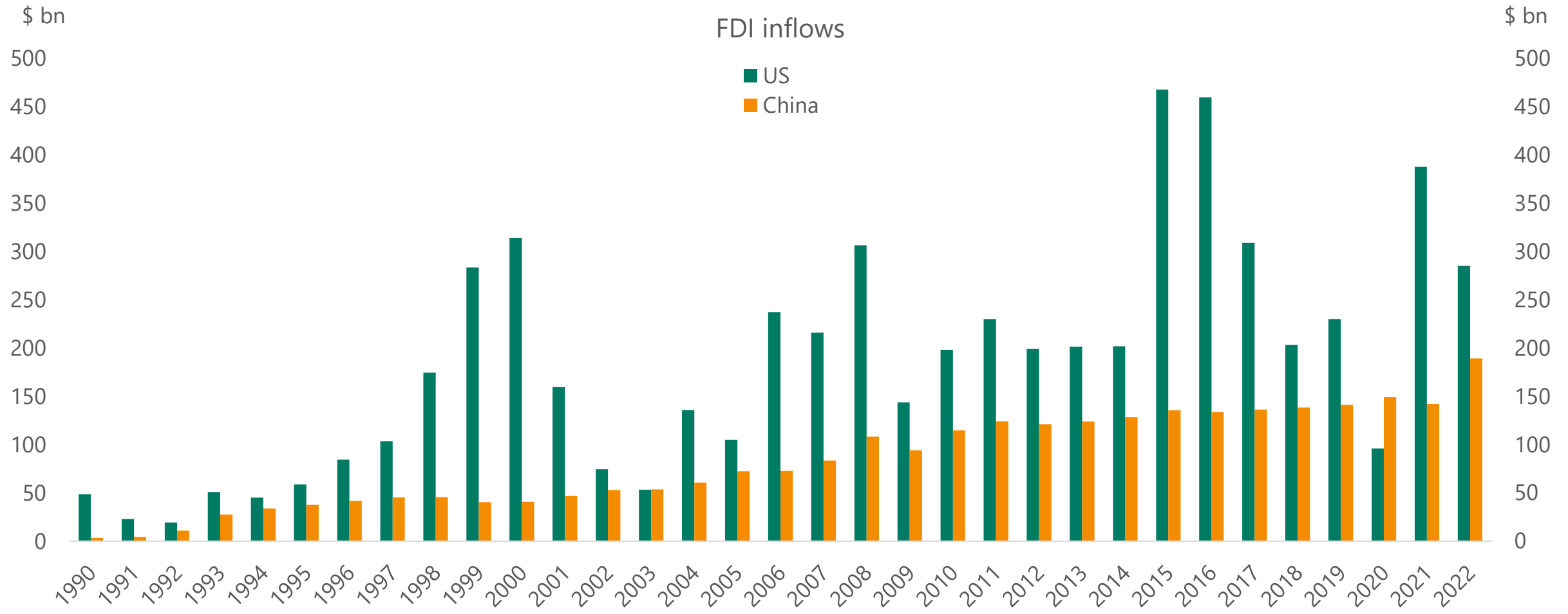
Chinese exports to US, EU and Japan declining



US-China trade deficit has been growing



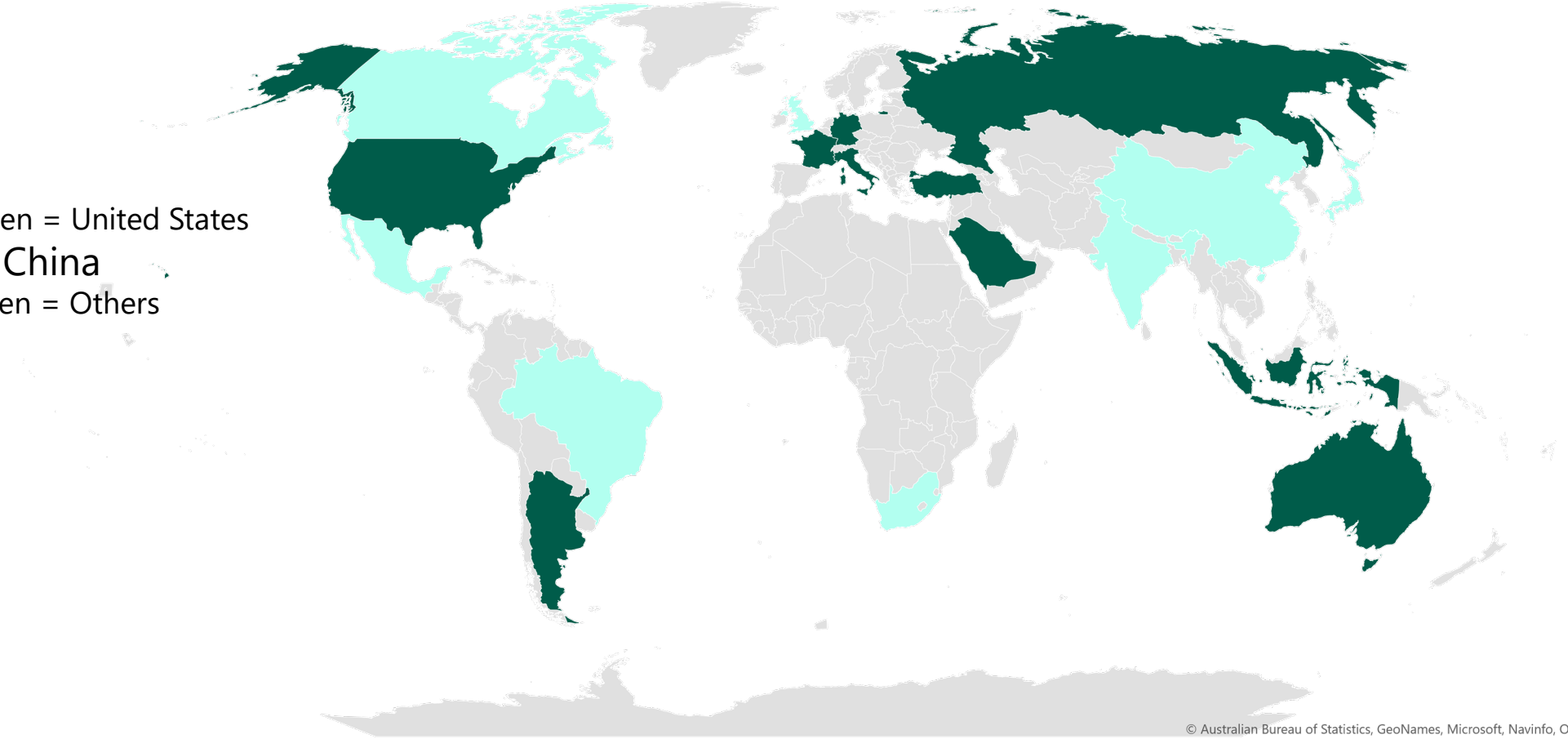
China and US: Comparing foreign direct investment



In 2000, China was not the top export destination for any of the G20 countries

Top export destinations for G20, 2000

Light green = United States
 Blue = China
 Dark Green = Others

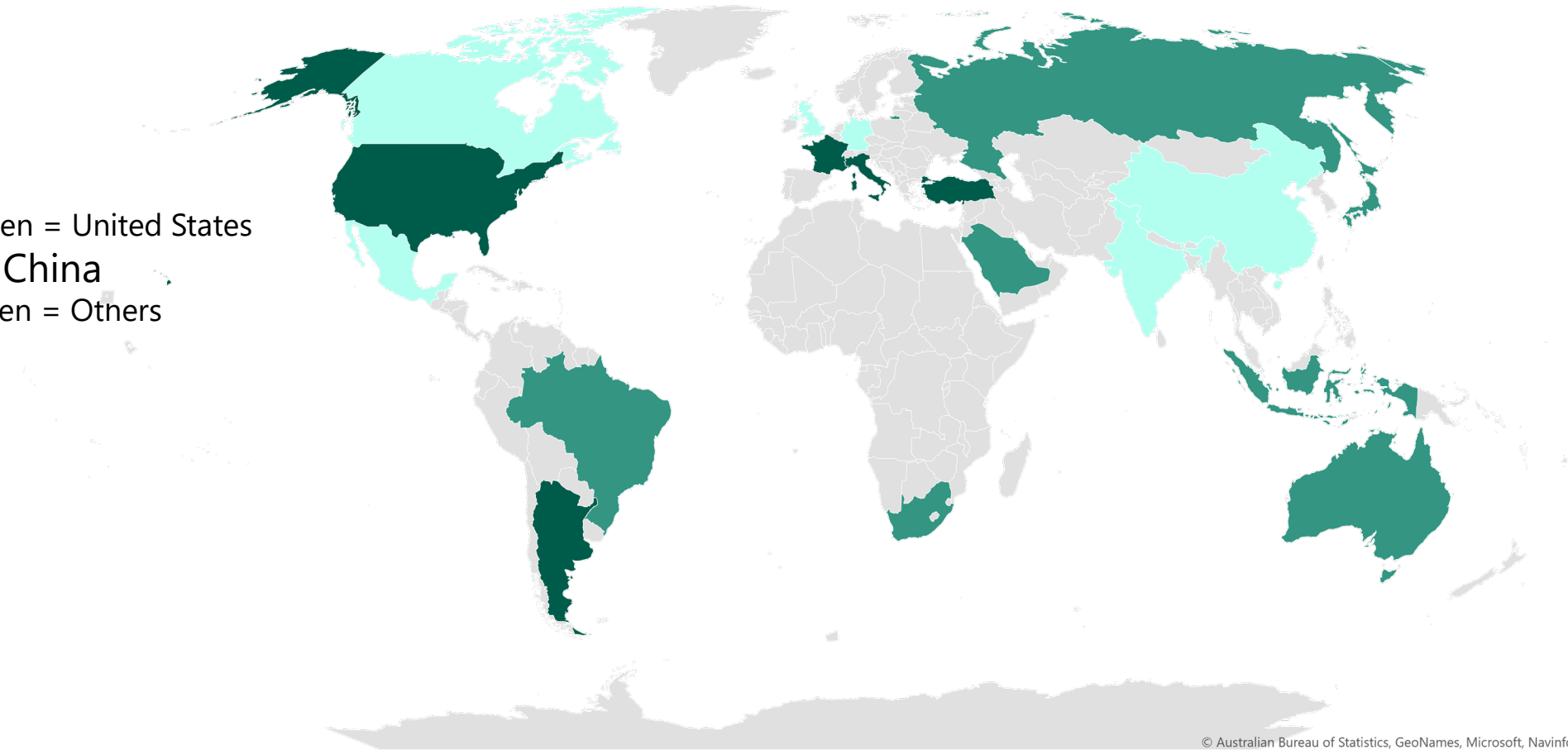


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In 2022, China was the top export destination for 8 of the G20 countries

Top export destinations for G20, 2022

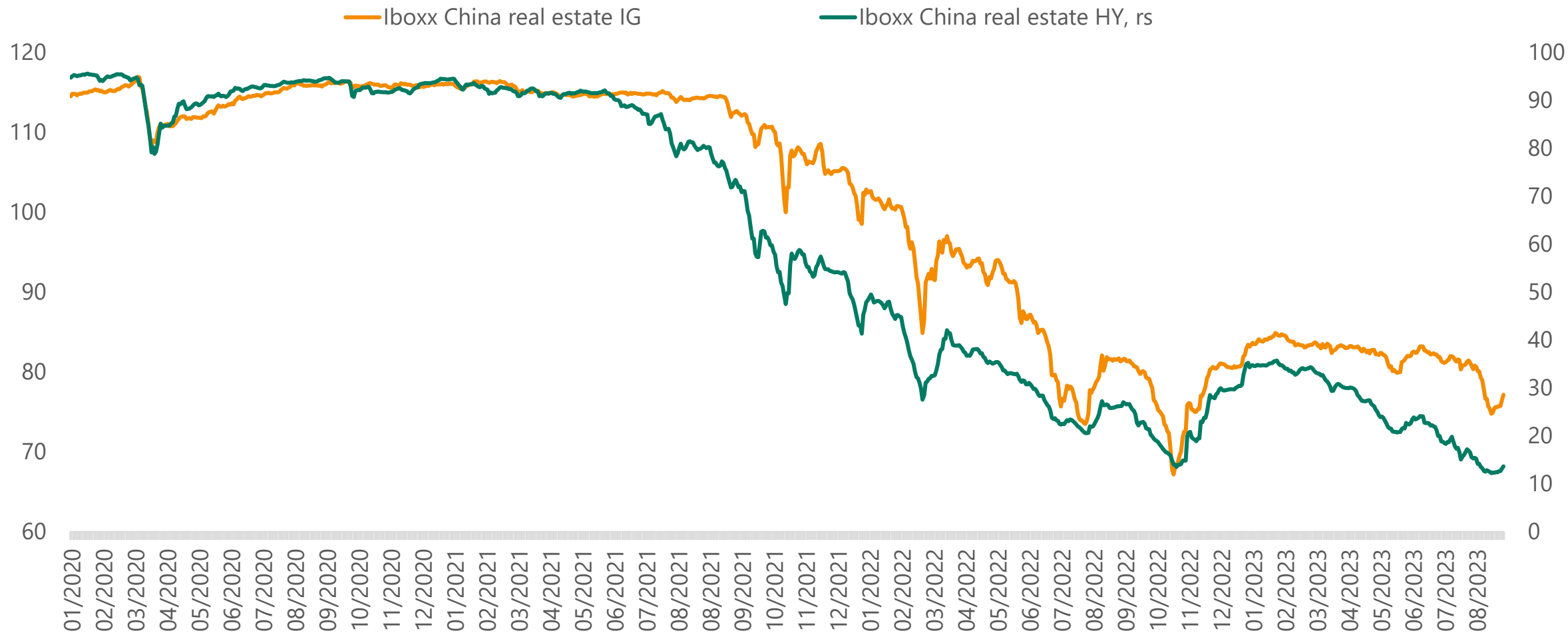
Light green = United States
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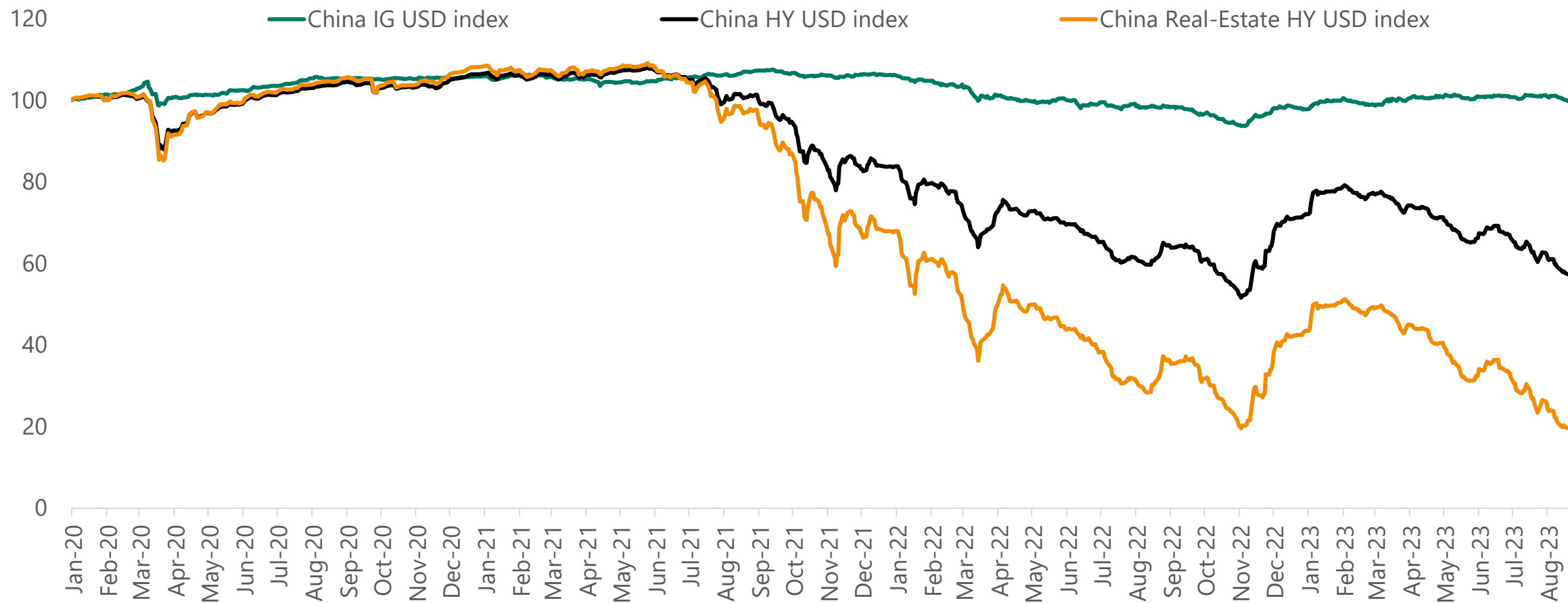
China IG and HY

China IG and HY credit: Developers have been hit hard

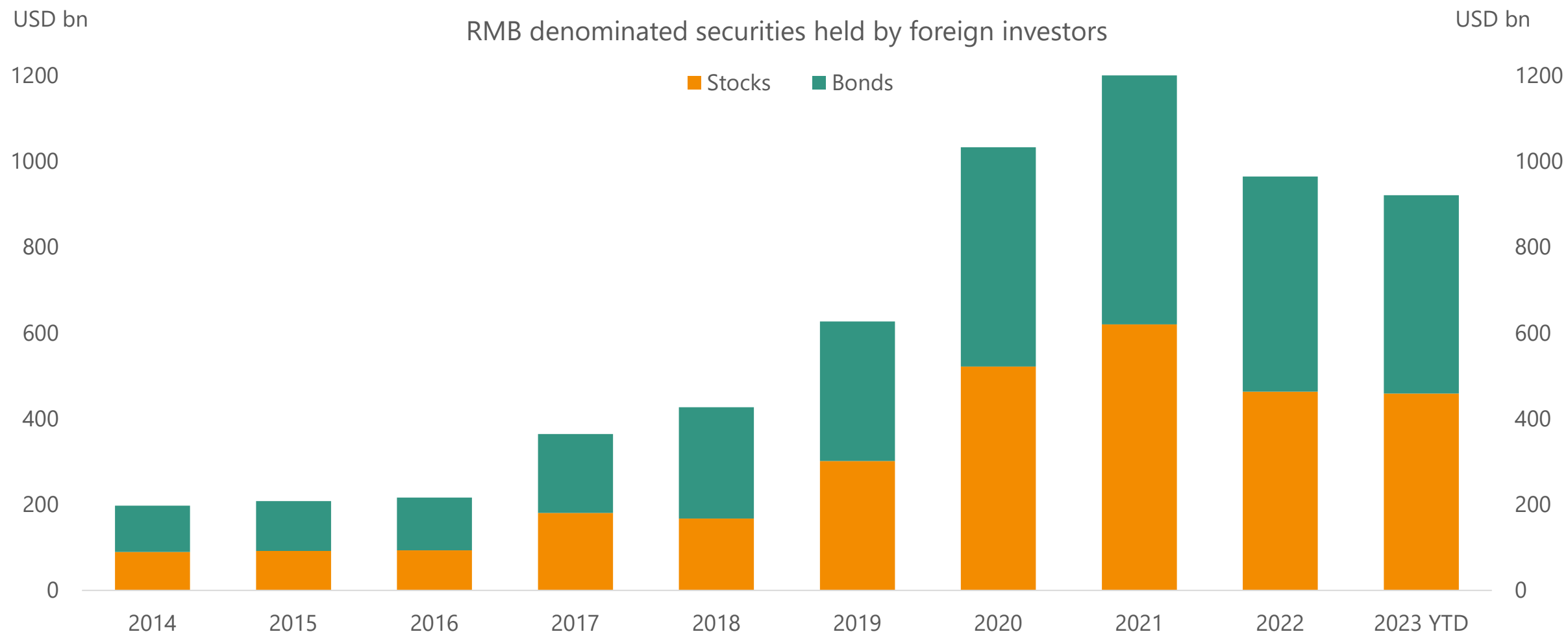


China's HY real estate index is down

Index, Jan 2020 = 100

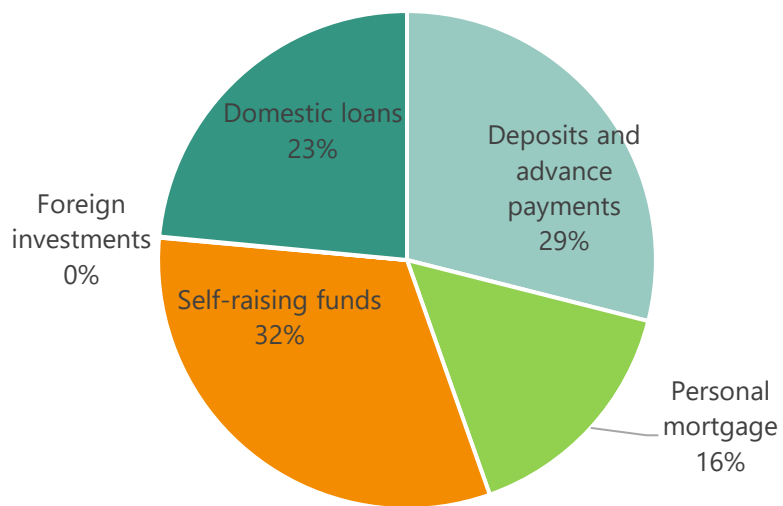


Global holdings of Chinese stocks and bonds

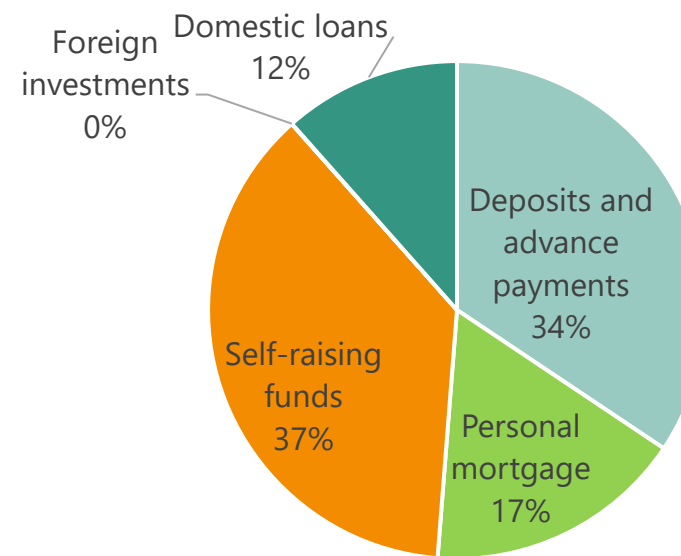


China: Sources of funds for real estate developers

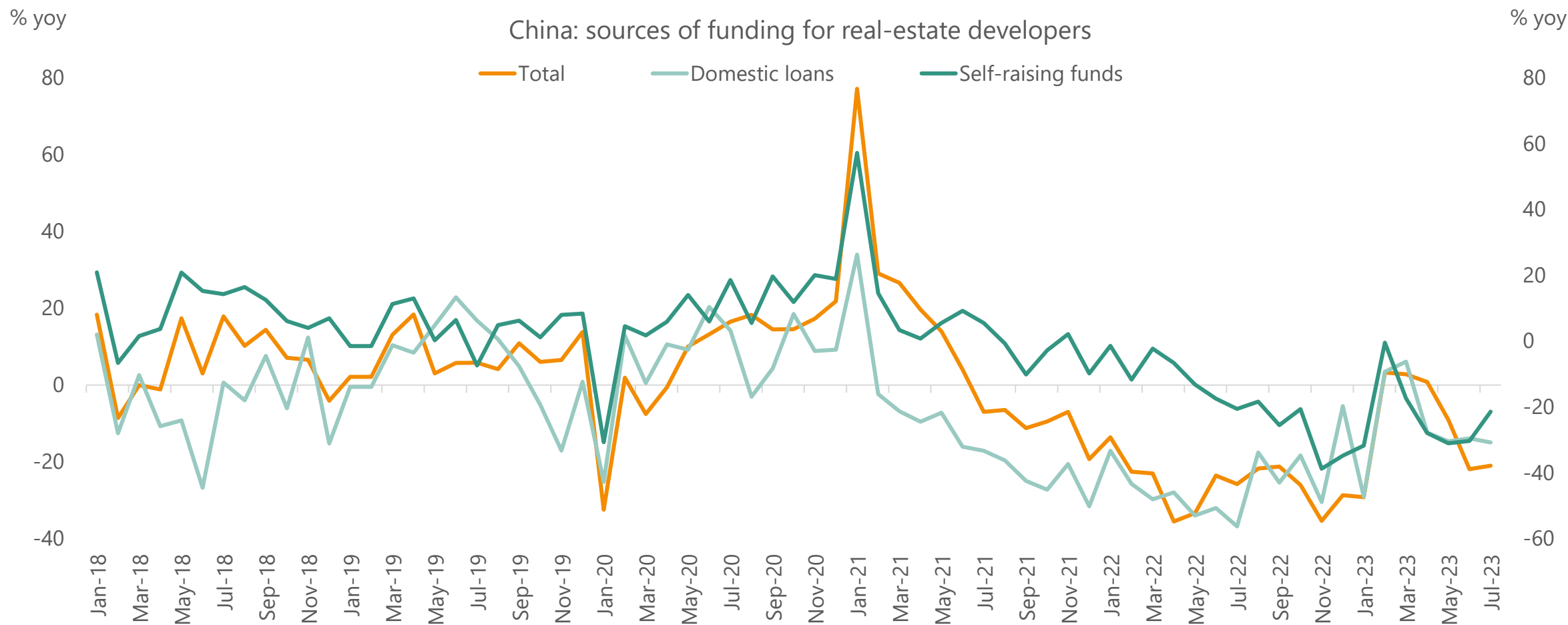
January 2020



July 2023

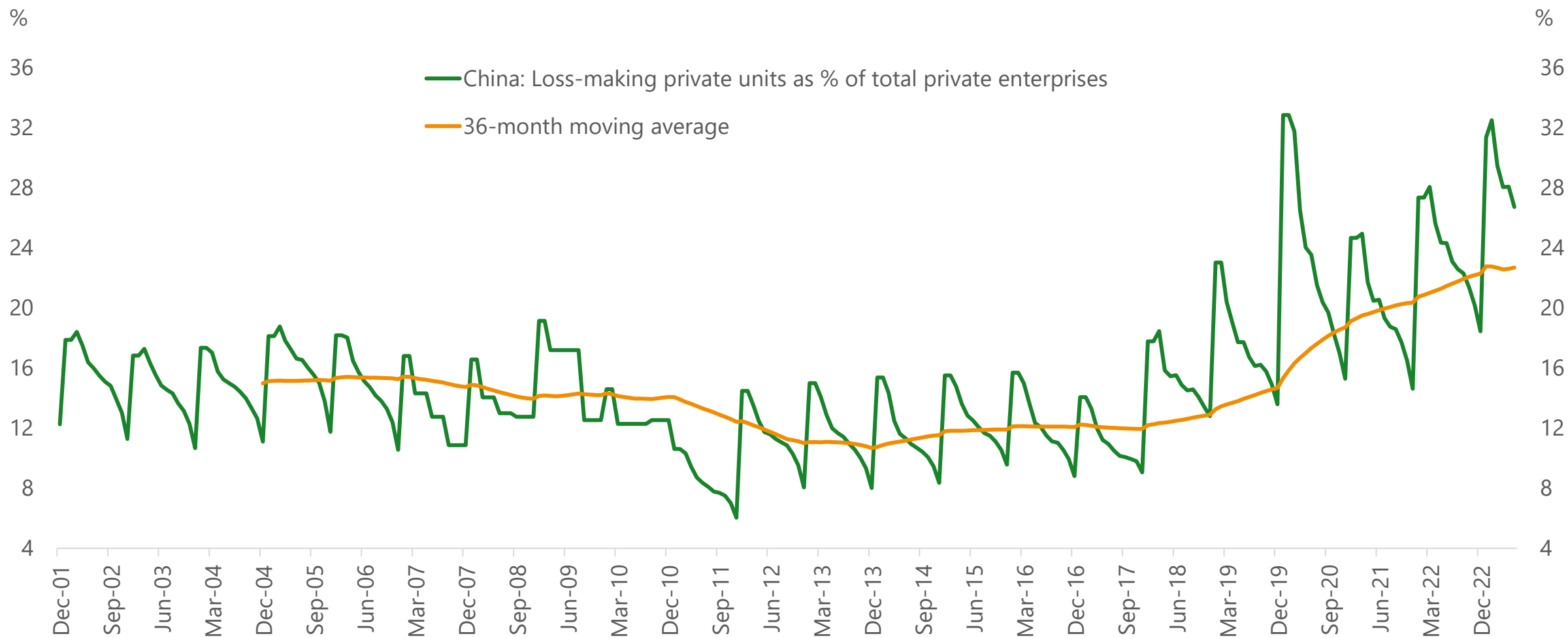


China: sources of funds for real estate developers continue to decline



Sources: NBS, Haver, Apollo Chief Economist

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



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



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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.