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Outlook for China: Housing deflating, demographics deteriorating, and exports slowing

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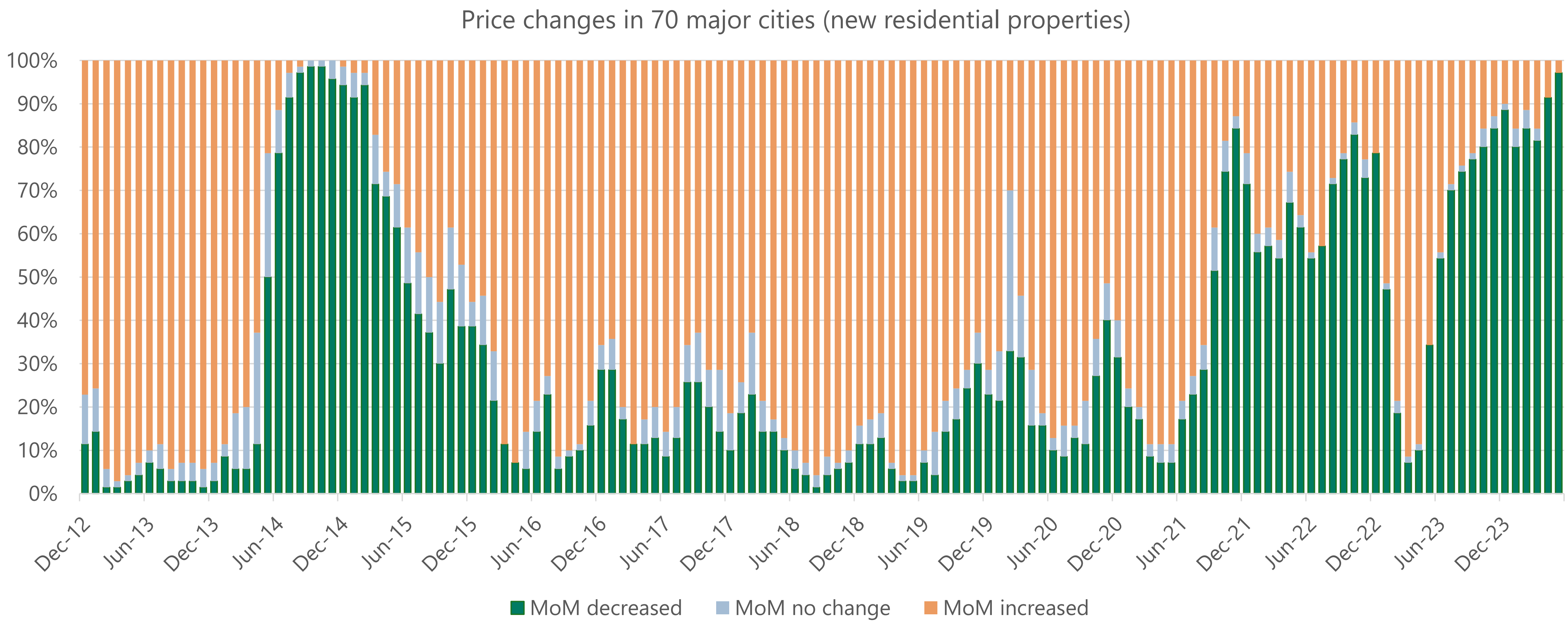
China: Overview

Housing market cooling rapidly in China

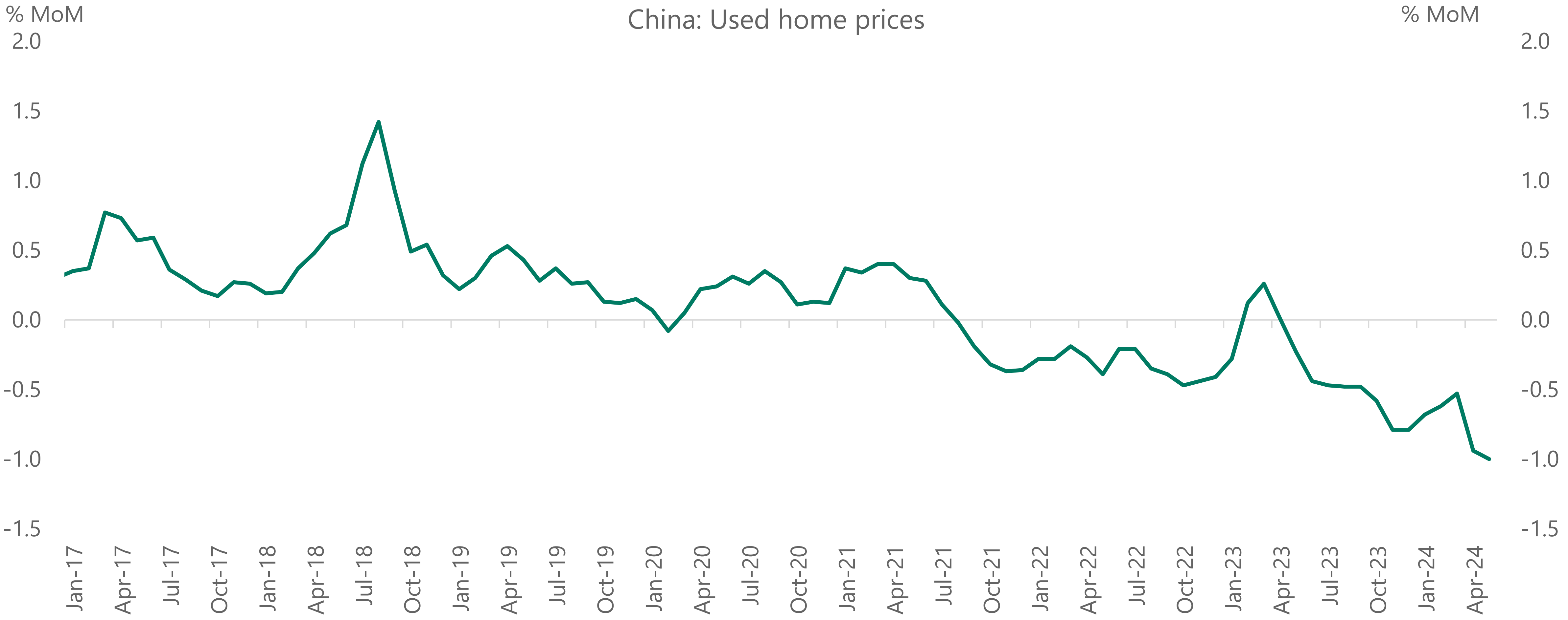


Source: Bloomberg, Apollo Chief Economist

China: New home prices declining

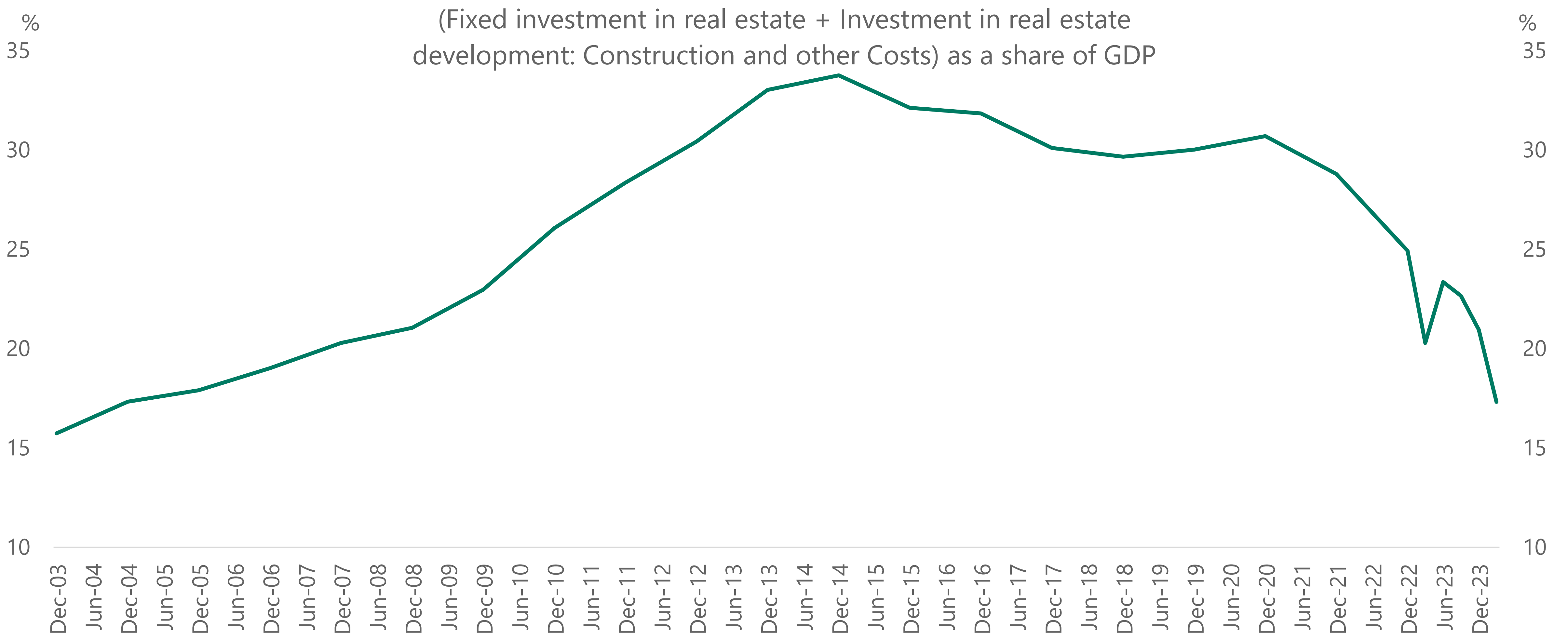
Source: Bloomberg, Apollo Chief Economist

China: Used home prices falling



Source: Bloomberg, Apollo Chief Economist

China: The deflating housing bubble is having a negative impact on GDP

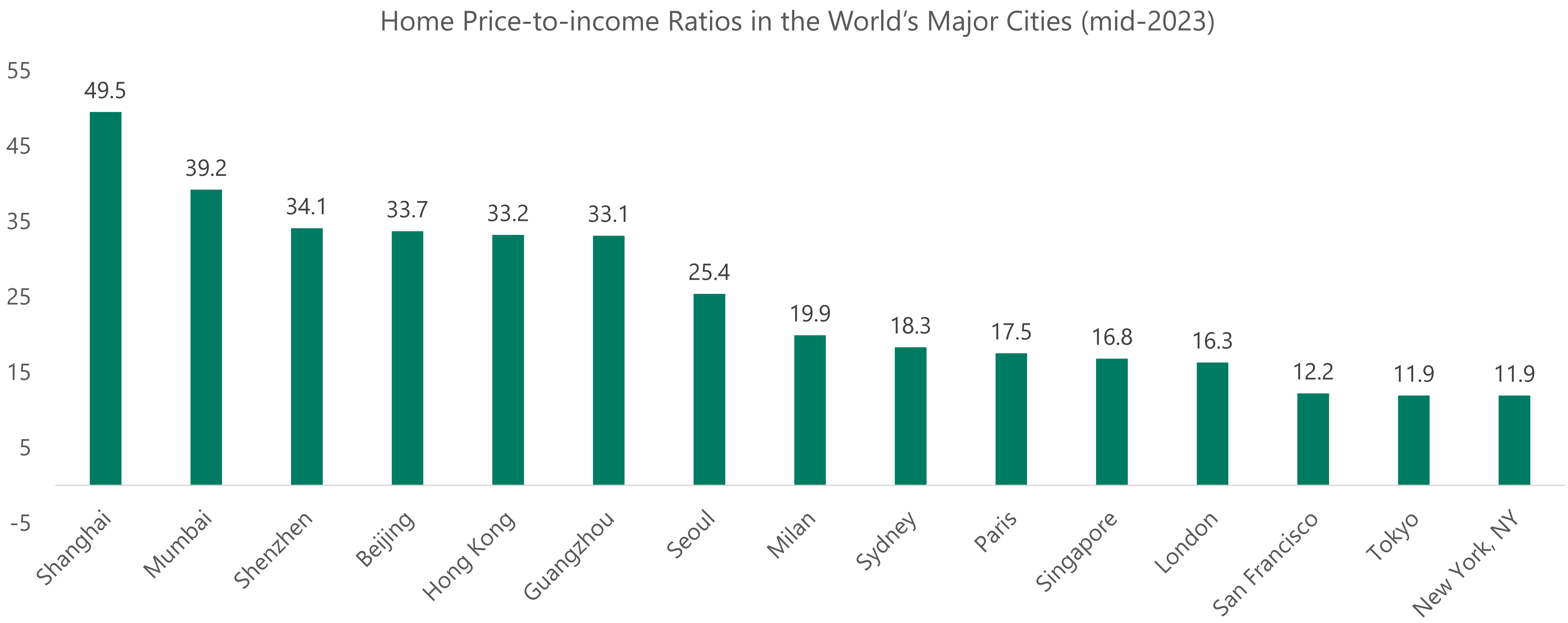


Source: Haver, Apollo Chief Economist. (Data as of Q3 2023)

Beijing home prices falling

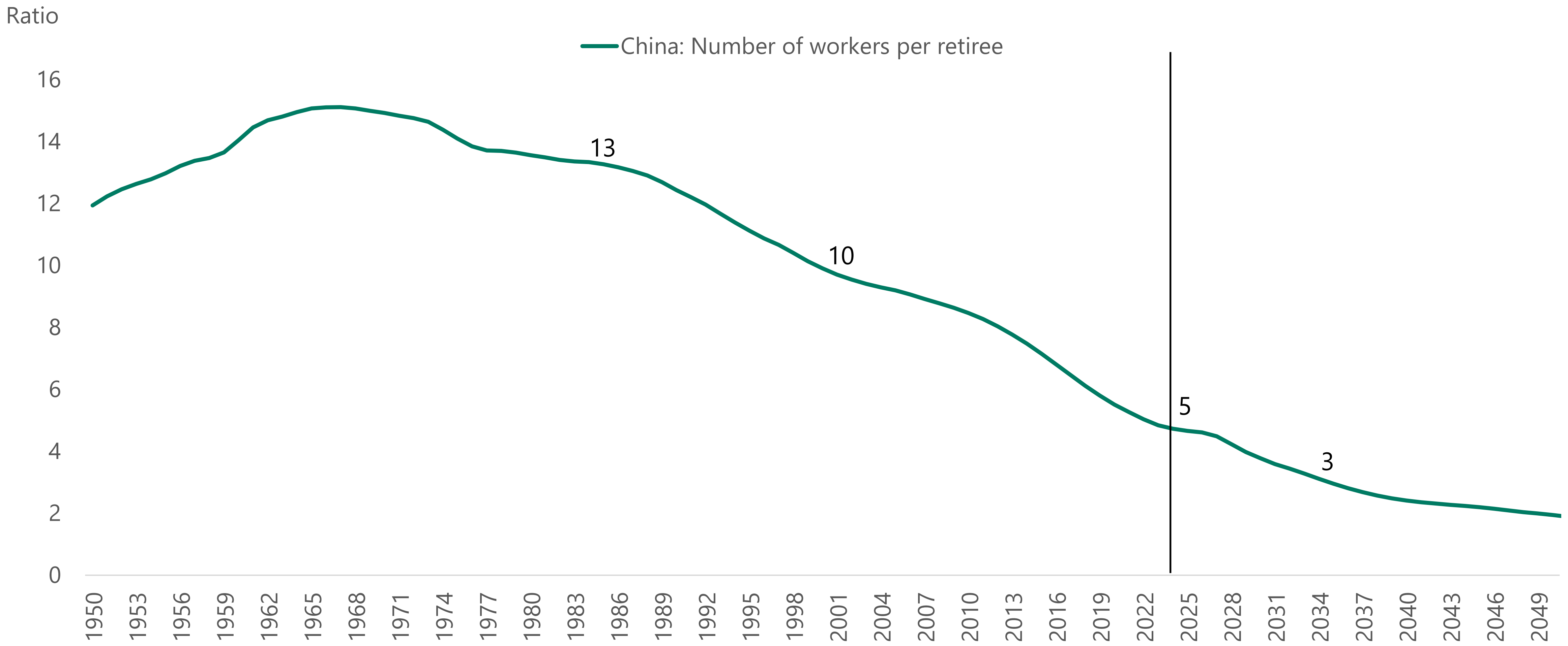
Source: BIS, Haver, Apollo Chief Economist

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



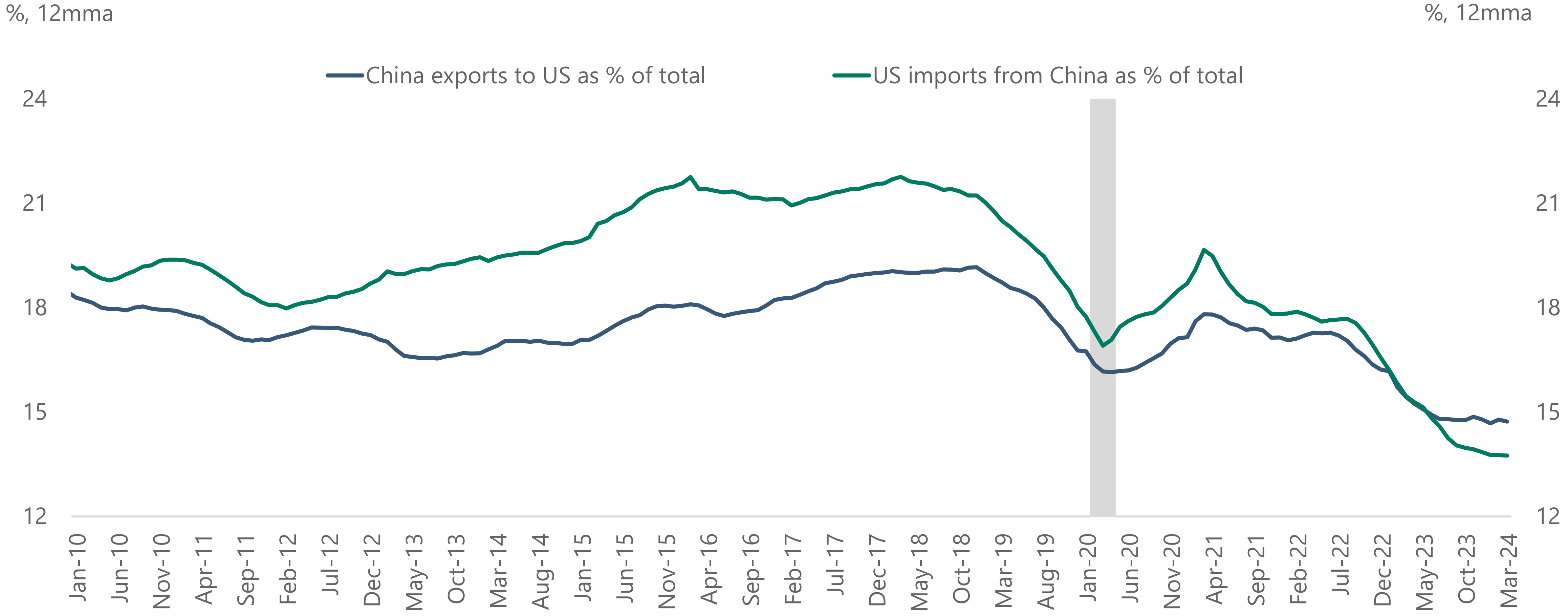
Source: Numbeo (https://www.numbeo.com/property-investment/rankings.jsp?title=2023-mid), Apollo Chief Economist. Note: *Price to Income Ratio* is the basic measure for apartment purchase affordability. It is generally calculated as the ratio of median apartment prices to median family disposable income, expressed as years of income.

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



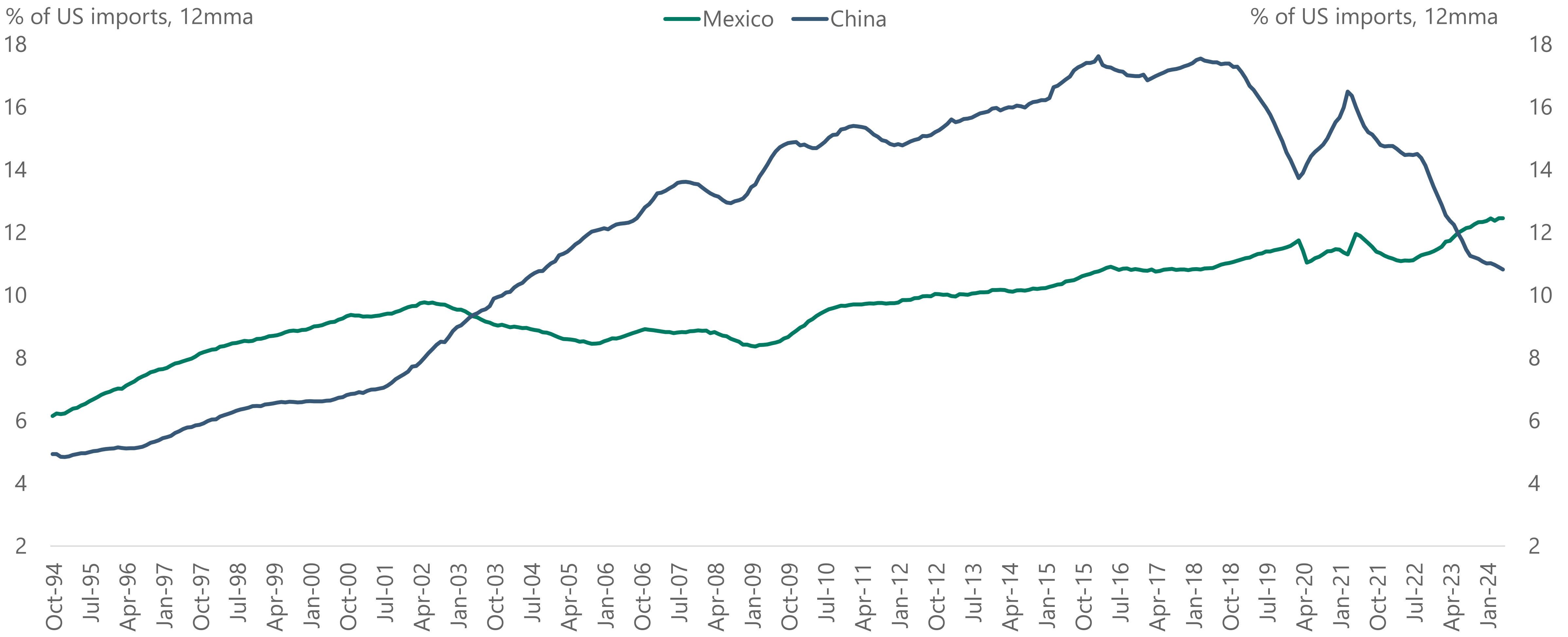
Source: UN, Haver, Apollo Chief Economist

US and China less dependent on each other for trade



Source: IMF, Bloomberg, Apollo Chief Economist

US now importing more from Mexico than China



Source: Census Bureau, Bloomberg, Apollo Chief Economist

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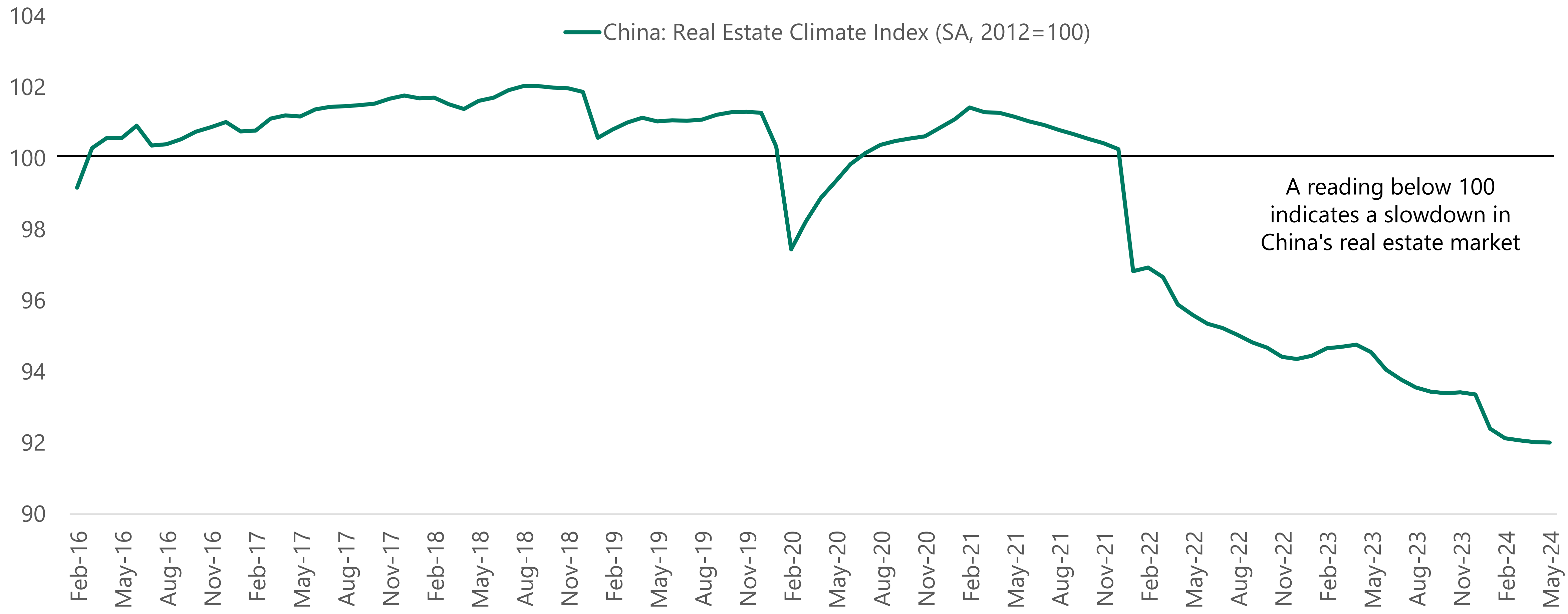
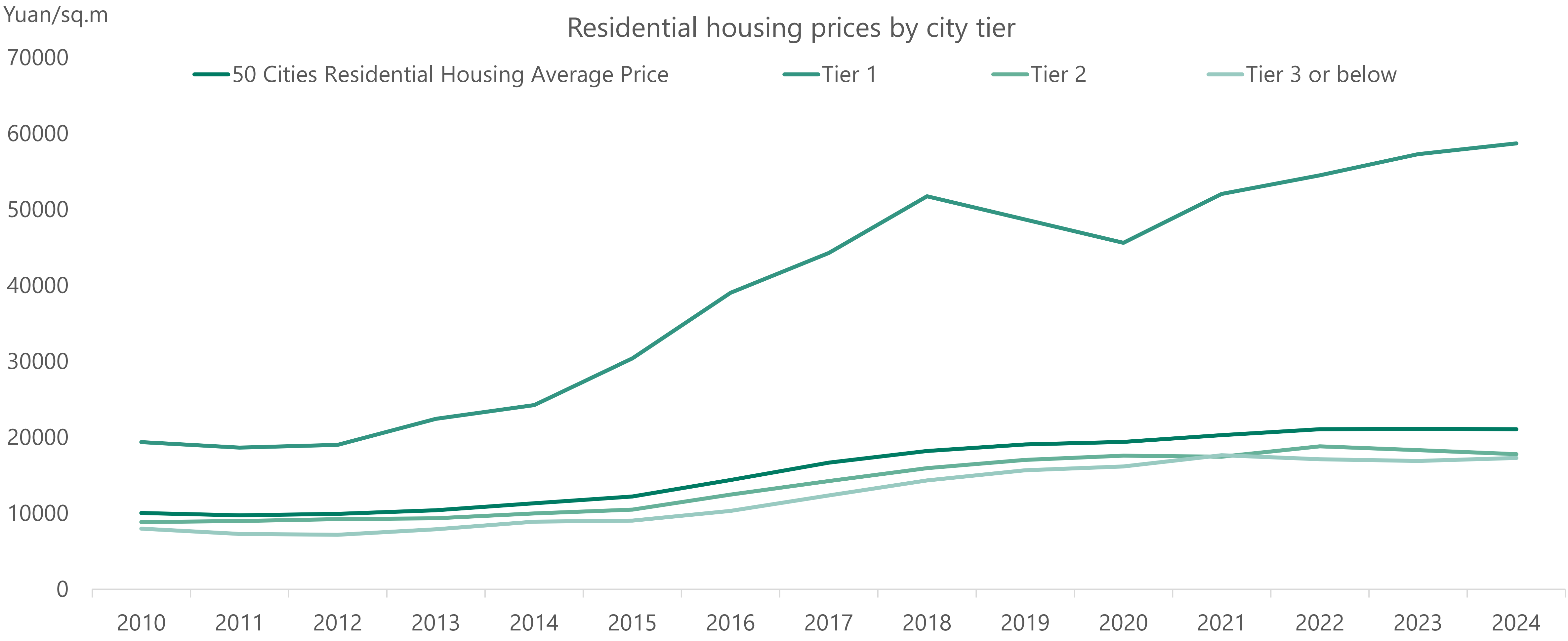
China: Housing bubble is deflating

China real estate index in recession territory



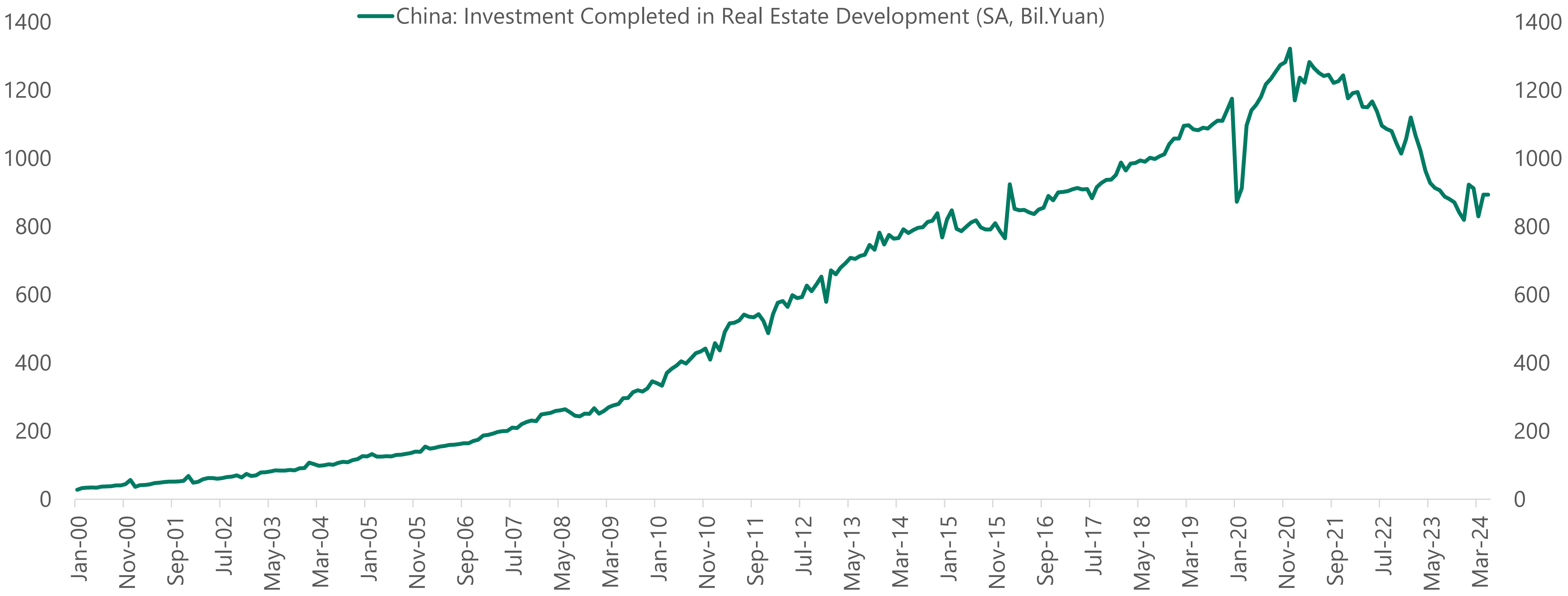
Source: NBS, Haver, Apollo Chief Economist. Note: A reading above 100 indicates economic growth and a reading below 100 indicates a slowdown in China's real estate market.

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



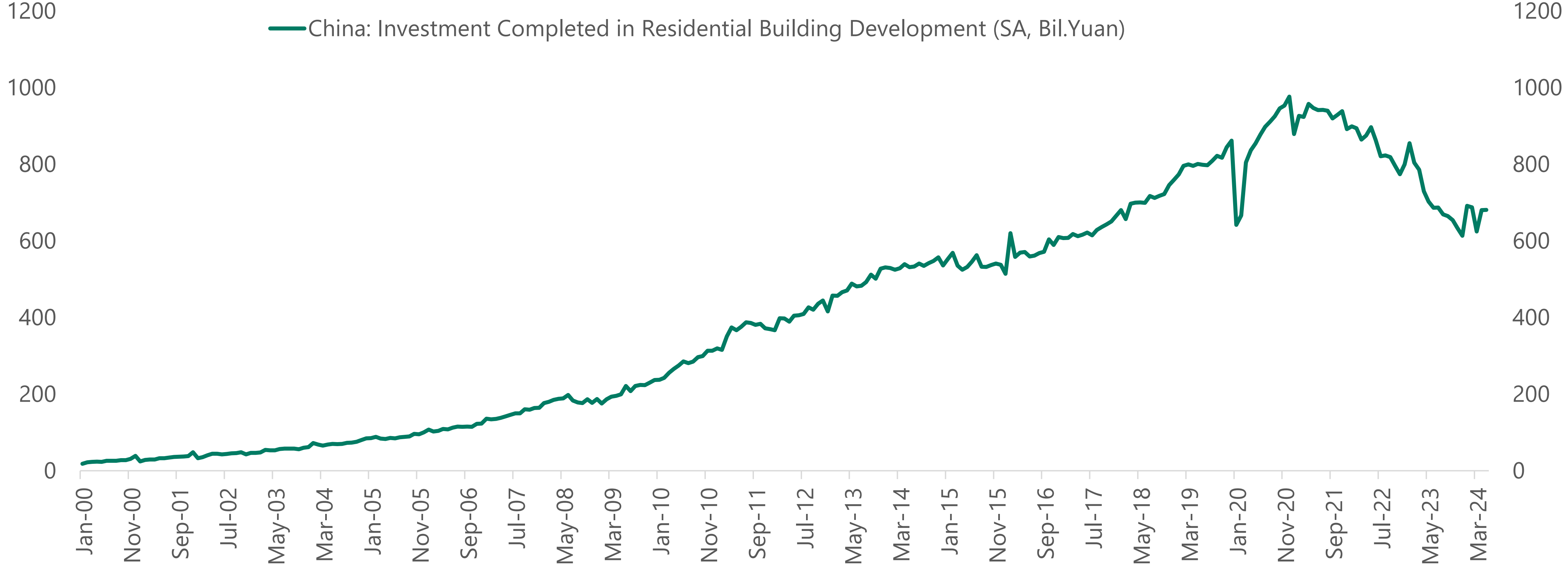
Source: Bloomberg, Apollo Chief Economist (Note: 2024 is till May)

China: Real estate investment slowing



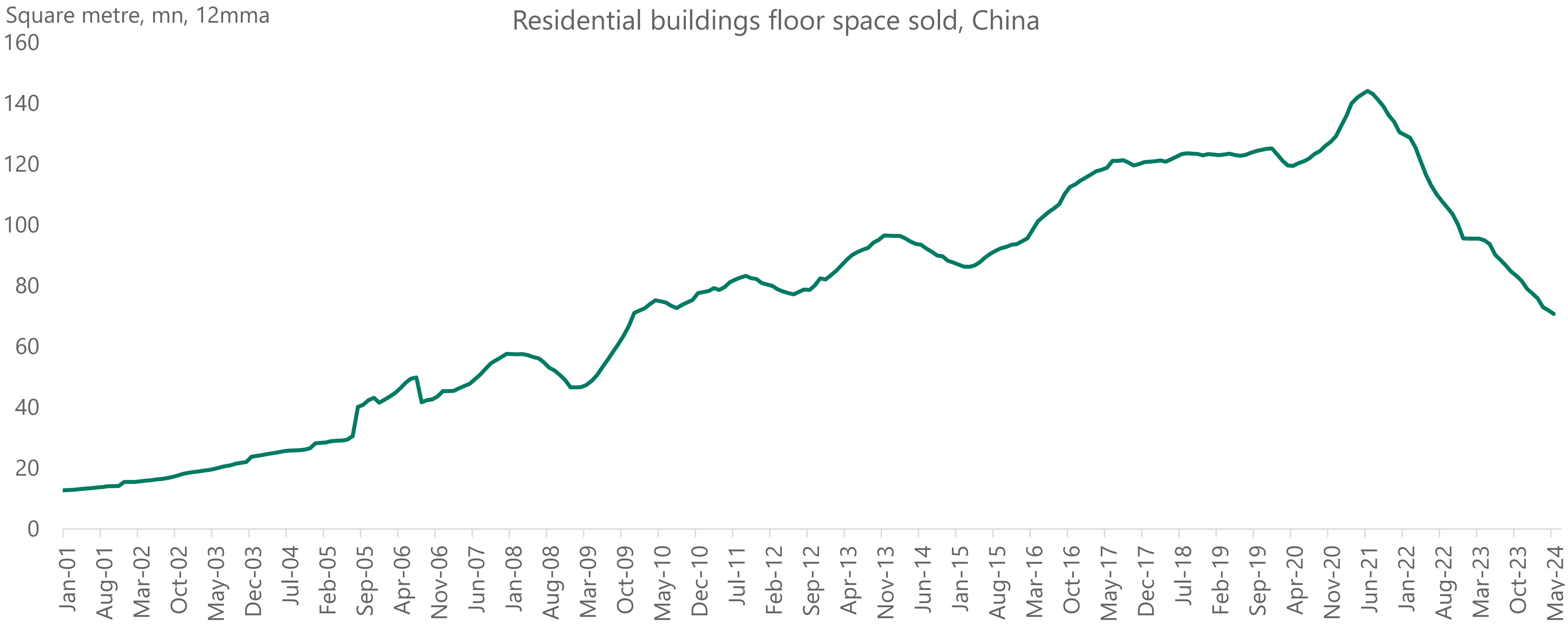
Source: Haver, Apollo Chief Economist

Residential real estate investment slowing



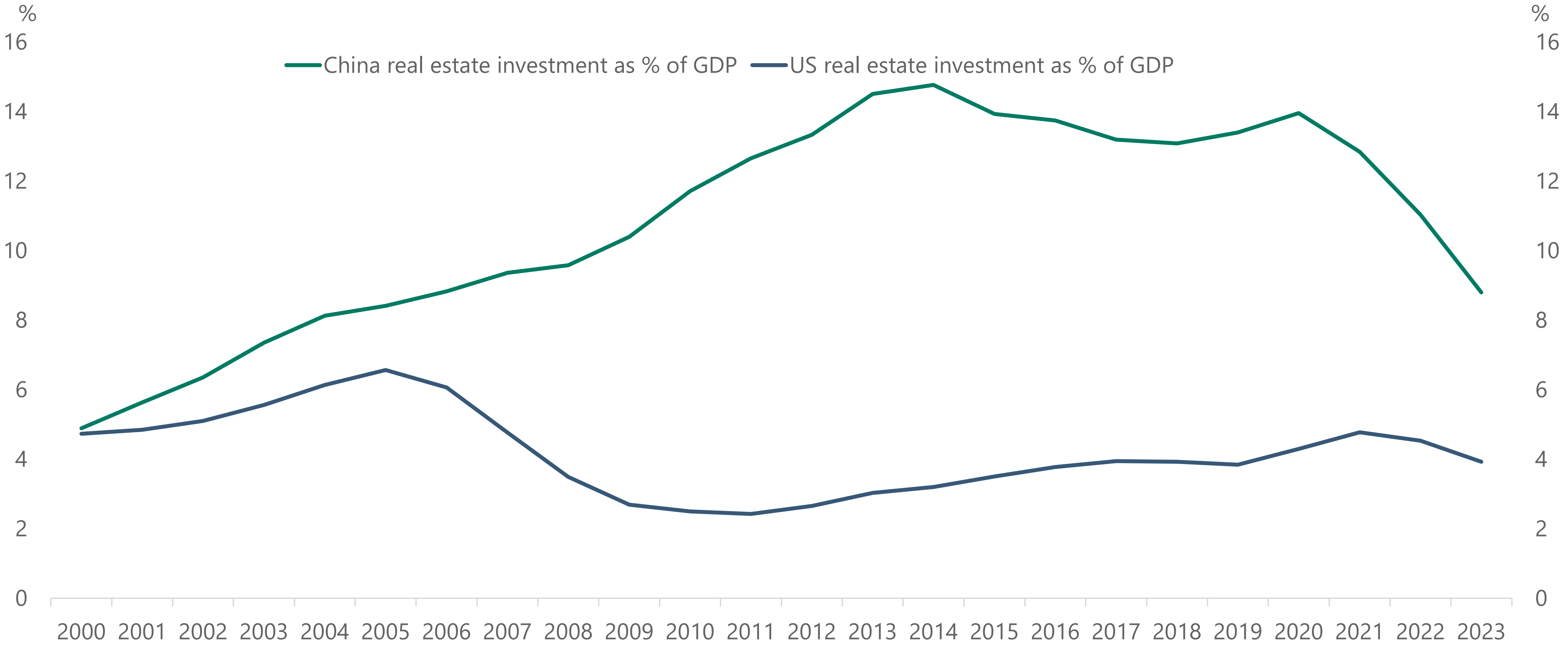
Source: Haver, Apollo Chief Economist

China residential transactions falling



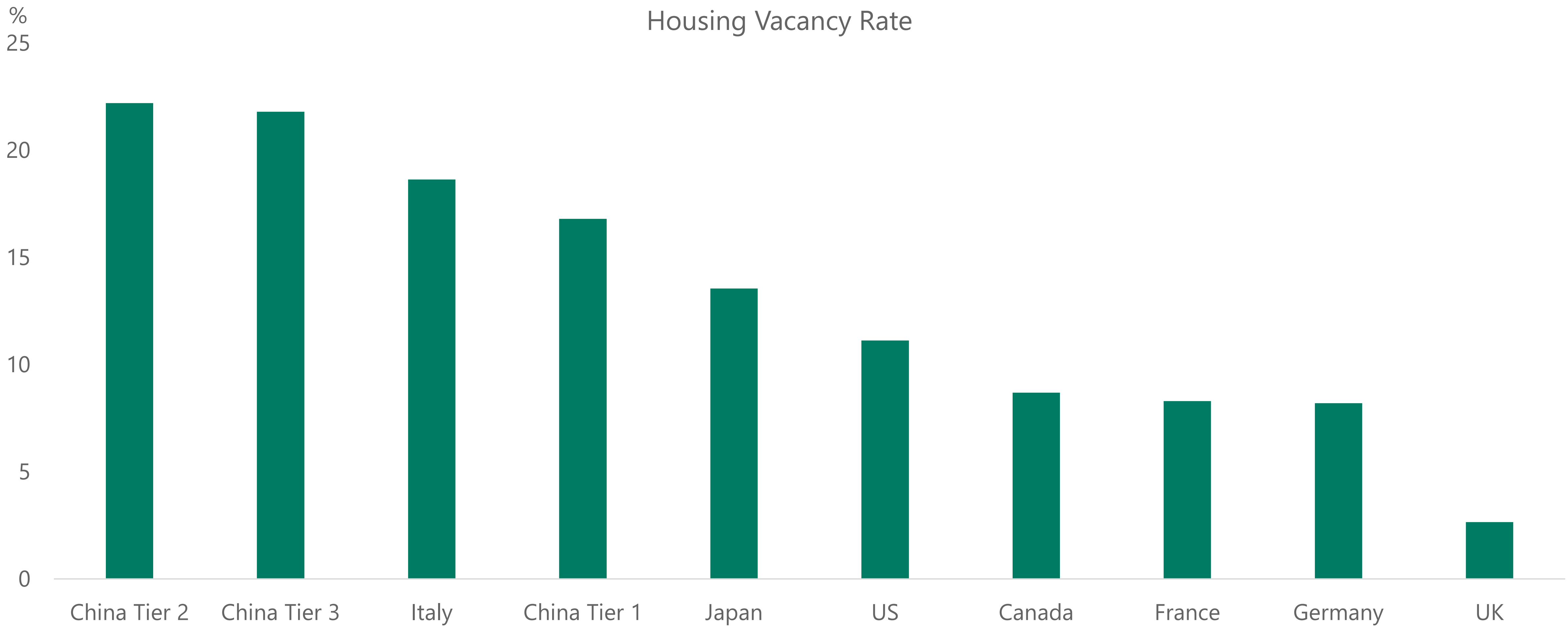
Source: NBS China, Haver Analytics, Apollo Chief Economist

A sharp drop in real estate investment in China



Source: Bloomberg, Apollo Chief Economist.

Average Chinese vacancy rates higher than G7 countries

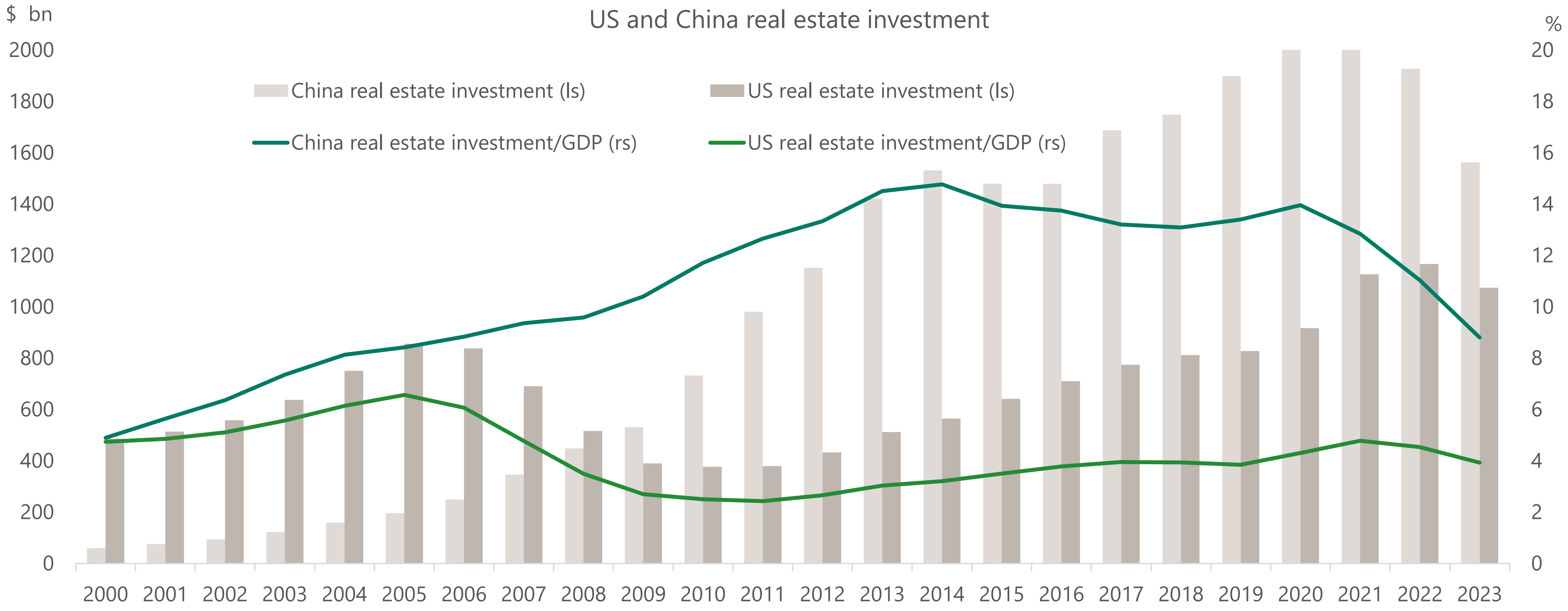


Source: ECB, OECD, Survey and Research Center for China Household Finance, Apollo Chief Economist

Home sales low in Tier 1 and Tier 2 cities

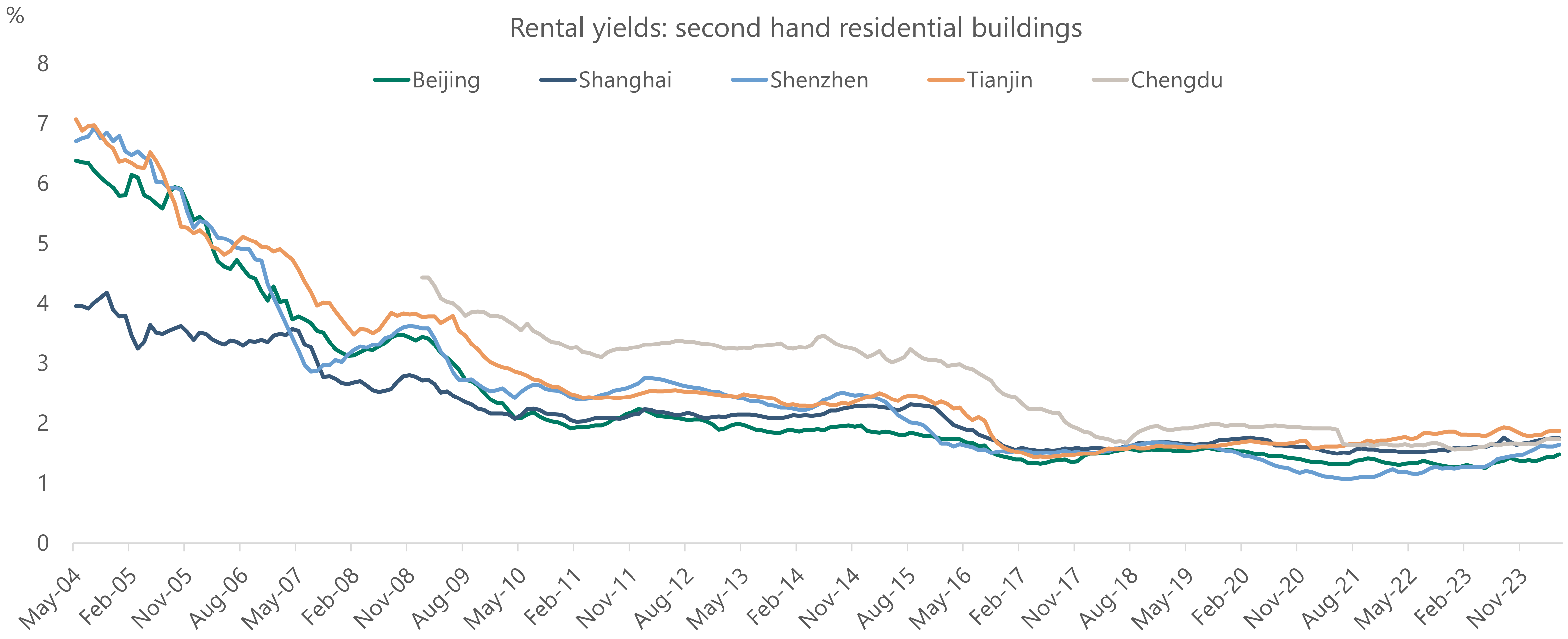
Source: China Real Estate Information Corp, Bloomberg, Apollo Chief Economist

Chinese economy more prone to real estate crisis as real estate investment accounts for a bigger share of GDP in China than in US



Source: Bloomberg, Apollo Chief Economist.

Rental yields at second hand residential buildings coming down in major cities

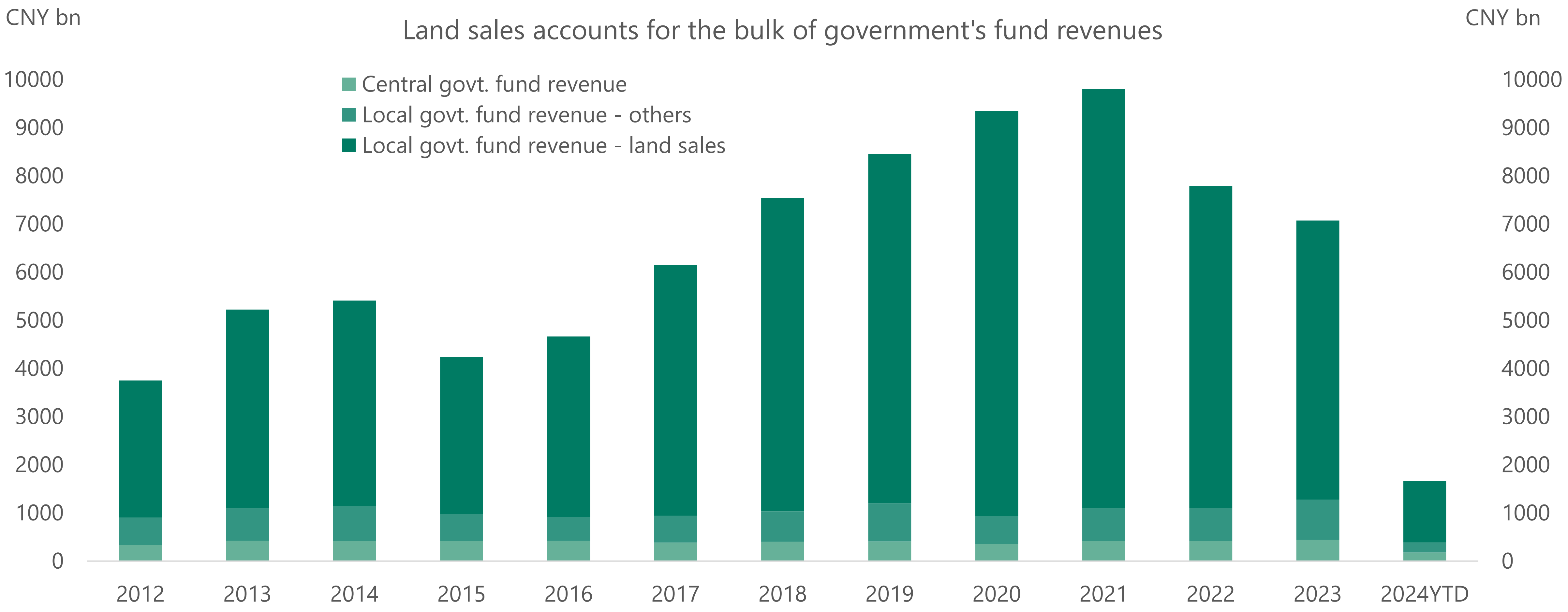


Source: Bloomberg, Apollo Chief Economist (Note: Rental yield is the rental income as a percentage of the property's value)

Interest rates have declined to lowest levels since 2009

Source: PBoC, Bloomberg, Apollo Chief Economist

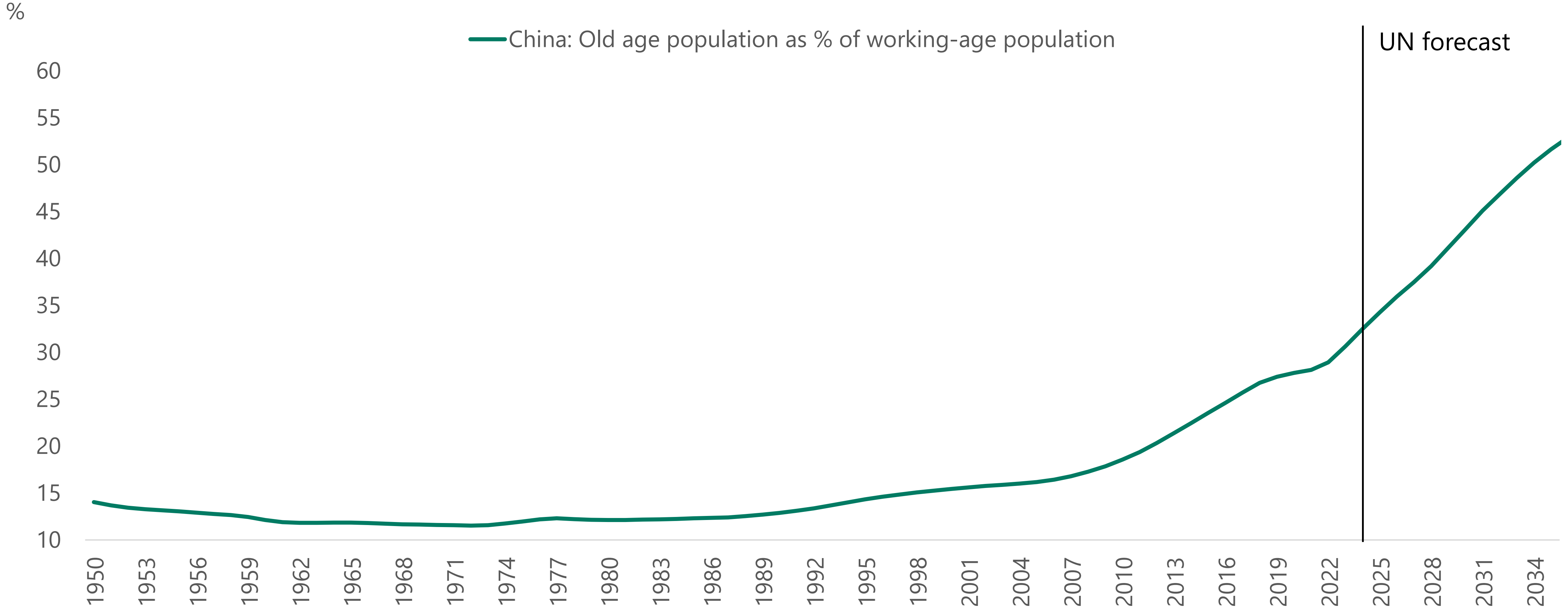
Land sales are a crucial source of local government revenue



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

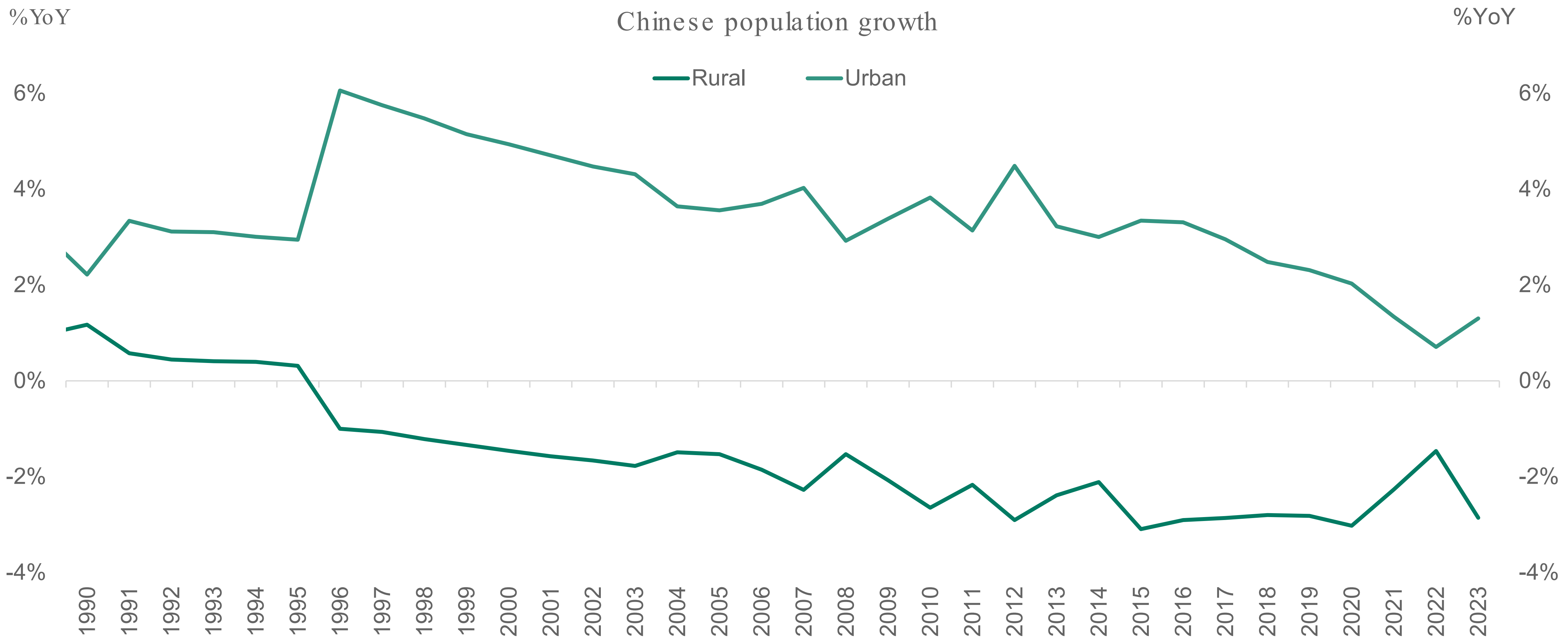
China: Demographics

China: Dependency ratio approaching 50% over the coming decade



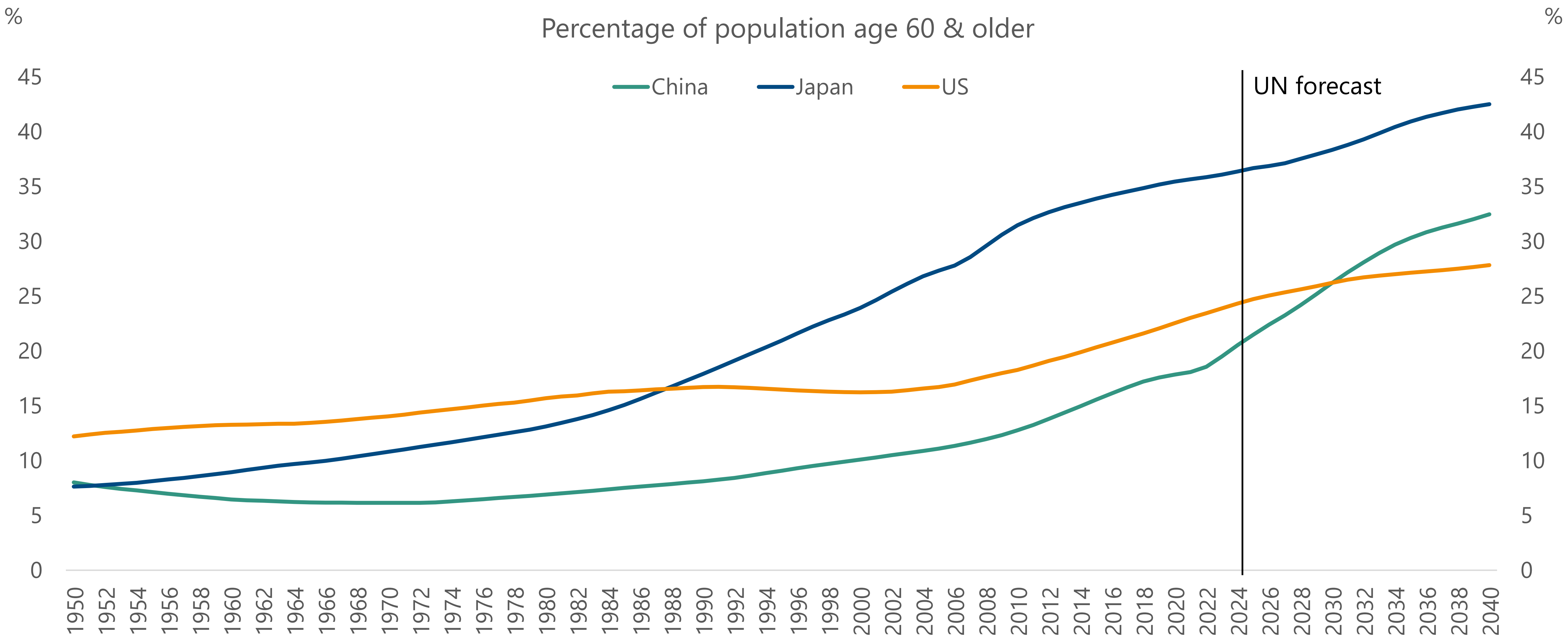
Source: UN, Haver Analytics, Apollo Chief Economist (Old age = 60 years and over; working-age = 15-59 years old)

Population growth slowing



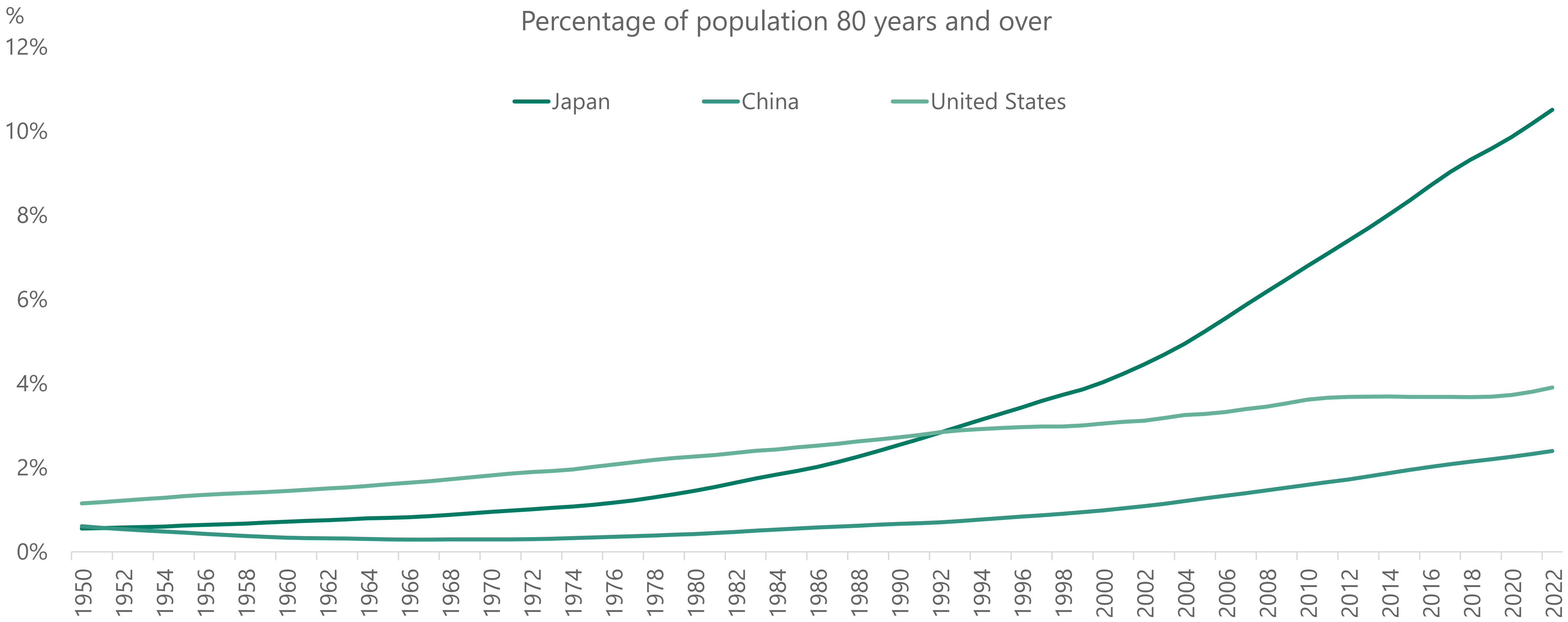
Source: China National Bureau of Statistics, Haver Analytics, Apollo Chief Economist

China aging faster than the US



Source: UN, Haver Analytics, Apollo Chief Economist

China demographics better than Japan’s



Source: UN, Haver Analytics, Apollo Chief Economist

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China: Exports slowing

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

Source: General Administration of Customs, China, Haver Analytics, Apollo Chief Economist

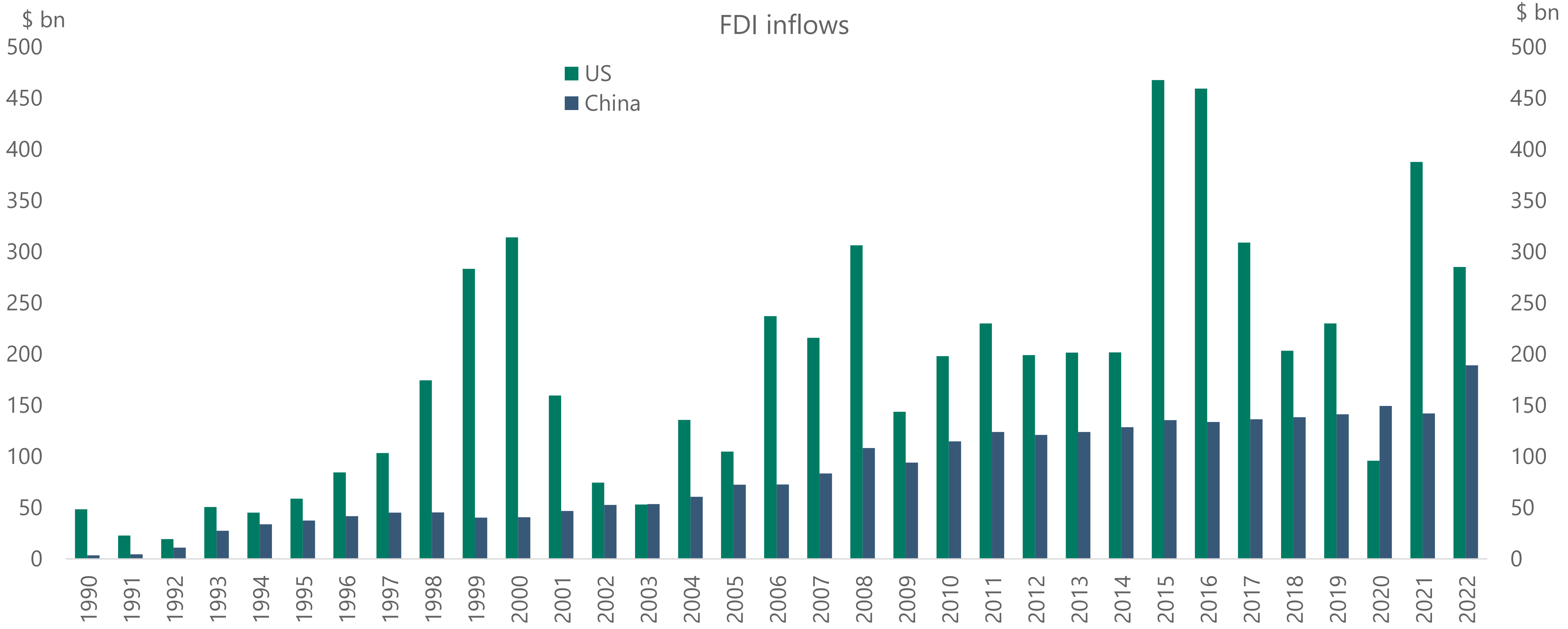
China: Exports shifting away from US and Europe to other emerging markets

Source: Bloomberg, Apollo Chief Economist

US-China trade deficit

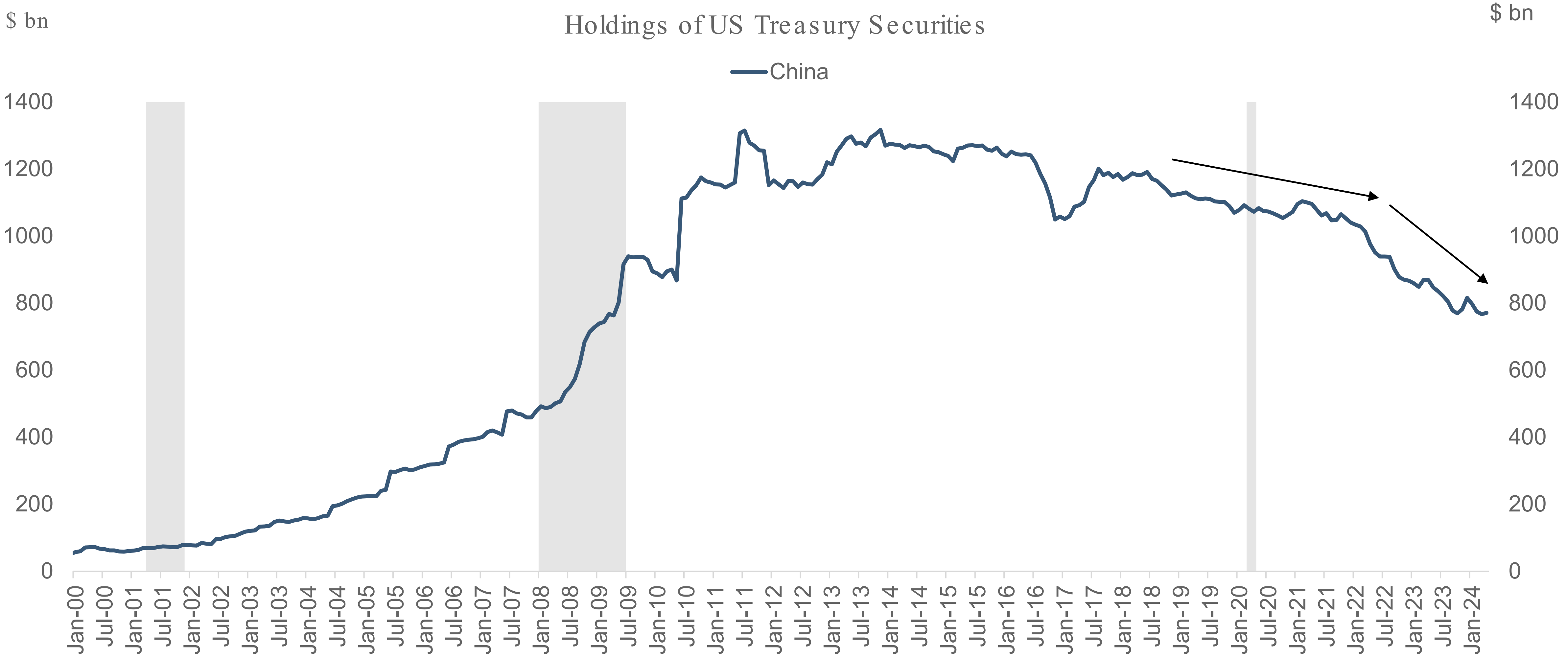
Source: Bloomberg, Apollo Chief Economist.

China and US: Comparing foreign direct investment



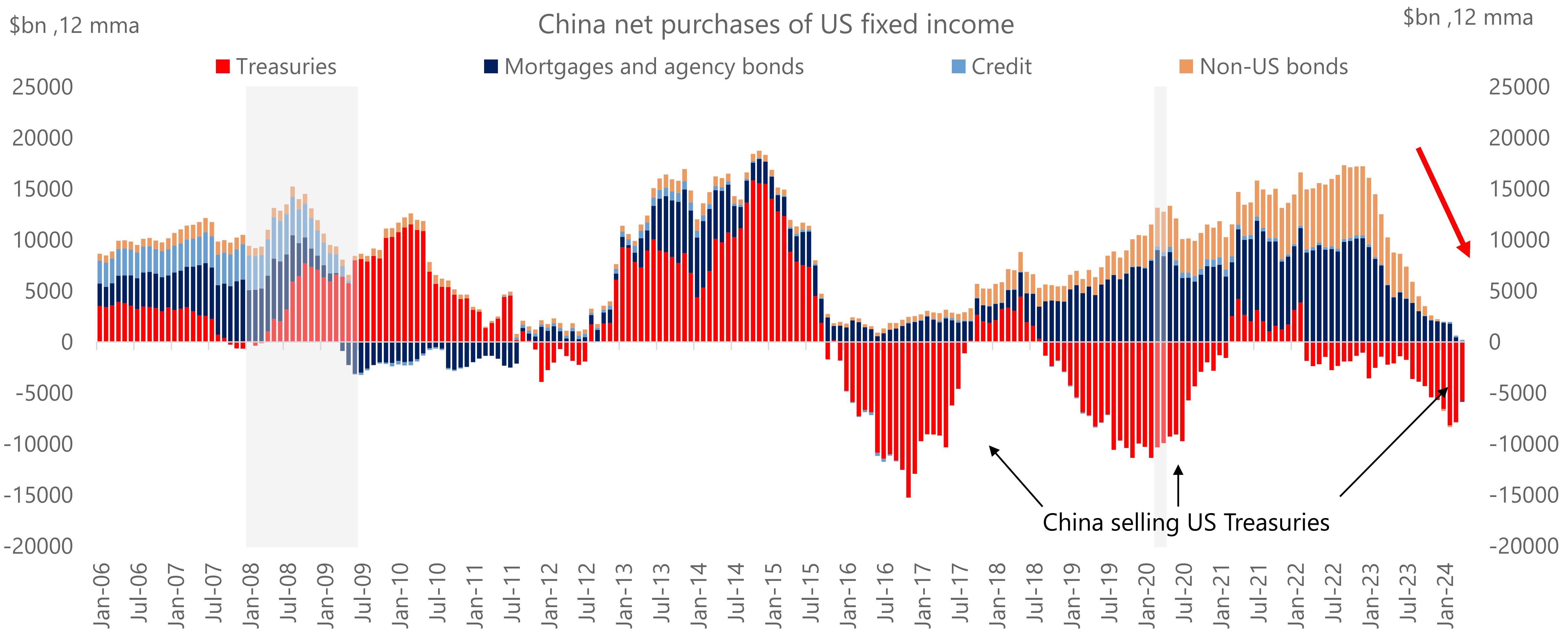
Source: UNCTAD, Apollo Chief Economist (https://unctad.org/topic/investment/world-investment-report)

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



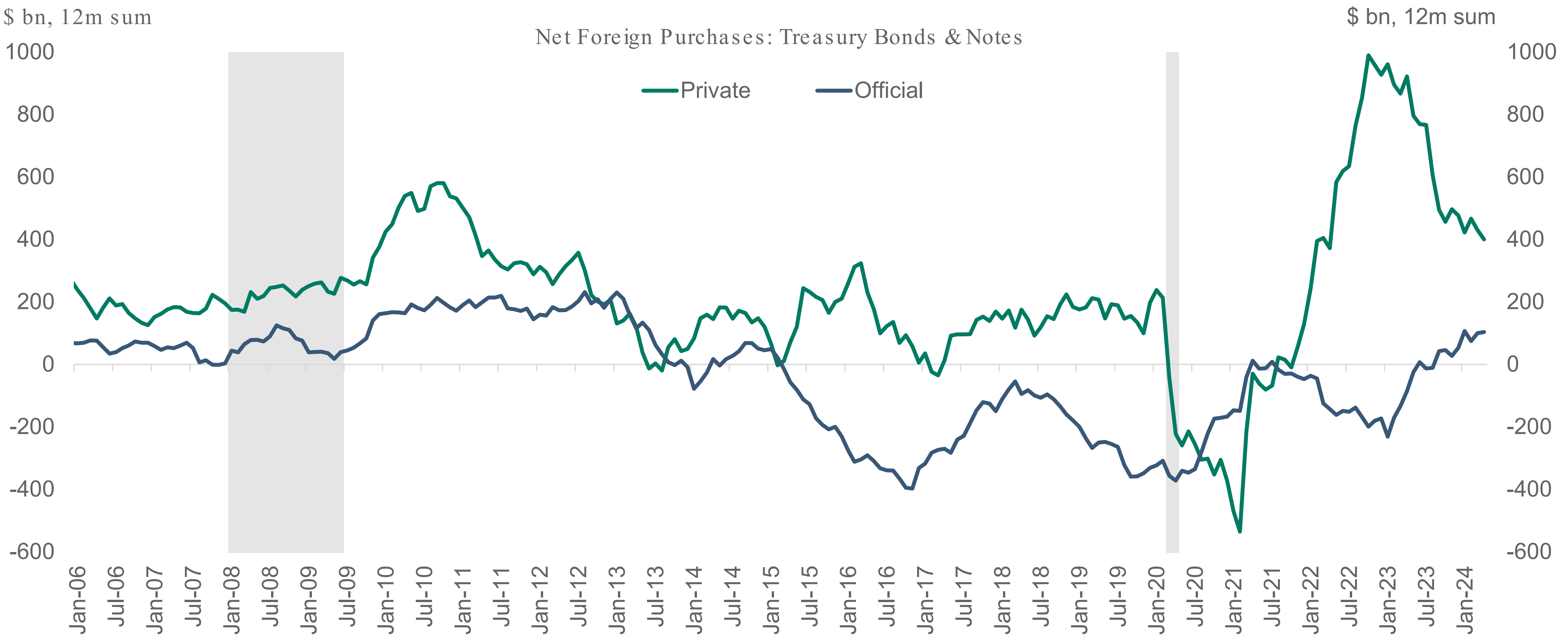
Source: Bloomberg, Apollo Chief Economist

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



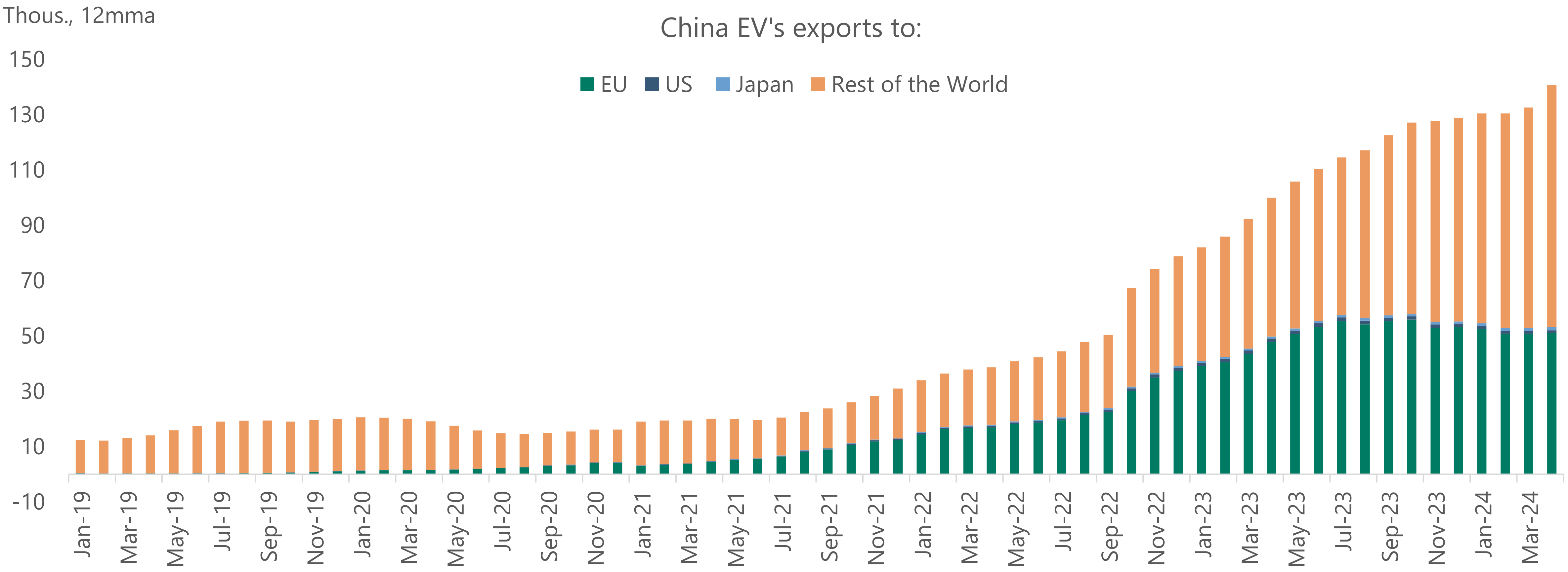
Source: Treasury, Haver Analytics, Apollo Chief Economist

Foreign private sector is slowing its purchases of US Treasuries



Source: Treasury, Haver Analytics, Apollo Chief Economist

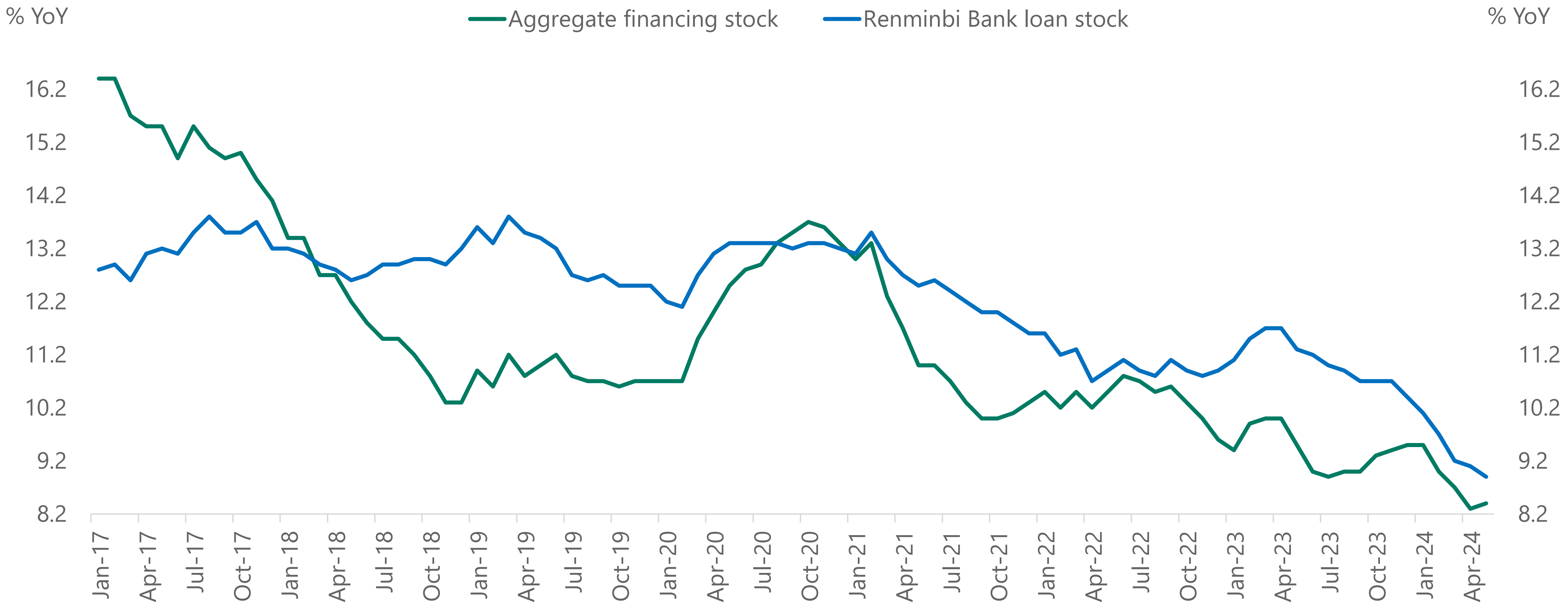
Europe is now the main market for electric vehicle exports from China



Source: China customs data, Bloomberg, Apollo Chief Economist

China: Credit growth and debt levels

China credit growth

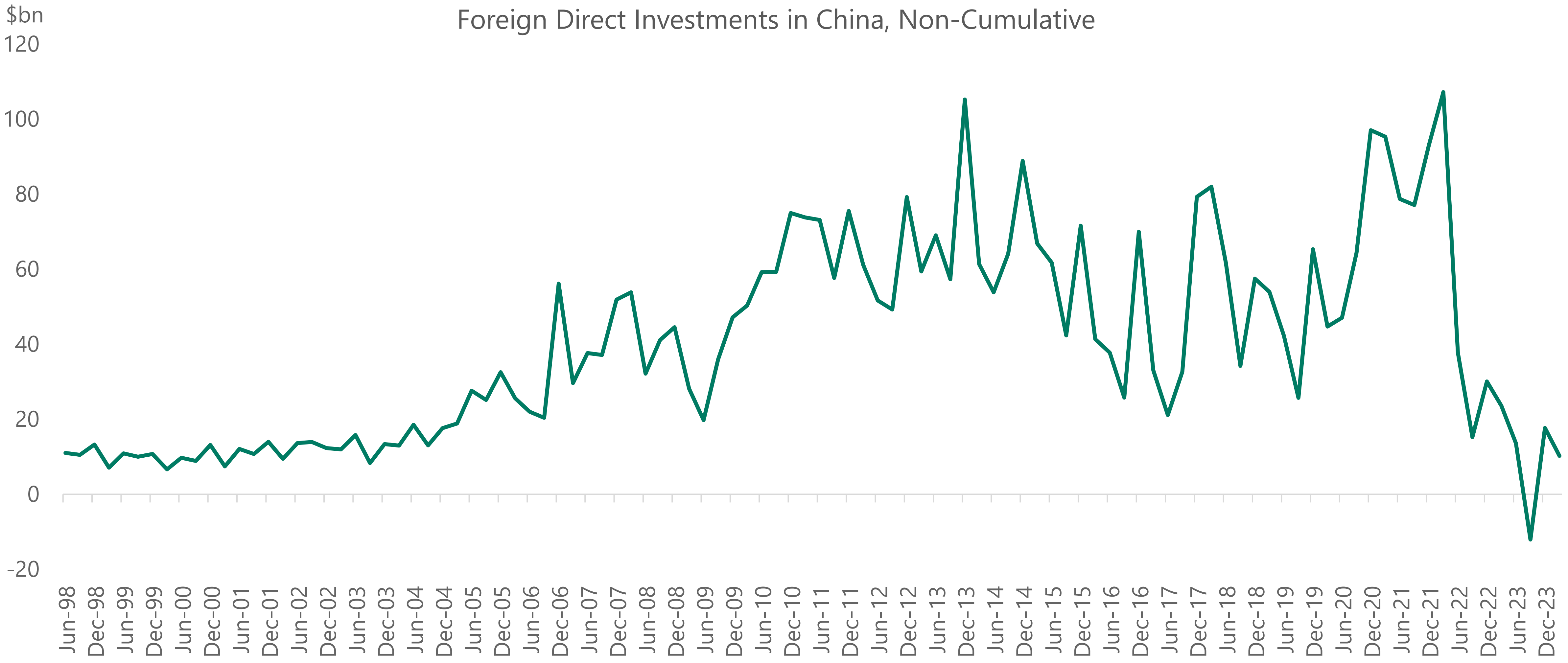


Source: PBoC, Bloomberg, Apollo Chief Economist

China: Outstanding aggregate social financing

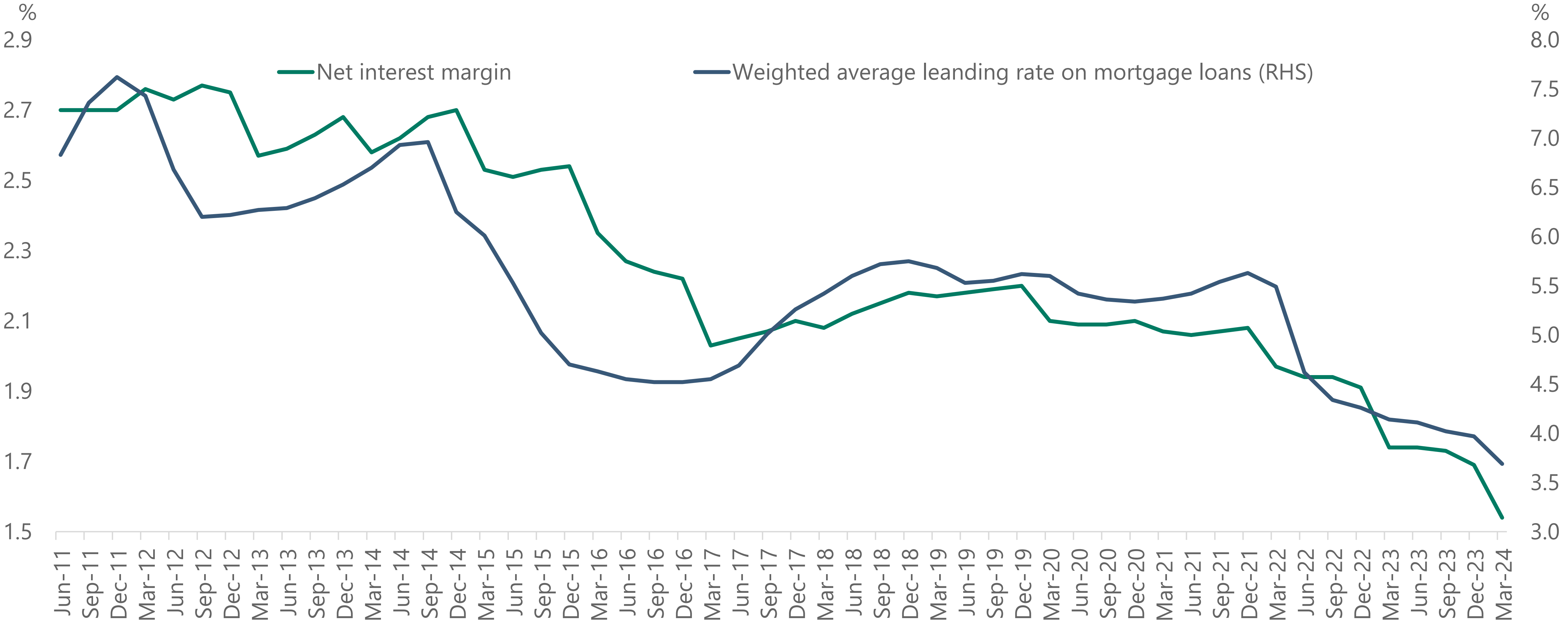
Source: PBoC, Bloomberg, Apollo Chief Economist

China FDI falling fast



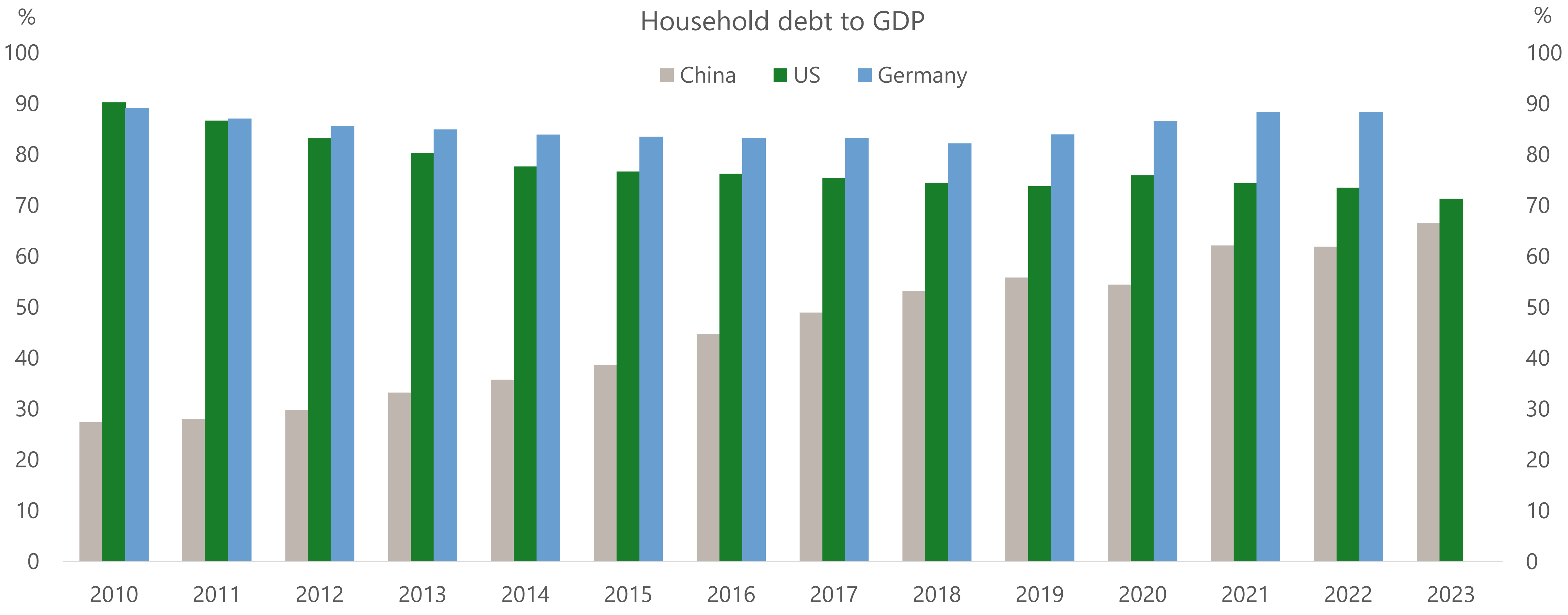
Source: Bloomberg, Apollo Chief Economist

Falling margins in China’s banking sector



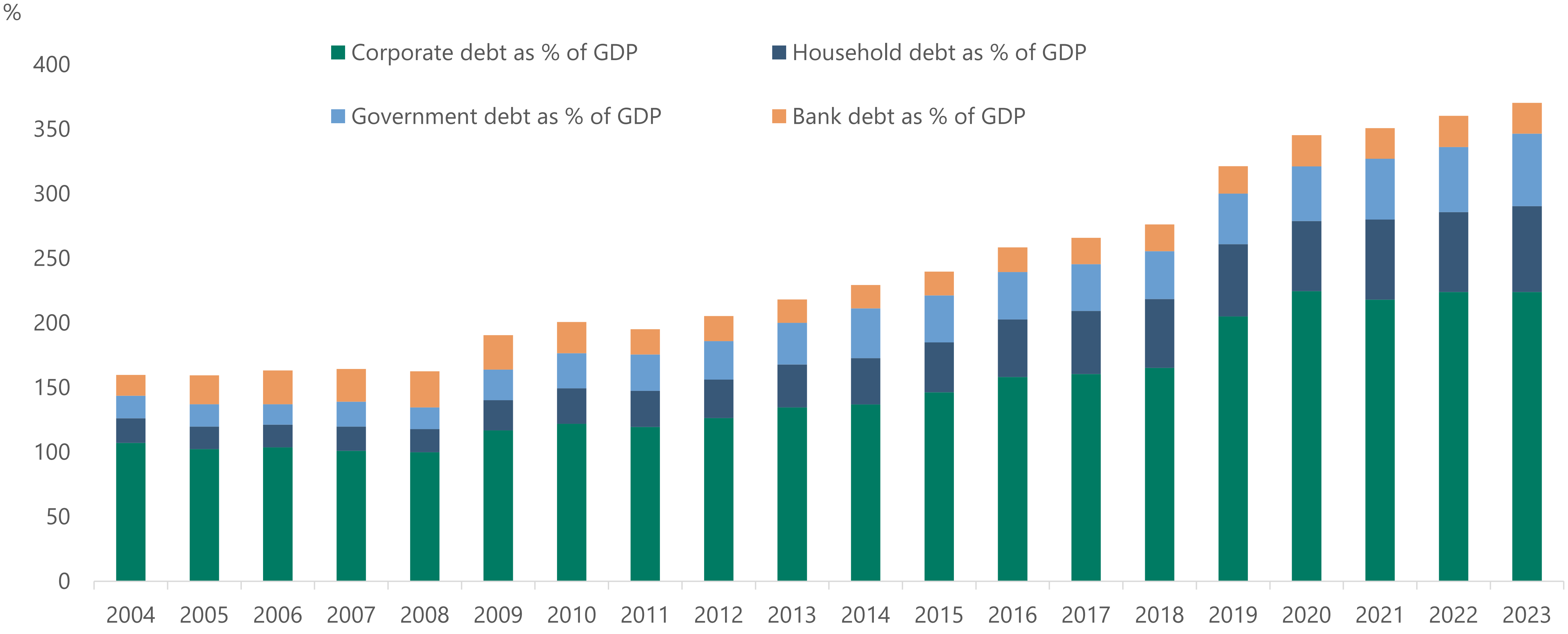
Source: Bloomberg, Apollo Chief Economist

Household debt to GDP has increased steadily in China



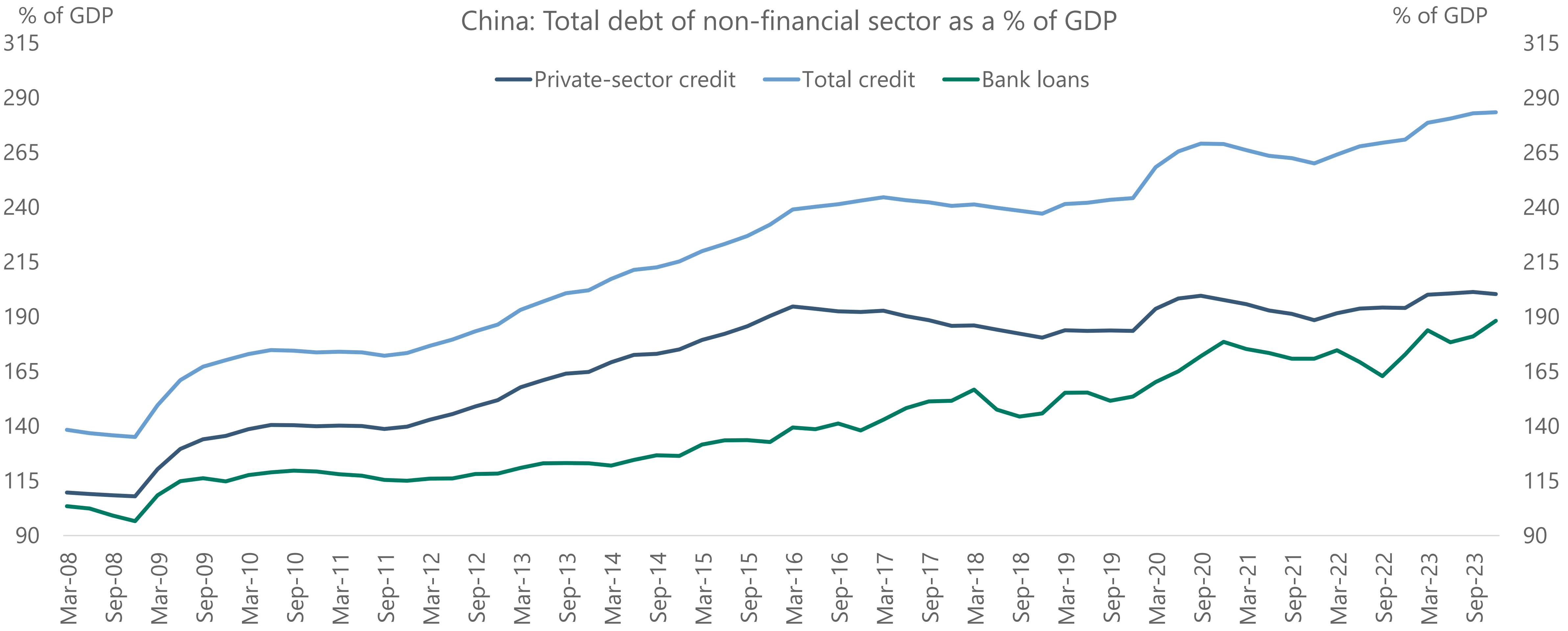
Source: Bloomberg, Apollo Chief Economist

China: High debt levels



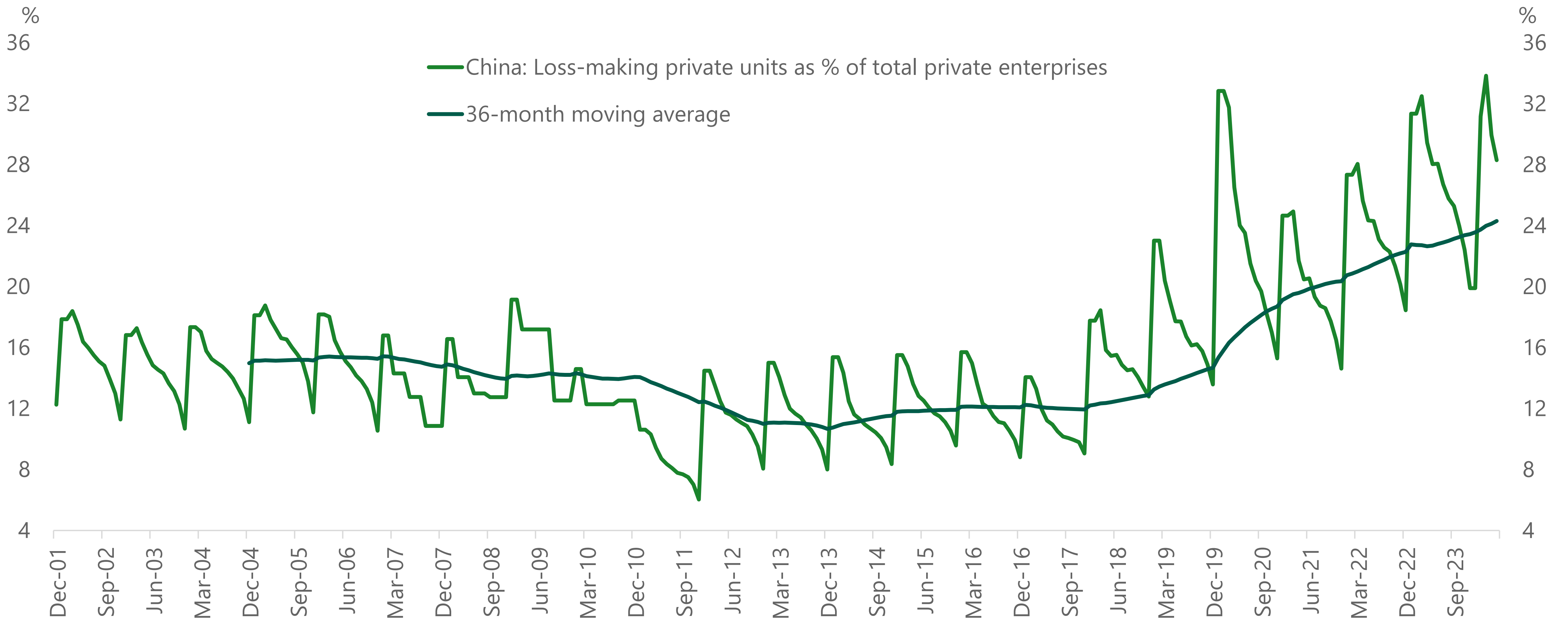
Source: Bloomberg, Apollo Chief Economist

China: Debt levels have increased in the private sector



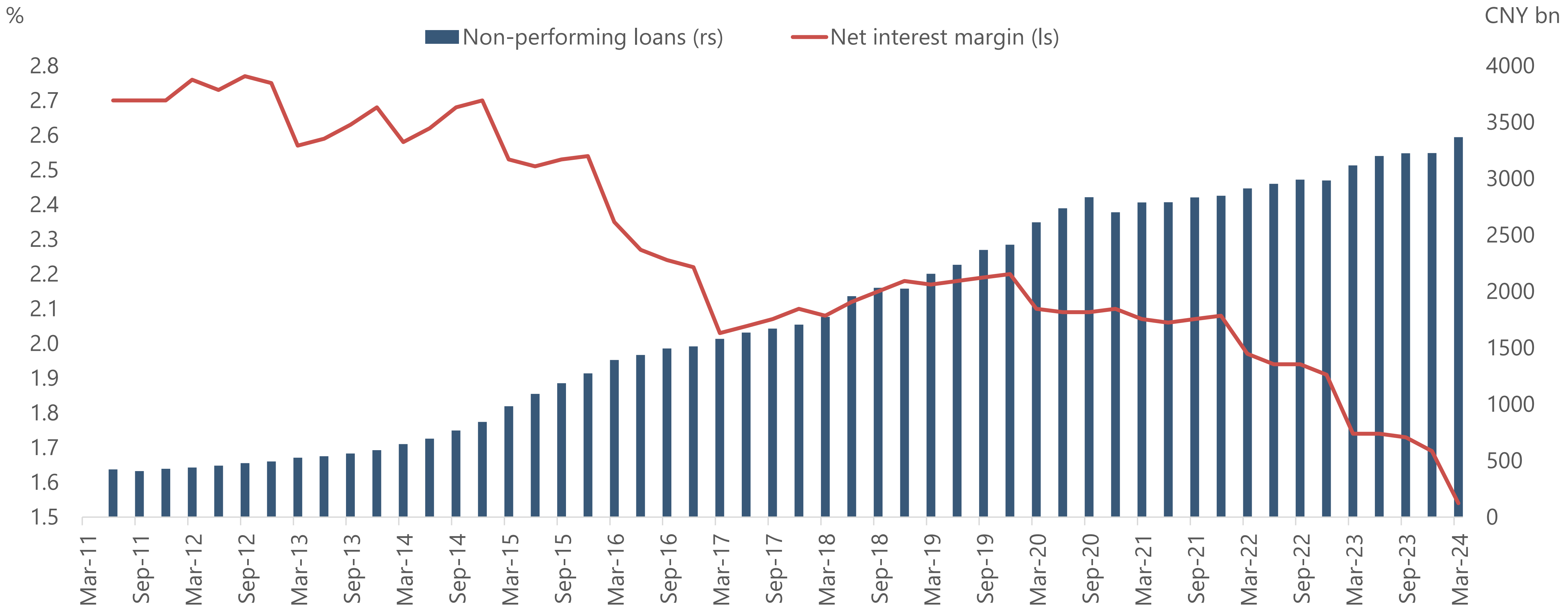
Source: BIS, Bloomberg, Apollo Chief Economist

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



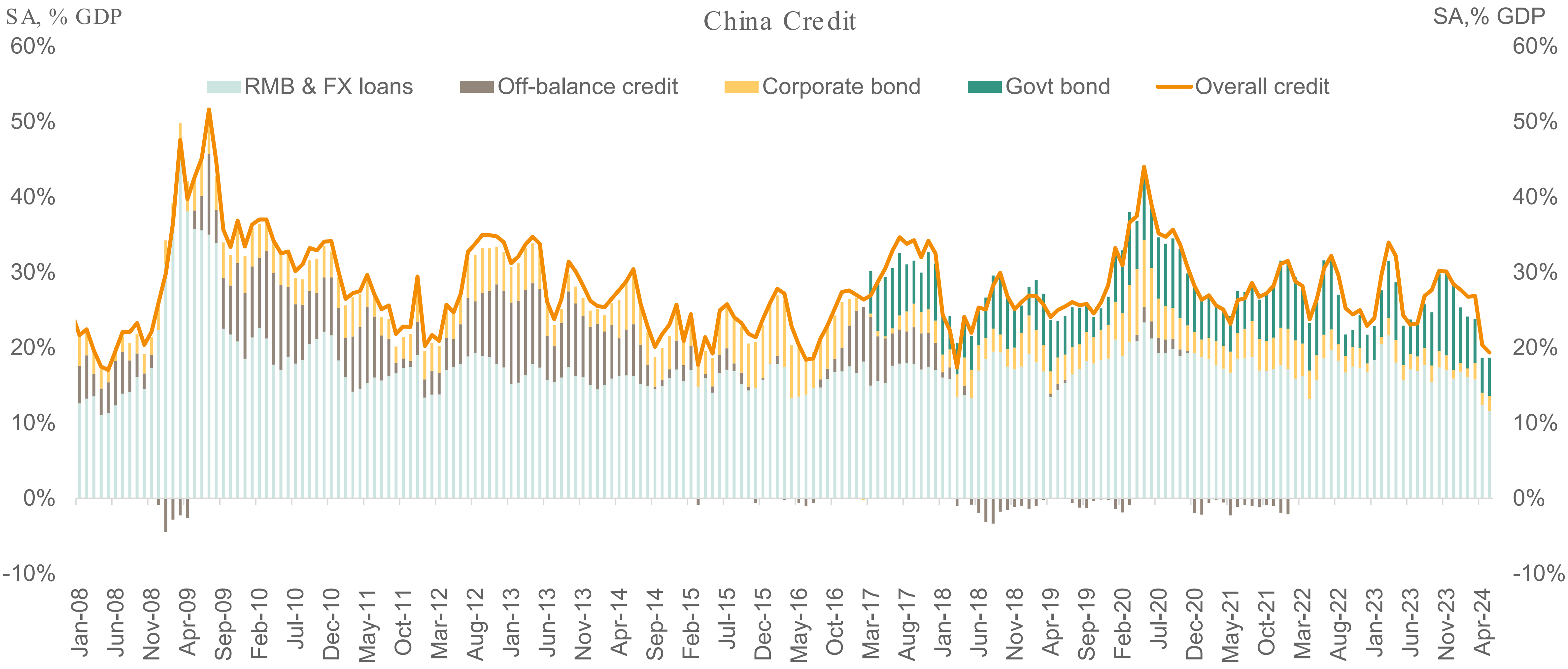
Source: Bloomberg, Apollo Chief Economist (Note: CNBUPRTD Index, CNLBPRTD Index)

China banks: NPL has been rising



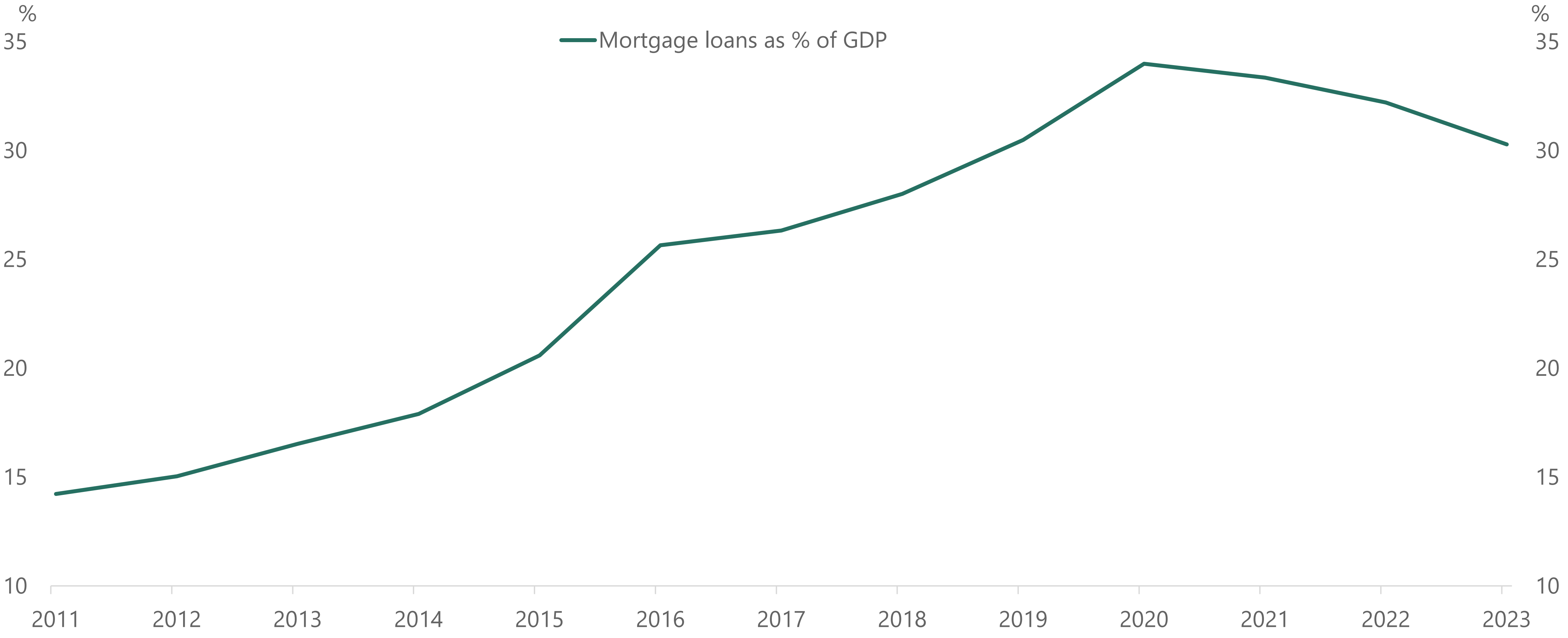
Source: China Banking Regulatory Commission, Bloomberg, Apollo Chief Economist

China credit growth



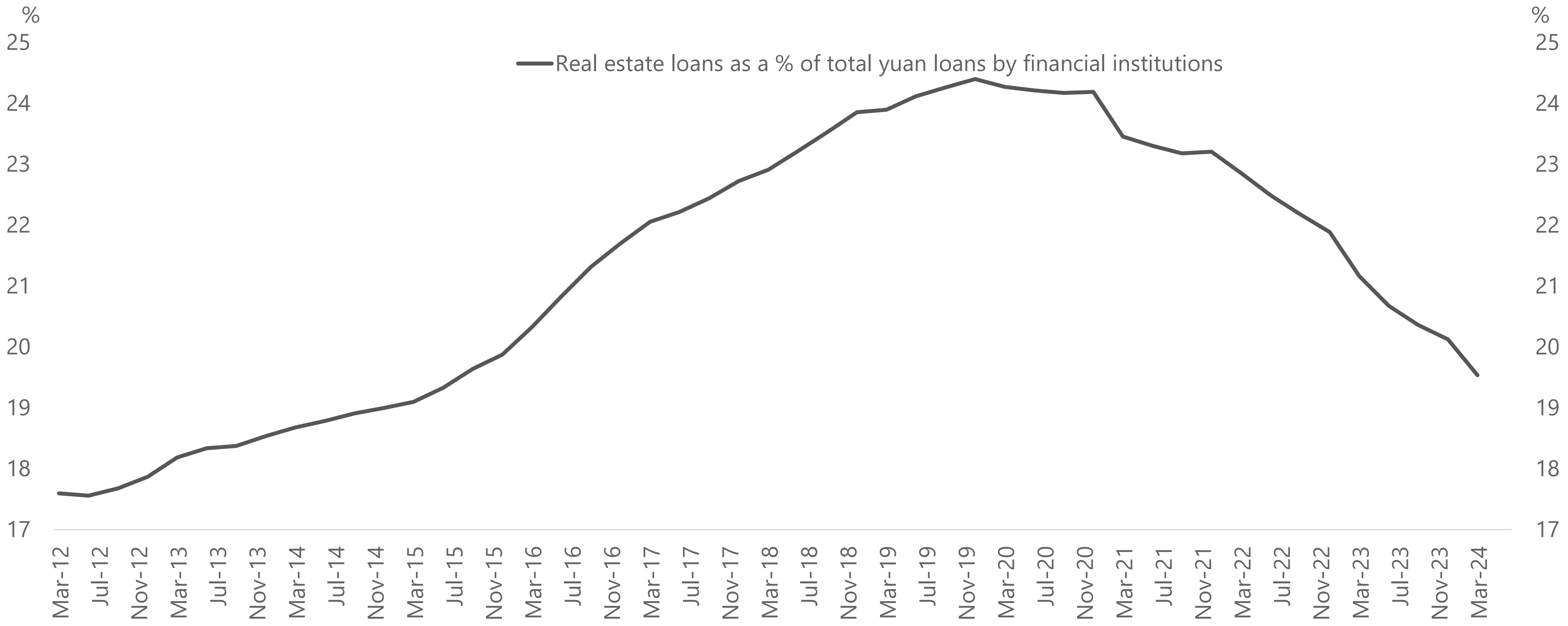
Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

China’s mortgage liabilities as a share of GDP



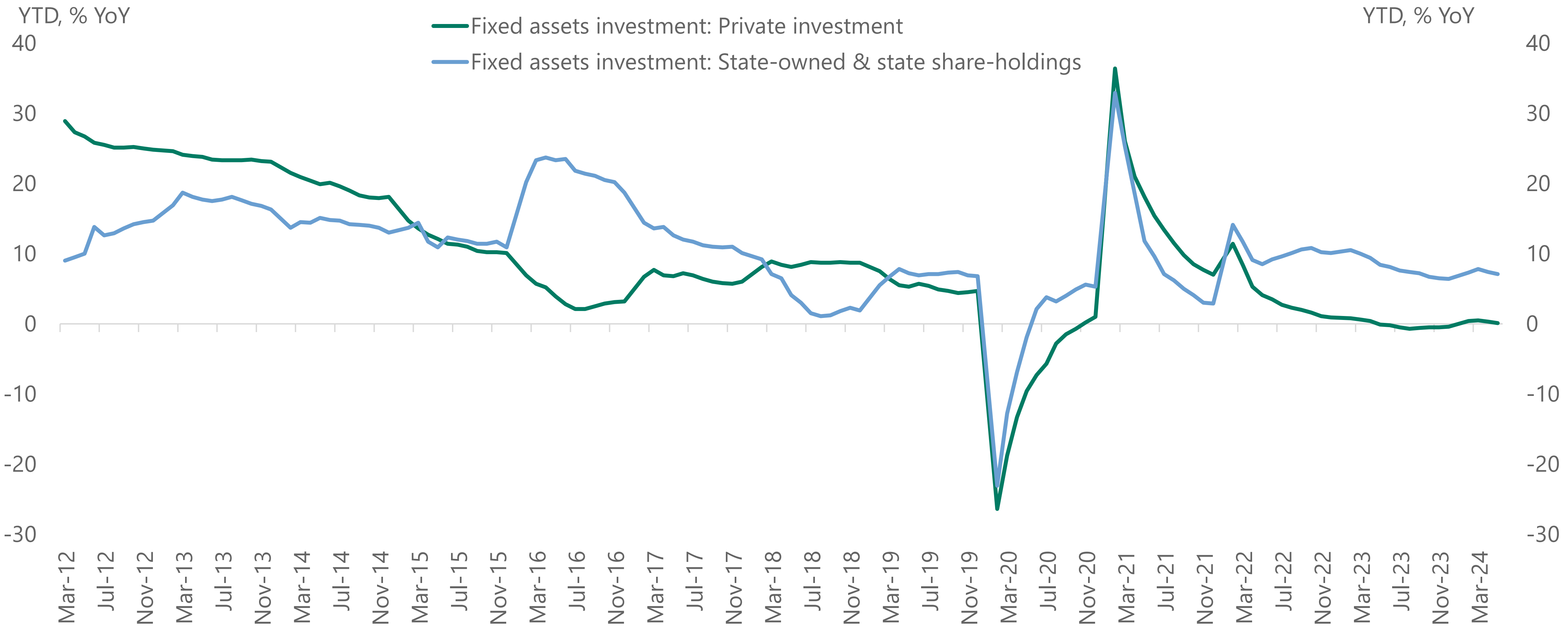
Source: PBoC, Bloomberg, Apollo Chief Economist (Q2 2023)

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



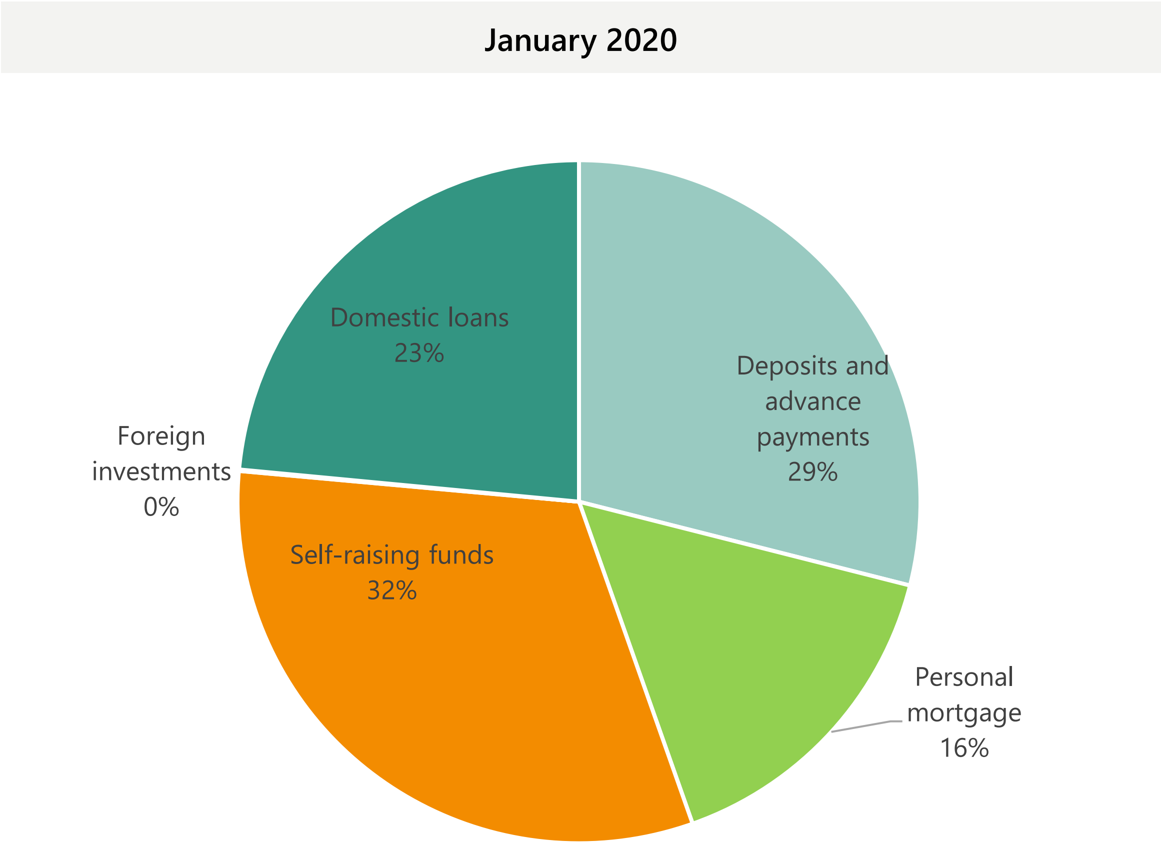
Source: Bloomberg, Apollo Chief Economist

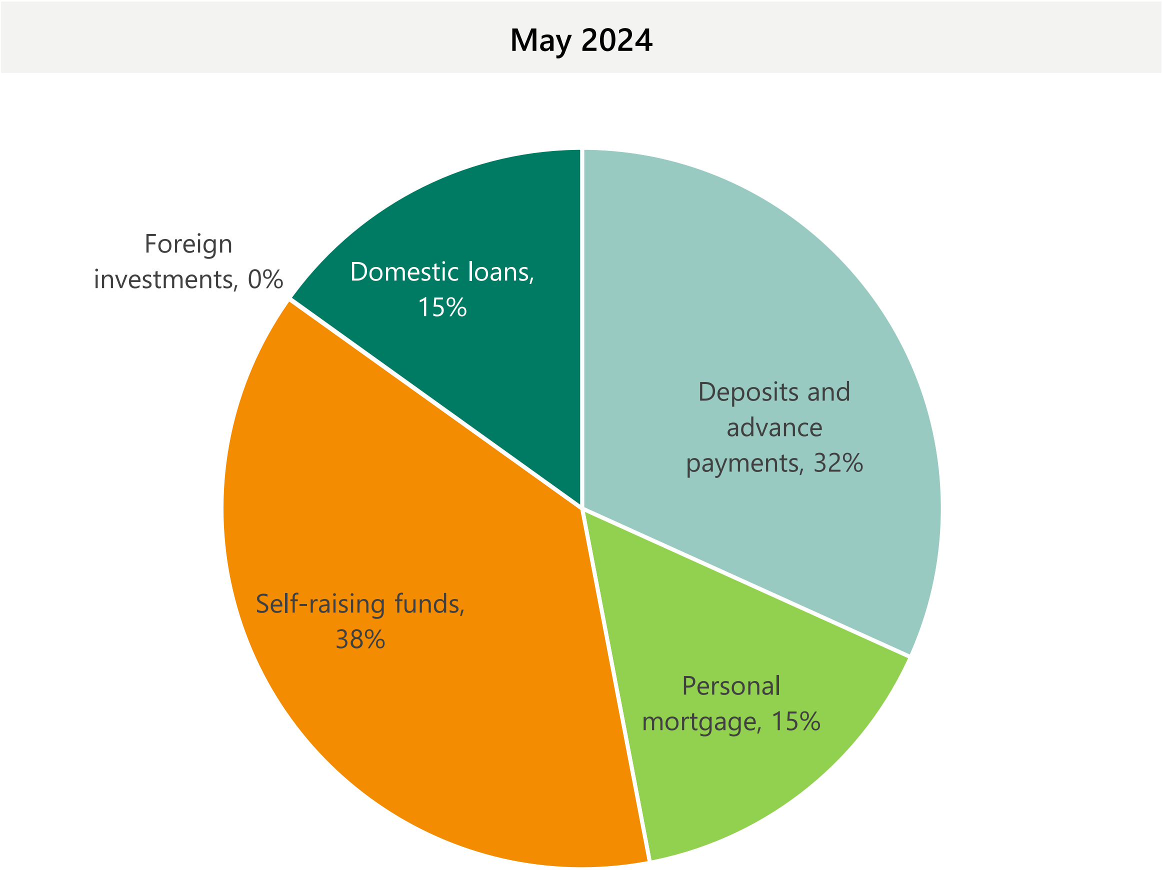
China: Private investment growth is slowing



Source: National Bureau of Statistics of China, Bloomberg, Apollo Chief Economist

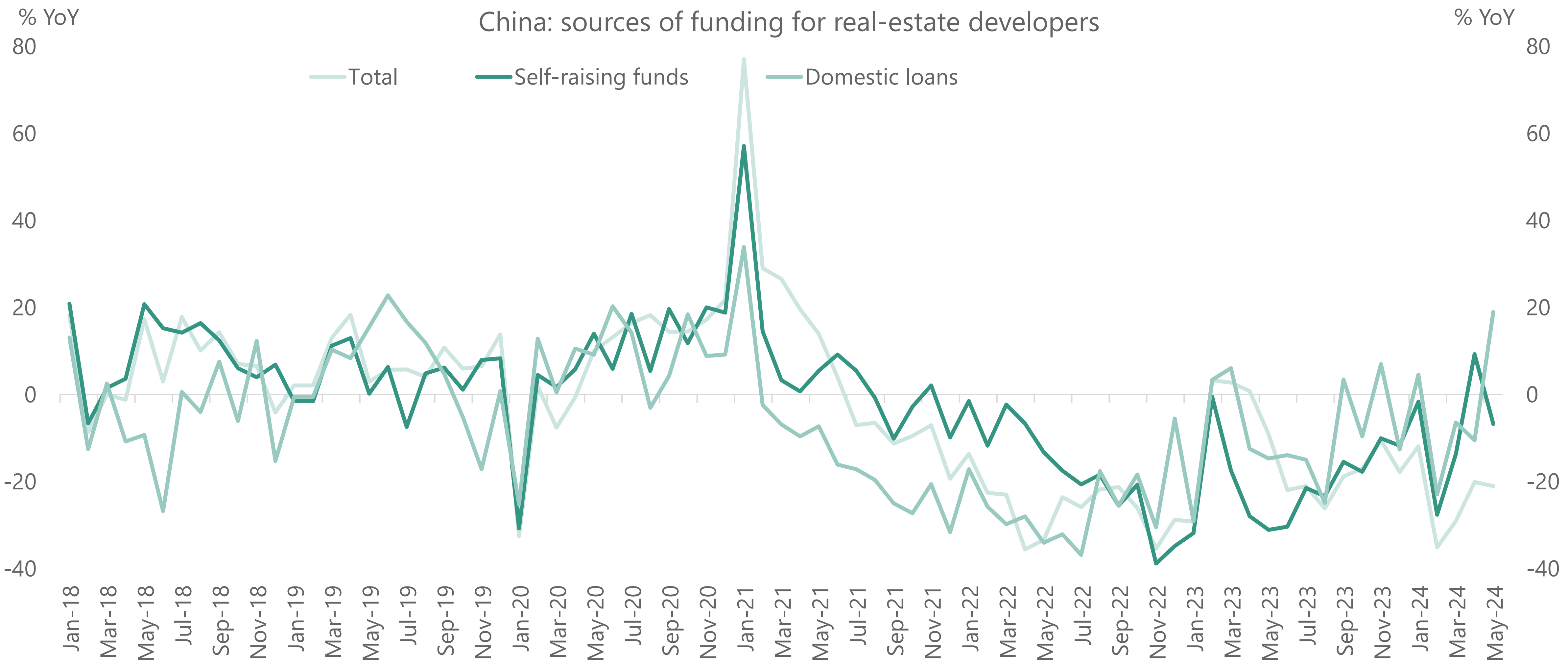
China: Sources of funds for real estate developers





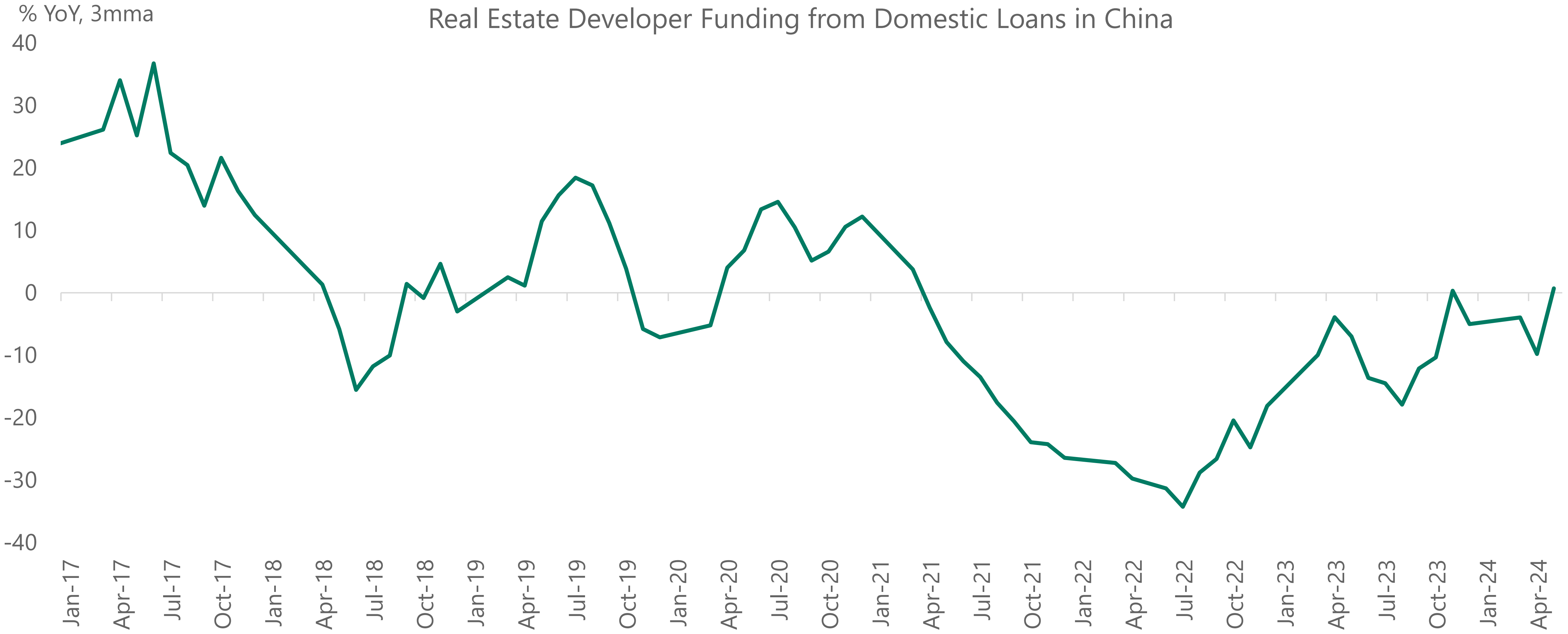
Sources: NBS, Haver, Apollo Chief Economist

China: All types of funding improving



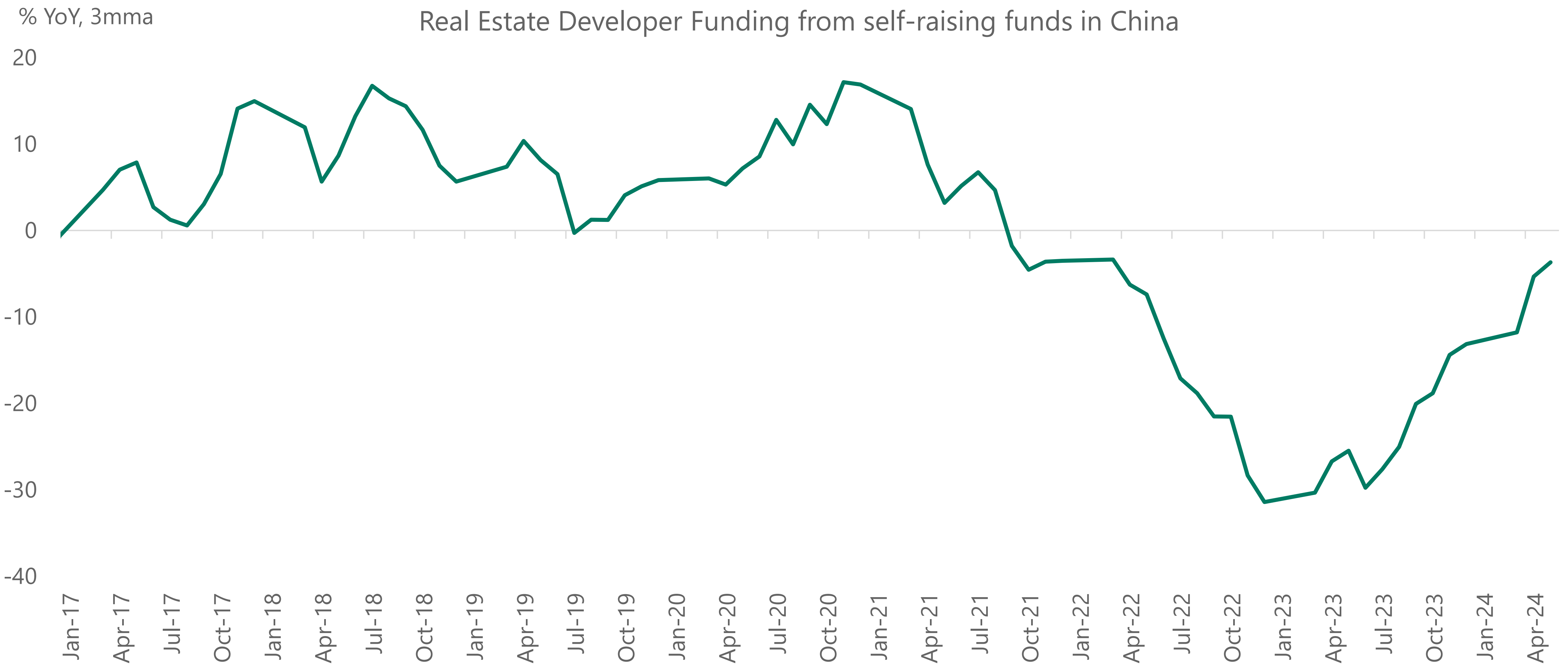
Sources: China National Bureau of Statistics, NBS, Haver, Apollo Chief Economist

China: Domestic funding conditions



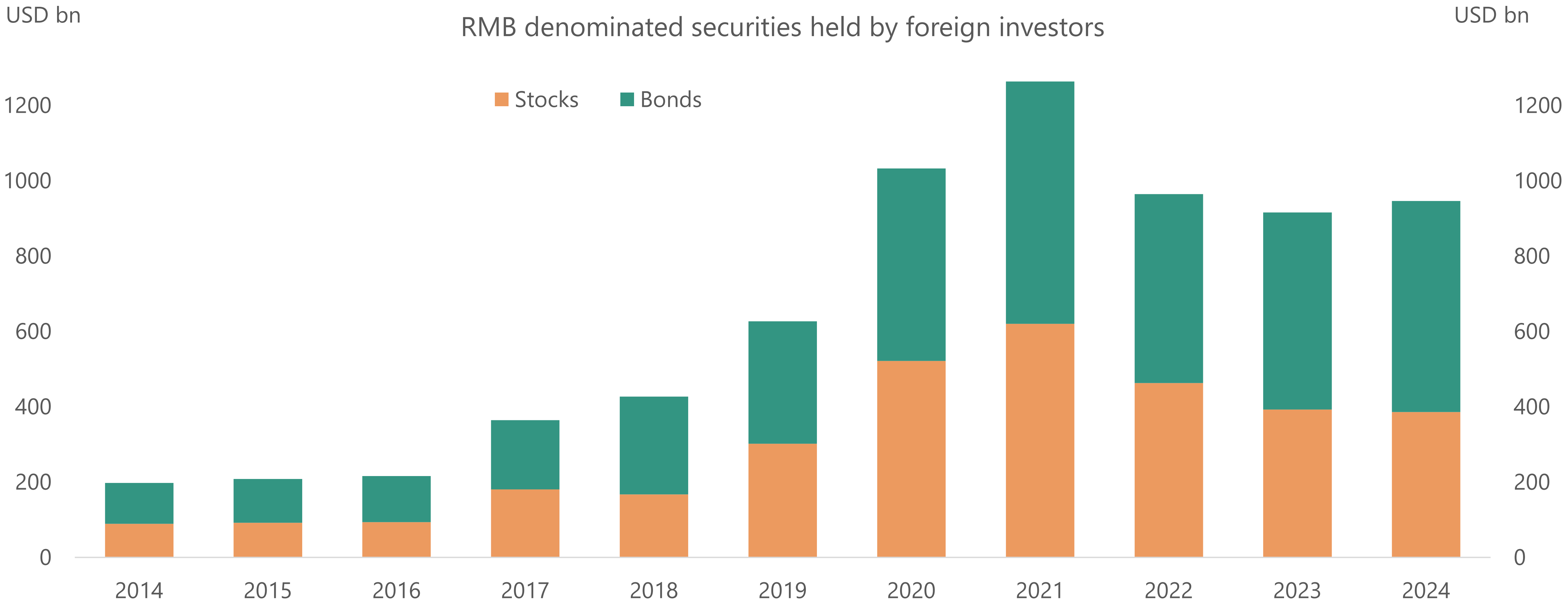
Source: Bloomberg, Apollo Chief Economist.

China: Self-financing for real estate developers



Source: Bloomberg, Apollo Chief Economist.

Global holdings of Chinese stocks and bonds



Source: The PBoC, Bloomberg, Apollo Chief Economist

China: Credit markets and stock markets

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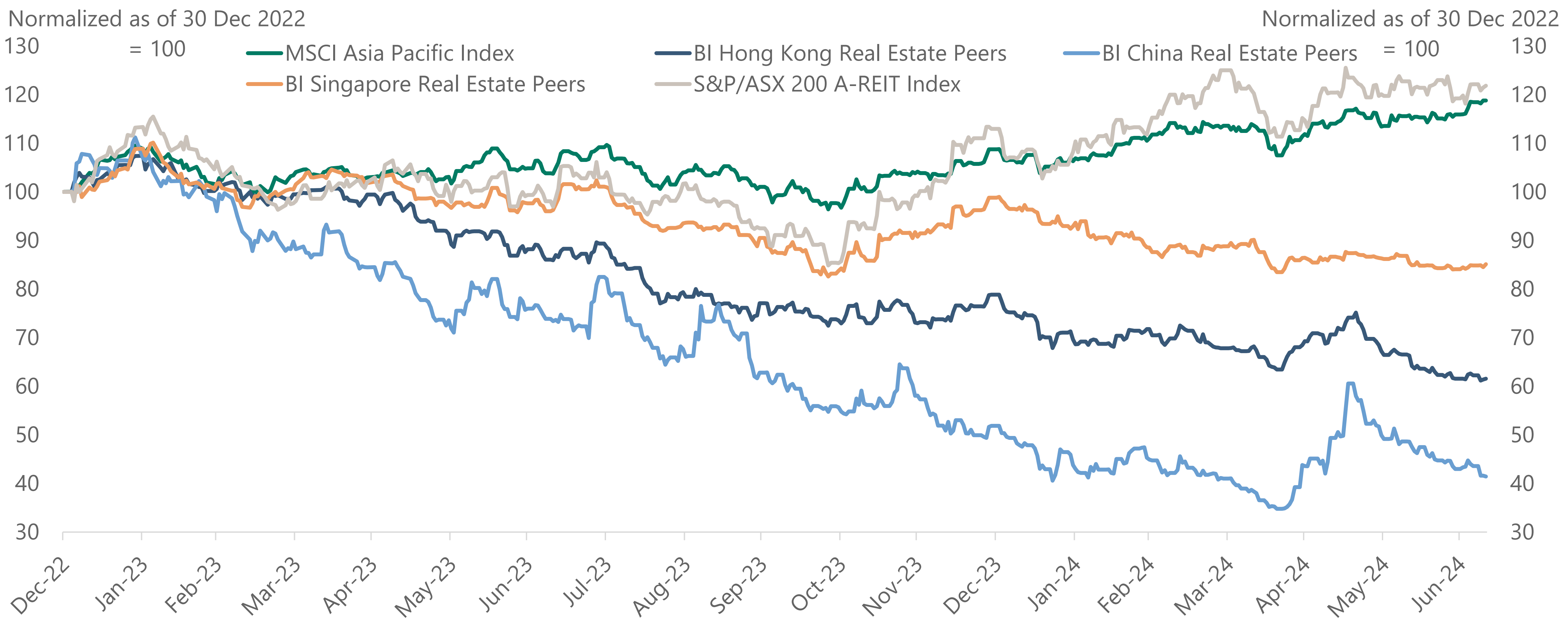
China real estate sector performance compared to other Asian countries

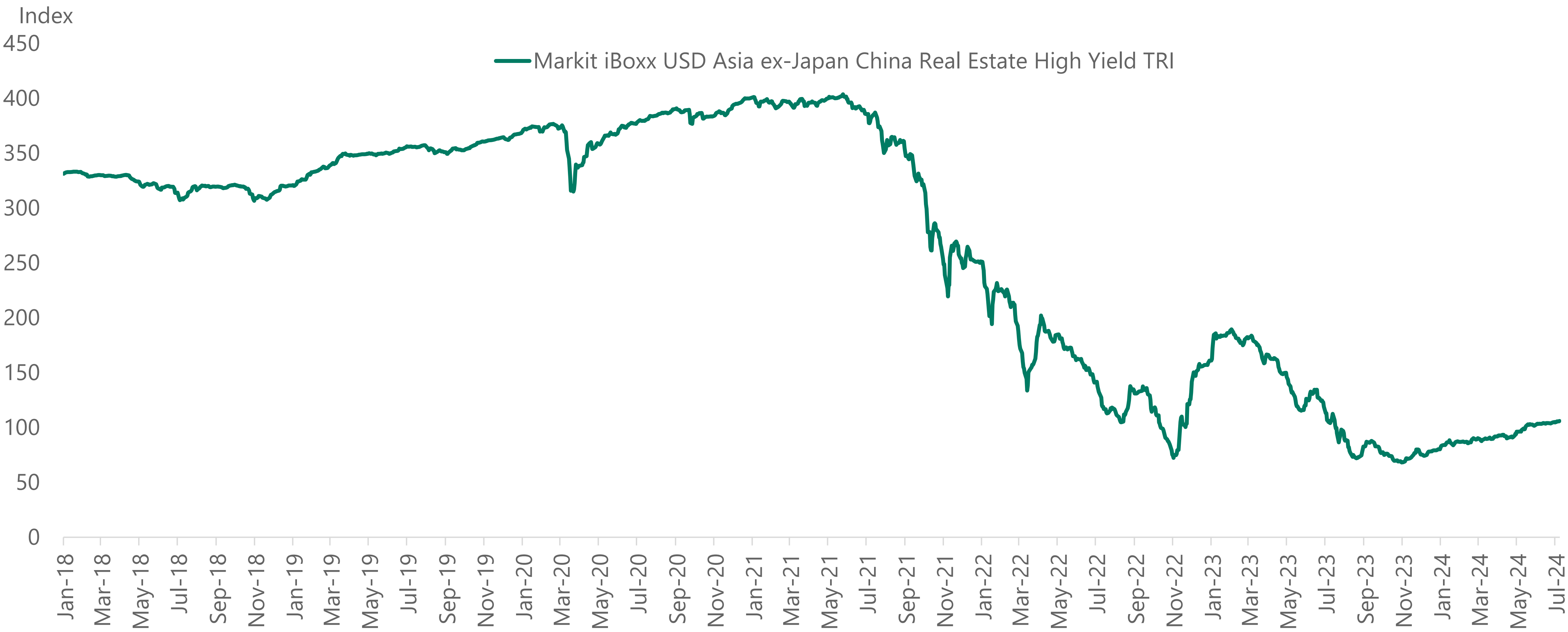


Source: Bloomberg, Apollo Chief Economist.

China IG and HY credit: Developers have been hit hard

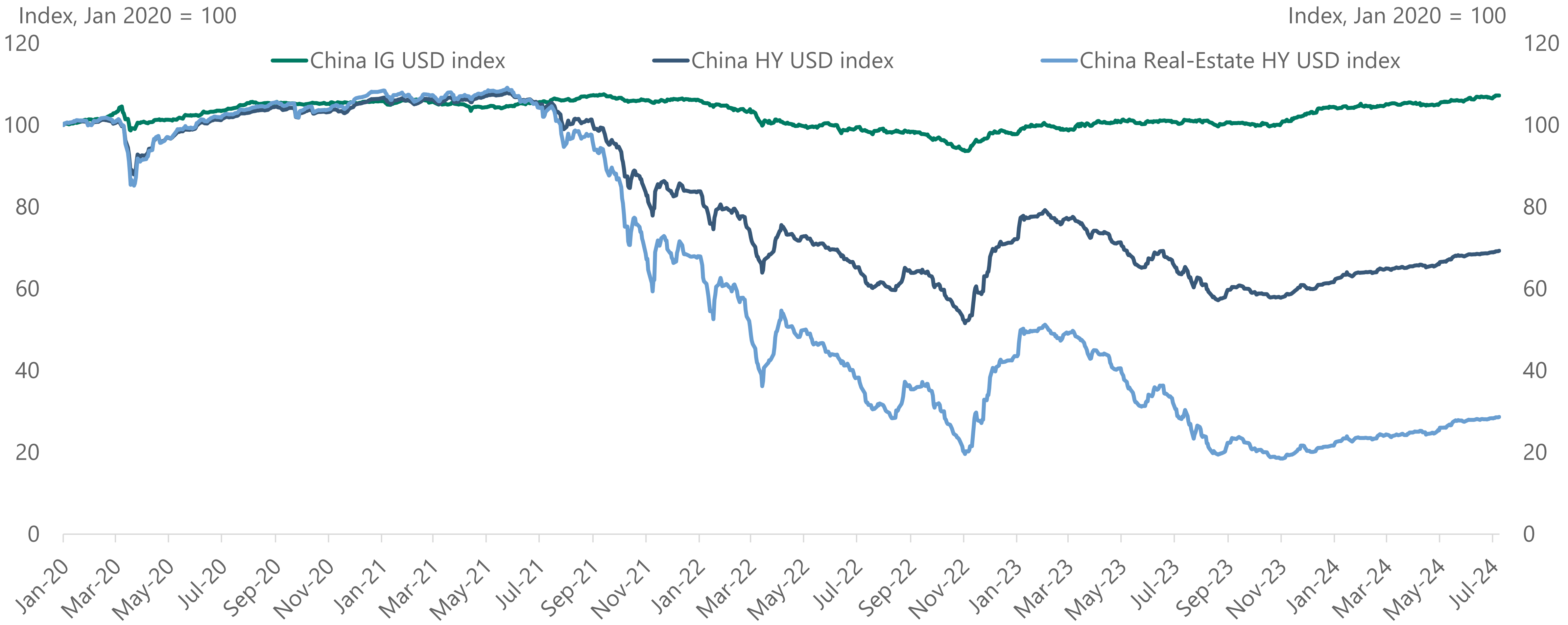
Source: Bloomberg, Apollo Chief Economist.

China's real estate sector under pressure



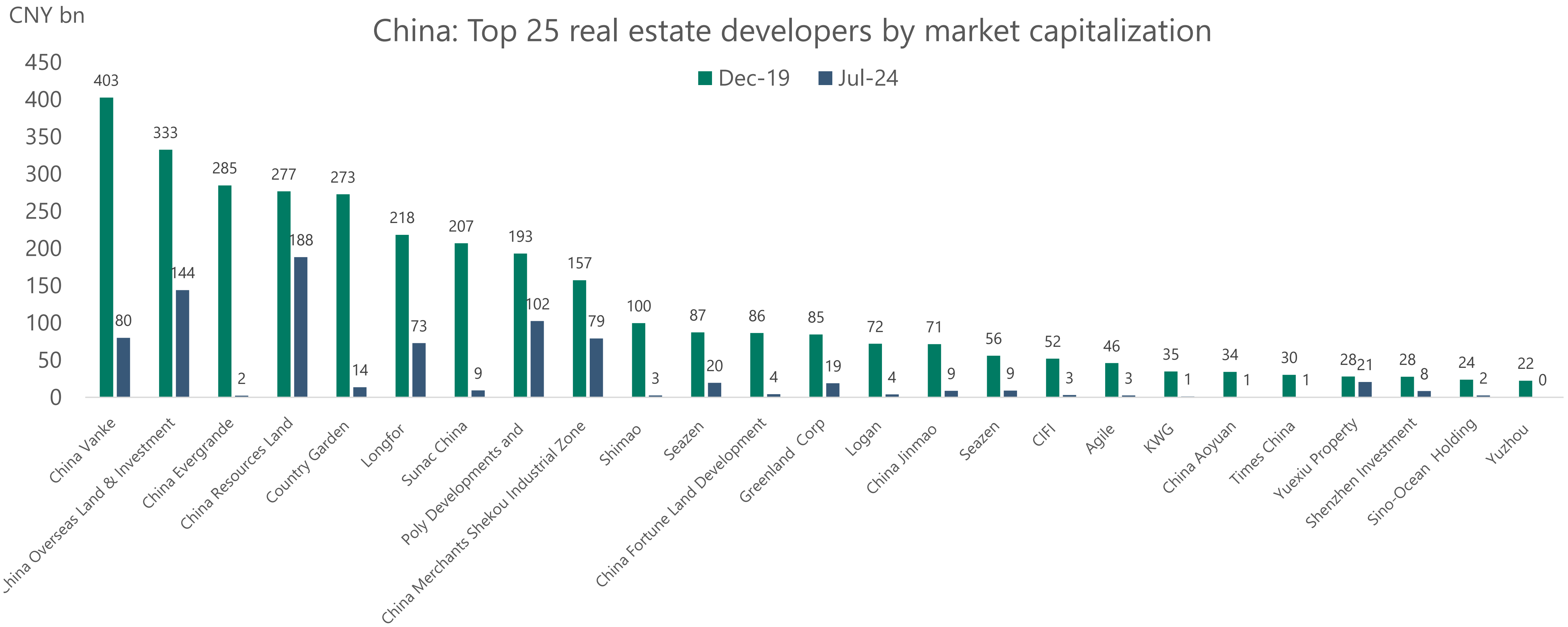
Source: Bloomberg, Apollo Chief Economist.

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



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: Stock prices of real estate developers

Source: Bloomberg, Apollo Chief Economist.

China: Other indicators

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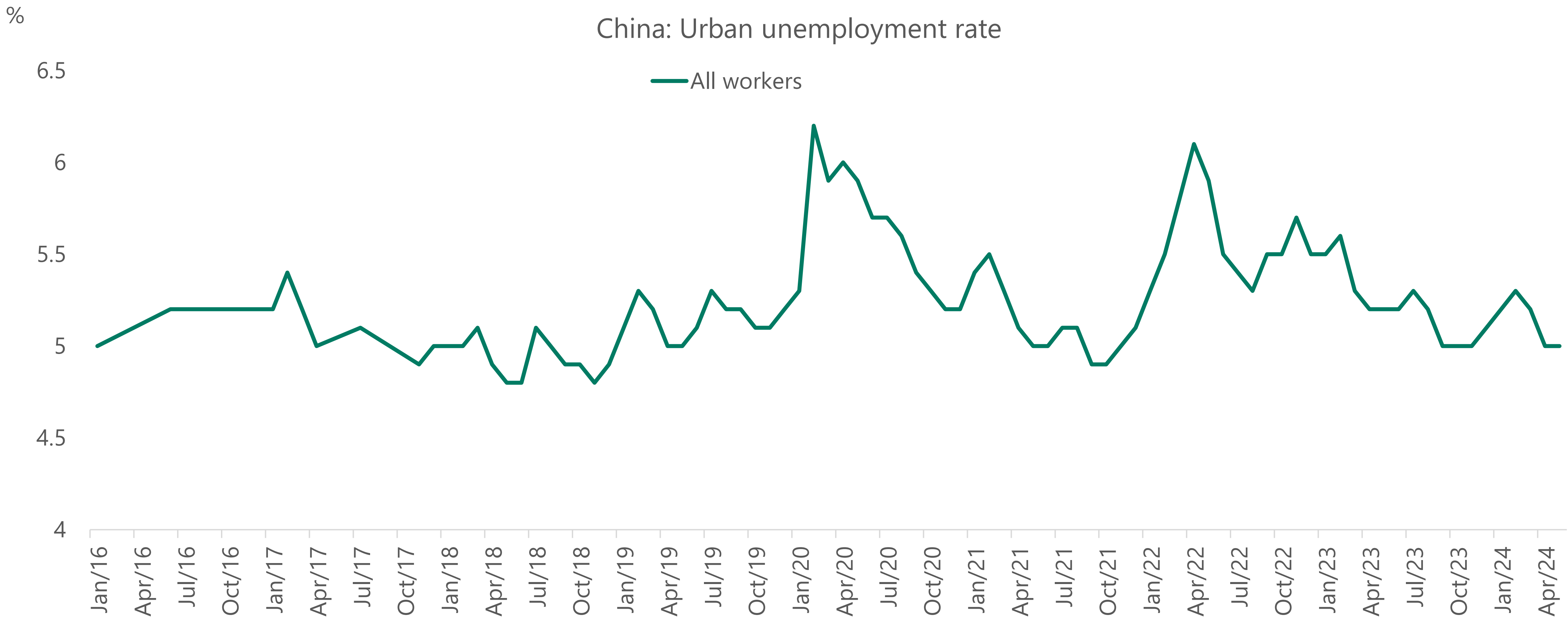
China economic indicators: Recent decline

Source: Factset, National Bureau of Statistics of China. Note: The count includes number of indicators published annually and maximum number of quarterly and monthly indicators in the year

China: Unemployment rate is stable

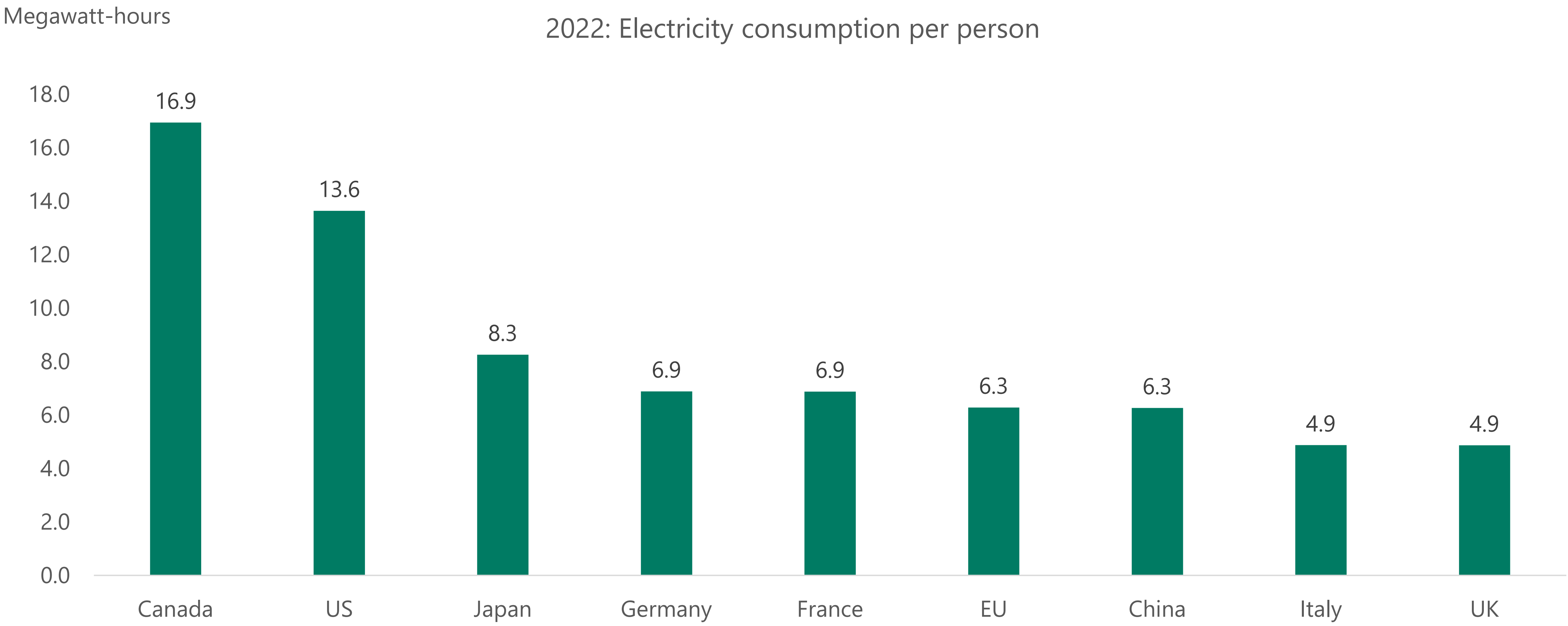


Source: NBS, Bloomberg, Apollo Chief Economist

China: Consumer confidence is down

Source: NBS, Haver, Apollo Chief Economist

China's per capita electricity use is higher than in Italy and UK



Source: Statistical review of world energy, World Bank, Apollo Chief Economist

Air quality levels back to 2021

Source: Bloomberg, Apollo Chief Economist. Note: Index data is 200 days moving average.

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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.