

APOLLO

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

Torsten Slok, Rajvi Shah, and Shruti Galwankar
tslok@apollo.com

Apollo Global Management

June 2025

Unless otherwise noted, information as of June 2025

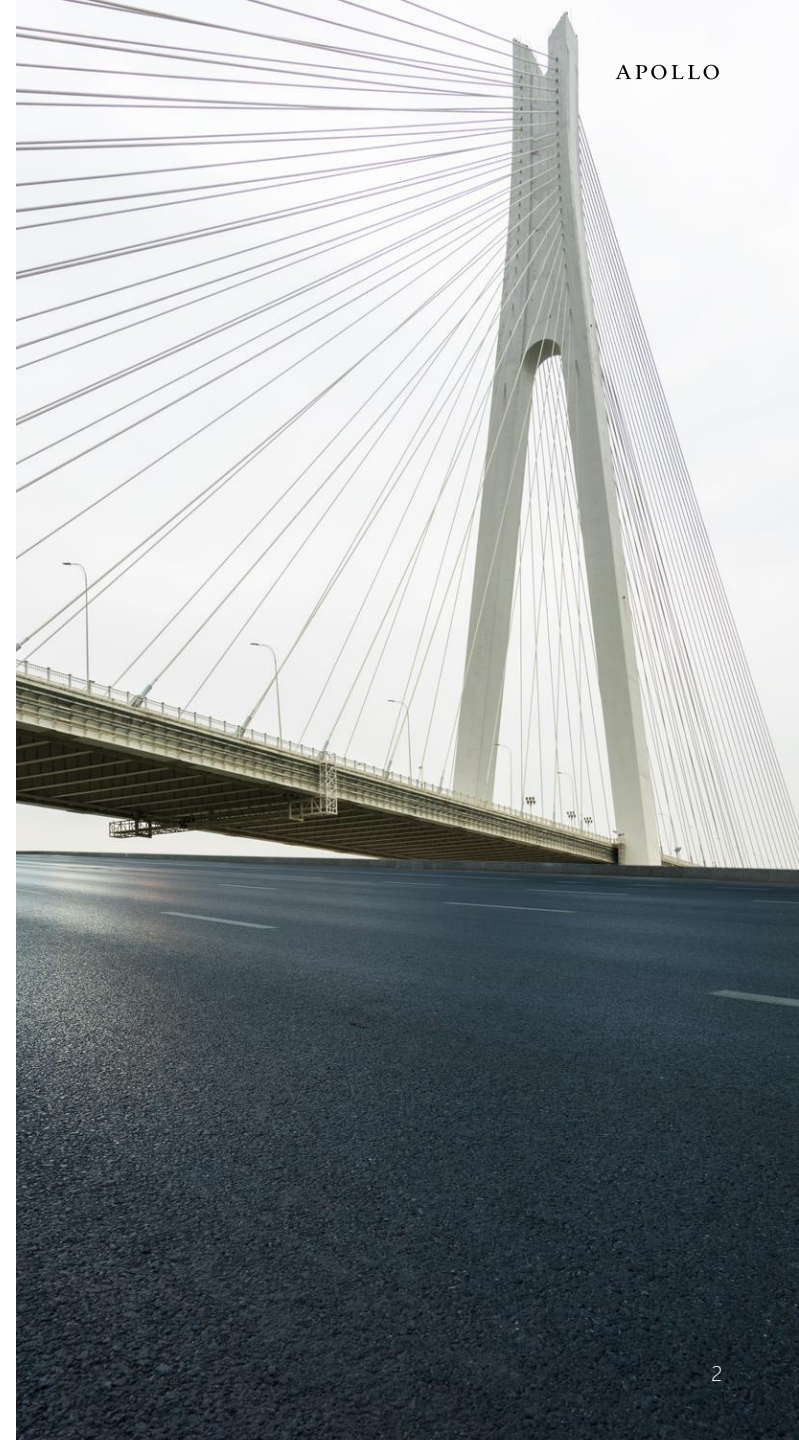
Proprietary - Not for distribution, in whole or in part, without the express written consent of Apollo Global Management, Inc.

Legal Disclaimer

Unless otherwise noted, information included herein is presented as of the dates indicated. Apollo Global Management, Inc. (together with its subsidiaries, "Apollo") makes no representation or warranty, expressed or implied, with respect to the accuracy, reasonableness, or completeness of any of the information contained herein, including, but not limited to, information obtained from third parties. Opinions, estimates and projections constitute the current judgment of the author as of the date indicated. They do not necessarily reflect the views and opinions of Apollo and are subject to change at any time without notice. Apollo does not have any responsibility to update the information to account for such changes. Hyperlinks to third-party websites in these materials are provided for reader convenience only. There can be no assurance that any trends discussed herein will continue.

The information contained herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice and does not constitute an investment recommendation or investment advice. Investors should make an independent investigation of the information contained herein, including consulting their tax, legal, accounting or other advisors about such information. Apollo does not act for you and is not responsible for providing you with the protections afforded to its clients.

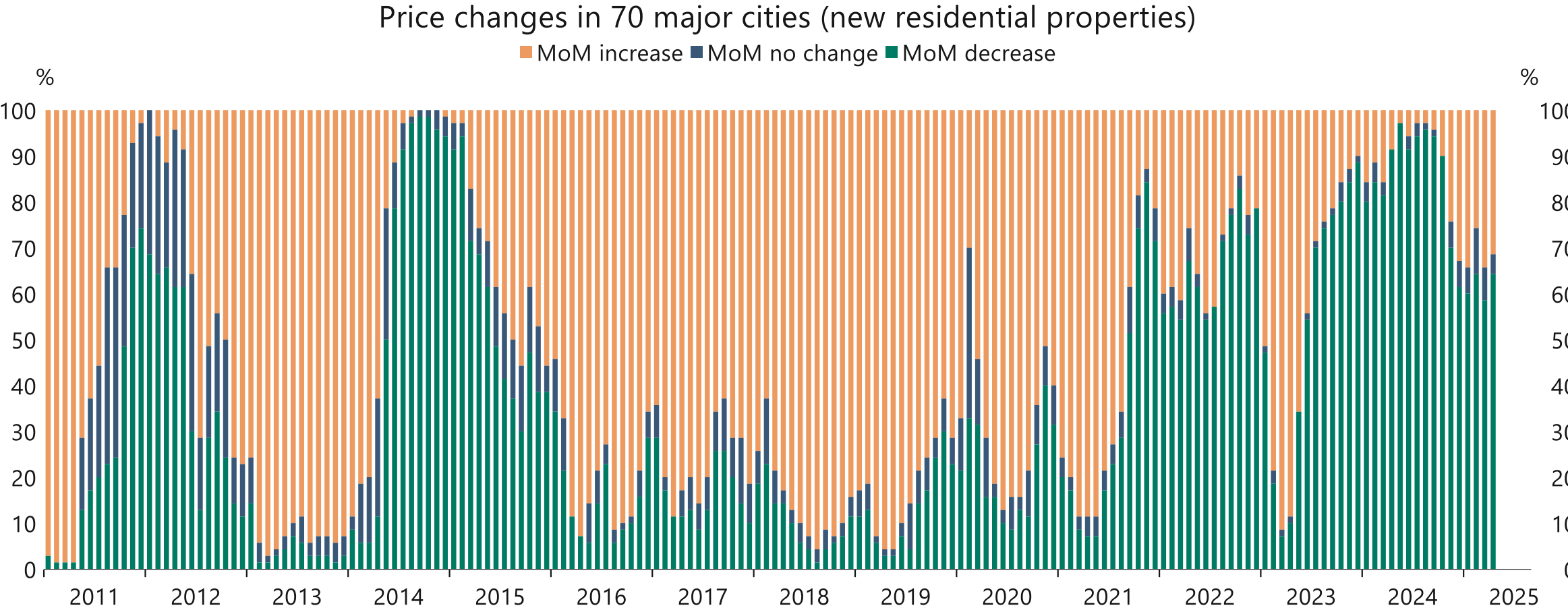
Certain information contained herein may be "forward-looking" in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking statements may be identified by the use of terminology including, but not limited to, "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology.



- 1) Trade war weighing on Chinese growth
- 2) Housing slowing down
- 3) Demographic headwinds

China: Overview

Housing market cooling in China

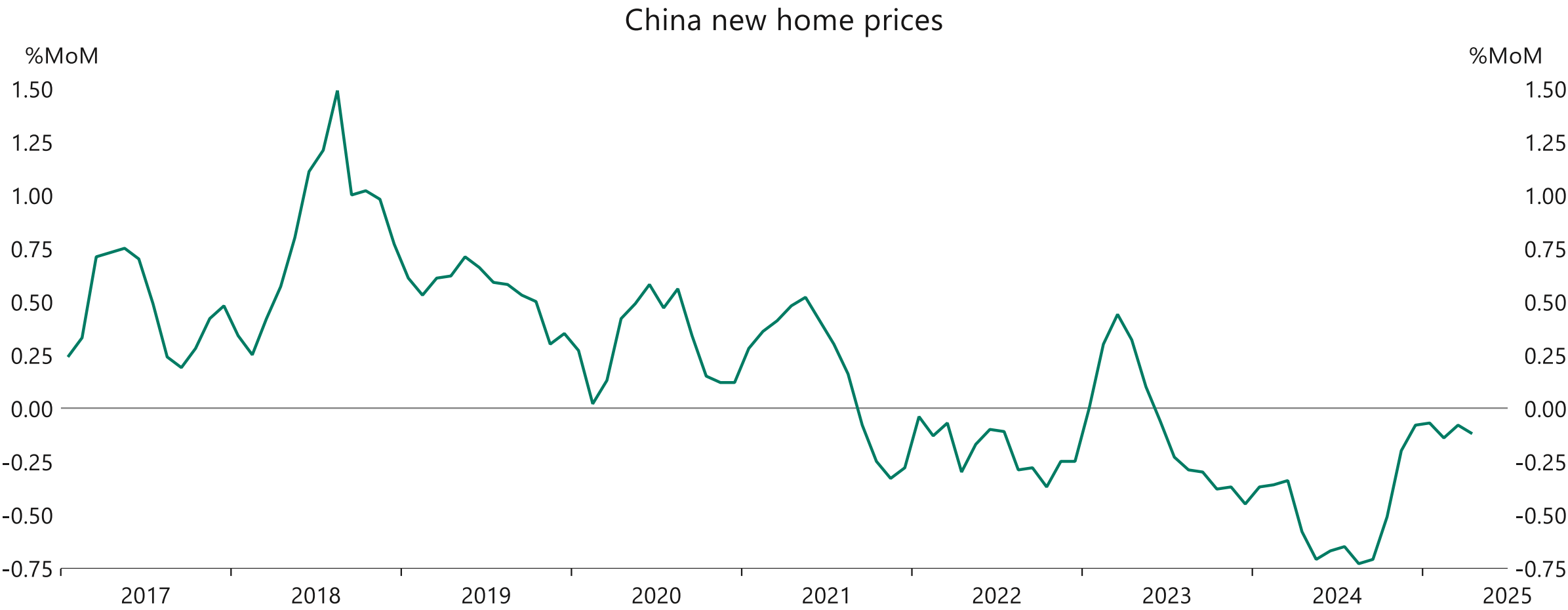


Source: Bloomberg, Macrobond, Apollo Chief Economist

Beijing home prices falling



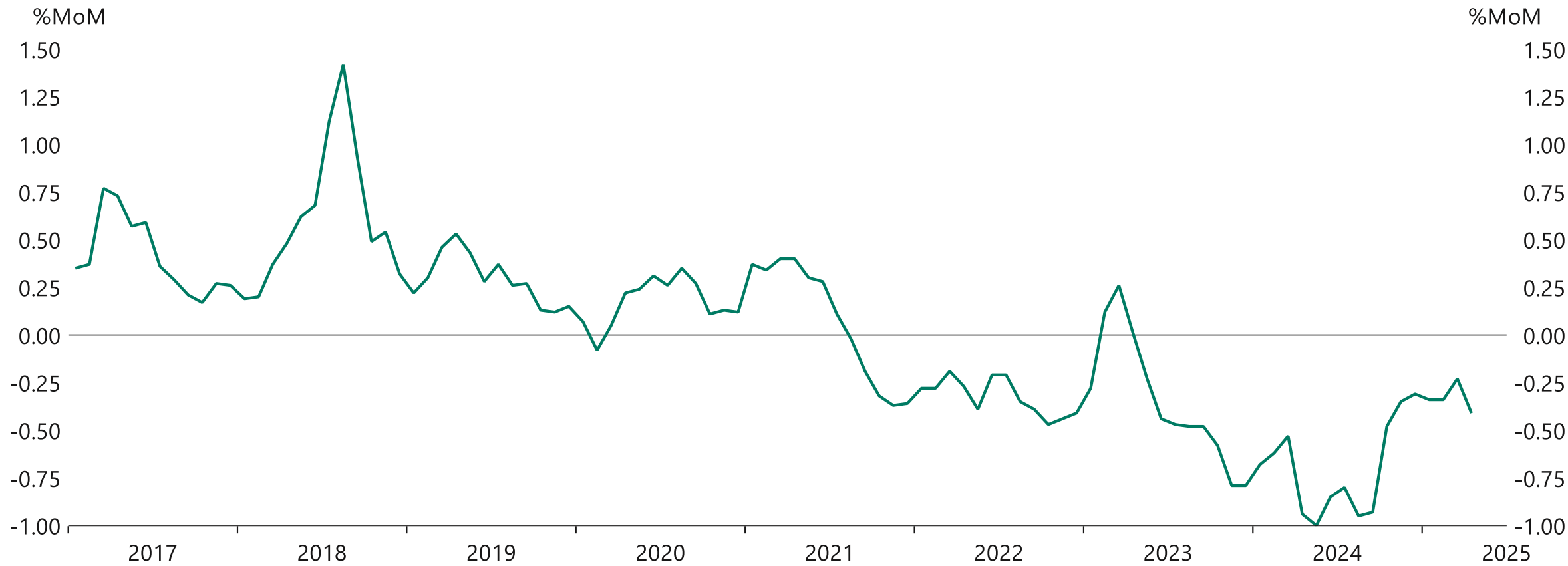
China: New home prices



Source: Bloomberg, Macrobond, Apollo Chief Economist

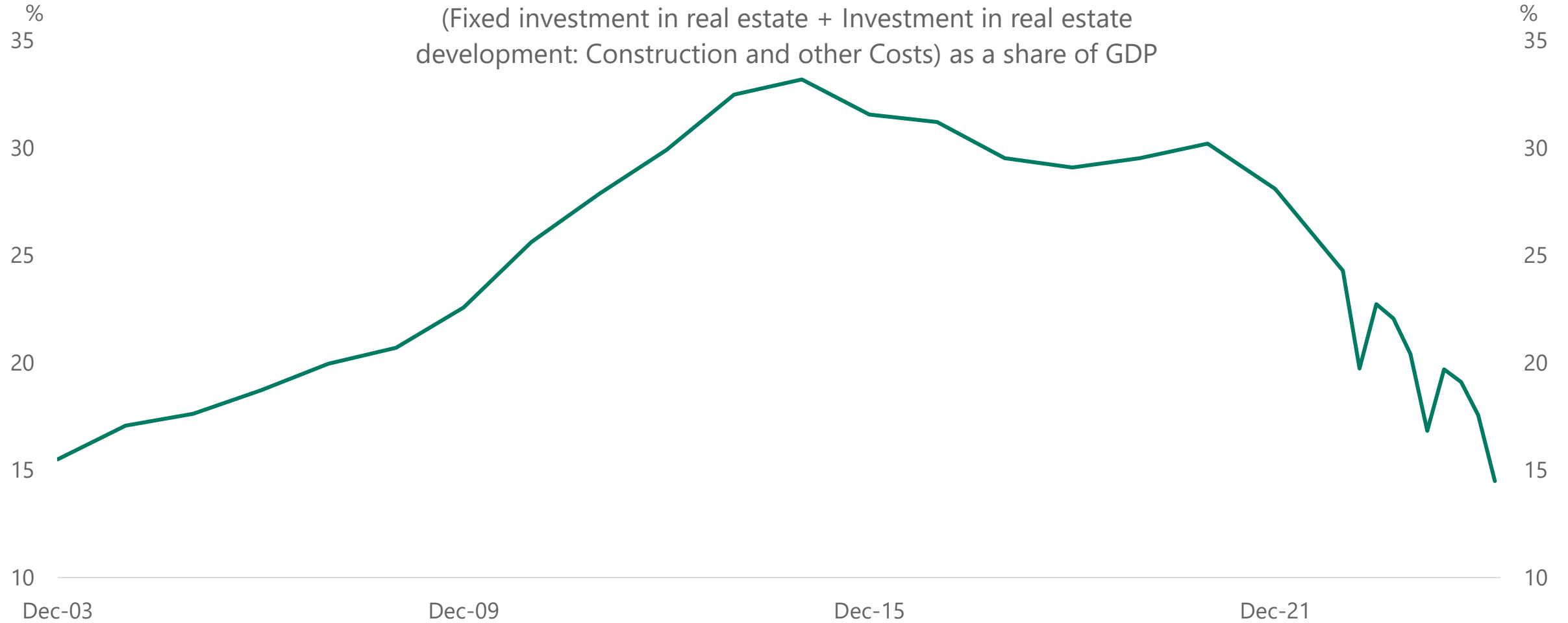
China: Used home prices

China used home prices

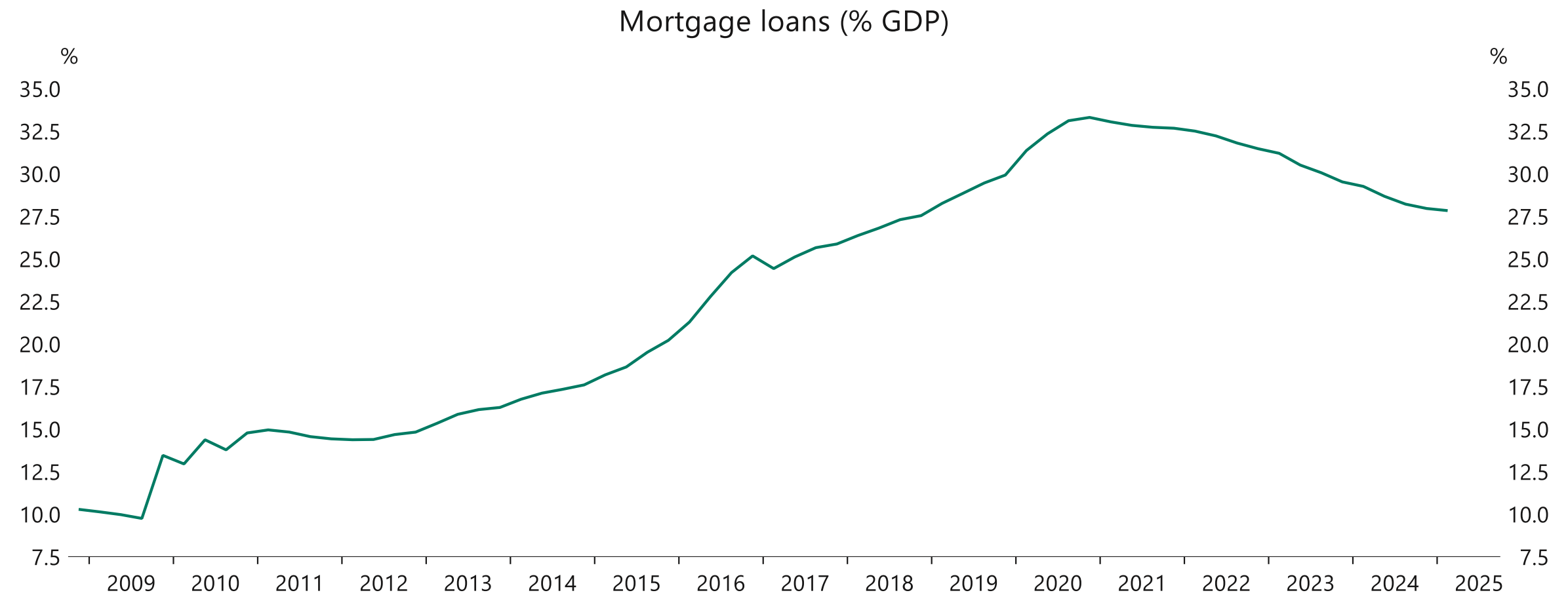


Source: Bloomberg, Macrobond, Apollo Chief Economist

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

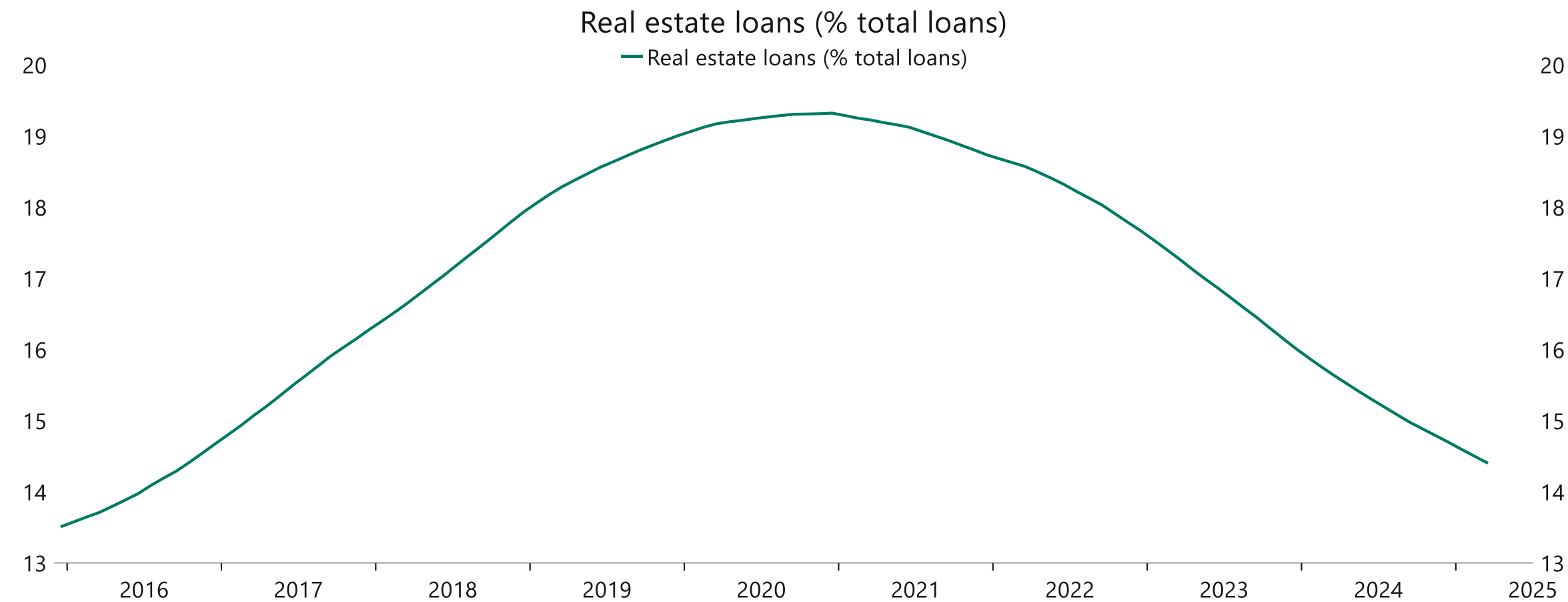


China's mortgage liabilities as a share of GDP



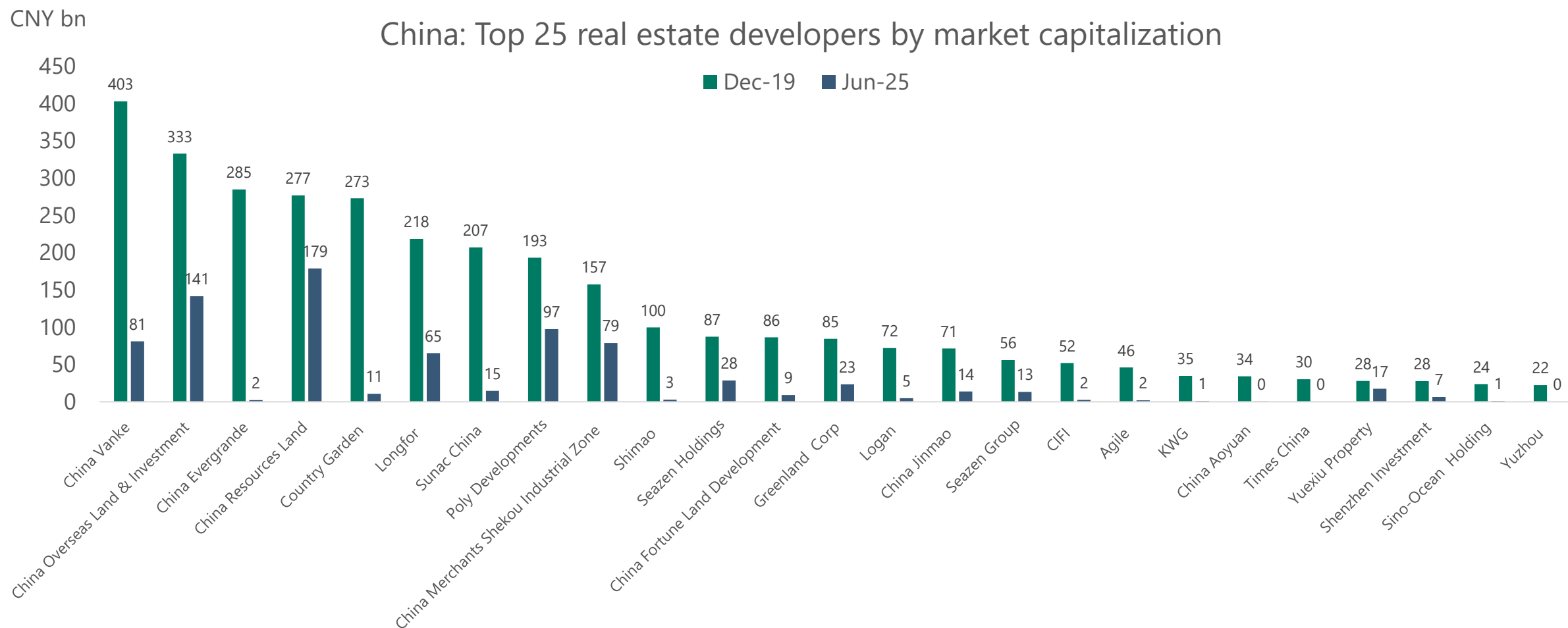
Source: China NBS, PBoC, Macrobond, Apollo Chief Economist

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



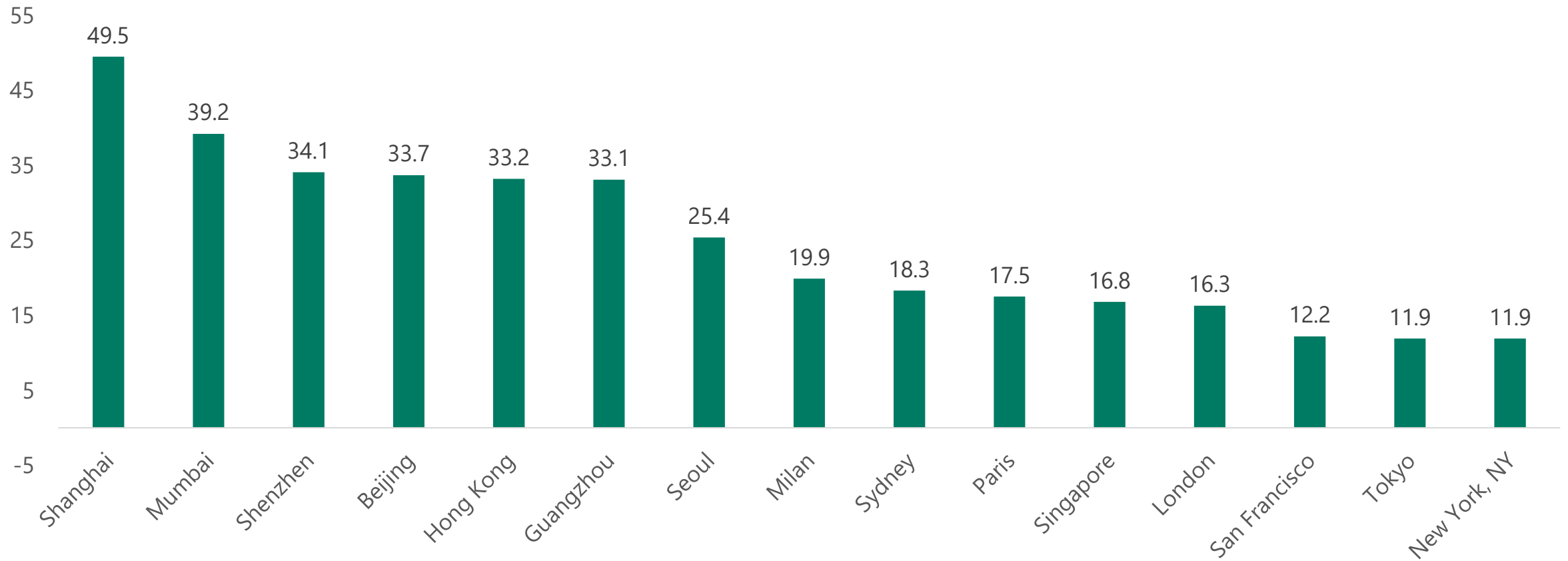
Source: People's Bank of China (PBoC), Macrobond, Apollo Chief Economist

China: Market capitalization of real estate developers has declined significantly



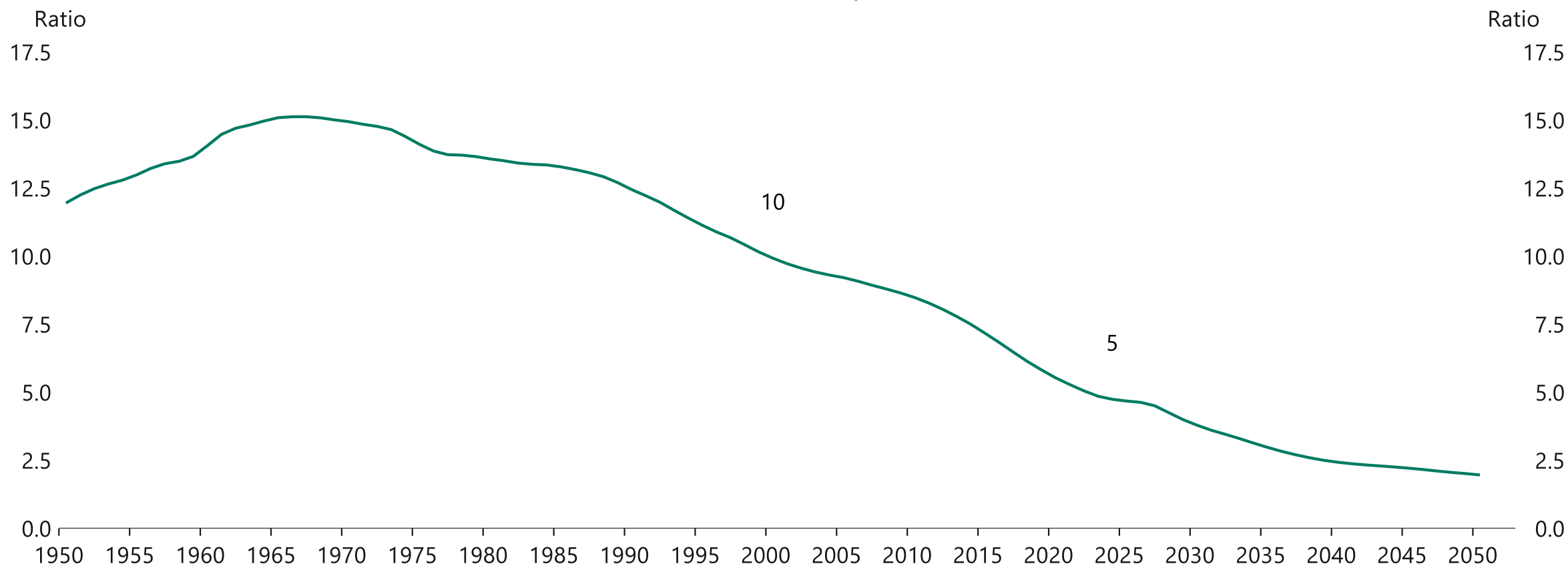
Home price-to-income ratio four times higher in Shanghai than in New York

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



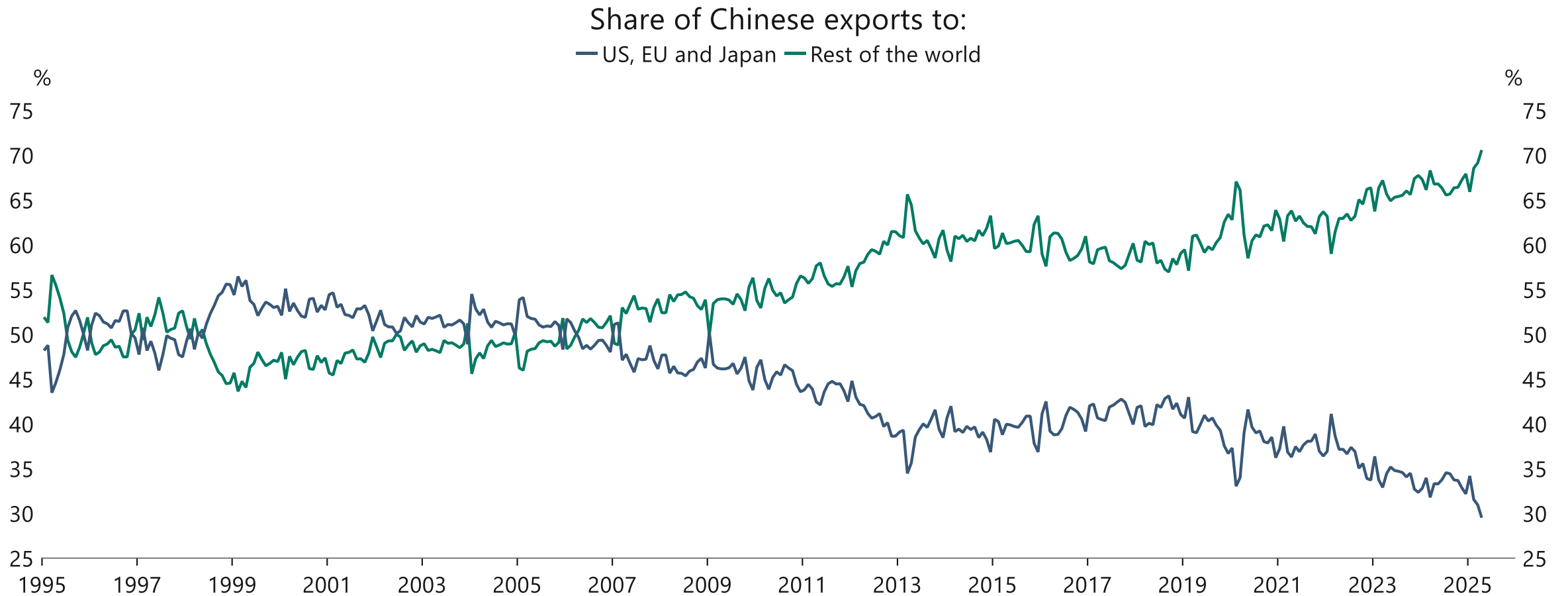
China: In 2000 there were 10 workers per retiree. Today there are 5.

Number of workers per retiree



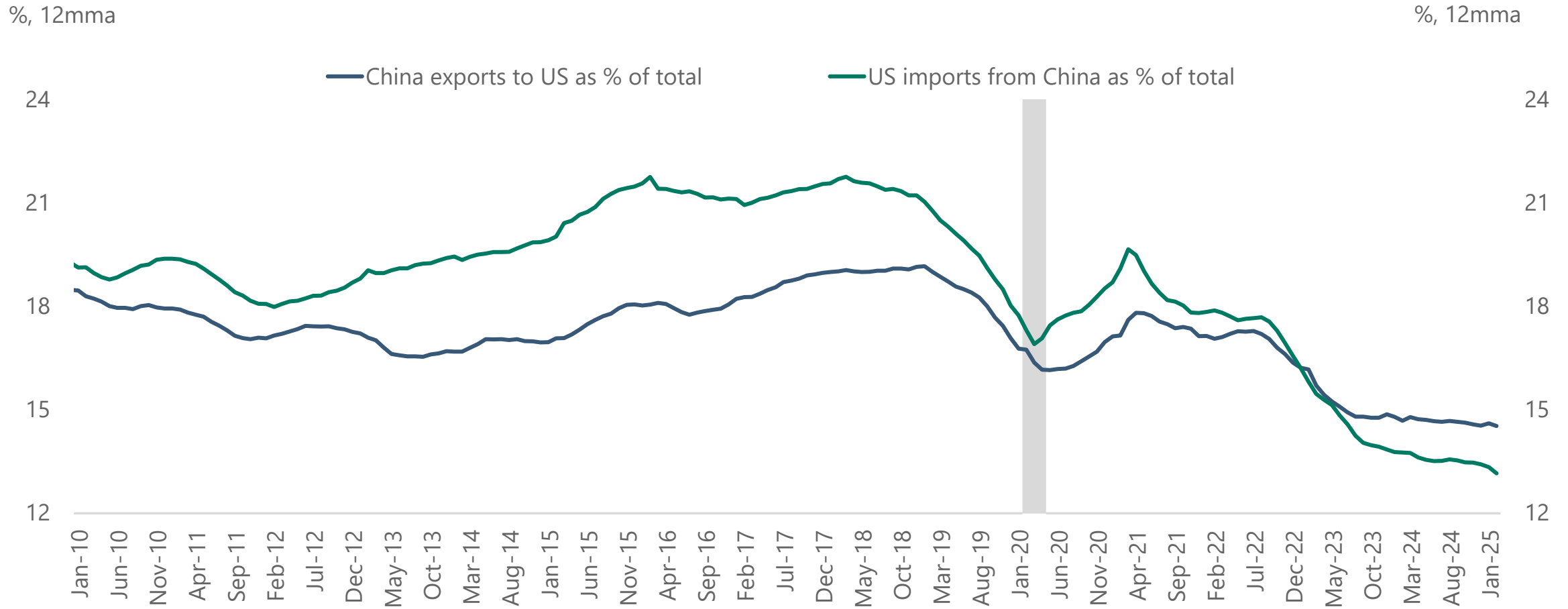
Source: United Nations Trade & Development, Macrobond, Apollo Chief Economist

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

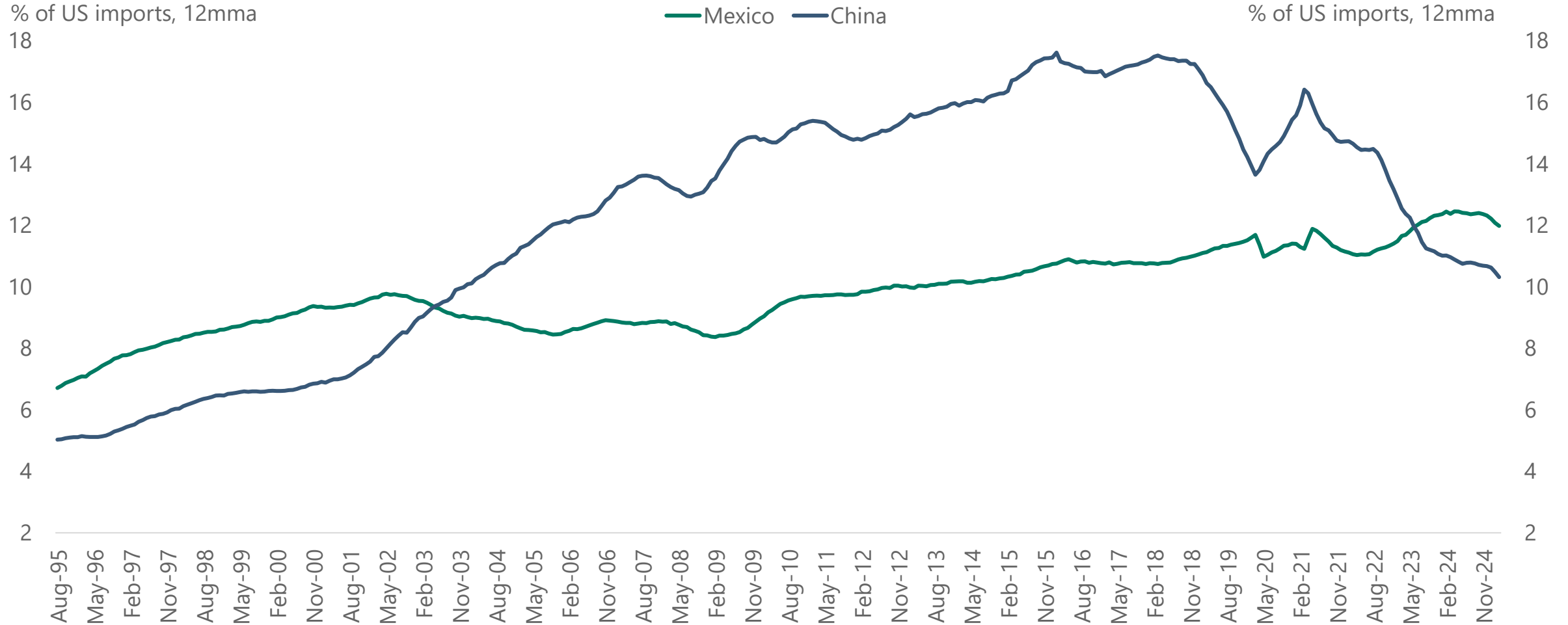


Source: China General Administration of Customs (GAC), Macrobond, Apollo Chief Economist

US and China less dependent on each other for trade



US now importing more from Mexico than China



Source: Census Bureau, Bloomberg, Apollo Chief Economist

The number of economic indicators published by China

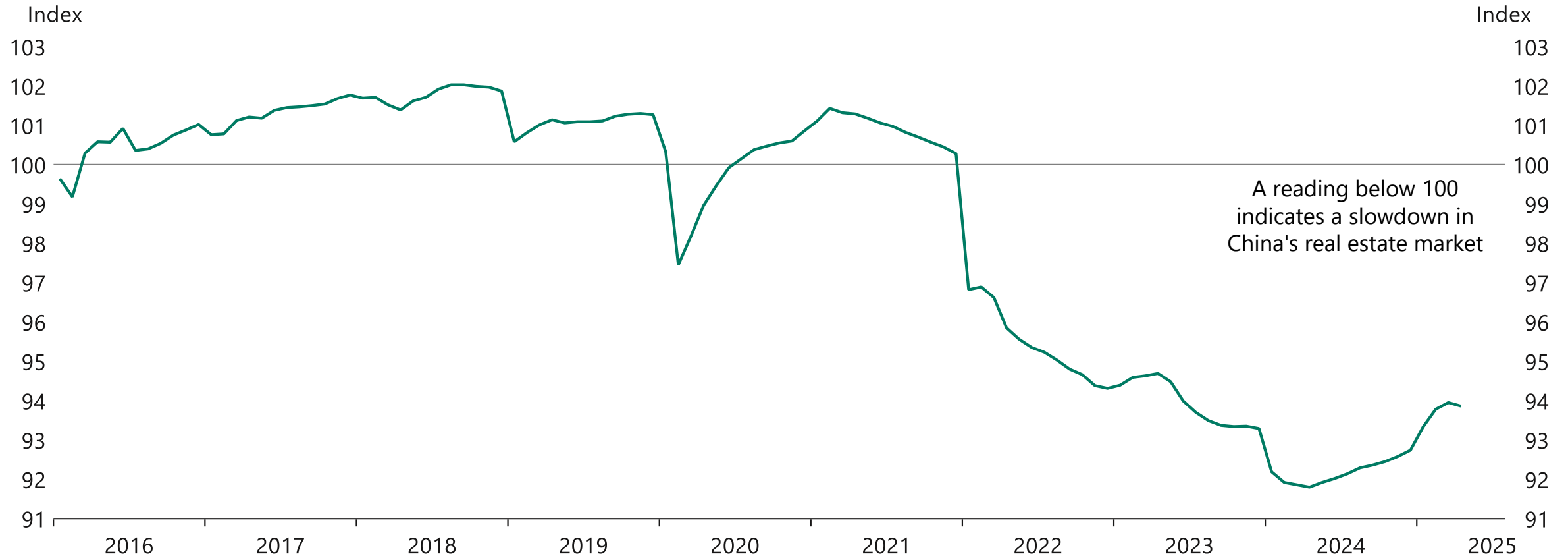


Source: Factset, National Bureau of Statistics of China. Note: The count includes number of indicators published annually and maximum number of quarterly and monthly indicators in the year

China: Housing bubble is deflating

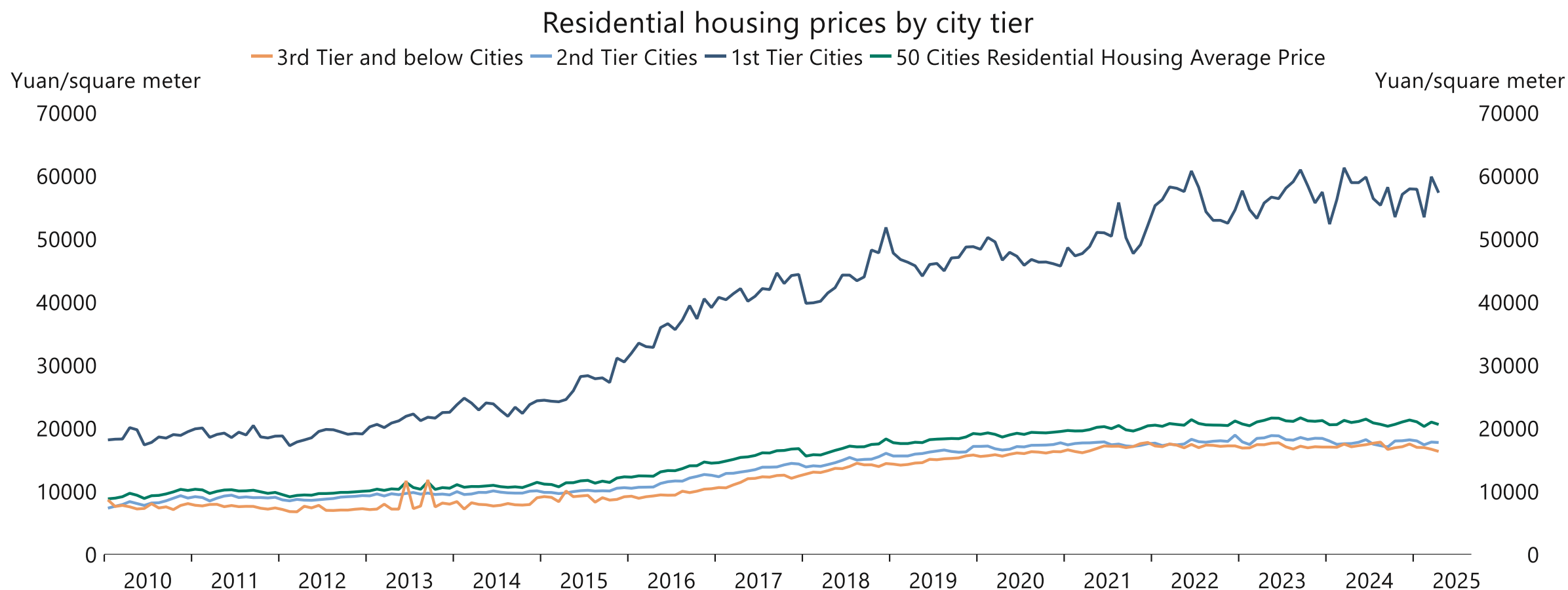
China real estate index in recession territory

China National Real Estate Climate Index



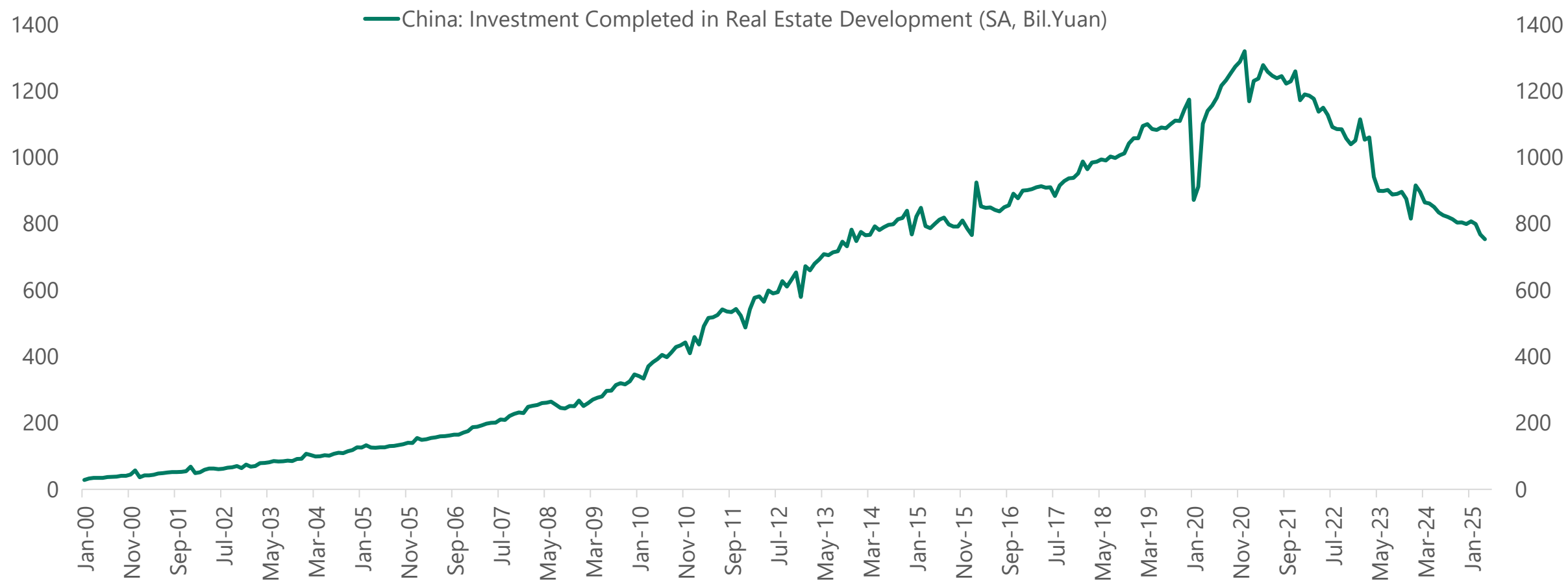
Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

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

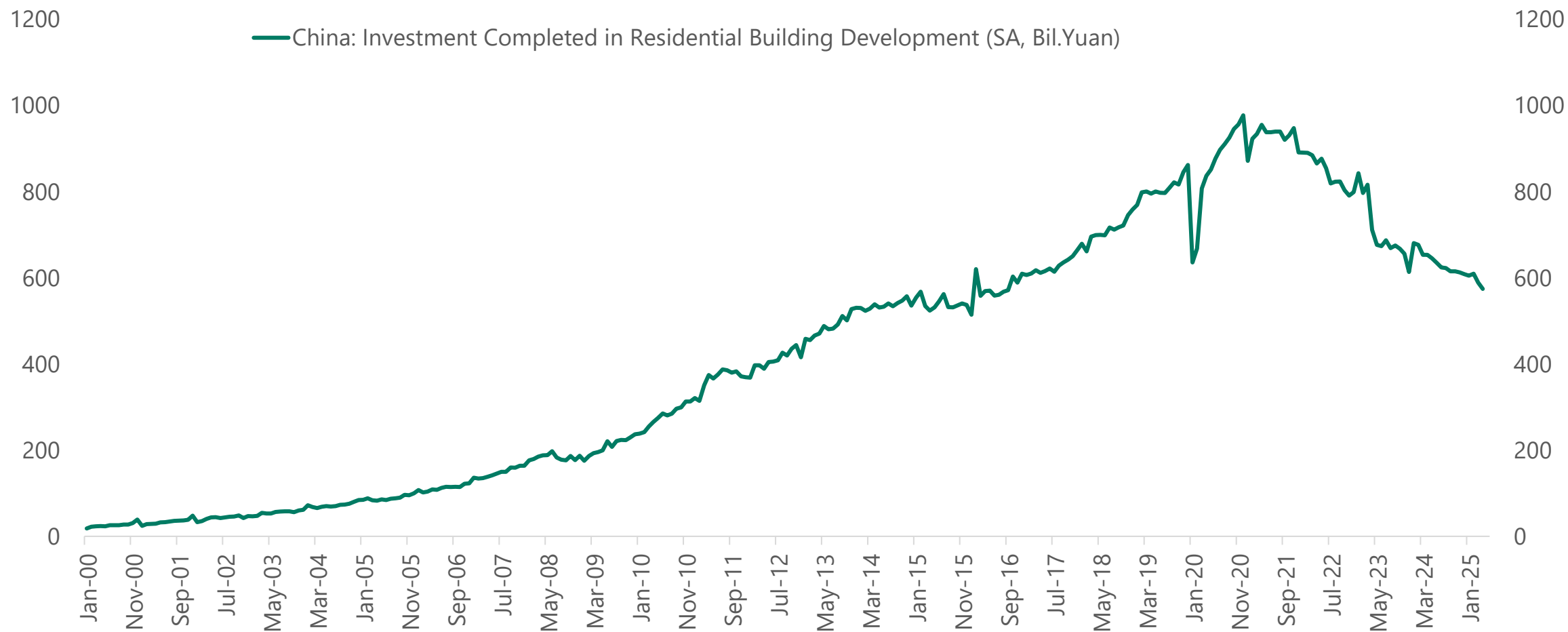


Source: Bloomberg, Macrobond, Apollo Chief Economist

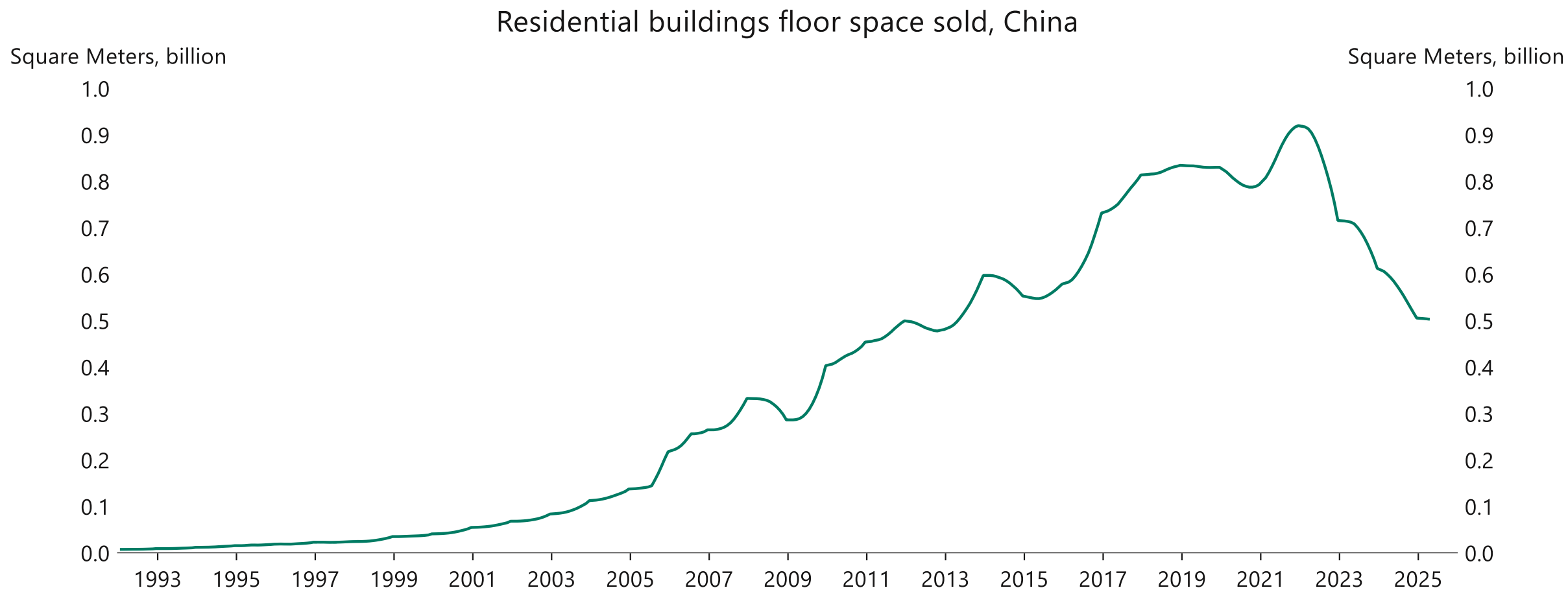
China: Real estate investment slowing



Residential real estate investment slowing

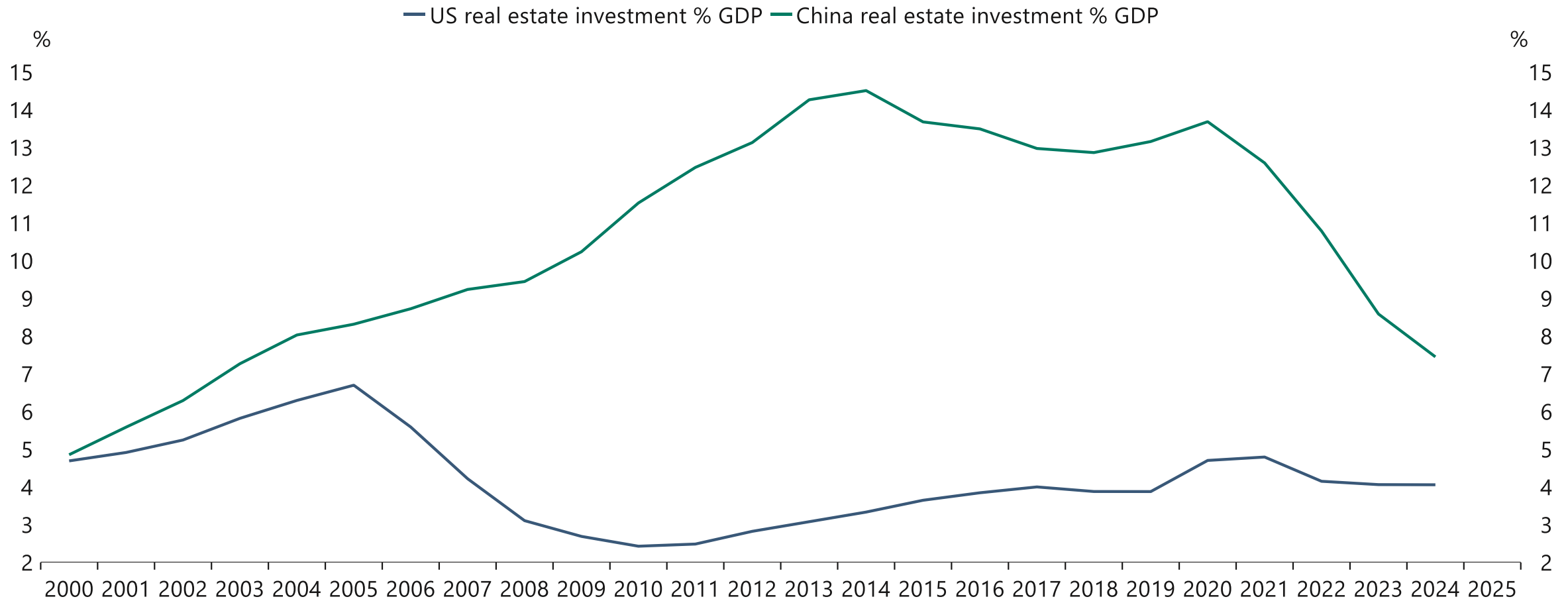


China residential transactions falling



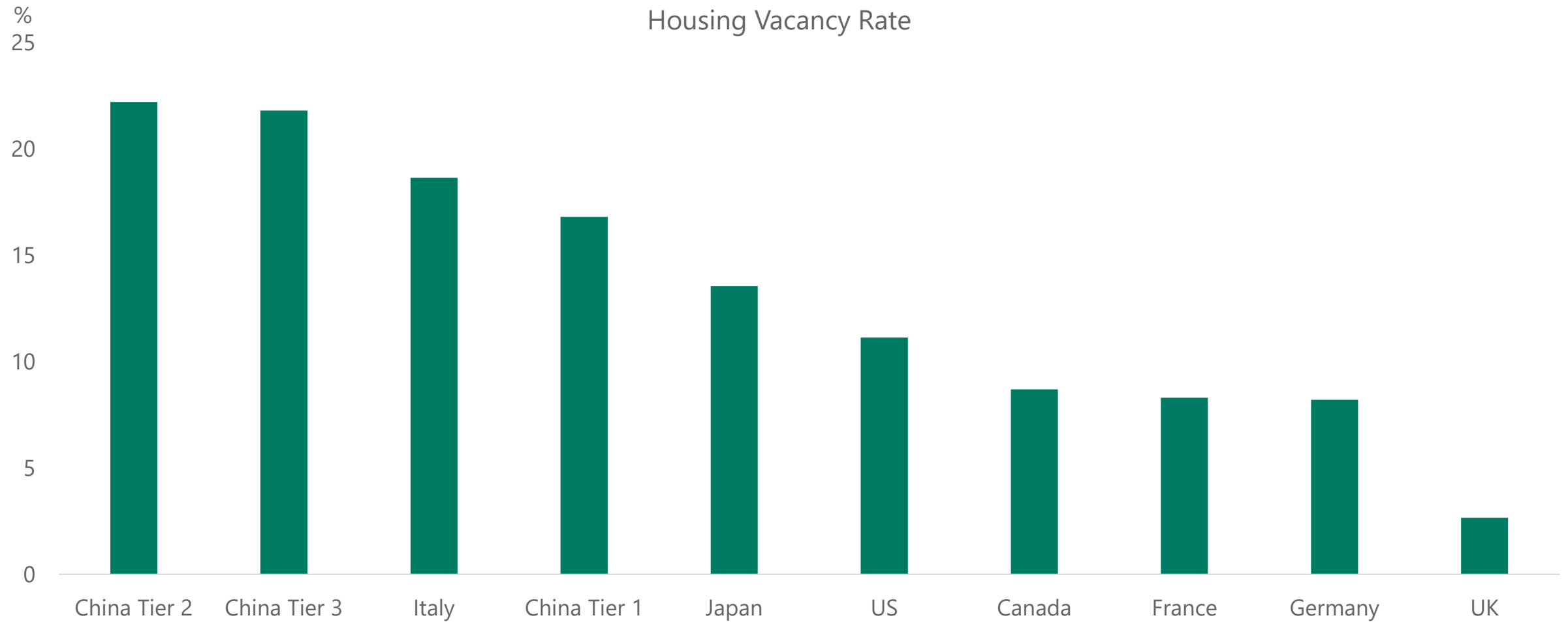
Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

A sharp drop in real estate investment in China



Source: Bloomberg, Macrobond, Apollo Chief Economist

Average Chinese vacancy rates higher than in G7 countries



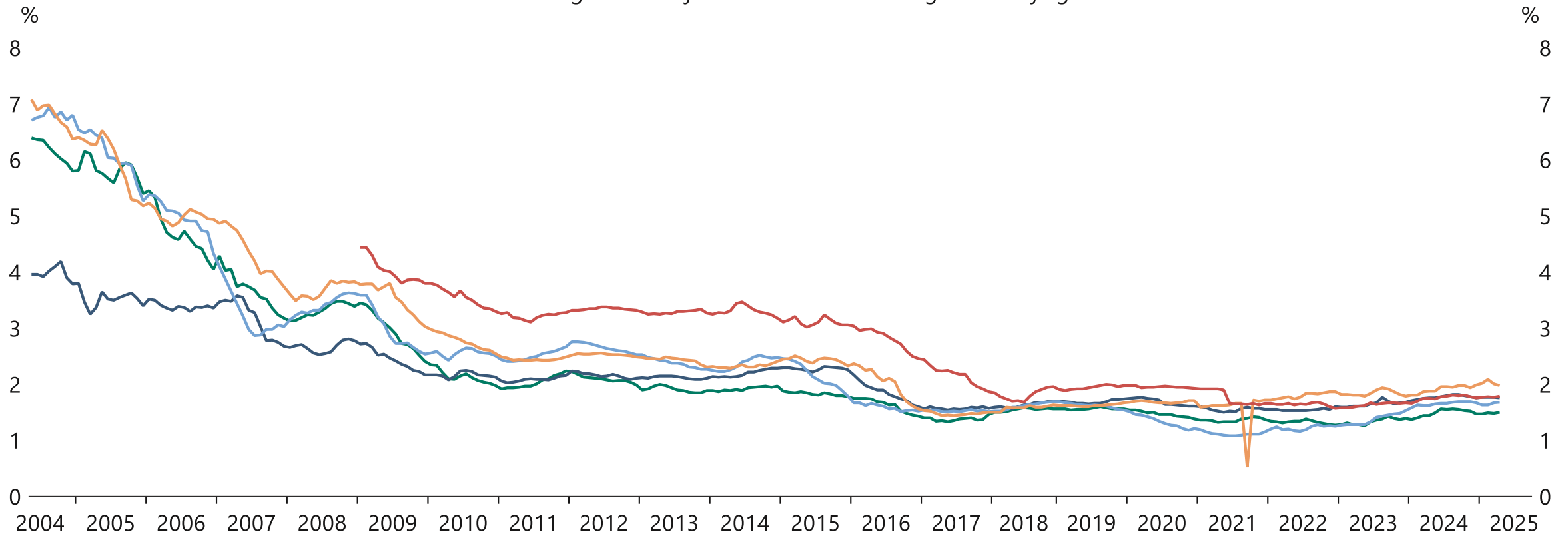
Home sales low in Tier 1 and Tier 2 cities



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

Rental yields: second hand residential buildings

— Chengdu — Tianjin — Shenzhen — Shanghai — Beijing



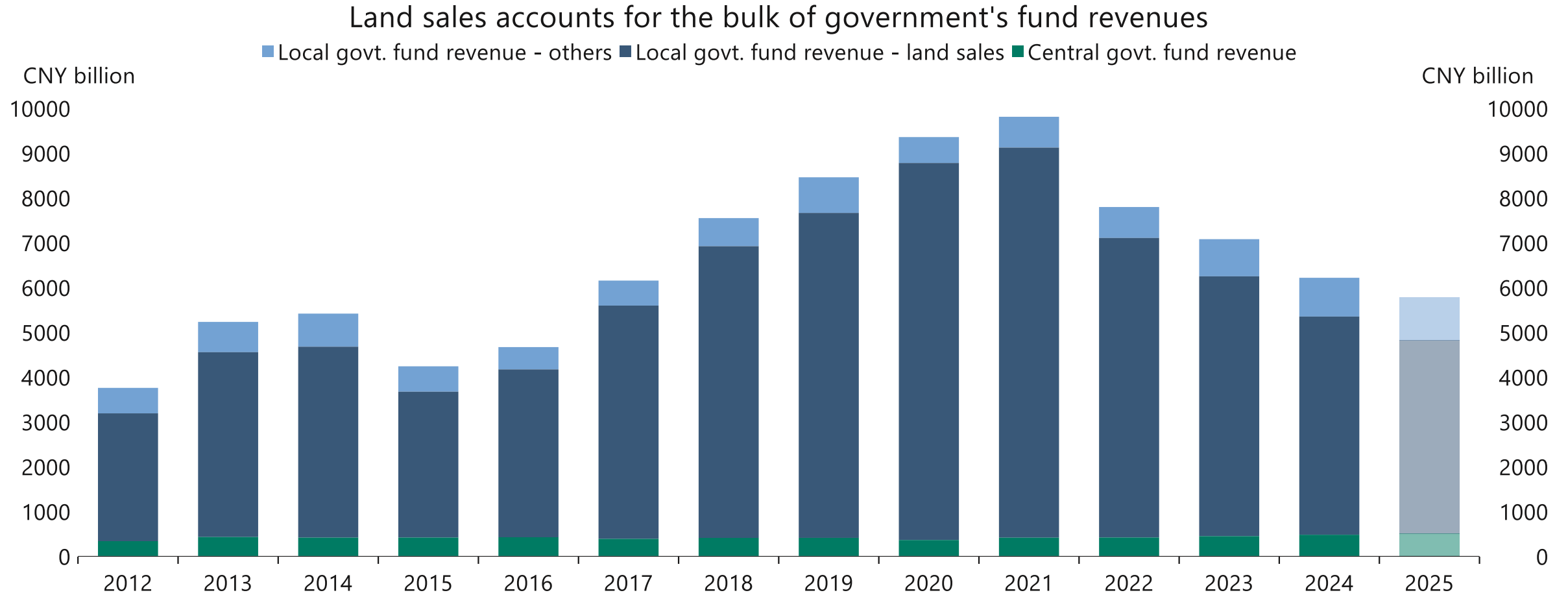
Source: Bloomberg, Macrobond, Apollo Chief Economist. Note: Rental yield is the rental income as a percentage of the property's value

China: Mortgage rates have declined to lowest levels since 2009



Source: People's Bank of China (PBoC), Macrobond, Apollo Chief Economist

Land sales are a crucial source of local government revenue

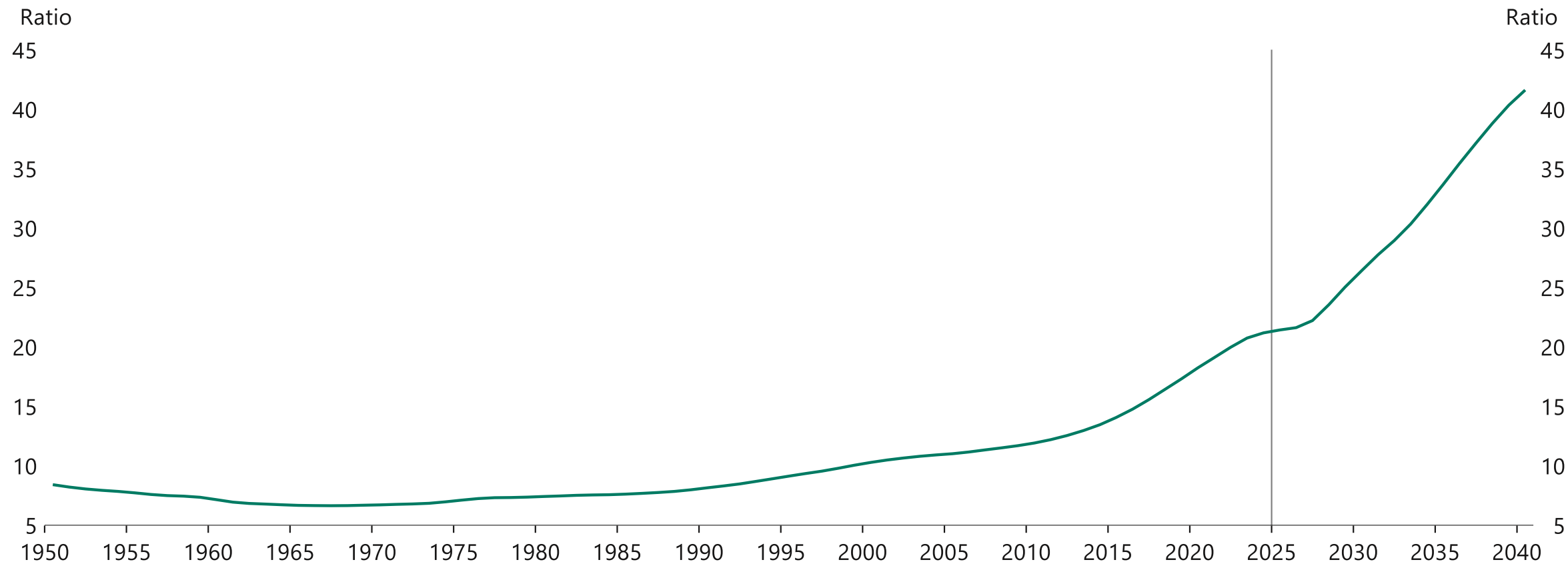


Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Demographics

China has an old age dependency problem

China: Old age dependency ratio



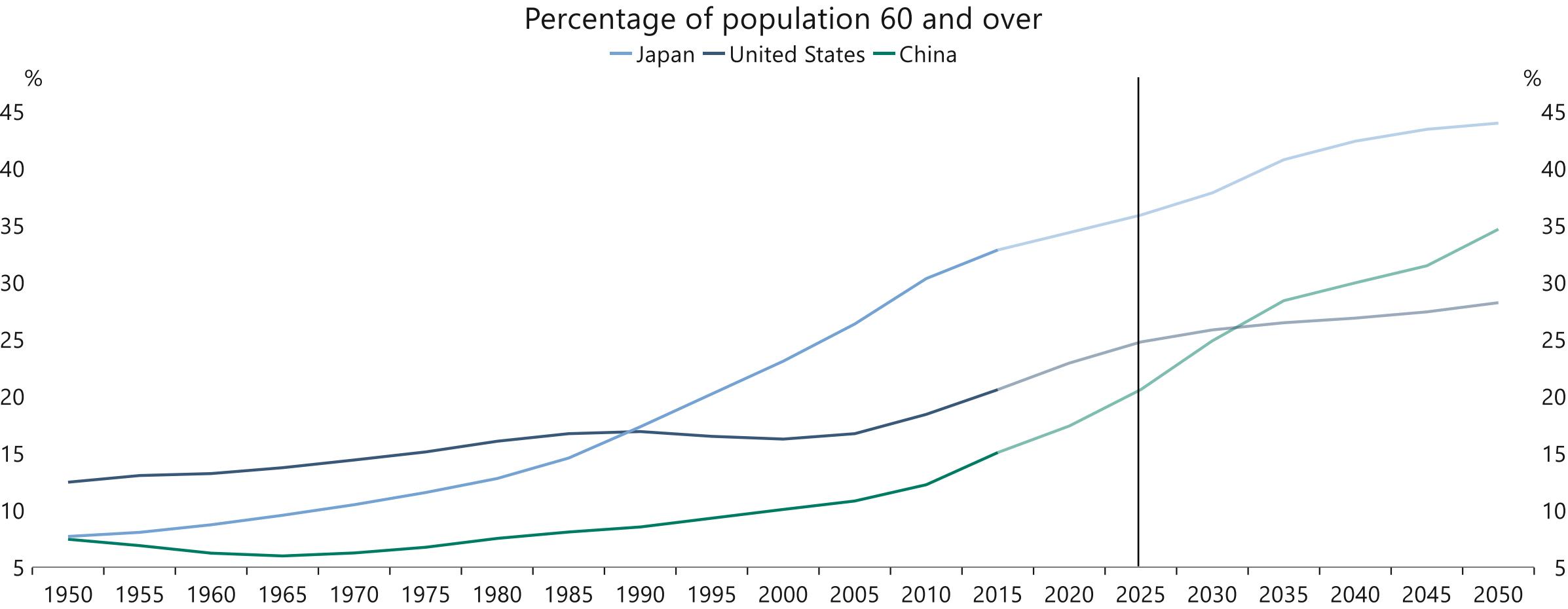
Source: United Nations Trade & Development, Macrobond, Apollo Chief Economist

Population growth slowing



Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

China aging faster than the US

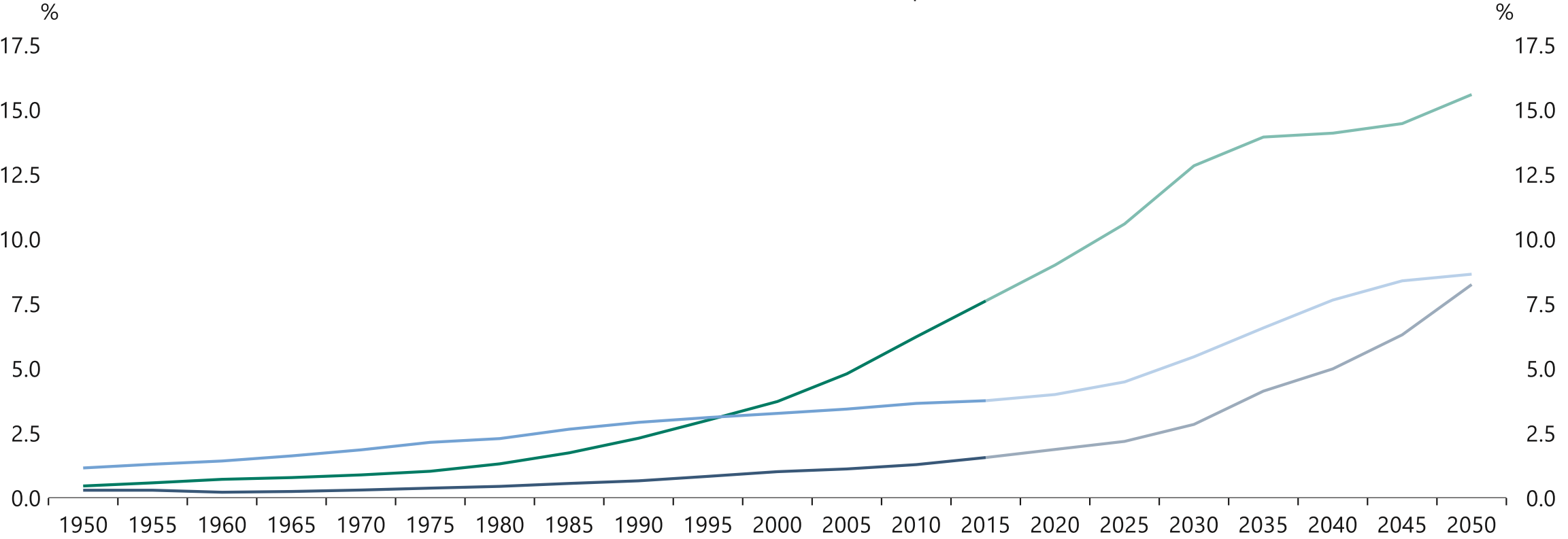


Source: United Nations Department of Economic & Social Affairs (UNDESA), Macrobond, Apollo Chief Economist

China demographics better than Japan's

Percentage of population 80 years and over

United States China Japan

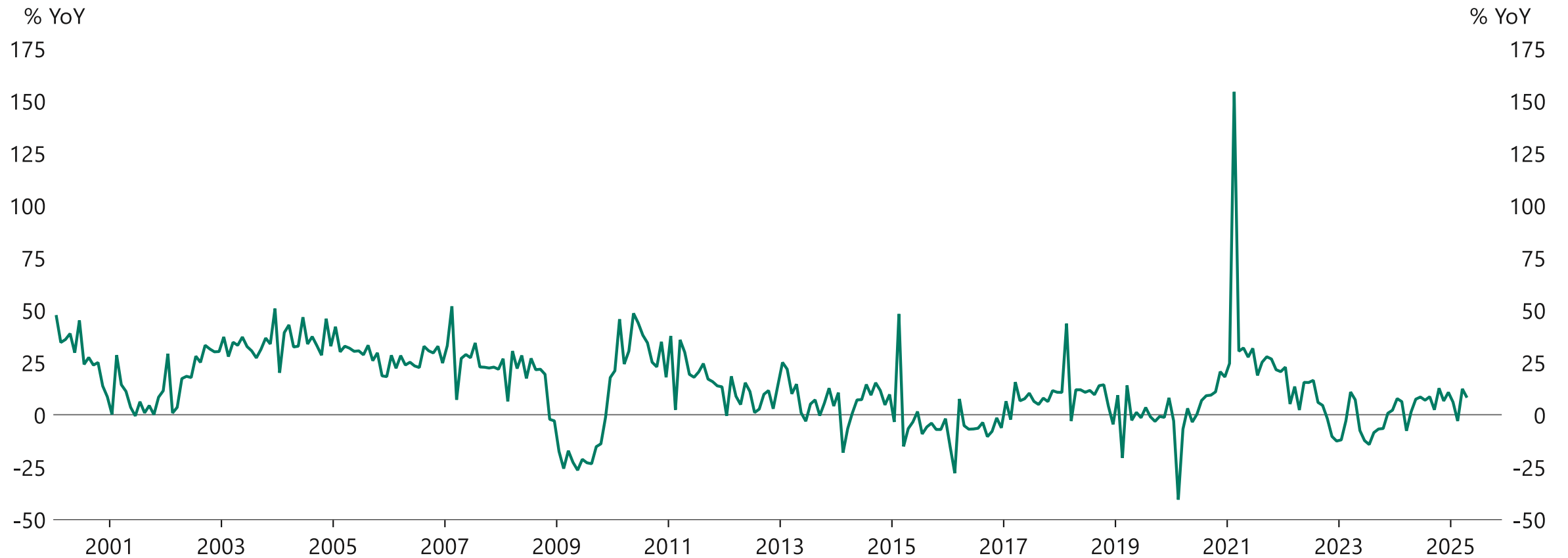


Source: United Nations Department of Economic & Social Affairs (UNDESA), Macrobond, Apollo Chief Economist

China: Exports slowing

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

China export trade in USD



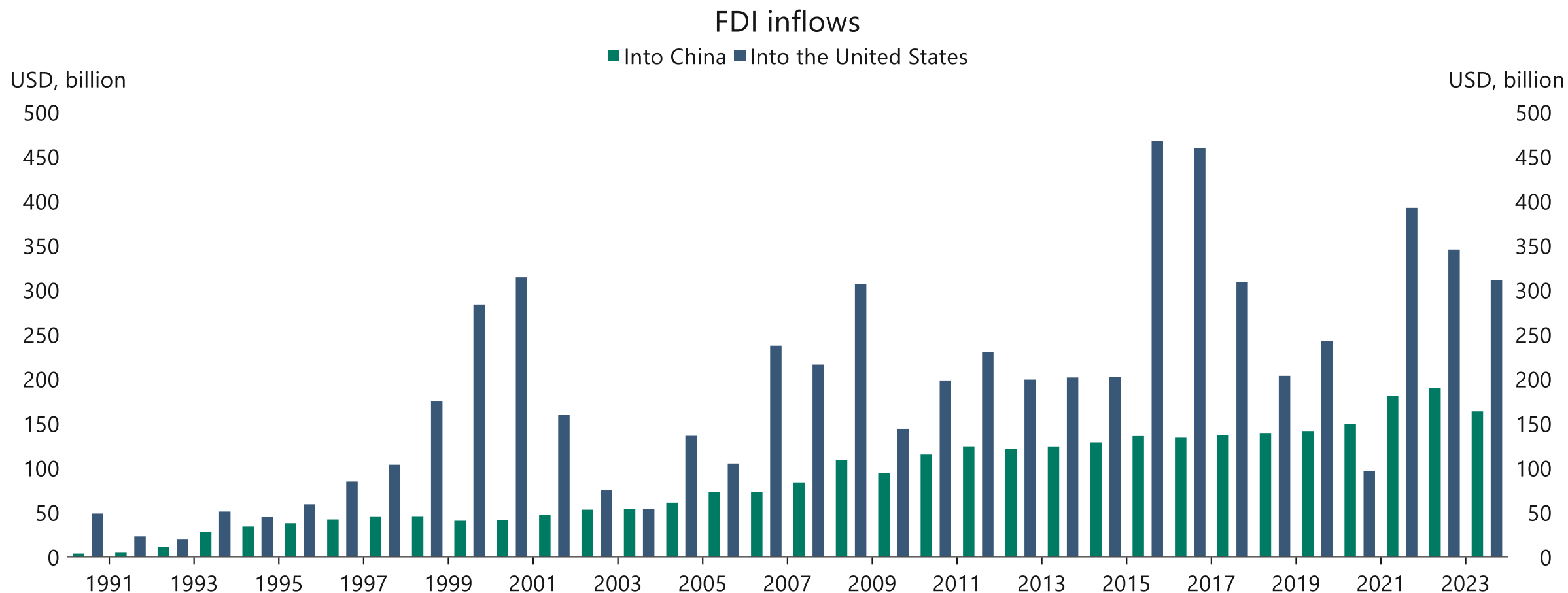
Source: China General Administration of Customs (GAC), Macrobond, Apollo Chief Economist

US-China trade deficit



Source: Bloomberg, Macrobond, Apollo Chief Economist

China and US: Comparing foreign direct investment



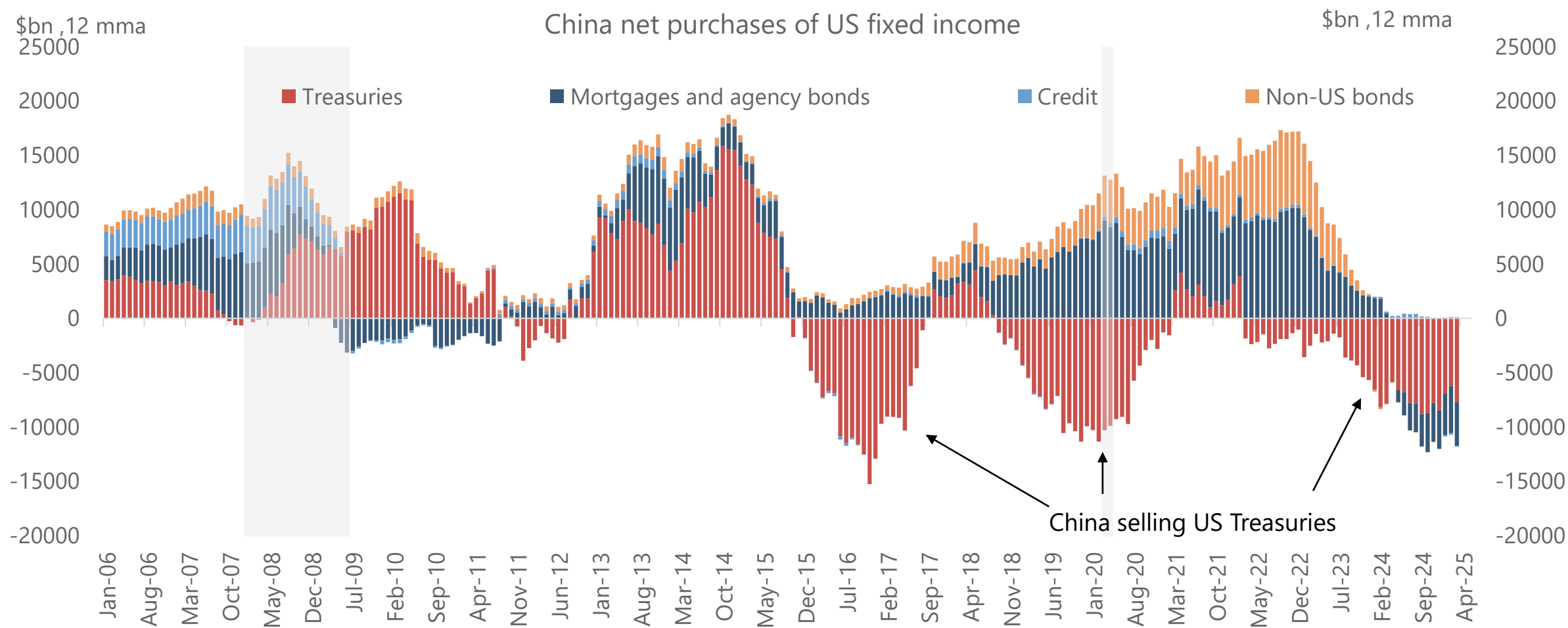
Source: United Nations Food & Agriculture Organization (FAO), Macrobond, Apollo Chief Economist

China holding \$500bn less in US Treasuries than in 2021



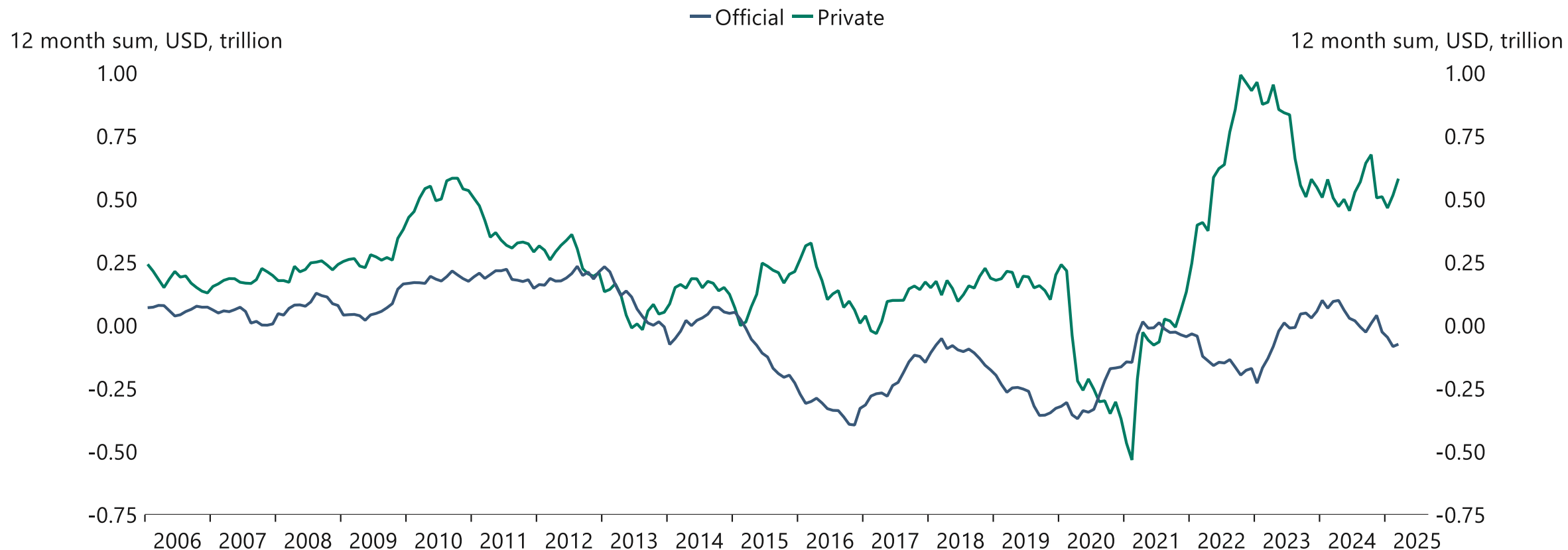
Source: U.S. Department of Treasury, Macrobond, Apollo Chief Economist

China is selling Treasuries and mortgages



Foreign demand for US Treasuries is coming from private buyers

Net Foreign Purchases: Treasury bonds and notes



Source: U.S. Department of Treasury, Macrobond, Apollo Chief Economist

Foreign holdings of Chinese government bonds



Source: ChinaBond, affiliated to China Central Depository & Clearing Co., Ltd., Macrobond, Apollo Chief Economist

Europe is a big market for Chinese EVs

Thous., 12 mma

160

140

120

100

80

60

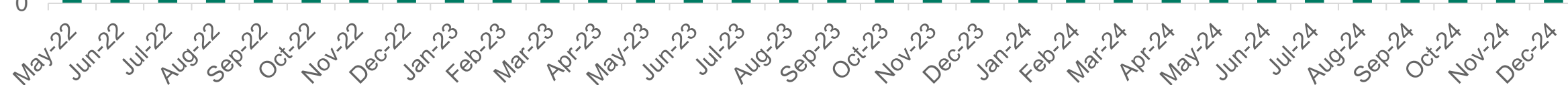
40

20

0

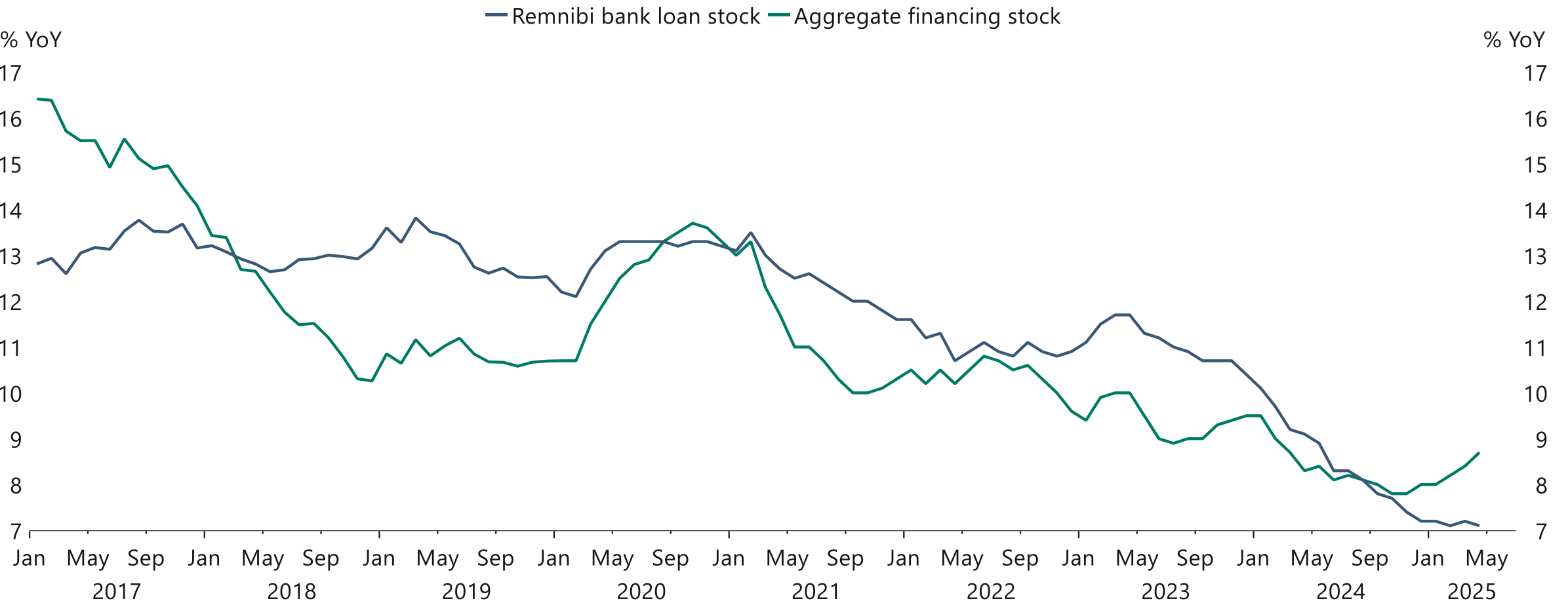
China EV's exports to:

■ EU ■ US ■ Japan ■ Rest of the World



China: Credit growth and debt levels

China credit growth



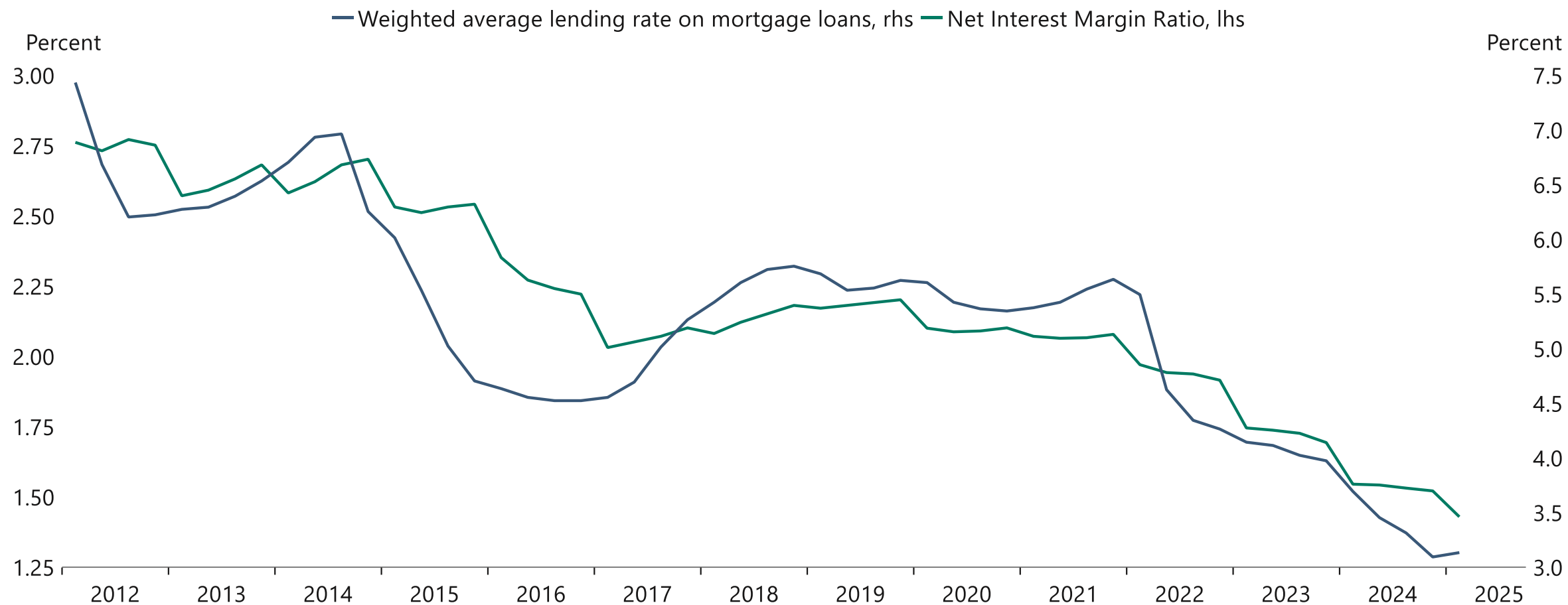
Source: People's Bank of China (PBoC), Macrobond, Apollo Chief Economist

China FDI falling fast



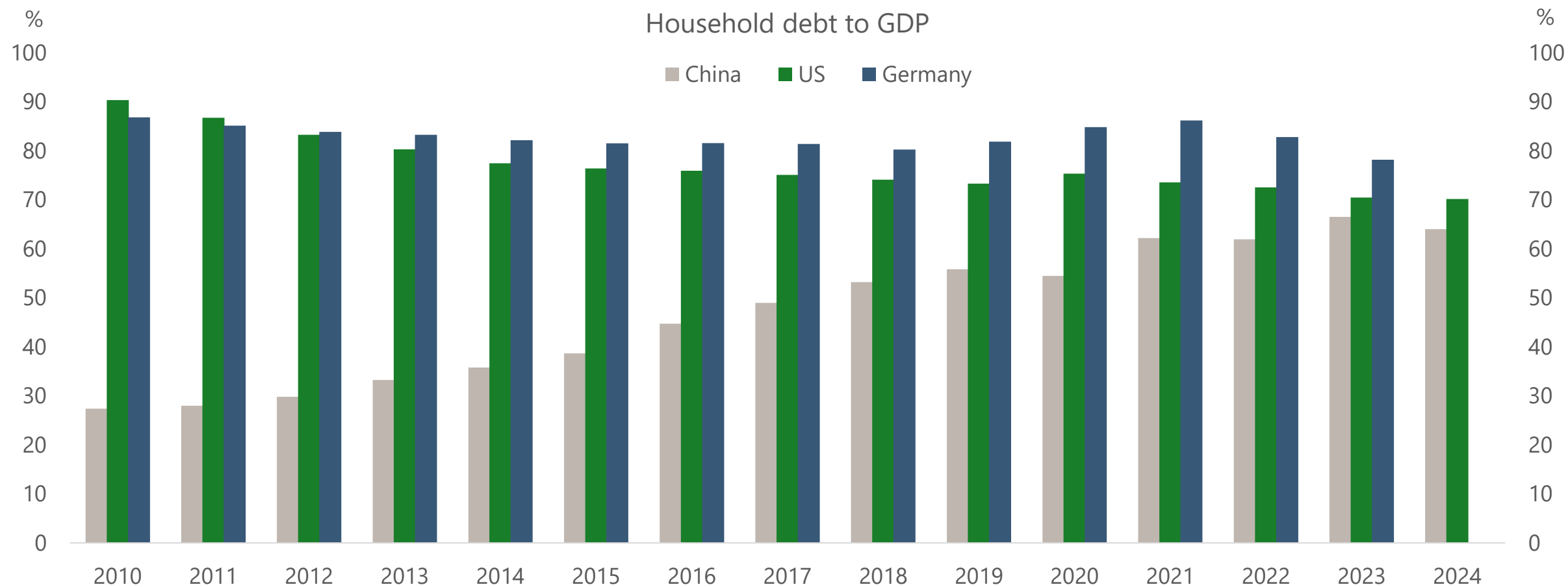
Source: State Administration of Foreign Exchange (SAFE) of China, Macrobond, Apollo Chief Economist

Falling margins in China's banking sector

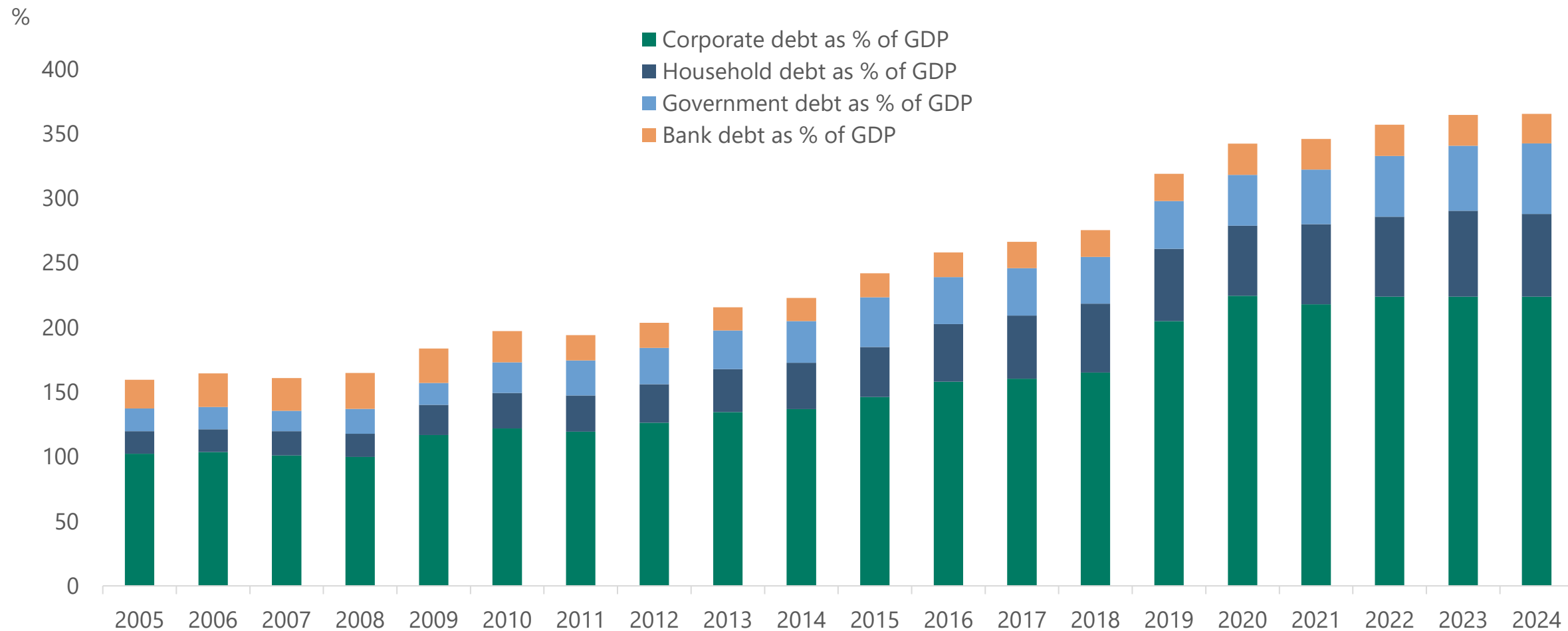


Source: China National Financial Regulatory Administration, People's Bank of China (PBoC), Macrobond, Apollo Chief Economist

Household debt to GDP in China, US, and Germany



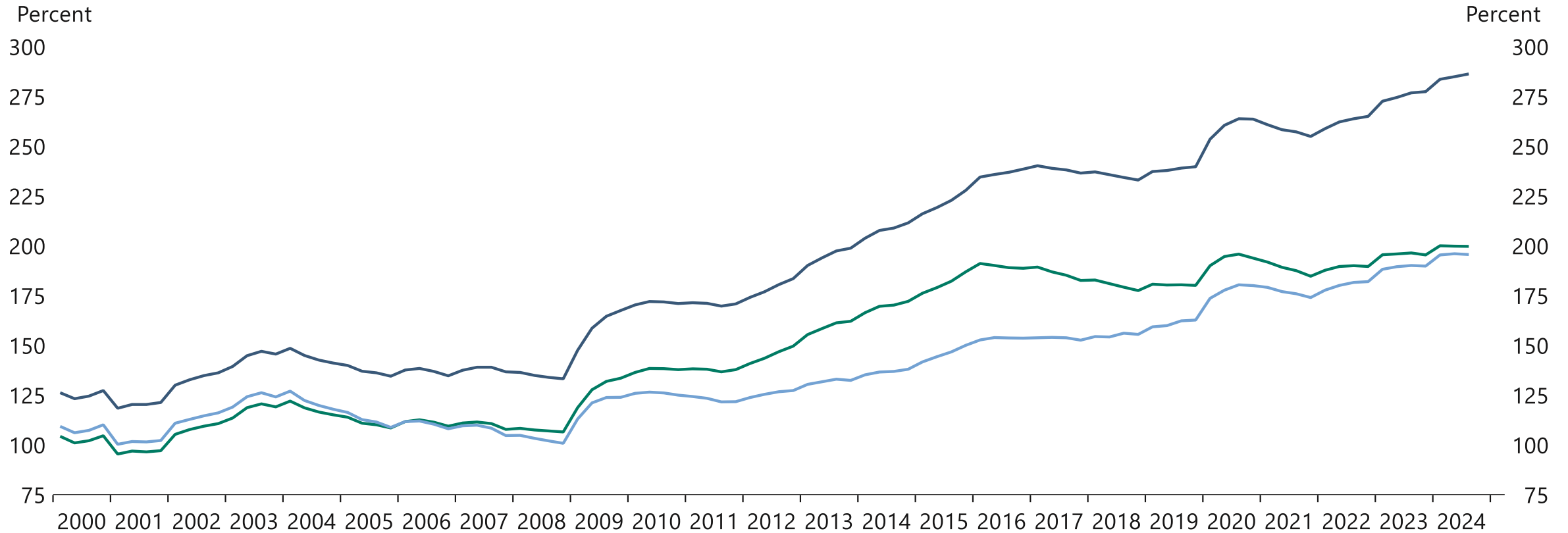
China: High debt levels, in particular in the corporate sector



China: Debt levels have increased in the private sector

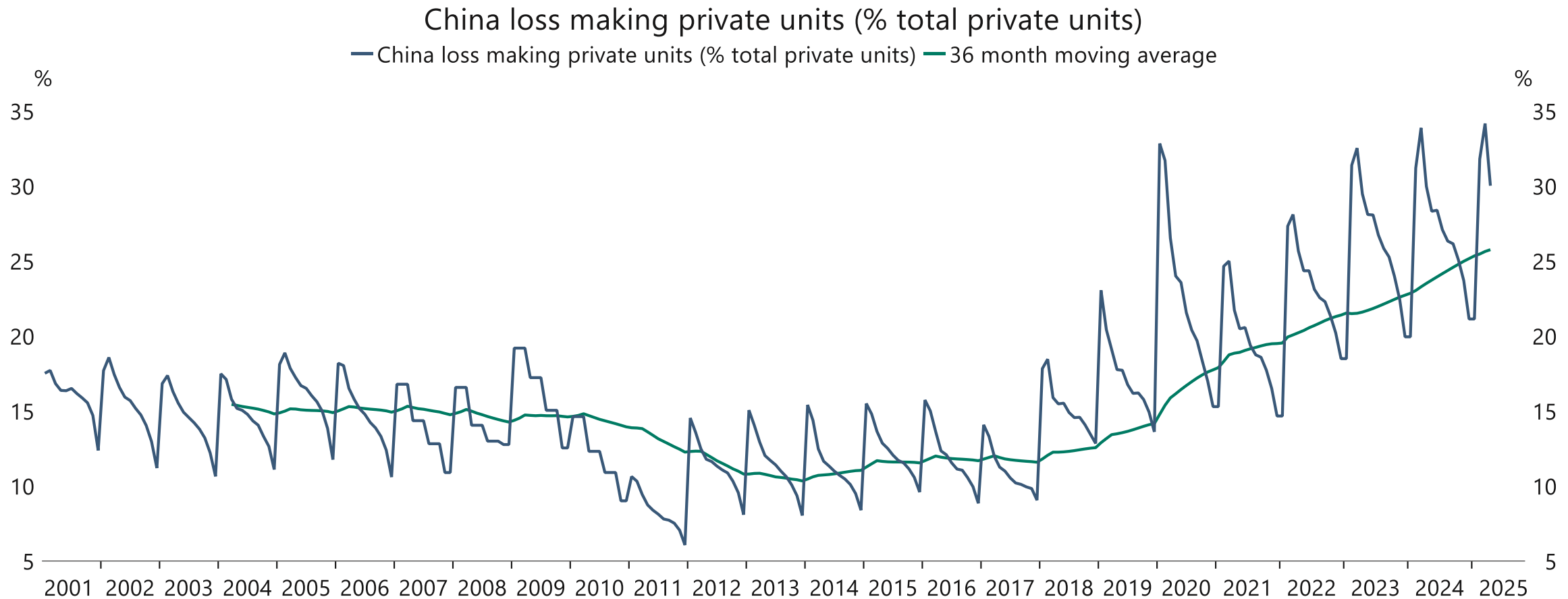
China Credit to Non-Financial Sectors, Percent of GDP

— Bank loans — Total — Private sector



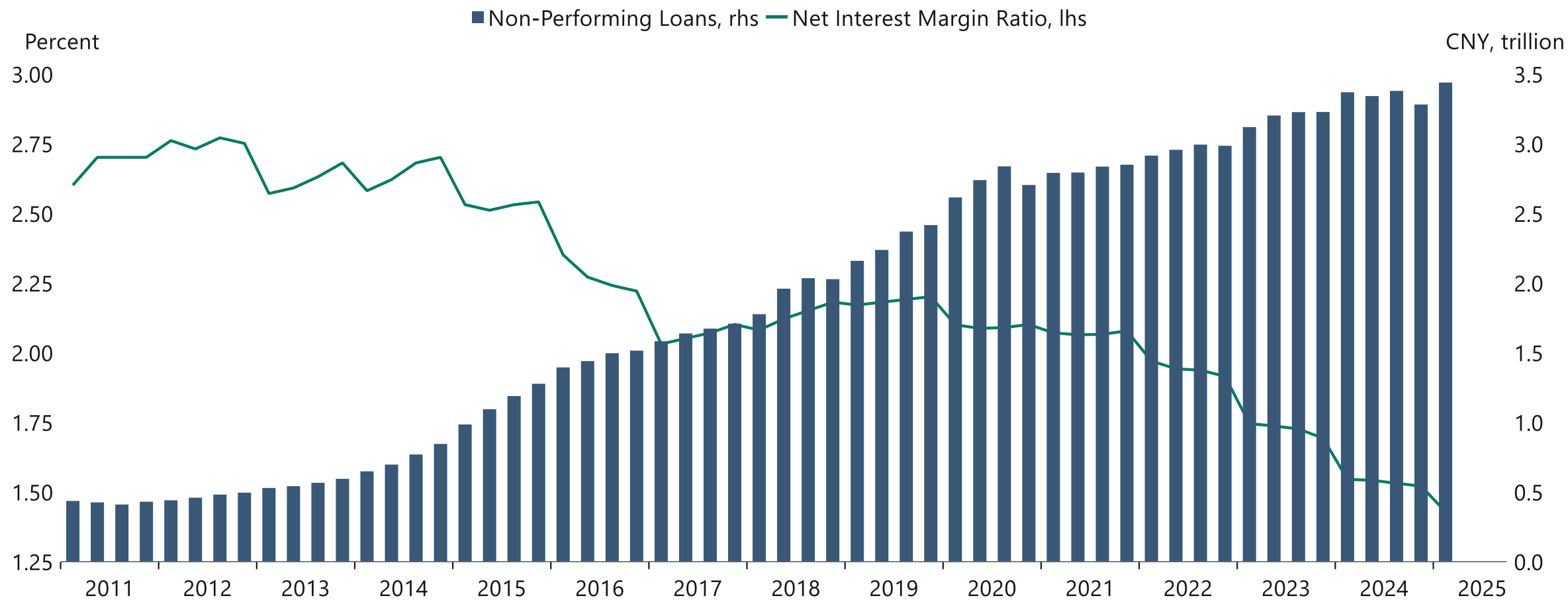
Source: BIS (The Bank for International Settlements), Macrobond, Apollo Chief Economist

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



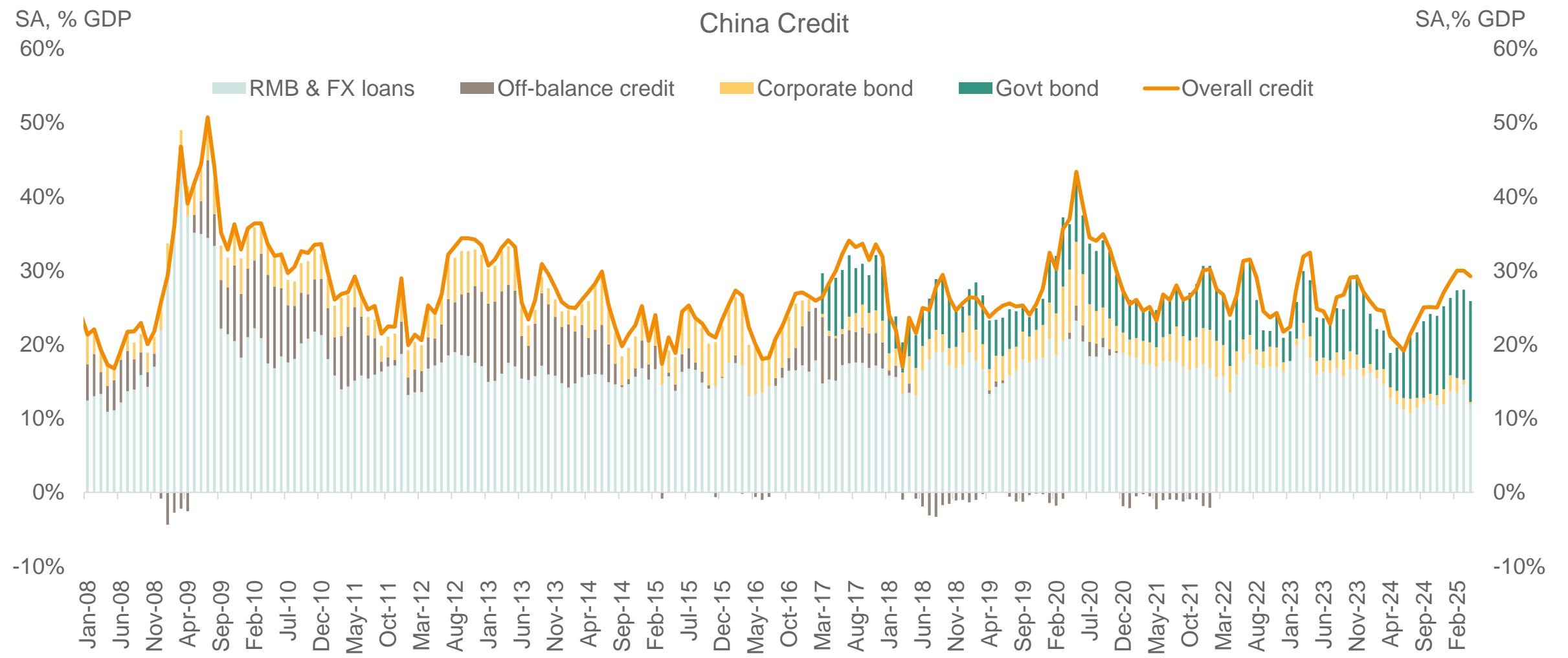
Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

China banks: NPL has been rising



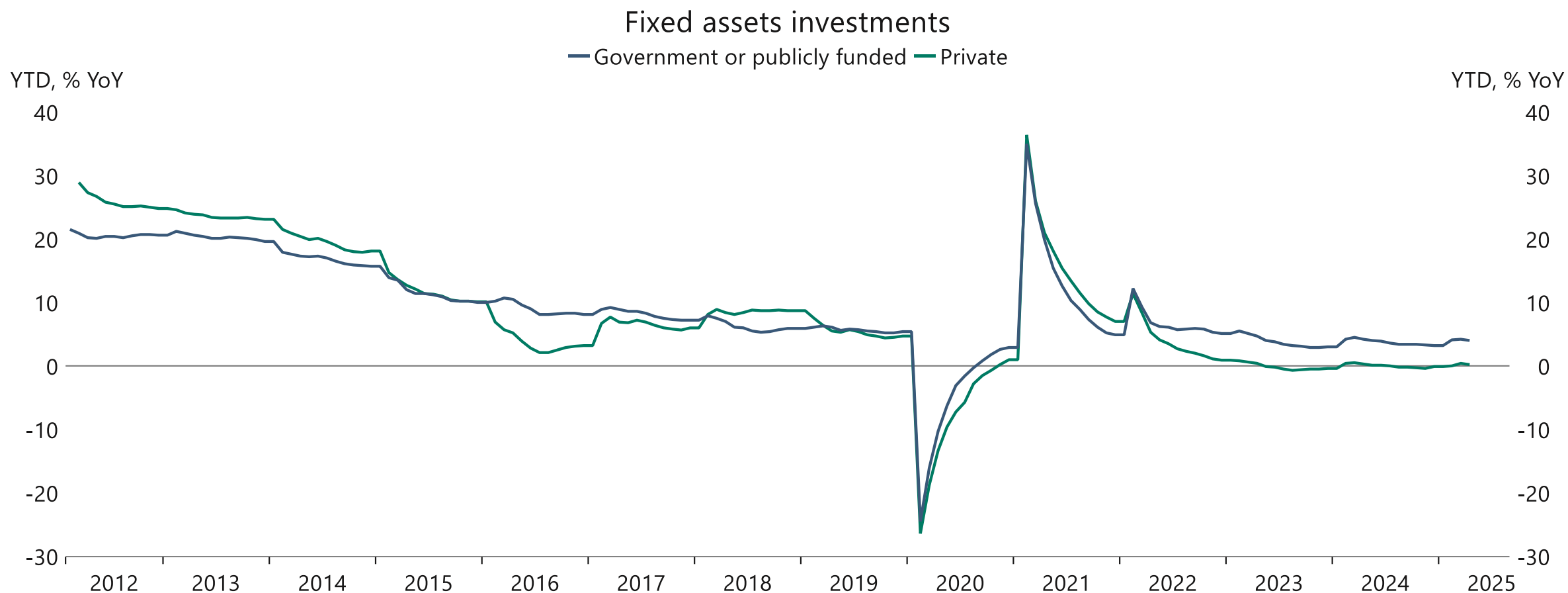
Source: China National Financial Regulatory Administration, Macrobond, Apollo Chief Economist

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

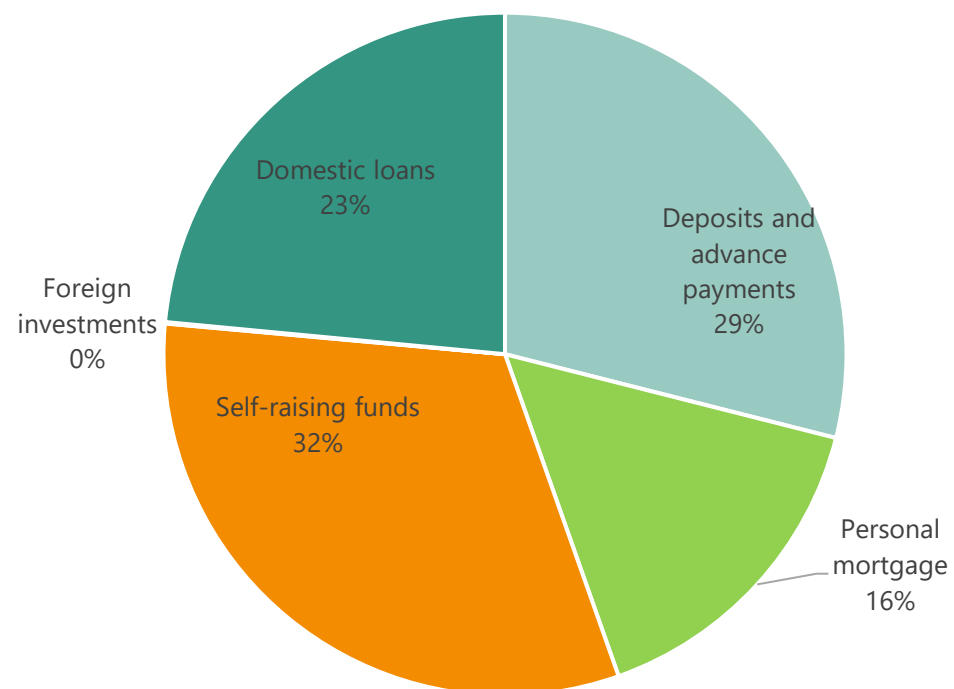
China: Private investment growth is slowing



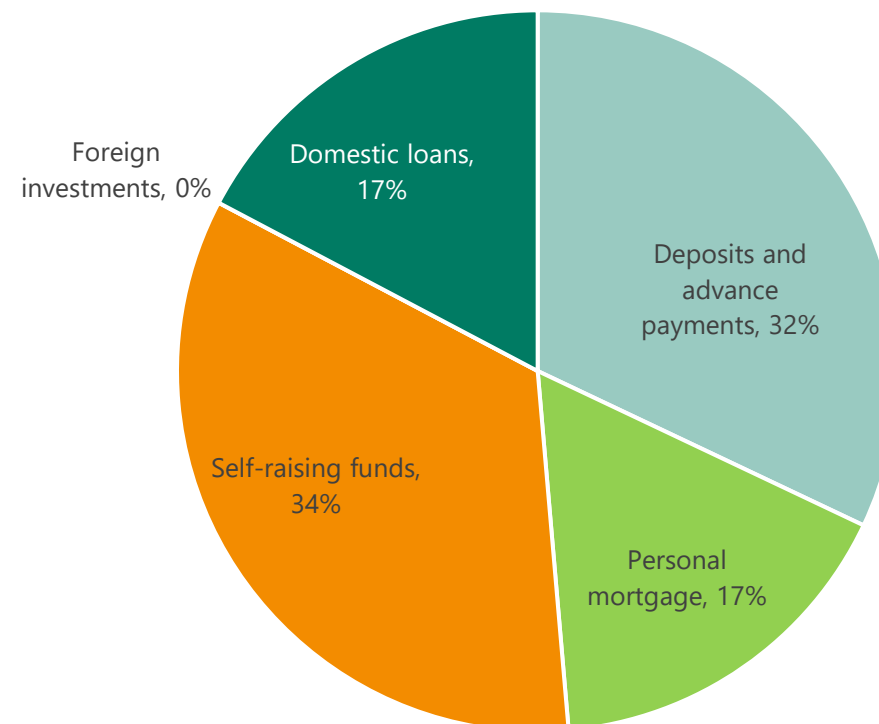
Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

China: Sources of funds for real estate developers

January 2020



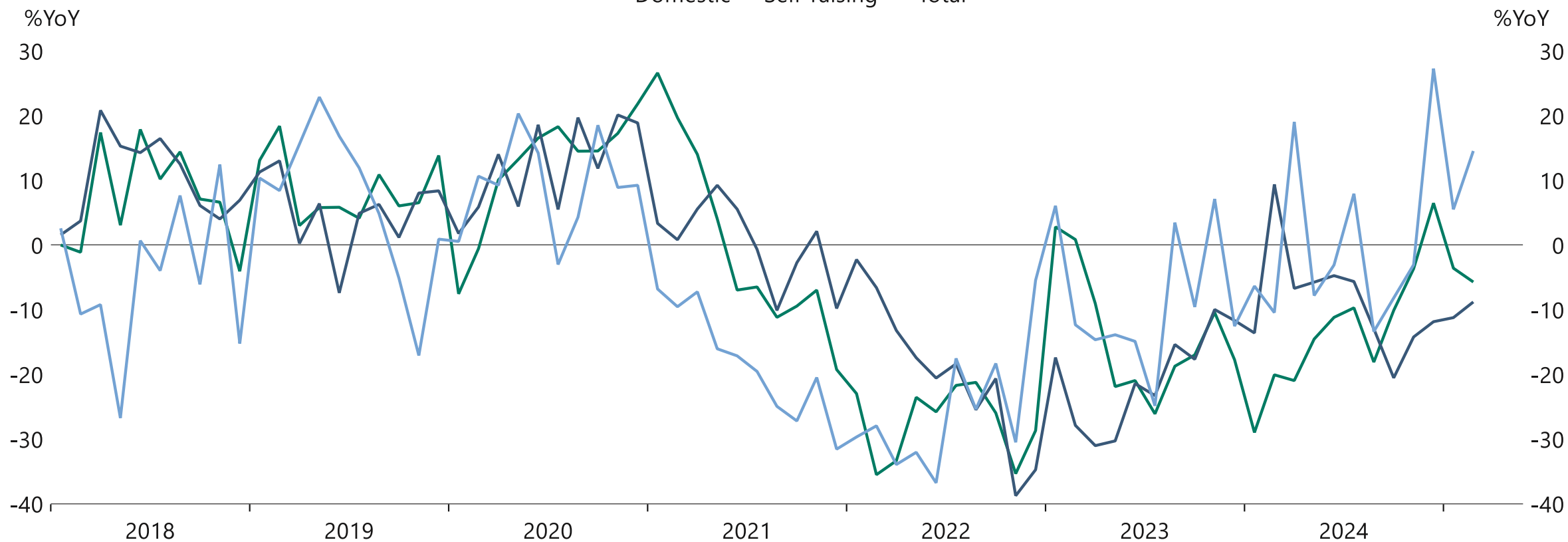
March 2025



China real estate: Funding gradually improving

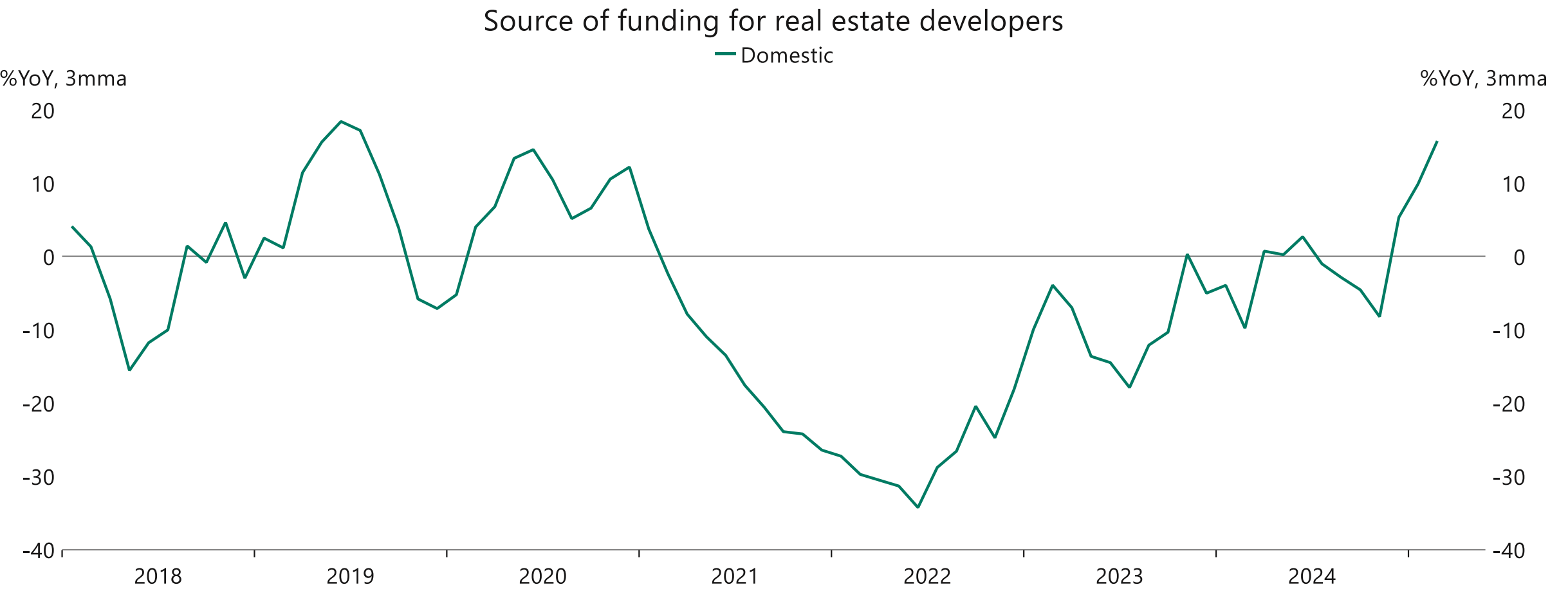
Source of funding for real estate developers

— Domestic — Self-raising — Total



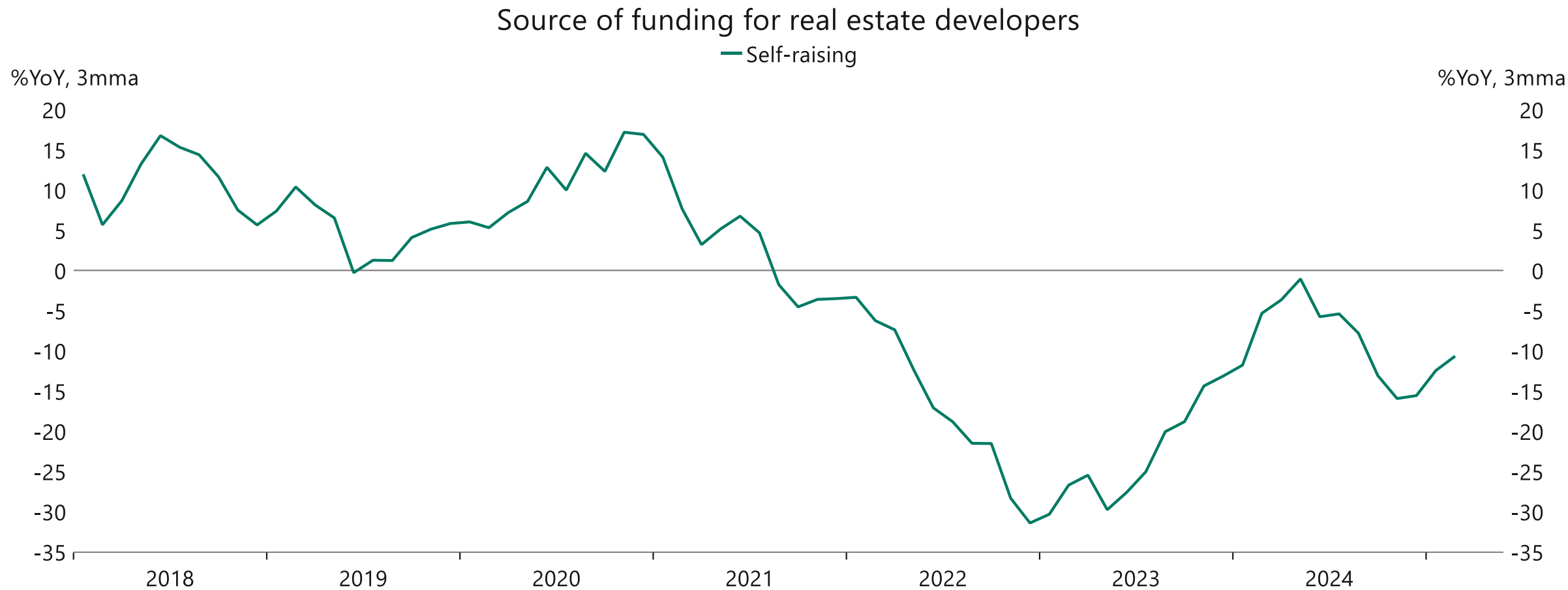
Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Domestic funding conditions



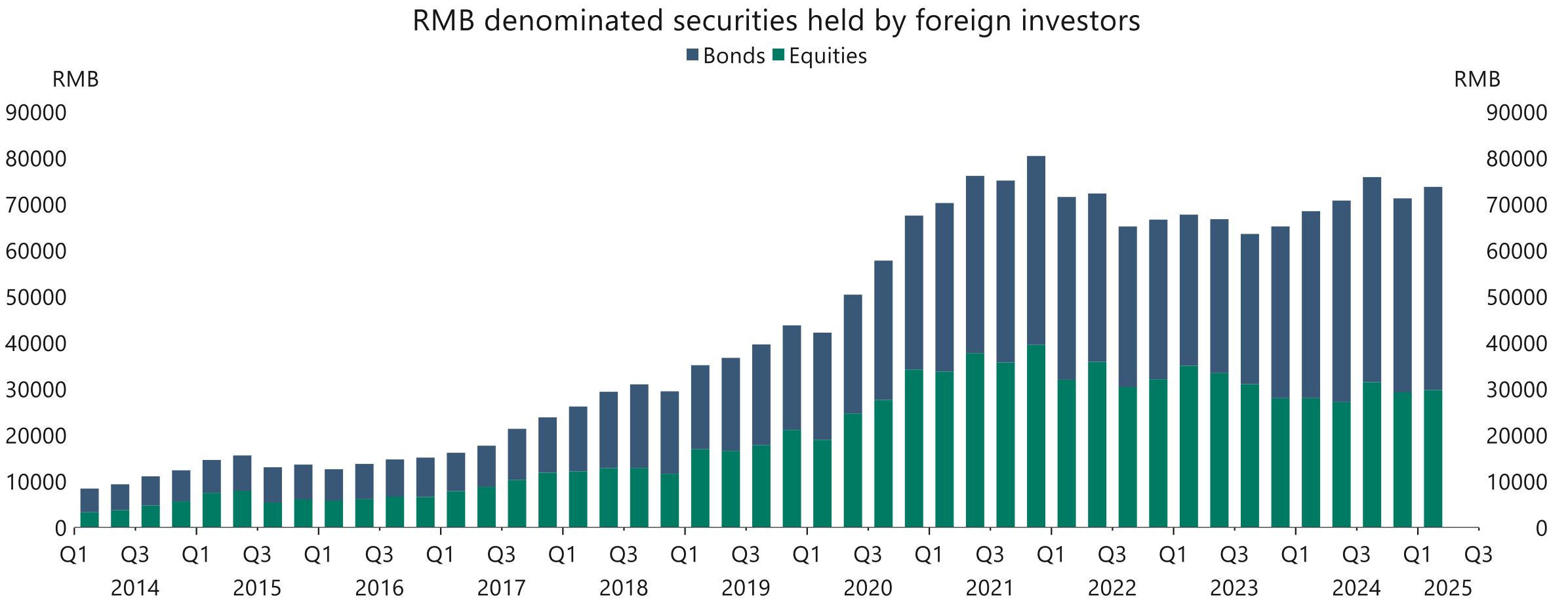
Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Self-financing for real estate developers



Source: Bloomberg, Macrobond, Apollo Chief Economist

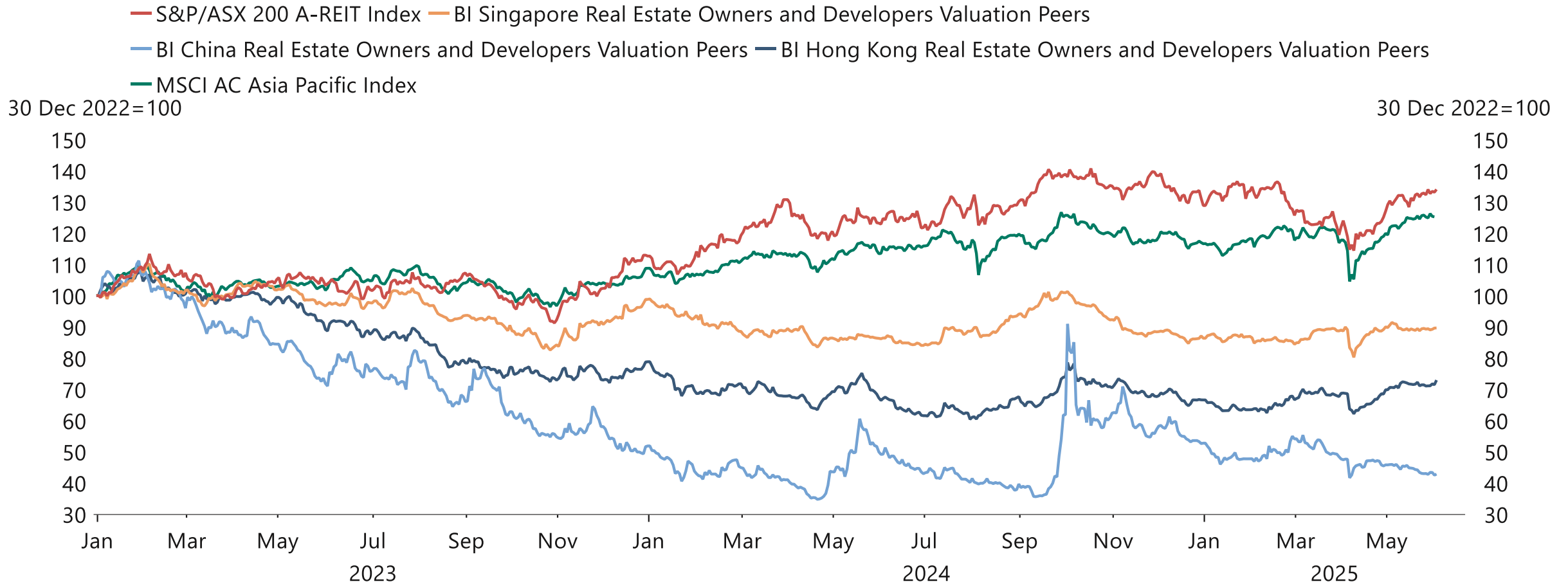
Global holdings of Chinese stocks and bonds



Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Credit markets and stock markets

China real estate sector performance compared to other Asian countries



Source: Bloomberg, Macrobond, Apollo Chief Economist

China IG and HY credit: Real estate developers have been hit hard



Source: Bloomberg, Macrobond, Apollo Chief Economist

China's real estate sector under pressure



Source: Bloomberg, Macrobond, Apollo Chief Economist

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



Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Stock prices of real estate developers

Bloomberg China Real Estate Developers Index

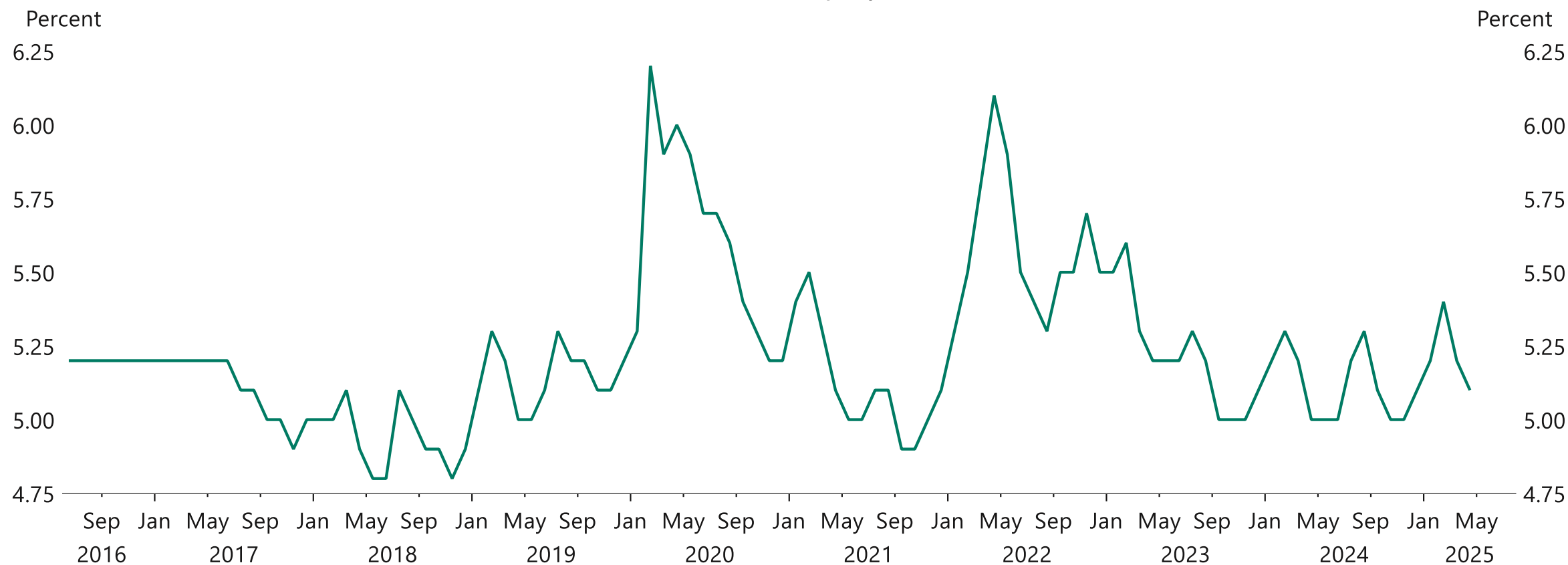


Source: Bloomberg, Macrobond, Apollo Chief Economist

China: Other indicators

China: Unemployment rate is stable

China, Urban unemployment rate

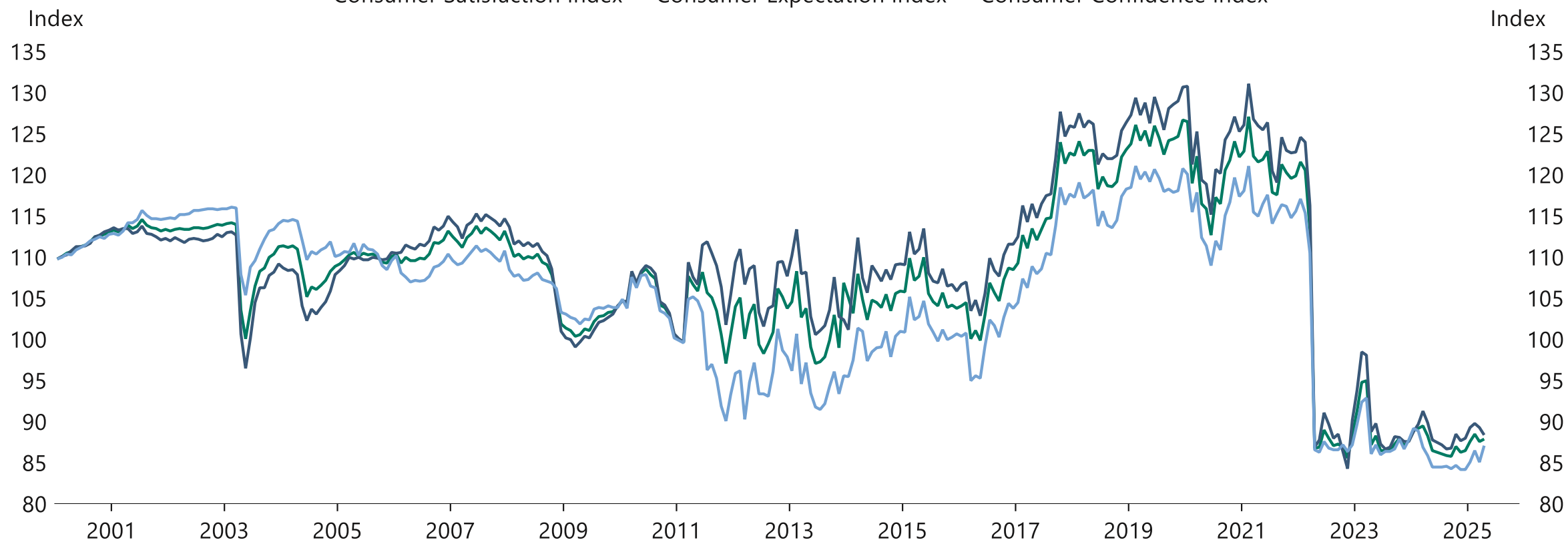


Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

China: Consumer confidence is down

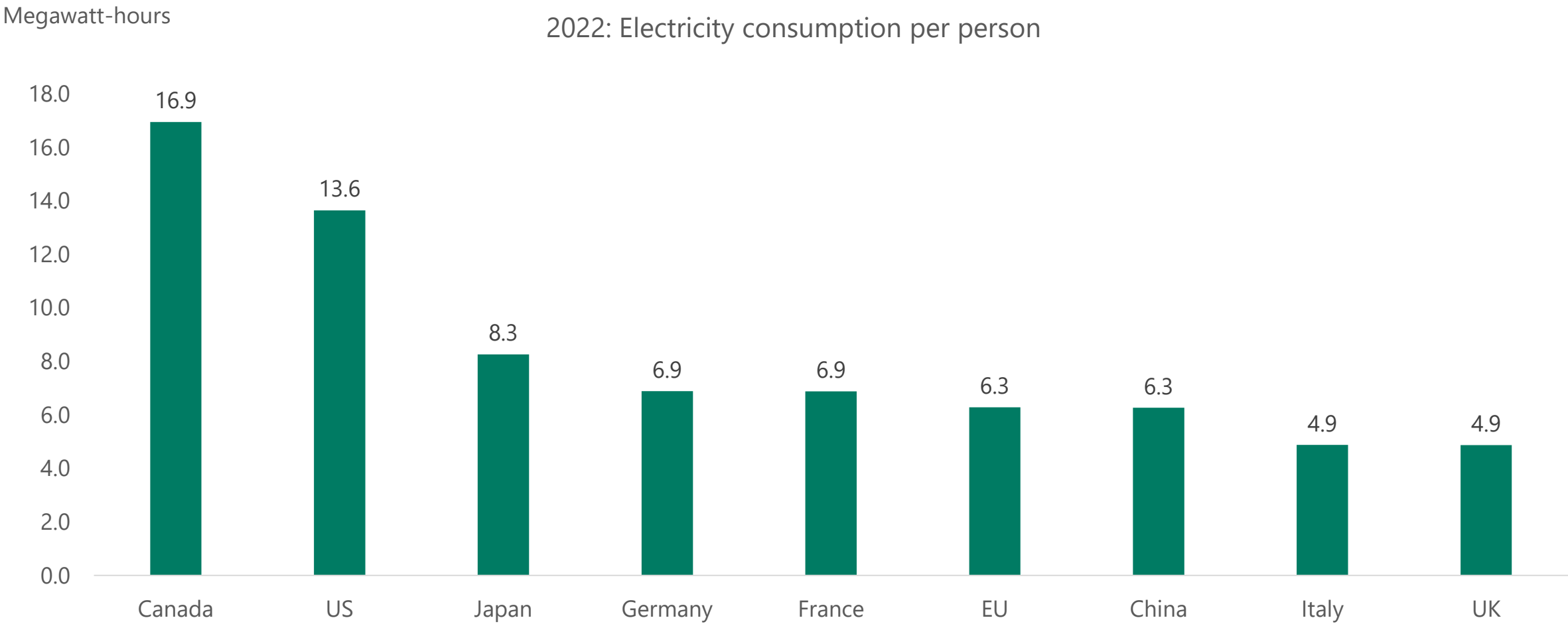
China Consumer Confidence Index

— Consumer Satisfaction Index — Consumer Expectation Index — Consumer Confidence Index



Source: China Economic Monitoring & Analysis Center (CEMAC), Macrobond, Apollo Chief Economist

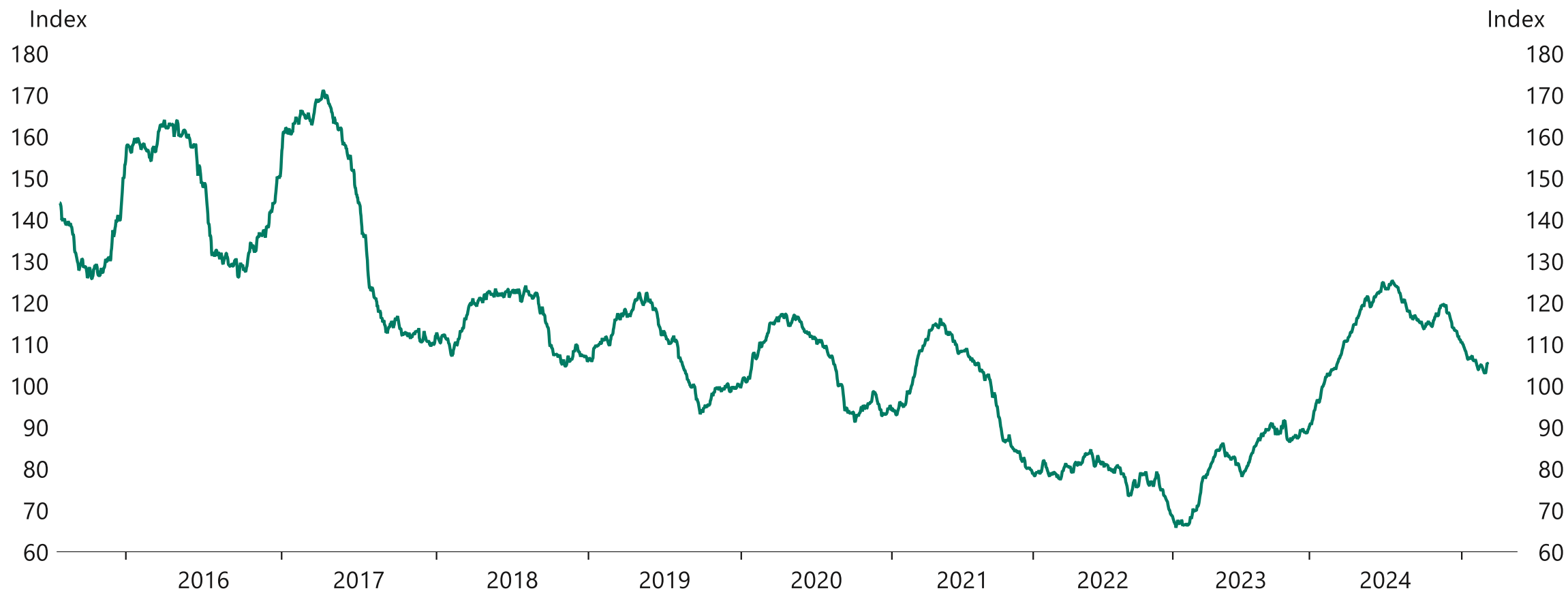
China’s per capita electricity use is higher than in Italy and UK



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

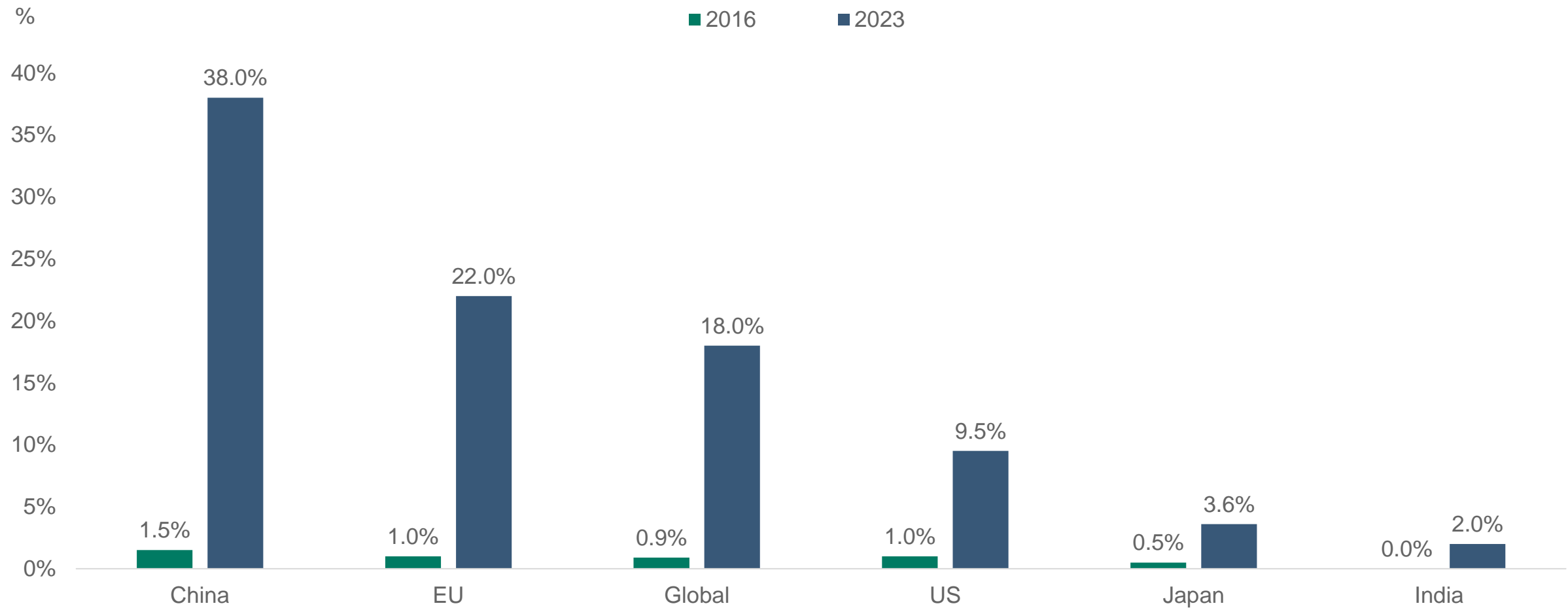
Air quality levels back at 2021 levels

China Air Quality Index Beijing



Source: Bloomberg, Macrobond, Apollo Chief Economist. Note: Data is 200 days moving average

China leads in EV penetration rate



Source: IEA, Apollo Chief Economist. Note: EVs refers to all electric vehicles (BEVs + PHEVs). BEVs = battery electric vehicles. PHEVs = plug-in hybrid electric vehicles.

M1 money supply and GDP growth



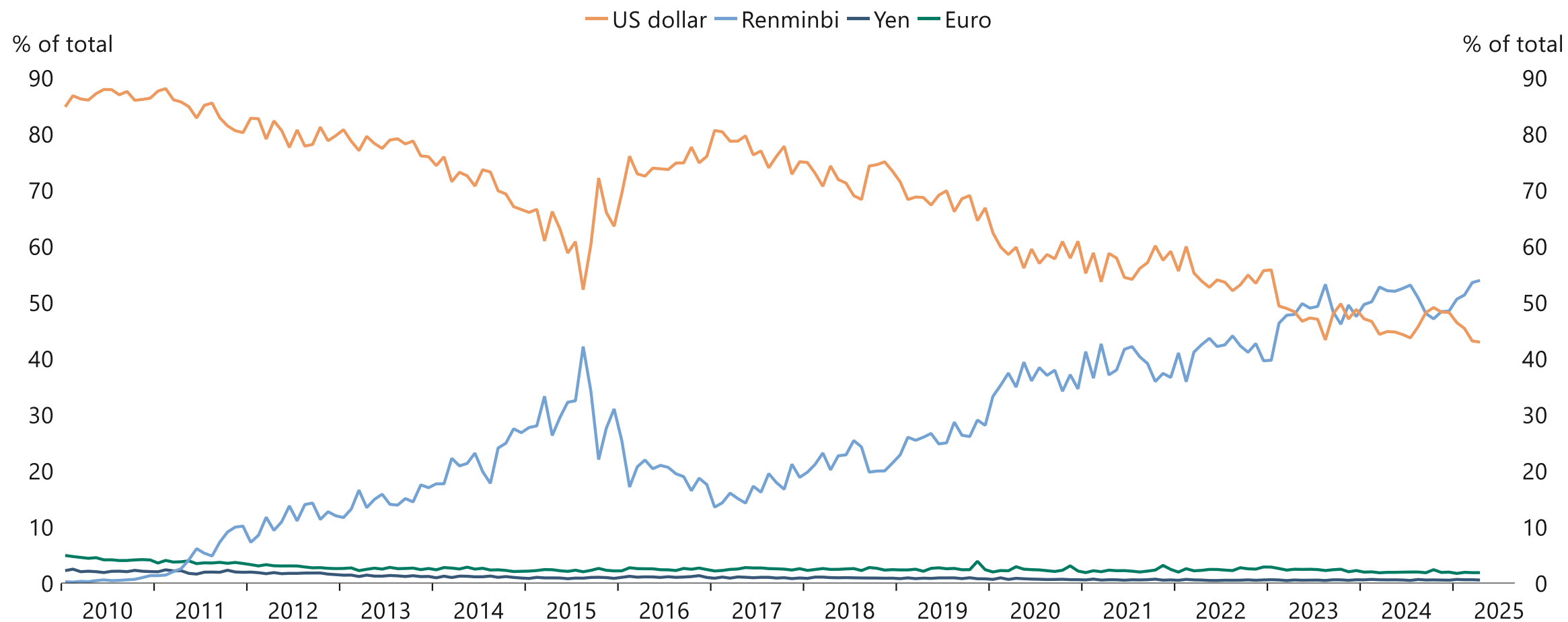
Source: China National Bureau of Statistics (NBS), People's Bank of China (PBoC), Macrobond, Apollo Chief Economist

Shanghai freight rates lead China PPI



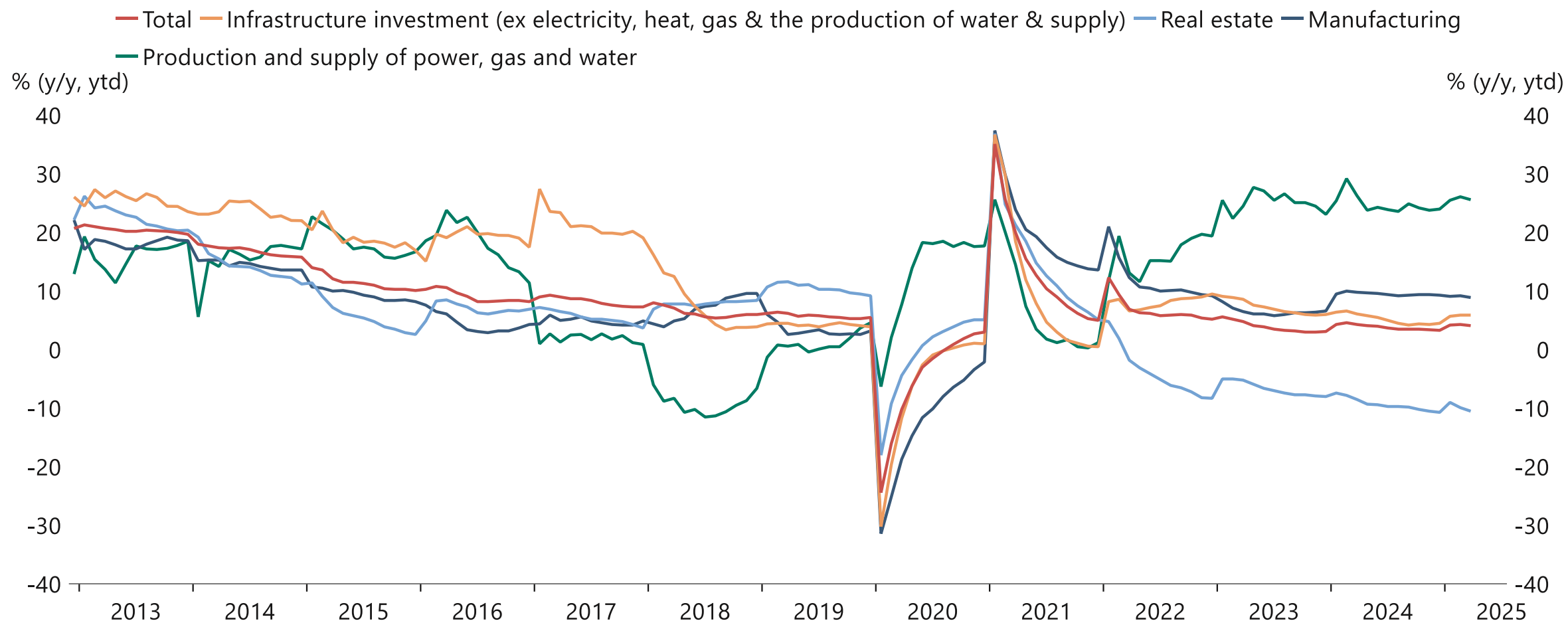
Source: China National Bureau of Statistics (NBS), Shanghai Shipping Exchange, Macrobond, Apollo Chief Economist

Outbound payments by currency



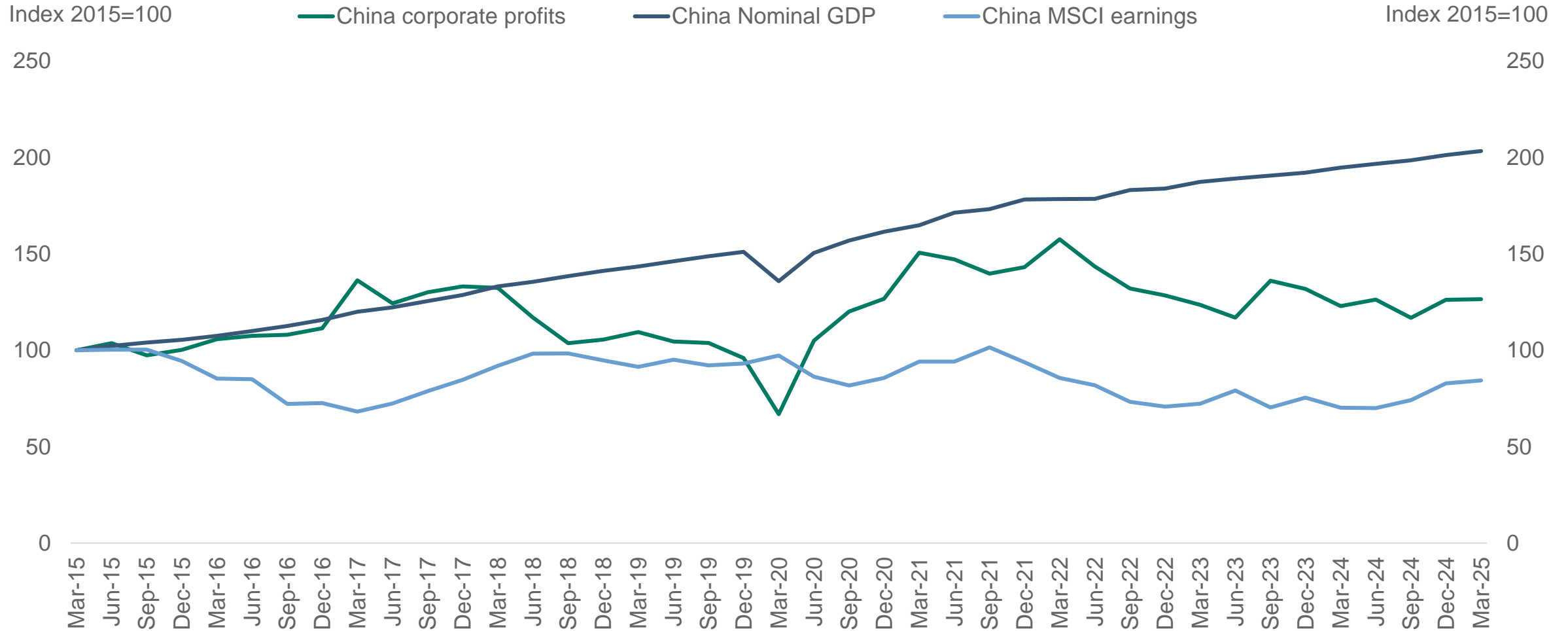
Source: State Administration of Foreign Exchange (SAFE) of China, Macrobond, Apollo Chief Economist

Fixed asset investment in China by sector



Source: China National Bureau of Statistics (NBS), Macrobond, Apollo Chief Economist

China's corporate profits declining relative to GDP and MSCI earnings

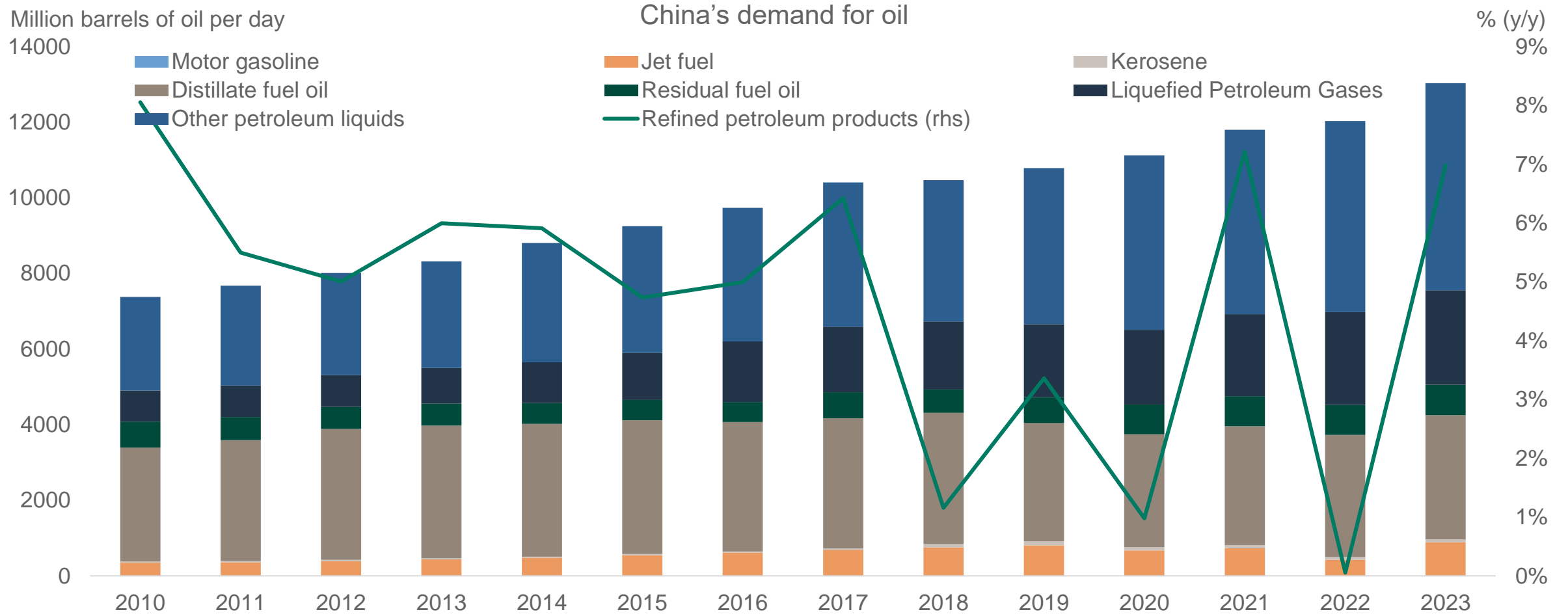


China's industrial profits declined third time in a row



Source: Bloomberg, Macrobond, Apollo Chief Economist

China's demand for oil



Japanese investments into China



Source: Bank of Japan (BOJ), Macrobond, Apollo Chief Economist

Chinese gold trading volume



Source: Bloomberg, Macrobond, Apollo Chief Economist



Torsten Slok, Ph.D.

Chief Economist

Apollo Global Management

tslok@apollo.com

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.