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

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

**Apollo Global Management**

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Unless otherwise noted, information as of July 2024

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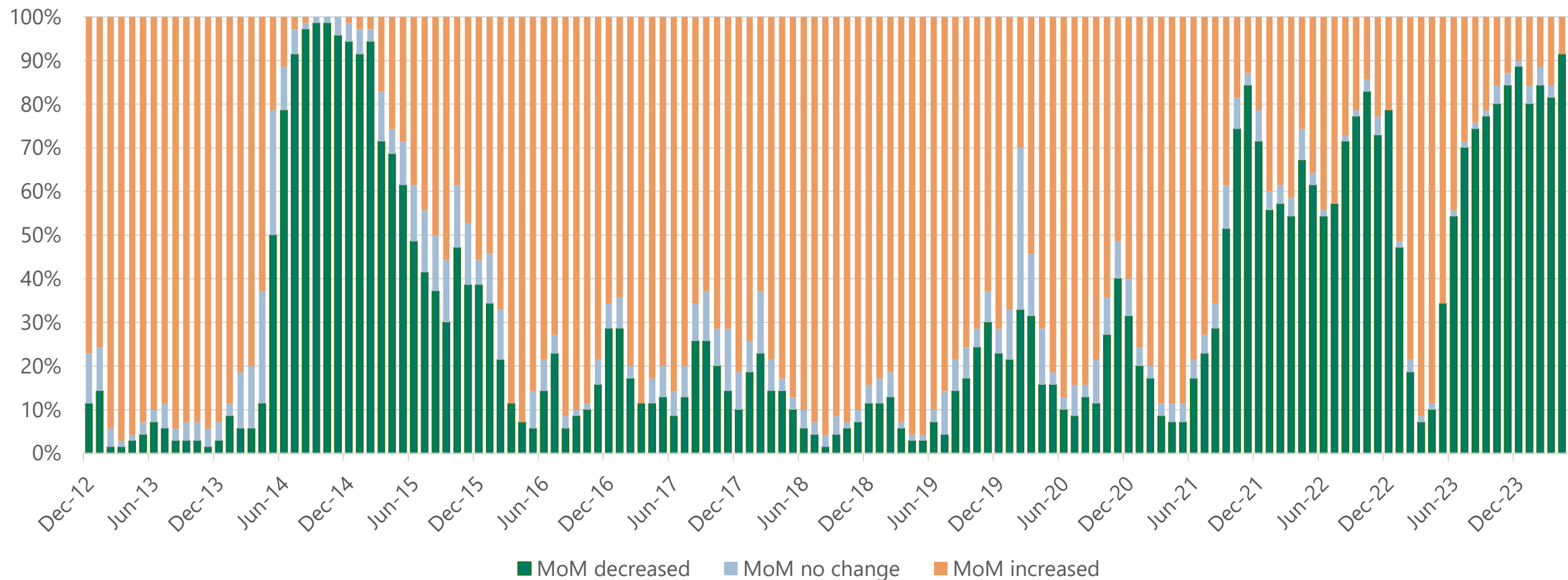
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# China: Overview

# Housing market cooling rapidly in China

Price changes in 70 major cities (new residential properties)

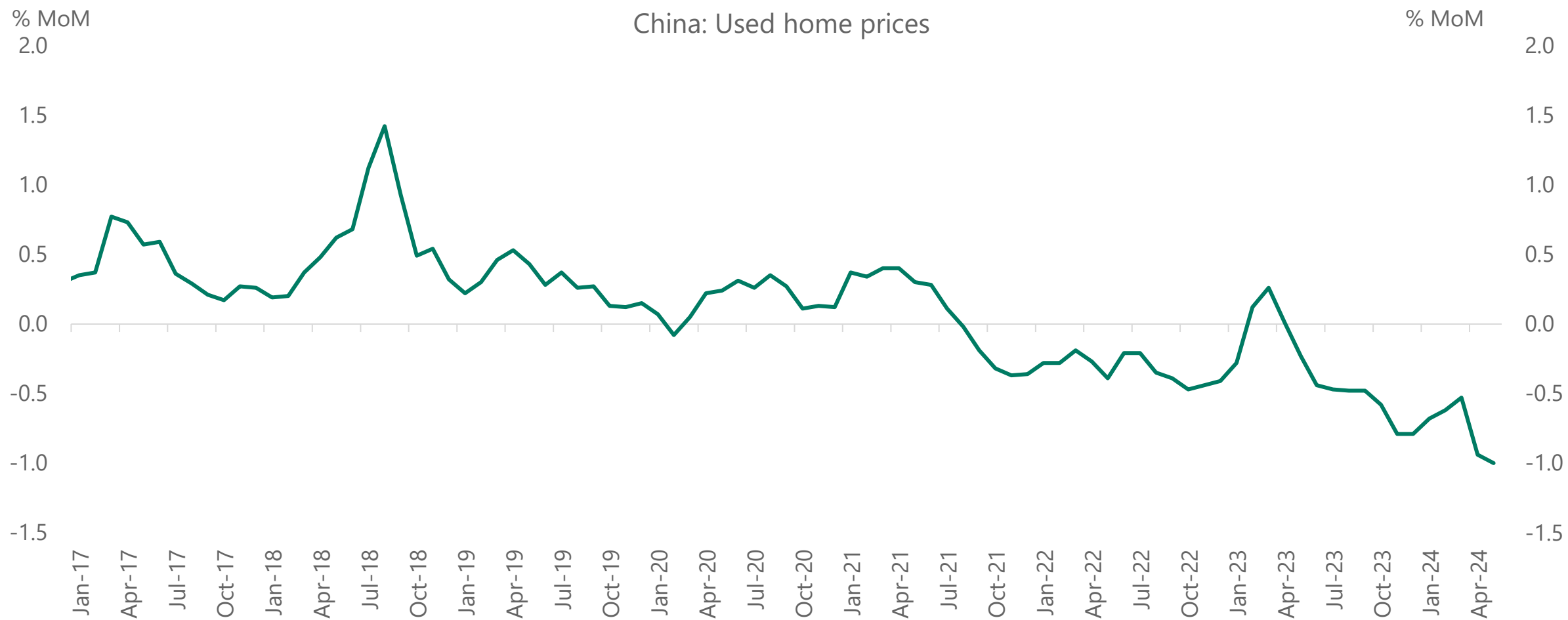


Source: Bloomberg, Apollo Chief Economist

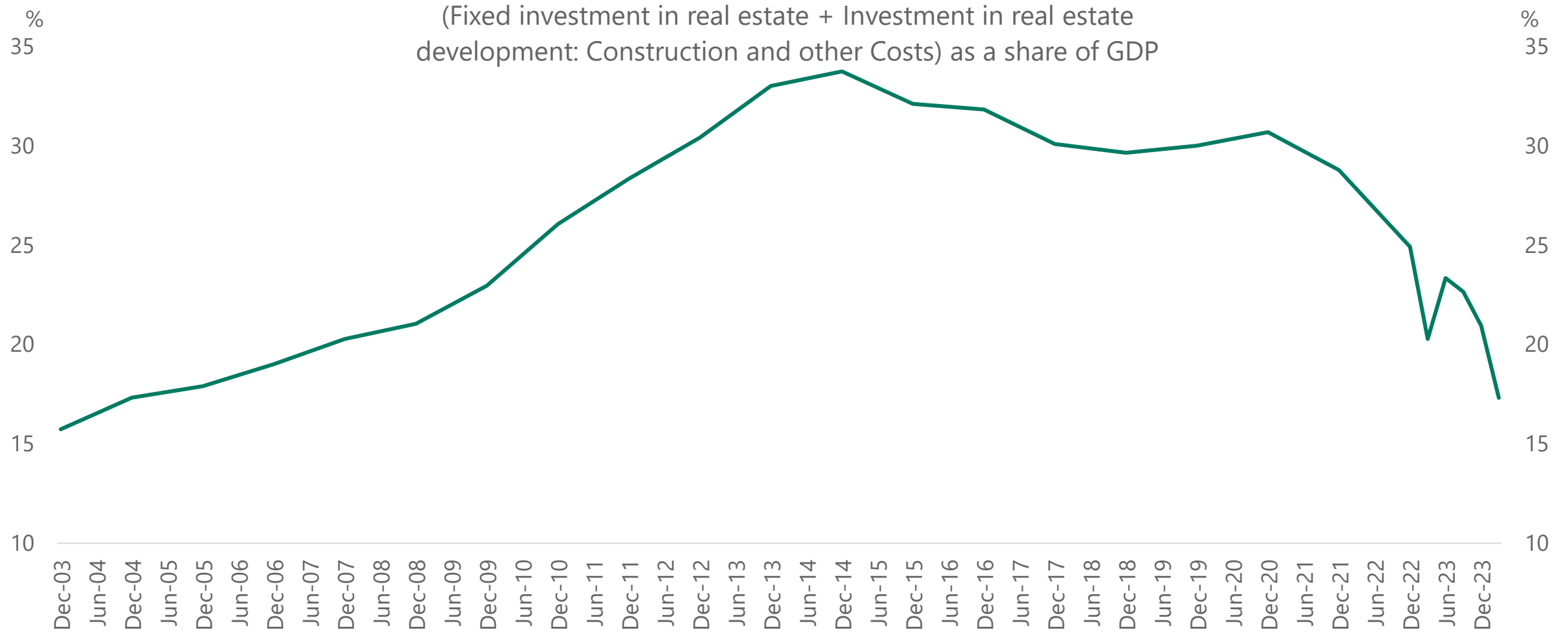
# China: New home prices declining



# China: Used home prices falling



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



# Beijing home prices falling

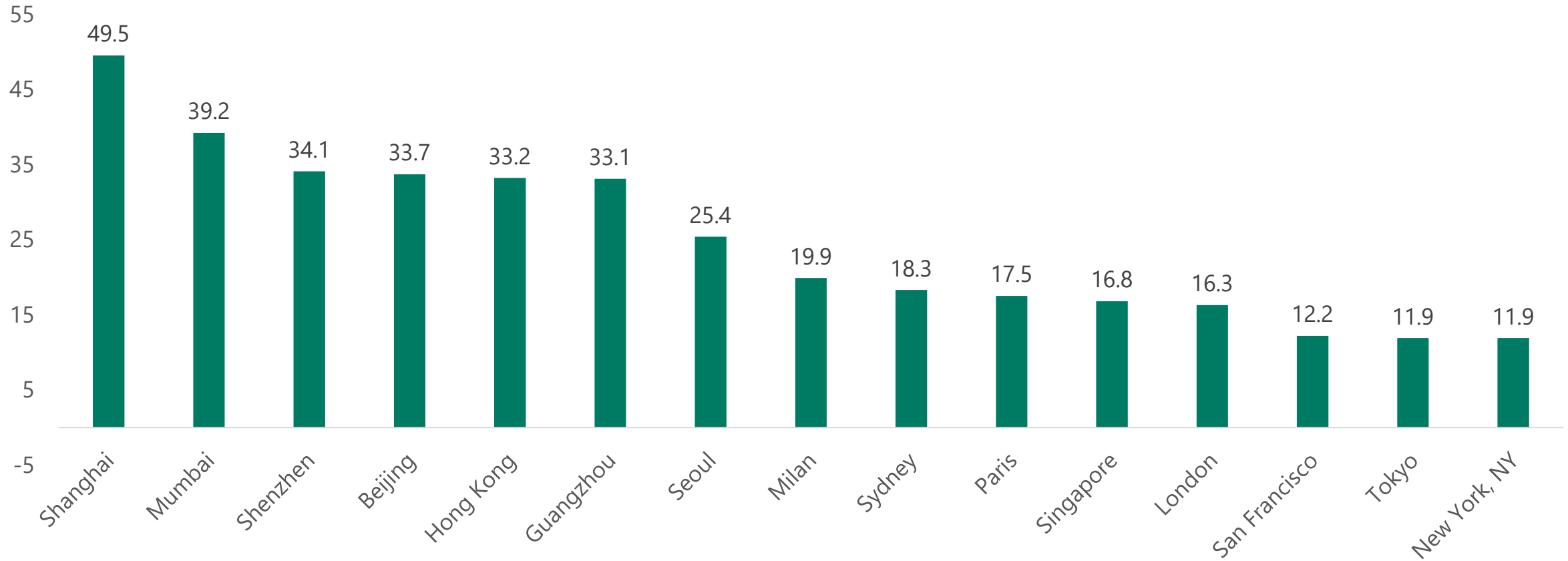


Source: BIS, Haver, Apollo Chief Economist



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

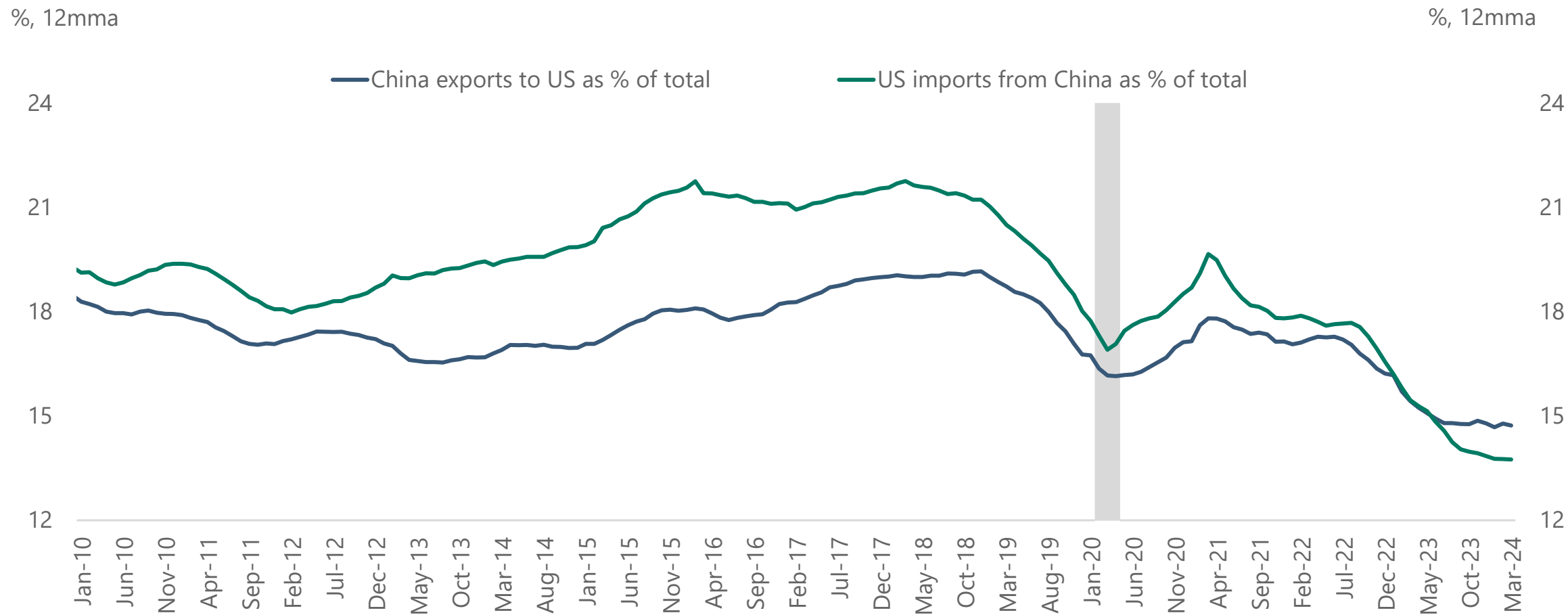
Home Price-to-income Ratios in the World's Major Cities (mid-2023)



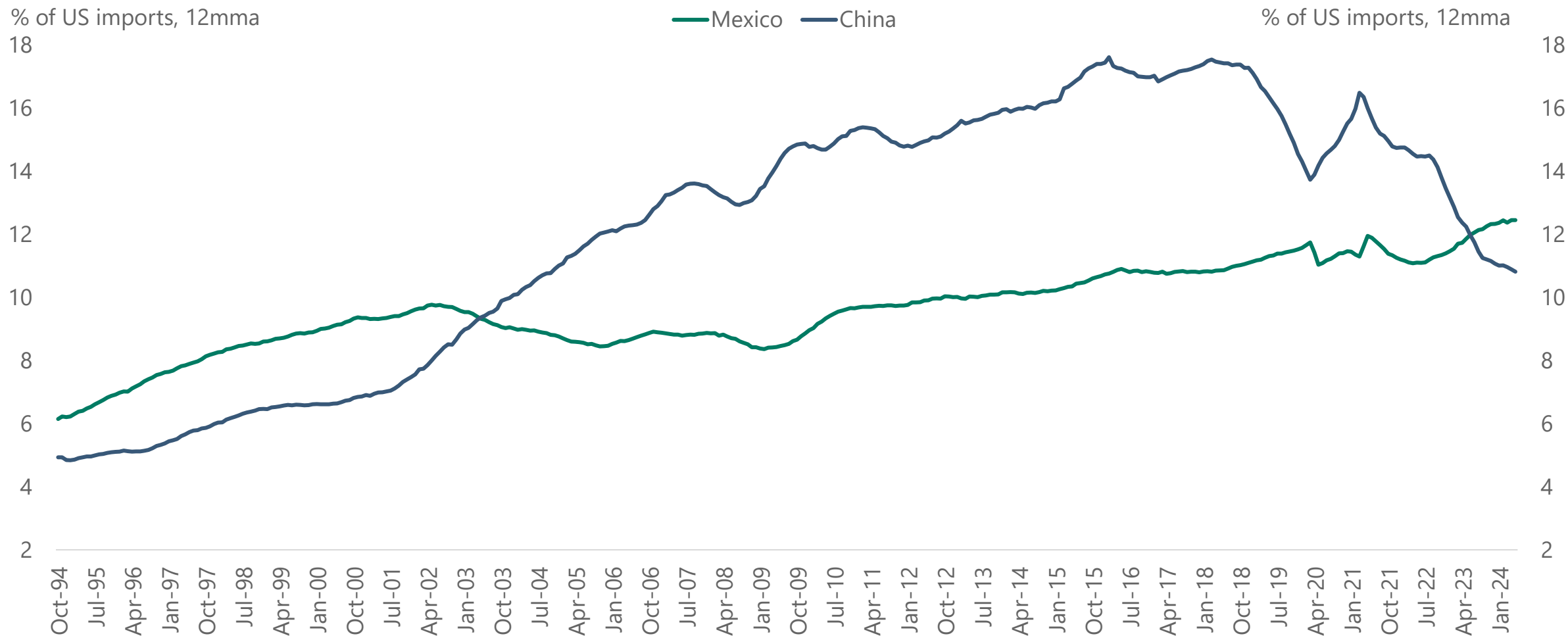
China: In 2000 there were 10 workers per retiree. Today there are 5.



# US and China less dependent on each other for trade

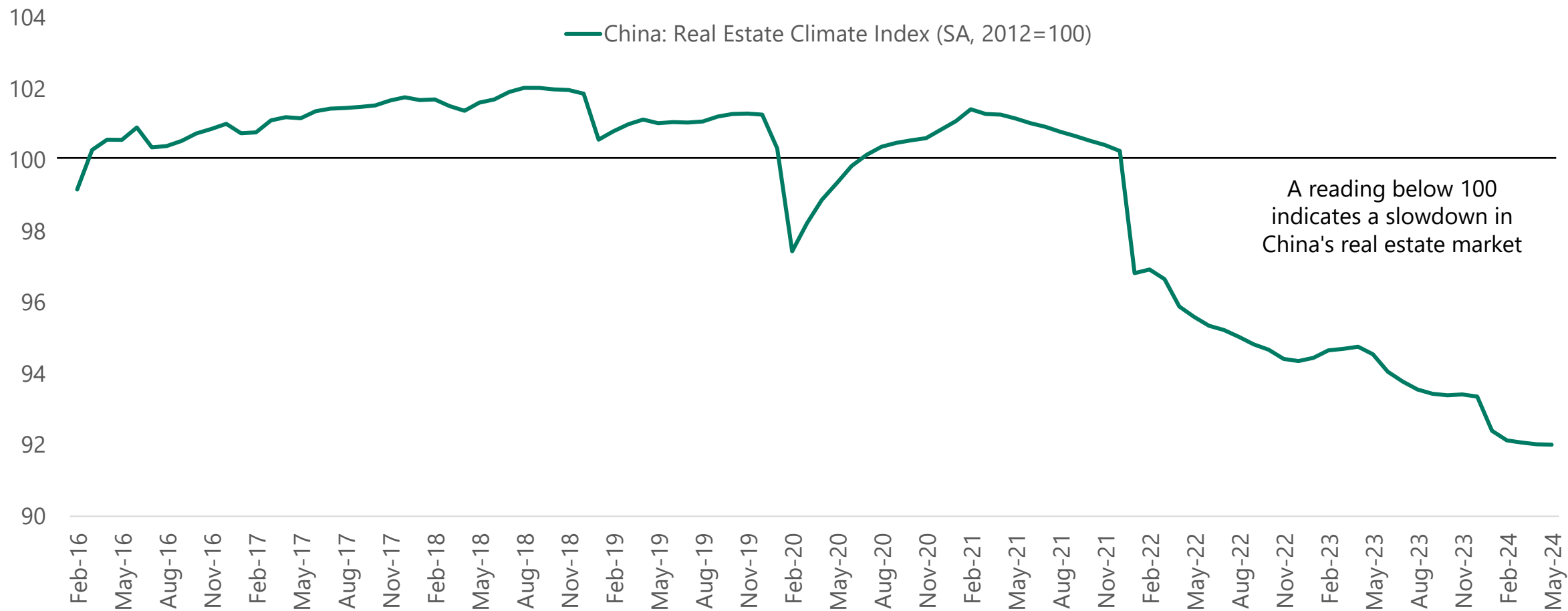


# US now importing more from Mexico than China



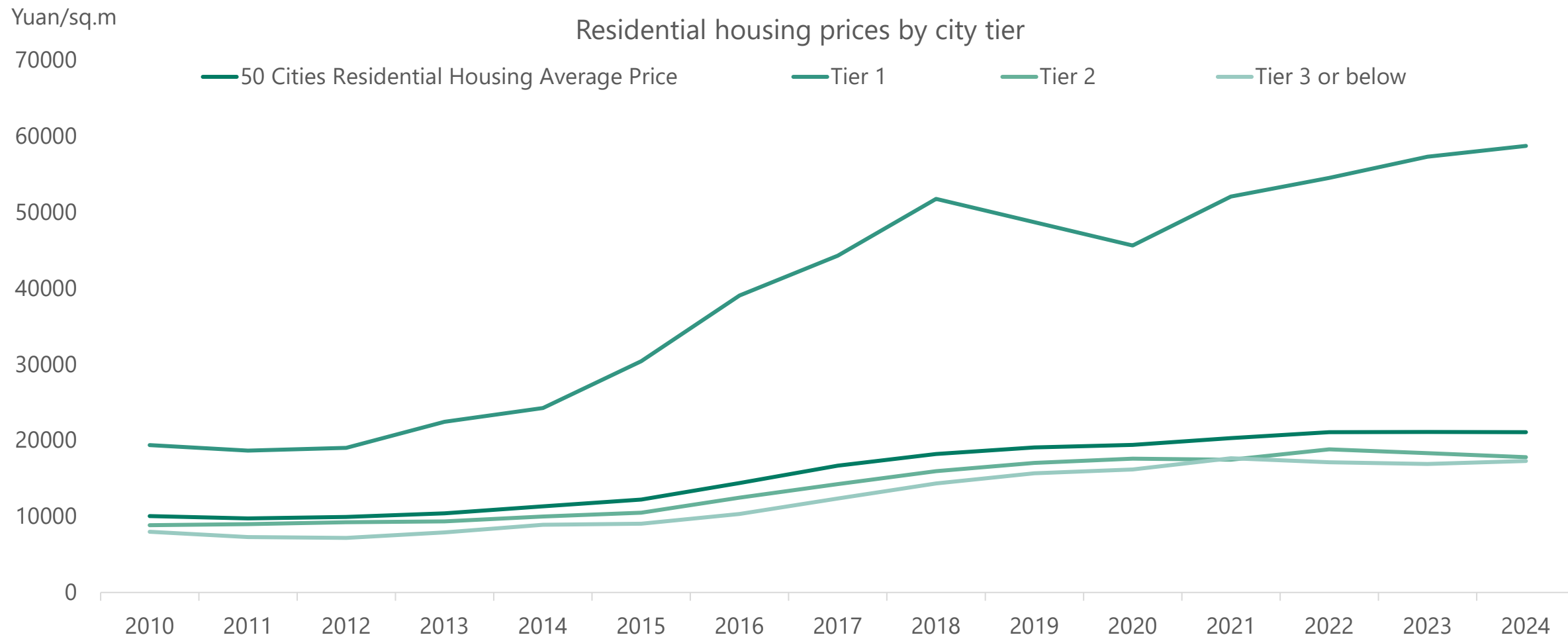
China: Housing bubble is deflating

# China real estate index in recession territory



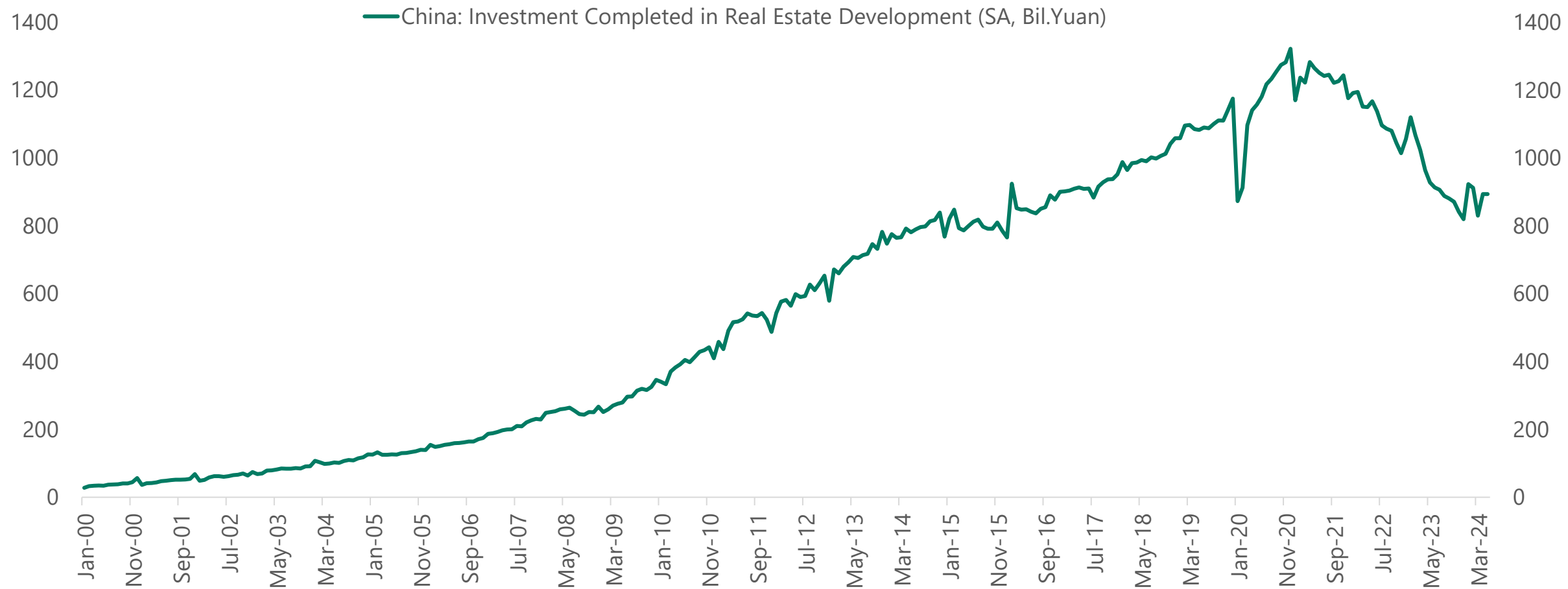
Source: NBS, Haver, Apollo Chief Economist. Note: A reading above 100 indicates economic growth and a reading below 100 indicates a slowdown in China's real estate market.

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



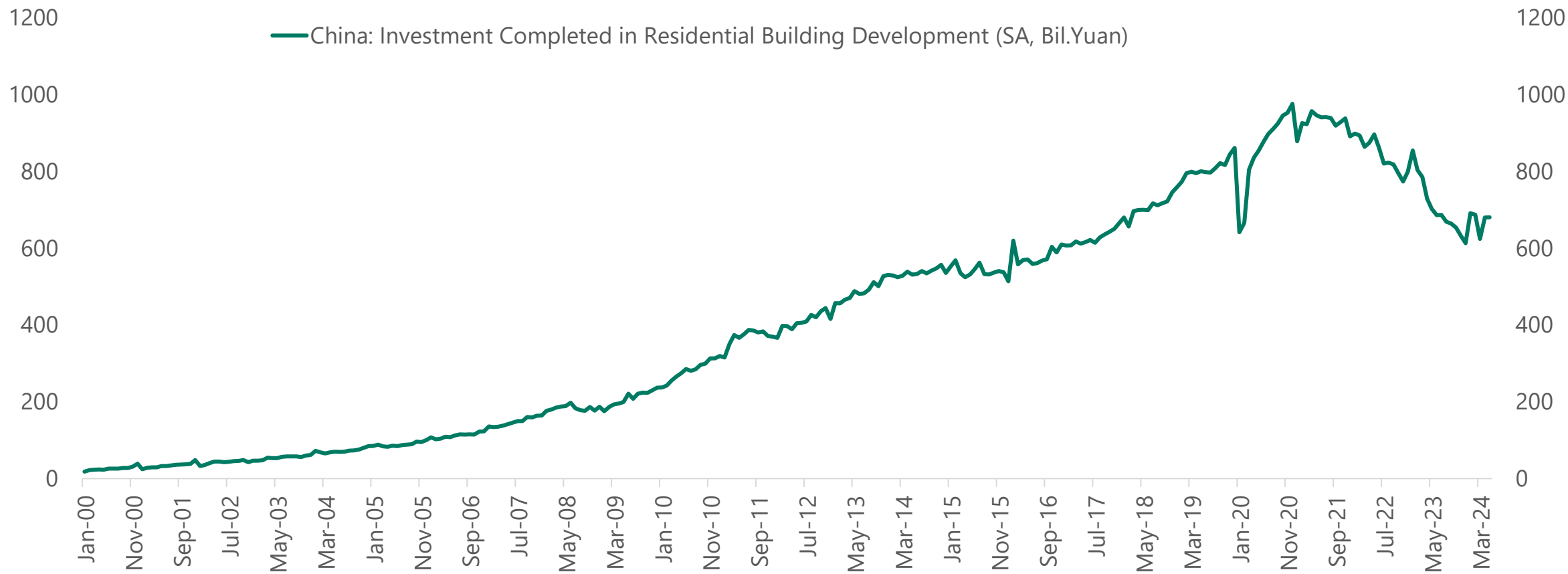
Source: Bloomberg, Apollo Chief Economist (Note: 2024 is till May)

# China: Real estate investment slowing





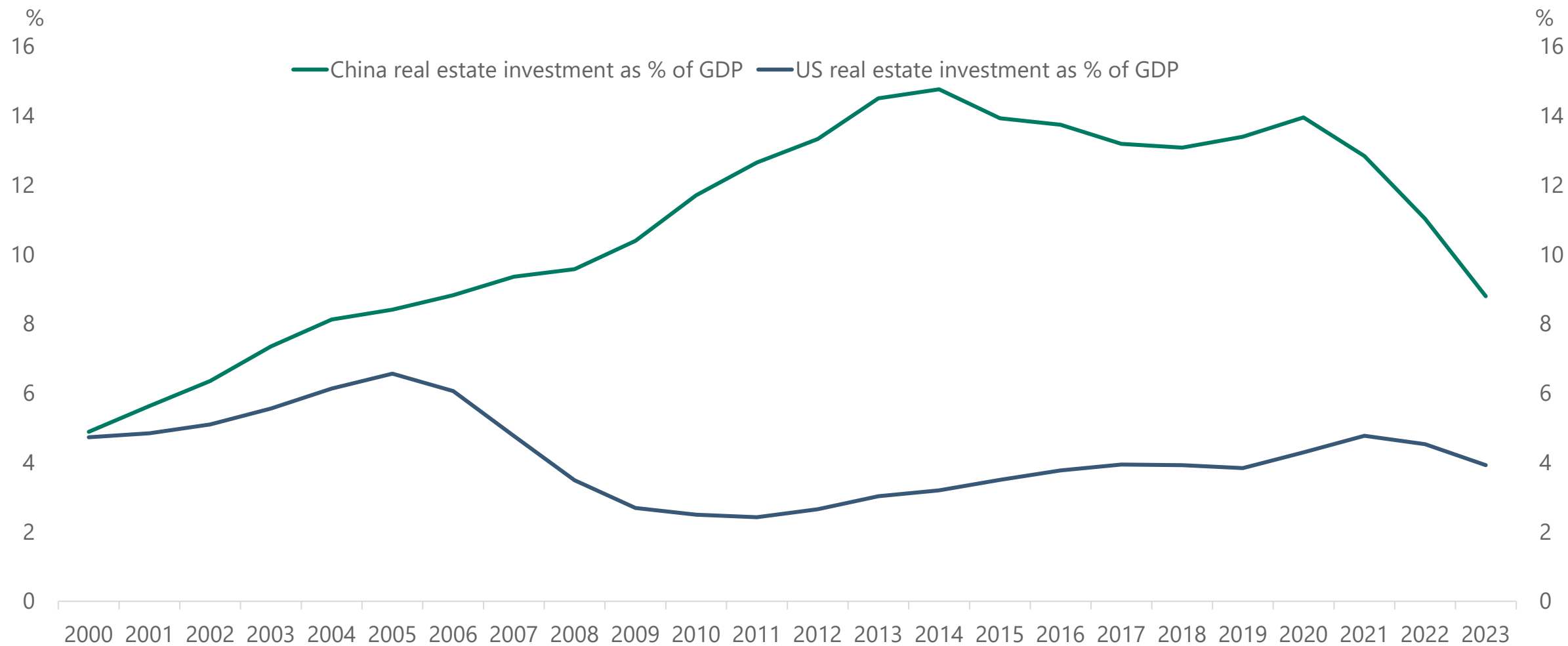
# Residential real estate investment slowing



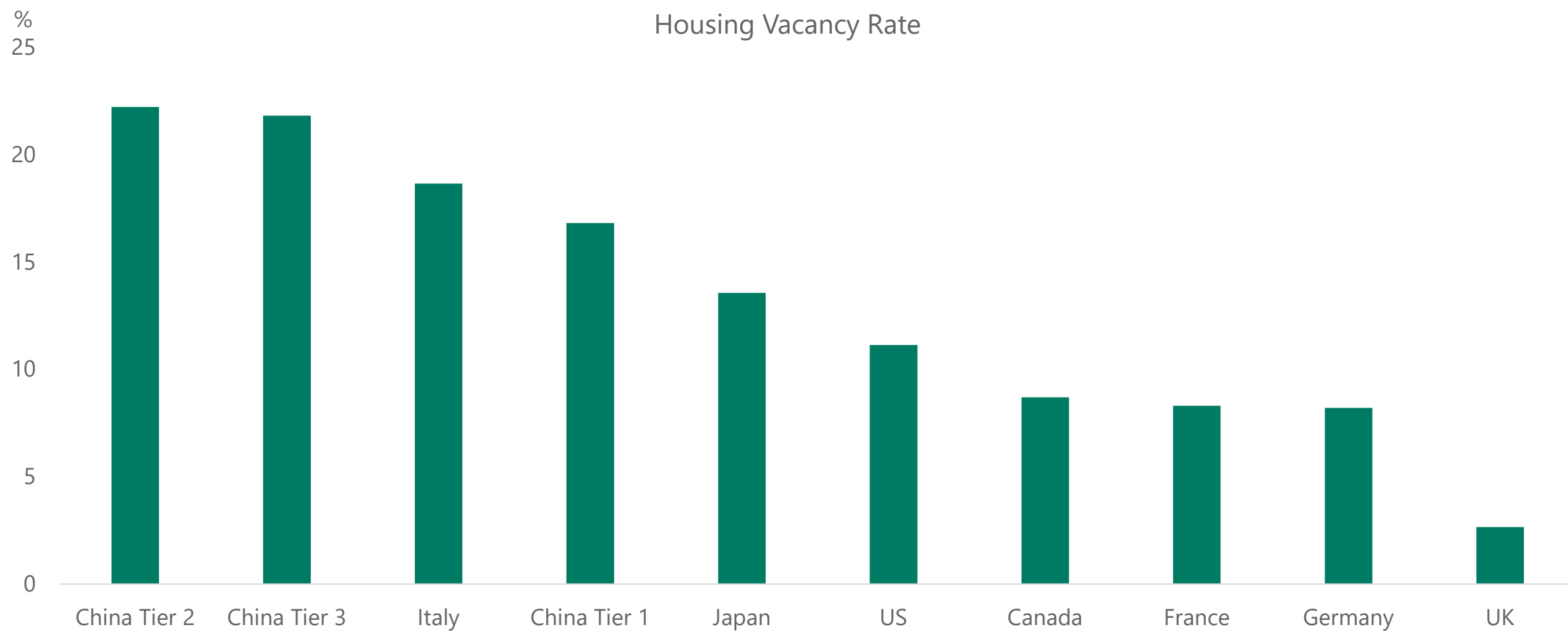
# China residential transactions falling



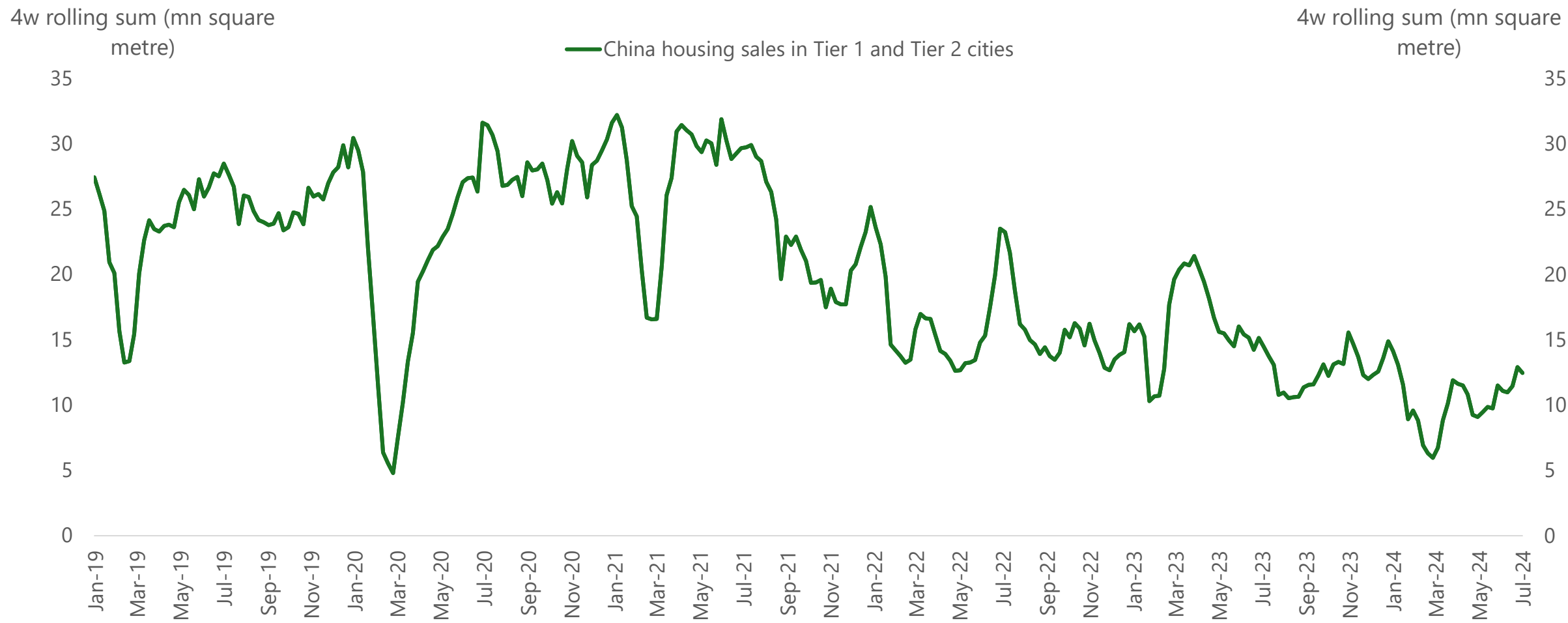
# A sharp drop in real estate investment in China



# Average Chinese vacancy rates higher than G7 countries

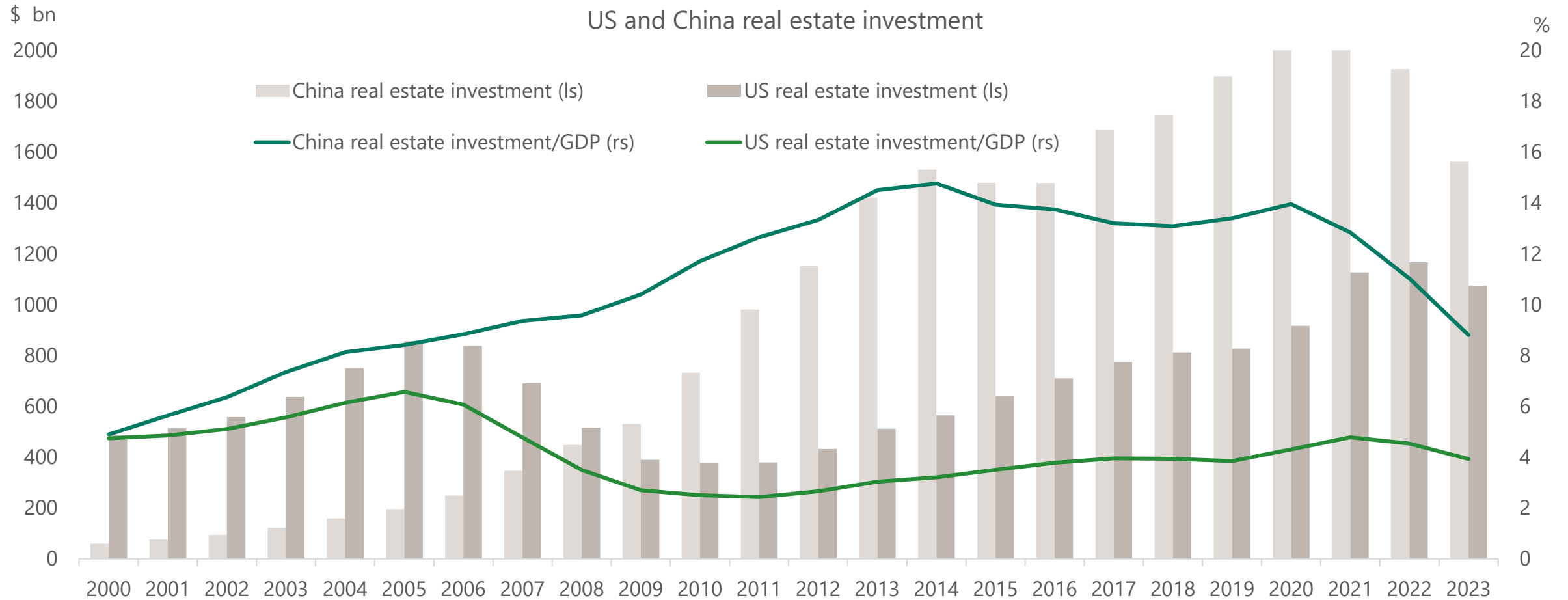


# Home sales low in Tier 1 and Tier 2 cities



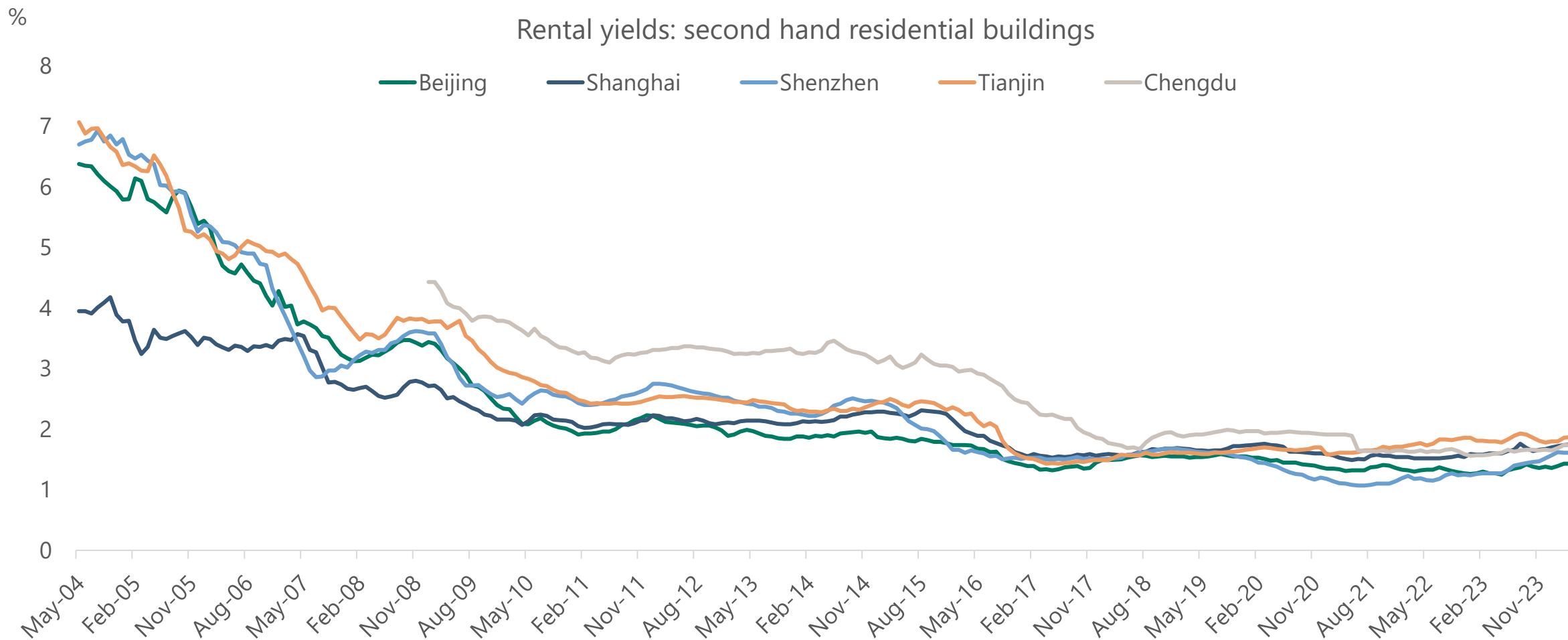
Source: China Real Estate Information Corp, Bloomberg, Apollo Chief Economist

# 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



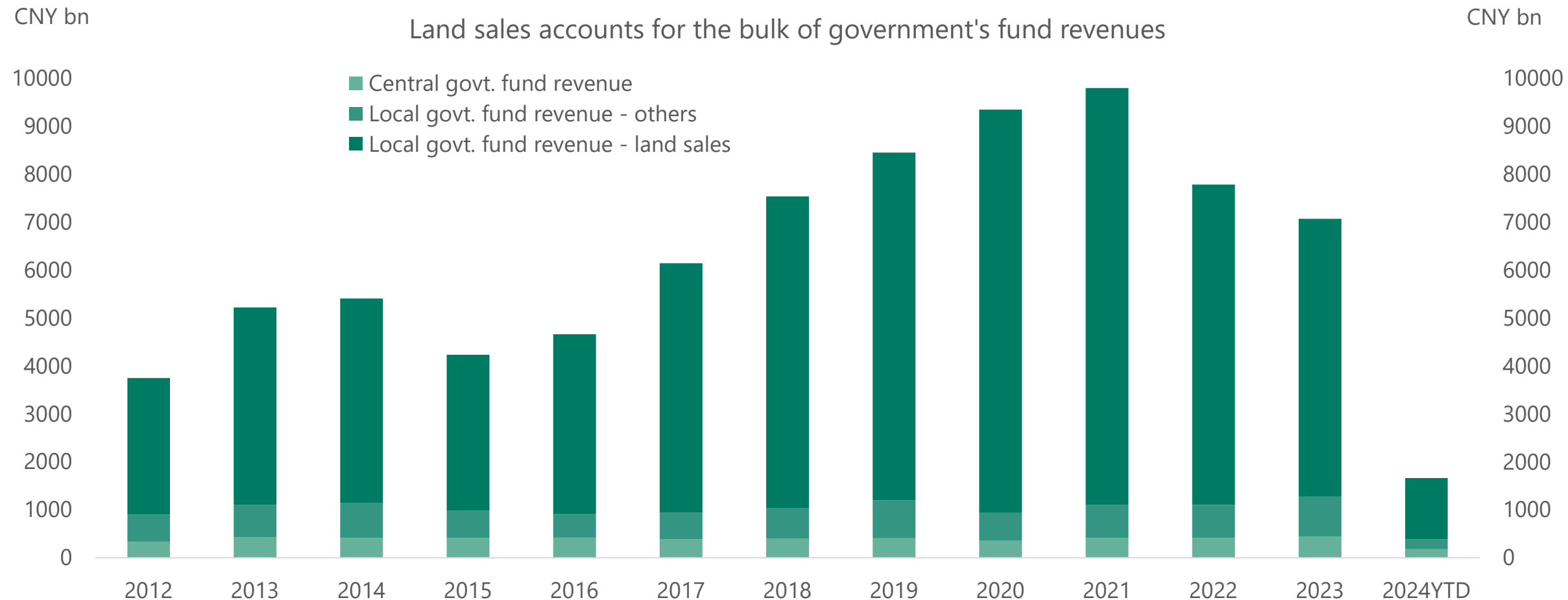
Source: Bloomberg, Apollo Chief Economist (Note: Rental yield is the rental income as a percentage of the property's value)

# Interest rates have declined to lowest levels since 2009





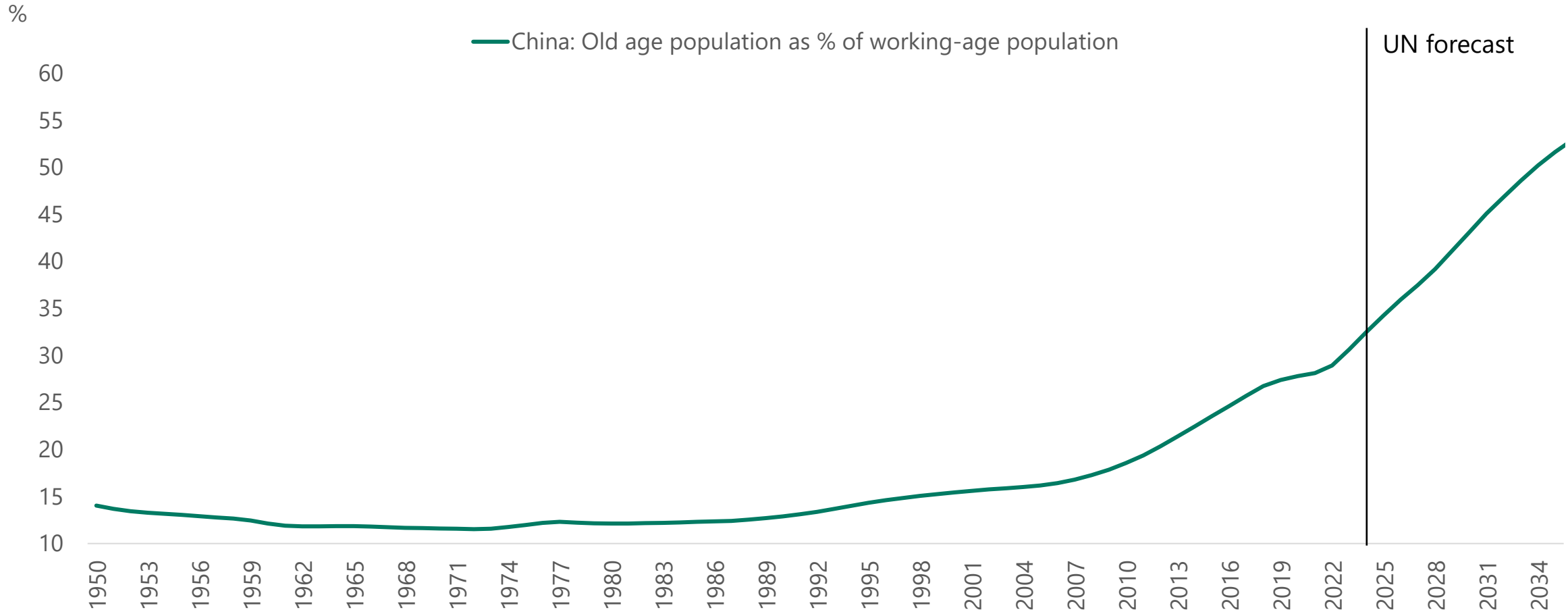
# Land sales are a crucial source of local government revenue



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

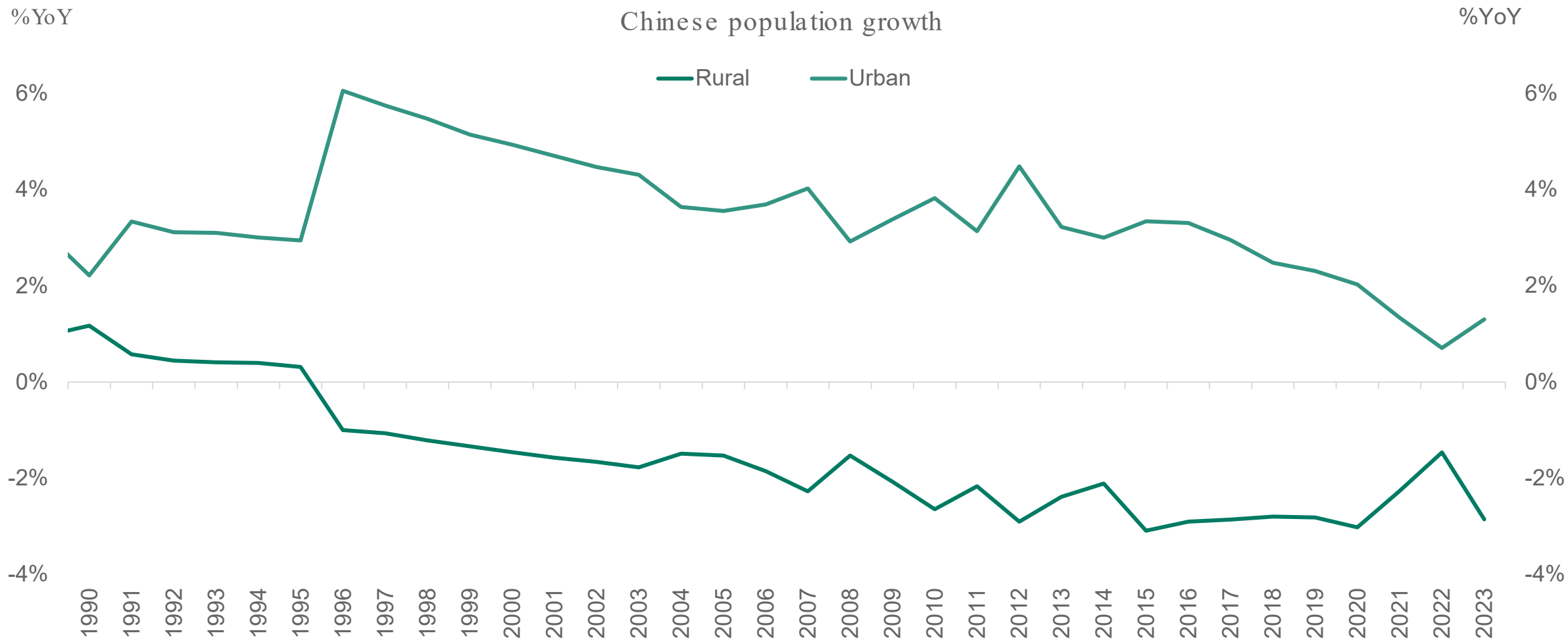
# China: Demographics

# China: Dependency ratio approaching 50% over the coming decade



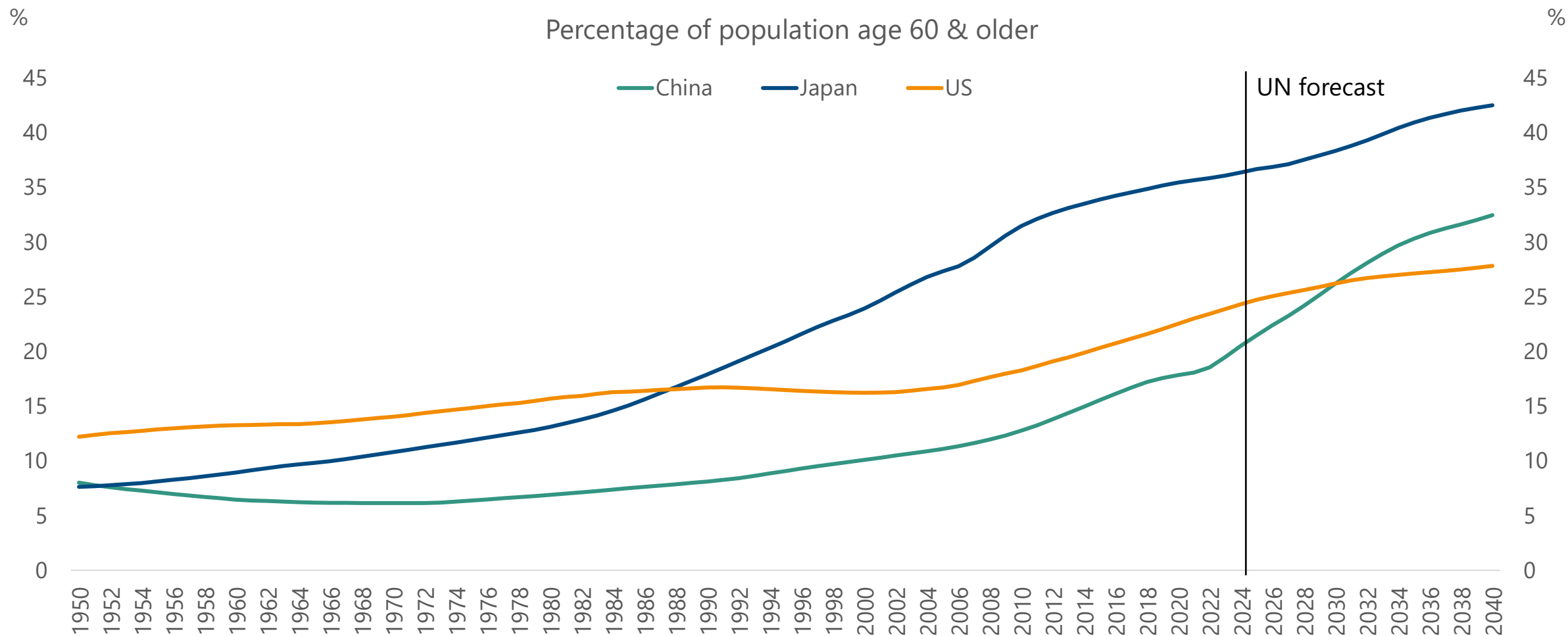
Source: UN, Haver Analytics, Apollo Chief Economist (Old age = 60 years and over; working-age = 15-59 years old)

# Population growth slowing

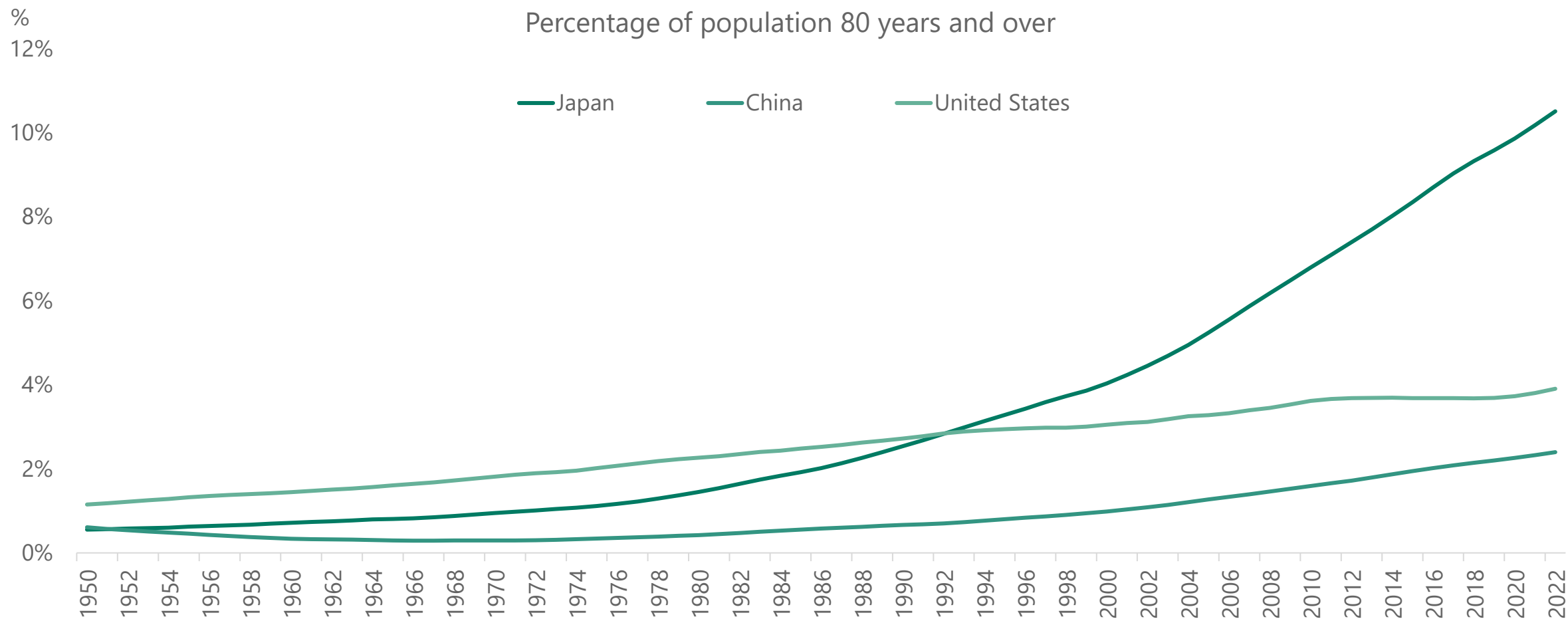


Source: China National Bureau of Statistics, Haver Analytics, Apollo Chief Economist

# China aging faster than the US



# China demographics better than Japan's



China: Exports slowing

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





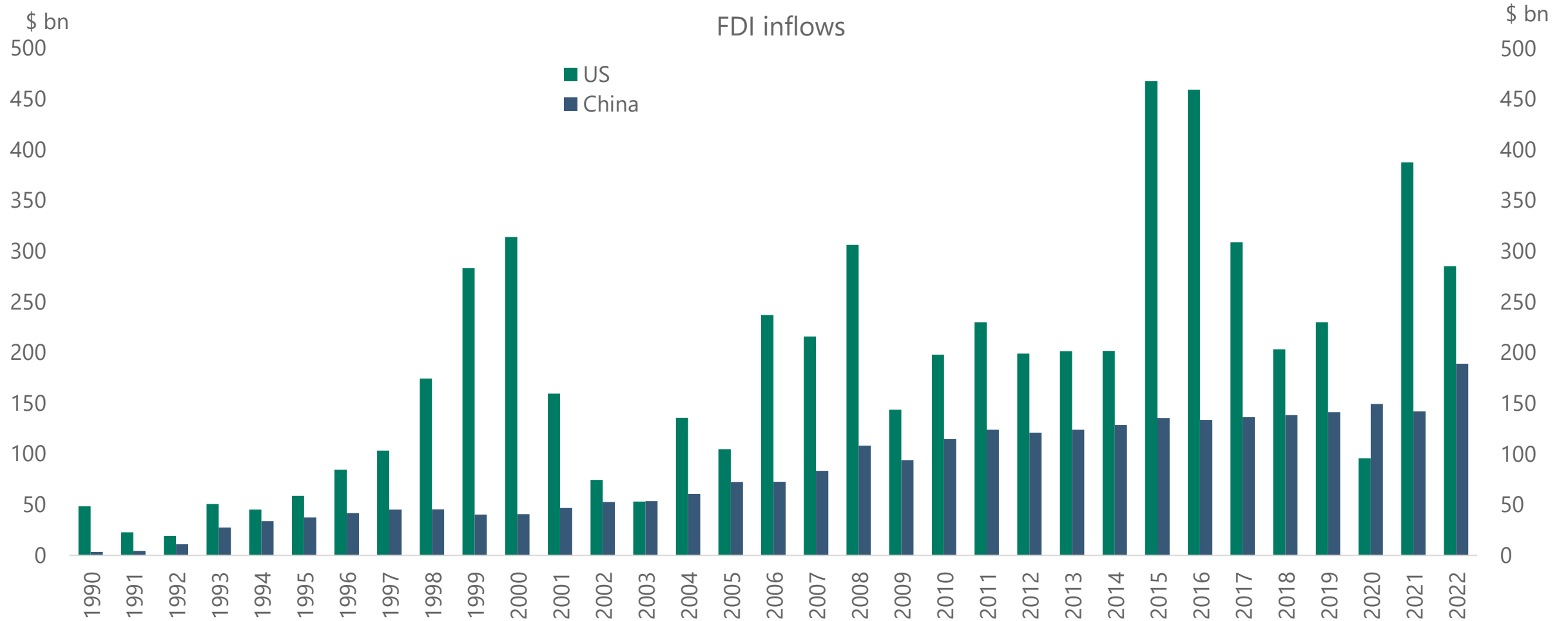
# China: Exports shifting away from US and Europe to other emerging markets



# US-China trade deficit

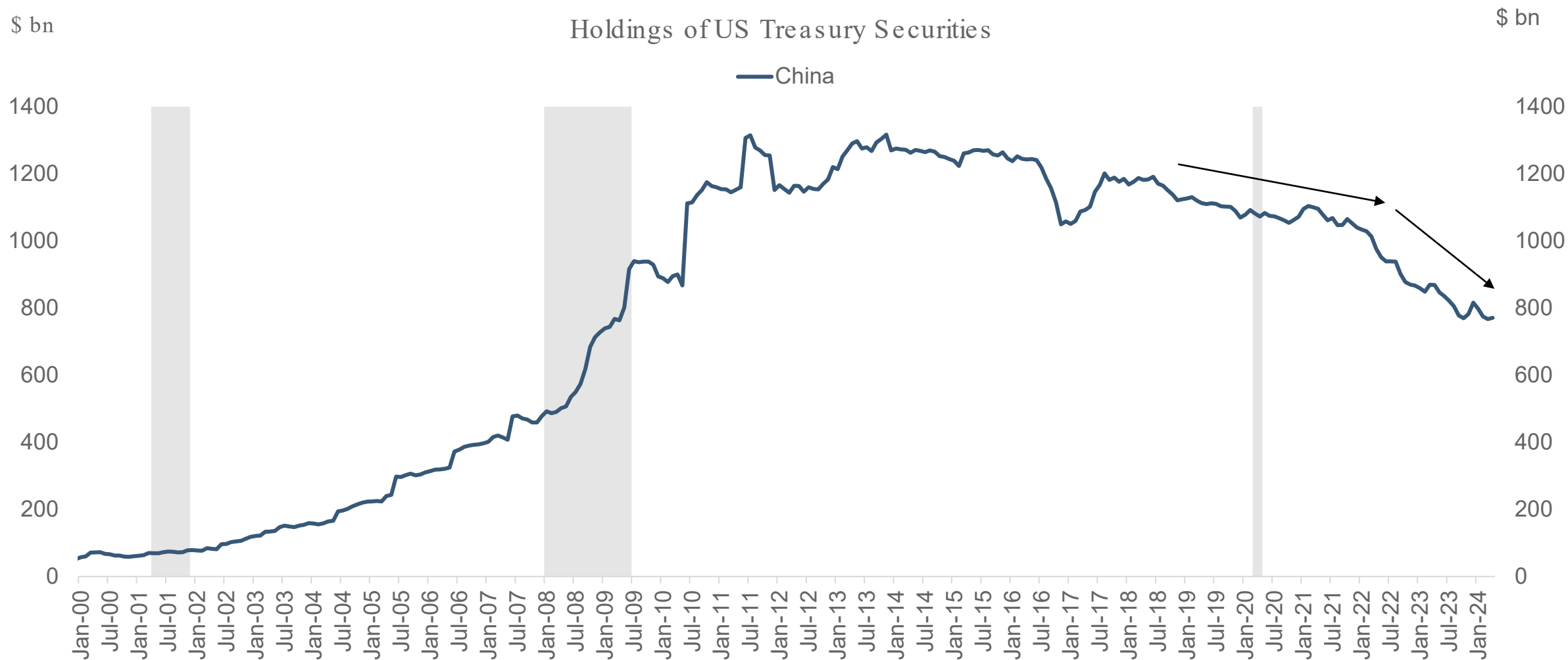


# China and US: Comparing foreign direct investment

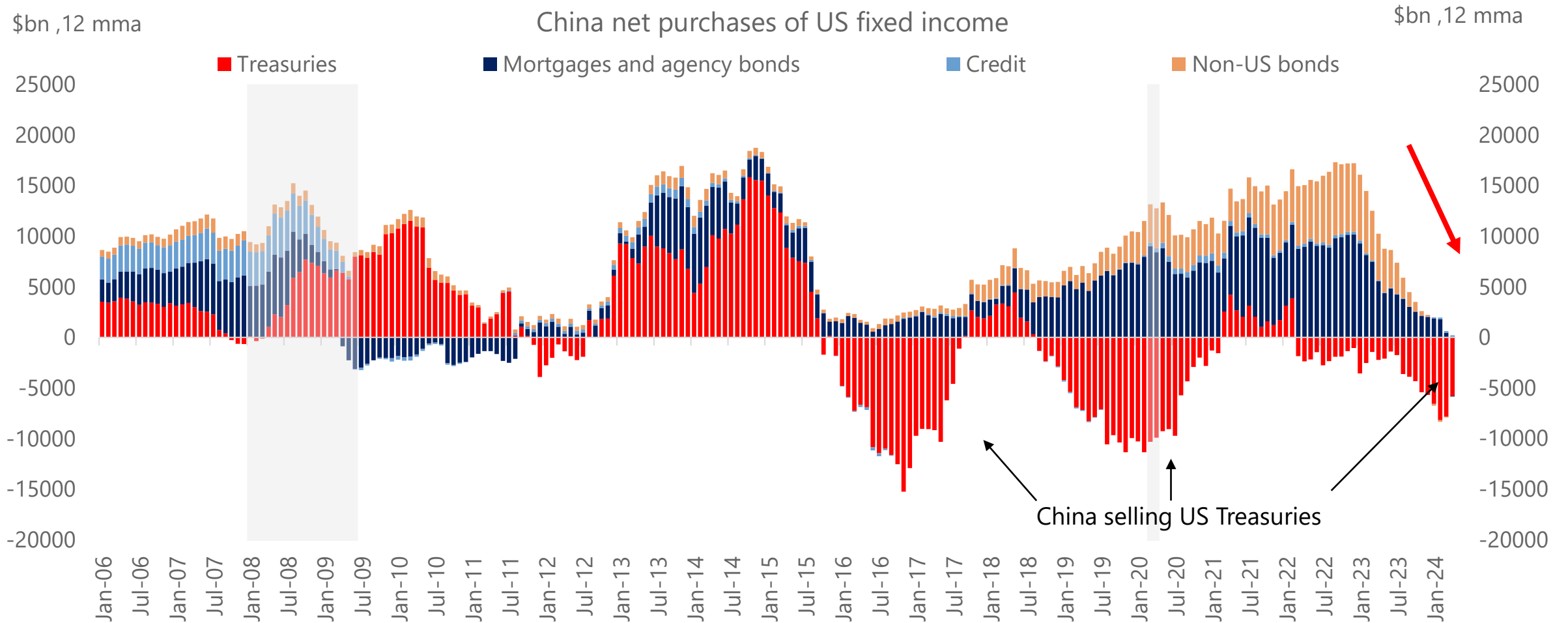


Source: UNCTAD, Apollo Chief Economist (<https://unctad.org/topic/investment/world-investment-report>)

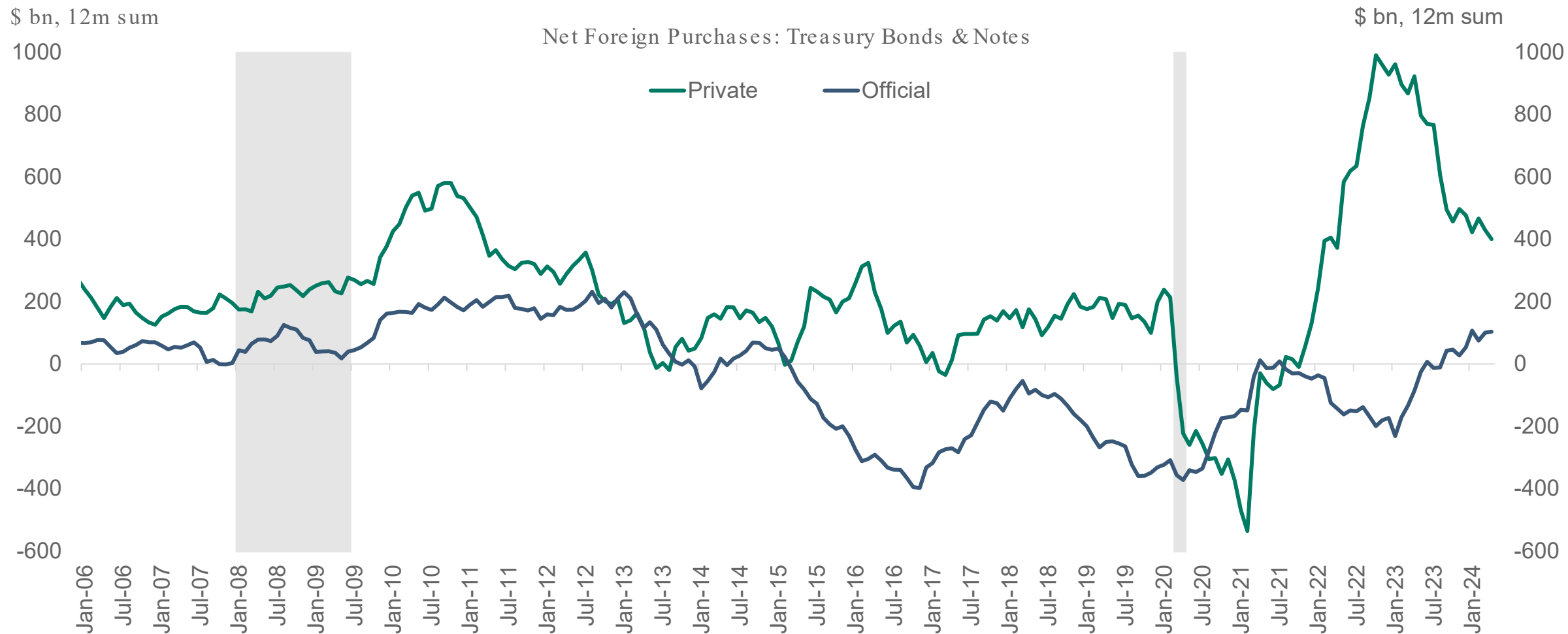
# China holding \$300bn less in US Treasuries than in 2021



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

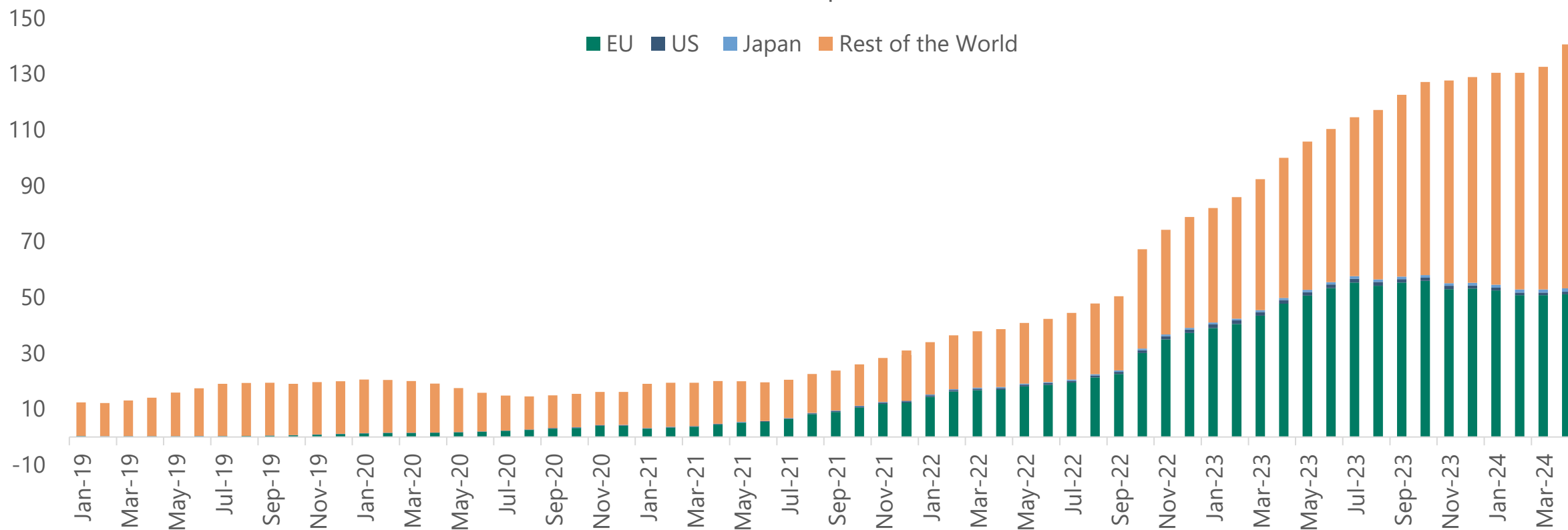


# Foreign private sector is slowing its purchases of US Treasuries



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

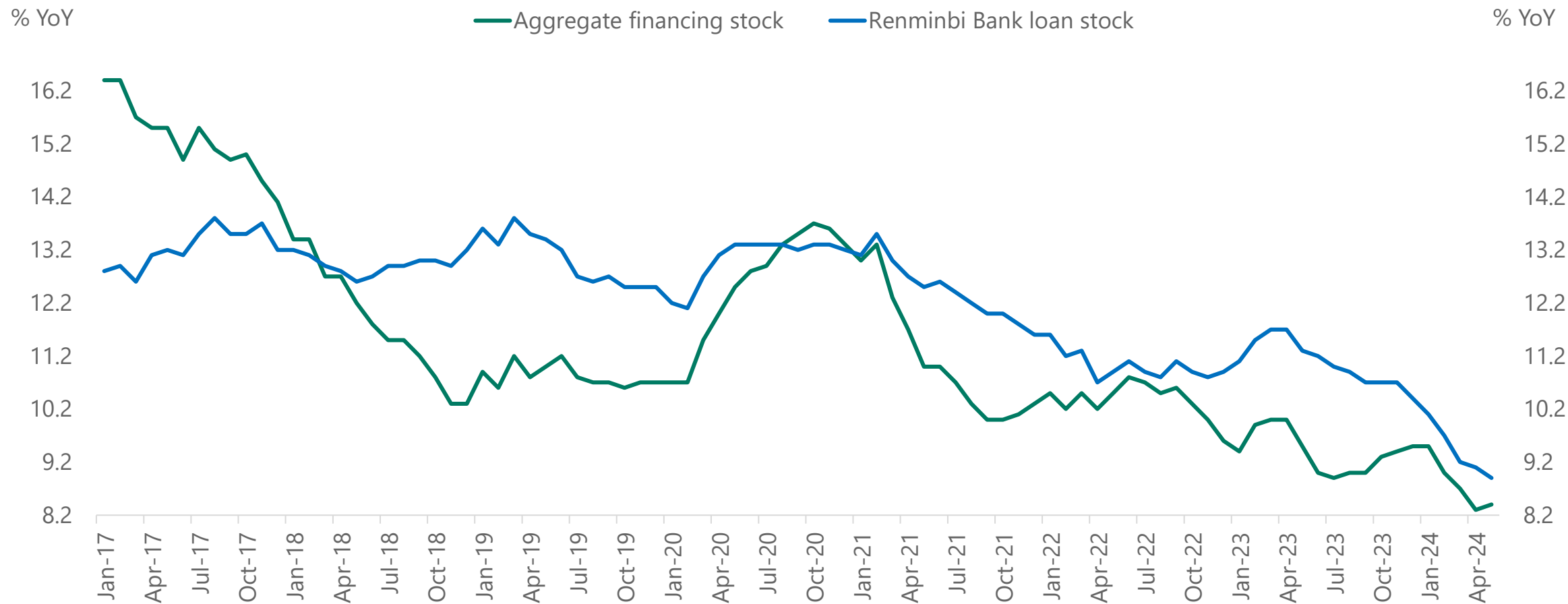
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# China: Credit growth and debt levels



# China credit growth

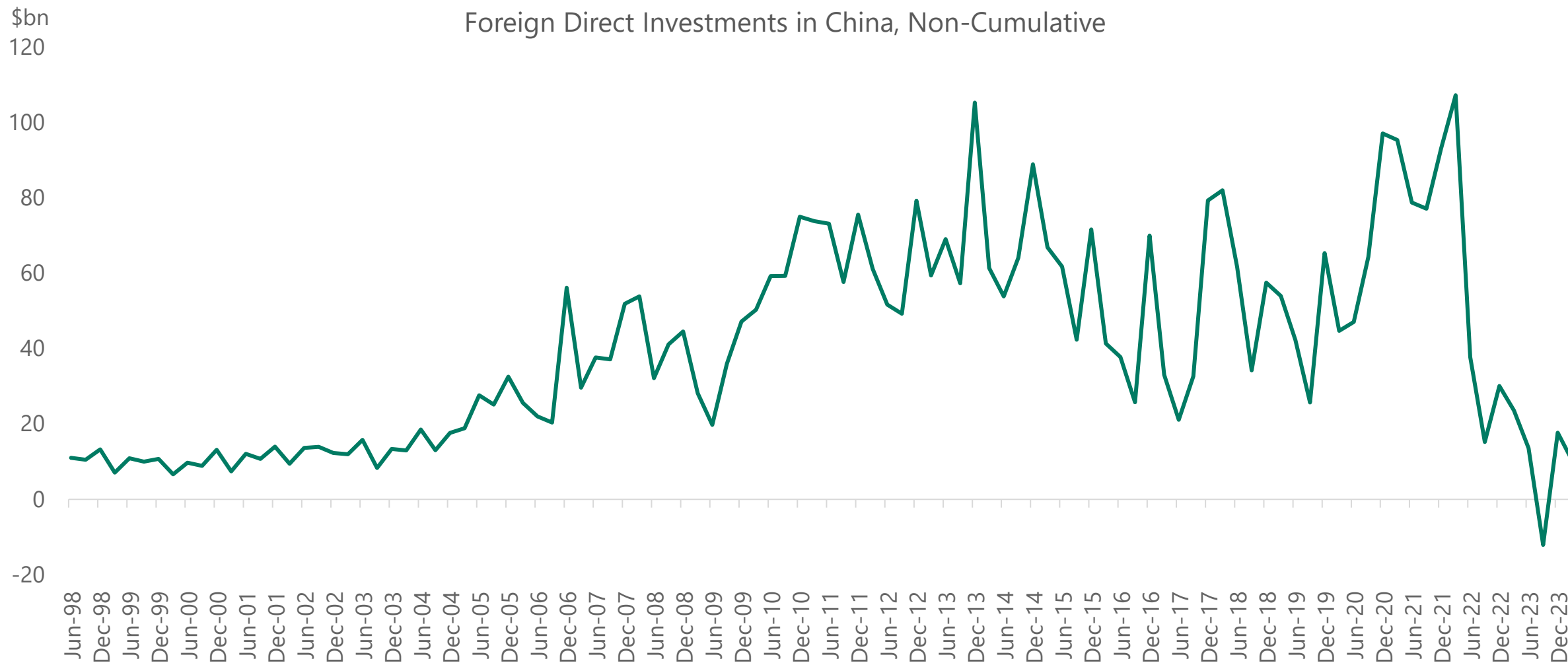


# China: Outstanding aggregate social financing

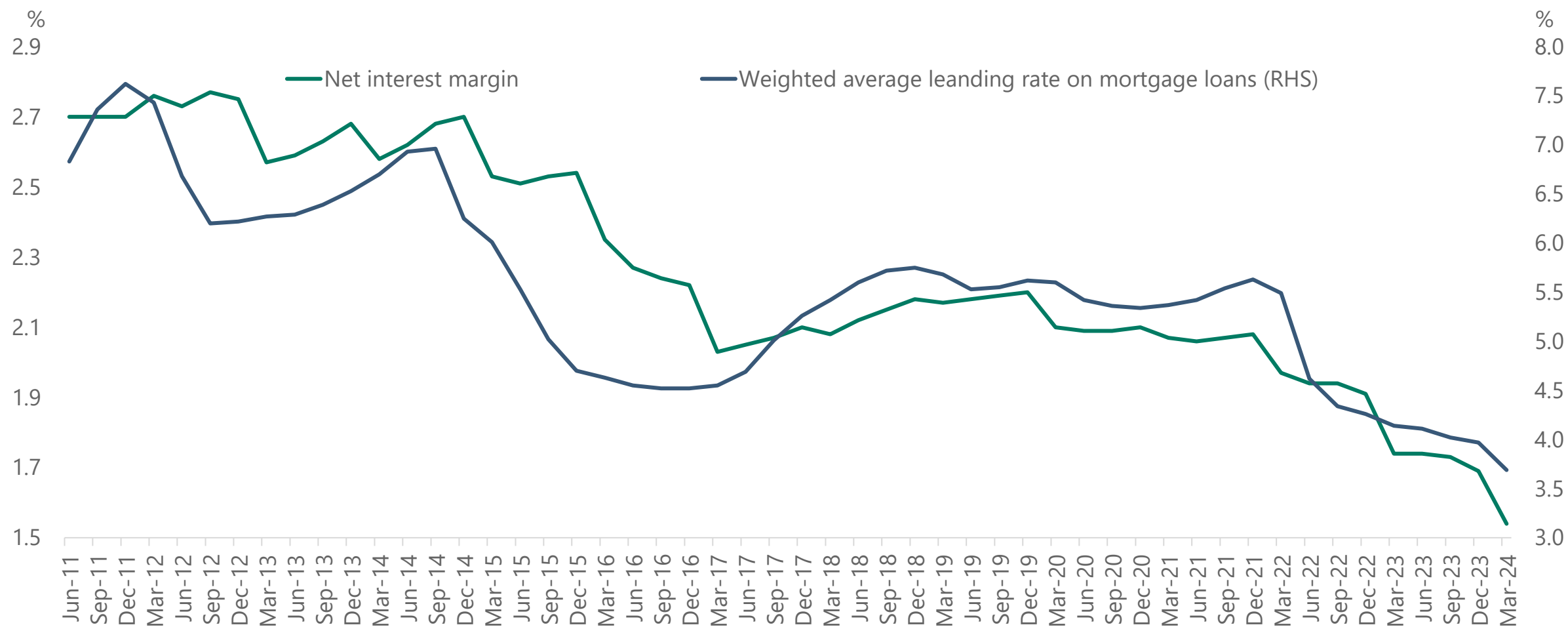


# China FDI falling fast

Foreign Direct Investments in China, Non-Cumulative

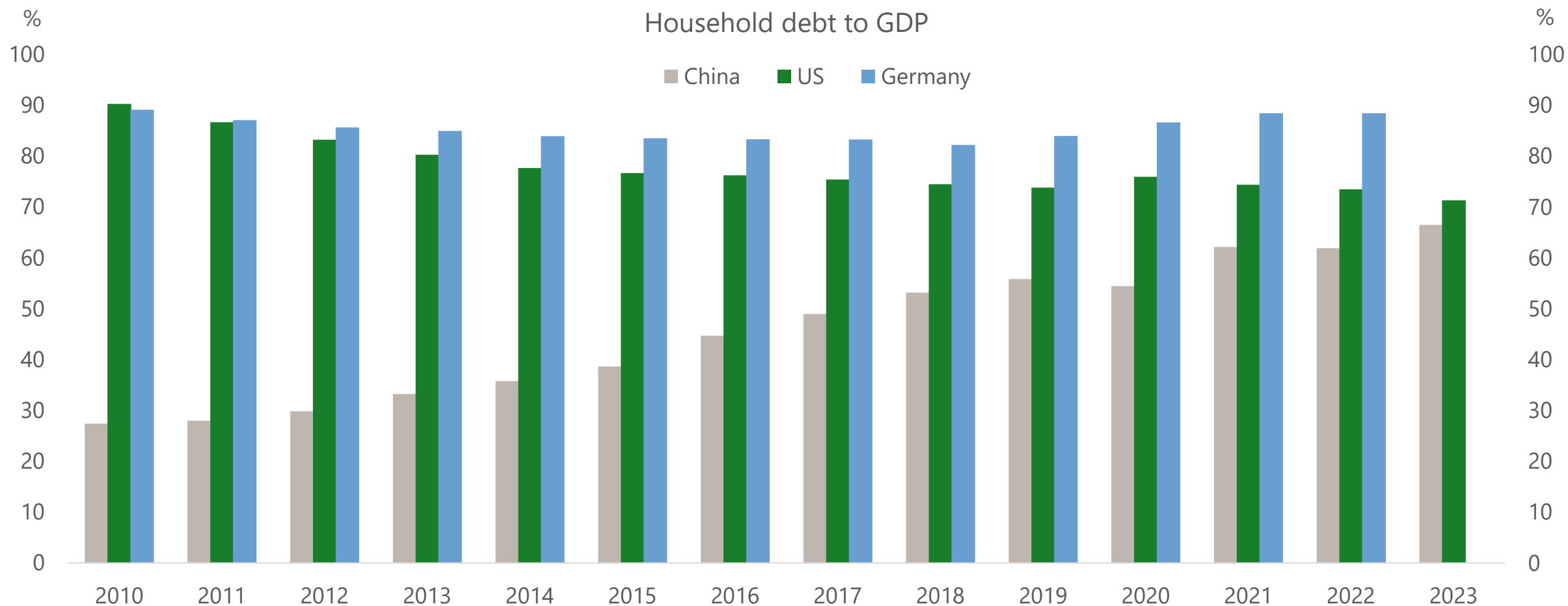


# Falling margins in China's banking sector

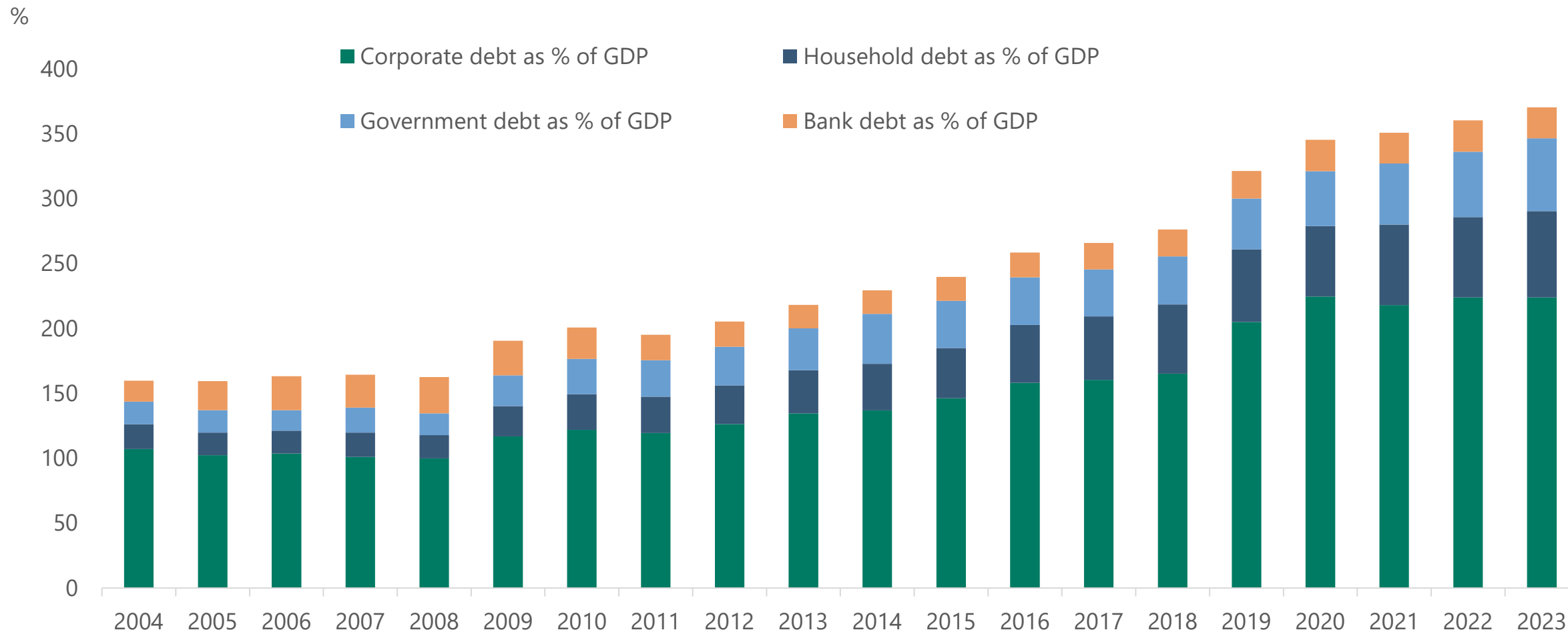


Source: Bloomberg, Apollo Chief Economist

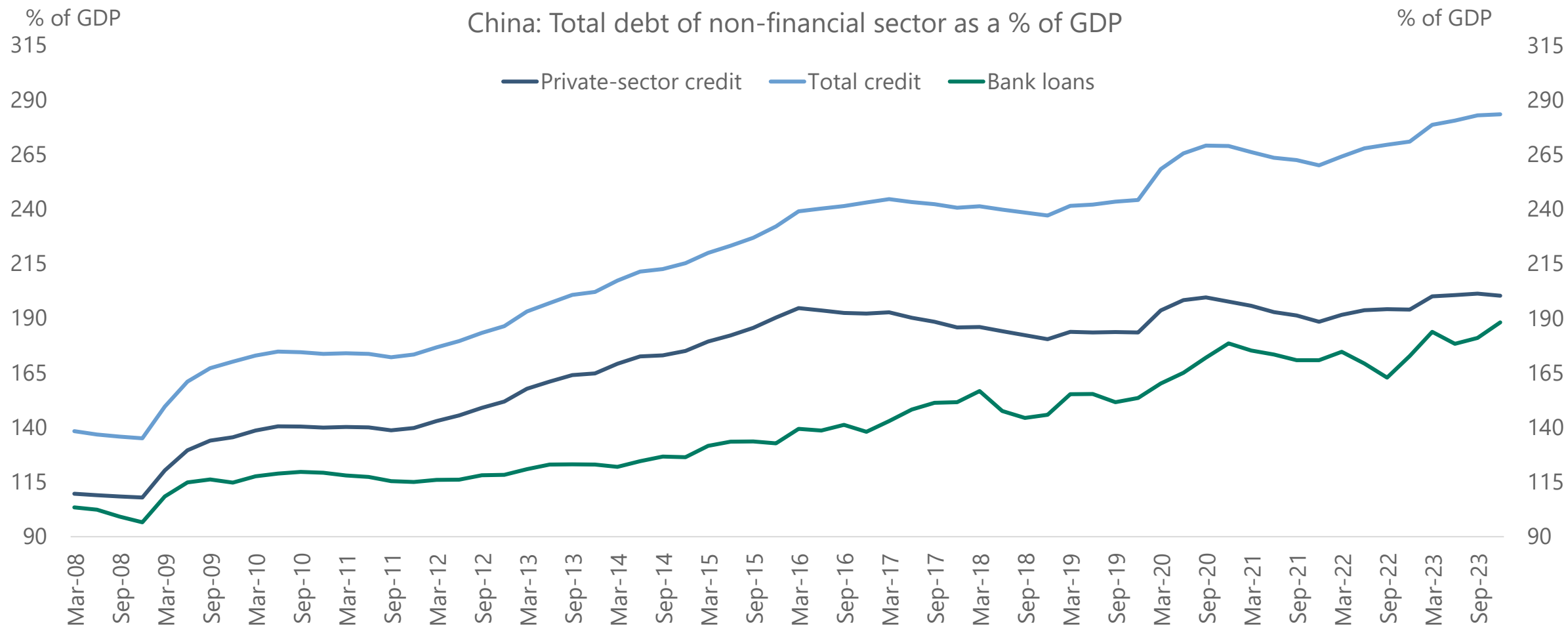
# Household debt to GDP has increased steadily in China



# China: High debt levels

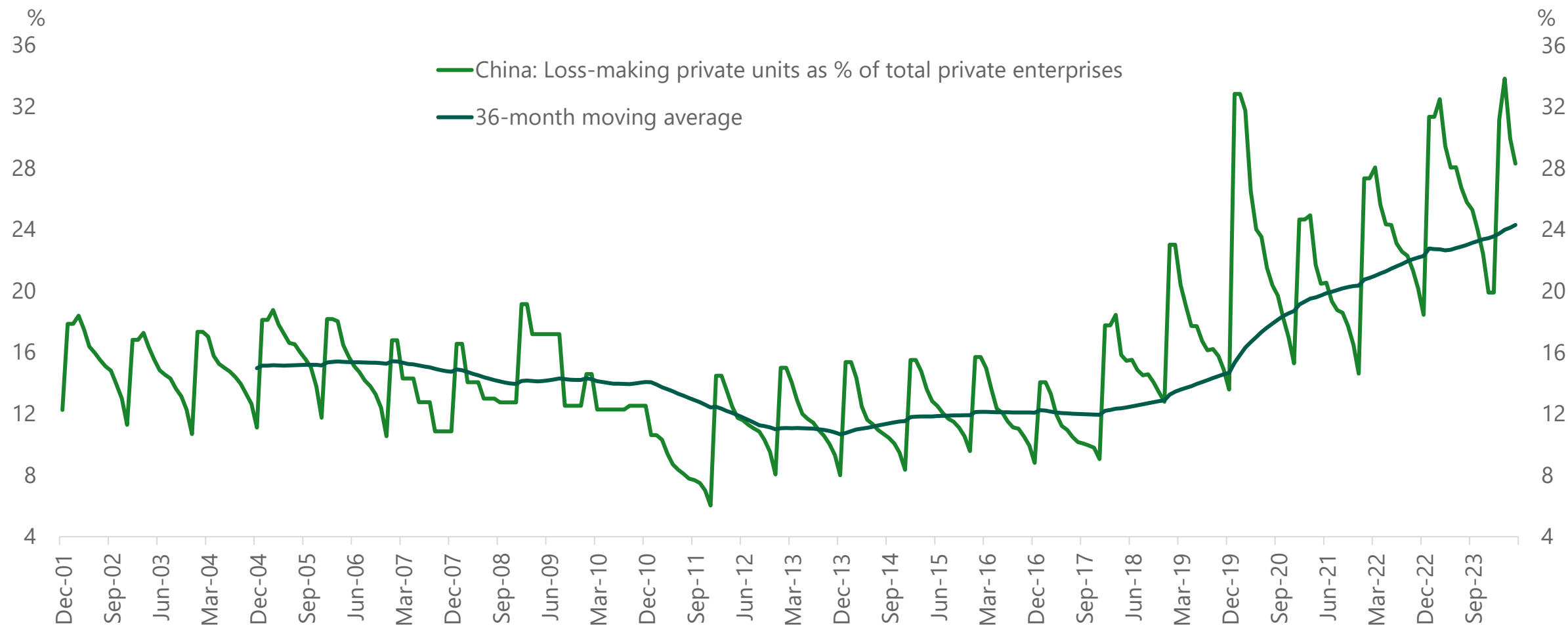


# China: Debt levels have increased in the private sector



Source: BIS, Bloomberg, Apollo Chief Economist

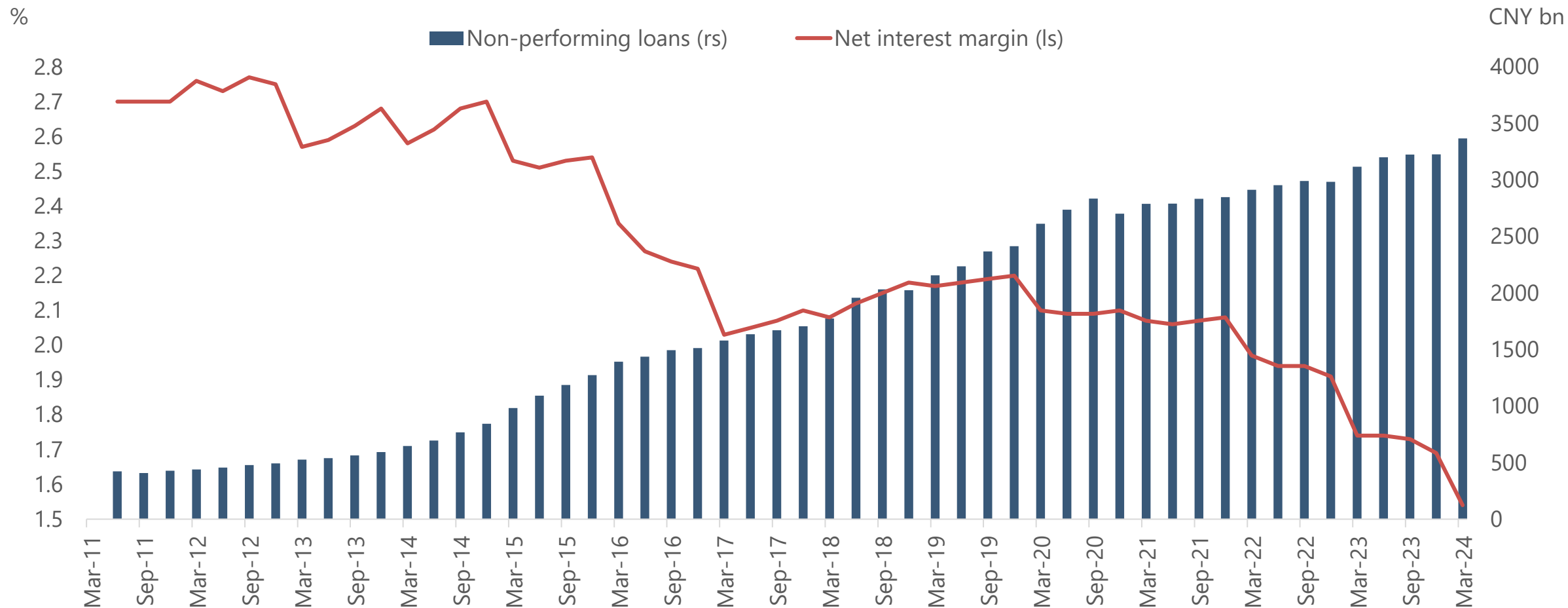
# A trend increase in the share of Chinese private firms that are loss-making



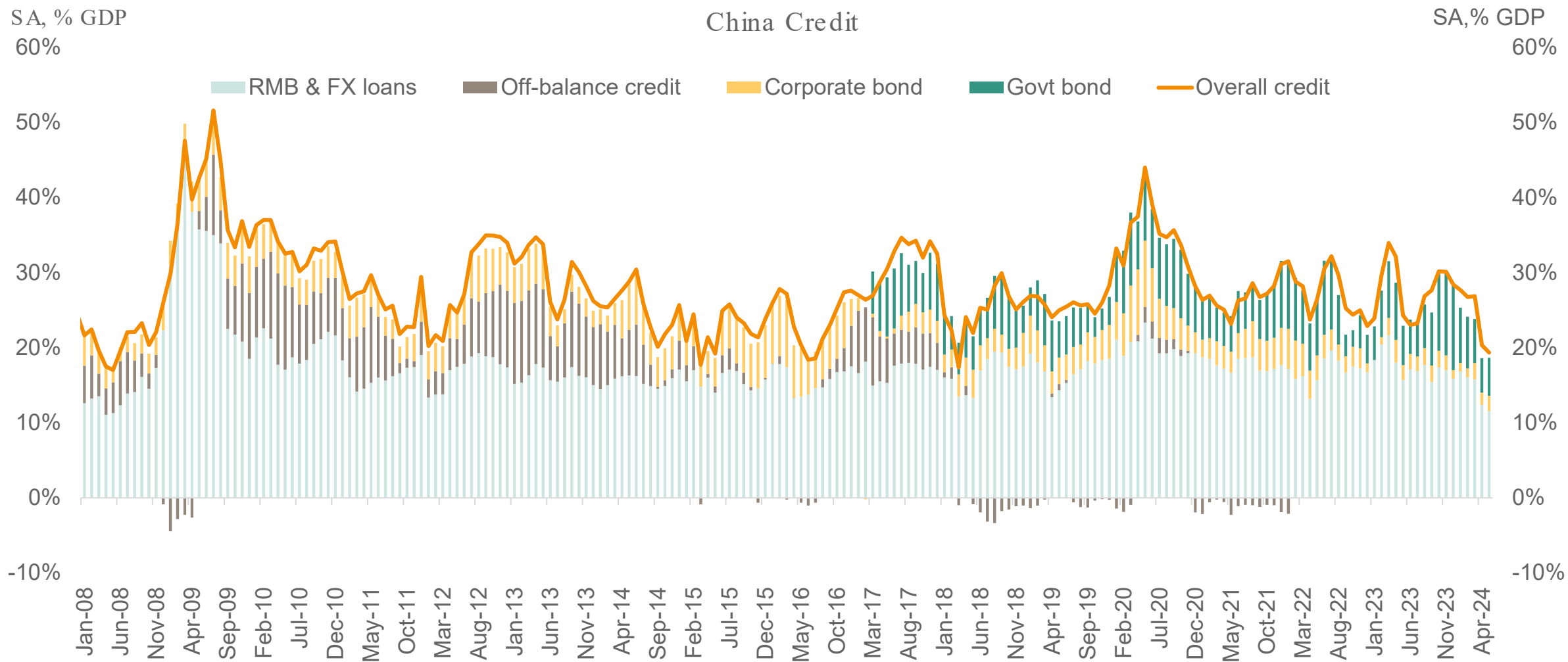
Source: Bloomberg, Apollo Chief Economist (Note: CNBUPRTD Index, CNLBPRTD Index)



# China banks: NPL has been rising



# China credit growth

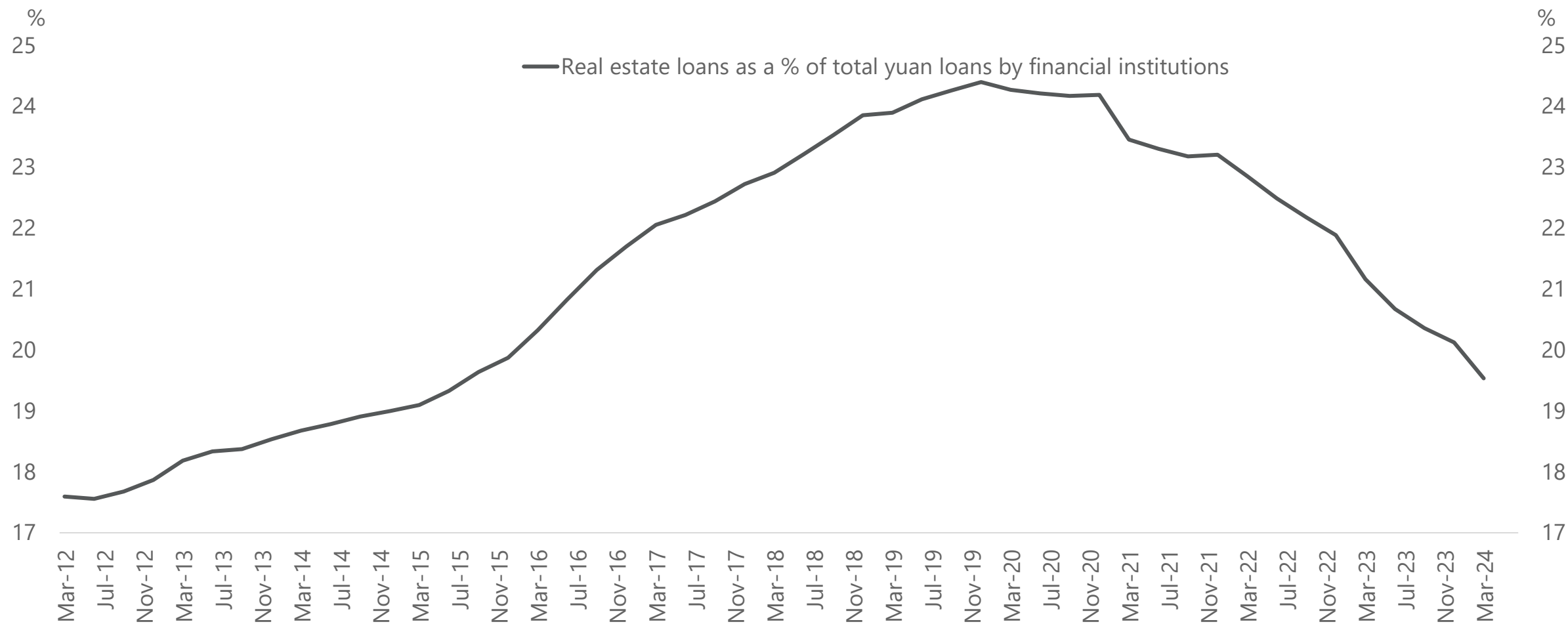


Source: PBoC, Haver Analytics, Apollo Chief Economist. Note: Off-balance Credit includes Entrusted Loans, Trust loans, Undiscounted Bankers' Acceptances, Deposit Taking Fin Institutions Asset Backed Securities, Loan write-Offs

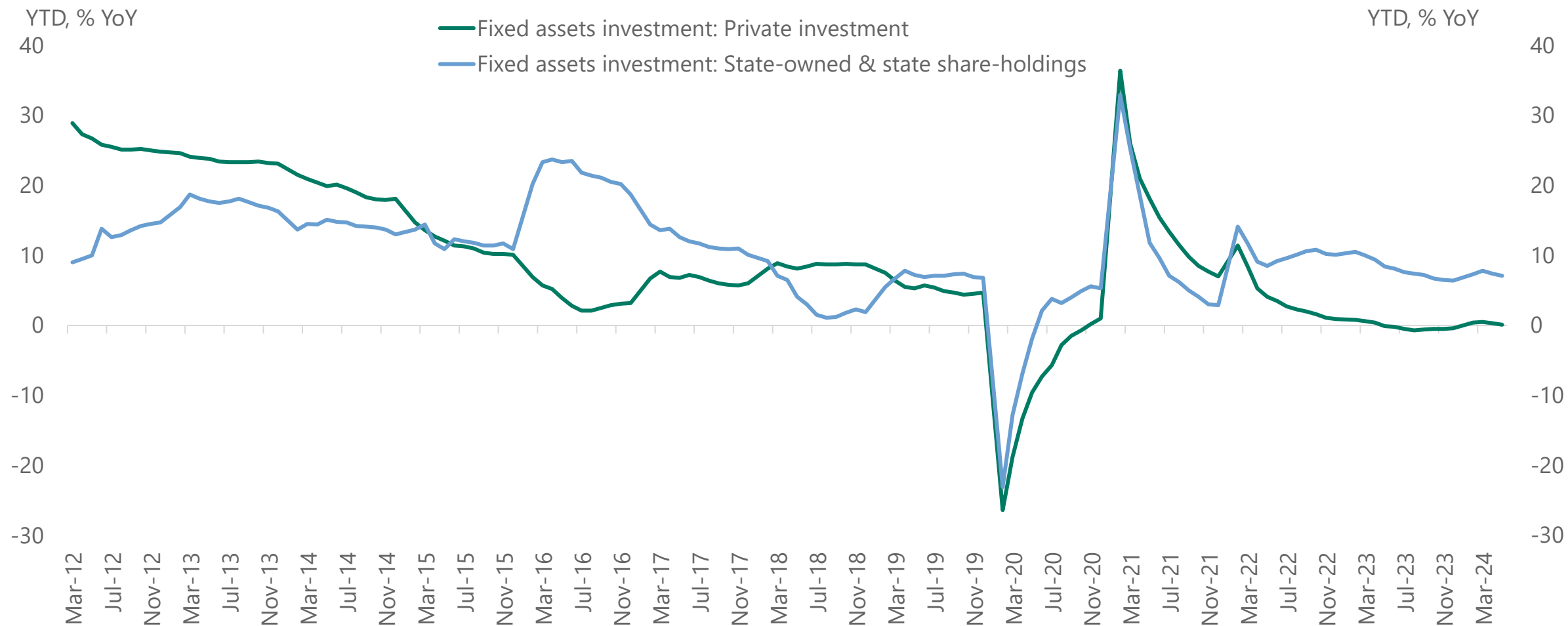
# China's mortgage liabilities as a share of GDP



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



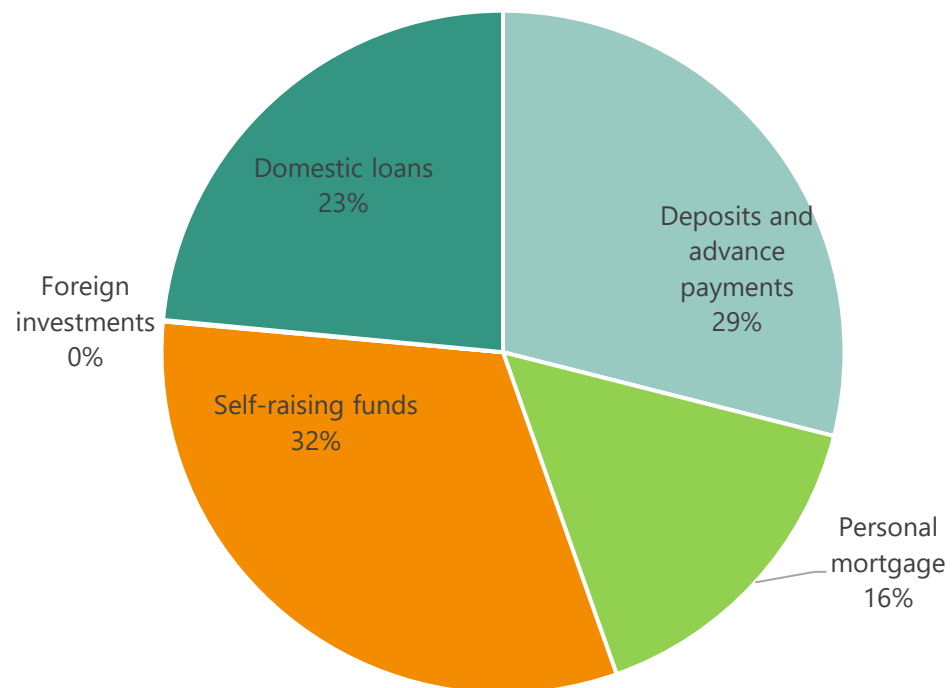
# China: Private investment growth is slowing



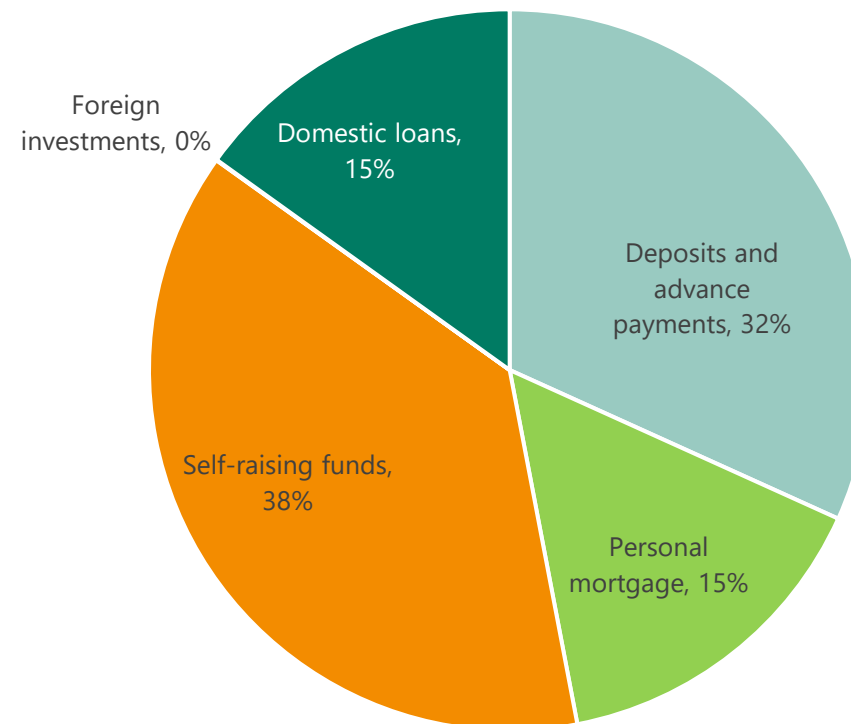
Source: National Bureau of Statistics of China, Bloomberg, Apollo Chief Economist

# China: Sources of funds for real estate developers

January 2020



May 2024

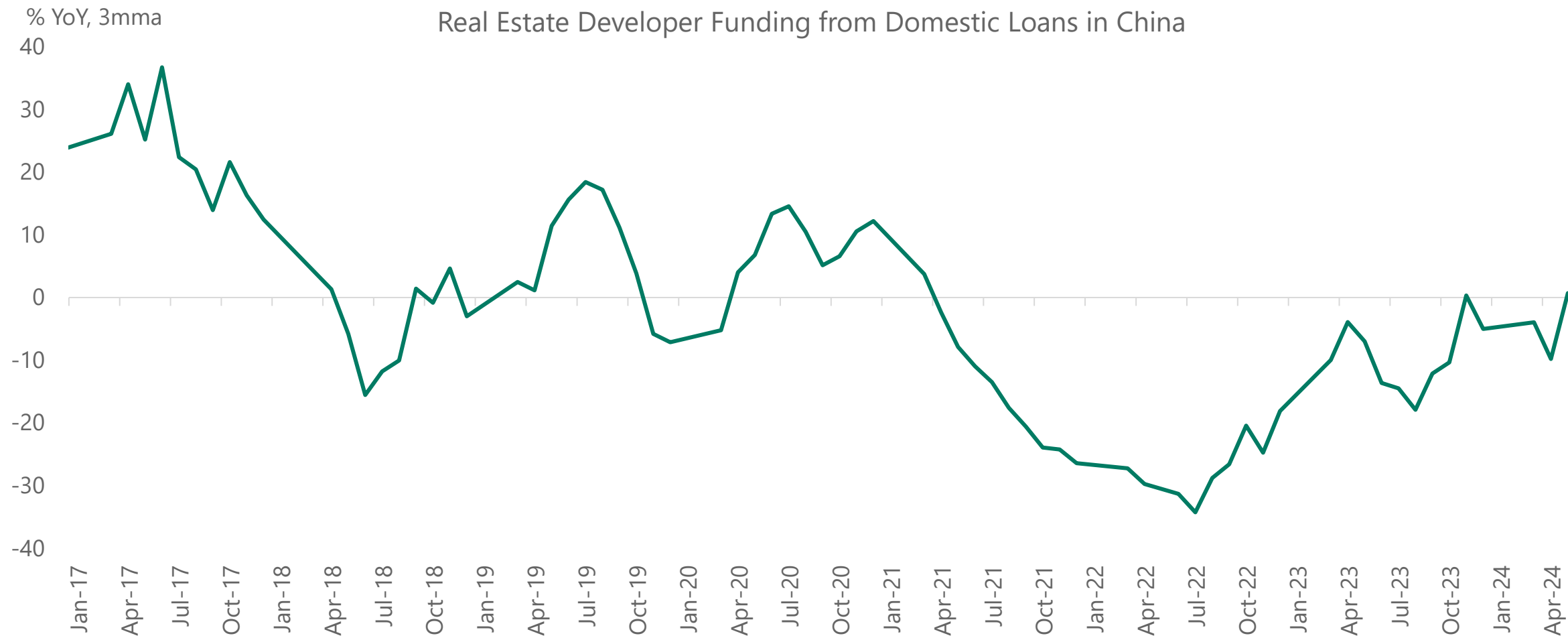


# China: All types of funding improving



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

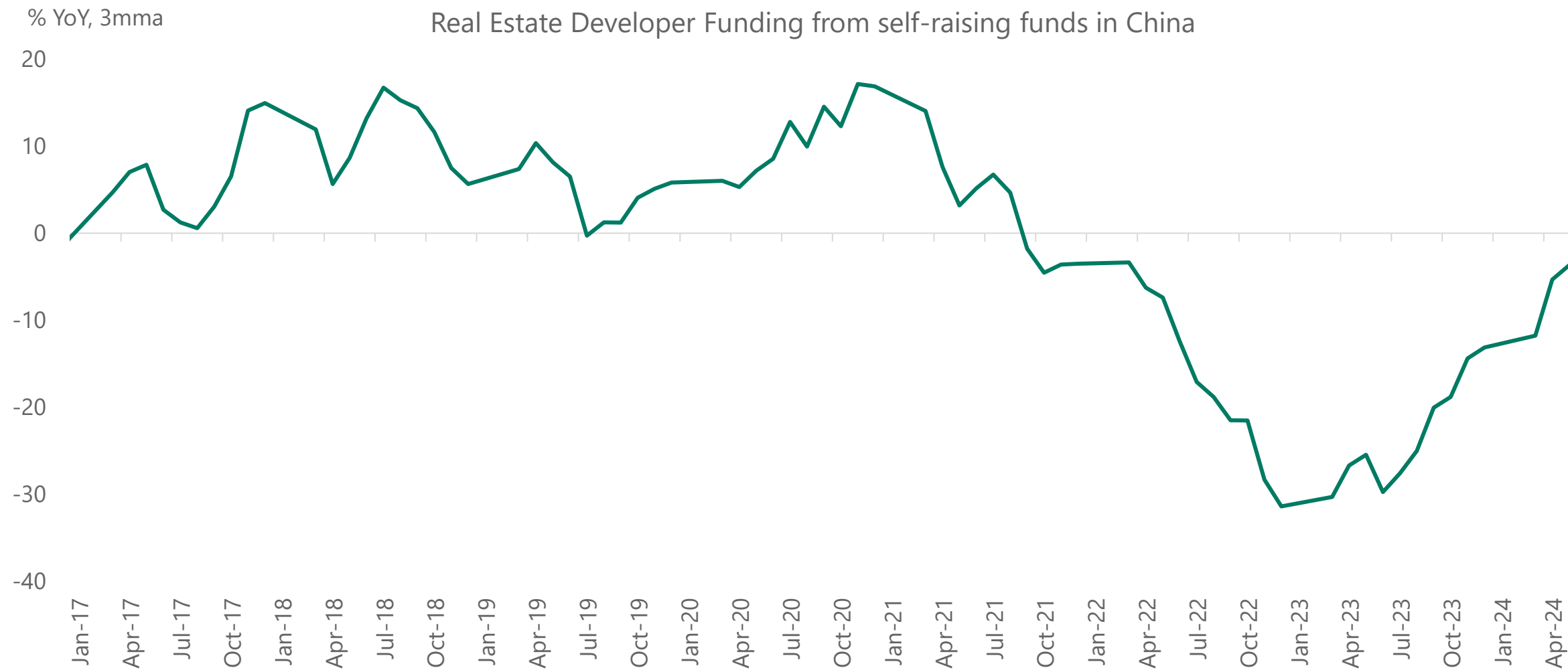
# China: Domestic funding conditions



Source: Bloomberg, Apollo Chief Economist.

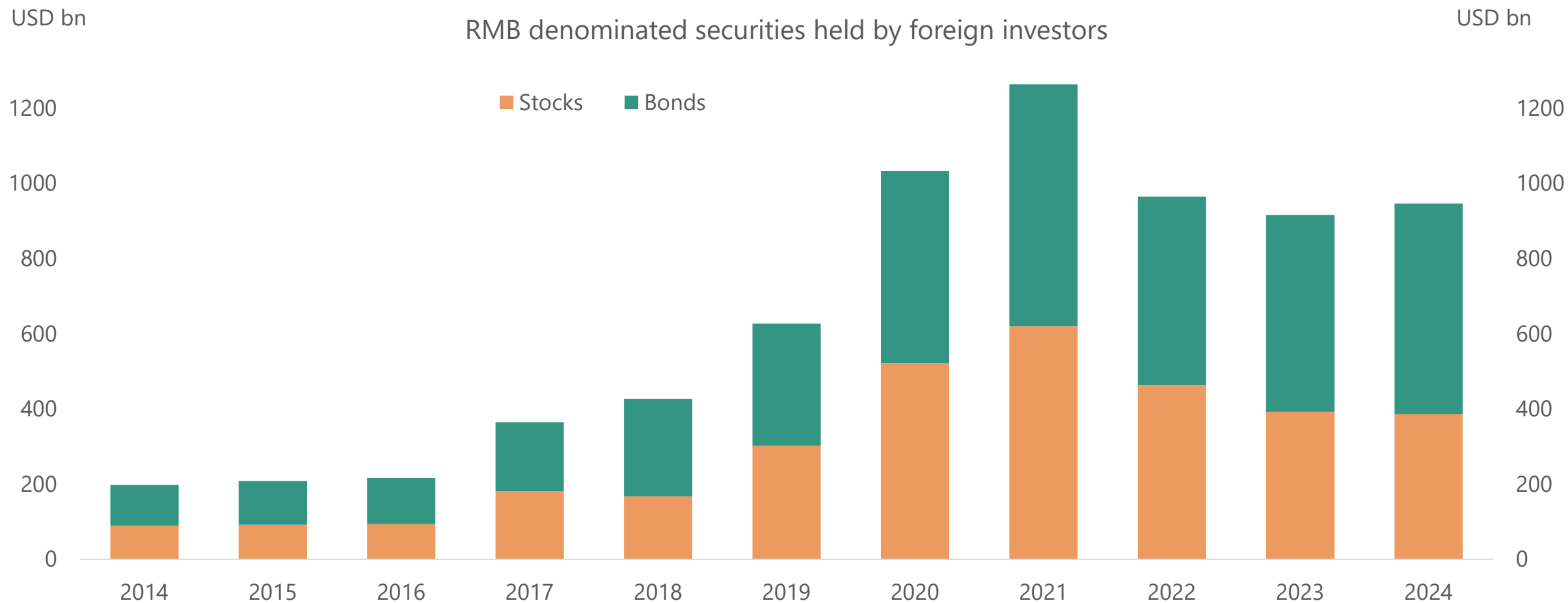


# China: Self-financing for real estate developers



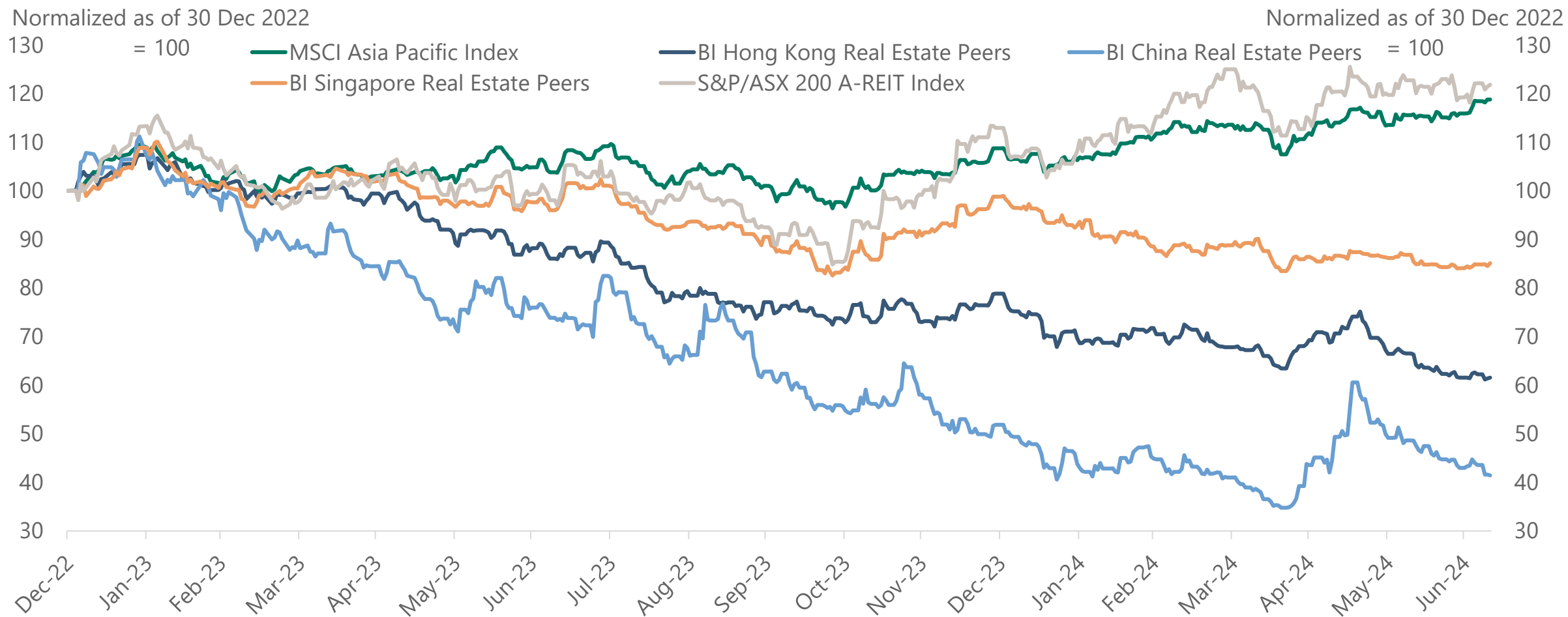
Source: Bloomberg, Apollo Chief Economist.

# Global holdings of Chinese stocks and bonds



# China: Credit markets and stock markets

# 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



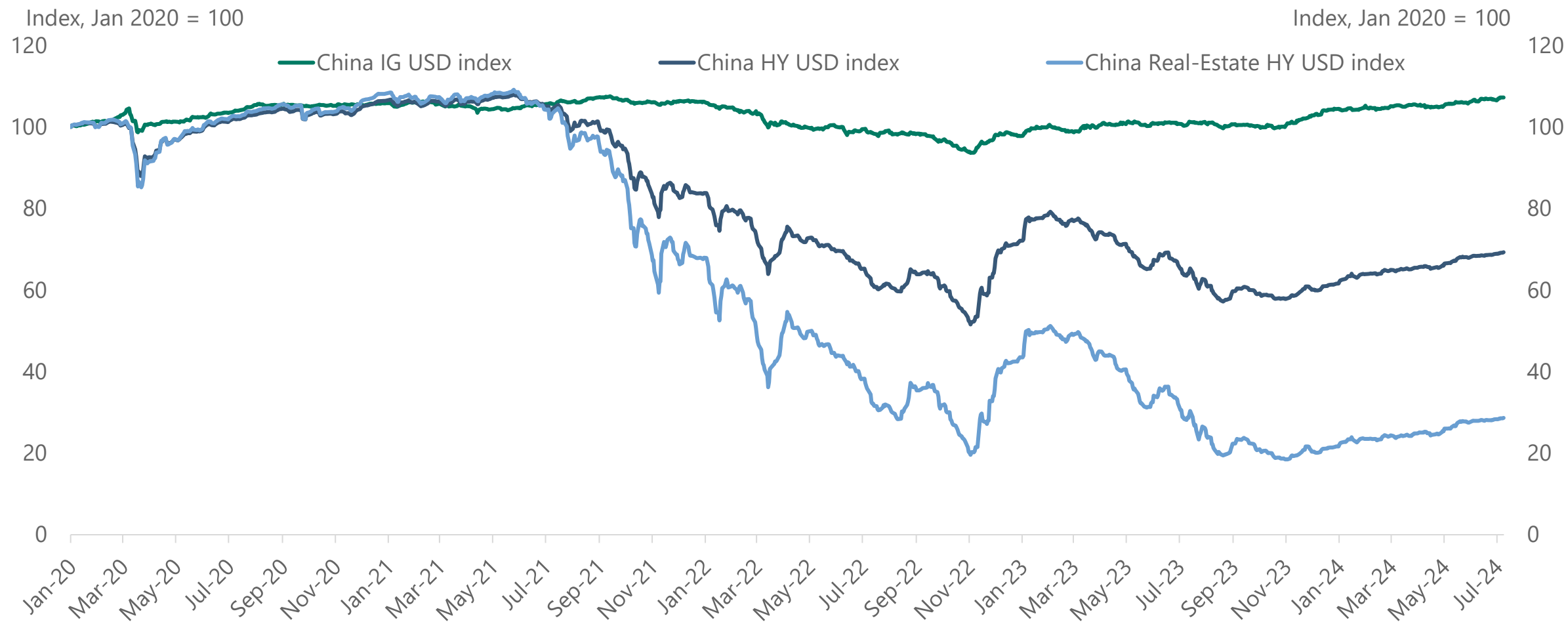
Source: Bloomberg, Apollo Chief Economist.

# China's real estate sector under pressure



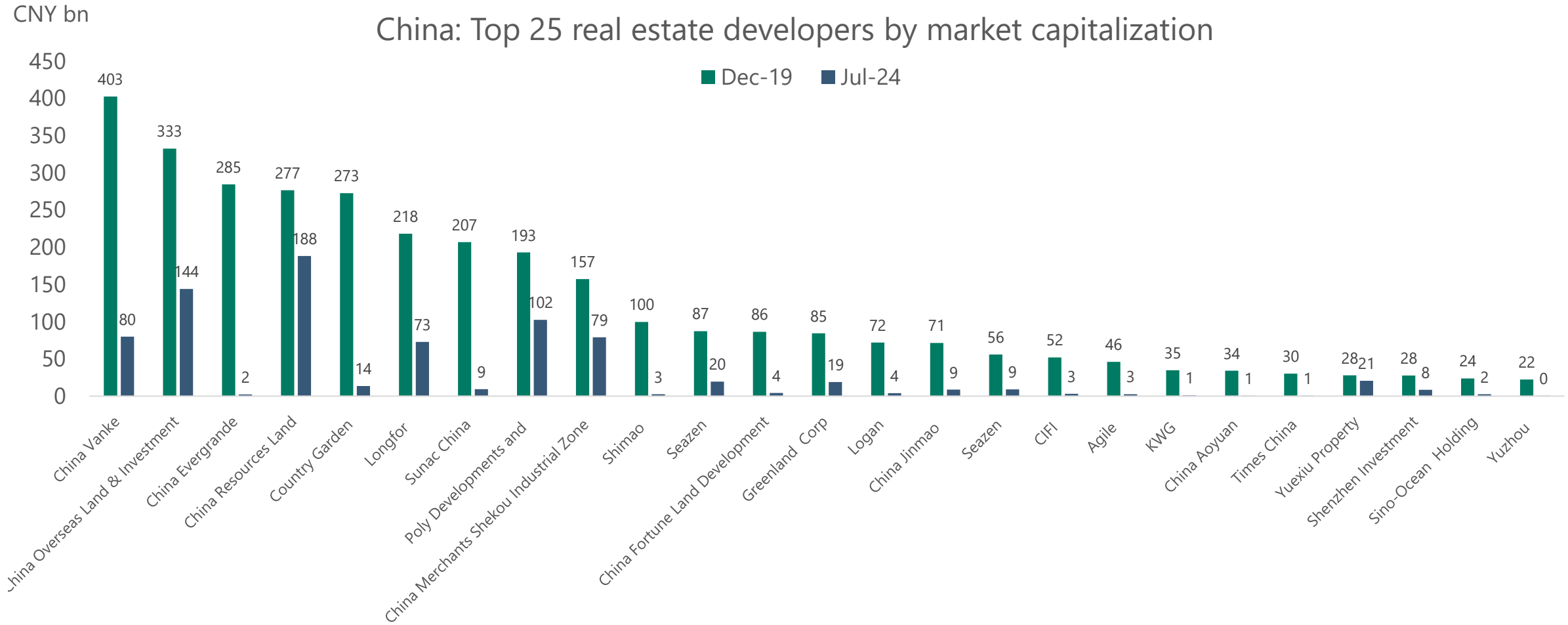
Source: Bloomberg, Apollo Chief Economist.

# 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

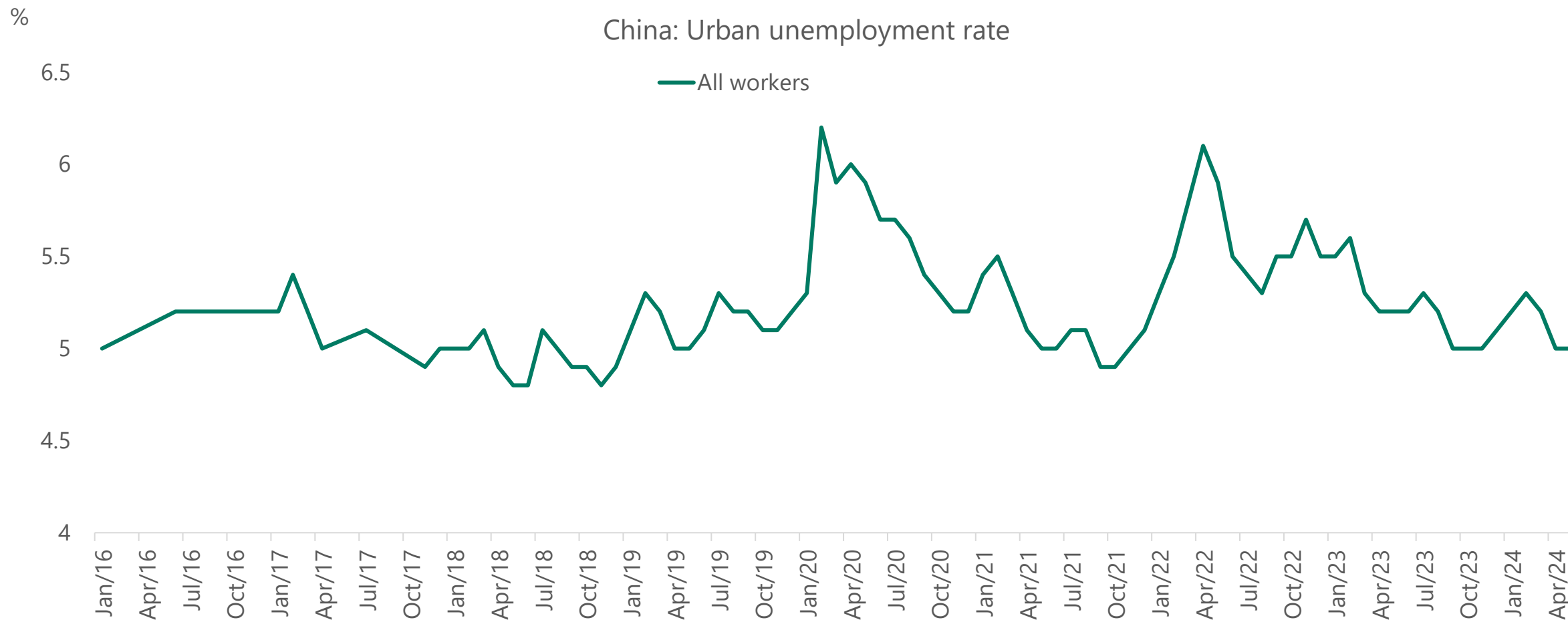


# China: Other indicators

# China economic indicators: Recent decline



# China: Unemployment rate is stable



# China: Consumer confidence is down

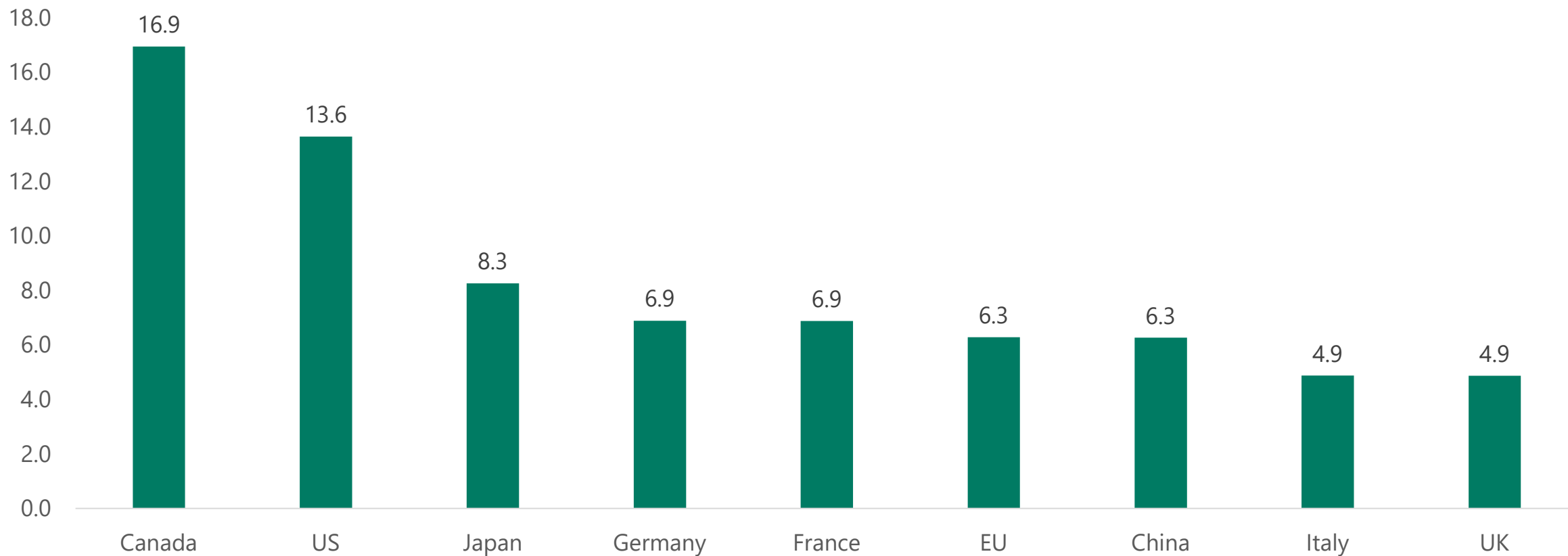


Source: NBS, Haver, Apollo Chief Economist

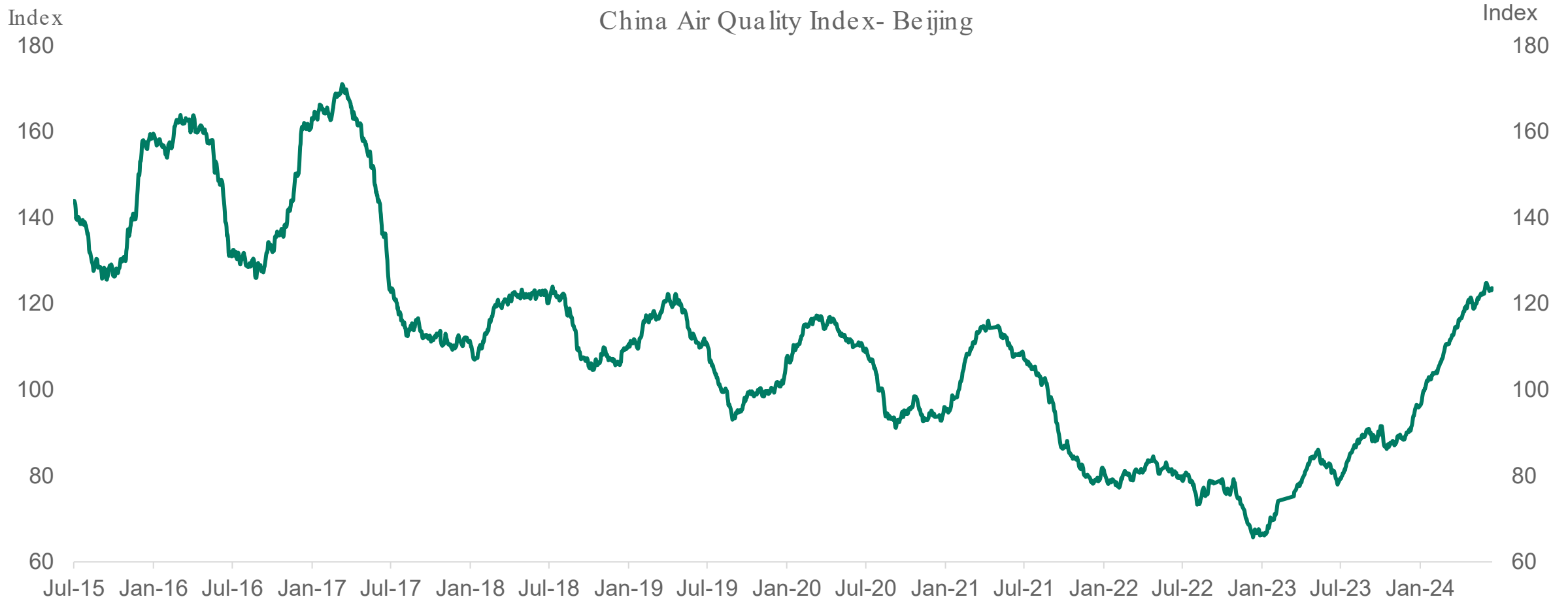
# China's per capita electricity use is higher than in Italy and UK

Megawatt-hours

2022: Electricity consumption per person



# Air quality levels back to 2021



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



# 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.