Outlook for China:
Slowing exports, housing deflating, and demographics deteriorating

Torsten Slok, Jyoti Agarwal, and Rajvi Shah
tslok@apollo.com

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China: Overview
Diverging growth trends in the US and China

Source: Bloomberg, Apollo Chief Economist

Bloomberg 2023 annual real GDP forecasts

US (ls)  China (rs)

Source: Bloomberg, Apollo Chief Economist
China: Exports are slowing

Source: Bloomberg, Apollo Chief Economist
US importing more from Mexico than China

% of US imports, 12mma

Source: Census Bureau, Bloomberg, Apollo Chief Economist
US and China less dependent on each other for trade

![Graph showing US and China trade dependencies](chart)

**Source:** IMF, Bloomberg, Apollo Chief Economist
China holding $300 billion less in US Treasuries than in 2021
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

Net Foreign Purchases: Treasury Bonds & Notes

Source: Treasury, Haver Analytics, Apollo Chief Economist
China: Housing makes up 23% of GDP

(Fixed investment in real estate + Investment in real estate development: Construction and other Costs) as a share of GDP

Source: Haver, Apollo Chief Economist. (Data as of Q3 2023)
China real estate index in deep 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)

Source: Bloomberg, Apollo Chief Economist
Home price-to-income ratio five times higher in Shanghai than in New York

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 to four 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 IG and HY credit: Developers have been hit hard

Source: Bloomberg, Apollo Chief Economist.
China: In 2000 there were 10 workers per retiree. Today there are 5.
A trend increase in the share of Chinese private firms that are loss-making

Source: Bloomberg, Apollo Chief Economist (Note: CNBUPRTD Index, CNLPRTD Index)
China banks: NPL has been rising

Source: China Banking Regulatory Commission, 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 declining
China demographics not similar to Japan

- **Percentage of population 80 years and over**

  - **Japan**
  - **China**
  - **United States**

Source: UN, Haver Analytics, Apollo Chief Economist
Real estate playing a key role in the Chinese economy
Land sales are a crucial source of local government revenue

Land sales accounts for the bulk of government's fund revenues

- Central govt. fund revenue
- Local govt. fund revenue - others
- Local govt. fund revenue - land sales

Source: Ministry of Finance of the People's Republic of China, Bloomberg, Apollo Chief Economist
Home sales slowing in Tier 1 and Tier 2 cities

Source: China Real Estate Information Corp, Bloomberg, Apollo Chief Economist
The value of new home sales among the 100 biggest real estate companies continue to decline

Source: China Real Estate Information Corp, Bloomberg, Apollo Chief Economist
Housing market cooling down in China: Home prices falling month-over-month

Source: Bloomberg, Apollo Chief Economist
Housing market cooling down in China; Home sales declining

Source: CRIC, Bloomberg, Apollo Chief Economist
Beijing home price inflation slowing down

Source: BIS, Haver, Apollo Chief Economist
China: Real estate investment slowing

Source: Haver, Apollo Chief Economist
Residential real estate investment slowing

China: Investment Completed in Residential Building Development (SA, Bil.Yuan)

Source: Haver, Apollo Chief Economist
Rental yields at second hand residential buildings in major cities

Source: Bloomberg, Apollo Chief Economist (Note: Rental yield is the rental income as a percentage of the property’s value)
China: Debt and financing
Household debt to GDP has increased steadily in China
China credit growth

China: Debt levels have increased in the private sector

Source: BIS, Bloomberg, Apollo Chief Economist
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 declining

Source: National Bureau of Statistics of China, Bloomberg, Apollo Chief Economist
Foreign official holdings of US bonds is falling

Source: Treasury, Haver Analytics, Apollo Chief Economist
Chinese trade with the US
Chinese share of exports to US, EU, and Japan declining
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 IG and HY
China’s real estate sector under pressure

Index

Source: Bloomberg, Apollo Chief Economist.
China: Within high yield, the real estate sector remains under pressure

Index, Jan 2020 = 100

Source: Bloomberg, Apollo Chief Economist.
China: Market capitalization of real estate developers has declined significantly
China: Sources of funds for real estate developers

Sources: NBS, Haver, Apollo Chief Economist
China: All types of funding declined

Sources: China National Bureau of Statistics, NBS, Haver, Apollo Chief Economist
China: Domestic funding conditions have deteriorated

Source: Bloomberg, Apollo Chief Economist.
China: Self-financing for real estate developers

Source: Bloomberg, Apollo Chief Economist.
China: Stock prices of real estate developers
China real estate sector performance compared to other Asian countries

Normalized as of 30 Dec 2022
= 100

Source: Bloomberg, Apollo Chief Economist.
Global holdings of Chinese stocks and bonds

RMB denominated securities held by foreign investors

Source: The PBoC, Bloomberg, Apollo Chief Economist (as of September 2023)
High and rising youth unemployment in China

China: Urban unemployment rate

- Workers aged 16-24
- All workers

Source: NBS, Bloomberg, Apollo Chief Economist
China: Consumer confidence is down

China consumer confidence

Source: NBS, Haver, Apollo Chief Economist
China: High debt levels

Source: Bloomberg, Apollo Chief Economist
China: Negative FDI

Foreign Direct Investments in China Non-Cumulative
China: Outstanding aggregate social financing

Source: PBoC, Bloomberg, Apollo Chief Economist
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.