



Global Investment Research

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# China Property Market and Macro Economy

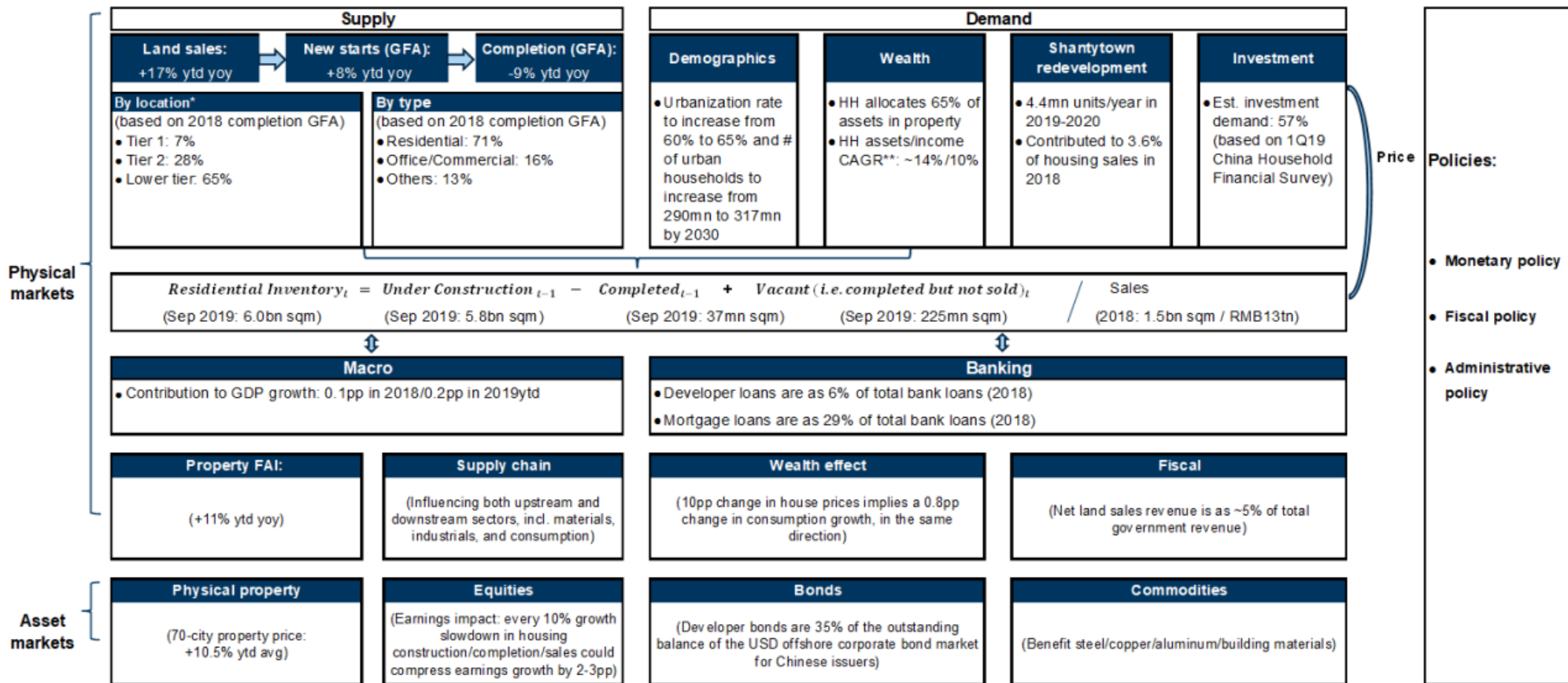
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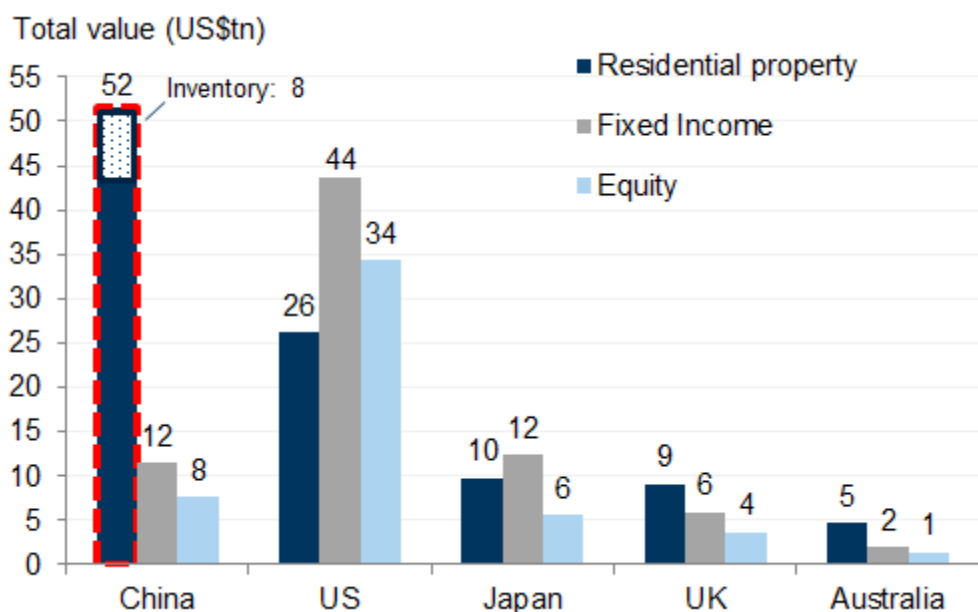
# The interconnection between housing and the economy in China



Note: 1. Ytd growth rates are as of Sep 2019. 2. \* Tier 1 cities include Beijing, Shanghai, Guangzhou, Shenzhen. Provincial capitals include 27 cities. Other major cities include Dalian, Wuxi, Suzhou, Ningbo, Wenzhou, Xiamen, Qingdao, Beihai, Sanya. Others are taken as lower-tier cities. 3. \*\* is calculated since 2010.

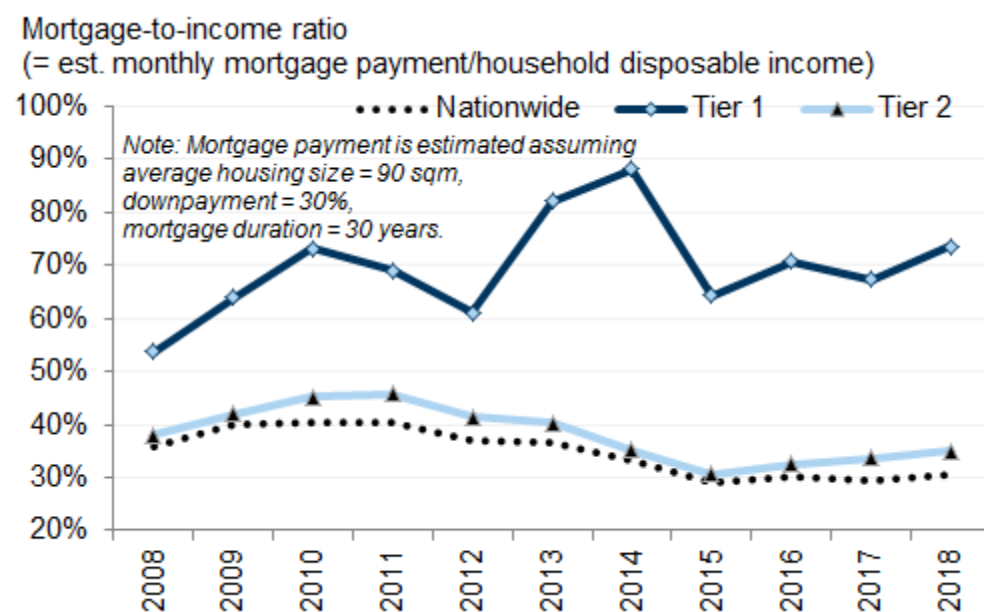
# China property: A US\$40tn market

One of the largest asset classes globally



Source: WFE, CEIC, Japan Cabinet Office, Halifax, Goldman Sachs Global Investment Research.

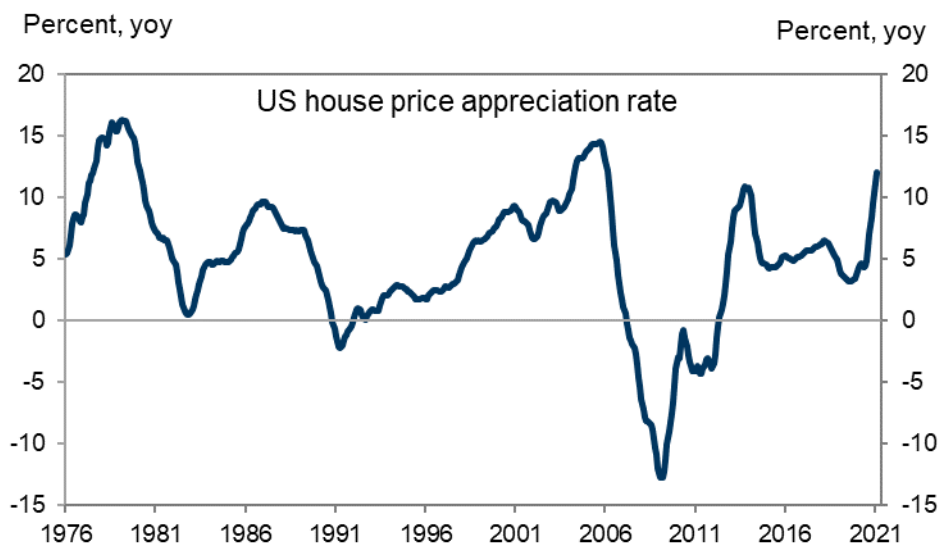
Affordability looks stretched in tier 1 cities



Source: Wind, CEIC, Goldman Sachs Global Investment Research.

# China property: Much shorter price cycles than in the US

US: One cycle in a decade



Source: Haver Analytics.

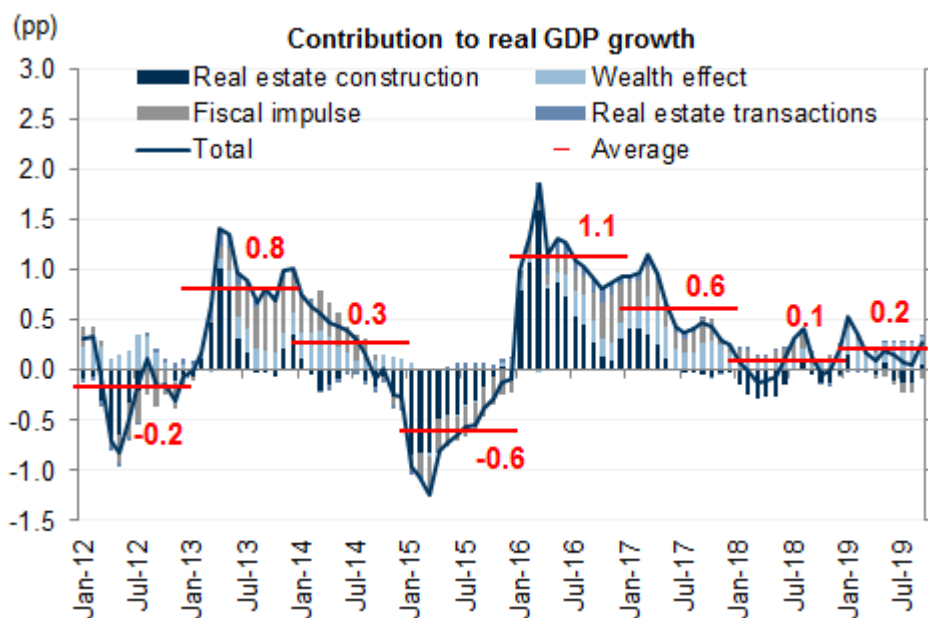
China: One cycle in a few years



Source: Haver Analytics.

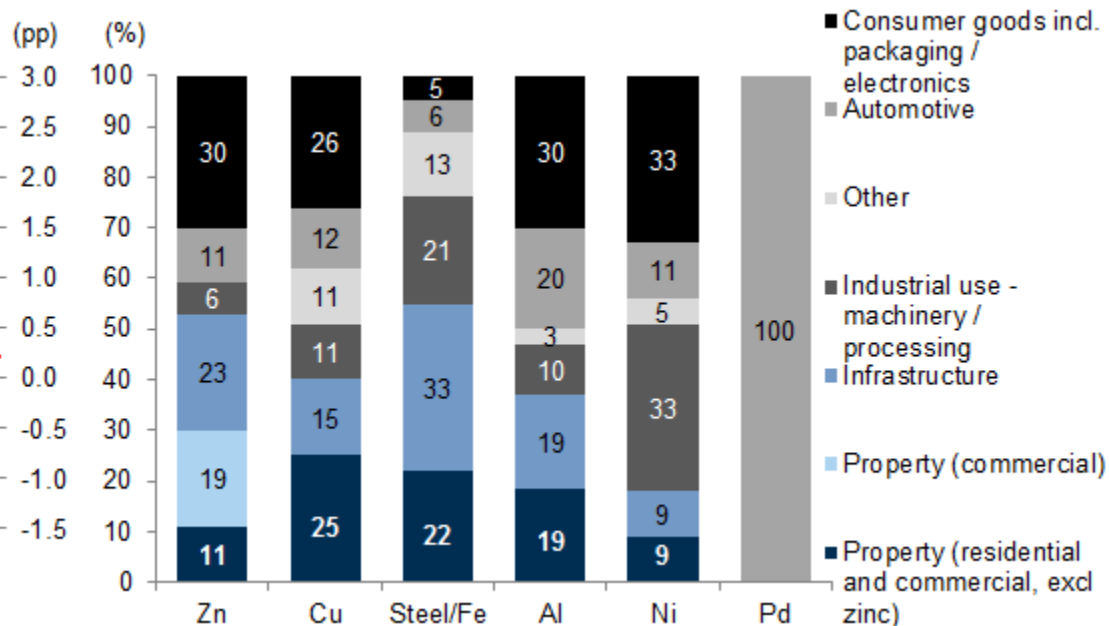
# China property: Driving GDP growth and commodity demand

1pp contribution to GDP growth in 2016/17



Source: CEIC, Goldman Sachs Global Investment Research.

Significant driver of copper and steel demand

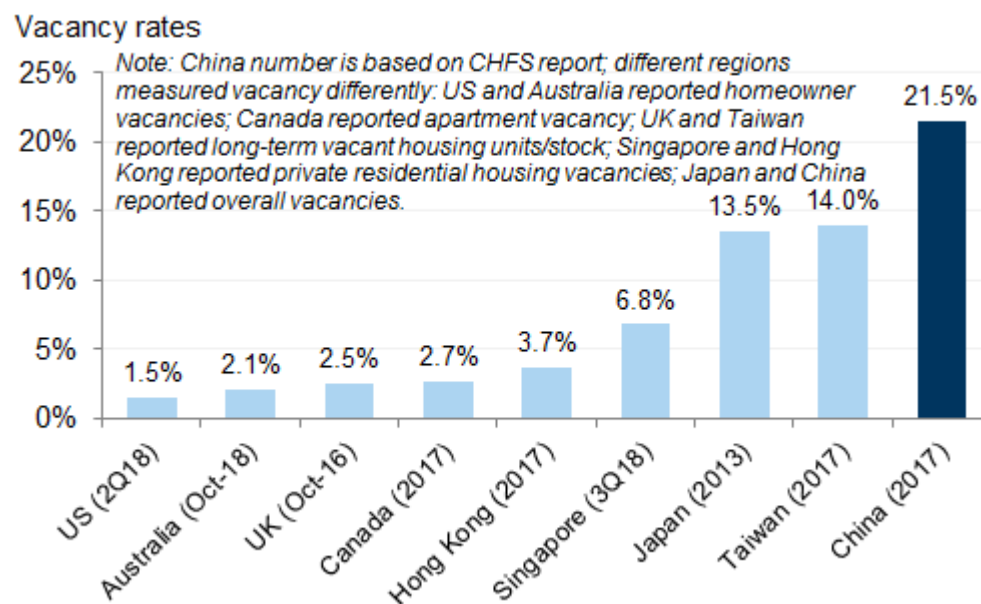
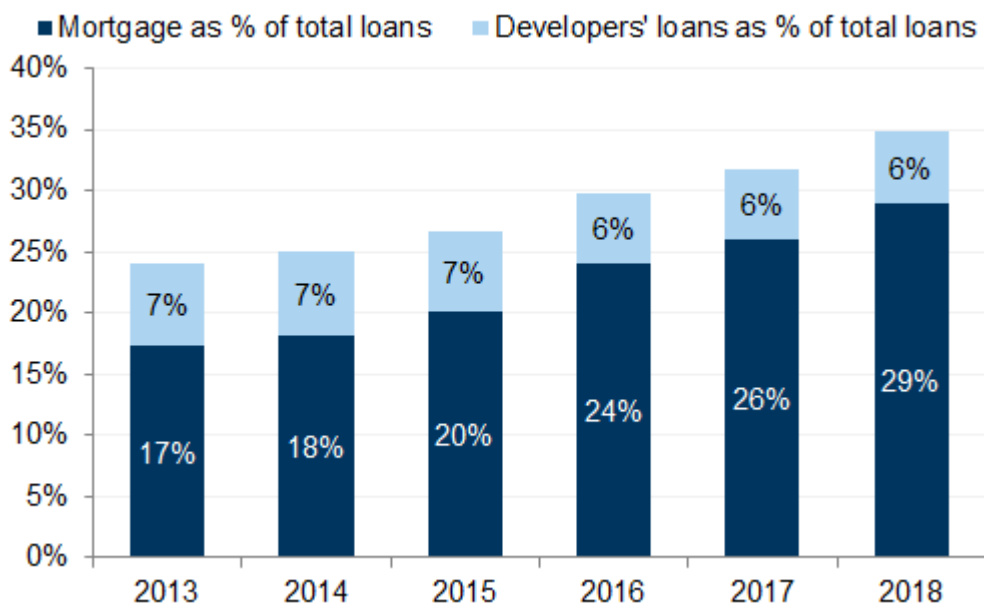


Source: ICA, IWCC, Woodmac, Antaika, Goldman Sachs Global Investment Research.

# China property: Significant bank lending exposure and elevated vacancy rate

Property related loans c.35% of bank lending

Vacancy rate exceeded 20%

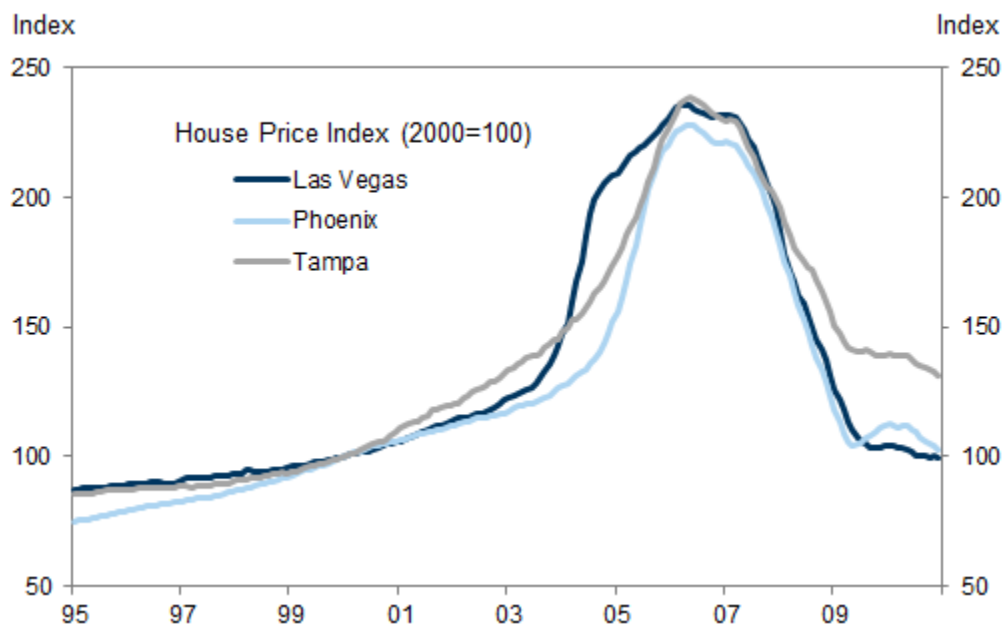


Source: Company financial reports, Goldman Sachs Global Investment Research.

Source: FRED, Canada Mortgage and Housing Corporation, SQM research, UK Ministry of Housing Communities & Local Government, Japan Ministry of Internal Affairs and Communications Statistics Bureau, Singapore Urban Redevelopment Authority, Hong Kong Rating and Valuation Department, Taiwan Ministry of the Interior's Construction and Planning Administration, CHFS, Gao Hua Securities Research.

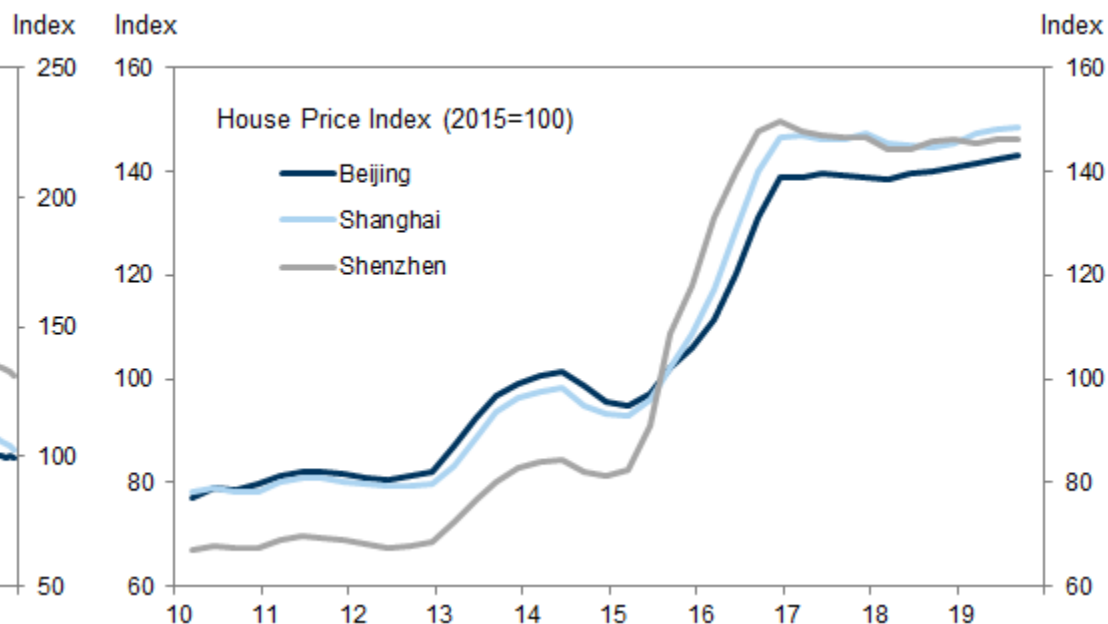
# Aiming for flat: Different paths after house price appreciation

Sometimes prices fall after booms



Source: Haver Analytics.

Sometimes prices stay flat after booms



Source: Haver Analytics.

# Aiming for flat: Comparing “Decline 9” with “Flat 9”

Selecting historical episodes of declining and stable house prices after booms

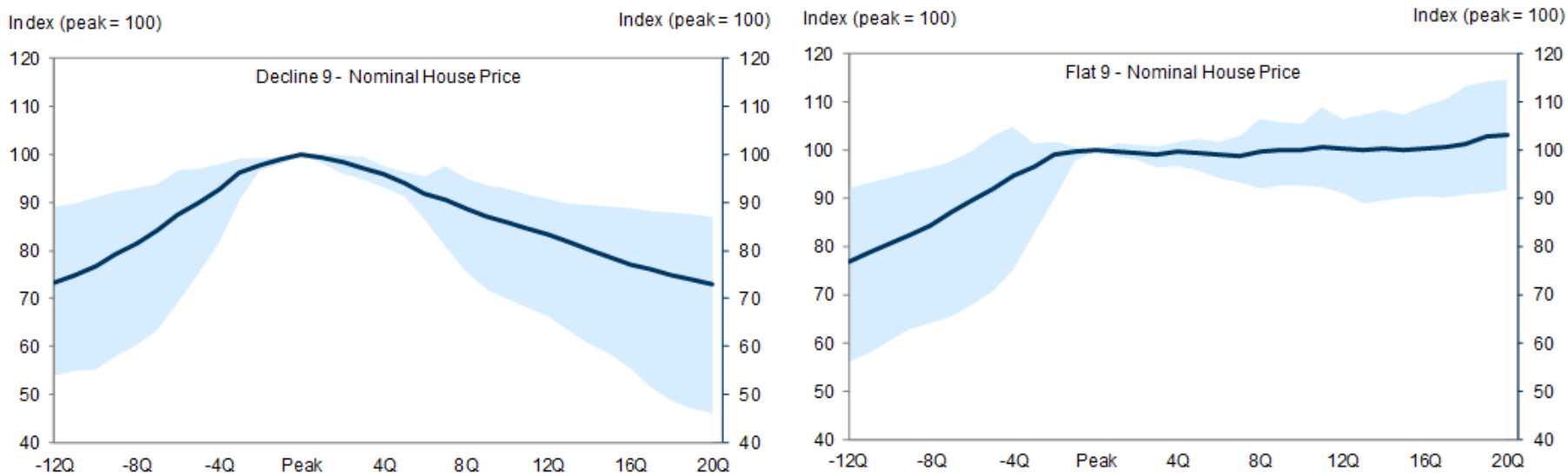
| Decline 9      | Begin  | End    | Duration (qtrs) | %Chg, Nominal | %Chg, Real | Flat 9         | Begin  | End    | Duration (qtrs) | %Chg, Nominal | %Chg, Real |
|----------------|--------|--------|-----------------|---------------|------------|----------------|--------|--------|-----------------|---------------|------------|
| Finland        | 1989Q3 | 1993Q2 | 15              | -37           | -47        | Australia      | 1989Q2 | 1997Q2 | 32              | 17            | -6         |
| Greece         | 2008Q3 | 2017Q2 | 35              | -43           | -43        | Brazil*        | 2015Q4 | 2019Q3 | 15              | 0             | -12        |
| Ireland        | 2007Q2 | 2013Q1 | 23              | -54           | -53        | Colombia       | 1999Q1 | 2004Q1 | 20              | 15            | -21        |
| Japan          | 1991Q1 | 2009Q2 | 73              | -47           | -45        | France         | 1992Q1 | 1998Q3 | 26              | -5            | -11        |
| Netherlands    | 2008Q3 | 2013Q4 | 21              | -20           | -24        | Germany        | 1995Q4 | 2007Q3 | 47              | -6            | -18        |
| Norway         | 1988Q1 | 1993Q1 | 20              | -26           | -37        | Israel         | 1999Q2 | 2007Q3 | 33              | -8            | -20        |
| Spain          | 2007Q3 | 2013Q2 | 23              | -36           | -42        | Portugal       | 1992Q4 | 1997Q1 | 17              | 8             | -10        |
| Switzerland    | 1989Q4 | 2000Q1 | 41              | -25           | -38        | Spain          | 1992Q4 | 1998Q2 | 22              | 18            | -4         |
| United States  | 2007Q1 | 2011Q2 | 17              | -20           | -27        | United Kingdom | 1989Q3 | 1996Q4 | 29              | 0             | -25        |
| <b>Average</b> |        |        | <b>30</b>       | <b>-34</b>    | <b>-40</b> | <b>Average</b> |        |        | <b>27</b>       | <b>4</b>      | <b>-14</b> |

\*End refers to most recent data instead of end of cycle for Brazil.

Source: OECD, Goldman Sachs Global Investment Research.

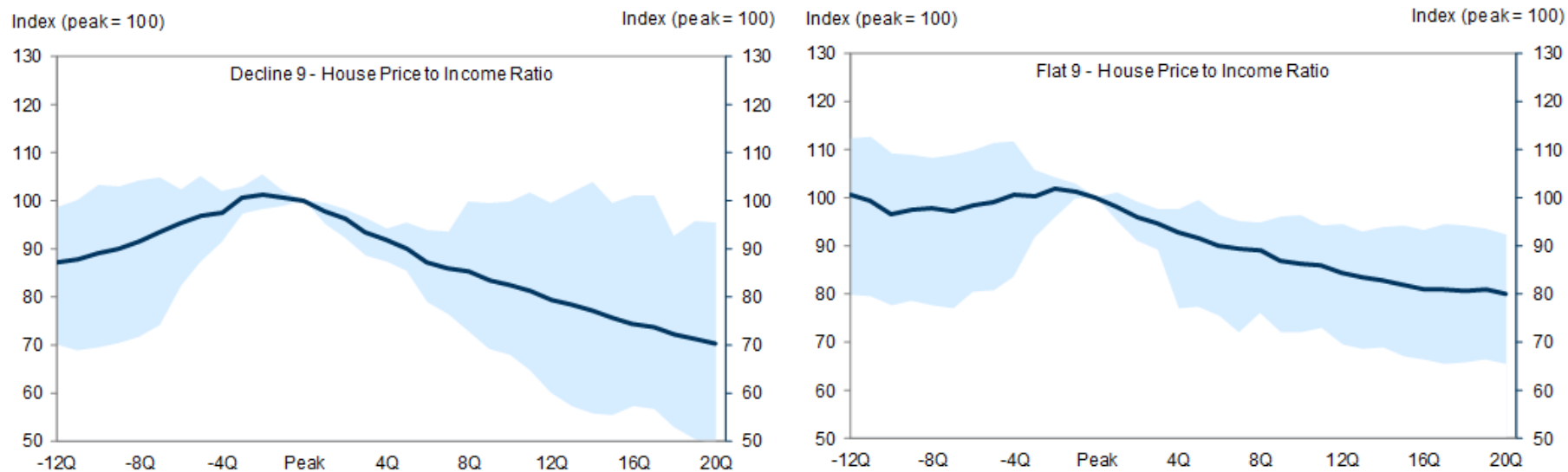


## Different experience in nominal house prices



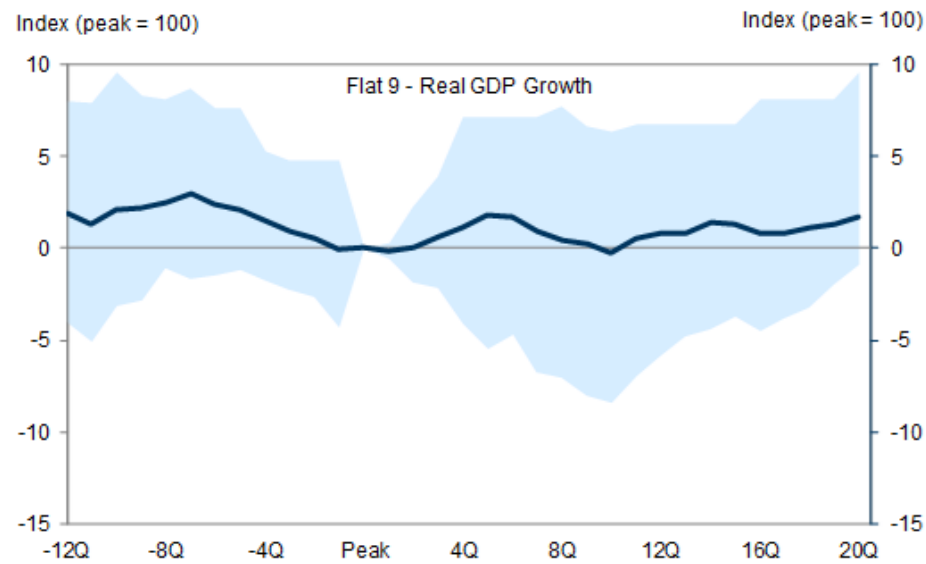
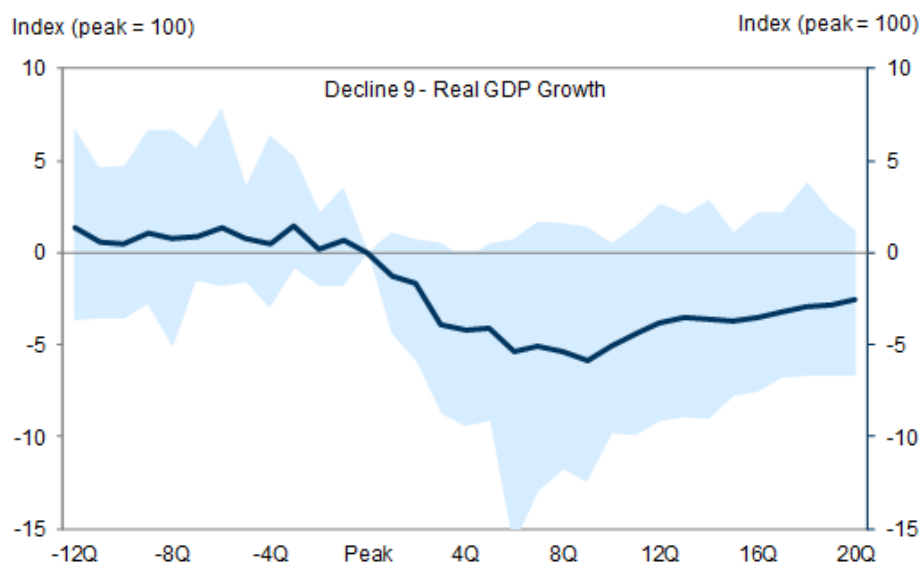
Source: OECD, Goldman Sachs Global Investment Research.

## Similar experience in price to income ratio



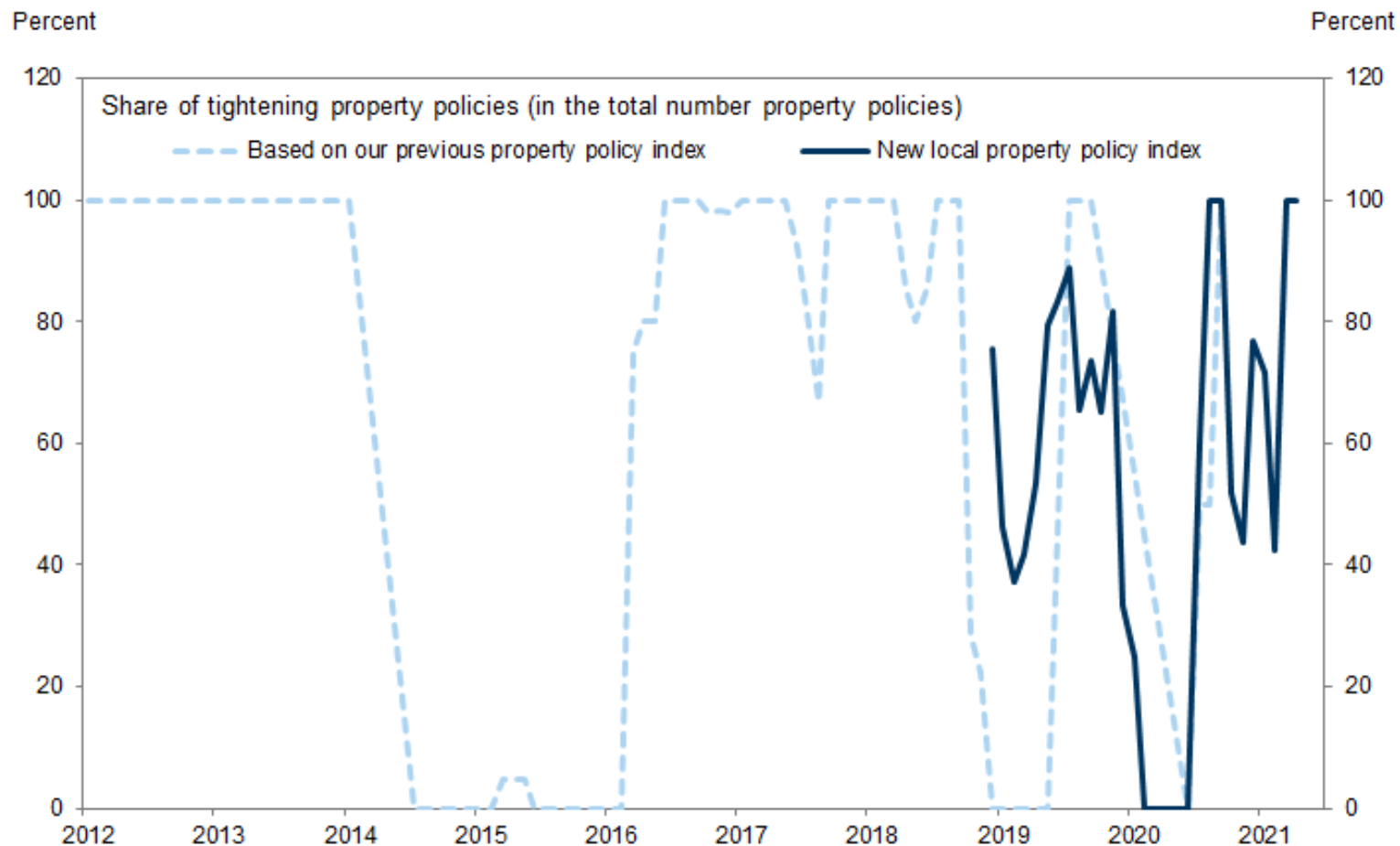
Source: OECD, Goldman Sachs Global Investment Research.

## Different experience in real GDP growth



Source: OECD, Haver Analytics, Goldman Sachs Global Investment Research.

# Housing policy: Higher frequency

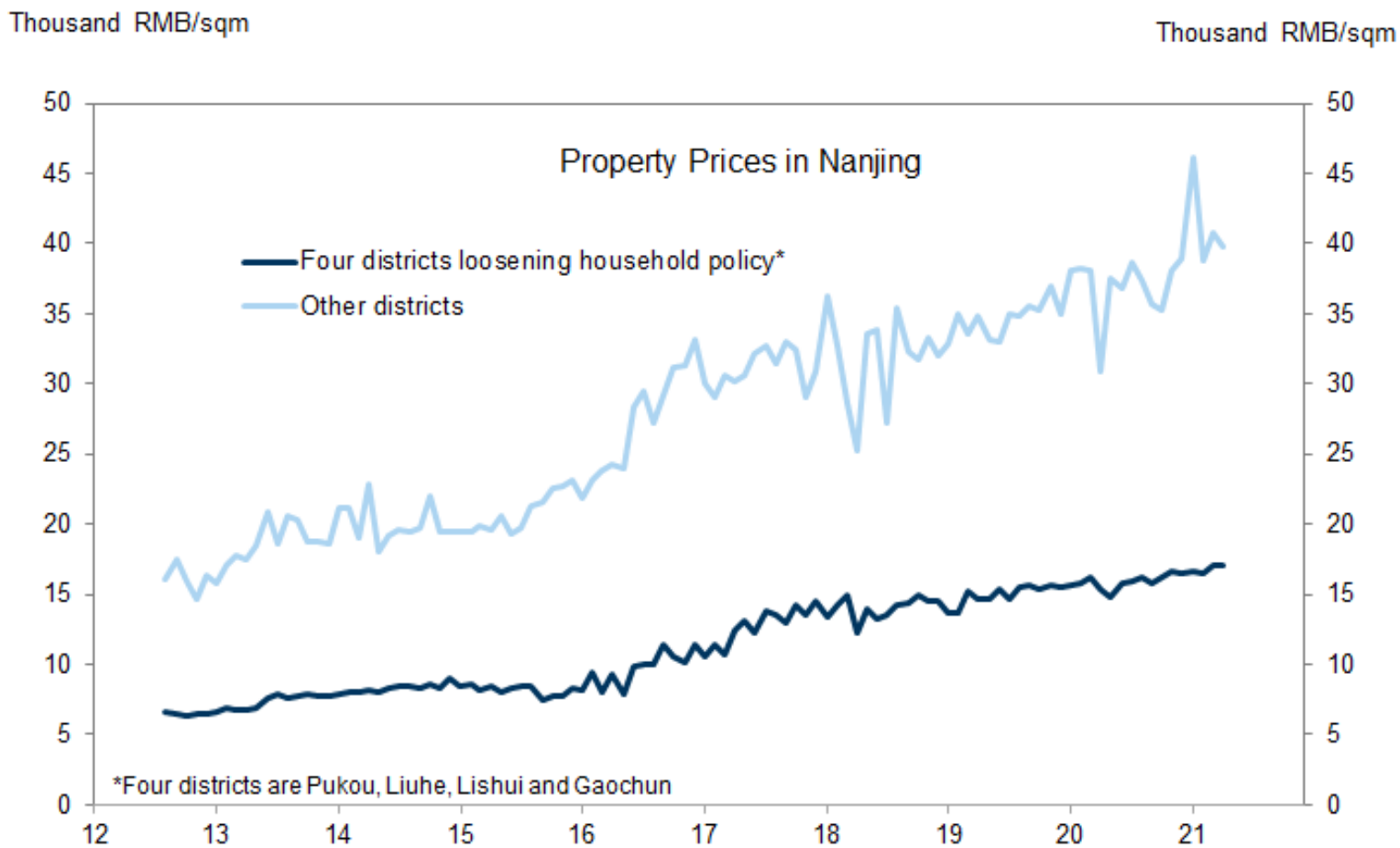


Source: CEIC, Goldman Sachs Global Investment Research.

| Demand policies   |  |  | Supply policies   | Others  |
|---|--|--|---|---|
| Purchase restrictions   | Credit related   | Sales related  |   |   |
| 1. Household registration/Hukou<br><i>("attracting talents and grant them local hukou")</i>   | 5. Mortgage rate<br><i>("restrictions/changes of mortgage interest rate")</i>                        | 8. Owners' sales restriction<br><i>("holding period restrictions")</i> | 1. Property selling price<br><i>("cap on selling price")</i>                  | 1. Property speculation<br><i>("house for living, not for speculation")</i> |
| 2. General mortgage restriction<br><i>("number of mortgages allowed")</i>   | 6. Downpayment<br><i>("requirement on downpayment ratio")</i>  | 9. Transaction tax<br><i>("tax on property transaction")</i>           | 2. Developer financing<br><i>("funding sources and leverage requirement")</i> | 2. General land policy<br><i>("land supply related")</i>                    |
| 3. General purchase restriction<br><i>("number of new property purchases allowed")</i>  | 7. Housing provident fund<br><i>("provident loan quota or rules for withdrawing provident fund")</i> |  | 3. Presale restrictions<br><i>("presale criteria adjustment")</i>             |   |
| 4. Social welfare contribution<br><i>("certain years of social welfare contributed before being eligible for local home purchases")</i> |  |  | 4. Shanty town<br><i>("old community renovation"/"penggai")</i>               |   |
|   |  |  | 5. Land transaction tax<br><i>("exemption of land value added tax")</i>       |   |

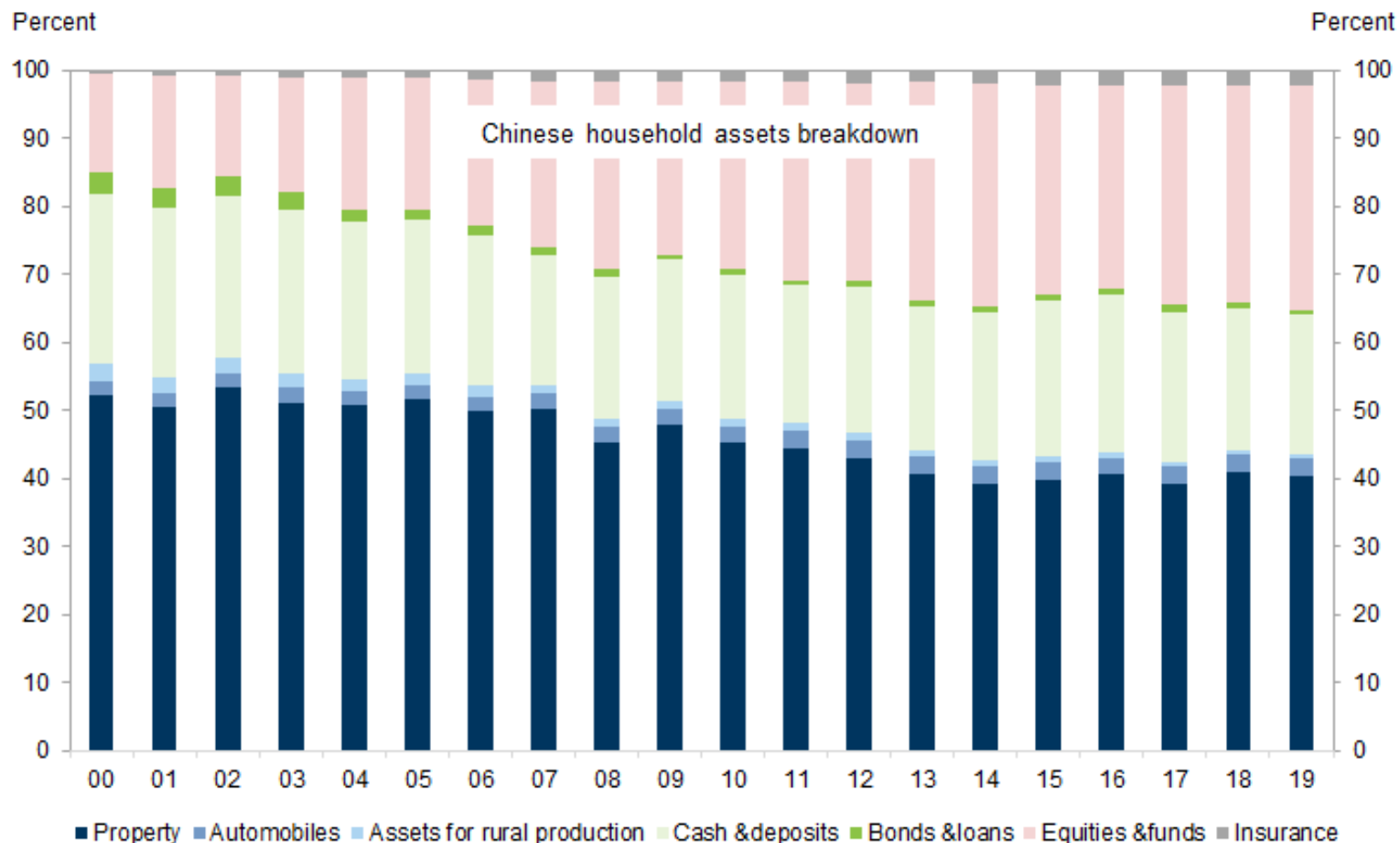
Source: Goldman Sachs Global Investment Research.

# Housing policy: More localized



Source: CREIS, Goldman Sachs Global Investment Research.

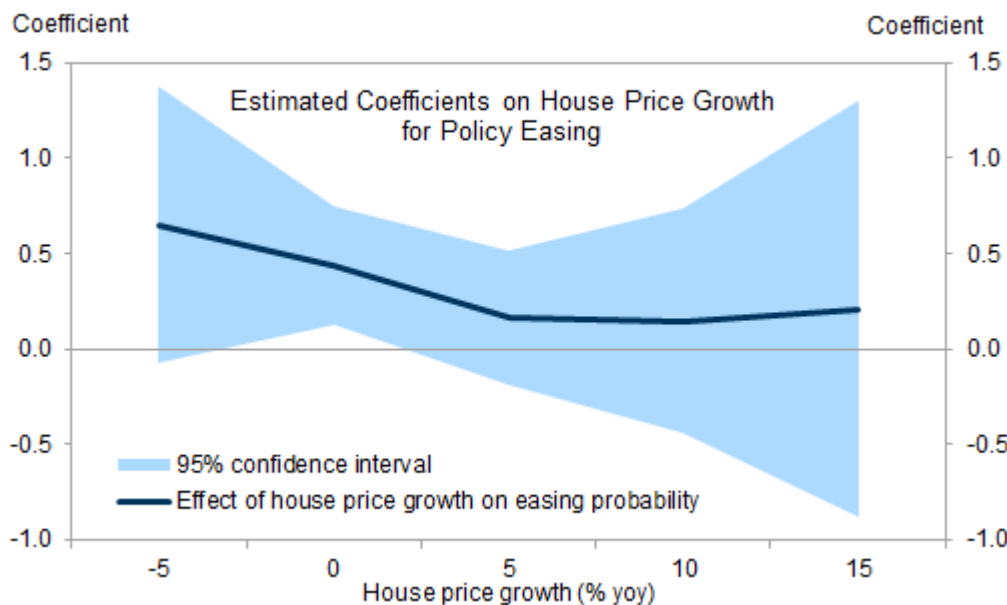
# Property still the largest asset for Chinese households



Source: Wind.

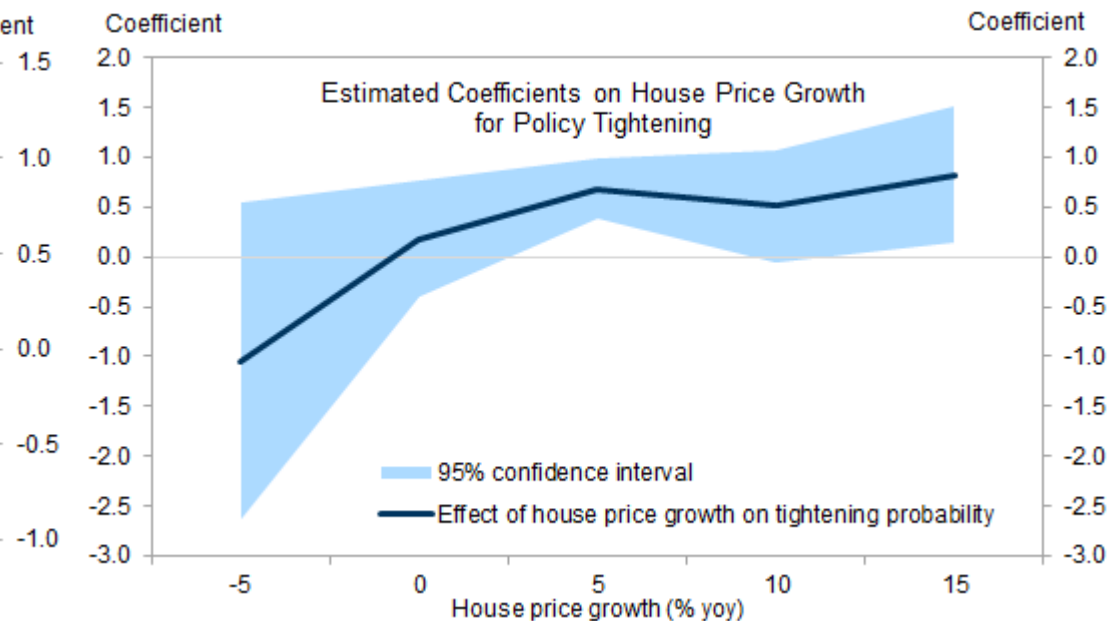
# Local governments appear to be targeting 0-5% annual house price appreciation

Easing when HPA falls to 0%



Source: NBS, Goldman Sachs Global Investment Research.

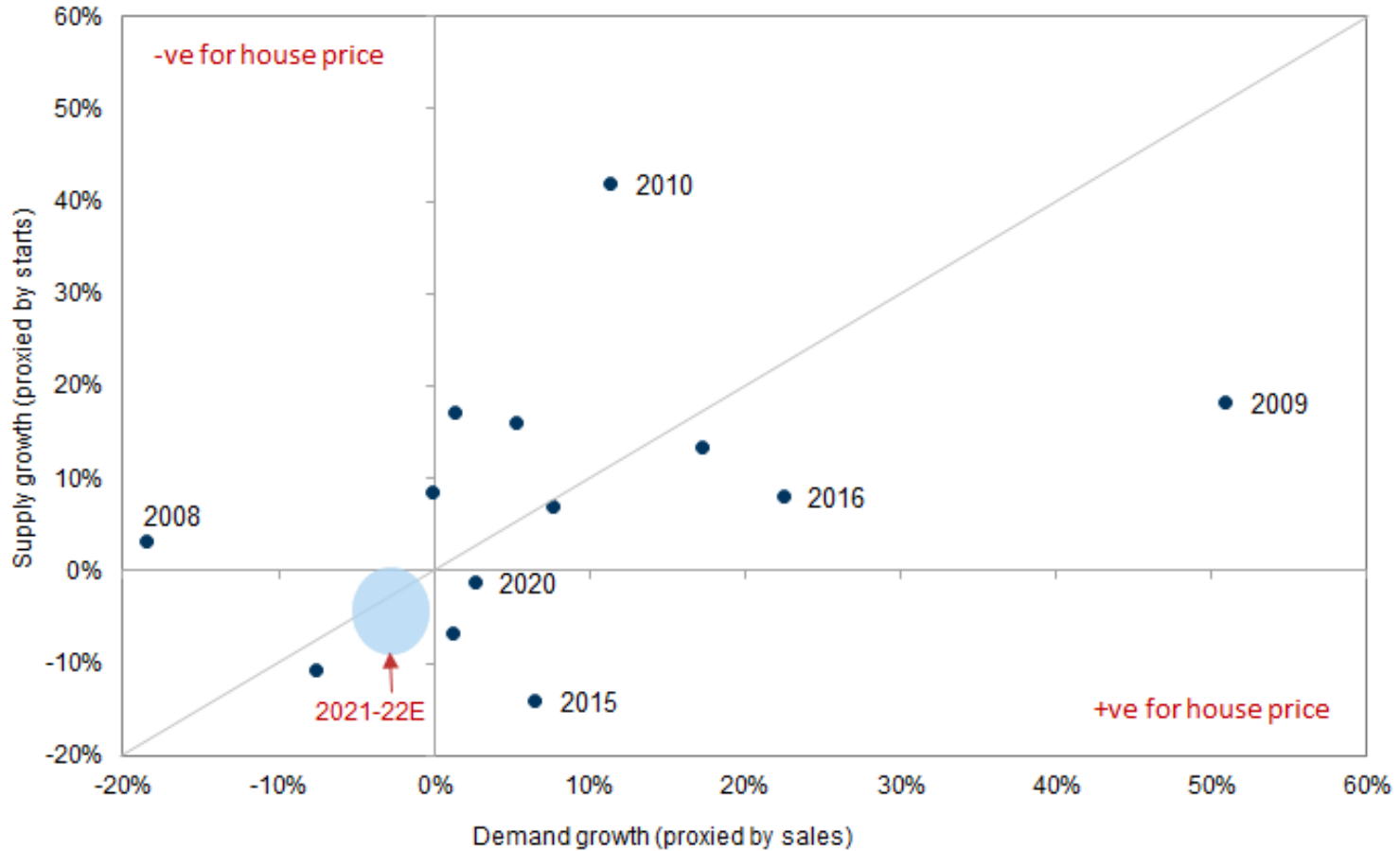
Tightening when HPA rises to 5%



Source: NBS, Goldman Sachs Global Investment Research.

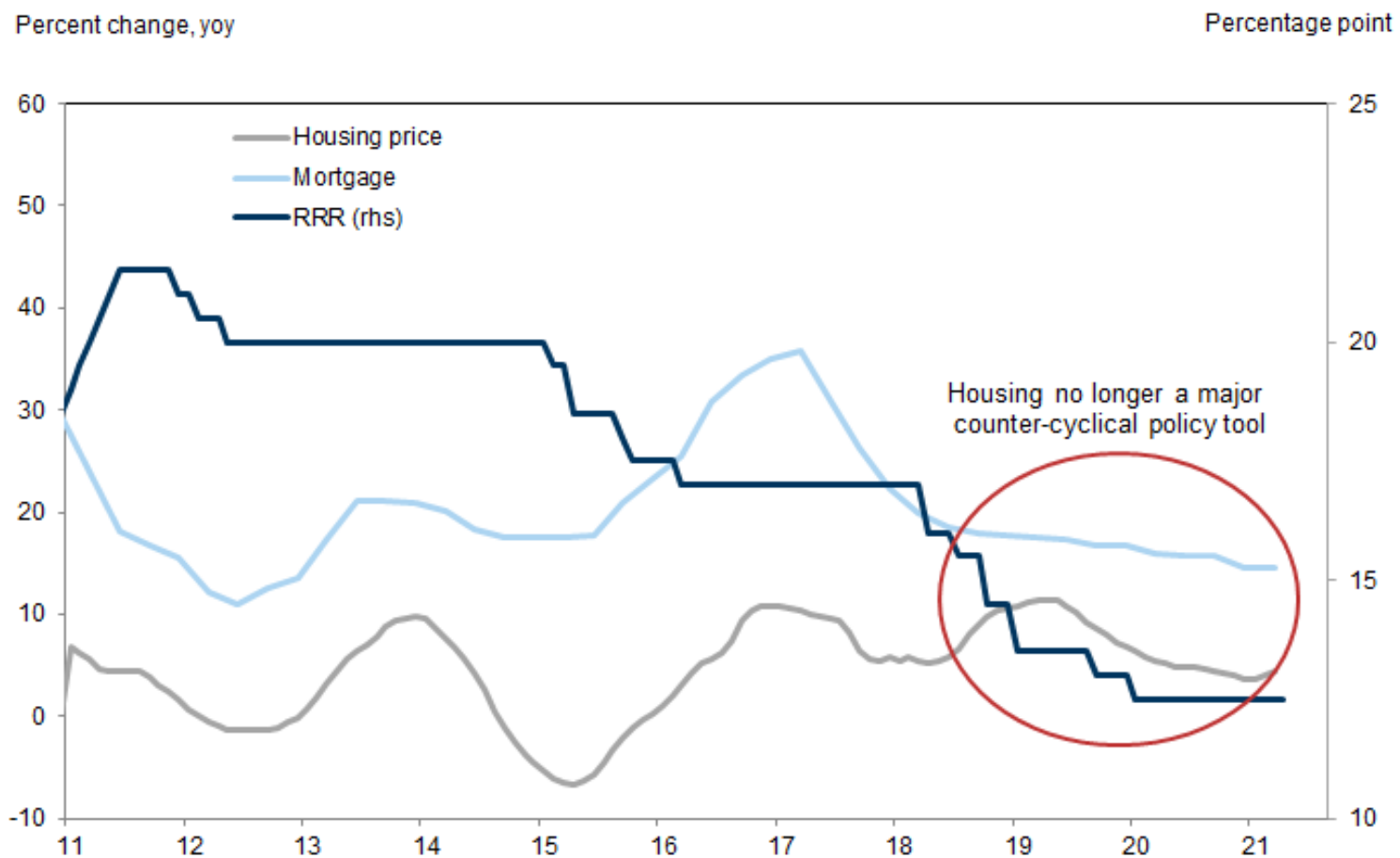


# We expect both sales and starts to soften in 2021-22



Source: Haver Analytics, Goldman Sachs Global Investment Research.

# Housing is for living, not for speculation



Source: Wind, Goldman Sachs Global Investment Research.

# Disclosure Appendix

May 18, 2021

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