

### China Watch

# Why falling home prices may hurt consumption less than you think

#### Falling home prices stirred spillover concerns

China's property market has seen little sign of recovery so far, despite continued policy relaxation since 4Q last year. While secondary home sales still hold up, other key metrics of the physical market — new home sales, new starts, land transaction and property investment — remain sluggish across the board. Meanwhile, home prices have continued to trend down after peaking in mid-2021 (Exhibit 1 and Exhibit 2).

Investors are now increasingly worried that the persistent property market downturn could lead to a greater collateral damage beyond investment and industrial activities, especially in consumption. Apart from weaker spending on housing-related goods (e.g., home appliances and furniture; Exhibit 3) due to sluggish home sales, how much will falling home prices scar households' balance sheets and hurt overall consumption expenditure due to negative wealth effect?

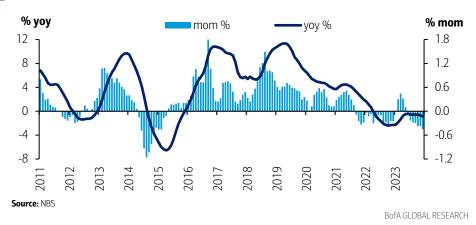
Such concerns are not unfounded, especially given real estate on average accounts for 60% of household financial assets in China. However, we believe the actual wealth effect might not be as bad as some may fear, as the lack of mortgage equity withdrawal mechanism in China limits the spillover from home price declines to household liquidity and spending. It is not unthinkable that when Chinese households postpone their home buying plans due to lower property prices, they tend to save less for future down payment. That said, the spillover could take place by weighing on consumer sentiment, which could be driven by various macro factors (e.g., future income expectation) beyond the housing sector.

### Limited evidence of "wealth effect" on spending

Barring some short-term corrections, China's housing prices have surged significantly over the past two decades. However, empirical studies showed little evidence of wealth effect on consumer spending during the previous housing market cycles.

#### **Exhibit 1: 70-city new home prices**

New home prices declined sequentially over the past 7 months



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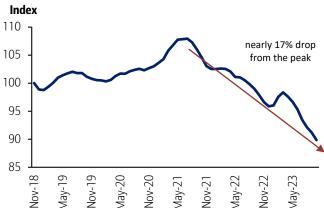
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China & Asia Economist Merrill Lynch (Hong Kong) +852 3508 3961 helen.qiao@bofa.com Economic theory suggests that for homeowners, rising home prices should lead to an increase in households' wealth and thus their consumption expenditure. Such a wealth effect can play out via three channels: (1) larger capital gains if homeowners sell their homes; (2) higher rental income for landlords; and (3) expanded access to credit as households can collateralize their homes to borrow from banks. Much of the empirical literature demonstrated notable wealth effect from home price changes in major developed market (DM) economies such as the US and the UK.

#### Exhibit 2: Secondary home prices from Beike (25 major cities) Secondary home prices already fell below the 2018 level



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#### **Exhibit 3: China retail sales**

Retail sales of housing-related goods remained sluggish on weak property sales



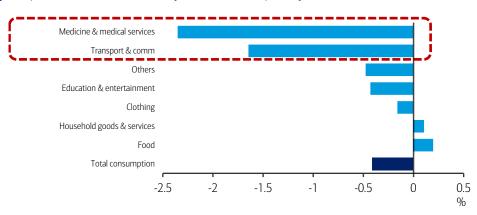
Source: BofA Global Research, CEIC

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#### Exhibit 4: Impact of every 1% home price increase on spending

Source: Beike, BofA Global Research

Every 1% increase in home prices is estimated to reduce spending on medicine & medical services and transport & communication services by 2.3% and 1.6%, respectively



Source: Sheng Songcheng, Song Hongwei, Wang Heng and Wang Wei (2021)

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In contrast, most analysis focusing on China seems to indicate that rising home prices had a negative impact on private consumption. For example, using city-level data during the period of 2005–18, Sheng et. al (2021)<sup>1</sup> estimate that consumption per capita is negatively correlated with housing prices. If housing prices double, consumption per capita would drop by 2.3%. Such a negative relationship is statistically significant and particularly notable for spending on healthcare and transport & communication (which



<sup>&</sup>lt;sup>1</sup>Sheng Songcheng, Song Hongwei, Wang Heng and Wang Wei (2021). The property sector and China's economy, CITIC Press Group.

include durable goods such as auto, phones, PCs), the typical discretionary consumption categories (Exhibit 4).

These results imply that the "crowding out" effect might have outweighed the wealth effect in China when housing prices rose substantially before the trend reversed in mid-2021. When home prices rise rapidly, potential home buyers would tend to save more for future purchases, and those who do not own a home would have to spend more on rents. That, as a result, potentially reduces spending elsewhere on goods and services. The opposite likely holds true when home prices decline.

Our analysis also lends support to this view. A set of simple scatterplots in Exhibit 5 show an ambiguous relationship between home prices and retail sales growth at the city level during 2010–19 (note that none of the regression coefficients are statistically significant). Particularly, in Tier-1 cities where housing affordability problem is the most severe (Exhibit 6), annual retail sales growth appeared negatively correlated with housing price changes (albeit the coefficient is not statistically significant).

We cannot rule it out that the relationship between home prices and consumption might also change over time. For example, Liu et. al (2019)<sup>2</sup> shows that for every 1% rise in home prices during 2006–10, retail sales for consumer goods fell by 0.3%. In contrast, for every 1% rise in home prices during 2011–15, retail sales of consumer goods increased by 0.2%.

#### Exhibit 5: Residential property price vs. retail sales in tier 1, 2 and 3 cities (%yoy)

For Tier-1 cities where housing affordability problem is the most severe, annual retail sales growth appeared negatively correlated with housing price changes, though the coefficient is not statistically significant



**Source:** Bureau of Statistics for each city through CEIC

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### What explains the muted wealth effect?

We see two key reasons why the wealth effect had not been as significant in China compared with other economies:

1. **Much higher down payment ratios for property purchases**. Prior to the recent wave of property policy relaxation since 4Q23, households in China's Tier 1 cities typically face a down payment ratio of 30–40% for their first home purchase, and in some cases as high as 50–70% for their second home purchase. Even after the recent reduction, the minimum down payment ratios in China (especially cities still with HPRs) remain much higher than in other economies (Exhibit 6). This requires potential home buyers to save up a significant lump sum before they can obtain mortgage loan from banks.

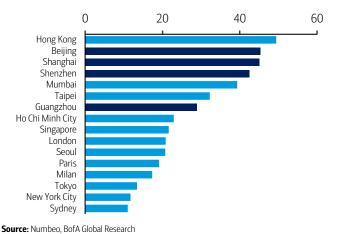
 $<sup>^2</sup>$  Liu L, Wang Q, Zhang A (2019) The impact of housing price on non-housing consumption of the Chinese households: a general equilibrium analysis. N Am J Econ Finance 49:152-164



2. Lack of mortgage equity withdrawal (MEW) mechanism. During times of economic boom and rising home prices, the equity value of a property (i.e., the difference between current home value and outstanding mortgage) would typically rise. Yet, home equity withdrawal is largely nonexistent in China. This is in sharp contrast with the US and some other DMs, where households can extract cash from increased home equity, which allows them to spend more.

#### Exhibit 6: Property price-to-income ratio (2019)

Home prices in China's Tier-1 cities have been high relative to income



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#### Exhibit 7: Property down payment ratio – international comparison

China has much higher down payment ratio requirement than most other countries

Minimum down payment ratio

US 0% for VA loans, 3.5% for FHA loans, 5-10% for other type of loans UK Typically 10% India 10-25% depending on the property's value Japan Usually 10%, but could be as low as zero Germany Usually 5-15% depending on the federal state, but could be as low as zero Canada 5-20% depending on the purchase price of property Most banks require 20%, but could be as low as zero	China	<b>35%</b> in Beijing & Shanghai, <b>30%</b> in cities with HPRs, <b>20-25%</b> in cities without HPRs
India 10-25% depending on the property's value Japan Usually 10%, but could be as low as zero Germany Usually 5-15% depending on the federal state, but could be as low as zero Canada 5-20% depending on the purchase price of property	US	0% for VA loans, 3.5% for FHA loans, 5-10% for other type of loans
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France Most banks require <b>20%</b> , but could be as low as zero	Canada	<b>5-20%</b> depending on the purchase price of property
	France	Most banks require 20%, but could be as low as zero

**Note:** Federal Housing Administration mortgage (FHA) and Veteran Affairs loan (VA) programs have specific requirements. HPRs = home purchase restrictions.

Source: News, BofA Global Research

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#### Why does MEW matter?

The existence of MEW probably explains why the yoy growth rates of US household housing wealth and personal consumption expenditure (PCE) excluding housing & utilities generally trend closely in the same direction (Exhibit 8).

In the US, it is a common practice for households to tap into their increased home equity during market booms through home equity loans and home equity lines of credit (HELOC), both providing extra funding to increase spending. The usage of these financing tools was especially popular before the Great Financial Crisis when home prices were skyrocketing in the US. According to data from the New York Fed, the total outstanding balance of home equity loans more than tripled between 2003 and 2009, reaching over US\$0.7tn at peak (Exhibit 9).

In addition, research has shown that households with credit constraints generally display larger housing wealth effects (Cooper, Dynan, (2016))<sup>3</sup>, highlighting the importance of additional credit access through increased housing wealth.

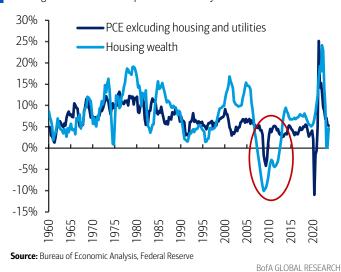
That said, existing estimates of housing wealth effects in the US vary. For example, a 2019 paper from the International Monetary Fund (IMF) found the marginal propensity to consume (MPC) of 4 cents on the dollar. Meanwhile, Guren, McKay, Nakamura, and Steinsson (2018) estimated the MPC out of housing wealth to be around 2.8 cents for every dollar.

The authors also found such wealth effects to be symmetric with respect to home price increases and decreases. In fact, during the trough of the Great Financial Crisis, housing wealth was down over 10% yoy for US households in 4Q 2008, which was quickly followed by a 4.2% yoy slump in non-housing PCE.



<sup>&</sup>lt;sup>3</sup> Daniel Cooper, Karen Dynan (2016), Wealth Effects and Macroeconomic Dynamics, Journal of Economic Surveys

### **Exhibit 8: Housing wealth and non-housing real PCE (%yoy)**Housing wealth and consumption trend closely with each other



### Exhibit 9: Total outstanding balance for home equity revolving debt (trillions of US\$)

Total outstanding balance of home equity loans more than tripled between  $2003\,\mathrm{and}\,2009$ 



It is perhaps difficult to stipulate the magnitude of negative wealth effect in China when home prices are falling. After all, since the turn of the century, China has only seen a few episodes of home price depreciation (1H 2009, 2Q–4Q 2012, 4Q 2014–4Q 2015) that didn't last for long. What makes it even more complicated is the fact that the property market typically moved closely with the macro policy cycles in China, which made home prices highly correlated with consumption growth by nature.

Yet, the lack of MEW implies that China is unlikely to see a similar pullback in consumer spending if home prices fall by a similar magnitude. That is, the so-called "wealth effect" might not be as significant as some might fear, as the spillover from home price declines to household liquidity and spending would be limited, even though the value of household assets might drop. This is particularly the case if the majority of homeowners choose to hold on to their properties rather than being forced to sell them at a loss.

Note that most households are still far away from being under water, even if home prices fall. According to an urban household survey by the People's Bank of China (PBoC) in 2019, only 43% households in China have mortgages, and the average outstanding mortgages of those households stood at RMB389,000. That debt level is relatively moderate compared with per-household net assets at RMB2.89mn and risk-free financial assets (deposit, housing provident fund holdings, etc.) at RMB350,000.

In our view, falling home prices affect consumption, to a larger extent, via consumer sentiment. But sentiment could be driven by various macro factors (e.g., job market, future income expectation) and thus is difficult to be measured. We believe changes in housing prices could be one determinant, but probably not the most important one, of households' spending decision. This is evident in our latest BofA Consumer Survey in February — for respondents who had reduced spending during the Lunar New Year (LNY) holiday, falling asset prices were ranked as a relatively minor reason for the expenditure change (Exhibit 10).

### What is the key for consumption to turn around then?

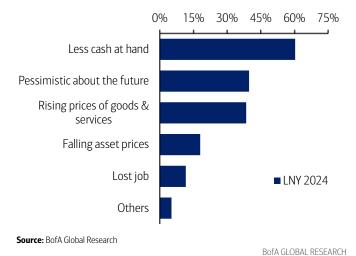
The silver lining is lower home prices will allow potential buyers to save less and spend more elsewhere. This implies more room for discretionary goods and services spending now that the financial burden from home purchases and mortgage payments ease, against the backdrop of the government's continued property policy relaxation. That could be one factor, among many others, that contributes to China's ongoing services consumption boom.



Ultimately, a complete turnaround in consumer spending would hinge on an improvement in the labor market, future income prospects and consumer confidence, which in turn would rely on more substantial policy support to shore up the economy. In our February BofA China Consumer Survey (see <a href="report link">report link</a>), our respondents ranked "income improvement" as the #1 factor that will lead them to spend more over the next six months, followed by "disbursement of consumption coupons or subsidies" (Exhibit 11).

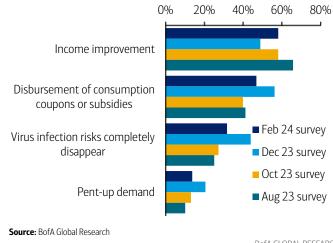
## Exhibit 10: BofA China Consumer Survey (respondents who reduced spending during the LNY)

What factors made you reduce spending during LNY? (select all that apply) "Falling asset prices" was ranked as a minor reason for spending cut



### Exhibit 11: BofA China Consumer Survey: key drivers to increase future spending

What factors will lead you to spend more over the next six months? (select all that apply) "Income improvement" ranked as the #1 factor in February



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