FOR PROFESSIONAL INVESTORS – 29 September 2022

Chi on China

AN ASSESSMENT ON CHINA'S PROPERTY MARKET RISKS

You can't understand where someone's going unless you understand where they've been.

Jerry B. Jenkins

SUMMARY

- The "three red lines" policy to force developers to cut debt has been a catalyst for the property downturn since 2021. The root cause is the incentive problems that distorted the 1998-2003 housing reform, leading to a buildup of speculative excess for over two decades.
- The Chinese characteristics in the system make a property market crash (or "Minsky moment") unlikely. However, the property market's predicament is structural. Its size and economic importance will shrink in the long-term, and this will drag on GDP growth in the medium-term.
- Whether this structural change adds to or subtracts from GDP growth in the long-term will depend on how the "creative destruction" will unfold. The property market may evolve to a three-pillar structure, dominated by state-owned developers, with the share of private housing declining but that of public and rental housing increasing.

China's housing market has entered a structural downtrend, as the population ages and per capita housing space approaches the developed market average. However, the pace of the market contraction since late 2021 has been particularly swift. Beijing's policy to deleverage the property sector has led to a liquidity squeeze and a loss of homebuyers' confidence in the ability of the developers' to deliver pre-sold homes. These factors have aggravated the structural pressures on the property market.

However, as we argued long ago[1], Beijing has sufficient policy tools and resources to prevent a "Minsky Moment", which is an abrupt and significant drop in asset values (a property market crash in our case) because

[1] "*Chi on China: China's Property Bubble (Part 1 of 3): What Bubble?*" 3 June 2014, and "Chi on China: China's *Property Bubble (Part 2 of 3): What Risk?*" 11 June 2014.

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of rampant speculation funded by borrowed funds on the back of prolonged economic prosperity[2]. Furthermore, China is not likely to suffer the type of housing bust seen in Japan in the late 1980s or a subprime crash of the kind that occurred in the US in 2007-08.

THE SCALE OF THE PROBLEM

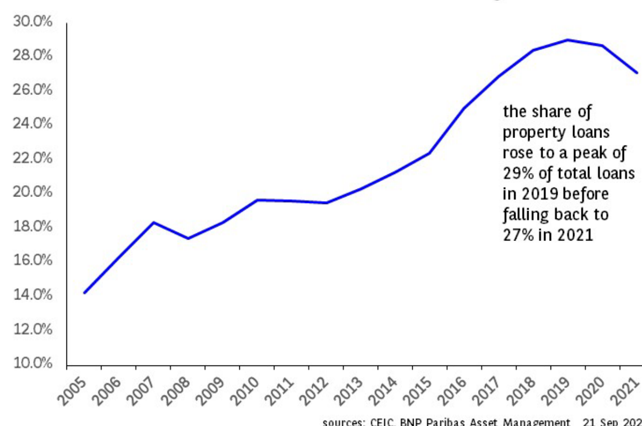
The direct impact:
The market estimates that real estate investment accounts for 25% of China's total fixed-asset investment. This includes direct property activities from construction and property services and property supply-chain activities, such as mining, energy, financing, furniture and transport & storage. From this perspective, a 10% fall in property activities could cut GDP growth by 2.5 percentage points.

The wealth effect:
A 2019 PBoC survey showed that housing accounted for almost 60% of household assets, suggesting that falling property prices would hurt household consumption via a negative wealth effect. The survey also reported that mortgage debt accounted for over three quarters of total household debt, which has risen sharply in recent years. So debt-reduction by households would also hurt consumption.

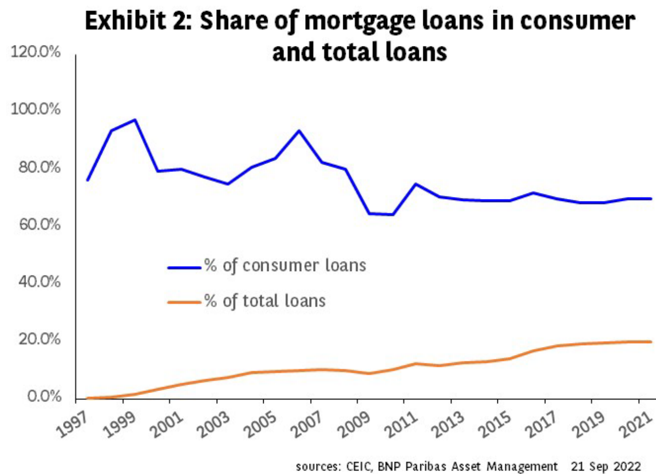
Arguably, this negative wealth effect should be limited because 1) home equity loans are uncommon in China, implying that Chinese homebuyers had not monetised their property, and 2) China's property market policy is strict with down payment amounting to as high as 30%-40% of the first home and 60% for the second.

Banks' exposure:
The Chinese banks' direct and indirect exposure to the property sector is estimated at more than 50% of total bank loans. Direct property loans (for development, construction and mortgages) have doubled since 2005 (Exhibit 1), accounting for more than 27% of total bank loans in 2021 after hitting a peak of 29% in 2019. Mortgage loans, which account for the bulk of consumer loans, have risen from less than 1% of total loans in 1998, when housing reform started, to 20% (Exhibit 2).

Exhibit 1: Real estate loans as a share of total loans



[2] There are three kinds of borrowers in the Minsky world. 1) The hedge borrower (who can repay principal and interest from cash flow), 2) the speculative borrower (who can only repay interest and needs to roll over the principal by further borrowing) and 3) the Ponzi borrower (who can repay neither interest nor principal and must borrow, or sell assets, to meet the interest bill). Professor Minsky argued that prolonged and robust growth would breed economic complacency and increase the number of speculative and Ponzi borrowers. They are the culprits who cause asset bubbles that eventually burst with devastating economic effects.



Banks' indirect exposure to property comes from their funding of the shadow bank market and lending to non-property sectors that use land and property as collaterals. The systemic impact is difficult to estimate due to data problems and the complicated transmission mechanism of indirect lending.

Some brokers have estimated that up to half of China's shadow bank credit had gone to finance the property market in 2021. Since shadow credit accounted for about a third of aggregate financing, this implies that about 17% of aggregate financing went to the property sector. In addition, non-property loans collateralised by land and property accounted for 20% of all bank lending, and banks held half of the RMB6.5 trillion property developer bonds in 2021 (equivalent to 2% of total bank loans).

The sum of these direct and indirect exposures easily adds up to over 50% of total loans, raising concerns about systemic risk should the property market crash.

LEVERAGING UP

The developers' reliance on home sales (including presales) revenues for financing has aggravated such concern. In 2021, industry data showed that developers' financing from such revenues accounted for 53% of their total financing, up from less than a third in 2008.

The presale model has resulted in a significant increase in developers' indebtedness. Developers often receive government licences to sell homes right after laying the foundations. This enables them to get cash quickly to buy more land, which is then used to collateralise more borrowing.

However, liquidity problem arose when new home sales, and hence revenues, dropped sharply (Exhibit 3). The government's restrictive property financing policy has aggravated the liquidity squeeze, leading to a rise in developer defaults and credit risk in the financial system.

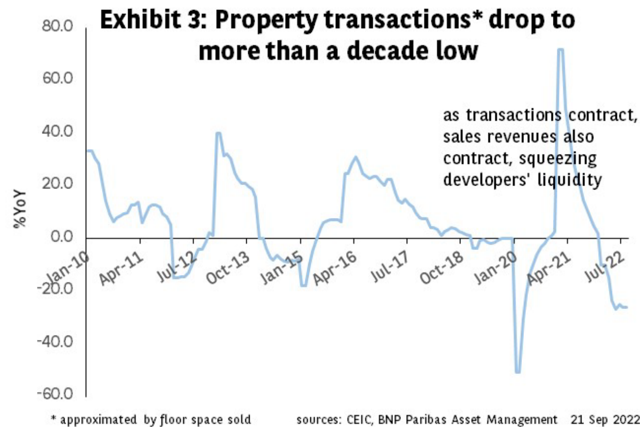


Exhibit 3: Property transactions* drop to more than a decade low

* approximated by floor space sold sources: CEIC, BNP Paribas Asset Management 21 Sep 2022

THE CATALYST FOR THE DOWNTURN

The root of the current property downturn dates back to the 1998-2003 housing reform and the subsequent economic boom that created speculative excesses and destroyed housing affordability (see Appendix).

To force developers to reduce debt growth, China implemented in August 2020 a "three red lines" policy:

1) Developers' liabilities should not be more than 70% of assets, excluding advance proceeds from projects sold on contract.
2) Their net debt should not exceed equity.
3) They must hold cash at levels at least equal to their short-term borrowings.

A developer crossing any of these red lines would face regulatory restriction on their borrowing based on a colour scheme created by the regulators (Exhibit 4).

Exhibit 4: The "Three Red Lines"

Policy colour code	Number of red lines breached	Allowable annual debt growth
Green	0	15%
Yellow	1	10%
Orange	2	5%
Red	3	0%

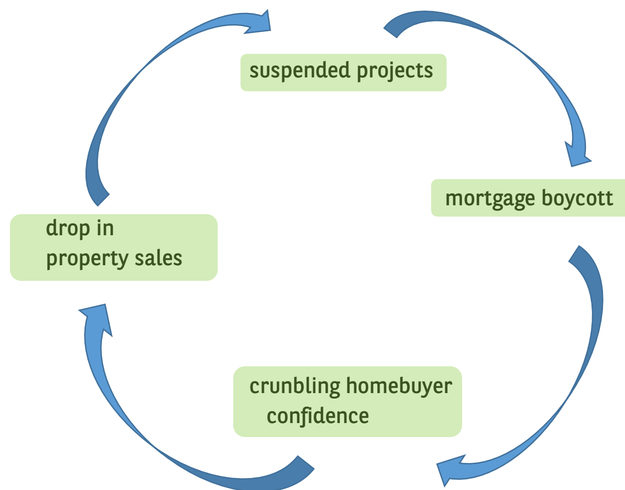
sources: Government report, BNP Paribas Asset Management 21 Sep 2022

Arguably, the three red lines policy was a catalyst for the current market downturn, as property market activities started to contract more sharply and developers' liquidity conditions tightened more quickly after the regulation came into force. The government's deleveraging policy, which started in 2017 and only included the three red lines later, and anti-speculation measures were the fundamental causes for the property woes.

The plunge in housing sales (including presales) since early 2022 has squeezed developers' liquidity further, causing them to suspend many presold projects that were under construction. Developers' failure to deliver the presold homes has prompted homebuyers to stop mortgage payments, eroding market confidence and

reducing property sales further. This, in turn, has forced more developers to suspend projects, thus creating a vicious circle of even lower confidence, more mortgage boycotts, further sales contraction[3] (Exhibit 5).

Exhibit 5: Contagion risk of mortgage boycott



SYSTEMIC RISK?

Nonetheless, systemic shock is unlikely as the Chinese banking system has a huge buffer of RMB7.8 trillion in tier-1 capital in excess of Basal III rules (RMB18.2 trillion), according to our estimation[4]. This is almost double the estimated RMB4 trillion in debt of the 12 worst affected developers in this downturn, and 9.5 times more than the estimated mortgage non-performing loans stemming from the mortgage boycott.

Crucially, Beijing's policy response to preserving systemic confidence has been swift. It includes a mortgage payments holiday for the affected homeowners, mobilising banking, state and local government resources to revive the suspended projects, easing funding shortages of developers and more macroeconomic policy easing to protect economic growth[5].

Many of the restrictive property market measures have also been relaxed. They include putting on hold the three red lines policy, lowering the mortgage lending rate, relaxing the conditions for buying second homes and reducing the down payment requirement from the punitive levels of 30%-40%.

NO PROPERTY MARKET CRASH

No "Minsky Moment"

A key tenet of the Minsky Moment is that a significant build-up of leverage in the system will eventually crush the debt-financed asset bubble, resulting in an economic disaster.

However, indebtedness is not so high in China. Despite a steadily rising trend, mortgage loans still account for about 20% of total bank loans. Crucially, there are no financial derivatives, such as collateralised debt obligations (CDOs) and asset-backed securities (ABS), for leveraging up the housing market. The Chinese

[3] "*Chi Flash: China's Mortgage 'Boycott*", 22 July 2022.
[4] See reference in footnote 3.
[5] "*Chi Time: China's Growth Crosscurrents – What's New*?" 20 July 2022.

government tightly controls the mortgage market, requiring at least 30% down-payment for the first home and 60% for the second before the recent relaxation. China also has no organisations such as the US's Fannie Mae and Freddie Mac to facilitate housing leverage.

No US-style crash

So a US-style housing crash and a Minsky Moment are unlikely because China's immature credit system and lack of financial innovation has barred many high-risk buyers from entering the market. In the run up to the US subprime crisis, extremely loose credit standards allowed many people, including those who would otherwise not be able to buy, to enter the housing market. When the market fell, many were forced to sell. When the domino effect of debt-financed purchases and CDOs and ABS unfolded, a Minsky Moment arrived.

However, in China, most homebuyers have the buying power to enter the market. Those who cannot afford a home have been kept out. This means there is no excessive leverage and most Chinese households would not be forced to exit through fire sales in case of a market decline as they have the wherewithal to hold on[6].

China's property market corrections are typically characterised by gradual and moderate price falls with transaction volumes bearing the brunt of the corrections. The contractions in transaction adversely affect developers' cash flows and financing for local governments, as is happening in the current downturn.

No banking crisis

A property-induced debt-currency crisis with a devastating credit crunch, large-scale bank failure and a currency crash is also unlikely. China's system is protected by its high domestic saving rate (of more than 45% of GDP), domestically funded debt, bank-dominated financial system with strong government control and government guarantee of bank deposits and an inconvertible capital account.

Strong government control of banks, state companies, local government entities and even some private companies also means that the government can bring together creditors and debtors to iron out solutions for debt restructuring over time rather than allowing market forces to drive bankruptcies and defaults. This "Chinese model" has been proven instrumental in reducing systemic risk.

As we have long argued[7], creditors in China are mainly households, as banks source over 80% of their funding from retail deposits, and the government's implicit guarantee policy for the banking system makes the Chinese people believe this "put" option will not let the system fail. Hence, there has not been any loss of public confidence so that the probability of bank runs and financial contagion is negligible. Meanwhile, the closed capital account has locked up domestic liquidity, providing a backstop for keeping the banking system whole.

Granted, state ownership and implicit guarantee policy in China have distorted creditor behaviour. Ironically, they also help preserve the system. Furthermore, with most of the huge domestic savings in bank deposits, most banks do not rely on wholesale funding, which is a major determinant of bank vulnerability during the US subprime crisis. In China, wholesale funding accounts for less than 15% of total funding, according to the PBoC, compared to 75% at the peak in the US.

No Japan-style market crash

There are significant structural differences between the Japanese and Chinese property markets. In Japan, private housing dominates the market. So in property crisis, declines in housing price and housing activity

[6] See references in footnote 1.

[7] "*Chi Time: China's Debt Vulnerability (II) – A Banking Crisis?*" 22 November 2019.

mutually reinforced each other, transmitting the housing shock to the banking system and amplifying the financial stress in the wider economy.

In China's controlled market, the "visible hand" blocks the transmission mechanism, for good and bad, via administrative measures, such as restrictions on home purchase, sales and price movements. Hence, market corrections (including the current one) mainly come through activity contraction, with home sales and starts etc. falling 30% to 40% but prices remaining relatively stable (Exhibit 6).

The Chinese approach prevents the market from clearing through falling housing price at the cost of large volume contraction in the short term. The relatively stability in housing price, in turn, helps to limit the spillover effect via the financial channels on the economy.

STRUCTURAL DECLINE

Nevertheless, China's housing sector, and by implication the construction sector, has entered a structural decline since 2013 due partly to deteriorating population and property market dynamics and partly to President Xi Jinping's structural policies[8].

Property demand from population growth has entered a declining trend. The latest UN forecast in July[9] suggests that China's population is set to contract this year, with the working-age group of 15-64 shrinking by 22% by 2050 and the old-age group of 65 and older doubling. The forecast suggests a net negative population dynamics for housing demand as the former group is the main source of household formation and the latter group represents lower housing demand.

From a market perspective, urban population growth and changes in per-capita living space determine the future of housing demand growth. While China's urbanisation will continue, the growth rate of urban population is declining. This will constrain future demand for housing.

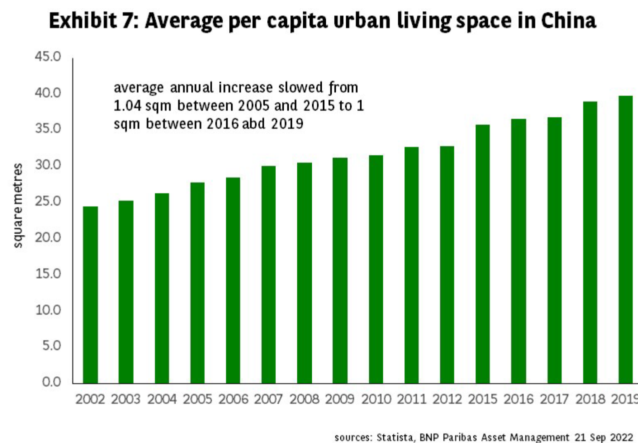
Per-capita living space is crucial for upgrading demand for housing. As households move from factory dormitories and crowded slums to modern flats, average living space rises. When most of the population lives in modern flats, average living space stops rising. The movement of upgrading demand towards the maximum level of per capita space determines how long the high-growth phase of housing demand will last.

[8] "*Chi on China: China Loses Its 'Animal Spirits'*", 10 August 2016.

[9] "*Global Launch of World Population Prospects 2022, Release of the Latest China Population Prospects and Symposium on Low Fertility*", John Wilmoth, United Nation Population Division, Department of Economic and Social Affairs, 11 July 2022.

Evidence suggests that demand growth for upgrading is set to fall because its per-capita urban living space has reached the developed market's average. For example, average per-capita living space in the Europe is 39 square metres, according to EU data[10]. China reached this level in 2019, and the annual increase slowed from 1.04 square metres between 2005 and 2015 to 1 square metre between 2016 and 2019 (Exhibit 7).

Exhibit 7: Average per capita urban living space in China



sources: Statista, BNP Paribas Asset Management 21 Sep 2022

President Xi Jinping's policy to revamp China's growth structure has also turned against the property market and construction. Previously, China's housing market followed the nation's supply-expansion development model, in which economic agents built, invested and produced first to expand supply and create jobs; demand would catch up later.

This model worked for more than 30 years when the country was chasing high growth rates creating swift demand catch-up. However, it started to break down when President Xi took office in 2013 and changed the policy objective from chasing growth quantity to growth quality through structural reforms and debt-reduction. This means no more swift demand growth to absorb all that supply, production and investment excesses that had built up in the economy.

OUTLOOK

China's housing market and construction industry are facing the same structural adjustment: the large stock of output (including houses) produced under the old economic model is no longer required. Expect more property company defaults and sector consolidation in the short- to medium-term, as weak developers exit the market. This process will drag on GDP growth.

However, the long-term growth impact may not be negative. It depends on how the unfolding of the "creative destruction" process will unfold as old sectors are destroyed to make room for new sectors. If the labour and capital resources resulted from the decline of the property sector can be effectively redeployed in the emerging sectors that are focused on high value-added manufacturing and technology, productivity and long-term GDP growth may rise.

What is certain is that property and construction will go into a secular decline and no longer be major drivers for GDP growth in the future. Some property market players expect the dominance by private, or commodity, housing to end and be replaced by a three-pillar structure in which the share of private housing falls and that of public housing and rental housing rises. Furthermore, within the private housing segment, state-owned

[10] "Average Floor Space per Capita", Enerdata, retrieved from https://entranze.enerdata.net/

developers will likely dominate, as private developers exit the market or merge with or are acquired by state developers.

The deleveraging of China's property market is certainly not over, but it does not pose a systemic risk to the economy, and new growth drivers will eventually emerge.

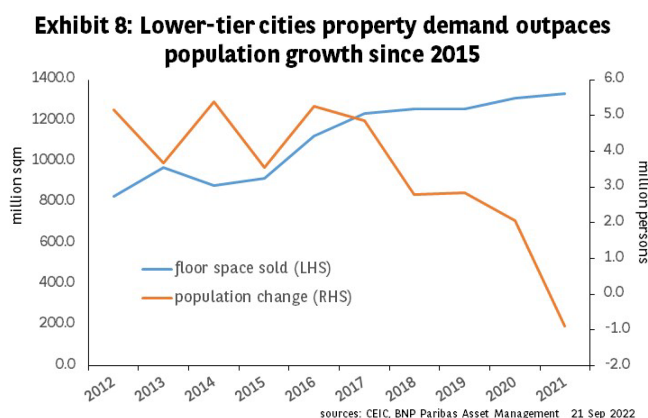
APPENDIX - THE ROOT PROBLEM

China's reform to privatise housing started in 1998 and largely ended in late 2002/early 2003 after the government spent billions of renminbi each year to build commercial (or private) housing as the primary form of housing provision[11]. Combined with the economic boom following China's accession to the World Trade Organization in 2001, the housing privatisation programme contributed substantially to the housing boom and soaring prices (especially in the Tier 1 cities) in following years.

The vulnerability of the property market was first seen in 2009 when Beijing pumped RMB4 trillion into the economy (including the property sector) to counter the effects of the 2007-08 US subprime shock that pulled the global economy into a financial crisis. This liquidity inflated housing prices, boosted housing supply and resulted in overcapacity. Policy tightening in 2013 to cool the economy left the property market in liquidity stress, triggering a contraction in 2014 and 2015 (see Exhibit 3 above).

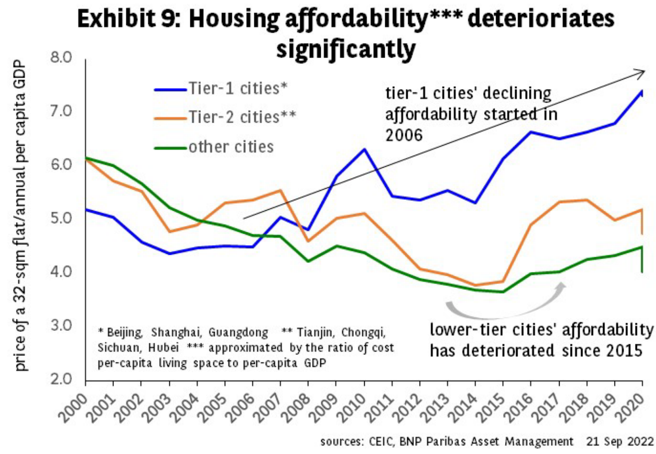
The shantytown renovation scheme in 2015-2016 revived the market when residents of the slum areas were offered cash to buy renovated homes. The scheme spurred housing demand in the lower-tier cities, but it also created a distorted incentive for people to buy homes on the expectation of forever-rising housing prices.

Speculative excess can be seen in property sales outpacing population growth in the lower-tier cities since 2015 (Exhibit 8). The huge policy stimulus in 2015 to boost economic growth[12] fuelled speculation further and resulted in a deterioration in housing affordability (Exhibit 9) and a sharp increase in households' mortgage borrowing.



[11] "*Economical Housing Provision in China (1998-2002) – A Case Study of Beijing*", Fan-yu Meng , Francis Wong , Eddie Chi Man Hui & Chang-chun Feng, International Journal of Strategic Property Management, June 2004, pp. 87-104.

[12] "*China's $1 Trillion Investment Plan: Stimulus or Not*?" Shannon Tiezzi, The Diplomat, January 8, 2015.



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