

RESEARCH INSIGHTS



Abigail Yeow ayyyeow001@mymail.sim.edu.sg

Abstract

On 9 December 2021, credit ratings agency Fitch Ratings downgraded the property developer China Evergrande Group and its subsidiaries to 'Restricted Default'. This brought the market unrest to a fever pitch, as financial experts feared a wider contagion effect on the greater China economy and to some extent, the global economy. Despite the incessant mention of Evergrande in recent media coverage, readers must be aware that the Evergrande saga was in many ways a red herring. The crux of the problem lies with the entire Chinese property market, with the majority of the issues still lurking beneath.

While the situation is still developing to this day, it seems that the overall commotion has largely died off. As such, this writer believes it is the optimal time to discuss the crisis. This editorial will attempt to organise the events in a chronological order, first focusing on the factors that contributed to the Chinese property bubble, which was intrinsically linked to Evergrande's default, before covering the fallout and impacts on the Chinese property market. It will also cover the recent developments in the market as China attempts to prevent spill-over effects of the property crisis from impacting the greater economy. Only developments up till 1 February 2023 will be considered.

The Start of the Property Market

All stories have a beginning, with the beginning of this saga starting in the 1950s through the Land Reform Movement up to the death of Chairman Mao Zedong in 1976 and the subsequent end of the 'Maoist' era of government. Two factors emerged as the main catalyst that planted the seeds of growth of the property market: the Great Migration and the post-Mao Housing Reforms. Both factors were highly interrelated, with each having multiple impacts on the way the other played out.

Post-Mao Housing Reforms

To understand the modern-day Chinese property market, retrospection on China's land reforms must first be made. In feudal China, a small handful of landlords owned swathes of farmland while the majority of the population were landless peasants. Unlike the serfs of tsarist Russia, Chinese peasants were not in feudal bondage to their landlords, instead renting their land from powerful local landlords. This continued even after the 1911 Xinhai revolution overthrew the Qing Dynasty. Until 1934, a meagre 4% of the population owned half of the land, while a staggering 70% of peasant households owned only 17% of land.

China's Property Market *The Iceberg*

This unbalanced land concentration was eventually broken by the Land Reform Movement in the 1950s led by the late Chairman Mao Zedong of the Chinese Communist Party (CCP), which eventually became the sole ruling party of the People's Republic of China. The resulting classicide, in which virtually the entire landlord class was purged from Mainland China, redistributed land to the peasants - with many becoming first time landowners.

However, the ownership was short-lived. As part of Mao's Second Five Year Plan (1958 to 1963), otherwise known as the Great Leap Forward, the CCP established 'agricultural collectives' - in which households were grouped together to increase agricultural output. While initially assuring peasants would be able to retain their newly obtained land, the CCP would renege on that promise by 1958, abolishing all private ownership of land and forcing households into state-owned communes.

Mao's initial plan was to rapidly develop both the agricultural and industrial sector (in particular the production of steel and grain) simultaneously. However, a myriad of factors not limited to the shifting of workers from agricultural to industrial labour, bad weather conditions and poorly implemented agricultural policies created the perfect storm. The Great Chinese Famine from 1959 to 1961 would be remembered as the world's worst man-made famine, with an estimated 15 to 55 million people starving to death. The CCP officially acknowledged in 1981 that the famine was a consequence of the mistakes made in the Great Leap Forward. After Mao stepped down as State Chairman of the PRC, the new PRC chairman Liu Shaoqi made a speech in 1962 at the Seven Thousand Cadres Conference, stating that "The economic disaster was 30% fault of nature, 70% human error."

This marked a turning point as the government pivoted away from the more extremist ideology that birthed the Great Leap. Nevertheless, ownership of private property was still extremely restricted until after the end of the Cultural Revolution in 1976. Private ownership of nonagricultural land in particular was 'impaired' due to three main factors:

"First, the movement and occupations of peasants was strictly monitored. Second, a political work points system infringed on the right of peasants either to sell or otherwise utilise their own labour. Finally, the government infringed upon individual and collective property rights through forcing large numbers of peasants to work on various construction projects without payment."



These three factors are the result of the 'Danwei' system, which was implemented by the government under the central planning system. All workers were organised into 'Danwei' (单位) or a work-unit, where their place of employment was responsible for all aspects of urban life, from housing to schools and clinics, shops and services. The limited occupational mobility meant that workers were 'locked' into being solely dependent on their work-unit for housing. The result was a nationalised and allocative housing system, where rent was so heavily subsidised that in most cases, it was insufficient to cover maintenance costs, let alone building costs. Such socialist housing policies meant that there was "low investment in the housing sector, a chronic shortage of urban housing, substandard quality of housing, and poor living conditions for most urban residents".

Following the death of Mao in 1976, the CCP acknowledged the failure of a centrally planned economy and began transitioning to a market-based system. It is important to note that the government did not plan to abandon Communism, instead choosing to decrease government planning and direct control. This period of major economic reforms, known rather aptly as the Chinese Economic Reform, included the de-collectivization of the agricultural industry and the opening up of the country to foreign investment, as well as the privatisation of several stateowned industries. This also included the following three stages of housing reforms:

1978 to 1993: The government launched several pilot projects in different cities. In these pilots, the government returned previously confiscated private housing to their rightful owners. They also gradually increased the rent residents had to pay for public housing, encouraging residents to bear higher housing costs. In 1988, a nationwide reform was passed to begin the commercialisation and privatisation of urban public housing, further encouraging home ownership. This included a significant number of public rental houses being sold to workers in work-units at highly subsidised prices.

1993 to 1997: The government began to restructure the housing construction industry, with particular focus on finance, management and distribution systems. Less emphasis was placed on the Danwei system, although workunits were still given permission to participate in the construction of homes and subsequent distribution to their workers. Housing markets targeted at high-income groups and subsidised commercial housing for low to middleincome households boosted the demand for private homes. The biggest change for the supply side came when the government allowed the private sector to participate in housing construction and development. Thus began the transformation of housing as a public good, provided under social welfare by work-units, to a private good largely provided for by the private sector, which could be freely traded on the open market.

1998 onwards: The construction and allocation of housing through work-units was finally abolished, establishing a mostly market-based system of housing provision. Cash subsidies were introduced for the increasing number of workers choosing to settle in urban cities to enter the urban workforce. The government continued to provide subsidised public rental housing to low and middle-income households, relying on the newly established commercial housing market to meet the needs of higher income households with access to mortgage financing.

The Great Migration

The other side of the coin that must be examined is the unprecedented rise in migration of the workforce from rural to urban areas. This is evident from the demographic shift of the population: the urban population increased from 416 million in 1998 to 914 million at the end of 2021. On the other hand, the rural population decreased from 831 million in 1998 to less than 498 million at the end of 2021.

In 2021, the National Bureau of Statistics listed approximately 292 million individuals as migrant workers, those having rural hukou registration and were employed in non-agricultural occupations for longer than six months. Among them, about 60 percent (171 million) left their places of hukou registration and found non-agricultural jobs elsewhere. Additionally, the average age of China's migrant workers was 36.8 years in 2021, making the average migrant worker born in the 1980s. This perfectly coincides with the three government policies introduced in the 1980s that created the impetus for one of the largest migrations in human history.

As mentioned previously, the Chinese Economic Reform resulted in the breakneck development of China's manufacturing and industrial sectors. Compounded by the influx of foreign investments, urban cities in the East began transforming into manufacturing hubs with increasing needs for cheap labour. As such, young adults from rural farming backgrounds began migrating to urban centres, in search of better economic opportunities.

The controversial One Child Policy, first introduced in 1979 as a response to China's overwhelming population boom, limited the number of children born in rural families to 1.5 (two for a first-born girl, otherwise one). The policy was strictly enforced, particularly in rural areas, with alleged stories of forced sterilisations of young women by local government officials. The result was a dramatic shift in the typical rural household structure, with significantly fewer children able to pitch in for agricultural farming. Rural households began experiencing slower income growth, especially when compared to their urban counterparts, further encouraging migration to urban areas.

Lastly, the Hukou System — a residence registration system devised in the 1950s to record and limit internal migration and which severely restricted rural-to-urban movements — began to loosen in response to the demands of both the market and rural residents wishing to seek greater economic opportunity in cities.

The coalescence of these three policies resulted in the meteoric rise of urban migration, and with it the corresponding need for urban housing. This, combined with the privatisation of housing, was the spark that ignited the development of the Chinese property market.

The Rise of the Property Market

A spark, if contained, can create a pleasant and warm campfire. However, adding fuel can cause said fire to grow and turn uncontrollable in a blink of an eye. In a similar vein, a number of factors have turned the initial spark of the Chinese property sector into a raging inferno, leaving the government scrambling to contain it. This section is divided into three broad categories: the demand factors, supply factors and finally the factor that contributed to the unhealthy rise in both demand and supply of property in China.



Demand Factors

First, a look at the causes of the property boom from the demand perspective. The most obvious factor that one can identify without much difficulty is the population of China. Indeed, the government implemented the infamous onechild policy in the 1970s in response to fears of overpopulation. As the country with the world's largest population, any impacts on shifts in population demographics would be magnified. The continuing migration of workers from rural areas to urban cities is no exception to this. As migration continued, the rapid urbanisation of cities such as Beijing, Guangzhou, Shanghai and Shenzhen (commonly known as the original tier 1 cities) would naturally be accompanied by a substantial increase in demand for housing. Additionally, the rise of new tier 1 cities such as Chongqing, Wuhan and Chengdu meant the degree of urbanisation lasted well into the 2000s, with the degree of urbanisation seeing the largest increase from 29.04% in 1995 to 49.95% in 2010.

Additionally, there is a socio-cultural aspect to the rise in demand for property. The country has one of the world's highest rates of homeownership, at almost 90%. Home ownership is traditionally seen as a prerequisite for marriage, especially for men. This can be partially attributed to the extreme gender imbalance caused by the aforementioned one-child policy, with 2021 estimates of 30 million more men than women. This places further pressure on men to own property in order to increase their marriage prospects. However, a caveat must be made here. This factor is often overstated, especially considering that homeownership is an important symbol of the middle-class in many other parts of the world.

A greater contributor to the rise in demand for housing could be the increasingly popular view of property as investments. Limited access to other investment opportunities has spurred the growing Chinese middle-class to view real estate as an attractive (and safe) investment, with some owning multiple properties as a way to maintain and grow their wealth. Surely, investing in a visible and tangible property is a much better alternative than the options of investing in the oftentimes unstable domestic stock market, buying low-yielding government bonds or stashing their money in even lower-yielding bank deposits. Property has grown in popularity to such an extent that as much as 70% of household wealth is tied up in real estate. For perspective, the figure is approximately 32% in the U.S. and 36% in the U.K. The figurative icing on the cake is the lack of a property tax (up until recently at least), leading households to buy two to three properties purely for investment purposes.

Supply Factors

A key factor in driving the property fervour has been the business model associated with real estate development. The Chinese property development is best represented by a continuous cycle, with an unholy trinity of players: local governments, property developers and financial institutions (local banks).

In China, the government owns the rights to all land in the country. Land-use rights can be bought from the government for up to 70 years, with a possibility of an extension. The sale of such rights became a major source of income for the government and in particular, the local government. The dependency on the income from these land sales only increased after the 1994 Tax-Sharing Reform, where the central government succeeded at alleviating the national budget deficit at the expense of the significantly increased financial burden placed on local governments. Local governments were now responsible for public infrastructure spending within their jurisdiction, with the stimulating the goal of local economy.

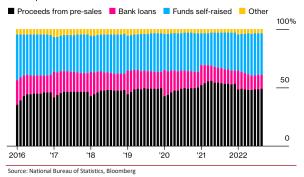
As a result, local governments began collecting fees from land leasing, known as land transfer fees to further increase revenues. Revenue from land transfers and real estate special tax was estimated to account for 37.6% of local governments' fiscal revenue in 2020. On a micro level, local government officials had incentive to continuously drive property development, as the resulting construction constituted measurable economic output, for which they were rewarded for through promotions.

Following the privatisation of property construction in the 1990s, property developers rose to prominence. Recognising the incoming demand for housing in urban cities, companies such as Evergrande and Vanke were able to capitalise on the first initial wave and expand, becoming the industry giants of modern China. Total sales of commercial housing grew from RMB 5.8 trillion (US\$914 billion) in 2011 to RMB 17.3 trillion (US\$2.7 trillion) in 2020, a 21.8 percent annual growth rate.

Property developers were not only lured in by the lucrative profits and seemingly bottomless demand for housing, but also the fundamental structure of the business model. When a developer buys a land-use right from the local government, they can begin construction on the project, which would typically take two to three years to complete. However, they can begin making presales on the properties to prospective homebuyers before completion. These deposits, typically a third of the entire price of the home, became the largest single source of finance for real estate investment in China in 2019, making up 34% of total outstanding funding, ahead of corporate loans, mortgages or bond proceeds, according to the National Bureau of Statistics. These presale funds greatly lower a developer's initial required capital investment for a project, thus increasing their capacity to take on multiple projects at once.

Liquidity Source

Pre-sales proceeds have become a crucial funding avenue by developers



Pre-sale funds have historically been one of the developers' biggest and most-important sources of funding, with developers taking funds from pre-sales and investing them into land acquisition for new projects. This is made possible by the general lack of oversight on how the developers utilise the funds. A crucial footnote here is that the dependence on both onshore and offshore debt financing bonds and loans in particular is nothing to scoff at. The entire sector has at least US\$292 billion of combined onshore and offshore borrowings due by the end of 2023 (more on this later).

The last piece of the puzzle is the financial institutions, in particular banks. The sizeable chunk of financing property developers obtain from financial institutions causes the financial industry to be inextricably linked to the property development market. In 2020 alone, the property development sector took out a total of RMB 2.6 trillion (US\$419 billion) in domestic loans. From the financial industry's perspective, this exposure to the property sector exceeds any other industry, with RMB 13 trillion of outstanding loans to developers.



Separate from the main drivers of the rise in supply, there exists two other sources of debt financing: offshore capital markets and local government financing vehicles (LGFVs). In line with the opening up of the country to foreign investments, Chinese companies were granted the option of tapping on offshore capital markets for liquidity. When appetite grew beyond what the onshore debt markets could support, developers began turning to the offshore debt markets, with offshore investors hungry for high-yield China property bonds. In just the first two months of 2019 alone, developers issued close to US\$21 billion in new offshore debt.

Local government financing vehicles (LGFVs) are local stateowned special purpose vehicles (SPVs) that raise finance for municipal construction and infrastructure projects, through loans and debt issuances. They were created by local governments during the global financial crisis in 2008 in response to a ban on direct borrowing from the central government, which was only lifted in 2015. Post 2008, LGFVs remained popular for boosting local infrastructure projects, including property development. At least 40% of LGFV revenues are derived from land sales to property developers. Additionally, debt accrued by LGFVs do not appear on the local government's balance sheet, enabling local governments to borrow beyond the official debt limits, leading to a rise in 'shadow banking'.

However, the flip side of this double-edged sword is the local government's responsibility over these vehicles. Being state-owned, despite the debts not appearing on their balance sheets, local governments are obligated to service these debts should the LGFV default. This creates a moral hazard issue where LGFVs are not incentivized to prioritise projects with higher returns. In reality, LGFVs are notorious for choosing unprofitable projects, with average returns on investment of less than 2%. Additionally, the broader economy is also impacted when these LGFVs fail, with 'hidden' LGFV debt continuing to drag on local economies, outpacing GDP growth by over 30% since 2008.

With property developers, local governments, banks, the central government and overseas investors each acting in their own interest, it seems almost inevitable that the Chinese property development market would expand the way it did.

Supply and Demand: EASY CREDIT

This writer posits that the decisive contributor to the rapid expansion of the property market was the ease of access to credit to all parties involved.

Since the opening of the country in the 1980s, the government has been heavily reliant on the property sector to achieve its GDP growth targets. This can be attributed to the unique way the country defines GDP. In most countries, GDP is a measure of the country's real economic output. However, China does the converse - it sets the country's GDP growth target at the start of the country's annual legislative session. Subsequently, local governments have the responsibility of generating enough economic activity to meet said targets. As mentioned previously, an "easy" method of achieving this was through construction.

The result? To spur on both demand and supply in the property market, construction loans were made easily available to property developers in the 1990s to keep up with the rising demand for property. As such, property developers started becoming dependent on higher levels of debt - a strategy otherwise known as leveraging. (Keep this term in mind, for it will resurface in the latter parts of this editorial.) This in turn, only quickened the business model discussed previously, with an increasing number of developers building an increasing number of projects simultaneously.

On the other hand, demand was boosted by the rapidly developing mortgage market. Mortgage financing only gained popularity in the 2000s, but has since developed rapidly. As of September 2022, data from the People's Bank of China estimated outstanding mortgages totalled approximately RMB 39 trillion. This figure is relatively low in comparison with other countries with equivalent property market sizes, thanks in part to the high down-payment requirements. However, increasing property prices have also led to a rise in mortgage financing in China and should not be overlooked.

COVID-19

To the government's credit, there was indeed a realisation that the country's appetite for debt had grown out of control after the massive fiscal and monetary expansion that followed the 2008 Global Financial Crisis. The government responded with a wide-scale financial "derisking and deleveraging" campaign in 2015, which included raising the reserve requirements of banks (which decreases their loan-making capacity) and clamping down on shadow banking. However, the black swan event in 2019 threw a wrench in the government's plans. The COVID-19 pandemic crippled major economies worldwide, and China was no exception. With state-wide lockdowns, China's exportdriven economy began struggling to maintain production output. For the first time since the cultural revolution in 1976, China's economy contracted, with GDP growth falling by 6.8%. As such, the government was left with no choice but to temporarily halt financial deleveraging efforts as banks were encouraged to increase lending to stimulate the economy.

The Bubble

The combination of easy credit and the numerous factors pushing demand and supply has led to the development of the world's biggest property boom to date. The housing market within the Chinese economy had grown to US\$52 trillion, eclipsing the US 2008 housing market before the Financial Crisis.

The magnitude of this issue is both understated and overstated. While pundits of either camps of opinion make valid arguments, the reader would be better able to form their own opinion on the matter with the following facts:

- Real estate, excluding housing construction and some residential consumption, accounted for 7% of China's total GDP in 2019.
- Other industries with ties to the sector contribute an additional 17.2%.
- Real estate and construction are also crucial for job creation, making up around 20% of urban non-private employment. Construction alone is highly dependent on the health of the real estate sector. Employment in the construction sector peaked in 2020 when it recorded over 62 million jobs.

Separately, significant debate has also focused on whether a bubble even exists in China's property market. A bubble is first formed when the price of the asset exceeds its fundamental value by a large margin. This attracts speculators to join the market and continue to raise prices, while increasing levels of risk are introduced into the market. Eventually, the decline in demand due to unrealistically high prices causes the price to begin falling, which induces mass selling and results in the crashing of the asset price. This signifies that the bubble has popped.

Regardless of whether a bubble exists or not, the fact remains - the Chinese property market was and still is extremely overheated, characterised by astronomical housing prices and an oversupply of properties in the market.



Evergrande

Dominating most of the headlines of 2021, one is unable to discuss the Chinese property market without delving into the rise and fall of Evergrande.

The China Evergrande Group, more commonly known as Evergrande, is China's second largest property developer by sales. Founded in 1997 by Hui Ka Yan (also known as Xu Jiayin), Evergrande capitalised on the wave of urbanisation in China, building apartments that mostly catered to middle to upper-class households. After its public listing in 2009, the group has since expanded to become an investment holdings group and branched out into electric vehicles, food and agriculture, finance and even sports (Guangzhou Evergrande Football Club).

With more than 1000 projects in over 200 cities across China, Evergrande became one of the largest property development companies, directly employing over 200,000 employees and being indirectly responsible for an additional 3 million jobs. By 2020, the company held assets worth over RMB 2.3 trillion (USD 306.4 billion). The company also grew at an annualised rate of 44%, making it one of China's fastest growing companies.

The company was able to achieve such growth in a short span in part due to its founder, Hui. As a member of China's People's Political Consultative Conference, which acted as an advisory board to the central government, Hui was able to forge strong political ties with key figures. He was then able to leverage said relationships into accessing colossal amounts of funding from Chinese banks in the form of loans. Additionally, his closeness to powerful authority figures served the indirect function of assuring investors and banks who provided funding of the company's "stability". In 2017, Hui was named China's richest man, with a net worth of USD \$43 billion - a whopping \$32.7 billion increase in 2016 alone. By comparison, Tencent founder Pony Ma was worth USD \$39 billion.

Overleveraging

However, Evergrande's rise to the top did come at a cost. To significantly increase its development capacity, Evergrande took on mammoth amounts of debt, both offshore and onshore. It famously, or rather infamously, became the world's most indebted company with debts amounting to over RMB 2 trillion (approximately USD \$300 billion). This figure alone is equivalent to 2% of China's total GDP of \$14.7 trillion. Additionally, it is also equivalent to the sum of debts of Peru (\$93.3 billion), the Philippines (\$97 billion), Iceland (\$20.3 billion), Bulgaria (\$46.5 billion), and Panama (\$31.7 billion) combined.

The Cracks

"Beware of little expenses, a small leak will sink a great ship." - Benjamin Franklin

In the case of the Chinese property market, several small leaks began to appear, from the overdependence on debt to the slowing demand for housing.

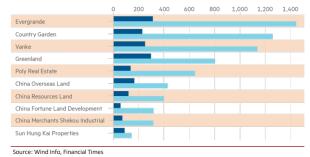
Overdependence on Debt

It is worth noting that Evergrande is not an isolated case. Several other property developers, both private and stateowned, have large amounts of debt, as seen from the table below.

China's top 10 property developers

Rmb bn
Revenues (12 months to Jun 30)

Total liabilities (as at Jun 30)



To make matters worse, there was an increasing dependence on offshore debt markets. Annual sales of dollar-denominated offshore bonds surged from US\$675 million in 2009 to US\$64.7 billion in 2020. The aggressive use of offshore debt in recent years was reflected in the high yields seen in offshore bond markets. Average yields on Chinese developers' dollar bonds exceed 7%, which is one of the highest rates in the global corporate bond market. High yields are a double-edged sword - investors are rewarded with higher returns in exchange for taking on higher risk. While high yields would typically signal to investors of the higher risk associated with the bond, international investors were perhaps too optimistic about the risks in the Chinese property development market. Many believed that the government would never allow the entire market to collapse, owing to the significance of the industry to the overall Chinese economy. Consequently, developers believed there was unlimited demand for property debt from international investors.

Slowing Urban Population Growth

Another trend that emerged in the 2010s was the slowing of urban migration. As the reader would recall, urban migration played a key role in kickstarting the entire Chinese property market. However, since 2015, China has seen a decline in urban migration as overcrowding concerns in developed cities were accompanied by the wave of new tier 1 cities, leading to many citizens choosing not to pursue economic migration. Additionally, with the advent of the "digital economy", workers were given flexibility in choosing to work remotely, further decreasing the need to relocate for work. The final nail in the coffin came from the COVID-19 pandemic, where remote working became the norm.

To accompany the decline in urban migration, China's overall population has also experienced a significant shrinkage. The delayed effects of the One Child Policy alongside the difficulties faced by working parents in raising children has also played a part in a slowing urban population growth.

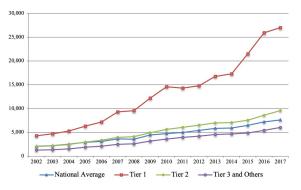
Housing Affordability

Since 2002, housing prices in China's tier one cities have risen more than six-fold compared to the 80% overall national increase in US housing prices between 2000 and 2005. While the bulk of the rises have occurred in the more developed Tier 1 cities, the figure below shows that there have been significant rises in the prices of houses in Tier 2 and 3 cities.



Figure 2. Residential Housing Prices by City Tier (yuan/sq.m)

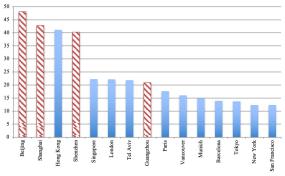
This figure depicts the annual housing prices in first-, second-, third-tier cities from 2002 to 2017. National Bureau of Statistic provides annual data for 35 large and medium-sized cities. Tier-1 cities include Beijing, Shanghai, Guangzhou, and Shenzhen The other 31 cities belong to tier-2. The rest belong to tier-3.



Source: National Bureau of Statistics, Rogoff and Yang (2020)

Currently, the home price to income ratios in Beijing, Shanghai, Shenzhen, and Guangzhou are comparable to the world's most expensive cities. In particular, the price to income ratios in Beijing, Shanghai and Shenzhen all exceed a multiple of 40 compared to 22 in London and 12 in New York.

Figure 4: Home Price-to-income Ratios in the World's Major Cities (2018) This figure shows home price-to-income ratios in Beijing, Shanghai, Hong Kong, Shenzhen, Singapore, Tel Aviv, Guangzho Paris, Vancouver, Munich, Barcelona, Tokyo, New York, and San Francisco, respectively.



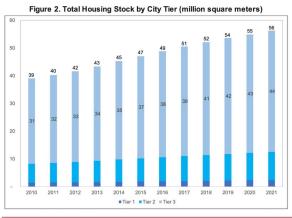
Source: Numbeo, Rogoff and Yang (2020)

With housing prices rising to exorbitant levels, homeownership slowly became an out-of-reach dream for all but the wealthy. As such, the proportion of property bought for investment or speculative purposes increased relative to those bought for actual residential use.

Materialisation - Ghost Cities

The most visually obvious manifestation of these "cracks" in the property market came in the form of "ghost cities". These under-occupied developments were first observed in 2006, in the midst of the earlier property bubble that the country faced from 2005 to 2011. They refer to the glut of mostly unoccupied residential developments in China, which began sprouting up across the country when the market began overheating. In typical urban cities, an area would first develop till the point of being economically viable before developers begin constructing residential property in the surrounding area to fulfil newly created demand. However, Chinese developers are forced to begin development almost immediately after acquiring the land from the government - leading to them putting the proverbial cart before the horse.

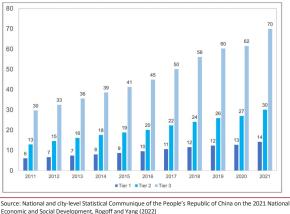
This phenomenon is particularly prevalent in Tier 3 cities. Despite a relatively low urbanisation rate compared to their Tier 1 counterparts, Tier 3 cities were found to account for more than 72% of urban housing stock, with an increase in over 10 million square metres between 2010 and 2021 (figure below).



Source: National Bureau of Statistics, Rogoff and Yang (2022)

In terms of value, Tier 1,2 and 3 cities accounted for 12%, 8% and 80% of national construction production by value respectively.

Appendix Figure 1. GDP by City Tier (trillion yuan)



conomic and Social Development, Rogorf and Yang (2022)

Thus, in terms of both value and floor space, Tier 3 cities account for the lion's share of property construction and development. This is corroborated by the higher debt leverage in construction in Tier 3 cities of almost 80%, compared to lower levels in Tier 1 and especially Tier 2 cities in 2020.

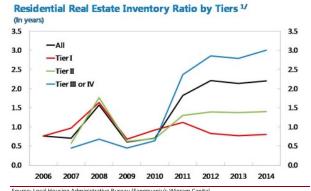
Given the significance of Tier 3 cities on the property market, the reports of "ghost cities" made its rounds in financial circles accompanied by haunting images of neighbourhoods filled with high-rise apartments but devoid of human life. However, this is yet another red herring.

Is there actually an oversupply of housing?

It is difficult to reconcile the fact that housing prices have reached record levels while the issue of an oversupply of housing has simultaneously appeared in the form of "ghost cities". After all, by the most basic principle of economics, shouldn't an oversupply of any product result in prices falling? Herein lies the misconception - most "empty" houses in China are sold, just not occupied by their owners. With regards to famous "ghost cities" such as Ordos City (Inner Mongolia) and Pudong (Shanghai), they did fill up with residents within a "few years", as observed by writer Wade Shepard (also the first individual to note the phenomenon in 2006).

Housing inventories have indeed risen, particularly in Tier 3 cities which have approximately 3 years worth of sales of unsold supply (figure below).





Source: Local Housing Administrative Bureau (Fangguanju); Wig Advisors; IMF Staff Calculations, IMF Staff Report (2015)

The key to solving this paradox lies in the business model of Chinese property development. Recall that property developers relied partially on presales of new developments to fund construction of older developments. Hence, even if developers had some unsold apartments in one of their developments, they had a multitude of options available to them to temporarily cover the excess. They could rely on the presales of other older developments to finish constructing the development, access unused lines of credit with banks or even start a new project and collect new presales. This could tide them over until they manage to sell the unsold units. Additionally, given the time taken to actually finish construction (2 to 3 years) nicely coincides with the 3 years' worth of sales of unsold units, the apartments would not remain unsold for long.

Hence, if houses are not unsold, what exactly is the issue? Instead of an actual oversupply, a more appropriate view would be that there is "false (high) demand" in the Chinese property market. This false demand is a consequence of property being viewed as an investment amongst citizens. Households with the financial capacity to purchase multiple properties artificially inflated the demand in the past 20 years, with 2 major effects:

- Housing prices were raised (artificially) in response.
- Low-income households were crowded out of the market, unable to purchase property due to high prices despite genuine need for housing.

This false demand acted as a smokescreen for the actual underlying problem, giving all parties a false sense of security. This smokescreen has faded away now that the market has reached near-peak saturation. Those with the capacity to purchase a house already own multiple properties, while those who previously could not afford to purchase their own house are still unable to do so due to the high prices. As such, the so-called "oversupply" of houses is actually the false demand finally returning to its actual level.

Problem Arises

And so, the problem emerges: Property developers continuously build property in response to high **false** demand by using **increasing amounts of debt** that property companies will ultimately not be able to repay when demand returns to its actual level.

Beijing Steps In

The government recognised the precarious state of the overleveraged Chinese property market, and in particular its vulnerability to any sudden drop in demand. In 2016, the government first used the phrase "houses are for living in, not speculation" - serving as an indication of its upcoming policies.

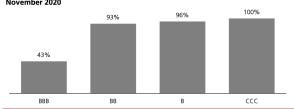
In August 2020, the government introduced the Three Red Lines - 3 financial regulatory guidelines aimed at controlling the heavily indebted property market. This came as part of the resumption of the 2015 state-wide deleveraging campaign pre-COVID. Even though the country was still in the throes of the pandemic, the government still went ahead with the guidelines, hinting at the level of severity of the situation. The three guidelines were as follows:

- Liabilities to assets ratio of less than 70% (excluding advance proceeds from projects sold on contract i.e. presales)
- Net gearing ratio of less than 100%.
- Cash to short-term debt ratio of more than 1.

The gist of the guidelines was that the government had adopted a negative view on excessive leverage, where companies were encouraged to avoid excessive liabilities, hold less debt than total equity and have sufficient cash on hand to cover short-term obligations. Companies that breached 1 of the guidelines were allowed an annual growth in debt of 10%; Companies that breached 2 of the guidelines were allowed an annual growth in debt of 5%; Companies that breached all 3 guidelines were allowed an annual growth in debt of 0%, thus unable to take out new loans from Chinese banks.

With the amount of debt funding accessible predicated on the amount of existing leverage, most companies were unable to comply with the draconian guidelines. According to S&P estimates in November 2020, only 6.3% of rated developers were capable of complying with all 3 guidelines. The number of BBB rated companies who failed to comply with the first guideline was particularly high - 43% (figure below).

Percentage of rated developers with liability-to-asset ratio of more than 70%, November 2020



Source: S&P Global Ratings, UBS

As a result, half of the top property developers suddenly lost complete access to onshore debt markets. A year later, however, most were able to remain within the lines to apply for more loans, apart from two, including Evergrande.

Apart from the impact on onshore debt usage, the 3 guidelines also had a knock-on effect on offshore capital markets. A seed of doubt was planted in the minds of international investors - why would the government choose to clamp down on an industry that has been one of the key pillars of China's growth? What problems were lurking beneath the surface? Suspicion eventually bred an overall hesitation to lend to Chinese property developers. On 8 July 2021, Evergrande increased issuance of its commercial bill IOUs (a type of unsecured, short-term debt), indicating that the company was beginning to have difficulty accessing long-term debt funding from investors.

COVID-19, again

The slowdown of the global economy from the pandemic caused the property market to suffer a significant loss of investment, both internal and external. This decline is illustrated by statistics from the first six months of 2022, which show a 5.4% deterioration in the growth of China's housing market. With the decline in investment and the concurrent effects of the pandemic, the consequences of the developers' business models (i.e. using presale funds to invest in new projects) finally became apparent as issues surrounding developers' lack of liquidity were exposed.



Problem Worsens

The problem thus worsens: Property developers continuously build property in response to high **false** demand by using **increasing amounts of debt** that property companies will ultimately not be able to repay when demand returns to its actual level. Now that the source of funding is severely reduced, companies began facing serious liquidity issues.

The Liquidity Crunch

Halted Projects and Mortgage Boycotts

Facing the liquidity crunch, property developers were left without sufficient funds to fund their developments. Coupled with slowing housing demands from the nearsaturated markets, developers had no choice but to halt construction on several ongoing developments. As early as June 2020, residents received notices that construction on their (already-paid for) properties were being halted. One of the most prominent examples was the Xiulan County Mansion project in the city of Guilin (a Tier 3 city), where construction was halted in mid June once explosive headlines emerged of a court accusing the parent company of the developer (Jiadengbao Real Estate) of "illegal fundraising" and seized RMB 340 million worth of its properties, including a number of flats in the development. By the summer of 2021, hundreds of ongoing residential projects in cities across the country came to a halt. The Shanghai E-House Real Estate Research Institute estimated in July 2022 that 3.85% of property in the country's housing market were halted construction projects in the first half of 2022, equivalent to an area of 231 million square metres.

As construction halted, homeowners of affected properties were stuck in a state of limbo, forced to continue paying off mortgage loans on half-finished apartments, with no definite news on when construction would continue. The frustrations of homebuyers continued to simmer inconspicuously until it eventually reached a boiling point in 2022, when a 590-word letter began circulating on online forums. Penned by angry purchasers of the halted Dynasty Mansion project in Jingdezhen, Jiangxi to the developer of the project (Evergrande), the letter stated that "All homebuyers with outstanding mortgage loans (would) stop paying, unless construction resumes before 20th October 2022.".

The letter went viral on Chinese social media and messaging platforms (WeChat Weibo), becoming the catalyst that would ignite the 2022 mortgage boycotts. Within days, protests sprung up in cities like Shanghai, Beijing, Shenzhen and Zhengzhou, just to name a few. At its peak, over 320 protests took place in over 95 cities.

The boycotts were a rare instance of collective action typically squashed under the country's harsh online censorship laws, all the more demonstrating the value citizens place on property. Residents of Tier 2 and 3 cities were especially enraged, as they hold a significantly larger share of their household wealth in real estate than their peers in Tier 1 cities. Property developers also faced indirect fallout, as investors became more reluctant to provide funds. Large property firms such as China Vanke and Country Garden experienced considerable declines in share price. The boycotts also prompted local governments to tighten oversight on the use of pre-sale funds held in escrow accounts, further exacerbating developers' liquidity issues.

Wealth Management Products

While not directly related, we would be remiss to not wealth management products. mention Wealth Management Products (WMPs) are investment vehicles marketed by issuers (e.g. banks, property developers) to retail and corporate investors, often paying yields that are far higher than deposits. They are particularly popular amongst retail investors due to the aforementioned limited onshore investment opportunities. Conversely, they were a convenient tool for property developers to raise funds for operations without adding further debt to their balance sheets. In relation to Evergrande, the company sold WMPs promising annual returns of 12%, making them extremely attractive to investors with higher risk appetites. While WMPs issued by banks are highly regulated, WMPs issued by property developers are registered in loosely regulated local financial asset exchanges.

Evergrande Wealth, a unit launched by Evergrande in 2016 as a peer-to-peer online lending platform that originally was used to fund its property projects, sold WMPs products to more than 80,000 people – including employees, their families and friends as well as owners of Evergrande properties - and raised more than 100 billion yuan in the past five years. On 13 September 2021, Evergrande missed payments on its WMPs, prompting more than a hundred infuriated investors to gather in the lobby of the company's headquarters in Shenzhen.

While this was just a small footnote in the entire saga, it highlights the fact that homebuyers were far from the only affected party. Retail investors and others were also impacted by the systemic faults in the entire market.

Evergrande Defaults

As mentioned at the start of this piece, the defaults were the most highly discussed section of the tale thus far, for good reason. Trouble began when just a week after Evergrande missed payments on its WMPs, it missed interest payments due on loans to two of its largest domestic bank creditors on 22 September 2021. This was treated as a minor hiccup, since China's Ministry of Housing and Urban-Rural Development had already convened a meeting with the bank creditors to inform them that Evergrande would be incapable of meeting its financial obligations.

The next day on 23 September 2021, the company missed payments on one of their offshore dollar-denominated bonds (EVERRE 8.25% due 2022) worth USD \$2 billion (USD \$83 million in interest). They eventually paid on 20 October 2021 and as it was within the 30-day grace period, this was not actually considered a default. Evergrande continued to missed payments on four other dollar bonds (rows 2 to 5 of the table below) but always managed to pay before the grace period.

The company again missed interest payments on 6 November 2021, this time involving two dollar bonds issued by the company's restricted subsidiary, Tianji. The two bonds in question (TIANHL 13% due 2022 and TIANHL 13.75% due 2023) were worth USD \$645 million and USD \$590 million respectively. Investors were fervently hoping that the company would be able to make the payments before the 30-day grace period, just as it had done for the other bonds weeks earlier. However, this hope was shattered when on 6 December 2021, Evergrande officially defaulted on the two bonds, missing the combined USD \$82.5 million coupon payments.

On 10 December 2021, ratings agency Fitch Ratings downgraded both Evergrande to Restricted Default (down from an original rating of C) as a reflection of the company's non-payment of coupons after the grace period had lapsed. It also downgraded the company's subsidiaries - Hengda and Tianji to Restricted Default.



Other Developers

While the headlines may have focused on the woes of Evergrande, other developers were not spared as an onslaught of missed payments spread across the industry. Some of the notable events include the following:

- Kaisa missed a USD \$400 billion bond payment (November 2021). Fitch downgraded Kaisa Group's rating to restricted default alongside Evergrande on 10 December 2021.
- Shimao Group failed to pay interest and principal on a USD \$1 billion bond due on 3 July 2022.
- Yuzhou Group requested to defer an offshore bond payment of USD \$582 million.
- Sunac failed to pay USD \$29.5 million in interest on a US-dollar bond before 11 May 2022.
- Sinic Holdings failed to repay its USD \$250 million senior notes due 18 October 2021.

State-owned developers were not spared from the liquidity crunch either. Shanghai-based Greenland Holding Group Co., which is partially owned by local government entities and was said to be one of the nation's most resilient property firms. News emerged in late 2021 that the developer was in danger of defaulting on a USD \$500 million offshore bond in December that year, after the developer faced difficulty raising funds. This came after domestic banks, such as long-term lender CITIC Bank began reducing lending while some rating agencies had downgraded Greenland's bond ratings.

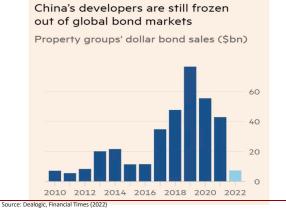
With the developer's USD \$500 million bond looming, Shanghai officials intervened and allegedly held a meeting in early December with representatives of 7 state-owned enterprises (SOEs), ordering them to buy new dollar bonds issued by Greenland. Shanghai Municipal Investment Group, Bank of Shanghai, Shanghai Land (Group) Co. and Lujiazui International Trust Co. were reported to be among the SOEs. While the meeting was not confirmed by Shanghai authorities, Greenland announced it had raised \$350 million in a rare dollar bond issue on 14 December 2021, in which the only purchasers of the bond were the 7 SOEs.

The Fallout

Offshore Bond Market

The Chinese onshore bond market has taken a hit from the rising defaults. The crisis has become so extreme that an analyst who has been covering the market since its inception in 2005 has been quoted as saying that the "market is no longer analysable". In 2022 alone, Chinese property developers have missed payments on a record USD \$31.4 billion worth of dollar bonds.

With two-thirds of the more than 500 outstanding dollar bonds issued by Chinese property developers now trading below 70 cents on the dollar, investors are estimating that close to US \$130 billion of the more than US \$200 billion in outstanding dollar bond repayments may be unrecoverable.



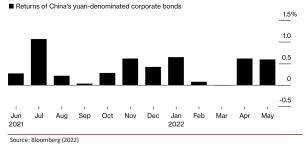
As international investors became reluctant to lend to developers with non-investment grade bonds, the tightening of liquidity also spread to investment-grade bonds from higher-quality borrowers who were presumed to have been safe. These include bonds issued by Country Garden Holdings Co. and Vanke, which saw record drops in October 2021. Overall, the market value of investmentgrade Chinese property bonds had dropped about 23% in October 2022, against a 7% decline for the broader Bloomberg USD China IG bond index over the same period.

Onshore Bond Market

Stress in the onshore bond market was not as prevalent (initially) when compared to the woes of their offshore counterparts. Despite its larger size compared to the offshore bond market, China's onshore bond market has not been as affected by the stress from the property sector, partly due to the higher priority developers place on making payments on their local notes, even at the expense of defaulting on their offshore notes. As such, returns in the local corporate bond market have been mostly positive.

Onshore Resilience

China's local bonds had mostly positive returns despite property angst



Evergrande

Evergrande initially promised creditors that the company would have a plan to restructure its debt by the end of July 2022. This deadline came and went, with executives then assuring creditors of a proposal by the end of 2022, which they again missed. With creditors' patience wearing thin, the company is racing against the clock to present an acceptable plan of debt overhaul. The latest update offshore investors received was in the form of an ad-hoc meeting organised by the company with some of its major dollar bondholders to "formally" discuss debt restructuring plans.

The company is also facing a winding-up petition in Hong Kong court, filed by Top Shine Global Limited of Intershore Consult (Samoa) Ltd over a HK\$862.5 million financial obligation owed by Evergrande's online home and car-sales platform FCB Group. While the company has faced numerous lawsuits from investors in the mainland, this petition holds much more severe consequences if it succeeds. If the court grants the petition, a provisional liquidator may take control of the company, dispose of its realisable assets and distribute any remaining funds to creditors. In such a scenario, creditors could expect to take a haircut of up to 85%. During a hearing in November 2022, the company's legal representative claimed that Evergrande expects to "receive support from offshore creditors by the end of February or early March (2023)". Its efforts to dismiss the petition have had some limited success, with the hearing adjourned until 20 March 2023.

Beijing Intervenes (again)

In response to the spiralling property market, the government has initiated a series of moves aimed at shoring up its property sector.



16-Point Playbook

On 11 November 2022, a list of 16 directives was issued by Chinese regulators to financial institutions with the overall goal of improving the property market. These broad points include:

- Property development loans should be given to developers with "sound corporate governance" focused on the property business, regardless of whether the developers are state or privately owned.
- Make home-buying requirements more "reasonable" by supporting local governments in setting downpayment thresholds and mortgage rate floors to increase housing demand.
- 3. Ensure "continuous and stable" fundraising by construction companies.
- 4. Provide extensions of up to a year for developers with outstanding bank loans and trust borrowings due within the next 6 months.
- Support bond issuance by quality developers. Extend or swap (through negotiations) repayments on developers' bonds.
- 6. Trust companies are encouraged to provide developers funding support over mergers and acquisitions, rental properties and retirement homes.
- 7. Policy banks (China Development Bank and National Bank for Agriculture and Rural Development) should offer special loans to support delivery of construction projects.
- 8. Major creditors of delayed residential projects should offer additional financial support to ensure project completion.
- Support acquisitions of property projects by stronger developers from weaker rivals, through bonds issuances.
- 10. Asset management companies are encouraged to deal with residential projects as bankruptcy administrators and investors on restructuring.
- 11. Allow extensions on homebuyers' mortgage repayments if their property purchasing contracts have been changed or cancelled, or if they are under Covid-induced unemployment.
- 12. Homebuyers' credit scores should be protected to not hinder future purchases of real estate.
- 13. Temporary easing of restrictions on bank lending to developers. Banks that had previously breached the cap will be given extra time to meet the requirements.
- 14. Financing rules related to property project acquisitions will be temporarily optimised to encourage fundraising for acquisitions.
- 15. Support companies in the rental property business and actively accommodate their long-term funding.
- 16. Diversify fundraising for rental properties by issuing bonds specific to building rental properties. A trial on real estate investment trusts (REITS) should be pushed forward.

Relieving the Liquidity Crunch

With the sector facing at least \$292 billion of onshore and offshore borrowings coming due by the end of 2023, many of the government's actions have focused on addressing the liquidity needs of property developers. Points 4 and 5 relieves some of the pressure developers face with their outstanding obligations, while point 13 in particular allows state-owned lenders to increase their loans to developers. This represents a reversal of a previous policy in 2021 in which state-owned lenders were forced to reduce their loan exposure to the property sector to 40% or less.

Chinese regulators also allowed property developers access to up to 30% of the pre-sale funds that had been locked in escrow accounts. However, this is conditional on developers securing letters of guarantees from banks, which implies that only property developers with sound fundamentals would benefit from this move, leaving those in more dire straits unable to access funds. Additionally, any funds withdrawn should primarily be used to pay for project construction and to repay debts for specific projects.

In relation to point 1, 6 of the country's biggest banks have pledged RMB 1.28 trillion (USD \$179 billion) in financing support to property developers on 24 November 2022. Industrial & Commercial Bank of China Ltd. (ICBC) alone pledged RMB 655 billion in credit lines extended to 12 developers, including Country Garden Holdings Co. and Vanke. Interestingly, this support was not extended to neither Evergrande nor Sunac, despite both companies facing more serious liquidity issues. This further proves the earlier point made about the measures introduced only benefiting "stable" companies.

Raise Housing Demand

At the end of September 2022, regulators allowed 23 cities to lower mortgage rates for homebuyers looking to purchase primary residences. The policy aims to increase home ownership in cities where newly constructed housing prices declined from June to August 2022, as compared to prices in the same period of the previous year (2021). However, the list excludes the 4 original Tier 1 cities -Shanghai, Beijing, Shenzhen and Guangzhou. However, the effect is likely to be muted as it follows a series of cuts to mortgage rates to record lows in the months prior. In fact, these measures were recently extended in January 2023 to further stimulate demand.

Additionally, the central government also offered a rare tax incentive in the form of refunds on personal-income tax for residents who purchase new properties within a year of selling their old properties. The government hopes this would support homebuyers looking to upgrade their homes.

However, the slump in Chinese property sales has persisted despite such measures, as the weak economic recovery and wave of unemployment arising from the pandemic continue to affect homebuyer sentiment. China's home sales continued to slump in December 2022, with the 100 biggest developers seeing new sales dropping 30.8% from a year earlier.

Quelling of Social Unrest

The monetary policy committee that met in September vowed to expand a program providing special loans aimed at completing projects delayed by their respective companies' liquidity issues. While details are hazy, it has been reported that the government will offer RMB 200 billion (USD \$29.3 billion) in special loans. These loans would only apply to homes that have been sold but are yet to be completed, with the funds coming from the People's Bank of China (PBOC) and the Ministry of Finance. The specificity of these loans are not by accident - the loans aim to quell the rising social unrest from the mortgage boycotts that swept the country, which mostly stemmed from homebuyers being frustrated with paying mortgages on homes that were not being worked on.



Central Bank Policies

One of the more aggressive forms of support for the embattled sector came from the country's central bank the People's Bank of China (PBOC) in the form of cheap loans to financial institutions buying bonds issued by property developers. The initiative was rolled out in December through the PBOC's relending facility. The relending facility is a targeted policy tool utilised by the PBOC to make cheap loans at rates much lower than the benchmark interest rate. It has recently been used to support sectors affected by the pandemic, including the transport and logistics sectors.

The central bank has increased reliance on such targeted policy tools as opposed to directly cutting interest rates. As most major central banks raised interest rates to combat inflation in 2022, China has been more concerned with its lagging economic growth. If it were to introduce interest rate cuts, this may trigger unprecedented capital outflows and a devaluation of the country's currency. In April 2022, yields on benchmark 10-year US Treasury bonds exceeded those on Chinese government bonds for the first time in over a decade, a signal that the problem of outflows has become even more relevant. In spite of this, on 15 August 2022, the PCOB lowered its one-year medium-term lending facility rate (MLF) by 10 basis points, in a bid to encourage banks to increase lending activities. The MLF is one of the tools used by the PBOC to inject liquidity into the financial system and serves as a benchmark rate upon which banks set their own loan prime rates (LPR). A week later, it also announced surprise (albeit slight) cuts to the one-year LPR and five-year LPR (the reference rate for mortgages), by 5 basis points and 15 basis points respectively. However, most analysts believe the cuts are too small to have had any significant impact.

LGFVs Step In

Despite growing concerns of the depth of bad debts in the country's shadow banking industry, LGFVs were once again called upon to replace property developers as the largest buyers of land from local governments. In the first half of 2022, land acquisitions by LGFVs rose to RMB 400 billion (USD \$57 billion), up more than 70% compared with the same period in 2021. This benefits both property developers, decreasing their liquidity pressures, and local governments struggling with shrinking tax bases and revenues as a result of the pandemic. However, LGFVs are now the ones being squeezed. They are being forced to pay high premiums over market prices during land auctions, to compensate for the scarcity of bidders as private developers affected by the crisis were forced to cut-down on land acquisitions. Ironically, as the country struggles with pushing developers to complete construction on halffinished projects, a similar issue has arose as a result of the increase in LGFVs in the property development sector. As most LGFVs lack experience in property development, many of their newly acquired land remain devoid of any construction efforts. An executive at Guangzhou Metro Group has admitted that "It is in our best interest to keep the land and sell it for a profit when the market recovers."

To finance these land purchases, LGFVs have had to increase their borrowings from state banks and through bond issuances. Prior to the land-buying spree, conservative estimates of LGFV debt was about RMB 39 trillion (USD \$6.2 trillion) in 2020 while other estimated the debt amounting to RMB 53 trillion. However, LGFVs have also issued a record US \$39.5 billion in cross-border debt in 2022, despite unfavourable rates. This suggests that LGFVs are facing increasing difficulty raising funds from onshore markets, thus leaving them with no choice but to turn to offshore markets to fulfil liquidity needs.

Latest Developments

3 Red Lines Revisited

News emerged in January 2023 that the government had plans to amend the 3 Red Lines policy it had implemented in 2020. Under the new measures, some property firms would be allowed to further extend deadlines by at least 6 months from the original 30 June deadline. Additionally, restrictions on debt growth for developers would be eased according to the number of red lines developers meet, with those meeting all 3 lines having their borrowing caps removed. While the plans are still in the deliberation phase, this could significantly benefit companies that were able to meet all 3 guidelines. As of June 2022, more than 30 companies met all 3 guidelines, including Vanke and Longfor Group Holdings.

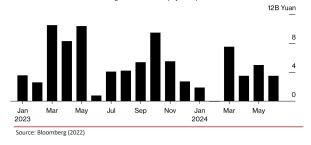
Bonds Rebound

In response to the slew of government initiatives, Chinese junk bonds have begun to rally. An index tracking Chinese dollar-denominated junk bonds is up more than 32% over the past three months, outperforming every other major bond benchmark in the world. Chinese offshore dollar bonds have also rebounded, returning 6.5% in November 2022 after 14 straight months of losses. The country's biggest developer by sales, Country Garden Holdings Co., experienced a 404% return in December on their dollar notes. However, the rebound in dollar notes is still overshadowed by the mountains of debt that many developers still face. Case in point, Country Garden has close to USD \$700 million of dollar bond principal and coupons due in January 2023.

While offshore bond markets seem to be on the mend, onshore bond markets seem to be facing more pressure than ever. The country faced its largest government and corporate bond selloff since 2017, as investors shifted towards riskier assets in response to the country's lifting of COVID-19 restrictions. The average spread on China's local three-year AAA rated corporate notes has since widened to 88 basis points, the worst it has been in over 2 years. Coupled with the repayment stress from maturing onshore bonds due in 2023 (figure below), the stress that had previously plagued offshore bond markets has seemingly shifted to onshore bond markets.

Tracking Payment Problems

Monthly bond maturities for Chinese firms that could struggle to repay Total Chinese local notes coming due that face repayment pressure



Housing Market Slump Continues

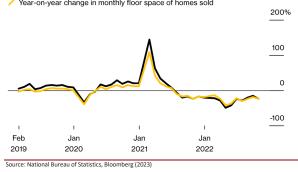
Despite the government's best efforts, housing demand remains deflated for a 16th month straight in December 2022. Measures to correct the slump, which began in June 2021 as developers began facing liquidity issues, have been further dampened by a spike in COVID-19 outbreaks after the country abruptly abandoned its Covid Zero policy.



Slumping Sales

China's home sales have been sinking since 2021's regulatory crackdown

Year-on-year change in monthly value of national home sales
 Year-on-year change in monthly floor space of homes sold



Writer's Opinions

Closing remarks: While China has been serious in its efforts to tackle the property crisis borne from the sudden halt in overleveraging, the measures introduced thus far have had rather specific and muted effects. I believe that unless confidence is restored amongst homebuyers and housing demand picks up significantly, any measures introduced to fix the crisis would only cushion the fallout from a complete collapse in the property market.

How did it spiral out of control?

I dare say it was the dependency on offshore debt that contributed to the decay of the Chinese property market. Property developers were over-indulged by the strong demand from international investors for Chinese property debt, which further encouraged them to take on more debt from other sources, such as onshore debt and presales funds. This led to a downward spiral as developers continued building apartments not to satisfy actual housing demand, but instead to just "build for the sake of building".

LGFVs - A Repeat

As mentioned, LGFVs have essentially replaced property developers in the purchase of land from local governments, especially in non-tier 1 cities. However, as LGFVs increase their use of debt from both onshore and increasingly offshore sources, one can't help but wonder if this crisis is destined to repeat again in the near future. In the same way the government began cracking down on overleveraged debt in the property development sector, the government has in recent years shifted its focus to reducing "hidden debt" from shadow banking institutions such as LGFVs, signalling a similar impending crisis.



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