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China's Dependence on the Property Sector as an Engine of Growth

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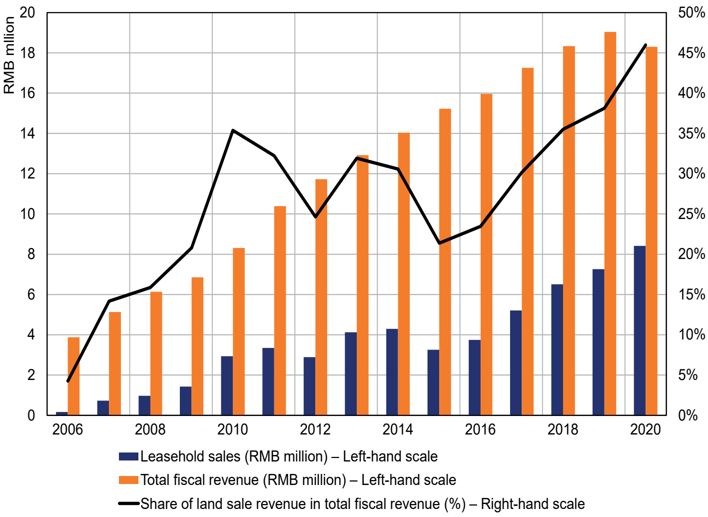
- The property boom has been a key driver of China's "economic miracle". The property sector can be defined as all the economic activities related to real estate, including the management and use of land and buildings by property developers, construction companies and real estate agencies. Property has been a pillar of rapid urbanisation, growth and employment in China since the 1980s. Real estate investment has also been used as a policy tool to stabilise China's economy. If the economy starts to overheat, monetary policy is tightened and restrictions are placed on buyers and developers. In times of economic slowdown, authorities use bank lending policies to stimulate the property sector, and the economy at large.

- China's growth model is now coming under pressure from evolving demographics, higher prices and rising debt for both households and property developers. The model is also having a negative impact on productivity, wealth distribution and regional equality. Handling this downturn and rebalancing the economic model are serious challenges for China. Depending on estimates, the property sector accounts for between 14% and 30% of China's GDP. The top of this range is above the level reached in the United States before the 2008 global financial crisis.

- In 2020, the Chinese government attempted to tighten regulation in the property sector, putting the most vulnerable developers under financial strain. The result was a sharp contraction in real estate investment, sales and prices, with some developers facing a cash-flow crunch. State-owned enterprises (SOEs) were then forced to intervene and restructure some of the developers.

- Amid slower growth, largely due to China's zero-Covid policy and the real estate slump, authorities started to ease some of the restrictions in the property sector in late 2021 – following similar patterns of other property market cycles in the past. These measures have not managed to contain the crisis and are expected to be extended over the course of 2022 and 2023. The sector's structural problems are likely to persist in coming years, affecting government revenue from the property sector and property developers' business model. Local government finances are particularly reliant on proceeds from land use rights (see chart opposite).

Local governments' revenue from land sales



Source: NBER, China's Ministry of Finance. Calculations: DG Trésor.

1. The property sector is a key driver of economic growth in China

1.1 Housing demand fuelled by urbanisation and demographic growth

Urban land was nationalised during the Maoist era (1949-1976). When Deng Xiaoping came to power in 1978, a market system was gradually reinstated for the property sector and land use. The 1980s saw a shift from housing being allocated by employers under a Socialist model to private provision of housing. While all land in China is publicly owned, this reform created a market for urban land use rights. Residential land is typically leased for 70 years, industrial land for 30 years and commercial land for 40 years.[1] Leases now tend to be automatically renewed after expiration. From the 1980s, housing demand was fuelled by demographic growth and urbanisation. According to the World Bank, China's urbanisation rate rose from 36% in 2000 to 61% in 2020. The OECD estimates that internal migration, which has been progressing steadily and has been largely restricted by the *hukou*[2] system, contributed around 70% to urban population growth in China between 1970 and 2010.

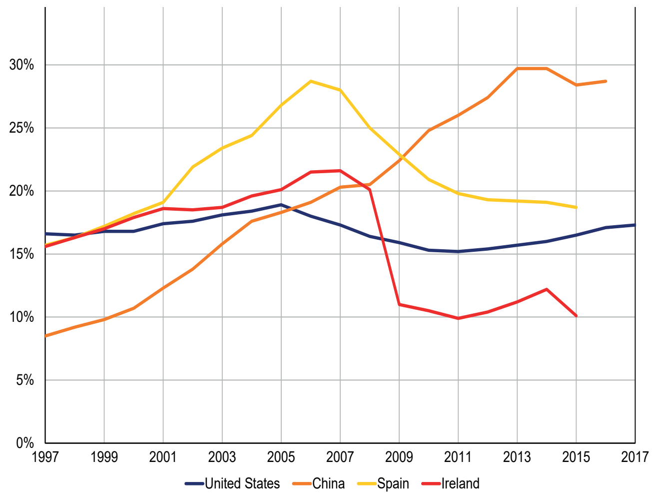
1.2 Real estate makes up a large share of household wealth in China

Virtually everybody is expected to own their own home in China, but it is considered as a prerequisite to marriage for young men in particular. The home ownership rate for urban and rural households stands at 90% and more than 20% of Chinese households own multiple homes[3] – a figure higher than in many developed countries. If cultural factors are part of the explanation for the high rate of home ownership, another important aspect is that there are no other high-yield investment alternatives in China (China's capital account is only partially open,[4] yields from savings vehicles are low compared with high unrealised gains from real estate). Property is also a profitable investment because it is hardly taxed at all. As a result, Chinese households pour their savings into real estate. Housing was estimated to account for 78% of household assets in China in 2017,[5] compared with 35% in the United States and 57% in the euro area.[6]

1.3 The property boom was a key driver of China's "economic miracle" in the 2000s

Real estate investment has been increasing steadily since 1998. The National Bureau of Statistics of China (NBS) estimates that real estate accounts for nearly 14% of the country's GDP. That figure does not include industries operating upstream (cement, steel) or downstream (furniture, home appliances) or related services. The National Bureau of Economic Research (NBER)[7] in the United States estimates the share at around 30% including upstream and downstream industries, indicating that China is probably more dependent on the property sector than Ireland or Spain before their downturns, and much more dependent than the United States before the 2008 global financial crisis (see Chart 1). In 2021, residential property accounted for roughly 75% of total real estate investment, compared with 16% for industrial property and 8% for commercial property, according to the NBS and CEIC.

Chart 1: Share of the property sector and related activity (% of GDP)



Source: KLEMS; Rogoff K. and Yang Y. (2021), NBER.

(1) Liu C. and Xiong W. (2020), "China's Real Estate Market", NBER, *Working Paper* 25297, p. 14.
(2) Introduced in 1958, the hukou system is a household registration system used to control China's population. There are two categories of registration: urban and rural households. An individual's residency status determines their eligibility for housing, public education, employment and social benefits. An urban hukou does not entitle the holder to the same rights in every city.
(3) Clark W. A., Huang Y., Yi D. (2019), "Can Millennials Access Homeownership in Urban China?", *Journal of Housing and the Built Environment* No. 1, pp. 69-87; Huang et al. (2020), "Multiple Home Ownership in Chinese Cities: An Institutional and Cultural Perspective", Cities, Vol. 97, article 102518.
(4) See Colin C., Debever C. and Fatton H. (2020), "Two Decades of Economic Transformation in China", *Trésor-Economics* No. 259.
(5) According to GoguData, a consultancy based in Shenzhen.
(6) Source: IMF.
(7) Rogoff K. and Yang Y. (2021), "Peak China Housing", NBER, *Working Paper* 27697, pp. 10-12; 31-34.

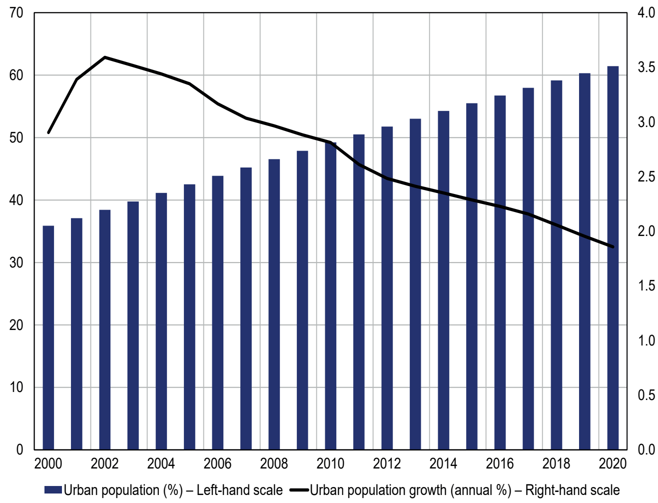
The NBS has estimated that the property and construction sectors contributed to almost 16% of urban employment in 2018, employing more than 66 million people in 2019. However, these estimates are not always accurate because it is difficult to calculate each sector's scope and the size of the informal economy.

2. The property sector suffers from structural problems and imbalances

2.1 Slowing demographics and urbanisation are weighing on the property boom

Slowing demographics automatically reduce the number of potential home buyers (see Chart 2). The working age population (people aged 15-59) reached a peak in 2011.[8] More importantly, urbanisation is slowing down and the annual urban population growth rate has been below 2% since 2019. Besides this structural slowdown driven by demographic change, urbanisation is now seen as a challenge in many respects. Urban development poses a major threat to China's food security (a strategic objective of the 14th Five-Year Plan (2021-2025)) because it puts pressure on the amount and quality of agricultural land. Housing demand is still strong in China's major cities, but there is a limited supply of land for new construction projects and it is getting smaller because local governments[9] have already sold the best plots.

Chart 2: Urbanisation rate in China



Source: National Bureau of Statistics of China (NBS), World Bank.

2.2 The property sector is now impacting consumption and productivity

The boom has led to profound imbalances in the property sector, fuelled by overindebtedness and speculation. Real estate investment has been the main investment outlet in China, at the expense of other types of productive investment. When lending money, banks gave preference to property developers and companies with real estate assets and land holdings (the most widely used collateral), reducing the availability of credit to other industries.[10] There was also a tendency for firms to boost their investments in the real estate sector to take advantage of higher property prices and use property assets as collateral to obtain more loans. The World Bank[11] partly attributes the decline in China's productivity to an increase in commercial credit and investment going to the real estate sector, which has seen lower returns on capital than other economic sectors (excluding infrastructure). These returns on capital are also declining.

Real estate also appears to be weighing on consumption, with urban households spending a larger share of their disposable income on housing, up from 5% in 1990 to 24% in 2021. This is partly due to sky-high property prices, which have led to higher household debt (total loans to households as a percentage of their disposable income) and higher net savings. In 2020, household debt in China was roughly 130% of household disposable income, compared to 40% in 2006 – a level similar to that of US households in 2007 according to Rhodium Group. Mortgage loans account for 70% of Chinese and US household debt, based on figures from the People's Bank of China (PBoC) and the Federal Reserve Bank of New York.

(8) The share of the working age population in total population was 70% in 2000, 75% in 2011 and 72% in 2020 according to the UN. The birth rate is declining steadily, down from 14‰ in 2000 to 7.5‰ in 2021 according to the NBS and natural population growth was 0.03% in 2021 according to CEIC.
(9) There are several levels of local government in China (provincial, prefectural, county, township and village). Local governments contribute the bulk of funding for public investment in China in accordance with the central government's strategic objectives.
(10) Rogoff K. and Yang Y., ibid.
(11) "Innovative China" (2019), a joint publication of the World Bank and the Development Research Centre of the State Council of the People's Republic of China, p. 18.

2.3 The property sector is contributing to wealth and interregional inequalities

Surging property prices have contributed to widening the wealth gap in favour of households owning their own home, especially in large cities. High housing costs and rents are preventing younger and lower-income households from moving to cities. It is estimated that the share of national wealth held by 90% of the poorest households fell by nearly 60% to 33% between 1995 and 2015,[12] but there is no way of precisely isolating how much of the decline can be attributed to real estate. The introduction of a national property tax, an inheritance tax or a wealth tax could help reduce speculation and close the wealth gap, but these taxes are not part of China's reform agenda – or their implementation has been repeatedly delayed.

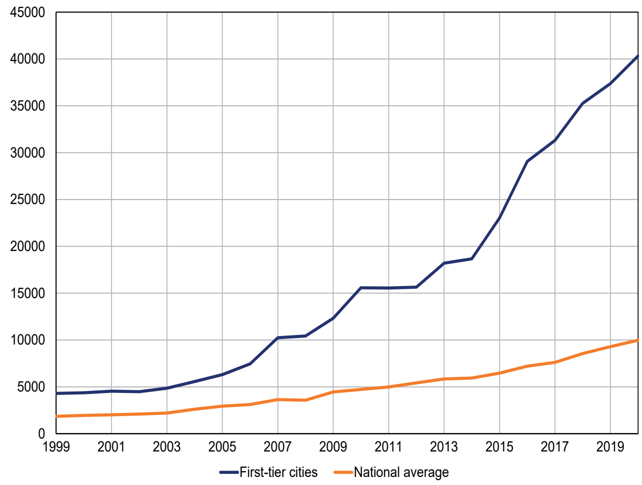
The property boom has also contributed to increasing regional inequality. Cities in China face different challenges depending on their status and attractiveness. While housing demand outstrips supply in the largest and most attractive cities, the opposite is usually true in second- and third-tier cities (see Box 1).

Box 1: Soaring property prices and varying levels of attractiveness of Chinese cities

The real estate boom has been characterised by soaring property prices in China (land and residential property prices per sq. metre). Nationally, average residential property prices (RMB/sq. metre) rose 14-fold between 1991 and 2021 (in Beijing, the increase was 20-fold). Meanwhile, average urban land prices (in 105 cities) doubled over the 2004-2021 period, but there were major disparities between first-, second- and third-tier cities[a] (see Chart 3):

- First-tier cities (Beijing, Shanghai, Guangzhou and Shenzhen) are the most attractive cities because of their high rates of economic growth. Demand for land and housing has outstripped supply, making it very difficult to afford a home there. Real estate assets have increased in value, fuelled by speculation. Urban land prices almost doubled between 2013 and 2021. In 2021, urban land prices in first-tier cities were almost 6.5 times higher than in third-tier cities – a clear indicator of the varying levels of attractiveness and supply in China's cities.
- Second-tier cities, which are relatively attractive nationwide, reported a trend in property prices that more closely mirrored disposable income. Over the 2013-2021 period, urban land prices rose 1.4-fold. Lower-tier cities are much less attractive and have recorded net population outflows. Construction projects started in these cities to support growth have fuelled oversupply. "Ghost cities" are an increasingly common phenomenon due to a sharp increase in vacant properties sitting unsold. Nationwide, total floor space under construction was on average three times higher than floor space sold between 1999 and 2021.

Chart 3: Average residential property prices per sq. metre in cities (RMB/sq. metre)



Source: National Bureau of Statistics of China (NBS).

a. China's 70 large and medium-size cities are normally classified in a tier system, based on how important they are in the national economy (first-, second- and third-tier cities).

(12) Piketty T., Yang L. and Zucman G. (2017), "Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015", *NBER*, Vol. 109, No. 7, pp. 20-24.

2.4 Property developers are grappling with mounting debt

Prompted by the property boom and lax regulation, property developers have taken on risky leverage-driven business models. China's property developers numbered around 95,000 in 2020,[13] including large conglomerates like Evergrande[14] (see 4.2). There is very little consolidation in the property market in China and many medium-sized developers operate locally. The property developers' business model has involved buying land use rights from local governments, taking out loans from banks for construction projects (using the land use rights as collateral), pre-selling housing before starting construction and delivering properties to buyers. This capital-intensive model[15] was highly profitable when the property market was starting out in the 1990s.

Since then, property developers have been facing ever-growing funding needs.[16] Despite soaring prices, developers continued to buy large amounts of land, driven by speculation and a desire to build up their land inventories for future projects. Developers had much higher expenditures as a result, but their revenue did not grow steadily for several reasons. First, until 2004, there was no official obligation for developers to start construction on a project immediately after buying the land.[17] They purchased large quantities of land, but did not build on it so no revenues were generated. Second, housing sales have at times been much slower in second- and third-tier cities, creating cash-flow problems for developers and a need to access more funding. Third, developers became more indebted in order to diversify their operations, requiring sizeable investments that sometimes produced lower returns. Some developers invested in the banking sector, e.g. buying stakes in second-tier banks.[18] When some developers became shareholders of banks, the banks in turn provided them with funds, enhancing the risks to their financial stability.

In this context, developers have had to access increased amounts of funding. Developers' total debt outstanding (loans, bonds and other funding sources, including shadow banking[19]) grew by 18% on average each year over the 2008-2021 period, now making up almost 50% of GDP.

3. Counter-cyclical use of the property market delayed the clean-up of the sector

3.1 The property sector was regularly used to achieve macroeconomic objectives until 2016

Authorities in China have used policy tools in the property sector to cool down or stimulate the Chinese economy. When the economy starts to overheat, restrictions are placed on buyers and property developers amid monetary tightening to slow down economic growth. When GDP falters, authorities tweak bank lending rules to stimulate growth, encouraging banks to lend more to property developers, buyers and local governments. These policy tools are easy to implement and have worked particularly well considering the size of the sector and the ripple effect on the broader economy (see above). Local governments have willingly used the measures to meet the central government's targets for economic growth, which have been imposed on them for a long time.

(13) Chinese media estimates (Sina.cn, fangchan.com).
(14) With total assets amounting to roughly €300bn at end-2020, Evergrande Group is one of the three biggest property developers in China. Its reported headcount is 200,000 direct employees and it states that it generates 3.8 million jobs. Despite missing an offshore bond payment deadline on 7 December, Evergrande has continued its housing construction business and is making interest payments. The group is currently being restructured (see below).
(15) Capital intensity is the amount of assets (expenditures and purchases) required to generate a unit of revenue.
(16) According to Wind, a financial data firm in China, loans to property developers represent 37% of banks' lending.
(17) Chinese authorities can now seize land from property developers if it remains undeveloped after two years.
(18) All the banks in China are second-tier banks, except for the four large state-owned banks (Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Bank of China (BOC) and Agricultural Bank of China (ABC)).
(19) Shadow banking refers to non-bank financial intermediaries or bank-like activities that take place outside the traditional banking sector and are unregulated.

After the 2008 global financial crisis, authorities stimulated the property sector by easing access to loans for real estate and construction.[20] When property prices started to surge in 2009, they tightened monetary policy considerably and introduced measures to constrain demand (banning purchases of second homes, increasing minimum down payment requirements for mortgages). As a result, the market stabilised between 2010 and 2012. During the economic downturn in 2016, authorities attempted to stimulate the property market by lowering interest rates for mortgages and property loans and reducing the minimum down payment.

A turning point came in 2016 when authorities pledged to address the sector's imbalances. President Xi Jinping announced his intention to stabilise the market, provide people with an affordable home and reduce the risk of getting into debt, with regulators often repeating his phrase that "housing is for living in, not for speculation". From 2016 onwards, authorities would turn their attention to stabilising property prices and cleaning up the financial sector.

3.2 Tighter regulation was introduced in 2020 to counter financial risks and social issues

In August 2020, regulators reintroduced restrictions in the property sector to reduce financial risks, implementing ambitious macro-prudential reforms. They imposed the "three red lines" borrowing metrics on China's largest property developers[21] to limit the size of their debts, with a three-year transition period until mid-2023. In December 2020, regulators introduced two ratios for domestic banks, capping the share of mortgages and property loans that banks can hold.

Alongside tighter regulation, authorities announced a number of social measures, including subsidies for affordable housing in a bid to promote inclusive growth and encourage access to housing for younger households, first homeowners and the middle classes. Rebalancing the property sector is also a part of China's new policy to boost the birth rate. Authorities believe that reducing the cost of housing will encourage more people to have children. Finally, in line with a new growth strategy, the authorities intend to redirect capital away from real estate towards more productive and strategic industries, such as the tech industry.

3.3 Regulation was eased again in response to the economic slump and the property slowdown

In 2021-2022, China's economic growth slowed and its property market plummeted. The economic cost of China's zero-Covid policy is not negligible[22] as the country has increasingly had to resort to lockdowns to stop the spread of the Omicron variant in 2022. The policy has caused people to put off buying a home (adopting a wait-and-see attitude and increasing precautionary savings), thus undermining growth in the sector.

In this context, from late 2021 authorities started, as in the past, to relax restrictions in the property sector. First, property developers' access to bank loans was facilitated. Second, assets bought by state-owned enterprises from private developers were excluded from rules that cap debt ratios. Third, authorities allowed developers to use funds held in escrow accounts by local governments (50 to 70% of proceeds from pre-sales are normally held in escrow accounts). Moreover, local governments eased property market rules in hundreds of Chinese cities in 2022 in a move to shore up the sector and restore their finances. Measures include reducing minimum down payment requirements and mortgage loan interest rates, granting housing subsidies, removing restrictions on the resale of homes and providing financial support to struggling property developers.

The crackdown on the property sector in 2020 seemed like a turning point. Its large scale and tough rhetoric seemed to signal a break with previous practices. But now that the target in 2022 is to "stabilise" the economy, restrictions are expected to be eased over the rest of the year. A question mark hangs over the efforts to clean up the sector in the long term amid persistent structural problems.

(20) In 2008, banks' interest rates were only slightly higher than inflation, stimulating demand for real estate investment.
(21) The three ratios constraining property developers' debt are a debt-to-asset ratio no higher than 70%, a net debt-to-equity ratio no higher than 100% and a cash-to-short-term-debt ratio equal to or greater than 1.
(22) The IMF downgraded its 2022 growth forecast for China to 3.3% in July (down 1.5 percentage points on its January forecast).

4. Property developers at the centre of today's real estate crisis

4.1 Some developers are facing a cash-flow crunch compounded by the property downturn

Regulatory tightening in 2020, coupled with the decline in investment, sales and prices, have squeezed many property developers as they struggle to find enough cash to stay afloat. Developers have been forced to restructure and sell off assets, triggering a wave of bond defaults. In 2021, Chinese real estate firms defaulted on a record $3.7bn in offshore bonds, equal to 36% of total offshore bond defaults by Chinese companies. These events raised fears of contagion risk because of the repercussions of a property market collapse for the banking sector, households and public finances and plunged financial markets into further turmoil. It seems unlikely that we will see a "fire sale" of assets by large developers amid a wave of bankruptcies, sending prices into freefall. Evergrande's restructuring, for example, involves orderly asset sales to avoid an onshore default, in consultation with local authorities and state-owned enterprises.

4.2 In the midterm, a prolonged property slowdown could pose several threats to the Chinese economy

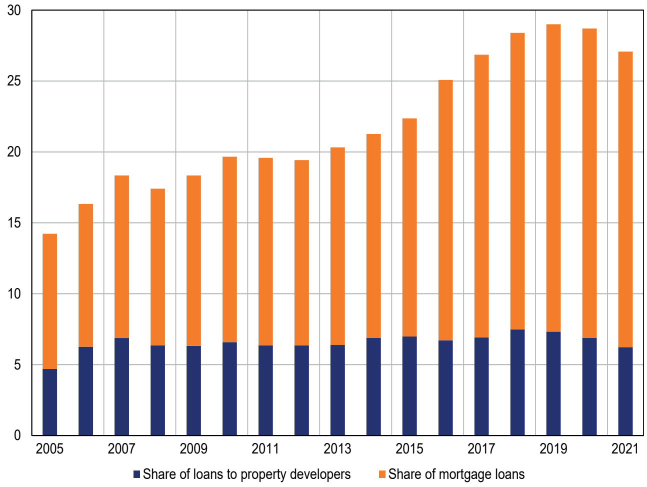
A prolonged slowdown in the property sector could imperil China's economic growth in the medium term. Weaker investment would have a direct impact on the economy, as would a drop in local government finances (see chart on page 1), wealth effects for households and defaults by property developers spilling over into the banking sector.

Some local governments are recording lower revenue from selling land use rights, putting a strain on public finances. The introduction of a national property tax could provide a regular source of fiscal revenue from the property sector, but has been postponed indefinitely. The alternative for the central government would be to increase transfers and issue debt.

A real estate slowdown and lower property prices would have opposite effects on households. On the one hand, this would make housing more affordable for the middle classes, but on the other, it would affect the behaviour of homeowners, undermine consumer confidence and weaken consumption due to the "wealth effect" – and come with the political risk of upsetting the wealthier sectors of the population as China's leaders seek to renew their mandates (the 20th Communist Party Congress will be held in autumn 2022).

Direct exposure of banks to real estate is still relatively low, although it doubled between 2005 and 2021 (see Chart 4). Property loans outstanding accounted for 27% of total bank loans outstanding in 2021. Three-quarters of property loans are mortgage loans to households and one-quarter are property-related loans to developers. Loans to Evergrande, China's second-largest developer, only make up 1% of banks' total loans. However, it is difficult to calculate Chinese banks' indirect exposure because much of their balance sheets contain loans collateralised by property assets.

Chart 4: Exposure of China's banks and financial institutions to property loans (%)



Source: People's Bank of China (PBoC).

The current economic situation is part of the explanation for the crisis in China's property sector, but structural factors are more important. Rebalancing China's growth model has now become a matter of urgency and cannot be delayed any longer.

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