

# China's Residential Property Sector

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## Abstract

The property sector is a significant driver of economic growth in China and a key source of demand for Australian commodity exports. Authorities have become increasingly wary of financial risks in the sector, and moved to reduce the importance of policies directed at real estate for managing short-run fluctuations in aggregate demand. The effect of COVID-19 on property sales and developer balance sheets necessitated a moderate easing of policy to support the real estate sector, but it only appears to have delayed rather than halted efforts to de-risk the sector.

## Privatisation transformed the provision of housing in China

In recent decades, China's residential housing market has undergone significant reform. From the late 1990s, the provision of residential property shifted from being mainly provided by the state to a model where the private provision of housing dominates.<sup>[1]</sup> Urban home ownership rates have increased from around 50 per cent in 1996 to between 80 and 90 per cent in more recent years (Huang and Clark 2002; Yang and Chen 2014; Huang, Yi and Clark 2020). Chinese home ownership rates are comparable to those in many Eastern European nations, where high home ownership reflects the nature of privatisation in the post-communist period, and is well above the OECD

average (Causa, Woloszko and Leite 2019; OECD 2019).

This high rate of ownership also reflects the role of property as an investment vehicle for Chinese households. Sustained property price inflation attracted household investment; around 22 per cent of Chinese urban households own multiple homes (Gan 2018). This has led to real estate accounting for around 60 per cent of household assets in China (Siyang 2020); the average ratio in advanced economies is around 50 per cent (Causa *et al* 2019).

Despite large private holdings of secondary investment properties, rental markets are still developing in China. Around 15 per cent of China's population live in rental housing, which is much

lower than the average in the OECD (JLL 2018; OECD 2020). This low rate reflects limited financial incentives for developers to build and manage rental housing themselves, and households preferring to leave property unoccupied and use it as a store of value. These factors contribute to China's high urban property vacancy rate, which was estimated at 21 per cent in 2017 (Gan 2018).

### The property sector is significant to China's economy and Australia's exports

The growth in private home ownership led to residential investment accounting for around 20 per cent of China's GDP at its peak in 2016, which is very high by international standards (Graph 1). Growth in residential investment has contributed significantly to Chinese GDP growth over the past two decades through both direct and indirect channels (Graph 2). These indirect channels includes investment in equipment and purchases of materials used in construction, such as steel.

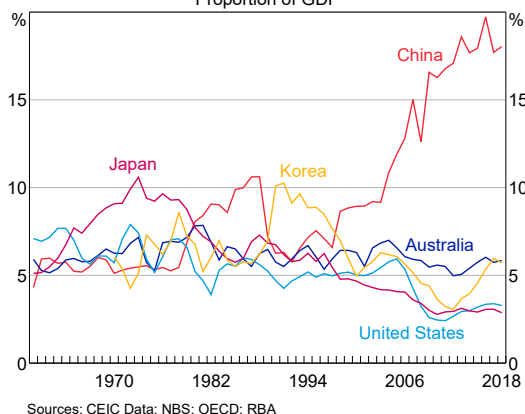
Given its size, cycles in Chinese GDP often reflect developments in the property sector, and housing represents a direct source of vulnerability for the Chinese economy. The concentration of household assets in property means that a significant decline in prices could also weigh on consumption as households respond to a reduction in their wealth.<sup>[2]</sup> In addition, proceeds from land use rights accounted for around a quarter of total revenues in the consolidated general government budget in 2019 and are a particularly important source of funding for local governments. Sharp falls in land

sales revenue would put a strain on local government finances and could affect other fiscal spending. Such falls are rare but not unprecedented. For example, the slowdown in the Chinese property market between 2014 and 2015 resulted in a decline in land sales revenue of almost 25 per cent. This decline was quickly reversed, with land sales revenues increasing strongly in 2016 and 2017.

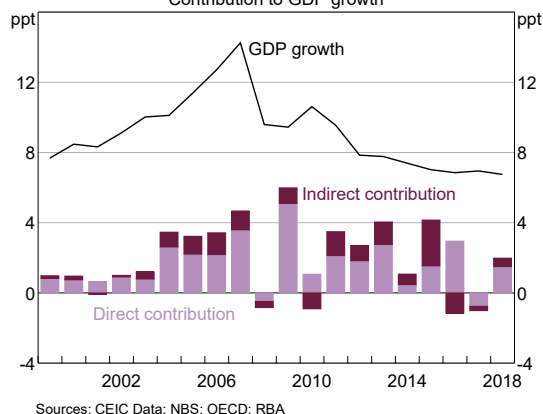
A prolonged downturn in property investment and construction would have considerable consequences for Australian exports. Housing construction in China is steel intensive. We estimate that residential property construction accounts for around one-quarter of China's steel consumption.<sup>[3]</sup> The effect of a downturn in housing construction would reduce the demand for iron ore and metallurgical coal (which together account for nearly half of Australia's exports to China). A slowing in household income and wealth that would result from such a downturn could also lower demand for other key exports, such as tourism and education services. Weakness in the Chinese economy could also affect Australian exports by lowering growth in other Australian trading partners.

The property sector is also important for financial stability in China. Property developers are among the most highly leveraged firms in the economy, including through their use of funding from non-bank lenders and presales.<sup>[4]</sup> Housing assets are also an important source of collateral for loans in the banking system; it is estimated that property is used

**Graph 1**  
**Residential Gross Fixed Capital Formation**  
Proportion of GDP



**Graph 2**  
**China – Residential Investment**  
Contribution to GDP growth



as collateral for around half of all bank loans (Borst 2014; Tham 2017). Given limited direct financial sector links between China and Australia, the transmission of a shock induced by the Chinese financial sector is likely to be mediated by lower activity in China or through global financial markets (Guttman *et al* 2019).

### Government policy has had a large influence on price cycles in recent decades

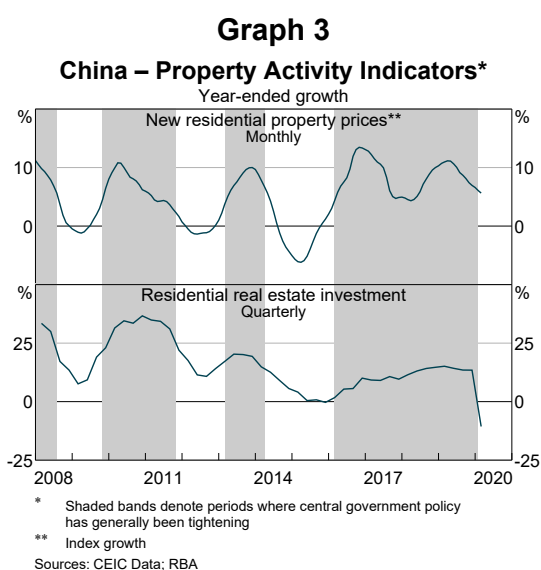
Key indicators of activity in China's property markets – including prices, sales, developer financing and investment – have exhibited cyclical behaviour. The timing and duration of these cycles are influenced to a considerable extent by government policy (Graph 3). Authorities have used various policy tools to both constrain and stimulate activity in the property sector, which has been motivated by a desire to exert control over property prices and economic growth. Over 2010–11, authorities made it more expensive and difficult to access mortgage finance and implemented some restrictions on the number of properties households could purchase, which led to lower property price inflation (Cooper and Cowling 2015). In 2012, authorities eased some of the financing restrictions, and housing price inflation started to rise. A similar pattern of tightening and easing broadly characterised other property market cycles over 2006–09 and 2013–14. The central government has historically taken a leading role in guiding property policy, but there

has been an ongoing push to shift more of the responsibility to local governments (State Council 2011; Shu and Zhang 2019). Formalised as the 'one city one policy' strategy, this push gave local authorities more freedom in setting policies that are appropriate for their property markets (Liu and Qin 2019). Divergences in policy have become more apparent in recent years, as areas with struggling property markets (particularly smaller 'third-tier' cities) introduce more stimulatory measures, while other cities continue to focus on tightening market conditions and constraining price inflation.<sup>[5]</sup> Nevertheless, cases where higher authorities overruled local authorities show that there are some limits to policy independence.

The government has also put forward plans for a 'long-term mechanism' – a series of reforms that aim to stabilise property price inflation by increasing the supply of housing and disincentivising speculation (Ding and Lian 2018). This mechanism is seen as an alternative to the short-term shifts in policy that have characterised property market cycles in China (Fan 2017). However, these reforms are unlikely to be fully implemented in the near term. For instance, the introduction of a property tax, one part of the mechanism, has been repeatedly delayed.<sup>[6]</sup> This tax is designed to reduce speculative behaviour by imposing a cost on the owners of empty homes. However, trial programs in Shanghai and Chongqing in 2011 were limited in scope, and reportedly had little impact on price growth (Rutkowski 2014; China Daily 2013). The lack of further trials in other cities suggests that there remain significant obstacles to the implementation of a national property tax. Other parts of the mechanism, such as the creation of interconnected clusters of cities, appear to be progressing more quickly (e.g. the Pearl River Delta, the Yangtze River Delta, and the Beijing-Tianjin-Hebei area).

### The tightening of housing policies since 2016 has been more targeted than in the past

The period from 2016 onwards has seen authorities focus on controlling property price inflation and reducing financial risks in the property sector.



Numerous measures were announced to restrict the flow of credit to both buyers of property and developers, including higher interest rates on mortgage loans and restrictions on developers' bond issuance. A number of cities also introduced restrictions that blocked secondary market sales of newly-purchased housing for periods of two to five years (Sohu 2019). While, as in previous periods, property price inflation fell following the implementation of these tightening policies, the decline was more pronounced in the largest 'first-tier' cities. Price inflation moderated more slowly in medium-sized and smaller cities. Eftimoski and McLoughlin (2019) suggest a combination of uneven policy measures (stricter restrictions in larger cities and looser conditions in smaller cities) and differing demand and supply conditions as explanations for the different pace of changes across city groups.

Housing subsidies provided by authorities under the 'shantytown' redevelopment program have partly offset these tightening policies, particularly in medium-size and smaller cities. Under the program, residents can replace substandard existing housing with either a better quality home or cash compensation that can be used to purchase new housing, although a survey has found that this cash has also been used to increase consumption and pay down debt (Wu 2018). The program has supported activity in property markets and helped reduce developer inventories of unsold housing. However, some officials have claimed that the provision of cash subsidies has contributed to a sharp increase in housing prices in some cities. The program has been scaled back in recent years and is expected to end in 2020.

While official data suggest that housing prices began to accelerate again from mid-2018, alternative data from a private data provider suggest that housing price inflation has been muted in first-tier cities and continued to ease in smaller cities, albeit at a slower pace (Graph 4). The difference between the two measures appears to be due to differences in the reporting of transacted prices. More recently, both the alternative and official measures have started to converge for medium-size and smaller cities, although they still

differ in their description of property price inflation in 'first-tier' cities.

Consistent with their push to reduce financial risks in the sector, authorities have shown their willingness to reduce the Chinese economy's reliance on real estate as a source of growth in recent years. The government announced in late 2019 that proceeds from newly issued local government special bonds could no longer be used to finance real estate projects.<sup>[7]</sup> Previously, much of this bond issuance had flowed to the real estate sector as local governments used proceeds to fund shantytown redevelopment and purchases of land. Mortgage rates have remained high and authorities have been active in looking to limit the flow of other consumer credit that ends up in real estate, with a series of bank inspections conducted by regulators in 2019 to check that non-mortgage loans were not being directed to property (Wu and Han 2019).

### Developer financing has come under increasing pressure

Property developers have typically financed their operations through a variety of funding channels (Graph 5). The most important of these are payments for properties sold off the plan (presales) and 'self-raised' funds, a broad category that includes equity financing. Domestic lending from bank and non-bank financial intermediaries is also a key source of funding; bond issuance, although volatile, has become more important in recent years.





Authorities' ongoing efforts to reduce the amount of finance flowing to property developers reflect a desire to limit 'speculative' behaviour that would bid up the price of land and ultimately feed into higher property prices (Hugage 2019). Government officials have also noted that the real estate sector crowds out other, more productive industries in credit markets, and this likely serves as additional motivation for their push to control the flow of funds into the sector (Li and Yang 2019). This push has led to changes in the funding mix used by developers.

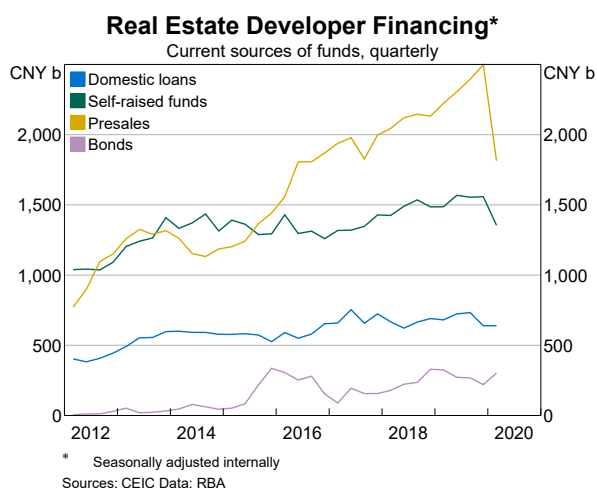
Authorities have pressured banks not to lend funds for land purchases. While local governments appear to have taken the lead on this (Yang and Mitchell 2016), Yao (2019a) notes that developers have been banned from using bank loans to buy land nationally. In response to these restrictions, developers appear to have increased their dependence on non-bank sources of funding, supplied indirectly by banks and by more lightly regulated non-bank financial intermediaries.

Non-bank sources of funding are considered to be particularly important for smaller developers who lack access to varied sources of finance, and rely on these loans to fund new projects (Feng and Wright 2019). Trust company investments (one source of non-bank financing) in real estate grew strongly through 2017 and 2018, while investments in other industries were contracting as a result of broader efforts by authorities to reduce the amount of non-bank financing in the economy (Graph 6). More

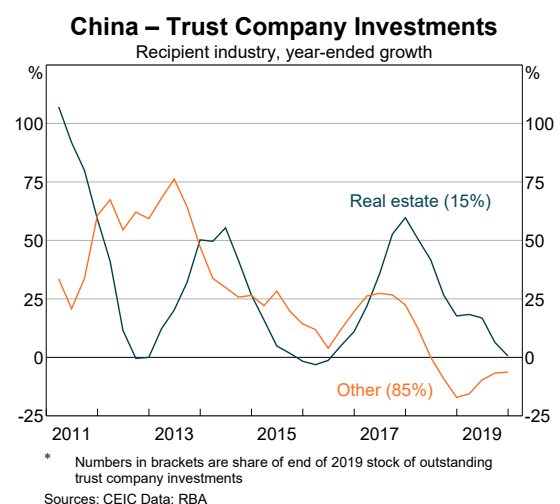
recently, authorities have stepped up their efforts to limit the flow of non-bank financing to the real estate sector and have focused specifically on trust companies, leading to a decline in trust company investments in real estate.

Larger developers have increased their use of bond financing in recent years (Graph 7). However, this source of funding is also subject to regulatory risk. For instance, in mid-2019 developers were banned from issuing foreign-currency-denominated bonds unless they guaranteed that the proceeds would be used to pay down maturing, long-term foreign currency-denominated debt (Chen and Leng 2019). Despite these restrictions, total foreign currency issuance in 2019 was substantially higher than in prior years. Restrictions on foreign currency issuance have been eased recently, as funding pressures on developers have escalated due to the impact of the COVID-19 pandemic on property markets (Yoon and Xie 2020). However, developers may struggle to take advantage of this by increasing issuance, as yields on US dollar (USD) developer bonds have risen in recent months (Jim and Shen 2020).<sup>[8]</sup> This makes it more expensive for developers to issue new debt or refinance existing obligations. These issues add to concerns about the ability of developers to repay their foreign currency bonds, as required repayments will also increase significantly in coming years. Furthermore, research suggests that developers have not generally hedged their foreign currency exposures and a depreciation of the Chinese renminbi (RMB) could

**Graph 5**



**Graph 6**



worsen the pressure on their finances (Chui, Illes and Upper 2018).

While recent restrictions on the issuance of RMB bonds by developers have tended to be more targeted, this issuance is similarly exposed to regulatory risk.<sup>[9]</sup> The sharp increase and subsequent decline in RMB bond issuance by developers between 2015 and 2017 was driven by the relaxation and reintroduction of restrictions by regulators.

### Increased reliance on presale funding has affected construction investment

Developers have responded to restrictions on accessing other sources of funds by increasing their use of presale funding (Graph 5). While presales have long accounted for the bulk of new residential property sales in China, their share has increased from around 80 per cent to almost 90 per cent since 2016. The importance of this source of funding comes from two distinctive features of the property market. Firstly, buyers often pay the full price at the time the presales contract is signed, so the average value of presales is generally large (Zhou, Zahirovic-Herbert and Gibler 2018). Secondly, in contrast to Australia, presale funds are generally not required to be held in escrow until the property is delivered, although projects are required to have a set completion timeline and meet construction goals before presales are permitted (Bird 2019; Swanson 2014). This means presales are effectively interest-

free debt that is repaid through the provision of completed housing.

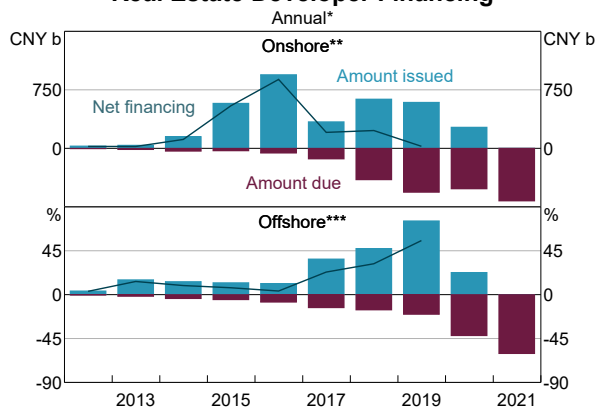
A number of restrictions announced by local governments recently suggest that policymakers are becoming more concerned about the risks posed by presale funding. The city of Xi'an is moving to require presale funds to be held by a third party, while the province of Hainan has decided to prohibit presales entirely (Xi'an Housing and Urban–Rural Development Bureau 2019; Wang and Lu 2020).

The increasing reliance on presale funding helps explain changes in the composition of growth in developer investment. Growth in developers' expenditure on construction has been noticeably weak in recent years, while growth in land sales for new residential plots has been stronger (Graph 8). Market reports suggest that, from at least mid-2018, developers have been delaying construction and stretching delivery deadlines beyond contracted deadlines, even as they have prepared land for new construction projects. While regulatory requirements mean that developers are penalised for not commencing construction soon after a land purchase, it appears likely that developers are also starting construction in order to receive approval to presell projects.<sup>[10]</sup> The lack of an escrow requirement means that funds raised from presales can be used elsewhere (e.g. for additional land purchases or to complete construction on other projects). This has reportedly been a popular strategy for developers to continue growing in an environment where other sources of funding are constrained (Bloomberg News 2018).

However, construction can only be delayed for so long and the stock of presold construction obligations appears to have been growing in recent years – developers have presold more apartments, but there is little evidence that construction has been increasing proportionately.<sup>[11]</sup> Using official sales data and estimates of the average timeline for construction allows us to provide a rough estimate of when presold apartments will come due.<sup>[12]</sup> This exercise suggests that a large amount of presold housing will need to be delivered in coming years to meet the rapid rise in presales obligations (Graph 9). The build-up of these obligations may

**Graph 7**

**Real Estate Developer Financing**



\* Partial data for 2020  
 \*\* Bonds denominated in Chinese renminbi (CNY)  
 \*\*\* Bonds denominated in foreign currencies (USD, HKD, EUR, JPY, SGD, MYR)  
 Sources: Dealogic; RBA; WIND Information

explain the increasing growth in construction expenditure over 2019, although the strength of this growth is unlikely to be repeated this year as developers suffer cash flow issues due to the impact of the COVID-19 pandemic on presales funding, which declined by 27 per cent in the March quarter.

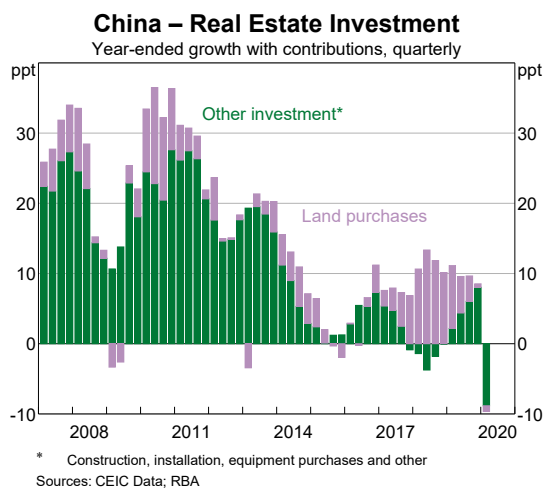
Tighter financial conditions have also played a role in further weakening the financial positions of smaller developers, who tend to be less profitable and more indebted, fuelling an increase in consolidation within the property sector since 2016 (Graph 10).<sup>[13]</sup> The consolidation reflects increased mergers and acquisitions activity between real estate companies and reports of an increasing number of bankruptcies (Liu, Wang and Guo 2019). The COVID-19-induced shock to sales revenue has likely further reduced small developers' ability to

access funding and continue operating, and is likely to contribute to further consolidation.

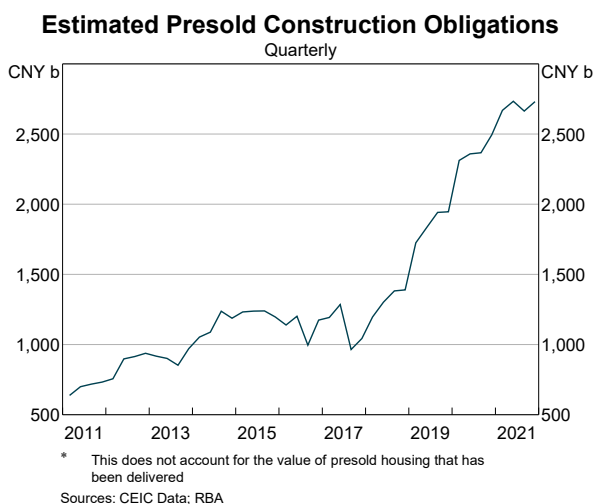
### COVID-19 has been a significant shock to China's property sector

Starting from the 2020 Chinese New Year holiday in late January, property transactions effectively ceased and construction sites were closed as a result of restrictions put in place to slow the spread of COVID-19 (Graph 11). The recovery has been gradual following the easing of the restrictions, although property sales are now around their levels from previous years. Despite the disruption, property prices have been broadly stable, perhaps reflecting some offsetting effects from simultaneous lower demand and supply.

**Graph 8**



**Graph 9**



**Graph 10**



**Graph 11**



Consistent with their approach over recent years, authorities continue to resist introducing significant stimulus in the property sector. Central regulators have emphasised they do not see real estate as a means to stimulate the economy in the short term, and intend to 'maintain the continuity, consistency, and stability of real estate financial policies' (People's Bank of China 2020). Authorities have been emphasising infrastructure spending (through increased special bond issuance) as a way to boost economic growth, while they continue to de-emphasise the property sector.

Despite the unwillingness to introduce stimulus, the severe shock to the property market as a result of the COVID-19 pandemic has clearly changed the near-term imperatives of property policy. As with actions in other industries, authorities have attempted to mitigate cash flow issues by directing concessional bank lending to firms facing demand shocks, and facilitating bond issuance by easing restrictions. Local governments have also implemented various policies to support developers, including additional flexibility in delivering properties and making it easier for projects to be presold. Still, a focus among developers on bolstering balance sheets may continue to weigh on property investment in coming months.

Local governments have led the response on supporting property demand, through varied policies including small reductions in mortgage rates and downpayment ratios, relaxed presale conditions and facilitating later payment transfers (*Beijing Evening News* 2020). At least 12 cities have withdrawn such measures shortly after they announced them, suggesting that the measures as originally announced may have ultimately been considered too much of a relaxation of policy (Ouyang 2020). Policy easing at the local level is

likely to be in place until local authorities are satisfied that their property markets have stabilised.

Beyond the recovery, the decline in investment spending resulting from the conclusion of the shantytown development program will be only partially offset by a program that subsidises renovation of older residential compounds. Over the longer term, we expect residential construction growth to decline gradually as growth in the urban population and disposable income slows. Construction activity will be increasingly driven by replacement of older stock, a phenomenon which is already occurring in the Beijing and Shanghai housing markets. There are both upside and downside risks to this long-term view. Cities with high vacancy rates may be able to absorb substantial numbers of rural-to-urban migrants without the need for further construction. Conversely, demand for newer, better-quality housing as average incomes rise may result in greater replacement activity.

## Conclusion

The economic shutdown induced by the COVID-19 outbreak presents the Chinese residential property sector with its greatest shock in recent years. Still, the response by authorities – to ease restrictions only marginally and steer clear of applying significant stimulus – suggests that they remain wary of risks that have built up in the sector.

Even if the recovery is slow and – as expected – property's contribution to China's GDP growth falls, over the long term the Chinese residential property sector is likely to continue to consume a significant quantity of steel and contribute to demand for Australia's key resources exports. ✎

## Footnotes

[\*] Jonathan Kemp and Tom Williams are from Economic Group. Anirudh Suthakar contributed to this work while in Economic Group.

[1] Private buyers do not own land, but lease it from the government for a period of 20 to 70 years (Zhang 2015). While it is likely that leases will be automatically renewed without cost after expiration, this is not guaranteed.

[2] There is considerable variation in academic estimates of the impact of changes in housing wealth on consumption in China. For instance, He, Ye and Shi (2019) find that a 1 per cent increase in housing wealth would increase consumption by 0.3 per cent, whereas Zhang and Cao (2012) and Chen, Hardin III and Hu (2018) report a 0.1 per cent increase in consumption.



- [3] Platts (2019) estimate that property accounts for around 35 per cent of steel consumption in China. Assuming that the steel intensity of residential and non-residential construction is similar, the residential share of floor space completed (71 per cent in 2019) suggests that residential property accounts for 25 per cent of total Chinese steel consumption.
- [4] Non-bank lending is generally considered to be riskier than traditional bank lending as it is less regulated and can enable banks to circumvent restrictions on lending to riskier borrowers.
- [5] Cities in China are commonly grouped in 'tiers' according to size, ranging from the largest 'first-tier' cities to medium-size 'second-tier' and smaller 'third-tier' cities.
- [6] Other aspects of this plan include accelerating the development of rental markets and focusing on the creation of urban clusters around large cities.
- [7] In contrast to standard local government bonds, special bonds are used to finance specific projects and revenues from these projects should directly fund repayments on the bond (Holmes and Lancaster 2019).
- [8] Most foreign currency debt issued by developers is denominated in USD.
- [9] The ability of specific developers to issue debt domestically was restricted in response to 'overbidding' for land (Wu and Jia 2019). Regulators also explicitly barred developers who had not met regulatory requirements from financing projects through issuing bonds.
- [10] National regulation mandates that a developer can be charged fees proportional to the amount paid for land use rights if a project has not started within one year of the land use rights being acquired, and the land use rights can be reacquired by the government without compensation if a project has not commenced within two years (The Supreme People's Court of the People's Republic of China 2015).
- [11] Data on finalised construction is incomplete as it relies on developers self-reporting when projects are finished, but available evidence from other sources suggest that the pace of construction has slowed in recent years, not increased.
- [12] The average timeline to construction has grown from two years to around two-and-a-half years (Yao 2019b). We have used plausible assumptions about the distribution of construction around these averages and available monthly data on the value of presold housing to construct an estimated time series of presold construction obligations. Caveats to this analysis include a lack of precise information on the distribution of construction around the average, and a lack of data on presold construction obligations that have been delivered.
- [13] Of over 90,000 firms in the property sector, the majority are smaller developers.

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