China Economic Update

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Residential property sector and risks for China's short term economic prospects

There have been concerns around China's residential property market for a number of years, with bearish observers repeatedly describing the market as a bubble. In March 2014, these fears were elevated by the collapse of the Zhejiang Xingrun Real Estate Company, an unlisted private property developer.

Views around the real estate sector vary widely. Observers who anticipate a sharp correction in property prices cite speculative bubbles and highlight excess development with high profile 'ghost cities' and per capita floor space. Nomura, for example, considers the property sector to be China's top risk (exceeding local government debt and shadow banking – although all of these factors are unquestionably linked). Those who are more optimistic tend to highlight the growth in urban incomes (which have exceeded some measures of prices), urbanisation and the scale of relatively undesirable legacy stock.

We see the risks around the housing sector being related more on the development side than consumer side, and hence are closely tied to concerns around local government debt (with land sales to developers a key revenue source) and shadow banking (which has become a key source of finance in recent years). The comparatively large equity that homeowners hold in their properties could provide insulation in the event of a large correction in property prices. Even so, a correction in property prices could have a significant impact on the broader Chinese economy.

Key characteristics of China's property sector

Private ownership of real estate has a short history in China (when compared with other major economies). From 1949 until 1978, all land and property was state owned. Gradual reforms over twenty years led to the introduction of 'commodity houses' in 1998, which could be bought and sold at market prices. Governments also produce low cost 'social houses' which are targeted at families with low to medium incomes. These properties are typically sold at 3% to 5% above total cost, with resale restricted for five years (Milken Institute).

In recent years, demand for investment properties has in part reflected the limited range of alternative investment opportunities for Chinese households. As broader financial market deregulation gradually occurs, this could reduce some demand for domestic property.

In 2013, contracted residential sales in China totalled RMB 6.8 trillion – an increase of 27%. This increase was driven by growth in sales volumes of 18% and an increase in the average value of 7.7% (NBS). The first two months of 2014 have been comparatively weak – with total sales falling by

around 5% (the first decline since June 2012). According to China Index Academy data, the total volume of sales in tier 1 cities (Beijing, Shanghai, Guangzhou and Shenzhen) fell by almost 40% yoy in the March quarter.

Strong growth in China's residential property market



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 *Transaction basis - total value of sales divided by total area Sources: CEC, NAB Economics

The property sector has become an increasingly important part of China's economy in recent years. As a percentage of nominal GDP, real estate investment (actual construction rather than property valuation) has increased from around 5% in 1995 to 15% in 2013. Investment in residential real estate is the largest component of the broader sector – accounting for around two-thirds of the total.

Property sector's role growing in China's economy



In addition, real estate accounts for a significant share of bank loans – around 20% of outstanding loans at the end of 2013 (compared with 14% at the end of 2005) and 26% of new loans – despite tightening credit requirements to the sector imposed by Chinese authorities. The sector also accounts for around 10% of trust loans (a component of the shadow banking sector that developers have turned to as traditional bank credit became tighter). The scale of investment in residential property has prompted concerns from the IMF around over-investment. Last year residential investment was around 10.4% of GDP - which is high when compared with the peak levels of investment in other economies prior to corrections in their housing markets (only Spain in 2006 at 12.5% was higher). Australia on the other hand has a residential investment to GDP ratio of around 4.8%.

Real estate investment share of GDP raises concerns for IMF



Source: IMF, CEIC, NAB Economics

The property sector is not a single entity. According to the National Bureau of Statistics, there are 160 Chinese cities with a population above one million citizens and this means that there are vastly different conditions across the country. China's cities are unofficially grouped into tiers. The increase in prices has been strongest in Tier 1 cities - Beijing, Shanghai, Guangzhou and Shenzhen - but according to Nomura, these cities only account for around 5% of total construction in 2013. Tier 2 cities - generally provincial capitals - accounted for around 28% of construction, while cities in tiers 3 and 4 accounted for around two-thirds of the total - where data quality is particularly poor.

Can a bubble be seen in the current market? Housing market data is opaque (at best)

As a general rule, bubbles in asset prices can only be conclusively seen in hindsight (after a sharp fall in prices is recorded). That said, there are a few key indicators that can imply a bubble.

One is an unreasonable increase in housing prices - which would require increases to be significantly higher than growth in incomes. On a transaction basis (total sales value divided by total sales area), prices increased by an annual rate of 9.9% over the past five years, compared with disposable income growth of 11.3%.

Similarly, official data suggests that it took the average Chinese household 10.5 years to earn enough money to purchase a home in 2005, but only 7.6 years in 2012 - which would indicate improving affordability over the period.

However, there are two broad issues with this view. The first is that there are considerable disparities between larger and smaller cities - meaning there could be bubbles in individual markets. The second is the reliability of price data - with considerably different results between official and market sources.

Urban incomes appear to have outpaced housing prices



^{*}Transaction basis - total value of sales divided by total area Sources: CEIC. NAB Economics

The transaction approach - which covers the broadest possible range of cities but is also extremely volatile - showed growth trends slowing from March 2013 - with average sales prices falling year-on-year in January and February 2014. In contrast, growth in the China Index Academy's 100 city survey peaked in December 2013, but still grew by 10% year-on-year in March 2014.

Different house price measures show different growth trends



House price data can also be distorted by other factors. The Financial Times cites examples of cash-back deals to individuals who purchase properties at the full listed price along with other examples of incentives (such as car parks and additional balconies) included for free to encourage sales. There are also examples of property firms cutting prices – for example Agile Property Holdings reportedly cut prices by 20% in both February and March for projects in Changzhou and Chengdu.

A square metre is not a square metre

One factor could explain the level of residential investment is the scale of legacy housing stock. Simple additions of floor space don't have any adjustment for the relative quality of housing – a square metre of new property is not the same as a square metre of older, less desirable stock.

Apartments built prior to 2000 were typically spartan, often with shared kitchen and bathroom facilities for an entire floor. These properties are now viewed as unsuitable by the emerging middle class, and are extremely difficult to sell. People who live in such homes are usually able to do so at relatively low cost while saving money for better equipped properties. It is common to hold onto legacy properties until they are purchased by property developers. While difficult to

sell to other residents, these properties are often centrally located in major cities and therefore have considerable land value.

As with other housing data, the scale of legacy property is somewhat uncertain. Analysis by Financial Times China Confidential put the share of legacy housing at 47% of the total stock in 2011. In contrast, Nomura estimates are lower – at around 33% of stock in 2007 and declining to 22% in 2013.

Construction data quality remains an issue

Available data for the residential property sector is patchy – in part reflecting the scale of the sector. In the past, official data captured 70 cities – although as noted above, there are 160 cities with a population over one million – meaning that full coverage of the sector is extremely difficult.

For example, there is some uncertainty around the volume of annual housing construction. According to official data, total housing construction in 2013 was around 1.1 billion square metres – comprising of 787 million square metres of commodity housing and 280 million square metres of social housing.

Official measures of housing construction



Nomura argue that this data grossly underestimates the true level of construction, and estimate that 2.6 billion square metres was completed last year – in line with their view of excessive investment in the sector.

According to GK Dragonomics, China needs to build around 10 million homes a year to match both the growing size and aspirations of its urban population. They note that until 2011, construction of property was below this level, but it exceeded it 2012. It is likely that the pattern of construction is as fragmented as the broader market trends – overbuilt in some markets and underbuilt in others.

If there's a bubble, will it burst?

When a bubble bursts, there is typically a rapid liquidation of properties. This can trigger a negative feedback loop – putting downward pressure on prices, forcing more foreclosures, increasing the number of properties for sale, putting further downward pressure on prices (and so on).

There are a few characteristics of China's market that could limit this downward pressure. Compared with many advanced economies, the initial deposit for Chinese home buyers is unusually high – at around 30% for first home buyers and typically around 60% for additional or investment properties. In many cases, investment properties are purchased without a

mortgage. This could limit the risk of rapid liquation, due to the strong equity position, households and investors are less likely to be forced to sell.

In some cities (primarily in tiers 1 and 2), tightening restrictions designed to cool the market require a downpayment of at least 70%, with no mortgages available for a third (or more) property.

Scale of outstanding mortgage loans has increased...



Mortgages in China are full recourse – requiring purchases to completely repay debt – unlike the non-recourse loans that contributed to the speed of the downturn in property markets in some parts of the United States during the sub-prime crisis.

As a share of GDP, China's residential mortgages are comparatively low – at just over 16% in 2013, compared with over 80% in Australia.

.but is extremely modest when compared with Australia



Falling prices may not force liquidations, as there are low carrying costs for property – reflecting in part the lack of a property tax (with the exception of the trial program in Shanghai and Chongqing). The low cost of carry has contributed to comparatively high vacancy rates and the trends of ghost cities. Comments by Chinese officials appear to indicate that property taxes are unlikely to be introduced within the next three years.

Nomura argue that the risk of property bubbles is strongest in tier 3 and 4 cities (which account for around 67% of housing construction) and that most observers focus their attention on conditions in tier 1 cities. Data from China Index Academy shows an increasing number of cities in these lower tiers are reporting falling prices – but not as significantly as was the

case in the first half of 2012. This will be a key measure to observe in coming months.



Government intervention in the sector

China's Government has been concerned by trends in the property sector for some time, gradually introducing policies to attempt to manage the sector. This has included policies around the size of deposits for first home buyers and investors, restrictions on purchases in some markets and increased construction of low cost social housing. Attempts to control lending to the broader real estate sector drove participants (including developers and investors) towards shadow banking and foreign debt markets – rather than systematically slowing credit demand.

There were surprisingly few signals announced at the National People's Congress in March, albeit Premier Li Keqiang commented that the Government would control residential property markets differently in different cities while taking into account local conditions.

As the default by Zhejiang Xingrun appears to illustrate, government intervention in future cases of default appear unlikely, unless such an incident creates broader economic risks.

China's property development sector is highly fragmented and in need of reform

According to data from the National Bureau of Statistics, there were around 90 000 real estate companies in 2012. This figure is somewhat distorted however, due to the number of firms created to develop individual projects. CBRE estimate that there are only 30 000 'true' developers, a number that is still remarkably high and reflects a highly fragmented sector that would benefit from consolidation.

Funding for the real estate developers has been challenging in recent years, partly in response to Government efforts to cool the sector. In 2007, Chinese authorities ordered banks not to provide loans to property developers for land purchases.

Despite tightening credit requirements, bank loans to real estate developers have continued to grow – rising to RMB 4.6 trillion at the end of 2013. However since 2010, the rate of growth has slowed (down to 15% at the end of 2013).

Loans to developers have grown, but rate has slowed



According to the China Real Estate Association, the average debt ratio for the country's top 500 developers was at its highest level in 2013 in five years. An increasingly difficult market resulted in the ratio of cashflow to debt for these firms falling to -5.7% (compared with +15% in 2012) – indicating the risk of further defaults in coming months.

Foreign bond markets have become a key source of finance for larger property firms. Since the start of 2010, foreign investors have lent real estate firms around US\$48 billion in US dollar denominated bonds and around US\$6 billion in RMB bonds. According to Credit Suisse, around half of the total outstanding debt of six of the largest developers is offshore sourced.

Moody's report that in early 2014 (the period ending 20 March), Chinese developers issued the equivalent of US\$9.2 billion in offshore bonds – compared with US\$5.5 billion in Q4 2013 and US\$25 billion for the full year. This has allowed larger developers (those with the capability to issue offshore bonds) to lock in interest rates, extend debt maturities and raise funds for land purchases.

The recent default of Zhejiang Xingrun should not impact too heavily on larger developers – who have multiple channels of funding, stronger liquidity and geographical diversity – but could increase pressure on smaller competitors (particularly those relying on shadow banking). Further defaults are likely at the smaller end of the sector – with potential opportunities for consolidation – however, this may impact on construction levels, demand for new land and by extension put additional pressure on local government debt.

Concern for local government financing

One of the potential risks associated with a sharp slowing in residential construction could be the impact on local government finances. As outlined in our earlier report on local government debt (China Economic Update February 2014), land sales account for a significant share of revenues – in excess of a third of the total in 2009 (IMF).

Data from China Index Academy for 300 cities showed that land sales exceeded RMB 3.1 trillion in 2013, a record level (with the average cost of land rising by 24%). According to the IMF, receipts from land sales are the main source of repaying local government debt – which has grown rapidly over the past five years – meaning that the capacity of local governments to service debt is related to the performance of real estate markets. This implies a greater level of risk associated with a correction in Chinese property markets than would be the case in other countries. It also highlights the need for reform in the funding relationship between the central and local governments, to provide for more reliable, transparent and predictable income.

The short term outlook for residential property markets

There are some clear risks to China's residential markets – reflecting tighter financial conditions and weaker sentiment – however the uncertainty due to data quality means identifying the true state of the market is extremely challenging.

Some observers expect the residential property market to cool in 2014, rather than collapse. Moody's expect contracted sales growth to slow to 10% this year (compared with 27% in 2013), while Standard & Poor's forecast a 5% increase in average sales prices (down from 7.7% last year).

We believe that there is the potential for a correction in house prices this year – however due to the structure of Chinese mortgages and the comparatively high level of equity in homes, a fall severe enough to trigger the large scale liquidation of properties (the 'bubble bursting') seems unlikely.

That said, weak conditions in the residential property market could have a major impact on construction and demand for land, and therefore impact the revenue generated for local governments. This could lead to increased concerns around local government debt (due to the importance of land sales in servicing government debt) and shadow banking (with the sector a key lender to both governments and developers).

Given the importance of residential investment (as a share of GDP) in recent years, a significant slowing in the sector would also make achieving this year's growth target of 7.5% more challenging (our forecast remains 7.3% in 2014).

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Note: due to the length of this month's note, the typical analysis of China's monthly data release is not included. For this analysis, please see China Briefing, released on 17 April.

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