

# Policy Brief

NUMBER PB14-21 AUGUST 2014

# Is China's Property Market Heading toward Collapse?

Li-Gang Liu

**Li-Gang Liu**, visiting fellow at the Peterson Institute for International Economics, is chief economist for Greater China at the Australia and New Zealand Banking Group in Hong Kong. Previously, he worked for the Hong Kong Monetary Authority, the Asian Development Bank Institute, and the World Bank.

Author's note: I acknowledge Nicholas Borst, Gary Clyde Hufbauer, Ken Kuttner, Adam S. Posen, Ted Truman, Steven R. Weisman, and an anonymous reviewer for their excellent comments, which have helped improved this article substantially. All remaining errors are mine alone.

© Peterson Institute for International Economics. All rights reserved.

China's property market has slowed significantly since the first half of 2014, with sharp declines in sales and a buildup in the inventory of new homes. This sharper than expected downturn-which has affected not only second- and thirdtier smaller cities but also first-tier megacities such as Beijing, Shanghai, Shenzhen, and Guangzhou—contrasts with last year's buoyant sales and double-digit price surge. Compounded by fears of a default in the shadow banking system and the perception of a highly leveraged Chinese economy, the sudden declines in the property sector are being watched closely. Many commentators believe this could be a turning point for the sector, triggering a hard landing of the Chinese economy and even a financial crisis. Over the last decade, China's property sector has become an important pillar for the country's growth as well as the key source for elevated commodity prices. A property market slump would hurt other sectors, as well as drag down resource-rich economies that rely heavily on China to buy their exports.

China's property market has always incited heated debates

and controversies. Without properly understanding the market's history and mechanisms, many analysts often compare today's situation in China with the Japanese property bubble and its subsequent collapse in the early 1990s and the US housing market collapse in 2008, suggesting China is about to experience something of similar proportions.

The fears about China's property market are likely overblown. First, China's private housing market is young. It did not exist until 1998. Over the last 16 years, the property sector has seen large swings in both prices and levels of investment. Cyclical downturns have resulted from macroeconomic conditions, credit restrictions, and the government's attempts to curb either the overheating or overcooling of the sector. This cyclicality is a good thing to the extent that investors tend to

As long as urbanization continues and appropriate policies are adopted, this property market downturn should prove to be merely cyclical.

avoid making one-way bets on either price appreciation or depreciation, and thereby it works to prevent excessive speculation. Largely owing to limited financial innovations, market developments, and punishing taxes, China's property market is still less leveraged than is typical in more developed economies. Developers have lowered their debt-to-asset ratios since 2009, and Chinese buyers must offer down payments of at least 30 percent before they can apply for mortgages.

Second, the government still has ample policy options to avert an outright collapse if the current property market downturn were to become more severe than anticipated. In the short term, it could ease policies it imposed more than four years ago to discourage property purchases for investment purposes. Indeed, at the time of this writing, some 30 Chinese cities have started to ease these property curb policies, which were designed

percent 120 Tier-1 cities 100 Tier-2 cities Tier-3 cities 80 60 40 20 0 -20 -40 -60 June 2011 2012 2013 2014

**Figure 1** New home sales by city size, June 2011–June 2014 (three-month moving average, year over year)

Sources: CEIC Data; E-House China R&D Institute, Housing Inventory Report (May 12, 2014).

to prevent excessive speculation. In addition, the government could also liberalize its urban household registration system, or *hukou*, to allow migrants to purchase houses and thereby encourage them to settle in their cities permanently.

In the medium term, the government can take a number of other steps, such as reintroducing an urban public housing program in large cities, funded by a property tax, to address income inequality and encourage an increase in rental properties. To reduce banking sector risk, the government could encourage banks to issue covered bonds to reduce the risk of maturity mismatch of their mortgage assets. Furthermore, diversifying property developers' sources for finance through real estate investment trusts, or REITs, would also reduce their reliance on bank financing. China should also improve its data collection to take into account the quality, location, and other important features of property transactions.

More important, demand for urban properties is expected to remain high over the next decade. It is estimated that another 200 million people could join China's urban areas by 2023. In this sense, China's property market bears no resemblance to Japan in the early 1990s or the United States in 2008. As long as urbanization continues and appropriate policies are adopted, this property market downturn should prove to be merely

cyclical, and a major correction is unlikely to take place. That said, the government should use the opportunity of this downturn to accelerate necessary institutional changes and steer the property market back to a steadier path for the long run.

This Policy Brief will provide history and context for the Chinese property market, outline the factors contributing to the current situation, and detail policy options and reforms needed for China to return its property to a balanced and sustainable path.

#### THE EVIDENCE OF A PROPERTY SLOWDOWN

New home sales for all tiers of Chinese cities dropped sharply in the first half of 2014, and the inventory of unsold new private homes has risen significantly since Q4 2013, totaling about 544 million square meters in June 2014, or about 42 percent of the total 2013 property sales (figures 1 and 2). Using average sales in the past six months as a gauge, it will take up to 14 months to sell off existing inventory in the first-tier cities, 16 months in second-tier cities, and 24 months in third-tier cities. In some extreme cases, it will take 42.5, 32.5, and 32 months for cities such as Wenzhou, Maoming, and Dandong to offload existing inventory.

Even for China's first-tier cities such as Beijing, Shanghai,

months of inventory 45 First tier 40 Second tier Third tier 35 30 25 20 15 10 5 \$ 63 69 89 85 F illiand Beingi

Figure 2 Unsold new home inventories in May 2014

Sources: CEIC Data; E-House China R&D Institute, Housing Inventory Report (May 12, 2014).

Shenzhen, and Guangzhou, the property market has slowed substantially. The Centaline secondary market home index, a Hong Kong–based, privately run index that is largely driven by housing prices, has trended down on a year-on-year basis since the beginning of 2014 (figure 3). Notably, Beijing's secondary home price has started to increase at a much slower pace since early 2013. Oversupply of properties last year, together with commercial banks' unwillingness to extend discounted mortgage rates to first-time home buyers—a state policy to encourage homeownership—appears to have contributed to the current slowdown.

The property market has become an important engine for China's growth over the last decade. On average, property investment accounted for 20 percent of China's fixed asset investment (FAI) from 2004 to 2013, and residential property investment was about 14.1 percent of total FAI. In 2013, residential property investment alone directly contributed 0.8 percentage points to growth in 2013. However, the indirect impact of a property market slowdown on growth could be much larger, extending to a large industrial chain ranging from steel, construction materials and equipment, white goods, furniture, banking, and property-related services. Other than the market's importance to the real economy, a major price adjustment could also

trigger a widespread failure in trust products, a form of shadow banking activities, leading to significant financial distress, if not a crisis, in China. In addition, a slowdown in China's property sector would have a negative repercussion on commodity prices, as well as macroeconomic conditions in countries with large commodity exports to China.

Because of its importance to China as well as to the rest of the world, these alarming housing market indicators in early 2014 may indicate a more severe adjustment ahead for the property market after more than a decade of boom. Adding to the fear of shadow banking defaults and the opaque funding relationship between property developers and China's shadow banking sector, some market analysts have already referred to this period as the "end of China's property boom," if not a collapse.<sup>2</sup>

## A BRIEF HISTORY OF CHINA'S POST-REFORM RESIDENTIAL PROPERTY MARKET

### China's private property market is still an emerging one.

Although China allowed private home ownership in the early 1980s, soon after the 1978 economic opening and reform, widespread private home ownership did not take place until 1998, when the State Council decided to phase out the old state-run housing distribution system (see table 1). Thus the

<sup>1.</sup> The criteria for classifying cities in the first, second, third, or even fourth tiers are mainly based on population size and GDP. Most provincial capitals are in the second tier, and third- and fourth-tier ones refer to prefecture-level and county-level cities, respectively.

<sup>2.</sup> George Magnus, "End of China's property boom has barely begun," *Financial Times*, July 8, 2014, p. 22.

percent 70 Shanghai 60 Beijing ······ Shenzhen ······ Guangzhou 50 40 30 20 10 0 -10 -20 2010 2011 2012 2013 2014

Figure 3 Secondary home price index, 2010–14

Sources: Centaline, Wind Information Co., Ltd (WIND), http://www.wind.com.cn/En/Default.aspx.WIND.

existence of a privately owned, residential property market has a short history, even in post-reform China.

Not surprisingly, China's mortgage finance industry did not exist until 1999. Mortgages outstanding are currently at slightly more than RMB10 trillion (USD1.6 trillion). Although this amount is growing fast, it remains a small portion of total bank loans, at around 14 percent in 2013. Given that China's property market is still young, with limited institutional underpinnings and an inadequate regulatory framework, overshooting and irrational investment choices should be expected. Both the central and local governments are on a steep learning curve regarding how they can effectively regulate the property market. Abrupt policy announcements are common and policy uncertainty is expected. As a result, housing prices are not only responding to economic fundamentals but also to property curb policies.

# STYLIZED FACTS AND FAVORABLE LONG-TERM FUNDAMENTALS

Returns on property investment have been attractive and relatively stable. Over the past decade, real estate investment has outperformed the stock market and bank deposits, providing a compounded rate of return of 10.1 percent a year (figure 4). Moreover, returns on property investments have been relatively stable compared with returns from the stock market. Because of

the limited investment options available in the less-developed Chinese financial system, Chinese residents prefer to invest their growing personal wealth in property.

In general, China's property investment closely tracks the business cycle. As with the markets of developed economies, trends in China's property market mirror macroeconomic movements (figure 5). What differentiates China from mature economies is that there is still room for China's per capita income to grow, its population density is much higher, and its urban population remains relatively small by the standards of member countries in the Organization of Economic Cooperation and Development. As long as China keeps growing, property values should continue to appreciate.

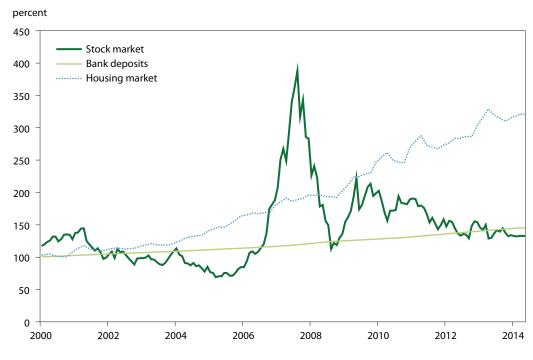
At an aggregate level, demand for property has outstripped supply over the last 10 years. Before 2005, China's housing floor space completed was usually greater than the floor space sold (figure 6). This suggests that unsold housing inventory was substantial, averaging 70.8 million square meters per year from 1995 to 2004. This condition reversed after 2005, with housing space sold substantially outpacing floor space completed each year except 2009. That is, demand has outstripped supply by 144.6 million square meters per year in the face of rapid urbanization, which has driven prices higher. While the latest data may reveal a temporary oversupply, overall, inventory

Table 1 Milestones in China's policies on the property market, 1990–2007

Date	Milestone Policies
1990	State Council Decree 55 stipulates the transfer of state-owned land-use rights, symbolizing the start of real estate market.
1992	Public housing sales in major cities start.
	Establishment and implementation of housing provident fund.
1994	Ministry of Construction issues regulations on presale of commodity housing.
1998	Abolishment of the state-allocated housing policy.
	Mortgage lending starts.
2001	Ministry of Construction issues regulations on sales of commodity housing.
2002	Issuance of rules regarding the granting of state-owned land use rights by way of tender, auction, and listing-for-sale.
2003	People's Bank of China Circular 121 applies more stringent administration on lending to real estate industry.
2005	State Council issues eight directives to stabilize housing prices. Detailed policies by seven ministries follow.
2006	State Council issues six directives on healthy development of real estate market. Detailed rules follow.
	Ministry of Construction and other ministries issue regulations on foreign investor speculation.
2007	Property Law enacted.

Source: Various announcements from the Central People's Government of the People's Republic of China (http://english.gov.cn/).

Figure 4 Investment return comparison in China, 2000–14

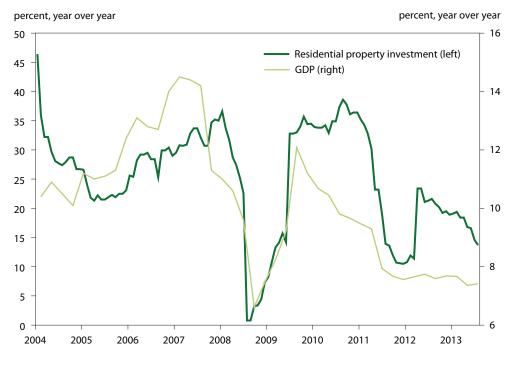


Source: CEIC Data.

does not appear to be a major issue. Rather, China's property developers, which are mostly privately owned, appear to have become skilful at managing market risk, and they have based supply decisions on market conditions, so that excess supply is no longer a concern.

It is important to differentiate empty apartments from unsold apartments. In many new residential developments, there are many vacant apartments, but this does not mean the units have not sold. China has a saving ratio of 50 percent of GDP; many residents treat property as a store of value. At the

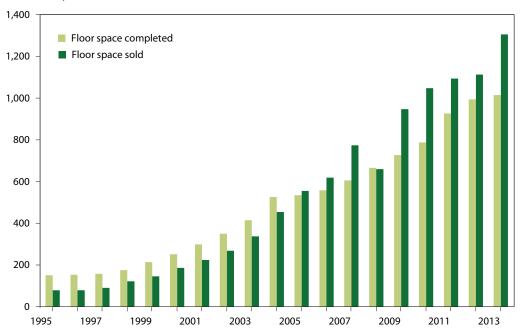
Figure 5 China's real estate investment and GDP growth, 2004–13



Source: CEIC Data.

Figure 6 Floor space completed versus sold in China, 1995–2013

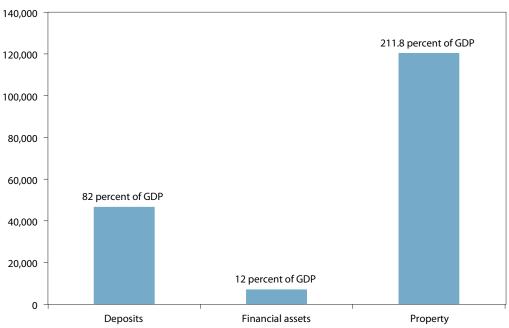
millions of square meters



Source: CEIC Data.

Figure 7 Chinese household assets in 2013

billions of renminbi



Sources: CEIC Data; author's calculations.

same time, there are limited carrying costs for leaving properties vacant. Many residents prefer to hold their investments, simply waiting for price appreciation rather than renting out, so that unfurbished properties may remain vacant for years. Finally, one special feature about China's residential property market is that many new apartments are sold with no interior renovation. Buyers have to spend more to renovate, so it often takes a couple of years to turn an investment flat into a liveable apartment.

Chinese households' average leverage ratio remains low. Since the privatization of the property market, real estate has become the largest asset class for Chinese urban residents (figure 7). It is estimated that the value of total urban real estate assets is 5 times the size of the equity market and 16.9 times the equity market assets held by households. However, China's urban housing stock is only 2.6 times the value of household bank deposits. In other words, China's households on average carry little debt.

Available data on mortgages corroborate this assessment. At present, total mortgages outstanding are about 14 percent of total loans and about 21 percent of household deposits (figure 8). Furthermore, China's mortgage quality has been good, with the lowest default rate among all types of loans. Meanwhile, property buyers must make down payments of at least 30 percent before qualifying for a mortgage. Because there is no mortgage insurance, applicants must pay this amount in full.

Banks are therefore well cushioned from the effects of large property market corrections.

Though property prices in China's largest cities have risen sharply, they are not that expensive from a global perspective. Available data suggest that the average property price in high-end city centers in Shanghai is about 33 percent of that in Hong Kong, 40 percent of that in Singapore, and 60 percent of that in Mumbai and Tokyo (table 2). The rental yield in Shanghai (2.66 percent) is not unjustified if compared with those in Hong Kong (3.0 percent), Singapore (2.41 percent), and Taipei (1.57 percent).

While property prices in China's first-tier cities have been rapidly approaching the average prices of other major Asian cities, China's urban residential property prices are on average not even close. For example, China's average urban property price was estimated at RMB5,850 per square meter by the National Bureau of Statistics in 2013, yielding a national price-to-income ratio of 6.1, falling comfortably within an international norm of between 6 and 8.

**Urbanization will accelerate further.** China's urbanization is a major driver for both the property market and China's economic growth. The shift from rural to urban areas will continue to be phenomenal over the next 10 years. The Development Research Center, affiliated with the State Council, estimates that urban

billions of renminbi percent 12,000 16 Housing mortgage loans (left) As percent of total loans (right) 15 10,000 14 8,000 13 6,000 12 11 4,000 10 2,000 9 0 8 2005 2010 2011 2012 2006 2007 2008 2009 2013 2014

Figure 8 China's housing mortgage loans, 2005–14

Sources: CEIC Data; author's calculations.

areas will add 200 million more by 2023—twice the number that have migrated to cities since 1990 (table 3). This next wave of migration will lead to an urban population of 920 million against a projected total of 1.4 billion, or an urbanization ratio of 65.7 percent (Xu 2014).

There were already 730 million people living in China's cities in 2013, with an urbanization ratio reaching 54.5 percent. However, if one only counts urban dwellers who have *hukou*—an urban household registration card—and thus can have access to urban public services such as public schools and hospitals, the true urbanization ratio is very low, only 35 percent. This economic segregation policy is about to be liberalized in China's second- and third-tier cities, according to the Third Plenum reform agenda of the 18th Party Congress. This reform will create substantial demand for urban housing.

Urbanization will also have major implications for China's infrastructure investment. The National Development and Reform Commission (NDRC) in 2013 estimated that China will need to spend at least RMB40 trillion to facilitate the expected pace of urbanization over the next two decades. Improving public transportation and infrastructure will benefit the urban property market. Given the limited areas available for expansion, urban density will have to increase. Indeed, past experience has shown that there is a strong positive correlation between property prices and the urbanization ratio. China's

accelerating urbanization will certainly support a robust property market.

The NDRC analysis suggests that China's residential property investment growth will peak much earlier than urbanization. China's property investment growth will turn negative after 2018, while its urban population will continue to rise through 2023, suggesting that China has built a substantial amount of residential housing over the past five years.

# BUT THE RISKS IN THE PROPERTY MARKET ARE RAPIDLY RISING

Despite some favorable fundamental factors, parts of China's property market do show signs of a bubble. Since 2008, China's property prices have risen 64 percent, outpacing most of its Asian peers (figure 9). At the national level, residential property prices have increased at about the same pace compared with urban household per capita income, which increased by 70.8 percent for the same period. Nevertheless, the gains in property prices have been rapid, fueling concerns of market sustainability. In the largest cities, property prices rose by a weighted average of 75 percent, much faster than the average per capita income growth of 65 percent during the same period.

In addition, China's housing price index may underestimate real price conditions. Many methodological issues, such

Table 2 Property prices in the world's most expensive cities, 2014

		<b>Buying price</b> (dollars per	
	Country, City	square meter)	Gross rental yield
1	Monaco	53,026	1.90
2	United Kingdom, London	32,745	2.09
3	Hong Kong, Hong Kong Island	20,660	3.00
4	Singapore	17,709	2.41
5	Russia, Moscow	16,509	3.80
6	United States, New York	15,284	4.29
7	Switzerland, Geneva	15,265	3.10
8	France, Paris	15,161	3.63
9	India, Mumbai	11,604	2.39
10	Japan, Tokyo	11,466	5.53
11	Israel, Tel Aviv	9,511	3.45
12	Sweden, Stockholm	9,439	n/a
13	Finland, Helsinki	9,161	3.62
14	Italy, Rome	8,355	3.84
15	Canada, Toronto	8,288	3.68
16	Luxembourg	7,654	3.85
17	Australia, Sydney	7,626	4.55
18	Taiwan, Taipei	7,112	1.57
19	Bermuda	7,056	4.76
20	China, Shanghai	6,932	2.66

Source: Global Property Guide, http://www.globalpropertyguide.com/most-expensive-cities.

as how to treat repeated property sales and how to make adjustments for quality and location effects, are not well addressed statistically. Thus it is prudent for the authorities to play close attention to rapidly rising prices.

Meanwhile, the rental yield continues to fall. China's rental yield is an average of 2.66 percent (figure 10). Cross-country comparisons show that though the yield in China is higher than that in Taiwan and Singapore, it is much lower than that in most Southeast Asian economies and Japan. Compared with the average mortgage rate—at around 6 to 7 percent now—property investors are suffering a negative carry, though they have gained in price appreciation.

Affordability has deteriorated in major cities. The housing price to income ratio is a good proxy for measuring housing market affordability (figure 11). While the affordability ratio at the national level remains reasonable, the price to income ratio in cities such as Beijing, Shanghai, Guangzhou, and Shenzhen has deteriorated markedly in recently years, suggesting that property prices in these cities have already exceeded the fair value warranted at current levels of per capita income.

China's overall property market data masks regional variations, with certain second- or third-tier cities in the central and western regions showing signs of significant oversupply. Cities such as Kunming and Changsha experienced property investment growth of more than 20 percent but population growth of less than 3 percent over the last 10 years (figure 12). In the current property market slowdown, property prices in these cities could experience significant downward adjustment absent policy changes to phase out property curb and *hukou* restrictions. However, cities with either more modest investment or population growth or both should be able to weather the slowdown reasonably well. In fact, cities with investment growth below 20 percent and population growth above 3 percent will continue to face rising price pressures.

#### Reliance on shadow banking finance increases liquidity risk.

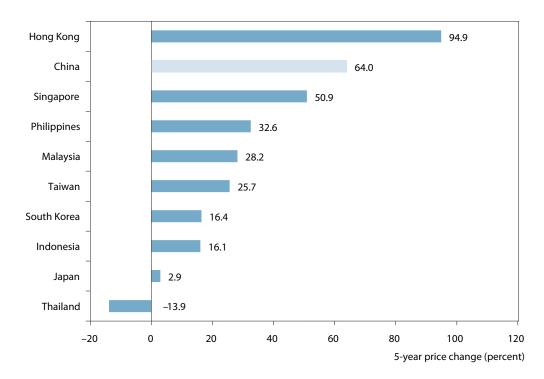
Funding for China's property sector has not changed much over the last several years; stable funding from bank mortgage payments and down payments from home buyers provide close to 30 percent of total funding. Meanwhile, self-raised funds remain sizable, at around 39 percent (figure 13). Using a back-of-envelope calculation, China's trust companies—an

Table 3 China's urban residential housing, 2010-23

Year	Urban residential housing per capita (square meters)	Urban population (millions)	Total urban housing stock (billions of square meters)	Housing completion (millions of square meters)	Residential property investment growth (percent)
2010	26.7	670	17.9	870	32.8
2011	27.2	690	18.8	970	30.3
2012	27.6	710	19.7	1,020	11.4
2013	28.1	730	20.6	1,020	19.4
2014	28.7	750	21.6	1,180	9.9
2015	29.3	770	22.7	1,260	6.5
2016	30.0	790	23.8	1,270	1.8
2017	30.6	810	24.9	1,310	1.7
2018	31.3	830	26.0	1,340	0.8
2019	31.9	850	27.1	1,380	-0.8
2020	32.5	870	28.2	1,370	-1.7
2021	33.1	880	29.3	1,330	-1.7
2022	33.7	900	30.3	1,330	-1.8
2023	34.2	920	31.3	1,310	-1.8

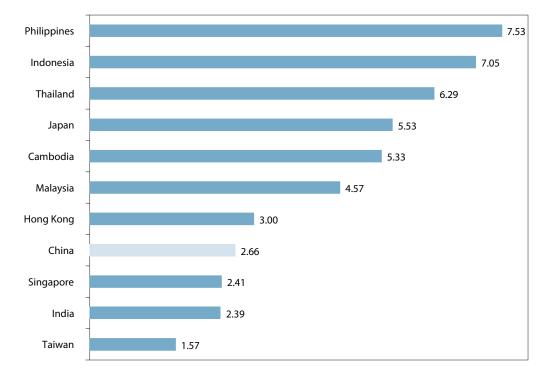
Sources: Development Research Centre of the State Council (2014); CEIC Data.

Figure 9 Property price changes in Asian countries, 2010–14



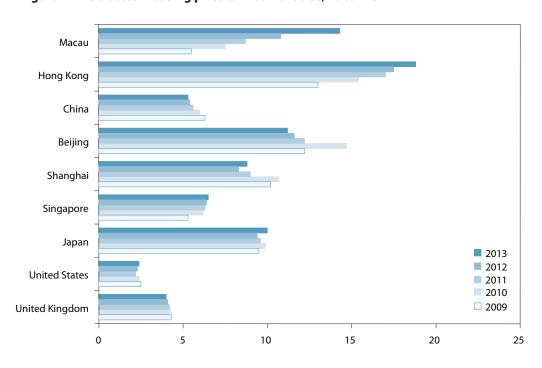
Sources: Global Property Guide, http://www.globalpropertyguide.com/Asia/price-change-5-years; author's calculations.

Figure 10 Rental yields across Asia, 2014



Source: Global Property Guide, http://www.globalpropertyguide.com/Asia/rent-yields.

Figure 11 Selected housing price to income ratios, 2009–13



Source: IMF (2014).

percent real estate investment growth, 10-year average Overinvested Shijiazhuang 35 ▲ Hohhot Guiyang Zhenazhou Changsha Xi'an 30

Figure 12 Real estate investment growth and population growth

**Fast-growing** Taiyuan Yinchuan Xining Haiko Qingdao 25 Nanchang Chongqing **♦** Xiamen Tianjin Nanjin 20 Kunming 15 Guangzhou Beijing 10 Shanghai 5 Shenzhen Slow-growing Underinvested

3.0

4.0

Sources: CEIC Data; author's calculations.

1 0

2.0

0 Λ

important segment of the shadow banking sector that has total assets of close to RMB12 trillion—lend about RMB2.4 trillion to the property sector. As self-raised funds in 2013 amounted to about RMB5 trillion, Chinese developers depended on trust companies for about 40 percent of their self-raised funds. A sluggish property market with rising inventories could lead to payment difficulties for weak developers, causing financial stress in China's trust companies as well. Indeed, a real estate market collapse could trigger widespread failure in China's already fragile trust company sector.

### IS CHINA BOUND FOR A MAJOR PROPERTY MARKET DOWNTURN?

Despite the indicators that appear to point toward a significant slowdown, it is for several reasons premature to predict a major housing market downturn.

First, policies to curb property demand remain in effect in 46 of the 70 cities for which the National Bureau of Statistics releases property prices on a monthly basis. Thus existing market prices do not truly reflect real demand conditions in those cities, including almost all of the first- and second-tier cities. Indeed, certain capital cities in the central or western provinces should never have imposed controls in the first place, as their housing prices remain low and affordable. For those cities, it could be a particularly good time to phase out an indiscriminate policy that has lasted for more than four years.

5.0 percent population growth, 10-year average

Given that the demand for housing in those 46 cities has been rationed, pent-up demand could exist that would support a healthy property market once local governments are allowed to relax the property curb policy progressively. A downward adjustment in prices, together with some relaxation of property curbs, will draw potential buyers into the market again.

Certainly, market dynamics vary significantly from city to city. Housing prices will likely remain generally stable in the first-tier cities and most of the second-tier cities, where the unsold new house inventories equal 12 to 15 months of sales due to weak first-quarter sales. If sales rebound to the historical average, current inventories could be run down much faster. For cities that have built up significant surplus properties, the most effective policy could be an aggressive liberalization of their hukou system.

Second, China's residential property market has always been cyclical, affected by macroeconomic conditions, property curb policies, and credit restrictions. China's property market has experienced two clear, complete cycles and one partial cycle: from 2007 to mid-2009, from mid-2009 to mid-2012, and an ongoing cycle starting from mid-2012 (figure 14). The current cycle peaked at the end of last year, and

19.2%

11.5%

Domestic loans, 16.1%

Mortgage, 11.5%

Advance payment, 28.2%

Self-raised: trust, 19.7%

Self-raised: other, 19.2%

Other, 5.3%

Figure 13 Real estate investment sources of funds, 2013

Sources: CEIC Data; author's calculations.

the price has started to move downward. There is no need to become overly worried. Like stock prices, price corrections after a sharp price increase are inevitable and necessary.

The recent slowdown in property investment coincides with an overall slowing of fixed asset investment and reflects the government's intention to rebalance the economy. From this perspective, the slowdown of housing investment is not particularly caused by a lack of confidence and stands in contrast to the recent global financial crisis, when the demand for housing crashed suddenly. As investment falls, the future supply of properties will also decline, thus supporting prices (figure 15).

Third, China's housing supply reacts to demand conditions quickly and proactively. With sales slowing, newly started construction fell sharply in the first quarter of 2014 (figure 16). Developers also slowed the pace of land purchase and now hold very low land reserves (figure 17). All these data reinforce a view that China's property market has become accustomed to cyclical adjustments.

Finally, the latest balance-sheet data show that China's largest listed developers can withstand this slowdown. Consequently, developers are unlikely to cut prices sharply to liquidate unsold housing stock, thus limiting the magnitude of price decline. Chinese developers still enjoy a large profit margin, probably the highest among listed companies

(table 4). Thus there is still room to cut prices in order to offload inventory overhang. In addition, based on a different data base on Mainland China-listed property companies published by the Wind Information Company, the debt-to-asset ratio for property developers listed in China has declined sharply in the past few years and fell to about 50 percent compared with 90 percent in early 2009, reflecting an improved financial health. The debt appears to include both external debt and borrowing from trust companies. Significant merger and acquisitions could occur as some small developers could fail to pull through this tough period. The concentration ratio of China's real estate sector has increased significantly in the past few years. Specifically, the top 10 companies took up 13.3 percent of market share in 2013, compared with 10.7 percent in 2011 (table 5). Meanwhile, the market share of the top 50 developers increased by 4.6 percentage points in three years to reach 25.4 percent in 2013.3

<sup>3.</sup> While on May 21, 2014, Moody's revised its outlook for China's property sector to negative, citing sales slowdown, high inventory, and weaker liquidity, it did not predict a widespread default either.

Figure 14 Property price index, 2005–14

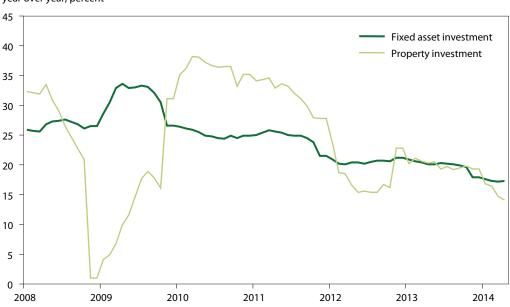
year over year, percent



Sources: CEIC Data; Liu and Zhou (2014).

Figure 15 Fixed asset investment and property investment, 2008–14

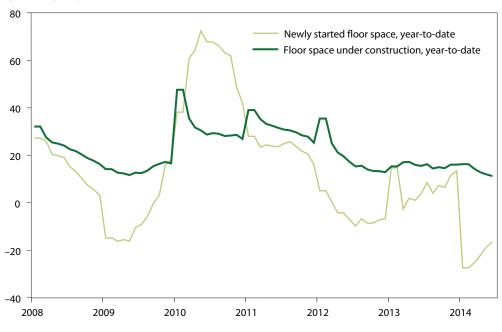
year over year, percent



Source: CEIC Data.

Figure 16 Floor space started and under construction, 2008–14

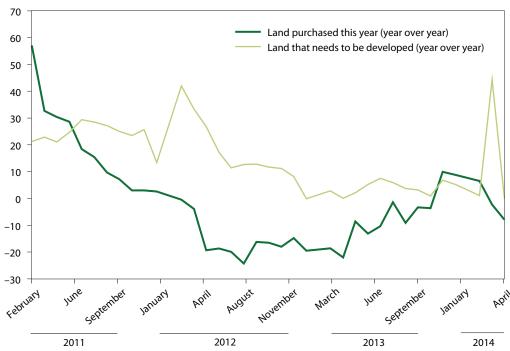
year over year, percent



Source: CEIC Data.

Figure 17 Land purchases, February 2011–April 2014

percent, year over year



Source: CEIC Data.

Table 4 Capitalization and gross profit margin of top 10
Chinese real estate companies listed in Hong Kong
in 2013

Top 10 Companies	Market capitalization (millions of Hong Kong dollars)	Gross profit margin (percent)
China Overseas Land & Invest	178,163	32.5
China Resources Land Ltd.	112,065	28.2
China Vanke Co. Ltd H	104,036	25.1
Country Garden Holdings Co.	67,427	30.3
Longfor Properties	46,043	27.8
Evergrande Real Estate Group	37,075	29.5
Shanghai Industrial Hldg. Ltd.	30,696	29.2
Sino-Ocean Land Holdings	28,932	24.3
Guangzhou R&F Properties - H	28,523	39.2
Soho China Ltd.	27,536	55.5
Weighted average gross margin		
Rest of HK-listed Chinese developers (n=51)	349,208	36.5
Top 10's share of market capitalize	zation	
Total	1,009,704	65.4

Note: The sample consists of 61 listed companies in Hong Kong under the real estate industry group. The figures are based on the latest available historical data.

Sources: Bloomberg, and author's calculations.

Table 5 Concentration ratio of real estate sector, 2011–13

2013	2012	2011
13.3	12.8	10.7
18.3	17.6	14.9
25.4	24.6	20.8
	13.3	13.3 12.8 18.3 17.6

Source: Wind Information Co., Ltd (WIND), http://www.wind.com.cn/En/Default.aspx.WIND.

## POLICY OPTIONS TO CONTAIN A MAJOR PROPERTY MARKET DOWNTURN

If the current property market downturn were to turn out to be a major correction that endangers China's macroeconomic stability, policymakers have effective policy options to head off a crisis.

In the short term, the government could phase out its property curb policies.<sup>4</sup> The State Council announced 11 measures to curb property prices, and it tightened mortgages on second homes on January 10, 2010 (table 6). This initiated a

series of property curb policies that did not end until February 20, 2013. There used to be 46 cities with a home purchase restriction policy—that is, if a household with local *hukou* already had two to three apartments, it could not buy another apartment. Meanwhile, migrants without *hukou* cannot enter the market at all. This policy has effectively rationed investment demand for housing. Given the policy was implemented almost uniformly and without carefully considering local economic conditions, stage of economic development, and location effect, the time is ripe to phase out such policies. Many have. Indeed, the capital city of Inner Mongolia, Hohhot, was the first to remove the property curb policy, and some 30 more cities have followed suit. Releasing demand for property investment could draw potential buyers into the market again, which could in turn help reduce the inventory overhang.

Liberalizing the *hukou* policy to include migrant workers will create significant new and noninvestment demand for urban housing. Depending on whether migrants already living in urban areas but not able to access public services are counted, China's true urbanization ratio could be overestimated by as much as 19 percent. The Third Plenum clearly stated that China's non-

<sup>4.</sup> Thirty Chinese cities have announced either officially or unofficially that their property curb policies have been removed at the time of this writing.

<sup>5.</sup> Beijing restricts second-home purchases. In Shanghai, the minimum down payment for second-home mortgages is 60 percent, and the mortgage rate for second homes is 1.1 times the benchmark rate.

Table 6 Key property curb policies in China since 2010

January 10, 2010	The State Council announced 11 measures to curb property prices, tightening second-home mortgage loans. Minimum mortgage
	down payments were set at 40 percent for second homes.
January 21, 2010	Ministry of Land and Resources (MLR) required more land to be used for affordable housing.
March 10, 2010	MLR issued new regulations to strengthen land supply and supervision in the real estate market, with more stringent requirements on developers.
March 23, 2010	The State-owned Assets Supervision and Administration Commission of the State Council (SASAC) ordered 78 SOEs, whose main businesses were not real estate, to accelerate restructuring and exit from the real estate business.
April 2, 2010	The Ministry of Finance tightened housing deed tax rules.
April 15, 2010	The State Council raised second-home minimum mortgage down payments to 50 percent.
April 15, 2010	MLR announced the 2010 land supply plan. Residential land supply was to increase significantly, with more land to be used for small and medium-sized residential housing.
April 18, 2010	The State Council suspended commercial bank mortgage loans to third-home buyers in areas where prices were too high or rising too fast.
April 30, 2010	Beijing became the first city to restrict second-home purchases. This presaged other housing purchase restrictions in China.
January 26, 2011	Second-home minimum down payments were raised to 60 percent from 50 percent. Local governments were required to establish a property price target for 2011. Seventy percent of the new land supply was to be allocated to affordable housing and small and medium-sized housing.
January 28, 2011	Shanghai and Chongqing kicked off property tax trials for second-home owners, with heavier tax rates for high-end, newly purchased second homes.
February 21, 2011	Local media reported that the Ministry of Housing and Urban-Rural Development (MOHURD) started setting targets and delegating the responsibility for local governments to achieve affordable housing targets.
February 30, 2013	In a State Council meeting chaired by then Premier Wen Jiabao, new measures were announced to rein in property prices. Local governments were to be responsible for the stability of the property market. Existing housing purchase limits were continued. The State Council also vowed to ensure that housing land supply in 2013 would be higher than the average over the preceding five years. It also set a target of completing 4.7million units of affordable housing while starting 6.3 million more. These were the first and only major property measures issued since the Party leadership transition.

Sources: Xinhua News Agency (various years; http://www.xinhuanet.com/english/home.htm) and various government websites can be access through the Central People's Government of the People's Republic of China (http://english.gov.cn/).

first-tier cities will have to engage in fast *hukou* reform to facilitate urbanization quickly. As a result, China's cities will have to invest more in public services to satisfy the needs of all its urban dwellers. China's State Council announced "Opinions on Accelerating Hukou Reform" on July 30, 2014, with an aim to establish a unified *hukou* registration system to replace the current system, which differentiates urban *hukou* from the rural one.

At this stage, China has some 170 million migrant workers waiting to receive *hukou* in the cities, according to the National Bureau of Statistics. In many third- and fourth-tier cities without property curb policies, owning property offers a fast track to gaining a *hukou*. It is estimated that another 100 million migrants are residing in their villages or townships but no longer work in agriculture. These migrants' potential demand for houses, either owning or renting, remains huge if they can find jobs in nearby cities where they can also gain equal access to public services.

In the medium term, the government could address income inequality arising from high urban property prices in large cities, risk concentration in the banking system, and risk mitigation on property development financing.

To make housing affordable for low and middle-income families, China will need to reintroduce an urban public housing program in large cities. While China's private property market has flourished since 1998, low-income households and recent university graduates have been left out of the market, increasing social tensions. Given the market's failure to address the housing needs of low-income and young households, governments at both the central and local levels have begun to intervene by providing affordable housing.

Progress remains patchy due to fiscal limitations. The 2008 fiscal stimulus package nonetheless earmarked RMB280 billion for the construction of affordable housing targeted at low-income households. In the 12th five-year plan, the state announced its intention to build 36 million units of public housing. In China's large cities, the public housing models adopted by Hong Kong and Singapore could be the examples to emulate. The public housing program in large cities will help segment the urban housing market, leaving those able to pay in the private housing market. This policy will not only reduce demand for private housing but also help reduce default risks in the private housing market.

A property tax could help address local government revenue constraints, and increasing the carrying cost on vacant properties could increase the availability of rental properties and enhance the efficient use of capital. China has started to experiment with property taxes in Shanghai and Chongqing. Widespread adoption will require setting up a nationwide property database, which will take some time. To be sure, a tax

# Liberalizing the hukou policy to include migrant workers will create significant new and noninvestment demand for urban housing.

is not the most efficient policy tool, but it could help contain property speculation, especially by people who own multiple properties. A portion of the revenue collected could be used to fund public housing programs for low-income families. In the last decade, China's local governments have used land sales as a form of ad hoc revenue to fund infrastructure investment and supplement their typically narrow tax base. With taxation, there could also be eventual representation in China's local political processes.

Allowing banks to issue covered bonds could help address the maturity mismatch of the banks' mortgage portfolios and reduce the potential shock of a major correction of the property market. China's banks still hold all mortgage loans on their balance sheets, which is a significant charge to their capital base. The growing mortgage financing business also risks exacerbating the intrinsic maturity mismatch problem facing the banking system, as the term structure of bank deposits is usually shorter than that of mortgage loans. Thus the banking system is vulnerable to the boom and bust cycles of the housing market.

Chinese banks could mitigate such a potential risk by either issuing covered bonds, as most banks in Europe do, or securitizing mortgage portfolios, as US banks do. In both cases, loans are pooled into a fund by credit institutions to create a new security. In the case of a covered mortgage bond, the new security issued is guaranteed not only by the collateral associated with the underlying loans but also by the issuer's creditworthiness. Therefore, banks will make sure good assets are packaged into the new security. Covered bonds have been used in Europe for a long time and still represent an important segment of its capital markets and a relevant mortgage funding source.

In the United States, the majority of mortgages are funded through mortgage-backed securities (MBS). A pool of loans is

then transferred to a special-purpose vehicle so that these assets can be sold off the institution's balance sheet, thus removing the capital charge associated with them. The US government also facilitated the development of the MBS markets by establishing Fannie Mae and Freddie Mac, which buy mortgage loans from banks and then securitize them. However, if banks or other mortgage originators do not exercise due diligence, the MBS market could experience serious problems. The US subprime mortgage crisis is a case in point.

The covered bond approach is likely more suitable for China, given the greater similarity of its legal structure to that of the European countries and given that banks are required to ensure that good loans are packaged. Such an approach would mitigate the risk of maturity mismatch from housing finance.

China could also diversify the financing sources of property developers by allowing the establishment of a REIT market, which reduces reliance on the banking system. Real estate investment trusts, similar to mutual funds that invest in stocks, are collective investment vehicles formed to invest in real estate properties. From the real estate developers' perspective, a REIT can help unlock capital tied in real estate they own and redeploy it to other high-yielding businesses. A REIT can also move real estate assets off the balance sheet and help create liquidity.

The first REIT was set up in the United States in 1960. Since then, many Asian economies have adopted REITs. For example, Hong Kong adopted the first REIT in 2005. China's State Council, in one of its regulatory reform documents of December 2008, gave the green light for a trial REIT. The People's Bank of China (PBC) and the China Banking Regulatory Commission (CBRC) are formulating rules to govern REITs. However, there is no timeline for the new regulatory guidelines to be announced. By reducing developers' reliance on bank financing, this financing instrument can alleviate the risk to the banking system as a whole and help promote the healthy development of China's property market.

China could improve data collection to enhance the transparency of the property market. Further efforts could be made to collect, publish, and disseminate property data. Enhanced data collection will facilitate better calculation of more informative and reliable property price indexes, which at this stage do not consider factors such as quality, location, and repeated transactions. Good data would also facilitate implementation of a property tax and allow accurate calculation of relative returns.

In summary, China's property market is experiencing another cyclical turn. The authorities still have many policy instruments at their disposal to avoid a major market downturn or collapse. In the short run, the government could simply

phase out property curb policies imposed on some 46 large cities in China and accelerate *hukou* reform. In the medium term, the government could reintroduce a public housing scheme to take care of low-income household needs. The public housing program could be funded partially by levying a property tax. Meanwhile, the maturity mismatch of the mortgage portfolio in the banking system could also be better managed by allowing banks to issue covered bonds. The authorities could encourage the development of REITs to diversify funding sources of developers. This financial instrument will not only reduce the banking industry's exposure to the real estate market but also

reduce funding costs for developers to ensure adequate supply of both commercial and residential properties.

Therefore, it is premature to compare the Chinese property market now with the Japanese property bubble collapse in the early 1990s or the US housing market collapse in 2008. China's continuing urbanization, available policy options, and the stage of its property market development all suggest that China's property market is experiencing simply another cyclical adjustment. Indeed, the current slowdown could catalyze the phaseout of outdated and irrelevant policies and accelerate necessary institutional developments in China's property market.

#### **REFERENCES**

IMF (International Monetary Fund). 2014. People's Republic of China—Hong Kong Special Administrative Region: 2014 Article IV Consultation—Staff Report; Press Release; and Statement by the Executive Director for the People's Republic of China—Hong Kong Special Administrative Region. Country Report No. 14/132 (May).

Liu, Li-Gang, and Hao Zhou. 2014. "China's Property Market: It Is a Cyclical Slowdown," *ANZ Greater China Weekly Insight* (May 27). ANZ Research, www.anz.com.

Stanley, Thomas, and Robert Ritacca. 2013. China's Urbanization: Funding the Future. *China* 360, issue 14. KPMG, December.

Xu, Wei. 2014. Urban Housing: Annual Demand Is Close to Peak, and Regional Markets Become Divisive. Chapter 2 of *China's 10-Year Growth Outlook (2014–2023): A New Growth Norm Emerging from Reforms*, ed. Shijin Liu (Beijing: CITIC Publishing Group, in Chinese).

This publication has been subjected to a prepublication peer review intended to ensure analytical quality. The views expressed are those of the author. This publication is part of the overall program of the Peterson Institute for International Economics, as endorsed by its Board of Directors, but it does not necessarily reflect the views of individual members of the Board or of the Institute's staff or management. The Institute is a private, nonprofit institution for rigorous, intellectually open, and honest study and discussion of international economic policy. Its purpose is to identify and analyze important issues to making globalization beneficial and sustainable for the people of the United States and the world and then to develop and communicate practical new approaches for dealing with them. The Institute is completely nonpartisan. The Institute's work is funded by a highly diverse group of philanthropic foundations, private corporations, and interested individuals, as well as income on its capital fund. About 35 percent of the Institute resources in our latest fiscal year were provided by contributors from outside the United States. A list of all our financial supporters for the preceding year is posted at http://piie.com/supporters.cfm.