



The Great Chinese Housing Boom

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Housing and land prices in China have increased continuously and dramatically for the past two decades. In fact, housing price growth has significantly outstripped income growth. Current housing prices are roughly 11 times annual income; in large cities such as Beijing and Shanghai the price-to-income ratio is as high as 23 to 1.¹ By comparison, Tokyo house prices were 15 times income and U.S. house prices 5 to 6 times income when the Japanese and U.S. housing bubbles, respectively, burst in 1990 and 2006. Rapid price growth, large price-to-income ratios, and high vacancy rates (between 25 and 30 percent) suggest the possibility of a bubble.²

The top chart compares key facts for the Chinese and U.S. housing booms and the bottom chart compares the recent mortgage debt as a share of gross domestic product for both. While in both cases nominal house prices increased by close to 50 percent over a 5-year period, the differences are striking. The U.S. housing boom reflects overconsumption and overborrowing, whereas the Chinese housing boom reveals large investment in construction and apartment holdings. Most of the “vacant” Chinese homes have been sold to private owners but are being held as investments alongside multiple other homes.

Asset bubbles are typically defined by the relative role of fundamental and speculative demand. Those who argue against a Chinese housing bubble point out that China is currently undergoing “the greatest urbanization story the world has ever seen” (Roach, 2012). Over the past decade, the Chinese urban population increased by over 20 million people (while the rural population decreased by 14 million people). The United Nations forecasts that another 20 million people are likely to migrate to China’s urban centers in the coming decade, which could create demand for roughly 10 million new housing units.³ If these fundamentals hold, China’s housing boom is purely demand driven.

Williams (2013), however, points out that construction growth is well on pace to exceed demand

from migration. High vacancy rates may also suggest “speculative” demand. China’s extraordinarily high household savings rate (about 25 to 30 percent) is well documented, and financial repression and highly underdeveloped financial markets severely limit the supply of quality assets for investment. In combination, these forces encourage demand for housing as a store of wealth (Chen and Wen, 2013). Individuals hold housing as they would gold because they wish to save and housing offers the most attractive return of all available financial assets.⁴ This explains why most of China’s empty apartments are sold properties. Store-of-value demand is speculative in nature because it hinges on the expectation that housing prices



cannot fall or the rate of return to empty apartments can consistently dominate that of cash. But nowhere in the world is this guaranteed—housing prices do fall sometimes, as they did in the United States in 2007. Thus, speculative demand generates bubbles because, more so than fundamental demand, it is fickle and prone to sharp reversals.

Significant store-of-value demand for housing suggests a bubble that could burst, especially when both the household income growth rate and the savings rate start to decline and capital controls in China start to relax.

Given the evidence for significant speculative demand, how should authorities, including monetary policymakers, react? There are generally two views on this question: (i) Intervention is not necessary because the bubble is not highly leveraged and will not significantly impair the financial system. And (ii) the bubble requires appropriate policy action because regardless of financing, it promotes inefficient resource allocation. Mishkin (2009) captures the first view; he argues that responding to “a pure irrational exuberance bubble” (i.e., a bubble that is inflated through investors’ own savings) risks doing more harm than good. Chen and Wen (2013) argue for policies under which housing can maintain its role as a store of value but mitigate related inefficiencies.

Housing is not an ideal store of value. Building houses consumes productive resources, and those who need housing as a basic necessity must compete for its acquisition with those who want it to preserve wealth. Chen and Wen (2013) demonstrate that private investment in fixed capital in China is negatively correlated with housing price growth. In addition, more low-income households are excluded from purchasing homes because their income growth falls behind housing price growth.⁵

In order to alleviate inefficiencies, Chen and Wen (2013) advocate government policies to (i) ensure that the growth rate of home prices equals or is slightly above the rate of return on bank deposits but does not exceed the average growth rate of household income, (ii) provide government-subsidized housing units to low-income households, and (iii) facilitate the development of rental markets so that empty apartments can be used more efficiently. This

approach allows housing to still serve as a store of value (for middle- or upper-middle-income households), but its rate of return is not high enough to distort firms’ investment incentives and low-income families are not pushed out of the home market. Middle-income Chinese households demand a good store of value, and a policy of bursting the bubble would likely generate substantial negative wealth effects and hinder China’s urbanization process.

The Chinese housing boom has generated global attention because of fears that it is not sustainable and its collapse would intensify the current world slump and significantly prolong the worldwide recession. Because of its speculative nature, significant store-of-value demand for housing suggests a bubble that could burst, especially when both the household income growth rate and the savings rate start to decline and capital controls in China start to relax. But how soon and how fast these events will happen—and if, when, and how investors might lose faith in housing as a store of value—are naturally difficult, if not impossible, to predict. ■

Notes

¹ Average annual earnings in 2012 were around 44,000 yuan (\$7,000 U.S. dollars). In Beijing, household income is roughly 1.5 times the national average, but housing is three times more expensive.

² In large cities, price-to-rent ratios are as high as 40 to 1 or 50 to 1. In equilibrium, these ratios would imply user costs to ownership in the range of 2 to 2.5 percent, which Wu et al. (2010) demonstrate would imply large expected capital gains.

³ See Williams (2013).

⁴ Unlike U.S. savers, Chinese savers do not have access to international financial markets or a wide variety of diversified investment funds.

⁵ In sharp contrast, the U.S. housing bubble is frequently associated with the increasing affordability of houses, including subprime lending.

References

Chen, Kaiji and Wen, Yi. “The Great Chinese Housing Boom: Causes, Consequences, and Future Paths.” Unpublished manuscript, Federal Reserve Bank of St. Louis, 2013.

Mishkin, Frederic. “Not All Bubbles Present a Risk to the Economy.” *Financial Times*, November 9, 2009; <http://www.ft.com/intl/cms/s/0/98e7c192-cd5f-11de-8162-00144feabdc0.html>.

Roach, Stephen. “China Is Okay.” *Project Syndicate*, August 29, 2012; <http://www.project-syndicate.org/commentary/china-is-okay-by-stephen-s-roach>.

Williams, Mark. “Housing Still on Unsustainable Path.” *China Daily*, February 28, 2013; <http://english.peopledaily.com.cn/90778/8147309.html>.

Wu, Jing; Gyourko, Joseph and Deng, Yongheng. “Evaluating Conditions in Major Chinese Housing Markets.” NBER Working Paper No. 16189, National Bureau of Economic Research, July 2010; <http://www.nber.org/papers/w16189>.

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