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The Chinese Real Estate Bubble: Is It an Opportunity for Short Selling?

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ABSTRACT

This chapter evaluates arguments on the emergence of the China real estate bubble. Because of the lack of data, it is hard for analysts to verify the arguments. However, evidence points to further problems in the Chinese banking and real estate sectors. If this is true, it is not too late to short Chinese banks and property stocks listed on the Hong Kong market in the form of H-shares and in the United States in the form of American depositary receipts.

KEYWORDS

American depositary receipts; Case–Shiller index; Exchange-traded funds; Minsky–Kindleberger model; Real estate bubble.
15.1 INTRODUCTION

In early 2010, certain prominent investors in the West, known as “global bears,” were forecasting that China was undergoing a massive bubble in real estate similar to that already experienced by the United States. Notable among these short sellers is Jim Chanos, president of Kynikos Associates, and U.K. hedge fund manager Hugh Hendry. An influential negative report entitled *China’s Investment Boom: Great Leap into the Unknown* on China produced by Monaco-based Pivot Capital Management (2009) received widespread attention in the investing community.

The basic arguments of Pivot are:

1. China’s export model has stalled thanks to recession in the U.S. and European economies. Pressure to revalue the renminbi against the U.S. dollar will make things worse for China’s exports.
2. China is overinvesting in real estate, basic materials, and infrastructure.
3. The 31% expansion of Chinese bank loans in 2009 was bound to result in a misallocation of capital, asset bubbles, and a rise in nonperformers.

Adding to the negative story, Northwestern University political science professor Victor Shih (2010) provided estimates of significant borrowings by entities controlled by local authorities. If Shih’s estimates are correct—and the government now seems to be conceding that he is at least partly right—it would suggest that China’s public debt to gross domestic product (GDP) ratio is probably 30% higher than conventional estimates and a definite problem for Chinese banks.

The global bears have advocated shorting stocks with exposure to China and Chinese real estate in particular. We make the following points.

1. The ruling Communist Party in China today bases its fundamental legitimacy on its success in producing an ever-increasing standard of living for its citizens. Current government policies taken to cool off the residential real estate sector have probably already gone too far and are likely to be partly reversed. Residential sales as of early June in 2010 have reportedly dropped dramatically as the result of restrictive government measures put in place. Restrictive policies were implemented not just for macro reasons of preventing overheating but also because of fears of discontent on the part of the average citizen who felt priced out of the market by speculators. The government faces a difficult tightrope of trying to cool the high end of residential housing without overly damaging the economy.
2. Despite its shift toward market economics, China is still a state-controlled economy. For example, monetary policy does not operate in China in
the same way as it does in the United States. In the United States, under quantitative easing the Federal Reserve has vastly expanded bank reserves. But the Fed has no way of forcing banks to lend, and bank lending has been declining (except at government-controlled Fannie Mae and Freddie Mac). However, in 2009, the Chinese government ordered by and large state-owned banks to increase lending as part of the government’s stimulus program. Banks did not have to worry about capital ratios or nonperforming loans and now must raise additional capital.

3. When compared with the United States, Chinese statistics are scarce and of dubious reliability. National reliable statistics on real estate prices, vacancy rates, real estate inventories, mortgage loans outstanding, loan-to-value ratios, and nonperforming ratios are generally not available or not reliable. Moreover, the country operates in a language that non-Chinese cannot read or speak.

4. The lack of investment alternatives, low real estate carrying costs, and negative real interest rates on bank deposits have caused many wealthy Chinese to view owning real estate as they would tangible assets such as gold, which do not produce cash flows. This makes vacancy rates more difficult to interpret than in a U.S. context. Some residential unit purchasers do not expect to live in or rent out their properties. Anecdotal reports suggest a large number of high-end apartments without water and electricity in major cities. Vacancy rates as high as 40% have been reported for some of the major cities and resort areas. The threatened imposition of property taxes—unknown in China at present—would radically change the economics of luxury properties. The most likely scenario is that these taxes, if imposed, will be confined to the high end.

5. The bulls argue that the continuous migration of people from the countryside and China’s recent record of rapidly increasing personal incomes may bail out real estate and infrastructure capacity that is put in place before demand actually materializes. China will “grow into” its current oversupply of real estate and infrastructure. Global bears are arguing that the number of Chinese yet to move to the cities is actually considerably smaller than is realized and that China is far more urbanized than is widely realized. They further argue that in any case the average Chinese cannot afford the high-end luxury apartments being built. Millions of in-migrant poor people do not make for solid demand for high-end properties.

6. It has been argued that comparisons of house price/income ratios can be misleading due to China’s one-child policy. When a first-time home-buying couple buys an apartment, it is often said that six people are buying: the couple and both sets of parents. Global bears dismiss this type of “China is different” argument.
7. If the current residential market statistics are murky in China, those for commercial real estate are absolutely opaque. Global bears point to the existence of large amounts of empty office space in China based usually on personal observation (see, for instance, Hendry, 2009).

### 15.2 COMPARISON WITH THE UNITED STATES

Figures 15.1 and 15.2 provide a good snapshot of the U.S. residential real estate bubble and bust. Figure 15.1 displays the Case–Shiller index.

The U.S. Case–Shiller index is a very reliable indicator in that it adjusts for housing quality and size, the general level of inflation, and is a national home price index. As observed in Figure 15.1, U.S. housing prices began their upward trend in March 1998 and peaked in 2006.

Figure 15.2 displays the accompanying rise in mortgage financing. The unrestrained behavior in the U.S. bubble, including lax standards, overly complicated mortgage-backed securities, and excesses of Fannie Mae and Freddie Mac, is by now well known. However, the U.S. residential real estate bubble, significantly financed by debt, lasted approximately 8 years before peaking. The resulting debt deflation is likely to slow U.S. economic growth for years to come.

**FIGURE 15.1**
United States Case–Shiller index (data source: http://www.econ.yale.edu/~shiller/data.htm).
15.3 THE BUBBLE IN CHINA

Figure 15.3 provides a somewhat less reliable snapshot of the Chinese real estate bubble. It is a graph of monthly year-over-year price increase data from a series called “Sales Price Indices of Buildings in 70 Medium-Large Sized Cities.”

Data are not adjusted for inflation (Figure 15.3). These numbers, augmented by anecdotal evidence from major cities, suggest an unusual pattern. Although Figure 15.3 only begins in 2005, some acceleration of Chinese real estate prices apparently got under way in 2002. It should be remembered that the Asian crisis of 1997 and the severe acute respiratory syndrome (SARS) outbreak in 2003 had an inhibiting effect on real estate activity not just in China but in Hong Kong as well. Figure 15.3 depicts that the rate of increase accelerated into 2008 and then fell off dramatically. In addition, the global financial crisis in 2008 clearly interrupted price acceleration. Therefore, over the last 12 years, there were three interrupting factors, that is, the Asian crisis, SARS, and the global crisis of 2007–2008, which probably acted as a check on Chinese bubble formation, with real estate price acceleration resuming in 2009. Moreover, most observers believe the numbers upon which Figure 15.3 are based underestimate price appreciation in many areas of China. Newspapers in China report year-over-year price increases of 30–50% in major cities such as Shanghai, Beijing, Shenzhen, and Guangzhou, as well as in resort areas.
such as Hangzhou and Hainan. Figure 15.3 shows that price increase resumes quickly after June 2006. However, price begins to decrease starting May 2010. The change in the first four months of 2011 is close to 0. This means, around 100 in the same chart.

15.4 THE DEBT DEFLATION MODEL—DOES IT APPLY TO CHINA?

The general pattern of real estate bubbles has been one of a rapid rise in real estate values financed by bank debt. When asset values reach extreme values, bubbles burst due to some government action to restrain the process, resulting in a plunge of asset values. Borrowers suffer financial distress as they find themselves in a negative equity position as the value of their mortgages begins to substantially exceed the value of their houses. Banks in turn experience rising nonperforming loans and, in many cases, become insolvent with a significant recession always ensuing. Versions of this model have been put forth by economist Hyman Minsky and financial historian Charles Kindleberger and Aliber (2005). Further research summarized by Rogoff and Reinhart (2009) provides examples of this boom-bust bank insolvency recession cycle for a number of countries. The model would appear to describe very well the experience of the United States from 1998 through the current real estate bust. Likewise, it would describe the Japanese real estate boom bust, which commenced in 1985 and peaked in 1990.

Data on Chinese bank mortgage lending and loans to real estate developers are not published by government sources. However, the managing director of

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1 The Kindleberger–Minsky framework explains the characteristics of financial crises and consists of five stages: (1) displacement, (2) boom, (3) overtrading, (4) revulsion, and (5) tranquility.
China equities and commodities at J.P. Morgan Jill Ulrich (2010) states in the South China Morning Post that the property sector accounted for 21% of Chinese bank loans in 2009. In the article she seems not to be unduly disturbed by real estate price increases in China, but loans classified as real estate may not be the entire story. Shih (2010) has estimated that banks have lent some RMB 11 trillion (US$1.4 trillion) to local government entities, most of this occurring in 2009. If a substantial portion of this has found its way into real estate, then the picture changes. These entities, rather than private individuals or companies, may be significant real estate borrowers.

Our tentative conclusion is that the Minsky–Kindleberger model does describe what is happening in China today, although it might make a difference from a macroeconomic perspective if a substantial portion of future defaulters are government entities rather than individuals. The bubble in China has come quickly, mostly during 2009 and the first 5 months of 2010. Most likely many observers are assuming that the government would bail out the banks if the need arose. From the perspective of a short seller, the crucial question is: where is China in the Minsky–Kindleberger model’s time line? Is the peak still ahead or has China, in a relatively short time period, managed to produce a debt-driven real estate bubble that is now near its peak? Government authorities are aware of the bubble and, as mentioned, have taken measures to slow it down, something that Minsky and Kindleberger might have approved. However, have the authorities’ actions come in time or are they the straw that is breaking the bubble’s back? Are they ignoring the root cause of the problem, which lies in an excessively expansive monetary policy and negative real interest rates? What about a failure to revalue the renminbi in 2009? The revaluation in real terms is taking place via inflation, especially asset inflation, in China.

15.5 THE STOCK MARKET—FORECASTING THE BURSTING OF THE BUBBLE?

Since November 2009 the various Chinese stock markets have apparently been reflecting worries about a slowdown and possibly a real estate/banking correction in China. Figures 15.4 and 15.5 display the index value on the Shanghai and Shenzhen markets for banks and real estate companies, which are down 28 and 42%, respectively in 2010. The indexes have remained stable until May 2011.

A similar picture emerges on the Hong Kong Stock Exchange where major Chinese banks and real estate companies are listed. The stock prices of numerous banks and real estate companies displayed in Figures 15.6–15.11 show similar price patterns.
FIGURE 15.4
CSI 300 Banks Index (data source: http://finance.yahoo.com).

FIGURE 15.5
CSI 300 Real Estate Index (data source: http://finance.yahoo.com).
FIGURE 15.6
China Construction Bank Index (data source: http://hk.finance.yahoo.com).

FIGURE 15.7
Industry and Commercial Bank of China (data source: http://hk.finance.yahoo.com).
FIGURE 15.8
Bank of China (data source: http://hk.finance.yahoo.com).

FIGURE 15.9
Glorious PPT H (data source: http://hk.finance.yahoo.com).
15.5 The Stock Market—Forecasting the Bursting of the Bubble?

**FIGURE 15.10**
R&F Properties (data source: http://hk.finance.yahoo.com).

**FIGURE 15.11**
Agile Property (data source: http://hk.finance.yahoo.com).
15.6 PROBLEMS IN SHORTING CHINESE STOCKS

Thanks to computer technology, advanced telecommunications, and abundant bandwidth, the world is moving toward a seamless integration of capital markets. Unfortunately, partly because of capital controls in various countries and other restrictions, we are not there yet.

First of all, shorting of individual stocks on the Shanghai Stock Exchange was only approved in principle in January 2010 and started on March 31, 2010. In addition, under Chinese regulations, institutional foreign investors only have limited access to investing in A shares (the principal shares traded on the mainland) under the Qualified Foreign Institutional Investor Program. Shorting is permitted on the Hong Kong, United States, United Kingdom, and Australian exchanges. Institutional investors will generally not have problems shorting stocks on any of the nonmainland exchanges. Retail investors are another matter. While a number of online U.S. brokerage firms offer real-time access to foreign markets, including Hong Kong, not all of these offer short selling. Similarly, not all Hong Kong brokers offer short selling. Some traditional U.S. brokers may offer short selling in foreign markets, but these orders may have to be placed during the day when the U.S. market (and the brokers) is open and then executed at night eastern time.

Approximately 100 Chinese American depositary receipts (ADR s) trade in the United States and they can all be shorted, although liquidity issues may make shorting difficult in some of these firms. In addition, a significant portion of Chinese ADRs are in the technology sector. However, Chinese banks, real estate firms, and commodity companies, which may be of more interest as short sales at this juncture, trade in Hong Kong.

One way for retail investors to short the Chinese market on U.S. exchanges is by shorting exchange-traded funds (ETFs) specializing in Chinese stocks and by buying so-called inverse ETFs, which essentially short a given market. For example, an investor can short Chinese stocks by purchasing the Ultra Short FTSE Xinhua 25 offered by Pro Shares. Liquidity issues limit the usefulness of some of these instruments, and tracking errors have also been reported. Moreover, the current crop of U.S.-traded Chinese ETFs does not allow the investor to target specific industries. Another approach to shorting the Chinese market is to short global commodity firms exporting to China. The financial press has reported the success of at least one hedge fund in May that shorted Australian mining stocks.

15.7 CONCLUSION

While other factors, such as the Greek crisis, may have contributed to the decline of Chinese banks and property shares, it appears that both of these sectors have been selling off in anticipation of the problems in the Chinese real
estate market. Investors have become sensitized to the bubble phenomenon. The question is whether it is too late to short the property market and whether global shorts have exaggerated the problem.

The lack of reliable data and the short operating history of China as a semicapitalist country make firm conclusions difficult. However, overall the evidence points to further problems in the Chinese banking and real estate sectors. If this is true, then it is not too late to short Chinese banks and property stocks.

Some investors predict that China’s real estate bubble will soon burst. Property prices in China are relatively high with respect to GDP per capita. Also, the Chinese government took actions in April 2010 to regulate real estate prices. However, the bubble may not burst in a way that the U.S. market experienced in 2007–2009.

For residential mortgage loans in China, the loan–asset ratio is always kept below 50%. If the property price drops by no more than 50%, there is no such issue of negative worth and foreclosure. Further, due to the high savings rate of China’s population, many residential properties are owned by families without having any mortgage. The declining property prices may hurt real estate speculators, property developers, or property investment companies but would not have much impact on the Chinese economy.

However, economic activities in China are controlled by central and municipal governments, sizable state-owned banks, and enterprises to a great extent. In 2010, the magnitude of bank lending has been reduced greatly following the change in monetary policy. In fact, bank lending on a large scale cannot be sustained any longer due to the potential risk from industry, as exports are severely affected by the European sovereign debt crisis. In 2011, the Chinese government will combat inflation and limit property-related personal and commercial loans. This will hopefully cool down the transaction volume of the real estate market. However, whether the real estate market will fall freely will be hard to say in such an economy with government interventions.

Even with the drop of property prices, the Chinese central government is taking measures to curb current real estate prices. A decline of 30% or more in real estate prices is widely accepted by the central government, but it is not certain that commercial banks can assume such big declines. Possibly a decline of over 50% in real estate prices would likely induce a new wave of financial crisis in China. Therefore, a rapid drop in real estate prices is hazardous to the banking system and the government expects a slow decline. In addition, if the yuan appreciates, then material costs will decrease. For example, if we assume that labor cost and land prices are the same, then property prices should be lower. However, if inflation is high and land prices are high, then property prices will be higher. We believe
that the Chinese government will allow no more than a 5% change in the yuan per year; therefore, it is hard to make solid conclusions. The Chinese government has recognized that a bubble currently exists and has opted to contain real estate prices to maintain a “harmonious society.” The above discussion while it may have practical implications should be regarded to be academic discussion. No explicit recommendation to buy or sell any security or fund should be implied.

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