Orient Capital Research
Andrew Collier, Managing Director
852-9530-4348
andrew@collierchina.com

Shiyi Zhou, Analyst, Shanghai
Chris Li, Analyst, Shanghai

Orient Capital Research

August 31, 2015

China's Rural Property Crisis

A Visit to Sichuan Suggests the Property Bubble is Worse than Expected

Summary

We visited Chonging and Chengdu in Sichuan Province and also traveled to several smaller cities in the countryside. The property bubble is worse than we thought. Inventories in the Tier 4 and below cities is now at 10 to 20 years of supply and prices have fallen by 30% or more. We think Sichuan is in many ways a typical province and represents much of the country's property sector. Approximately 60% of property construction activity occurs in these smaller cities. Local governments have been colluding with financial intermediaries to construct excessive amounts of residential and commercial property. With a slowing economy and tightening credit, there is a sense of panic within these governments.

Conclusion: With 80% of GDP tied to property in many of these areas, the deflation of this asset will have a severe impact on China's GDP growth, government revenue, consumer wealth, and social stability. Even a modest decline in real estate activity in rural areas could cause a 2% to 4% decline in China's GDP.

Property Overbuild in China's Heartland

Sichuan is China's largest Province with a population of 81 million and GDP of 2.85 trillion yuan, ranking number nine in China. We think it is representative of the country as a whole. We traveled to the two large cities, Chongqing with a population 9.6 million or 28.8 million if you include the Chongqing Municipality; and also visited Chengdu, the capital with a population of 4.3 million.

The real story of Sichuan's property market is not in the two major cities but in the rest of the province. These rural areas – Tier 3 and below -- is where 60% of China's property construction occurs. We discovered that the overbuild in property in hundreds of small towns and village is staggering. Inventory in some cities is at 10 to 20 years. Meanwhile, with many smaller cities relying for property for 80% of their GDP, land sales are declining rapidly, sales are plummeting, and governments are running short of operating revenue.

Visit to Changshou Project

We spent a day in Changshou, a small city 80 kilometers northeast of Chongqing. It's a generally run down city although we spotted one Maserati during our visit. We passed a Changshou Government Centre that was in ramshackle condition and clearly little used. Changshou is an economic development zone approved by the State Council in Beijing and officially is the center of the chemical industry featuring companies like BP, Sinopec, China National Petroleum and BASF. However, we saw few active industries and question the importance of these companies on the region's economic growth.

Most compelling was the amount of residential construction. The area in and around Changshou has several hundred high rise apartment buildings either completed or under construction – all this for a city with a population of just 800,000.

Figure 1. Changshou Residential Construction

Source: Orient Capital Research

While there is no official data about new residential capacity in Changshou, we compiled our own local estimate. Using the assumptions below, we arrive at a figure of 4 million sqm of new residential construction, or 20 sqm for every family in Changshou.

Figure 2. Estimated New Residential Construction in Changshou, Sichuan Province

No of Buildings	200
Average Height	25
Estimated apts per floor	10
Sqm per Apt	80
Total Sqm	**4,000,000**
Families in Changshou	200,000
New build per family (Sqm)	20

Source: Orient Capital Research

Universal City Centre

We spent some time at one project, Universal City Centre. It has 1.08 M sqm of residential and 135,000 Sqm of commercial property. In 2014, prices were around 4,000 to 5,800 psm but have since fallen by more than one-third to 3,000 to 4,000 psm. The sales agent told us this project was the best among the ten or fifteen projects in the area. "It's not a good time to invest," the agent noted. "It's gone back to 1997 prices. No one is buying to invest any more."

Figure 3. Universal City Centre.

Source: Orient Capital Research

The data for the province as a whole shows significant weakness in the property market – far worse than the official National Bureau of Statistics numbers would suggest. The weakness is apparent even in the capital city, Chengdu, which is healthier than the surrounding regions. The value of Chengdu land sales have fallen by one-third since the peak in 2010 to an estimated 46.8 billion yuan in 2015. In volume (in Mu or 16% of an acre) they have declined by two-thirds since the peak in 2010.

Figure 4. Land Sales in Chengdu (RMB Bln)

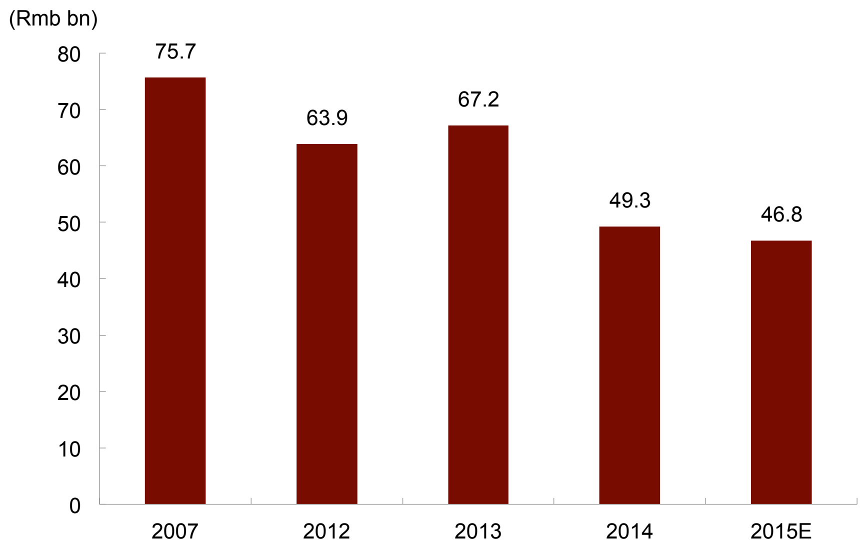
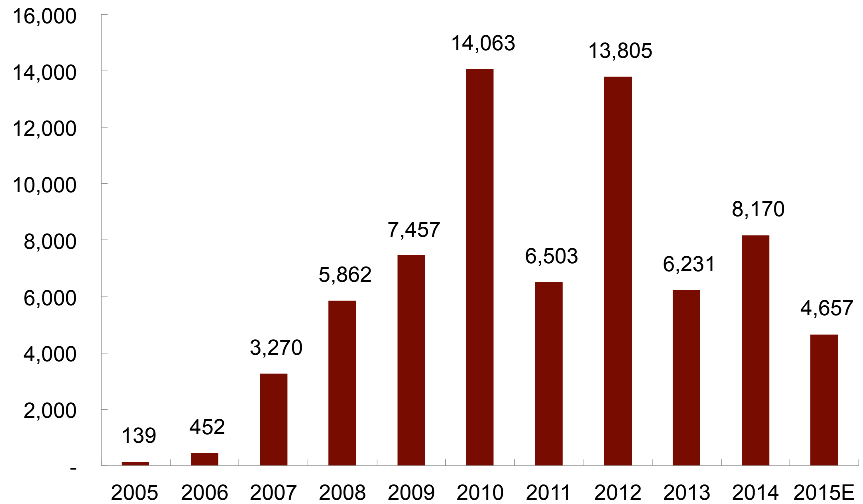


Figure 5. Land Sales in Chengdu (Mu)



Source: Center for Strategic Studies, Chengdu

Local agents said that inside the center city there is a 10 year supply of residential land and 15 year supply for commercial construction. For all of Chengdu, there may be as much as a 30-year inventory of land for commercial use. Although there are 2 million square meters in land built or under construction, based on actual permits filed with the city government, ***there is 140 million sqm of potential build.*** This is an inventory of approximately 30 years. We spoke to an agent who assists the government in conducting land transactions. "In 2013, we would beg the government to sell land. Now, the governments come to us. They are desperate to sell land." One Tier 4 city outside of Chengdu was unable to sell any land at all last year.

Crisis in Local Fiscal Revenue

Nationally, the official figures state that land sales account for approximately 40% of local government revenue. The GDP contribution nationally is around 30%. In Chengdu, according to local analysts, property was 65% of GDP at its peak in 2007 but has fallen to 34% currently. But we were told it is as high as 80% in the rural areas.

Property analysts frequently use a ratio of investment of real estate to fixed asset investment to estimate consumption patterns. A three-tier analysis is useful here. This is an important measure because it analyzes infrastructure compared with real estate growth.

Real Estate as a Percentage of Fixed Asset Investment

- 0 to 10%: very mature, basically like the US and Europe. This tier doesn't exist in China.
- 10% to 28%: healthy, not too hot, not too cold.
- 28% to 40%: overheated (all of Tier 1, 2 and 3 in China).
- 40%: bubble (some Tier 2 and basically everything from T3-5).

Currently, in terms of real estate as a percentage of FAI, Chengdu is at 20%, and Chongqing is at 30%. For all of China, the ratio is 35-40% -- basically a bubble -- while Sichuan is 30-32%. For example, Shuang Liu County, a top 100 county in China 20 kilometres from downtown Chengdu, has fallen from 20% GDP growth, accounting for half of Chengdu land sales, to 3% to 4% growth.

Middle Class is Not Growing Fast Enough to Salvage the Market

If we look across China, there are 600 large cities in China, of which 18 are major urban areas. Of these, 46 of them are overdeveloped. This means the population has moved from ancient homes to small, but newer, residential construction. The government has been pushing the second stage, which is an upgrade to even better residential construction, along with an improved home environment, including better schooling and infrastructure.

This includes 36 of the provincial capitals, Tianjin, and somewhat developed second Tier cities (Dongguan, Qingdao). Most of the country's 600 cities are barely able to afford to move into a new home, out of the traditional rural compound.

Chengdu Still Not Moving Up

Chengdu economic development is primarily in manufacturing and high tech:

1) Primary industry only accounts for 2% of GDP.
2) Secondary is 50%, including autos and firms like Foxconn and Intel.
3) Tertiary is 48% mainly tourism and software technology. A lot of Shenzhen's manufacturing and IT firms are moving to Chengdu due to lower operating and labor costs.

Chengdu's real estate policies were originally focused on buying the first home, from 1990 to 1998 concentrating on local Chengu residents. In 1998 the Hukou permit, which ties the individual's schooling and social benefits to a specific area, was relaxed to allow non-local migrants to obtain resident rights in other areas. Starting in 2000, 70% of buyers started to come from outside Chengdu (that number fell to 50% but now it's risen to 60-65%).

From 2007 to 2009, Chengdu residents began the process of upgrading. However, this process was slowed because of national policies restraining the purchase of second homes. In 2015, the government finally introduced policies encouraging move-up homes; in the pre-2015 period, entry level homes were almost 75% of the total, but now upgrade homes are almost 40-45%.

Outside Buyers Support the Market

Outside buyers fall into two areas:

1) People coming back to Sichuan - 43% of the non-local buyers, mainly to retire; all entry level.

2) New immigrants - people who came here for school or work; 57% of the non-local buyers; all entry level.

High Inventory and Falling Prices

Greater Chengdu housing prices are inexpensive compared with Chengdu. The average price is 6,724 psm 2015, down 10.3% from 7,500 psm in 2014. This compares with 20,000 psm in Shenzhen.

Total inventory in Chengdu is 10 to 13 years for residential. Commercial inventory is much higher.

Increasing Risks to the Local Economy

The loss of revenue from land sales has forced local governments to devise creative ways of generating revenue that are increasing the leverage in the system and overall systemic risk. The banks, under orders from the PBOC, have become more strict about lending to the property sector and to the government off-balance sheet companies known as LGFVs that have helped to fuel the property boom. Other economic actors have entered such as the insurance industry, which has invested 2 trillion yuan in infrastructure and property across China. However, even these sources of capital are drying up, forcing the governments to find new ways of supporting the ailing property industry.

In Sichuan Province, we were told that these off-balance sheet measures include:

1) **Trusts.** Persuading local trusts to buy the land. Most trusts in China are partly owned by Provincial governments and are thus under some pressure to support local government initiatives.

2) **LGFVs.** Platform companies buy land. These are the Local Government Financing Vehicles (LGFVs) that function as arms of the government. The biggest in Sichuan that has been involved in land purchases is Chuantou Energy, listed in Shanghai (600674). They may be obtaining capital from bank loans, trusts, and Wealth Management Products

3) **SOEs.** SOE Leasing. State firms will lease the land from the government, often through the LGFV.

4) **Hospitals.** In some cases, to pay for local social services such as healthcare, the city forces the hospitals to move to the outskirts, and then sells the vacant land to use as a fund to pay for healthcare.

5) **Mortgages**. Increasingly, the local governments are "mortgaging" the land to the bank. This is essentially a pre-sale based on future cash flows. Obviously it is a risky transaction because land values are declining so the banks will be left with an asset with declining value. One example of land mortgaging occurred in the Chengdu district Duijiangyan with 60 billion yuan of local debt. The local government had been required to pay the debt down in 2013 but forced the banks to roll over the loans. To pay off this debt and increase cash flow, it has mortgaged future land sales to local banks. Dujiangyan convinced property developer Dalian Wanda to purchase the land for 55 billion yuan to pay back the mortgage.

Private Capital Steps In

Overall, property projects in the less populated areas in Sichuan are being funded increasingly with riskier, short-term capital, increasingly from private lenders. This most likely due to concerns among the banks about rising exposure to the property market and the requirement to roll over loans to local government projects. Instead of large developers backed by commercial loans, the Tier 4 and below cities are relying on:

1) Small, private developers.

2) Small, private lenders.

3) Smaller developers squeezed out of the larger T1 to T2 cities.

Local contacts said that property developments soared in Chongqing under former Mayor Bo Xilai but this activity ended when he was removed from office in 2012. Since then, activity has picked up.

We spoke to the official for the Chongqing government who regulates small lenders. He said the Beijing regulator, the China Banking Regulatory Commission, in 2014 began registering small lenders, removing that responsibility from local governments, which continue to monitor the industry. There are now 7,000 private lenders in Chongqing, according to official statistics, with total lending of 60 billion yuan. Their maximum interest rate is 4x the official government rate, or about 25%. The official data states non-performing loans (NPLs) of 0.24% in 2014. But that will rise 8X to 1.5% to 1.6% in 2015. Of course, the unofficial rate is much higher.

"The small debt companies have NPL rates much higher than what they report," the official said. "As long as interest is paid, they keep extending the loans. The real rate is probably around 5%."

We also heard guarantee companies have proliferated. This is highly risky as their guarantees assist property developers in raising capital from other sources, including banks, and leaves them vulnerable to defaults. In fact, several developers defaulted in 2015.

This reliance on the private sector for property development is not a systemic risk per se because it doesn't rely on the main conduits of capital in China such as the banks and the large trusts. However, ***this reliance on private capital poses a risk of social instability*** because many rural residents are either lending, borrowing, or dependent on private capital flowing into the property market.

The Smaller City Property Bubble is a Giant Problem for China

The sharp decline in the value of housing in China's smaller cities is widely underreported for two reasons. First, there is a focus among investors on Tier One cities that are the main revenue driver for many listed companies. Second, there is a lack of accurate data on sales volume and pricing, particularly in the rural areas. If our Sichuan sample is representative, the majority of property in China – approximately 60% of construction – is currently suffering price drops of 25% to 30% and volume is declining rapidly and is likely to come to a halt in some cities.

According to our analysis outlined in the chart below, T3-4 cities account for 67% of housing under construction and 17.1% of GDP, or 8.6 trillion yuan in 2014, larger than T1 and T2 cities combined. Since these include less wealthy areas, the apartment are less expensive and smaller, and therefore would include a larger portion of the population, which also has fewer financial resources than residents in the larger urban areas. Any downturn would cause much more social damage to this group.

Figure 6. Property Investment by City Size

	Housing Under Construction	Housing Investment	Investment as% of GDP	Investment GDP (RMB Bln)
Top 4 Cities	5%	8%	2.4%	1,200
T2 (24 Cities)	28%	35%	10.5%	5,500
T3-4	67%	57%	17.1%	8,550
			30.0%	15,250

Source: Nomura Securities, Orient Capital Research.

There are three main risks that are likely to result from the collapse in pricing in the smaller cities in China (T3 and below):

1) **Local Government Revenue.**

2) **Retirement Savings.**

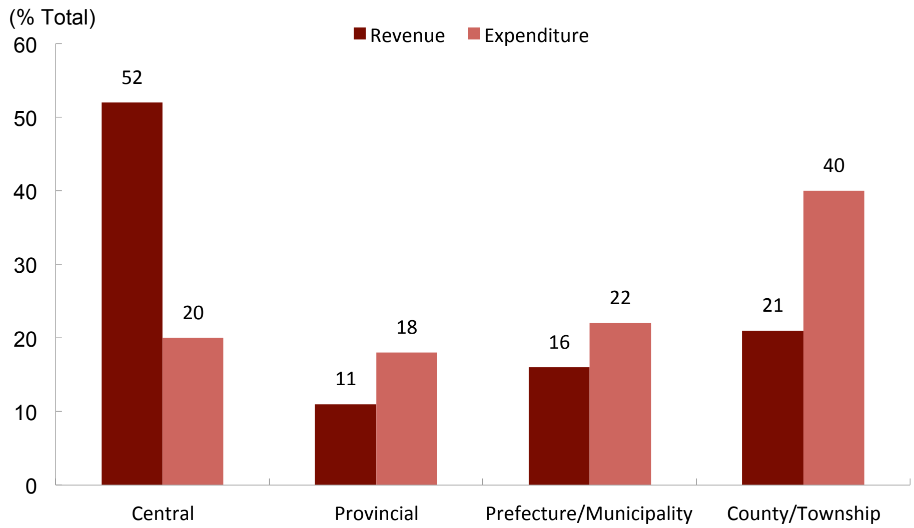
3) **Local GDP.**

Local Government Revenue

Local governments rely on land sales for 30% to 40% percent of their revenue. The number for Tier 4 cities is likely much higher.

As the chart below indicates, townships are the geographic unit most trapped between high expenditures and inadequate revenue. There are 47,000 townships in China.

Figure 7. Breakdown of China Government Revenue and Expenditure by Geography



With the significant overbuild of current property, coupled with financial tricks such as mortgaging future land sales, and property registrations far in excess of demand, the inadequate revenue for local governments is worsening.

To summarize the problem, the IMF has noted that:

> "Following the 1994 intergovernmental fiscal reform, the central government's share of total fiscal revenue increased from less than 30 percent to around 50 percent in 2012….Local governments are now responsible for much of infrastructure investment, service delivery, and social spending, which together account for about 85 percent of total expenditure. Local governments also have few own revenue resources and little discretion over tax rates and policy, which makes them increasingly reliant on central

government transfers. However, these transfers mainly cover current spending, leaving a smaller margin to finance infrastructure spending." (Risks from Local Government Finance, 2014).

The gap between local revenue and expenditure between 1998 and 2011 totaled 18 trillion yuan, according to IMF research. Of that amount, 13 trillion was supplied by revenue from land sales and 5 trillion from loans from the unofficial Shadow Banking sector. While private lending and other institutions such as insurance companies are helping to fill the gap, clearly the largest source of revenue from land sales is declining.

Nationally, the ratio of real estate investment to GDP is around 30%. However, in the rural areas of Sichuan, we were told that many Tier 4 cities have a ratio of as high as 80%. A collapse in the property market is going to cause a sharp decline in economic activity in these areas, lowering both government revenue and consumer incomes.

Scenario Analysis: What Happens to GDP When T4 City Property Values Collapse?

Let's look at the effect of a collapse in property values in the larger part of the market – Tier 3 and below. We assume a base case that this sector composes 57% of property investment and 17.1% of GDP. Now we look at declines of 2%, 4%, 6%, 8% and 10% of the property contribution from these cities. The impact is significant. GDP

Figure 8. Analysis of Decline in National GDP as Property Construction in Smaller Cities Falls

Investment as% of GDP	T3-4 GDP (RMB B)	Local Shortfall (RMB B)	Decline in Revenue as % of China's GDP
17%	8,550	-	-
15%	7,500	1,050	**2%**
13%	6,500	2,050	**4%**
11%	5,500	3,050	**6%**
9%	4,500	4,050	**8%**
7%	3,500	5,050	**10%**
5%	2,500	6,050	**12%**

Source: Orient Capital Research

As discussed above, the local governments are discovering creative ways of overcoming the revenue gap since the channels over the past decade of land sales are drying up. Clearly, Beijing will have to step up to the plate and provide adequate resources to local governments. Otherwise, there will be widespread government and corporate defaults, along with potential unrest among rural residents with inadequate incomes.

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