

How can Urbanization Policy influence the housing price in China?



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My research question and its practical/theoretical relevance

(1) **My research question is:** How can Urbanization Policy influence the housing price in China?

(2) **Why the question is interesting and important?**

- Chinese housing prices have been skyrocketing over the past few years, with seemingly unstoppable momentum. More and more people worried about Chinese housing bubbles will burst soon, and when that happens, the whole country and even the whole world will suffer the consequences.
- Urbanization Policy as one of the most important driving force of China's future economic development is undoubtedly the most talked about topic recently. There are two different ideas about the influence of urbanization on housing price:

My research question and its practical/theoretical relevance

- **One idea is:** Urbanization created enormous consumer demand for real estate investment, so urbanization accelerate progress will certainly have a huge impact on housing price in the future. Especially in some cities, the local government under the theme of urbanization, they really have the urge to push high housing prices.
- **The other idea is :** the new urbanization plan maybe have short term impact on supply/demand prices but it will eventually lead to a moderation in prices in the long term.
- After studying the influence of urbanization on housing price, I will finally get my research result: We should implement the new urbanization, which can make housing prices return to a reasonable price and soft-land overall housing bubble in the long term. So there are important practical meanings of my research paper.

Literature review

- (1) In the article of “China’s housing least affordable in the world” (Zhu Weijing, 2013), which talked about the serious housing bubble in China and will support my claim about the importance of my research question;
- (2) In the article of “China residential, when will the party end” (Alpha Watch, 2014), which talked about housing price bubble in China and will support my analysis about the characters of Chinese housing bubble;
- (3) In the article of “Urbanization and real estate investment in China” (Guillaume Rougier-Brierre, Guillaume Jeannet, 2009), which talked about the economic effects of urbanization in China and will support my conclusion about urbanization maybe increase housing bubble;
- (4) In the article of “New urbanization” (Business Sohu, 2014), which talked about the timetable of new urbanization policy will support my related analysis about it;
- (5) In the article of “Let us talk about NPC & CPPCC” section (2013) of www.lfeng.com, the idea of Zhang Ping will support my conclusion about new urbanization will make the housing price in China's big cities cool down.
- (6) In the article of “China's New Urbanization Plan” (Shannon Tiezzi, 2013), which talked about the urbanization in China prioritizes Hukou reform over construction and relocation projects. It will support my analysis about solving the Hukou problem will hugely increase housing consumption demand and overcome housing oversupply problems.

The logic of my research paper

1. Introduce Chinese housing bubble

Because Chinese housing bubble is accumulating, more and more people worried about the housing bubble will burst soon;

2. Analyze the characters of Chinese housing bubble

According to data and analysis, I think there are different housing bubbles in different cities of China. In the Tier 1 and 2 cities, prices are high due to strong demand and constraint in supply, so the housing bubbles in these cities seem to be more severely; In many Tier 3 and 4 cities, oversupply is the main problem, even creating some “Ghost towns” . We should pay close attention to these housing bubbles, even if the housing prices in these cities are not very high and housing bubbles seem not so severely.

3. Discuss the influence of Urbanization on housing price

Housing bubble is caused by many problems. My research will focus on the influence of Urbanization Policy. However, there are two different ideas about the influence of Urbanization on housing price: one is, urbanization maybe increase housing bubble; the other one is, New Urbanization maybe soft-land Chinese housing bubble.

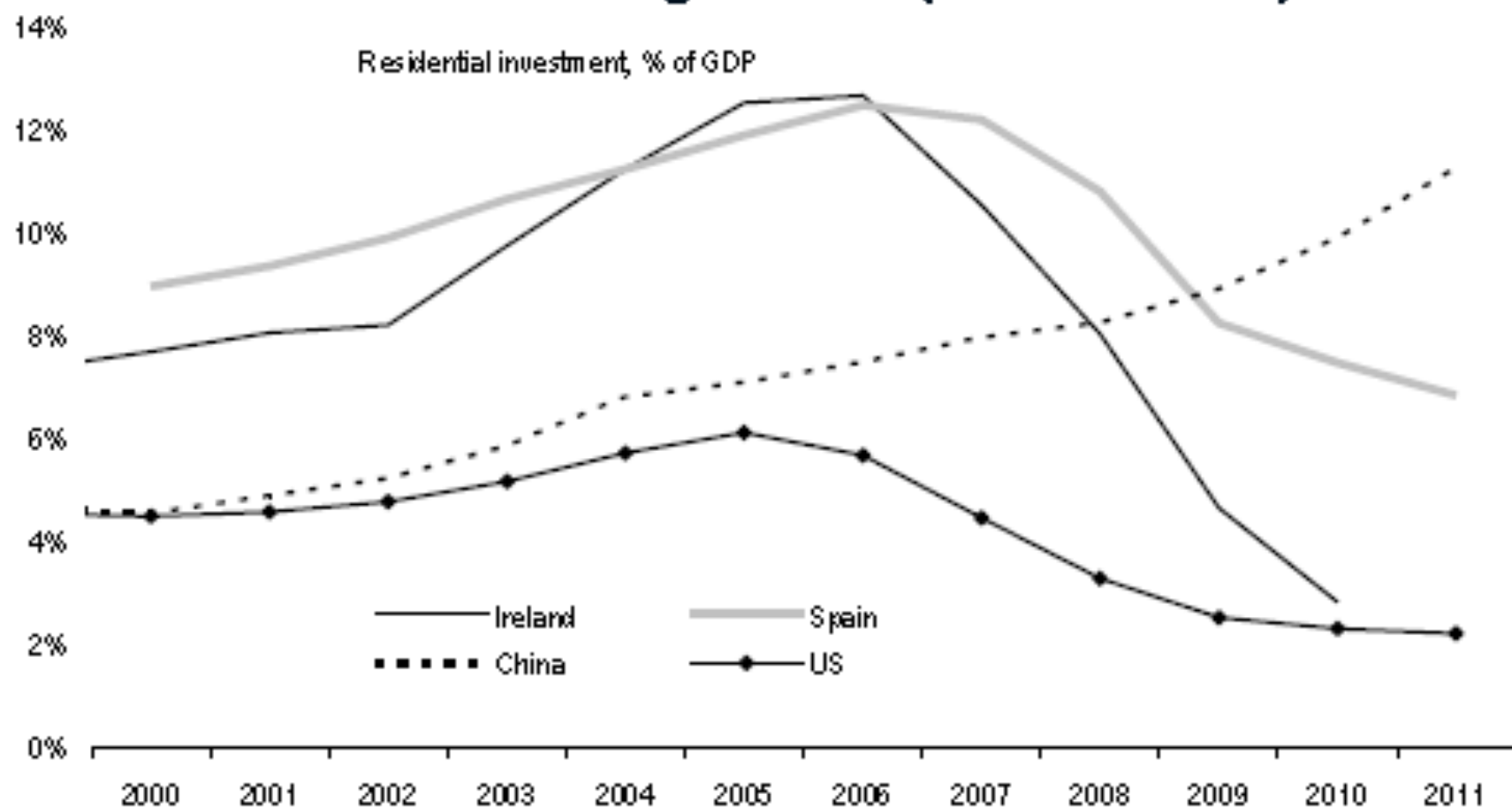
4. Get my research result

We should implement the new urbanization, which can make housing prices return to a reasonable price and soft-land overall housing bubble in the long term.

1. Chinese housing bubble

- Chinese housing prices have been skyrocketing over the past few years, with seemingly unstoppable momentum.
- Housing bubbles in the United States, Ireland, and Spain all burst between the years of 2005 to 2007. The amount of real estate investment in China as percent of national GDP is nearing that of Ireland and Spain at their housing bubble peaks; but Beijing's shows no indication of slowing down. (As shown in the graph below) History shows that housing bubbles will eventually burst, and when that happens, the whole country and the whole world will suffer the consequences. If we can soft-land the housing price and reduce the damages to the minimized level, before the housing bubbles eventually burst, it will have a very important practical meaning.

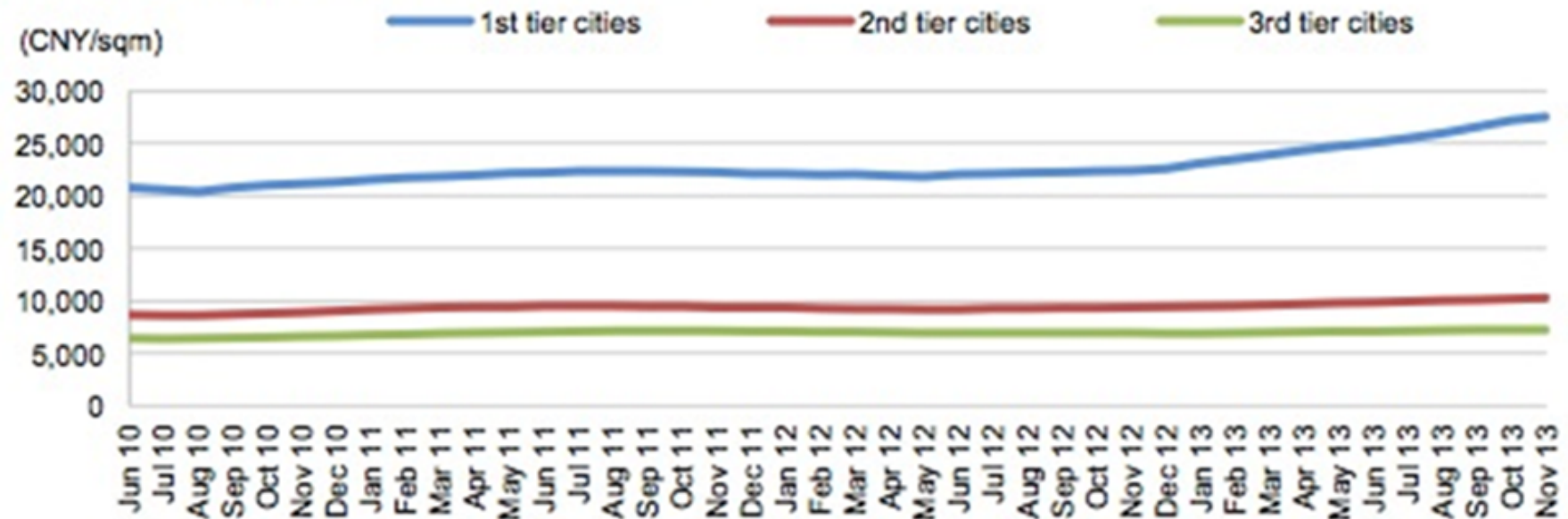
Housing investment is approaching peak levels seen in other housing booms (as % of GDP)



2. The characters of Chinese housing bubble

The China's central bank Governor Zhou Xiaochuan said: China may have housing bubbles only in some cities, the issue that's difficult to solve with a single nationwide policy.

Housing Price in 100 Major Cities



Source: WIND

2. The characters of Chinese housing bubble

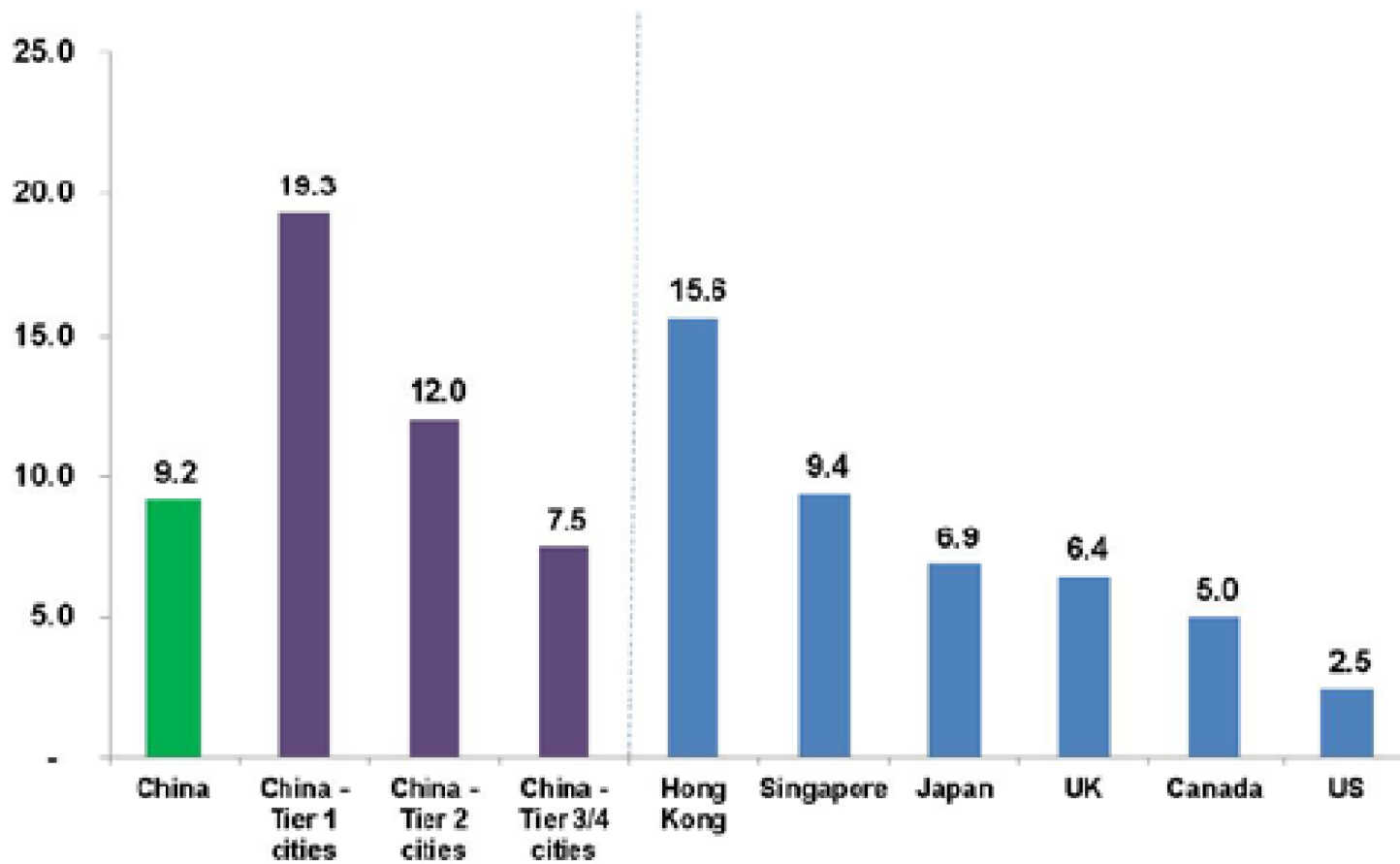
- **The price-to-income ratio**^① and **affordability ratio**^②, commonly used indicators to analyze housing market exuberance, showed that the overall China's average ratios are higher than most other countries. (There is housing bubble.)^③ However there is a degree of variance among different areas. The ratios are much higher in the Tier 1 and 2 cities where price increases have taken on a faster pace, while Tier 3 and 4 cities have ratios that are comparable to other countries.
- **In the Tier 1 and 2 cities**, prices are high due to strong demand and constraint in supply, so the housing bubbles in these cities seem to be more severe; **In many Tier 3 and 4 cities**, oversupply is the main problem. We should pay close attention to these housing bubbles, even if the housing prices in these cities are not very high and housing bubbles seem not so severe.

①**The price-to-income ratio**, which measures median housing prices in a given city against median disposable incomes, reflects affordability rather than absolute property value.

②**The affordability ratio**: Monthly mortgage payment for mainstream unit size versus average household income.

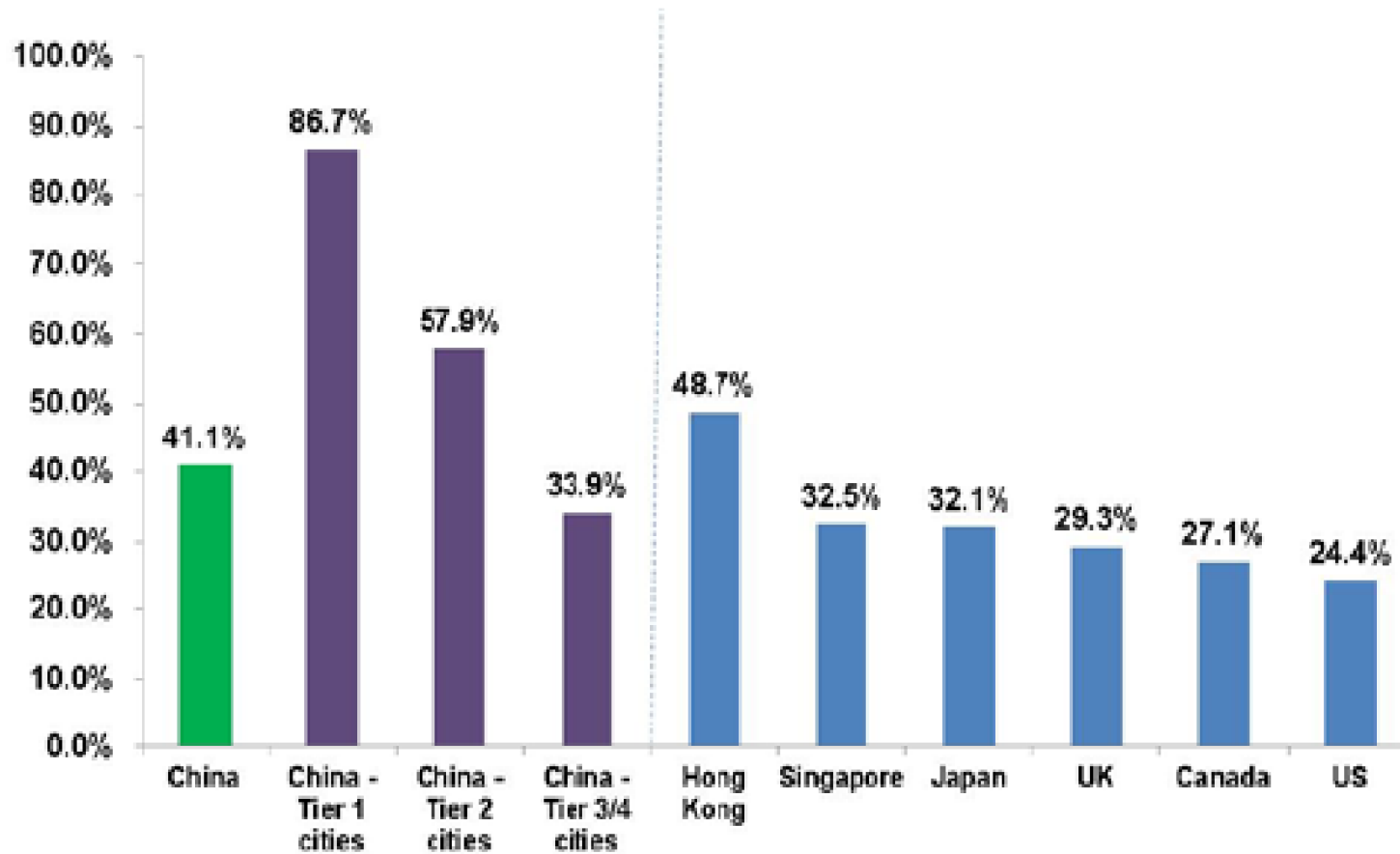
③**Source**: Citi research, China Property, Ghost Towns and Property Bubbles, December 2013.

Price-to-income Ratio



Source: Citi Research; Note* assume units size of 90sqm for all countries

Affordability Ratio



Source: Citi Research; Note* - Mortgage payment as % of household income, taking avg living unit size/ mortgage rate in respective countries

Price-to-income and affordability ratios of Tier 1 and selected Tier 2 cities

	Price-to-Income Ratio	Affordability (Mortgage as % of Income)
National	9.2	41.1
Tier 1 Cities	19.3	86.7
Beijing	22.4	95.4
Shenzhen	23.0	92.7
Shanghai	17.0	91.2
Guangzhou	15.6	69.4
Tier 2 Cities	12.0	57.9
Hangzhou	18.4	84.9
Tianjin	13.3	65.8
Xiamen	17.0	62.3
Chengdu	12.4	60.3
Nanjing	13.1	58.9
Chongqing	10.3	48.2
Shenyang	11.2	47.8
Wuhan	12.6	41.9

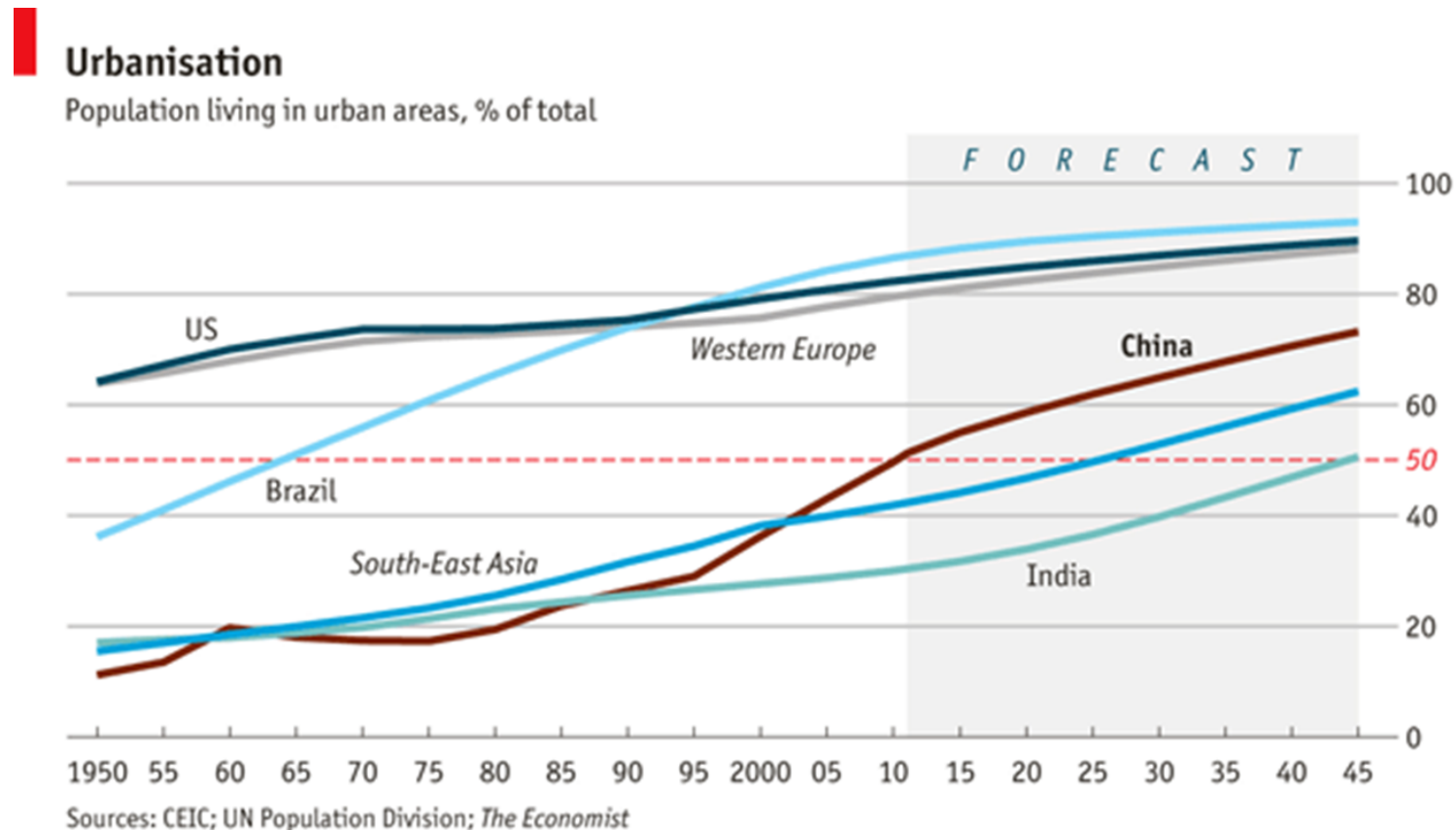
Source: Soufun, CEIC, Citi Research

3. The influence of Urbanization on housing price

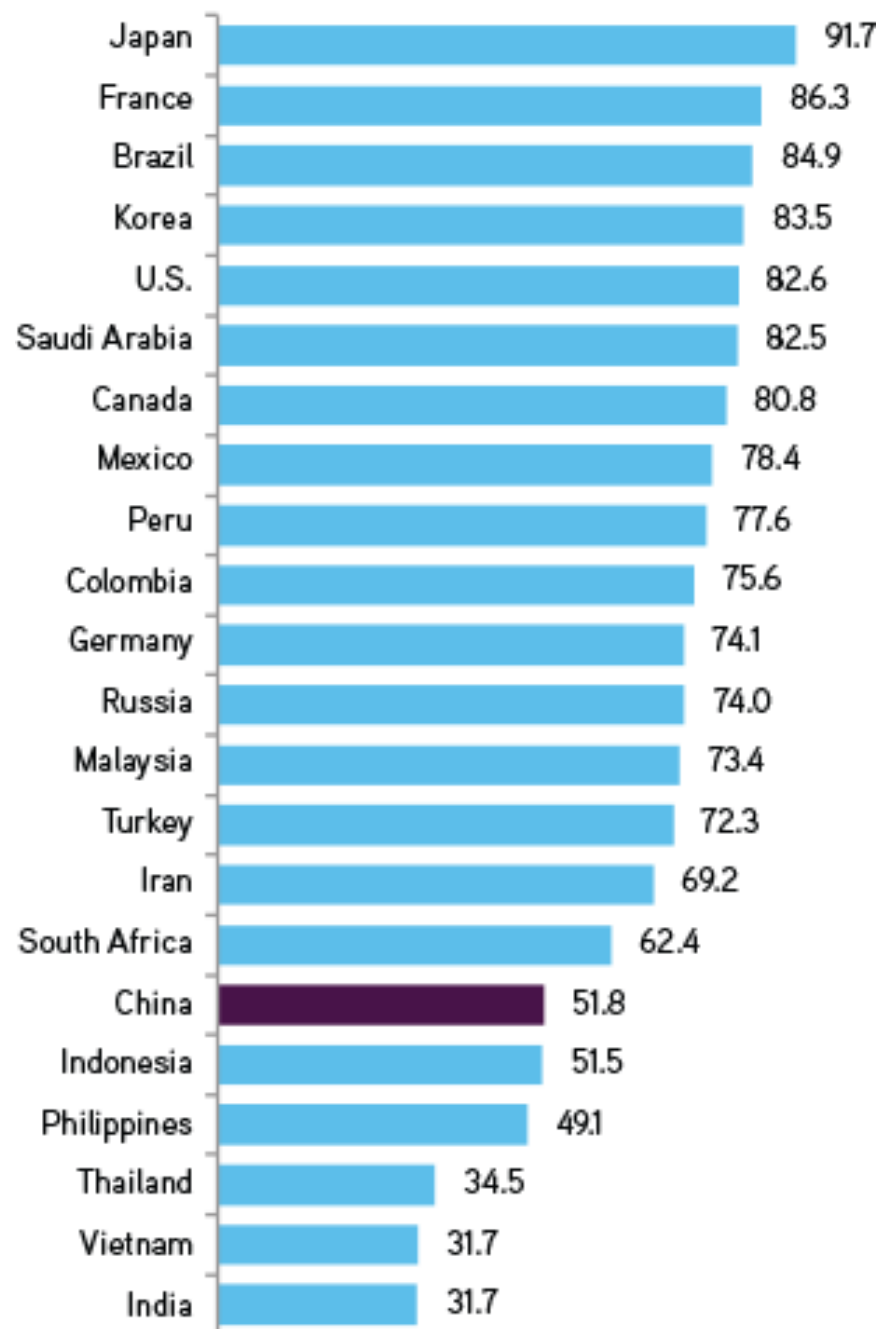
- (1) Why did China accelerate the urbanization?
- (2) Urbanization maybe increase housing bubble.
- (3) What is New Urbanization?
- (4) New Urbanization maybe soft-land Chinese housing bubble.

(1) Why did China accelerate the urbanization?

- Considering the rapid economic growth in China, some experts and scholars have maintained that urbanization in China lags far behind that of developed nations in Europe and America and it is imperative for China to catch up with this process. As a result, the Chinese government is permitting farmers move to cities and has instituted various measures to accelerate the urbanization process.



2012 Urban Population % of Total



(2) Urbanization maybe increase housing bubble

Urbanization boosted the real estate market

- According to a recent report by BNP Paribas (BNPP), the following Table summarizes the economic effects of Chinese urbanization, especially relating to the **consumption of raw materials** and the **boost given to the real estate market**(CAGR equals Compound Annual Growth Rate).
- Capital Economics estimated that the property sector contributed 9.5 percent of China's gross domestic product (GDP) in 2013.

Urbanization & Investment Driving China Commodity Demand

Year	Installed		Rolled			Urban		Export (USD b)	Property sales (m sqm)
	generation (GW)	Coal (m tonnes)	Oil (m bpd)	steel (m tonnes)	Cement (m tonnes)	Auto (10,000 units)	population (m)		
1990	137.9	1,079.9	2.3	51.5	209.7	514.0	301.9	62.1	29.0
1991	151.5	1,087.4	2.5	56.4	252.6	714.2	312.0	71.8	30.3
1992	166.5	1,116.4	2.7	67.0	308.2	1,066.7	321.7	84.9	42.9
1993	182.9	1,148.0	3.0	77.2	367.9	1,298.5	331.7	91.7	66.9
1994	199.9	1,242.0	3.1	84.3	421.2	1,366.9	341.7	121.0	72.3
1995	226.3	1,360.7	3.3	89.8	475.6	1,452.7	351.7	148.8	79.1
1996	236.5	1,396.7	3.6	93.4	491.2	1,475.2	373.0	151.1	79.0
1997	254.2	1,372.8	3.9	99.8	511.7	1,582.5	394.5	182.8	90.1
1998	277.3	1,250.0	4.2	107.4	536.0	1,630.0	416.1	183.7	121.9
1999	298.8	1,280.0	4.2	121.1	573.0	1,832.0	437.5	194.9	145.6
2000	319.3	1,299.0	4.5	131.5	597.0	2,070.0	459.1	249.2	186.4
2001	338.6	1,381.0	4.7	160.7	661.0	2,341.7	480.6	266.1	224.1
2002	356.6	1,455.0	5.0	192.5	725.0	3,251.0	502.1	325.6	268.1
2003	386.6	1,722.0	5.5	241.1	862.1	4,443.9	523.8	438.4	337.2
2004	429.9	1,992.3	6.4	319.8	966.8	5,091.1	542.8	593.4	382.3
2005	517.2	2,205.0	6.7	377.7	1,068.8	5,704.9	562.1	762.0	557.7
2006	623.7	2,373.0	7.2	468.9	1,236.8	7,278.9	577.1	969.1	606.3
2007	718.2	2,536.0	7.5	568.9	1,360.0	8,887.0	593.8	1218.0	761.9
CAGR 1999-2007	11.6	8.9	7.5	21.3	11.4	21.8	3.9	25.7	23.0
CAGR 1990-1999	9.0	1.9	6.9	10.0	11.8	15.2	4.2	13.6	19.6

Sources: NBS; BNP Paribas

(2) Urbanization maybe increase housing bubble

- **Resulted oversupply in real estate**

Simply by looking at the **incremental supply** from residential land under construction and social welfare supply for the next four years, the number is already **higher than** our projections of **incremental demand** based on migration and marriage needs (see following table).

It is not including the estimates of supply from land held by developers and the possibility of some vacant units held by multiple-home owners being put back into the market due to lack of transparent information. These would make the supply figures look even larger.

China's incremental residential supply and demand

	GFA (sqm)	Units	No. of people ¹
Under construction by developers	4.863 billion ²	51 million	147 million
Planned social welfare units (2014 -2017)		28 million ³	80 million
Supply			227 million
Migration (2014 to 2017) ⁴			72 million
Marriages (2014 to 2017) ⁵			104 million
Demand			176 million

Source: National Bureau of Statistics

- 1 Assumes urban building space per capita of 32.9sqm and average household size of 2.86 based on NBS Population Census 2010
- 2 Source: NBS 2013
- 3 36 million or 7.2 million p.a. social welfare housing units were planned under the 12th Five-Year Plan (2011-2015). We assume a similar rate of 7 million to be built p.a. thereafter.
- 4 Migration 18 million p.a based on average of historical and future urbanisation growth rate
- 5 Marriages 13 million p.a. based on 2013 actual (Source: NBS)

(2) Urbanization maybe increase housing bubble

- **Oversupply is not evenly distributed**

In the developed Tier 1 cities, land is more lack and old buildings especially in the prime city centers are torn down to make way for new developments. Housing prices in these cities are high due to strong demand and constraint in supply, so the housing bubbles in these cities seem to be more severe.

In the Tier 3 and 4 cities, a higher rate of increase in residential GFA (Gross Floor Area) being commenced, constructed and completed between 2008-2012, **resulting in a higher inventory digestion period**. We should pay close attention to these housing bubbles, even if the housing prices in these cities are not very high and housing bubbles seem not so severe.

The smaller cities bear the brunt due to the large supply of land sold by local governments. Massive advance town planning which over-forecasted demand, and local governments' strategies of building infrastructure and selling land for housing construction **to achieve their GDP-driven KPIs** (Key Performance Indicators) have **resulted in excess supply in many cities**. Oversupply exists not only in the units that have been completed or are under construction; it also lies in the massive land bank held by developers following the local governments' aggressive selling in the past. To make matters worse, many smaller cities do not enjoy high sustainable housing demand. As a result, a number of cities have been labeled as **"ghost towns"** by the media given the low occupancy of the newly completed homes. Such as: Ordos, Yingkou and Tangshan.

China Property – Key Statistics by City Tier

5-year CAGR (2008 – 2012)	Tier 1	Tier 2	Tier 3/4	National
Demographic and Economic				
Population	3.4%	1.9%	0.1%	0.5%
Disposable income	9.2%	12.0%	11.5%	11.0%
Real GDP growth	10.3%	13.3%	11.7%	9.3%
GDP per capita	7.7%	11.8%	13.6%	11.7%
Property Market				
Residential property sales value	6.2%	15.4%	18.7%	16.1%
Average selling price	12.4%	10.7%	7.9%	8.8%
Residential GFA started	1.3%	10.1%	15.8%	13.1%
GFA starts/GFA sold	110.8%	119.6%	160.1%	132.0%
Residential GFA completed	-0.4%	11.9%	16.5%	13.4%
Residential GFA under construction	6.2%	15.6%	22.6%	18.6%
Inventory digestion (months)	10.4	14.9	20.7	17.8
Land Market				
Land sales value	0.9%	12.5%	23.2%	17.6%
Land price	16.9%	12.3%	7.5%	14.9%
Land sold in GFA/GFA sold	77.6%	135.2%	175.2%	151.0%

Source: CEIC, Soufun, Citi Research (November 2013)

CAGR: Compound Average Growth Rate; GFA: Gross Floor Area.

(2) Urbanization maybe increase housing bubble

- **“Ghost Towns” are caused by Urbanization incompatible with cities' development**

1) Blind city expansions. Some local governments propose development objectives that are impractical and do not consider principles of city development, stages of economic development and limited resources;

2) Symbolic projects are prevalent. Without considering investment returns, some local governments build “show-off projects,” such as administration centers and luxurious office buildings, at the expense of investments in city facilities that are critical for public welfare;

3) Cities lack guidance on small-city development and special regulations, blindly imitating the patterns of others.

4) Very few people take into consideration their current labor conditions, future population growth, the construction of matched environmental and sanitary systems, and so on.

(2) Urbanization maybe increase housing bubble

- **Urbanization is in fact far more complex**

Particularly if this process is not brought under control, it will cause many problems, which will have severe economic and political consequences and affect social stability as well. Urbanization is not simply a process in which farmers move to cities. Rather, it is a complex process that not only requires co-development with industries and the entire economic system but also needs to be compatible with the conditions of **employment, security, education, public transportation, medical insurance, environmental protection and infrastructure.....**

(3) What is new urbanization?

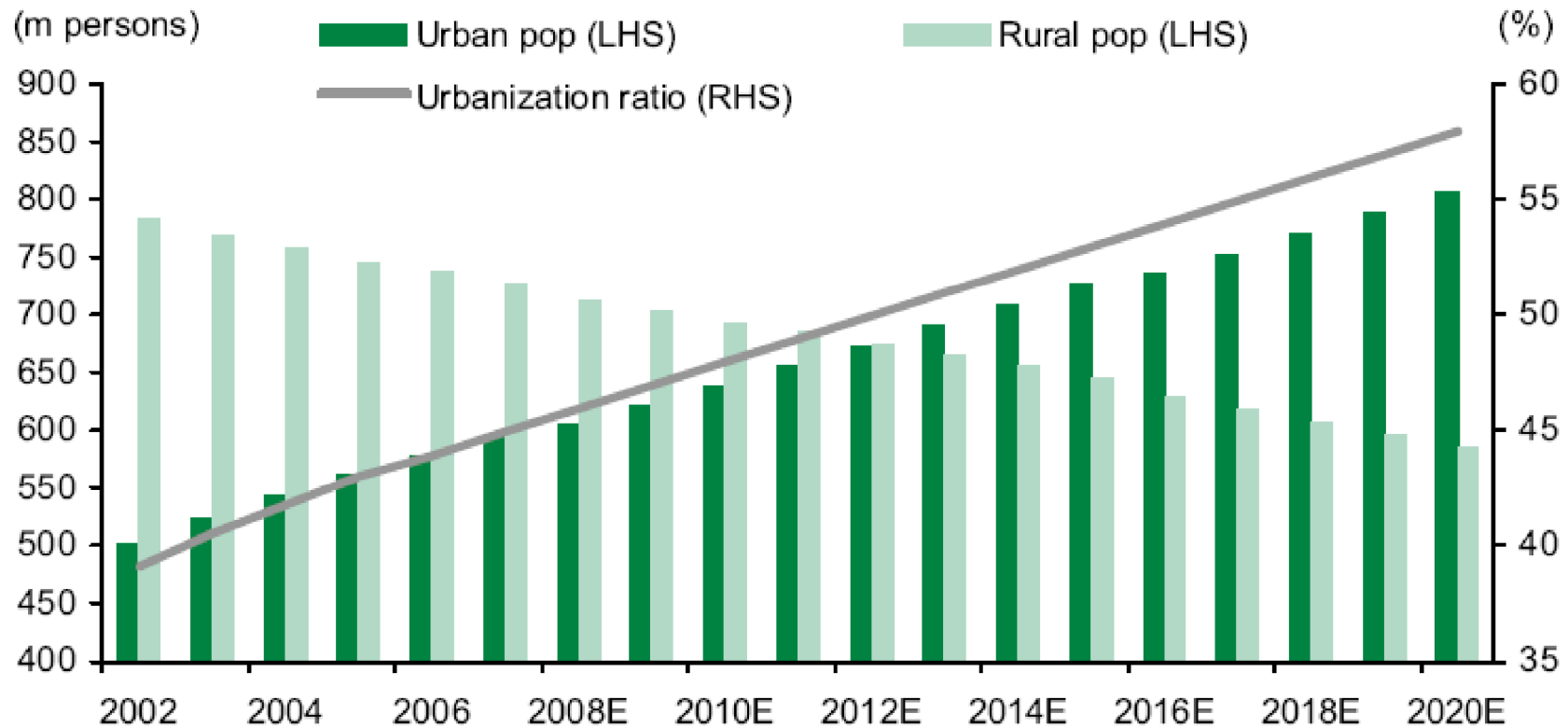
- In the past 30 years, urbanization mainly reflected in two aspects: First, the expansion of city size; and second, a large number of migrant workers are working in the city, but they can't stay in the city. Even though most of the migrant workers have worked in the city for many years, they still had to go back to their home in the countryside. The current institutional mechanism doesn't give the migrant workers the convenience of staying in the city, so it needs to make systemic changes. The Chinese government attaches great importance to this issue, because **new urbanization is one of population urbanization, rather than the land urbanization.**
- Urbanization has been a core part of the Chinese government's strategy over the past decade, and New-type Urbanization is part of their continued drive to help more rural dwellers migrate to cities, improving their standard of living and helping boost the overall economy.
- **New urbanization is resource-saving urbanization**

(3) What is new urbanization?

The new urbanization policy has a specific timetable:

- On December 16th, 2012, Chinese central government put forward this economic policy for the first time. Central Economic Work Conference proposed that new urbanization is the historical task of China's modernization, which is also the greatest potential for expanding domestic demand, so we should actively promote the healthy development of urbanization.
- In 2012-2013, after several central level meetings preheat, as a general outline of the development of China's urbanization, "The plan of Promoting the Healthy Development of New Urbanization in China (2011 - 2020)" had been completed, had been reported to The State Council, and soon be released. The plan is led by the National Development and Reform Commission, and more than a dozen ministries jointly prepare and draft.
- On December 23th-24th, 2013, the Central Rural Work Conference further refined the next stage specific time schedule of new urbanization, proposed three "100 million" goal, which means that in 2020, about 100 million used into solving the agricultural population permanently migrated and settled in the city; about 100 million used into reconstructing shanty towns and villages in towns; and about 100 million used into the Midwest of China urbanization.
- In December, 2013, the Central Working Conference about Urbanization discussed the "New National Urbanization Plan". According to the meeting discussion, the relevant ministries will continue to amend the specific plan details.
- On January 20th, 2014, "New National Urbanization Plan" had been revised and submitted to the State council.
- On March 17th, 2014, the Chinese government unveiled the National New-type Urbanization Plan, which detailed plans to increase the amount of Chinese people living in cities from 54 percent to 60 percent by the end of 2020, which will involve 110 million rural residents crowding into the cities over the next seven years, through huge investment in transport networks, urban infrastructure and residential real estate, together with reforms to the country's registration system.

Urbanization Trend



Sources: NBS; BNP Paribas estimates

(4) New Urbanization maybe soft-land Chinese housing bubble

- **Accelerating development of small and medium cities will make the housing price in Tier 1 and 2 cities cool down.**

Firstly, accelerate the new urbanization, especially the development of small and medium cities in China. Improve urban layout. Cities and towns should have a reasonable structure: to properly control the scale of megacity and big cities, vigorously develop medium and small cities, and small towns.

Secondly, strengthen the construction of infrastructure in the medium and small city, and improve the carrying capacity of these cities. If we increase employment opportunities, improve public services and infrastructures, which are the small and medium cities needed to run. I think the people will prefer to live in their hometown.

Thirdly, the layout of the city population should suit for the resources and the environment.

(4) New Urbanization maybe soft-land Chinese housing bubble

- **Solving the Hukou problem will help rural residents to win the status of official legal residents, further increase the housing demand, and digest housing inventory in Tier 3 and 4 cities.**
- New urbanization policy, rather than emphasizing the building of new homes and new cities, the top priority will be helping rural residents who have already migrated to the cities win the status of official legal residents. In other words, new urbanization will focus first on solving the Hukou problem.
- the Hukou system is “a major barrier holding back the country’s urbanization process.” In coming years, China will “**fully remove hukou restrictions in towns and small cities, gradually ease restrictions in mid-sized cities, setting reasonable conditions for settling in big cities while strictly controlling the population in megacities.**” In other words, China will continue to emphasize the growth and development of “small cities” by removing hukou restrictions for these underdeveloped areas. But “megacities” like Beijing and Shanghai will likely continue to have strict limitations on hukous in a bid to fight overcrowding and rising housing costs.

(4) New Urbanization maybe soft-land Chinese housing bubble

- **New urbanization will increase living consumption, and will eventually lead to a moderation in housing prices in the long term, although it maybe have short term impact on supply/demand prices.**
- As part of hukou reform, China's leaders hope to **begin breaking down the socioeconomic gap between registered urban residents and rural migrant workers**. Such a plan wouldn't technically increase China's urbanization ratio, since non-registered migrants are already counted as urban residents. However, reforming the hukou system would achieve the underlying goal of urbanization by **increasing domestic consumption**. Providing residence permits for migrants workers would raise their standard of living, which would lead to increased consumption.
- While reforming the hukou system was the number one priority for China's urbanization efforts, **there are five other tasks as well: more efficient land use, a sustainable funding system, better patterns of urbanization, holding construction to a higher standard, and providing stronger management of urbanization as a whole**. These goals promise that China will continue to relocate current rural residents even while it addresses the needs of people already living in cities.

4. Get my research result

- (1) New urbanization is an unprecedented opportunity for real estate;
- (2) Implement population urbanization;
- (3) Implement resource-saving urbanization;
- (4) We need to pay attention to many issues in the process of new urbanization. At first, we should solve the Hukou problem, then adjust of income distribution, and so on.

Reference:

- (1) Zhu Weijing. (2013). China's housing least affordable in the world. The world of Chinese. July 3, 2013.
- (2) Alpha Watch.(2014). China residential, when will the party end?. Alpha Investment Partner Limited. January, 2014.
- (3) Guillaume Rougier-Brierre, Guillaume Jeannet.(2009). Urbanization and real estate investment in China. IFRI. December, 2009.
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- (5) Zhang Ping. (2013). Let us talk about NPC & CPPCC. www.lfeng.com. April, 2013.
- (6) Shannon Tiezzi. (2013). China's New Urbanization Plan. The diplomat. December 17, 2013.

Thank you for your attention!