Market failure or institutional failure: why the Chinese urbanites find housing increasingly unaffordable?

Dr J Albert Cao and Dr R Keivani

Rapid housing price inflation has been continuing in China for the last 9 years with the consequences of aggravating affordability and social discontent in major cities. Blaming a failing market, the government and the housing industry have been focusing efforts on the market to restrain demand and encourage supply to tame housing price inflation in the last two years. However, demand remains strong and supply keeps short. This paper, based on a Royal Institution of Chartered Surveyors (RICS)/Shui On funded study on the Chinese property market, argues that the problems of housing price inflation and market housing affordability are deeply rooted in the institutional arrangements, instead of simply caused by a failing market. It uses a three-level analytical framework to provide explanations to how the institutional arrangements impact on the housing market and recommendations to how the problems can be addressed. The paper conceptualises a property-led urban economic model which compels local government’s to maximise land sale revenues at the expense of institutional arrangements to improve market housing affordability and provision of social housing. It analyses institutional arrangements on planning, real estate administration and the housing industry to indicate institutional arrangements at the micro-level that contribute to the problems in housing. Based on the above analysis, the paper puts forward a set of recommendations which aim to build a new housing regime to allow maximum market affordability and social housing provision.

Introduction

The huge improvement of housing standards in Chinese cities in the last 28 years is a miracle. From 1988 to 2005 market investment in property development grew at 29.5% year-on-year and by 2005 accounted for 22.4% of fixed asset investment (CNBS, 2006). Per capita housing space in urban areas rose 400% in 26 years to 26.1 square metre (sqm) gross floor area (GFA) in 2005 (MC, 2006) while urban population became 3 times bigger (CNBS, 2006).

However, rapid housing price inflation has been continuing in China for the last 9 years with the consequences of aggravating affordability and social discontent in major cities. Blaming a failing market, the government and the housing industry have been focusing efforts on the market to restrain demand and encourage supply to tame

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housing price inflation in the last two years. However, demand remains strong and supply keeps short.

The controversy on housing price inflation centres on whether market failure or institutional failure is the real cause. This paper, based on a Royal Institution of Chartered Surveyors (RICS)/Shui On funded study on the Chinese property market, attempts to unlock the real cause responsible for housing price inflation. It uses a three-level analytical framework to provide explanations to how the institutional arrangements impact on the housing. By conceptualising a property-led urban economic model, the paper points out that local governments maximise land sale revenues at the expense of market housing affordability and provision of social housing. It analyses institutional arrangements on planning, real estate administration and the housing industry to investigate institutional arrangements at the micro-level that contribute to the problems in housing. Based on the above analysis, the paper puts forward a set of recommendations which aim to build a new housing regime to allow maximum market affordability and social housing provision.

**Methodology**

This research uses an extensive interview programmes in the four main case study cities. The interviews were semi-structured in nature allowing for maximum objectivity yet encompassing the desired flexibility for iterative development and exploring issues in a deeper qualitative manner during the study period. The programme was designed to be comprehensive in its scope covering the full range of identified key actors. It therefore aimed to interview an average of 50 informed respondents in each city, with the target for Beijing being 60 given the city is the capital and that for Chongqing being 40 given it has a smaller property market with a shorter history. The interviewees are drawn from a range of actors including high ranking public officials at city, provincial (as in Guangdong) and national levels (as in Beijing), professional organisations and research and academic institutions and the private sector (major international, national and local developers, investors, banks and agents). Exhibit 1 provides the detail of the interviewed respondents in China.

<table>
<thead>
<tr>
<th>Exhibit 1 Interview programme in China</th>
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<tbody>
<tr>
<td><strong>Cities</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Beijing</td>
</tr>
<tr>
<td>Shanghai</td>
</tr>
<tr>
<td>Guangzhou</td>
</tr>
<tr>
<td>Chongqing</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
This study adopts an institutional perspective, which sees 'institutions', or institutional arrangements, as the informal and formal rules and their enforcement mechanisms. Institutional arrangements govern the choices that people make and can either support or impede market transactions. Market-supporting institutional arrangements help transmit information about market conditions, goods and participants, enforce property rights and contracts to determine who gets what and when, and manage competition in markets by regulating entry and directing incentives (North, 1990). They serve to reduce transaction costs for market transactions. On the contrary, market-weakening institutional arrangements raise transaction costs and invade property rights hinder the development or even the establishment of markets. They are the major sources of risks to market actors, including investors.

To aid the analysis of institutional change, a three-level analytical tool, developed by Ostrom (1990) is employed to assist the identification of the nature of and relationship among institutional arrangements (Exhibit 2). It stratifies rules for a particular event (in this case commercial property investment) into operational, collective-choice and constitutional levels. The operational level is the bottom level where individuals and firms make business decisions. These decisions result in actions in the market, i.e. development, purchase and holding of commercial property for investment purposes. The collective-choice level is the intermediate level where officials make decisions, which are rules bounding business decisions in a market. Officials’ decisions are enforceable against non-conforming individuals in the market. For instance, officials may impose a tax on the sale of property within a number of years to deter ‘speculation’, which is enforced in title registration.

The constitutional level is the top level, where decisions made by senior officials and politicians in turn set the institutional arrangements for the collective choice level. These decisions form the rules that officials must obey when they formulate rules for the market. For example, central government officials may ban local officials from imposing tax on rental income. Decision-making at any level is affected by the existence of contextual factors that are independent of the institutional arrangements surrounding the particular market (Edwards & Steins, 1998). The actions of foreign investors to make substantial number of enquiries on commercial properties in China and purchase some buildings in Beijing and Shanghai are independent from and unanticipated by the Chinese officials and developers, which changes market expectations and encourages developers to take extra risks in commercial property development.

Exhibit 2 The three-level analytical framework and the contextual factors
The above framework can be used to explain the making of the entrepreneurial local governments in China, which are keen to take risks in development. To boost economic growth, the central government in China, i.e. the constitutional level, decides that the promotion and tenure of office of local senior officials are linked to local economical achievements (GDP) those officials promote while in office. This rule has led to local senior officials, at the collective choice level, to set out ambitious growth plans to beat their counterparts and to provide government support in streamlined planning approval and subsidies to some sectors, such as manufacturing and construction, which could generate high GDP growth. Actors in those sectors, either state-owned firms or private firms, are encouraged to undertake projects that generate high figures of GDP and employment.

**Housing prices inflation**

The longest running real estate index is the China Real Estate Index System (CREIS), originally developed by the China Real Estate Association, Intelligence Centre of the prestigious Centre for Development Studies in the State Council and the China Real Estate Development Group in 1994. It is now run by the Soufun Research Institute, whose parent company runs the famous Soufun website for real estate. CREIS takes the average price of all property in Beijing at the fourth quarter of 1994 as the base of 1000, and compares the prices according to property types in different cities against such a base. Exhibit 3 shows the changes in housing prices in Beijing and Shanghai since the first quarter of 1995. Housing price in Beijing was stable and higher than that of Shanghai until quarter 3 of 2003, when it was surpassed by that of Shanghai. Housing price in Shanghai peaked in quarter 2005 when the macro economic control, mainly targeted at Shanghai, produced its impact. Beijing was not affected, however, and its housing price picked up fast and has exceeded that of Shanghai in the second quarter 2006.
Another measure is the residential index of the Real Estate Price Index of 35/70 Major Cities (REPI35/70). Exhibit 4 illustrates annual housing price change from 1999, indicating nationally housing price inflation has come down in 2005 and 2006 from the double digit growth in 2003 and 2004. Exhibit 5 shows cumulative housing price change from 1999, indicating that nationally housing price has risen by 60% by first quarter of 2006.
Statistical data from the government are also indicative of the development and status of the housing market. Exhibit 6 shows the sale of new housing in terms of square footage in the country and its annual growth. Exhibit 7 illustrates the change in average prices of housing in China in the same period. From both figures, it can be seen there has been a huge expansion of the amount of new housing sold at much higher prices.

Rising housing prices have become a concern of the central government since 2004, which introduced macroeconomic control to the real estate industry. In particular, runaway housing prices in Shanghai from quarter one 2003 to quarter two 2004, which measures at the CREIS’ Shanghai Housing Index as growing 322 points or 38.8% (Exhibit 3), alarmed the central government. There was also sizable foreign money that found their way through China’s foreign exchange control system into Shanghai residential property in expectation of housing price inflation and RMB appreciation. Excessive flow of foreign money into China increased the pressure for the RMB to appreciate, as the People’s Bank of China (PBoC) had to purchase all those foreign currency to maintain RMB stability, releasing more money, and thus liquidity, that counteracted the central government’s macroeconomic control.
Source: CNBS, various years

Exhibit 7 Price inflation for new housing in China

Price Inflation for New Commercial Housing in China

Source: CNBS, various years

Macro economic and administrative control

Part of the actions to control housing prices was performed by the PBoC, which worked along two fronts. The first front was to control demand for housing through interest rate changes. On 29 October 2004, the PBoC raised interest rate for the first
time since May 1996, with corresponding rate rise for mortgage loans (Exhibit 8). Then on 17 March 2005, the PBoC again raised the previously heavily discounted mortgage rate without increasing the general interest rate, and set the lower limit of mortgage rate at 90% of, and upper limit at the normal loan rate. Furthermore, it advised commercial banks to raise the percentage of down payment from 20% to 30% in areas of fast rising housing prices. Rate rise did contribute to depress demand and in turn housing price inflation, as numerous housing buyer surveys reveal. However, it fails to control housing price inflation in some cities, i.e. Beijing and Guangzhou.

Exhibit 8 Interest rates of mortgage loans in China, set by PBoC

<table>
<thead>
<tr>
<th>Terms</th>
<th>Before 29/10/04</th>
<th>29/10/04</th>
<th>17/03/05</th>
<th>28/04/06</th>
<th>18/08/06</th>
<th>18/03/07</th>
<th>19/05/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 years</td>
<td>4.77%</td>
<td>4.95%</td>
<td>5.76%</td>
<td>6.03%</td>
<td>6.30%</td>
<td>6.57%</td>
<td>6.75%</td>
</tr>
<tr>
<td>3-5 years</td>
<td>4.77%</td>
<td>4.95%</td>
<td>5.85%</td>
<td>6.12%</td>
<td>6.48%</td>
<td>6.75%</td>
<td>6.93%</td>
</tr>
<tr>
<td>5 + years</td>
<td>5.04%</td>
<td>5.31%</td>
<td>6.12%</td>
<td>6.39%</td>
<td>6.84%</td>
<td>7.11%</td>
<td>7.20%</td>
</tr>
</tbody>
</table>

Source: PBoC, various years

The second front the PBoC worked was to further tighten credit to developers after the Document 121 in mid 2003 (PBoC, 2003), which requires developers to contribute their own equity at not less than 30% of the total investment of projects before qualified for lending. As a result, development finance became much more difficult, which contributed to reduce new starts of construction and slow progress of construction, leading to reduced supply. This outcome, nonetheless, was generally regarded as causing housing prices to rise.

The Ministry of Land and Resources (MLR), the country’s land administrator, also acted to further tighten land supply in the hope to reduce the level of activities in the property development sector. Reduced supply, coupled with more open market disposal of LUR, increased the bid prices by developers, which also led to reduced supply and higher costs of housing and in turn higher prices of new housing.

However, local governments have been reluctant to impose control on housing prices, as rising housing prices have generated higher taxes and LUR sale receipt, and expanded real estate development activities that have contributed to local GDP. As one respondent in the Shanghai Focus Group meeting pointed out the prosperity of the Shanghai real estate market gave the city a rare opportunity to advance its economy to the level of an international business centre. “Such a situation embodied the hard-work of many people and carefully formulated and implemented policies and is not easy to achieve”. The reasons for Shanghai to rely on the property industry were that “rising costs have eroded the competitiveness of Shanghai in manufacturing, and the institutional arrangements in China do not allow Shanghai to become a national

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2 Before 17 March 2005, banks were allowed to lend to home buyers at greater discounts of the normal lending rate. Setting a lower limit means a rise of mortgage rate.
financial centre”. Through a dynamic real estate market, “Shanghai could replace its 1930s infrastructure with a 21 century one, provide quality space for international business activities and, more important, attract money and attention from the world.” For these reasons, Shanghai did not follow the central government’s measures full-heartedly and could not prevent another round of housing price inflation after the central government asked Shanghai to do so in 2004. From quarter three 2004 to quarter two 2005, the CREIS Shanghai Housing Index rose 21.2% (Exhibit 3), indicating that the macro economic control, introduced by the central government in mid 2004, failed to check the rapid housing price inflation in Shanghai.

Housing prices in Shanghai became an indicator of the success of the central government actions in the housing market. Runaway housing prices caused increasing discontent from the middle and low income groups, who were priced out of the housing market. One particular discontent was the impression in Shanghai that out-of-town and international investors seemed to buy a substantial part of the new housing, while the majority of local people could not set a foot on the property ladder.

The Shanghai Municipal Government (SMG) therefore was compelled to act on the runaway housing prices. On 5 March 2005, the SMG enacted the Opinions on Strengthening the Adjustment and Control of the Property Market to Promote the Healthy and Sustainable Development of the Property Market (SMG, 2005a), starting a series of measures to increase low-end supply of housing, market monitoring and crackdown on speculation and dishonest behaviour. The Shanghai Building, Land and Resources Administration Bureau and Shanghai Local Taxation Bureau imposed a set of rules on housing transaction to reduce demand for housing and enhanced policy-oriented supply (Exhibit 9), with the new tax effective on the day of announcement.

Exhibit 9 New rules adopted by Shanghai government to tackle high housing prices

<table>
<thead>
<tr>
<th>New rules</th>
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<tbody>
<tr>
<td>Taxation</td>
</tr>
<tr>
<td>5.55% Business Tax on the difference between purchase price and sale price of housing bought within one year, effective on the day of promulgation</td>
</tr>
<tr>
<td>Mortgage</td>
</tr>
<tr>
<td>Mortgage fully repaid for housing held less than one year before permission to sell</td>
</tr>
<tr>
<td>Time of transaction elongated from one week to one month, even with mortgage fully repaid</td>
</tr>
<tr>
<td>New supply</td>
</tr>
<tr>
<td>20 million square metres new housing for households relocated for major infrastructural projects and verified as low-income</td>
</tr>
</tbody>
</table>

Sources: various SMG documents

The new rules in housing transaction were highly controversial. An interview respondent, who is a famous professor on real estate, regarded the new rules as being ‘incompatible to a market economy’. Two interview respondents with legal
background regarded the new rules as ‘infringing on human rights’.

The State Council and central government agencies followed suit in policies and detailed measures to curb housing price inflation. On 26 March 2005 the State Council issued the “Notice to Earnestly Stabilise Prices of Housing” (State Council, 2005a), which outlined a number of policy guidelines and was referred to as the Old Eight State [Council] Articles (Exhibit 10). On 9 May 2005 the State Council circulated the “Notice on Opinions for Stabilising the Prices of Housing” (State Council, 2005b), which contained more detailed measures on how to “adjust and control” the prices of housing and was referred to as the New Eight State [Council] Articles (Exhibit 11).

Exhibit 10 Outline of the Old Eight State [Council] Articles

| 1 | Taking the task to stabilise the prices of housing very seriously |
| 2 | Earnestly taking responsibility to stabilise housing prices |
| 3 | Making great efforts to adjust and improve the structure of housing supply |
| 4 | Strictly controlling passive housing demand³ |
| 5 | Properly guiding housing consumption expectations |
| 6 | Monitoring the operations of the property market fully |
| 7 | Pro-actively implementing the various policy measures to adjust and control housing demand and supply |
| 8 | Seriously organising inspections on the task to stabilise the prices of housing |

Source: State Council (2005a)

Exhibit 11 Outline of the New Eight State [Council] Articles

| 1 | Strengthening planning control and improving the supply structure of housing |
| 2 | Increasing the strength of land supply control and strictly administering land |
| 3 | Adjusting the policy on transaction taxation and strictly ensuring tax levy |
| 4 | Strengthening credit management on real estate lending to avoid financial risks |
| 5 | Clearly identifying the standards of ordinary housing which enjoys preferential treatment to guide housing construction and consumption in a rational manner |
| 6 | Strengthening the construction of Economic and Decent Housing and consummating the cheap rented housing system |
| 7 | Earnestly rectifying and establishing market order and seriously investigating and treating market behaviour violating laws and regulations |
| 8 | Strengthening market monitoring and consummating market information disclosure |

Source: State Council (2005b)

Some detailed measures in the New Eight State [Council] Articles were as follows. First, local governments were to define what constitute ordinary housing. The criteria of ordinary housing consists of a plot ratio of higher than 1 for the housing estate,

³ Passive housing demand denotes demand generated by involuntary relocation.
housing units smaller than 120 square meters in gross external area and prices lower than 120% of the average housing prices. Local governments could float the above figures upwards but not exceeding 20%. Second, ordinary housing enjoys preferential policies in taxation and planning control to encourage provision and purchase. Third, from 1st June 2005, full sale receipts from all housing bought less than two years ago were subject to Business Tax. Sale receipts from ordinary housing bought more than 2 years were except from Business Tax. However, sale receipts from non-ordinary housing bought more than 2 years ago was subject the Business Tax on the difference of the purchase and sale prices. This is a higher tax incidence than the measures introduced in Shanghai.

The combinations of all measures has stopped speculation in Shanghai and led to falling housing prices, as indicated by Exhibit 3. However, nationally housing prices have not been affected and continue to grow, albeit at a slower pace (Exhibit 4 and 5), with housing prices in Beijing exceeding those in Shanghai, which used to be lower than Beijing before 2003. There is a danger of widespread discontent developing in a few cities with very rapid price inflation, i.e. Shenzhen.

Against this background a new round of macro economic control with the national housing market as the target looms large. On 28 April 2006, PBoC raised interest rate across-the-board, raising the costs for developing and buying housing (Exhibit 8). On 17 May 2006, the State Council announced a six article policy on the real estate market (Exhibit 12), which has been quickly referred to as Six State [Council] Articles, indicating a new round of action has started. On 24 May 2006, details of the Six State [Council] Articles were announced in the Opinions on Adjusting the Structure of Housing Supply and Stabilising Housing Prices (State Council, 2006). This new round is also confirmed by officials in the Ministry of Construction. Although they are similar to previous ones, the articles are more practical and indicate some of the lessons have been learnt in the last two years.

Exhibit 12 Outline of the Six State [Council] Articles

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Earnestly adjusting and improving the structure of housing supply</td>
</tr>
<tr>
<td>2</td>
<td>Giving full play to taxation, credit, and land policies</td>
</tr>
<tr>
<td>3</td>
<td>Controlling the speed and scale of urban redevelopment to a rational level to prevent passive housing demand from relocation to grow too fast</td>
</tr>
<tr>
<td>4</td>
<td>Further normalising and rectifying the order of the property market</td>
</tr>
<tr>
<td>5</td>
<td>Speeding up the Cheap Rented Housing provision, normalising the provision of Economic and Decent Housing, pro-actively developing the secondary housing market and the renting sector</td>
</tr>
<tr>
<td>6</td>
<td>Consummating statistical work and information disclosure system, increasing transparency and insisting on correct media guiding of public opinions</td>
</tr>
</tbody>
</table>

Source: State Council (2006)

Property-led urban economic growth
Achieving fast economic growth has been at the centre of the Chinese government’s policies since the reform and opening up campaign was initiated in 1979. So far, all policies formulated by the central government have been evolving around this objective, with remarkable achievements in actual economic growth.

The government’s policies towards the property industry have been similarly formulated with the same objective in mind since such policies became available in 1992, the year when the central government created a nationwide development boom. In the “Decision on Speeding Up the Development of Tertiary Industry”, enacted on 16 June 1992 by the Central Committee of the Communist Party and the State Council (State Council, 1992), real estate was identified as an industry that required only a little investment, was quick to produce results, created many jobs and had close links to economic growth and peoples’ livelihood, and thus its development should be speeded up. The real estate sector did quickly become a driver of the economic growth. However, it turned out to be that the real estate sector required large amounts of investment and became a huge drain of funds that dissipated in the hundreds of unfinished projects and billions of dollars of non-performing loans from 1993 to 1998.

A new policy to foster the housing industry as a new growth driver was formulated in the State Council’s “Notice on Further Deepening Urban Housing Reform and Speeding-up Housing Construction” (State Council, 1998), enacted on 3rd July 1998. This policy has rejuvenated the largest component of the real estate sector, the housing industry. From then on, the real estate sector has become a key driver of economic growth, and the property industry has been argued to be a pillar industry in a modern economy. Thus the above policy, designed to speed up housing reform and boost economic growth in the face of the East Asia financial crisis, has evolved into a property-led urban economic growth policy.

There are some merits to the property-led urban economic growth policy. First, real estate resources in both quantity and quality were inadequate to accommodate the demand in a new round of economic expansion at the turn of the century, as indicated the by quick take-up of office space in Beijing and Shanghai in 1999 and 2000, and the nationwide housing price inflation. Second, compared to other industries, the real estate industry is easier to take the lead to promote economic development as local governments have total control of land resources and substantial amount of financial resources. Skilled construction workers are abundant and new supply is plentiful. Land sale revenues and taxes from property development and sale are important sources of funds to upgrade infrastructure. Third, property-led development provides many cities the necessary accommodation to attract footloose national and international investment and also contributes to the rapid development and modernisation of urban fabric of cities. Many new projects substantially change the competitiveness of cities.
The property-led urban economic growth model has had significant results in generating economic growth. According to the economic census conducted in 2005, the output of the property industry in 2004 accounted for 5.2% of the total output of the economy, which was much higher than the 1.7% in 1997 (CNBS, 2005a and 2005b).

On the other hand, the downside of this policy is also obvious. First, the property-led economic urban growth model gives Chinese cities land and funds to implement their often unrealistically ambitious development plans, which will result in many new infrastructure and commercial property which will remain under-utilised far into the future. New development initiatives under this model often equates to city-wide development speculation, imposing huge risks to cities and on the national scale. Such risks hide behind an economic boom but would become apparent when a slow-down, let alone a downturn, occurs. The lessons in the 1990s, still visible in many major cities of China, are reminders of the risks. This is particularly worrying as many of the cities in the western west of the country have no significant industries except the property industry. Yet demand for space in those cities is small given the lack of related industries, skilled labour and markets. Once oversupply reaches a certain level, the property market, and in turn the urban economy in those cities, will suffer or even collapse.

The interview respondents in three out of the four case study cities regarded that local government policies and intervention contribute to overheating of the property market (Exhibit 13). In Shanghai, in particular, far more interview respondents believed this to be the case, which could be linked to Shanghai’s policies to boost the property sector for fiscal revenues from land sale and economic activities generated by property development, transaction and investment. Similar policies are also practiced in Chongqing. In Guangzhou, however, a lower number of respondents thought that there is a link between government policy and overheating, because the Guangzhou property market had been calm for several years including 2005, when the interviews were conducted.

Exhibit 13 Link between overheating and local government policies and intervention
Second, the model depends on continuous selling of and building on greenfield sites, which damages the environment and biodiversity and threatens food safety of the country. China is facing the risk of losing the ability to feed its huge population, because of failure to slow down or to eliminate the loss.

Third, it encourages under-supply of land for non-market oriented uses, such as for LRH, and under-compensation to occupiers and owners whose land and properties are compulsorily acquired to make way new development. Interviewees in the four cities have indicated their dissatisfaction on the effectiveness of social programmes (Exhibit 14). In particular, the acute shortage of land for Cheat Rent Housing has caused a severe shortage of such housing in Chinese cities, e.g. Shanghai and Beijing.

Such a policy has given those carrying out developments, in particular, developers, too much leeway, leading to a number of problems. Planning control, already weak in China, has often been bypassed to speed up development starts to allow fast GDP growth. The root of the acute problems in the housing market is poor planning control to structure a balanced housing supply. Existing oversupply of office space in Chongqing and the looming oversupply in Guangzhou and Beijing are further examples. Developers have also been able to evict owners and tenants with immoral and illegal means, and provide low or much delayed compensation. Acute social tension is generated due to forced land acquisition by local compulsory purchase orders, issued without sufficient consultation and/or compensation.

Exhibit 14 Views on the effectiveness in social programmes
Fourth, the property-led development model generates too much “smoke” and affects due attention to be paid to other industries and other areas. As the economy has grown fast enough under the property-led development model, problems and potentials in other industries are sometimes overlooked. For example, the agricultural sector has suffered due to the loss of arable land and has received lower priority by some local governments. Moreover there was a sentiment in the Shanghai focus group that a number of local governments, including Shanghai did not care enough to foster the growth of some indigenous firms, leading to big expansion of foreign firms. On the other hand, the same model has generated enough troubles. One interview respondent with close access to the Ministry of Construction commented that the minister was now a fireman charged with putting out real estate related fires. This implies that too much time is taken up by real estate related accidents and emergencies, like riots resulting from low compensation and compulsory purchase, with other much-needed strategic considerations and policies being overlooked.

Institutional failure rather than market failure

Since 1998, housing policies in China have been promoting owner occupation of housing supplemented by social housing. The actual implementation of the housing policies has been strongly biased toward owner occupation. The provision of social housing, on the other hand, has been limited in most provinces and cities and virtually not delivered in a few cities like Shanghai, where social housing is most needed.

The completion of the housing reform, which privatised most quality public housing, and the thriving housing market have combined to increase the ratio of private owned urban housing in China from 72.82% in 2002 to 81.62% in 2005 (MC, 2003; 2006),
higher than most, if not all, developed countries\textsuperscript{4}. However, this remarkable achievement of housing reform is increasingly under criticism as the problem of affordability in the housing market is getting worse, especially in economically developed cities. First time buyers in the 21 century have to purchase their first property in the market. However, their counterparts before the completion of the housing reform could purchase cheap public housing at over 50\% discounts to market prices, which were much lower in the first place. With housing price inflation lack of affordability looms large.

There are several factors that contribute to the dilemma of high private housing ownership and increasing difficulty for first time buyers to buy and for existing owners to improve housing conditions in the market. First, new housing are getting larger and more luxurious, with a very small proportion suitable to first-time buyers and lower-to-middle-income-owners. Average unit size in 2002 and 2005 in the country was 77.42 square metres and 83.2 square metres, respectively (MC, 2003; 2006). The 5.8 square metres increase in average unit size implied that newly completed housing in the three years after 2002 was much bigger than the average unit size in 2002. A recent announcement by the Ministry of Construction revealed that among the 1,000,000 units available in April 2006 in the 40 major cities, the average size was 120 square metres per unit and the percentage of small size units, i.e. below 80 sqm, was only 23\% (Exhibit 15). The small percentage of small new housing units mean affordability for first-time buyers and low-to-middle-income households for new housing is low in those cities.

Exhibit 15 Small size units are rare in China’s new housing

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Small size units are rare in China’s new housing}
\end{figure}

Source: (Beijingnews, 2006).

\textsuperscript{4} The ratio of private ownership of rural housing is close to 100\% in China.
There is ample anecdotal and statistical evidence to indicate that the sizes of housing units are much bigger in other cities, where income levels are much lower than the 40 most important cities. For example, a participant in the Chongqing focus group meeting revealed that Wulong County in Chongqing Municipality could be characterised as a ‘county of luxury housing’, as the minimum size of new housing stood at 160 square metres. A small rise in housing prices would price out a significant number of families in the smaller cities. Institutional and planning issues are the cause of the ‘super-sizing’ of residential apartments.

Second, the provision of social housing has been on decline. Social housing after the housing reform in China includes Housing Provident Fund, Economic and Decent Housing (EDH) and Cheap Rented Housing. Housing Provident Fund requires deduction from salaries of policy holders every month and covers about half of state sector employees. It offers lower interest rate mortgage to cover part of the housing purchase. From the early 1990s to 2004, it had accumulated loan values at RMB740 billion from 61.39 million people and had supported 4.33 million households with loans of RMB250.7 billion, a fraction of the total amount spent on housing purchase in the same period (Xinhua, 2005a).

EDH is actually subsidised housing for sale to middle income households by means-testing, with its prices kept down by waving the LUR premium and a number of taxes. Its proportion in total market housing provision has remained low and been in decline since 2004, both in total floor area (Exhibit 16) and total investment in development (Exhibit 17). Shanghai was one of a few cities which refused to implement the EDH policy. As a result, only about 1.5 million sqm low-cost housing was completed from 1991 to 2004, benefiting about 16,000 families who were displaced by compulsory purchase orders (SMG, 2005b). Compared with the sale of 32.3 million sqm of new housing (nearly 300,000 units) and 27.3 million sqm (303,291 units) second hand housing in 2004 (SMBS, 2006), the scale of sub-market and LRH programme in Shanghai is very small, far from enough to cover even 1% of the 4.9 million households of local citizens.

Exhibit 16 Sale of commercial housing and Economic and Decent Housing

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5 This is translated from the term “jingjishiyong fang”. It is sometimes translated as ‘affordable housing’, but the authors considered ‘Economic and Decent Housing’ more closely conveys its meaning of cheap but still suitable decent homes.
There are also many other problems with EDH. Poor implementation of means testing resulted in many units falling into the hands of housing investors. One developer told one of the authors that he and other developers of EDH did not bother to apply means testing at all and, in some cases, tried to bypass it by implementing only some of the criteria. The unit sizes of some EDH projects are identical to luxury housing as unit sizes are over 140 square metres, well in excess of the 120 square metres standard introduced as ordinary housing by the New Eight State [Council] Articles (State Council, 2005b). In Beijing, one large EDH project offers dozens of 300 square metre double storey (duplex) units, much more luxurious than most luxury housing (YCWB, 2006). The other large EDH project in Beijing also offers dozens of units in excess of 200 square metres. Some buyers, although qualified for some EDH projects, found they could not afford large units (CBT, 2006). Furthermore, because of loss of tax and LUR revenue, many local governments, for example Shanghai and Guangzhou, refused to implement the EDH scheme. The constitutional level rule on EDH, however, is not binding on the collective-choice level decision makers, making the central government powerless to rectify this situation.

Exhibit 17 Investment into commercial housing and Economic and Decent Housing
The last category of social housing is the Cheap Rented Housing (CRH), designed for very poor families. However, the supply of CRH is either extremely limited or not available. A circular from the Ministry of Construction indicated that 13 provinces had not full-heartedly implemented this scheme (Shang, 2006). For those local governments that implemented the scheme, the supply was very low. For instance, Shanghai had only 13,500 units at the beginning of 2005 as CRH against a population of local citizens of 13.5 million (SMG, 2005a), a ratio of 1 unit for 1,000 people who could qualify. In Beijing, the first purpose-built CRH project was completed at the beginning of 2004, providing 400 units with internal size from 30 to 60 square metres. Overall, about 18,000 households have been receiving housing benefits such as rent exemption or reduction since 2000 (CCTV, 2004). The CRH section in Beijing is again very small, compared to its population of 11 million local citizens.

For some cities, the undersupply of social housing is linked to established local government policies. One Shanghai focus group participant, an official, argued that the Shanghai housing policy was to maximise market allocation and the government’s role was thus to assist low-income families to meet their housing needs through the market. As a result, only those with very low income were able to live in CRH. This explains why Shanghai government does not operate the EDH project and the CRH programme is so small.

Third, there has been excessive demand for housing investment and a trend of owning second homes in recent years due to popular expectation of further price inflation and a lack of policies on housing investment and second homes. For example, the

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6 Non-local citizens are not qualified for CRH, regardless of their income status.
Shanghai Municipal Government issued a warning at the end of 2003 on the level of housing purchased for investment, which stood at 16% of all new housing purchase, close to the internationally accepted warning line. In particular, for housing over RMB7,000 per square, the ratio of investment-oriented purchase was nearly 40% (Chinanews, 2003). In Beijing, a survey coordinated by the city’s Statistics Bureau at the end of 2004 indicated a ratio of investment-oriented housing purchase at 17%, with nearly 50% of homes purchased by investors left vacant to wait for capital appreciation (Xinhua, 2005b). In Guangzhou, the ratio of investment-oriented purchase was found to be 13.8% in 2005 and in Chongqing the ratio was 11% in 2005.

The number of second homes is also significant. In 2002 the Ministry of Commerce found in its survey that 9.6% of households in big cities owned two or more homes (Xinhua, 2002). In Guangdong Province, the provincial Statistics Bureau found that the ratio of urban families having second or more homes stood at 18% in 2005 (YCWB, 2006). Interestingly, some local governments regard a high ratio of second homes as an indicator of wealth and economic development in their localities.

Fourth, migrants and non-resident buyers have been disproportionately represented in some major cities. In 2004, they purchased 60% of new housing in Beijing, 50% in Guangzhou, 26% in Chongqing and 20% in Shanghai (Xinhua, 2005f). One of the authors was surprised to learn that his neighbour’s brother, who is based in Shenyang in China and used to accept financial assistance from her, has purchased a flat in Qingdao, in 2005 in a nationwide housing investment boom. The risks to those investors are very high should the central government succeed in reining in the housing price inflation, as it is not clear how big the number of units built in most cities is.

In summary, the existing housing policy does not provide a housing safety net for local people, does not address the issues of buy-to-let and buy-to-hold housing investment, does not deal with multiple home ownership and does not take into account non-local purchase of housing. The design of such policies does not provide enforcement by constitutional level on the collective-choice level to ensure compliance. The outcome has been a passive response to housing price inflation and affordability by local governments at the collective-choice level. For example, Shanghai’s ten million square metre low-end housing provision to help the low-to-middle-income people, tabled in March 2005 as a measure against affordability problem (SMG, 2005b), is a one-off measure and requires purchase instead of renting. All other factors that push up housing prices have not been addressed at root.

The Six State [Council] Articles (State Council, 2006) will probably bring changes to the current housing policy. Clause 1 of Article 1 requires local governments at all levels (counties, and cities at prefecture and province levels) to formulate Housing
Construction Plan (HCP) to specify the building targets for ordinary housing, EDH and CRH for the next two years and next five years. These plans have to be made public in September 2006 and deposited at higher level governments. Clause 2 of Article 1 stipulates that from 1st June 2006, all new housing development projects should devote 70% of approved floor area to housing units less than 90 square metres in area.

New in the Six State [Council] Articles is the mechanism in place to force compliance of the collective-choice level. However, it is known at this stage that local governments are still half-hearted in devising the collective-choice level rules to implement the two clauses which are constitutional level rules. Only a few local governments, include Beijing, Shanghai, Guangzhou and Chongqing, made public their HCPs on time. With the exception of the Guangzhou plan, such HCPs fail to provide sufficient data on some or all of the important indicators. All HCPs promise only very small numbers of LRH. As a result, the housing market has paid little attention to the publication of HCPs.

It is also unknown what countermeasures local governments and developers will take to distort or even nullify the constitutional level rules. Thus, it is too early to say that housing policy will change following the enactment of the Six State [Council] Articles. Our interview program reveals that the planning system needs reform to increase transparency and the effectiveness of planning control. Otherwise the constitutional rules will be easily distorted, say, through the planning regime.

Exhibit 18 Transparency in urban planning system

<table>
<thead>
<tr>
<th>Per cent</th>
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<tbody>
<tr>
<td>Beijing</td>
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<td>Shanghai</td>
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<td>Guangzhou</td>
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<td>Chongqing</td>
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On the effectiveness of urban planning control, over 70% of respondents in Beijing,
Guangzhou and Chongqing were not satisfied. In Shanghai, there were also over 40% who were not satisfied (Exhibit 18). Almost no one was very satisfied on this issue.

Exhibit 19 Effectiveness in urban planning control

In the area of public participation in urban planning, 70% to 80% of the respondents in all four cities were not satisfied (Exhibit 19). Almost no one was very satisfied on this issue.

Conclusions

The problems of housing price inflation and market housing affordability are deeply routed in the institutional arrangements, instead of simply caused by a failing market. Two conclusions are as follows.

First, there is a lack of sound housing policy and housing plans at the central and local levels of governments, with serious consequences on affordability and accessibility to social housing.

The huge improvement of housing standards in Chinese cities in the last 28 years is a miracle. However, much of it has been achieved under the old command economy, and the transition to market economy has caused acute problems of housing affordability in the market and denial of access to social housing. Current housing policies at both national and local levels tend to favour the rich, squeeze the middle-income and deny the poor, favouring luxury market housing at the expense of ordinary housing, Economic and Decent Housing and Cheap Rent Housing. There is still no consensus on the reasons behind housing price inflation and thus no consensus
on solutions. While high taxes have been imposed on housing transaction, no taxes are there for housing consumption, which encourage luxury housing, second homes and holding housing as investment without letting. The programs of Economic and Decent Housing and Cheap Rent Housing have been too small in coverage and often fail to benefit those most in need.

Second, new measures to rectify the structural imbalance in housing supply are ad hoc and short-term, neglecting long-term and sustainability issues.

New measures introduced recently will alleviate the structural imbalance in housing supply. However, such measures are still ad hoc and without long-term considerations. There is a lack of well-elaborated policy guidance on housing, which explains why local governments, without experience and guidance, are extremely slow to act on improving housing affordability in the market and accessibility outside the market. The sizes of housing units, stipulated by the new measures, are too small to accommodate rising affluence and aspiration for housing. There are no density requirements on housing to revert the trend of declining housing density. Without a substantial increase in density, however, Chinese cities are not capable of housing the hundreds of millions new urbanites, even if all their remaining land is used for housing.

Recommendations

A number of recommendations are provided below.

Recommendation 1. (targeted primarily at central government but also relevant to local governments)

A National Housing Planning Policy Guidance (NHPPG) should be formulated to guide the formulation of Local Housing Planning Policy Statements (LHPPS) and coordination of LHPPSs at regional levels.

One difficulty for local governments to formulate HCPs is the lack of guidance to doing so. A NHPPG shall be formulated to define the contents of LHPPS to guide local governments to formulate LHPPSs and provide methodological guidance to forecast housing demand and calculate land requirements.

The NHPPG should guide the provision of housing to be planned in a regional context. It should be recognised that major cities may not be able to solve all their housing problems internally. In fact, the housing market has provided good examples for a regional solution. In Beijing, Shanghai and Guangzhou, some residents already live in neighbouring cities and commute to work on a daily basis. Thus cities need to have a regional perspective to find solutions for housing, which offer the opportunities for conservation of land and protection of environment in the central city and for housing-led economic growth for other cities. Mass transport system should be built...
to link cities to help commuters.

Recommendation 2. (targeted at both central and local governments)
LHPPS should be formulated to plan local housing building in the next 10 to 15 years and ensure house building in a sustainable manner. LHPPS shall replace existing LHPs.

The LHPPS sets out the policy for housing provision for the next 10 to 15 years and thus replaces the current LHPs. It incorporates the principles of sustainable development into the policies to identify future housing development sites and define the objectives of housing development at those sites.

Recommendation 3. (targeted at central and local governments)
A Housing Use Tax (HUT) should be imposed to finance local government services to households and development and maintenance of urban infrastructure, which are currently paid by other means, including land sales revenues.

A tax on housing has not been levied even though the legal basis has existed for years. The lack of such a tax reduces the costs of housing occupation and encourages demand for bigger housing. It also leads to local governments to generate income from other sources, notably land sale revenues, to pay for services to households and the development and maintenance of urban infrastructure. The imposition of such a tax will help the phasing out of property-led development model.

There is a debate, however, on the nature of, and means to collect, and social implications of the housing tax. On the nature of the tax the issues are whether it is a wealth tax or a tax on use, or whether it is a rent paid to the state for using state land. On the means to collect the tax, the issues are who should pay, how much should be paid and how it is calculated. HUT is a tax on the use of property and occupiers should pay the HUT. On the social implications, the issues are whether this is acceptable to the great majority of urban residents who just taste the joy of ownership of housing.

Recommendation 4. (targeted at central and local governments)
The density of housing and commercial development should be substantially increased to conserve land for the future. Minimum density for ordinary housing should be 400 dwellings per hectare in major cities, 300 in other cities and 200 in all towns.

Recently development density, measured by plot ratio, has been on the decline against the backdrop of near depletion of many inner city and suburban sites. The decline of development density is not sustainable because natural growth and migration will lead to substantial future population growth in most cities. Most of the future housing development sites, both inner-city and suburban, need to have similar high densities to conserve land for future development to satisfy future needs, provided that existing
local characters are taken into consideration.

The proposed minimum densities of 400, 300 and 200 dwellings (average 3 persons per dwelling) on residential sites are based on plot ratios of 4, 3 and 2, respectively, and average dwelling size of 100 sqm GFA. Assuming residential land accounts for 30% of all urban land and that all residential areas are already built according to the above guideline, the above densities equate to 360, 270 and 180 persons per hectare of urban land for major cities, cities and towns, respectively. However, given that that the proposed densities would only apply to new developments the adoption of Recommendation 19 will result in a gradual increase in overall population density over time. Compared to other Asian cities, most major Chinese cities are not high in population density thus a small increase in density is justified in terms land conservation.

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