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HANDS-ON CHINA REPORT
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China's Housing Imbalance – Is Affordable Housing the Cure?

In recent months, Chinese policymakers have strengthened their focus on the construction of affordable housing in response to popular discontent over stratospheric home prices in major cities, and as a means of compensating for an expected slowdown in real estate investment. This year's official target of building 5.8 million units of affordable housing has been bolstered by agreements signed between local governments and the Ministry of Housing and Urban-Rural Development (MOHURD), and by strong verbal endorsement from top national leaders. Local officials have been urged to diversify funding channels, ensure sufficient land supplies, adhere to fairness guidelines when allocating housing – and have been told that construction of affordable housing will be a major part of their performance appraisals.

This report looks at new modes of funding for affordable housing, the active players in this segment and the expected impact on the commercial housing market and on materials demand.

Key Themes

- **New modes of funding for affordable housing.** The problem of misaligned incentives and insufficient local government funding is gradually being addressed through new financing arrangements, including build-transfer agreements between construction companies and local governments, REIT financing, the investment of insurance funds and the use of Housing Provident Funds. Compared to the past, we expect local governments will make significant headway in achieving official targets for affordable housing, although some regions with higher fiscal deficits and a heavy financing burden for infrastructure projects may still lag behind.
- **An attractive market for construction contractors, but traditional developers will also play a role.** Construction contractors stand to benefit from an expansion in affordable housing, since this segment offers the promise of higher margins and a ready market. A growing number of private real estate developers have also begun positioning for a structural change in the housing market towards greater emphasis on the low-cost segment (see Figure 1).

Figure 1: Announcements by major developers to increase efforts in the affordable housing space

| Developer | Action |
|---------------------------|---|
| China Metallurgical Group | Plans to build 10-15 mn sqm of affordable housing |
| Vanke | Developing 1mn sqm of affordable housing |
| Greenland | Developing 2.38 sqm of affordable housing |
| China State Construction | Plans to build 0.5 mn sqm of affordable housing in Tianjin |
| BBMG | Converted their industrial site in Beijing into 1 mn sqm of affordable housing |
| Greentown | Plans to construct 1.2 sqm of mobile housing and 0.5 mn sqm of affordable housing |

Source: Factiva

This is partially in response to the stronger commitment displayed by the government to increase the number of such units, which promises greater volumes. What used to be an unattractive proposition for developers during a booming commodity housing market has now become more viable with sales that are effectively guaranteed.

- **Demand cushion for construction and building materials demand.** The construction of affordable housing should pick up some slack in China's construction industry, which employs about 36 million people and is a major contributor to a host of downstream industries.
- **Competition with commercial housing is concentrated at lower-end of market.** The ramp-up of affordable housing supply should not pose an undue threat to ordinary commercial housing, but to the extent that competition will materialize, it is likely to occur at the lower end of the commercial housing spectrum (where fewer listed developers are active).

Long-time followers of China's property market will recall that affordable housing targets in recent years have not been met due to misaligned incentives and local funding issues. According to a reported World Bank estimate, only two-thirds of last year's planned 3.1 million units of new affordable housing was actually built. Indeed, only 24.2% of this year's land area designated for economic and low-rent housing had been allocated by mid-year, according to the Ministry of Land and Resources.

However, land supply is not the primary indicator of the eventual availability of affordable housing, nor is it the primary issue. The main impedance in the development of affordable housing projects is a lack of funding, as well as a misalignment of interests between local and central governments. In the last two months, however, we have observed uncommonly strong pledges from all levels of government and indications of commitment by several major construction companies and developers to increase their focus on this segment. Various local governments appear to have ramped up construction starts in the last two months, during which MOHURD inspectors have stepped up local inspections.

I. Categories of Affordable Housing

In the Chinese context, the term "affordable housing" (often termed "welfare housing", "policy housing" or "social housing") encompasses several categories of housing that is provided as a form of social security to holders of residence permits who satisfy local-government determined criteria such as income, total assets, marital status and current living conditions. Every city determines its own set of criteria for affordable housing. For example, families of three or more people in Shanghai must have disposable annual income of less than RMB 34,800 per family member and per capita assets must be less than RMB 90,000. Family members must not have sold/transferred housing outside the family within the past five years.

Affordable housing is broadly defined into four categories:

- **Economic Housing:** units are usually limited to 60 square meters and are sold to qualifying families at below market prices, often 20-30% below comparable ordinary housing. Owners of economic housing usually may not sell or lease their units (except back to local housing authorities at the original price) until it has been occupied for a prescribed period – typically 5 years – and only after a land premium has been paid. Priority for economic housing is often given to families that have been displaced by urban renewal projects.

The development of economic housing may be undertaken directly by local governments, by work units, or as is often the case – by commercial developers who receive free land and receive another 50% exemption of all other taxes, but are required to follow guidelines on selling price and construction standards. Developers' profit margins are usually capped at of 3-4% compared to more typical margins of 15-20% for ordinary commercial housing.

- **Low-rent housing:** government-owned housing (<50sqm) that is leased at a low level of rent (sometimes as low as one-tenth the level of comparable market rents) to the poorest urban

residents. This class of housing is primarily financed from local government budgets, but in light of recent budgetary constraints, financial transfers from the central government have become a more important component of overall funding. Low-rent housing is owned by the state and cannot be sold. The low-rent housing initiative was broadened in July 2009 to cater to a wider range of people, including recent graduates and migrant workers, who might not qualify under normal residency criteria. Typically rental rates for these groups are not quite as steeply discounted relative to market rates.

- **Price-capped housing:** a more recently initiated housing assistance program aimed at urban middle-income families, with units limited to 90 square meters. Prices are capped by local governments when land is sold to a developer, usually at level falling between that of economic housing and ordinary commercial housing. As with the economic housing program, buyers must meet pre-determined criteria, and are subject to similar restrictions on resale.
- **Shanty-town resettlement:** The resettlement of shanty town residents constitutes a major component of China's affordable housing ambitions. A large proportion of China's shanty towns are situated in urban areas. During the process of renovation, displaced families will be offered either economic or price-capped housing, or receive financial compensation.

In an effort to step up affordable housing efforts, the central government has made local government officials directly accountable for the availability of affordable housing in future years. The effects of such an alignment of interests appear to have manifested at various locales (see Figure 2). In particular, 1st tier cities Beijing and Shanghai have both issued policies which increased the percentage of land that must be set aside for affordable housing in commercial housing projects – Shanghai from 0 to 5%, and more notably, Beijing from 15 to 30%.

Figure 2: Announced policies in support of a renewed effort in affordable housing

| City / Province | Date | Action |
|--|--------|---|
| Beijing | 25-Jan | Raising mandatory percentage of land allotted for affordable housing in commercial housing projects from 15 - 30% |
| Shanghai | 3-Jun | Raising mandatory percentage of land allotted for affordable housing in commercial housing projects from 0 - 5% |
| Fujian | 25-May | Provincial government signed a "responsibility statement" with municipal governments and departments; cities that are unable to finish targeted units of quality affordable housing will be held responsible. The statement detailed targets that totalled 47075 units of economic housing, 5300 units of subsidized rental housing, and 24641 households in shantytown remodeling. |
| Beijing, Tianjin, Chongqing, Qingdao, etc. 28 cities | 5-Aug | Approving 28 cities for using the Housing Providence Fund to finance affordable housing projects. The total loan amount will be close to RMB 50bn in support of 133 affordable housing projects across the cities. |

Source: News Reports

II. Layers of Funding Difficulty

With more aggressive construction starts targeted this year, the central government has budgeted RMB 63.2bn (+14.8% YoY) to invest in affordable housing, of which RMB 61.6bn represents transfer payments to local governments. However with some domestic experts estimating that the construction

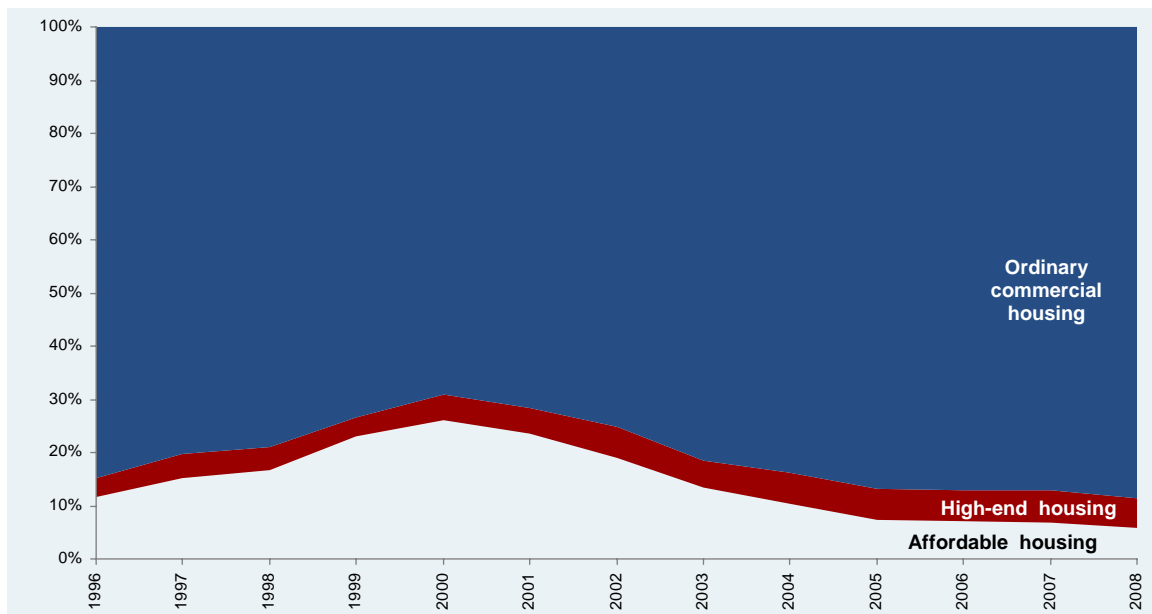
of low-rent housing alone might require as much as RMB450bn in 2010, the majority of the funding burden will continue to reside with local governments.

According to national guidelines, funding for affordable housing construction should be sourced from i) local government budgets, ii) net gains from housing provident funds (a tax-exempt compulsory housing savings plan for employees), iii) 10% of land use tax, net of expenses and iv) central government allocations and v) net income derived from low-rent housing. Other sources of capital can include bank lending, real estate developer capital and bond issuance.

Although according to national policy, 10% of local governments' net land use tax should be spent on affordable housing, flexible interpretations of the "net" amount have resulted in shortfalls of construction capital. In early-August, it was found that only 3% of land use tax in the Shenzhen government budget was allocated to affordable housing in 2010.

- **Low-rent housing faces the greatest funding challenge.** Of the four main categories of affordable housing, the low-rent segment presents the greatest funding challenge. With only the promise of low rental yields over time, local governments must forego land sale proceeds and generally also shoulder construction costs. In comparison, economic and price-capped housing can easily be sold upon completion and can be largely funded by developers' capital and through bank loans. Shanty towns targeted for reconstruction are often within urban areas with relatively high-valued land that can be redeveloped at higher plot ratios. As a result, the net investment involved is often within the reach of local authorities.
- **Challenges at the local level.** In recent years, land transfer fees have accounted for more than 20-30% of local government revenues, meaning that few incentives exist for governments to supply large amounts of land for affordable housing that might otherwise be sold at market rates to private developers targeting the higher-end of the market (see Figure 3 for an illustration of affordable housing as a percentage of yearly completions). This disincentive has become more pronounced in recent years as land prices have surged – for example, land transfer fees in 2009 rose by 43.2% to RMB 1.42 trillion and were estimated to account for 30.5% of local government revenue.
- **New Modes of Funding.** In light of slowing land sales and an ongoing clampdown on lending to local-government investment vehicles, local governments are under tremendous pressure to come up with the necessary funding to meet this year's targets.

Figure 3: Affordable housing as a percentage of yearly completions



Source: CEIC

- **Build-Transfer Agreements.** Opportunities have arisen for construction companies to not only undertake development projects, but to fund them as well. Under Build-Transfer (BT) agreements, construction companies finance the cost of a project, while the project owner (typically municipalities) would repay the construction fees plus interest over a period of 2-3 years after completion.
- **REITs: a new funding vehicle.** In early-2010, proposals to initiate affordable-housing-backed REIT trials in Shanghai and Tianjin were reportedly submitted to the State Council for approval. According to news reports, the pilot REIT program will largely target banks as core investors. With current nominal lending rates for 5+ year loans standing at 5.94%, there is some speculation that returns may need to reach 8% before institutional investors will participate in equity-style REIT ownership. We think there is some potential for REITs to become a financially-viable source of funding for affordable housing. Domestic experts have suggested possible solutions to enhance yields, including i) bundling other higher-yield local government real estate assets within the REIT structure ii) providing government subsidies to investors, and iii) offering preferential income tax rates for income generated from REIT investments.
- **Housing provident fund (HPF).** Established in 1994, HPF is a compulsory housing savings plan designed to assist ordinary wage earners by providing subsidized mortgage loans from the fund. A pilot program utilizing HPF funds for construction of affordable housing has begun in 28 cities, with total loan approvals estimated at RMB 50 billion. The new policy will enable local governments to tap into surplus HPF capital, which was reported by MoHURD at RMB 319.3bn at the end of 2008. With large amount of idle funds within the HPF, the surplus capital could be utilized more effectively to finance policy housing construction as well as provide additional returns in the form of interest payment from the loan arrangement.
- **Insurance Companies.** As of September 3, the China Insurance Regulatory Commission is permitting insurance companies to invest up to 10% of their assets in real estate. This represents a maximum of ~RMB 450bn of potential investment into the property sector, based on total insurance assets of RMB 4.57 trillion at the end of July 2010. Although property investments by insurers are likely to be diversified between affordable housing, retirement and commercial property, we believe that with rapidly rising premium income (5-year CAGR

24.2%) needing to be channeled into long-term investments, the insurance industry may emerge as an important provider finance for affordable housing.

III. Why are Private Developers Entering the Game?

Lately, the domestic media has been awash with reports of real estate developers, who had predominantly been commercial housing players, planning a serious entry to the policy housing segment. (See Figure 1) This is partially in response to the stronger commitment displayed by the government to increase the number of policy housing units, which promises greater volumes. Further adding to the mix of players, construction companies and even mining firms have announced plans to establish a foothold in the affordable housing segment. Affordable housing projects differ from their commercial counterparts on many fronts, not the least of which is an almost guaranteed demand, effectively minimizing the value-added by developers over construction companies in sales and marketing. As such, we can expect the landscape of the affordable housing market to evolve quite differently from that of commercial housing, in particular, a more diverse mix of key players.

For developers who have been mainly commercial housing-focused, profit margins of affordable housing projects are much lower; however, they offer several benefits that are quite opportune in the current state of the real estate market:

- **Goodwill benefits.** Affordable housing projects, given their much lower profitability, can be considered to some extent as a social responsibility of developers. As the government faces a growing impetus to fulfill its promise to deliver affordable and decent housing solutions to the masses, developers are increasingly incentivized to take on policy housing projects in order to build goodwill as well as strengthen their relationships with policymakers. Such relationships can bring benefits that are hard to quantify from the outset but are nevertheless substantial in the long run, for example, receiving preferential treatment in land sales.
- **Greater access to leverage.** Coupled with easier and greater access to leverage and quicker turnover, the ROI of policy housing projects is much more attractive than it may appear on the surface.
- **Positioning for structural change in the housing market.** Thirdly, since the round of measures to cool off the housing market in April, developers, home buyers, and speculators have all been observing the repercussions in the market, and, in particular, the resolve of the government in carrying out its aim of slowing the property market. So far, the government has been adamant in enforcing the policies and unabashed in reiterating its goal to stamp out speculation.

Demand in the policy housing market has become stronger than ever as commodity housing prices have reached levels far beyond being affordable for most. What used to be an unattractive proposition for developers during a booming commodity housing market has now become much more viable with sales that are, in effect, guaranteed.

- **Lower capital requirements.** The capital requirement of policy housing projects is substantially lower than that for commodity housing. Land, the largest cost factor in a housing project, is provided by the government, and depending on the type of policy housing, the government will fund the project to various degrees. (The government is responsible for all development costs for low-rent housing, public rent housing, and resettlement housing, and has to forgo part of the land premium for price-capped and economic housing).
- **Tax incentives.** Lastly, besides the various incentives offered by the government, policy housing can offer substantial tax benefits. For example, the amount of land appreciation tax collected is based on four profit margin brackets (30-60%); the low profitability of policy housing projects may be partially offset by the savings they bring in reduced taxes since they dilute the overall profit margin of a development project. Some cities have eliminated the land appreciation tax pre-

collection at 1% for policy housing projects to further encourage developers to enter into the segment.

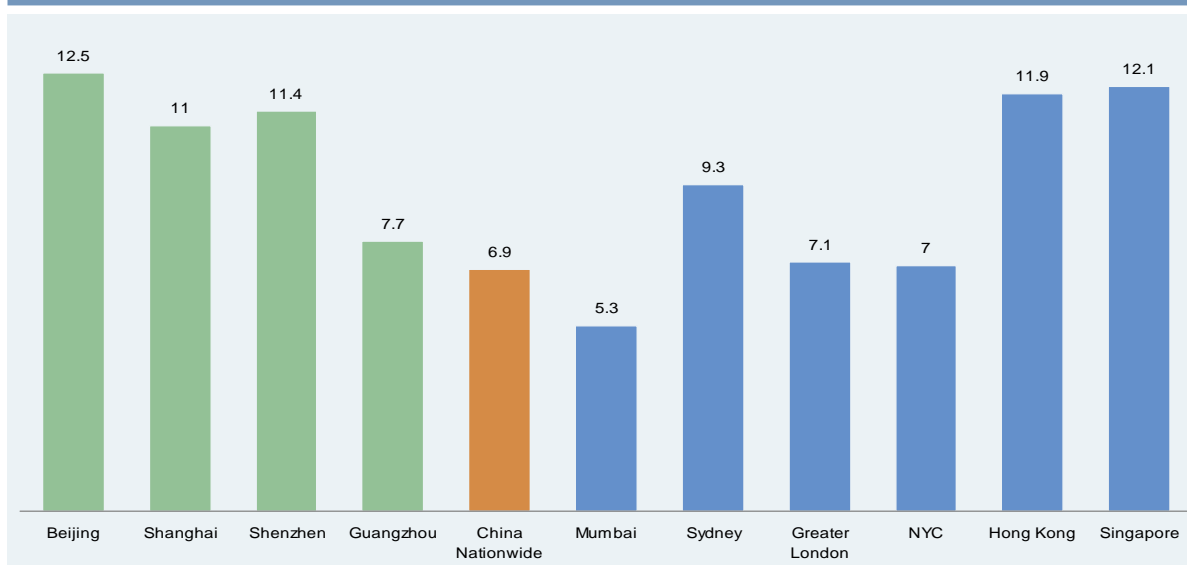
Construction Companies

Traditional property developers are not the only ones attracted to the affordable housing space; construction companies are also active in the segment. Build-Transfer agreements mentioned earlier generate higher margins for construction companies. In addition, construction companies are not responsible for the marketing and sales of finished units, as the government underwrites the entire project. For these reasons, the affordable housing space offers the incentive (through higher margins) as well as the advantage (the value-added by developers are minimized by virtue of simpler and more standardized designs, as well as the lack of a need for marketing and sales) for construction companies to become major participants in the near future.

IV. Affordable Housing: a Social Priority

In May, China's Ministry of Housing and Rural-Urban Development signed agreements with local governments throughout the country to commence construction on 3 million units of affordable housing in 2010 (including economic housing and low-rent housing). Another 2.8 million units will be built as part of shanty-town resettlement efforts. The total target of 5.8 million units has been reiterated by national leaders on several occasions, most recently by Vice Premier Li Keqiang in late-August. Policymakers are further aiming for 13 million units between 2009 and 2011, with an estimated total investment of RMB 900 billion.

Figure 4: Comparison of housing price/income ratios in Chinese and international cities

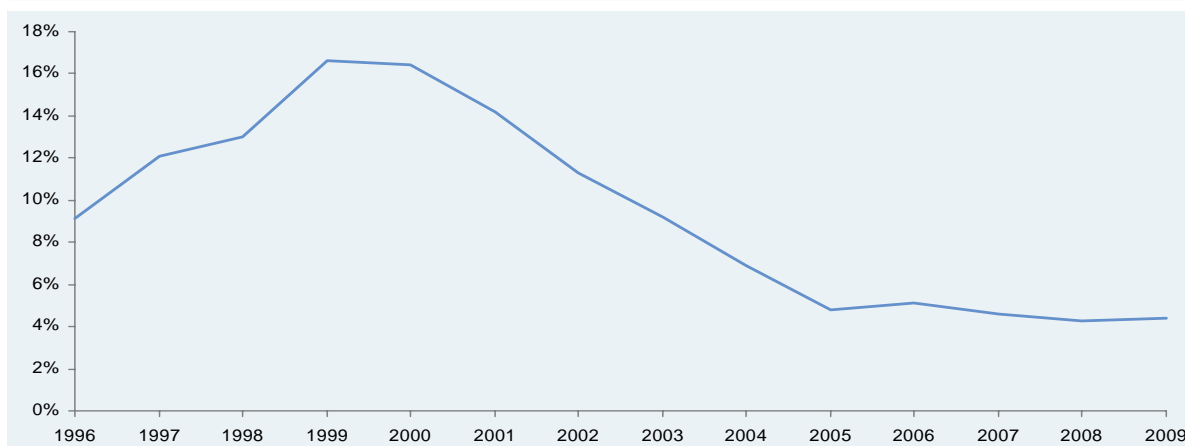


Source: J.P. Morgan research by Lucia Kwong

Affordable housing has risen to the fore among social concerns in China due to extreme inequality in urban living conditions, which has only widened over the course of China's recent property boom. Housing in first-tier cities costs about 11-12 times average household income levels in major Chinese cities, compared to ~7 times in New York and London (See Figure 4). The situation is less severe at a nationwide level, but nonetheless, policymakers are mindful of the country's rapid pace of urban migration and limited access to affordable housing for migrants, graduates and other low-income homebuyers. Neighboring business centers like Hong Kong and Singapore have similarly elevated ratios of 12x household income, but feature public housing programs that cater to 47.5% and over 80% of their respective populations. Over the 2000-2009 period, the proportion of investment in economic housing (affordable housing sold below market rates) within total housing investment declined from 14.2% to merely 4.4% (see Figure 5). For the first seven months of 2010, this

proportion was lower still at 3.1% as investment in commercial housing picked up sharply. If we assume Chinese households in the low to lower-middle income brackets are eligible for some form of affordable housing, approximately 77 million units are currently needed; however, China's existing stock of affordable housing has been estimated at ~13 million units. All else constant, even if the government meets and repeats its goal of commencing construction on ~6 million units each year for the next 10 years, the country would still face a shortage of affordable housing by the end of the next decade. Hence, it is clear that efforts in affordable public housing will continue to gain momentum, and some developers will see it as imperative to gain a foothold in the segment when it is still in its early stages.

Figure 5: Economic Housing as a % of Housing Investment



Source: CEIC

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