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## Agriculture environment influence on land-lost farmers' housing demands research

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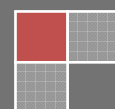
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### ABSTRACT

The sandwich crowd is housing property owners the standard by social class, but also to public policy coverage as a standard division policy target groups; Based on public policy coverage as a standard by policy target groups. The sandwich layer groups is the direct cause of low-income groups purchase ability is ceaseless and abate, prime cause is the housing speculation demand extrusion low-income groups owner-occupied consumption demand, and housing security public policy without timely coverage of low income group. The perfect sandwich layer housing security of the population in public policy, the key is to do low-end security, that they "guarantee" with public rental; midrange market, that the expansion of the middle-income groups, the use of policy instruments to support them buyers; high-end constraint, that is a combination of market, fiscal, administrative, legal and other means, especially the use of property taxes inhibit excessive speculative demand for housing.

### KEYWORDS

Land-lost; Rural environment; Speculative demand.



## INTRODUCTION

Urbanization is the space urbanization has greatly changed the original rural environment; it is the urbanization of human being at last, people must constantly adapt to the changes in the urban and rural environment. Yu *et al* (2014) concluded that the rural land been changed into city construction land, the village has turned into cities, scattered residential become concentrated residential, drinking natural water changed into drinking city tap water, all sorts of changes in the external environment will have a great impact on the living behavior of Peasants. From an environmental perspective, the landless peasants natural environment does not exist, they have a gradual process of adaptation to a new environment; from the angle of public policy, a large number of landless farmers landless monetary compensation is not enough to buy urban housing, they became the city sandwich layer crowd. There is no accepted authority definition of the sandwich layer crowd on the current academic research. Zhu (2013a) concluded that the existing researches on definition of sandwich layer crowd are wide, medium caliber and narrow diameter. Huang (2014) studied show that the so-called wide caliber, is refers to the people's livelihood fields of employment, medical, education, there exist several people between the edge of the crowd, it called people's livelihood sandwich layer group; the so-called aperture, although is the sandwich layer population refers to the housing sector, but the range is wide, that is as long as it is between the two housing supply will have a sandwich layer, a sandwich layer between such as low rent housing and affordable housing, affordable housing and commercial housing, low commercial housing and high-grade commercial housing; a narrow aperture, is refers to the people who suffering the housing problems of affordable housing and commercial housing.

## MATERIALS AND METHODS

The survey analysis used was performed according to the monthly family income and analyzed according to low income, middle income, medium and high income standards. Monthly income above 40000 Yuan is a high income standards; Monthly income between 20000-40000 Yuan, is the medium and high income; Monthly income between 20000-5000 Yuan is middle income; Monthly income less than 5000 Yuan is a low income. Then, select Chongqing urban nine area sampling questionnaire survey on 200 households, recycling to the 163 valid questionnaires. According to the questionnaire divided them into four groups. Finally, the analysis of buy or investment plan for housing holdings and the analysis of Chongqing urban residents housing sample investigation are shown in TABLE 1. According to the above analysis, the sampling really locked outside the commercial housing market is low and middle-income people. Among them, the low-income people often are neglected, they "sandwich layer" status has not been a clear identity.

**TABLE 1: Chongqing urban residents housing sample investigation**

Family type	Standards (monthly income)	Households	No house	One house	Two and more house
High income	Above 40000 Yuan	12	0	0	12
Medium income	Between 20000-40000 Yuan	35	3	19	13
Middle income	Between 5000-20000 Yuan	67	32	23	2
Low income	Less than 5000	49	43	6	0

The current research was performed by using the method of historical stages, studying the historical reasons and realistic background for the formation of the sandwich layer. In the 1990s the Sandwich layer phenomenon is not outstanding; it began to be widely concerned from the last ten years. The low and middle-income has already can't afford to buy the commodity house, medium and high income also feel more and more demanding, we analyze from two phases:

The first stage, in the 1980 s to the end of last century, housing reform early period and opening period, most low-income worker by purchasing a unit of public housing property, therefore the income of the low-income people is not high, but most will still be able to buy "public house". The second phase

is about the first decade of this century, namely commercial housing market basic formation period, high-speed propulsion of urbanization, on the one hand, in the original low-income workers have adult children, urban new generation living consumption demand moderate, on the other hand, the income level of migrant workers gradually entering the middle-income groups, promote housing demand multiplication, moreover enrollment expansion of colleges and universities to cause multiplication of secondary specialized school students' graduation multiplication demand for housing. The three aspects of resultant force formed the society the rigid demand for housing of low-income people. At the same time, it is about starting in 2004; house prices increase faster than income growth, Beijing house price gains and income growth as shown in Figure 1. Shenzhen housing prices shot 268% in 2004, Guangzhou rose 128%, Hangzhou rose 105%, rose 99% in Shanghai. House prices rose 35% in 2005, Tianjin, Beijing and Qingdao rose 30%. Since then, prices presented an increasing trend; But prior to that, Beijing, Guangzhou house price just alternate rise and fall a few years from 1999 to 1999, the rising trend of fluctuations, Beijing and Guangzhou historical prices as shown in Figure 2.

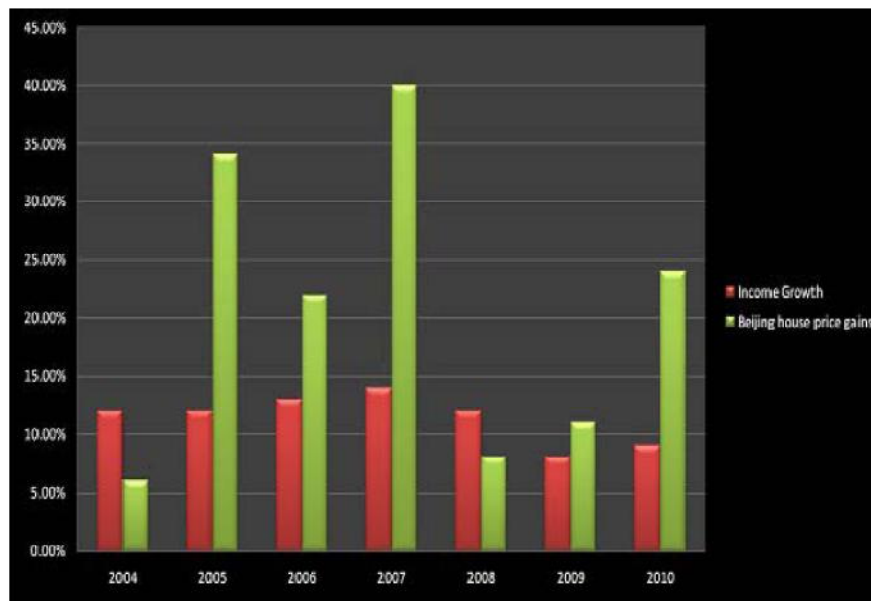


Figure 1: Beijing house price gains and income growth

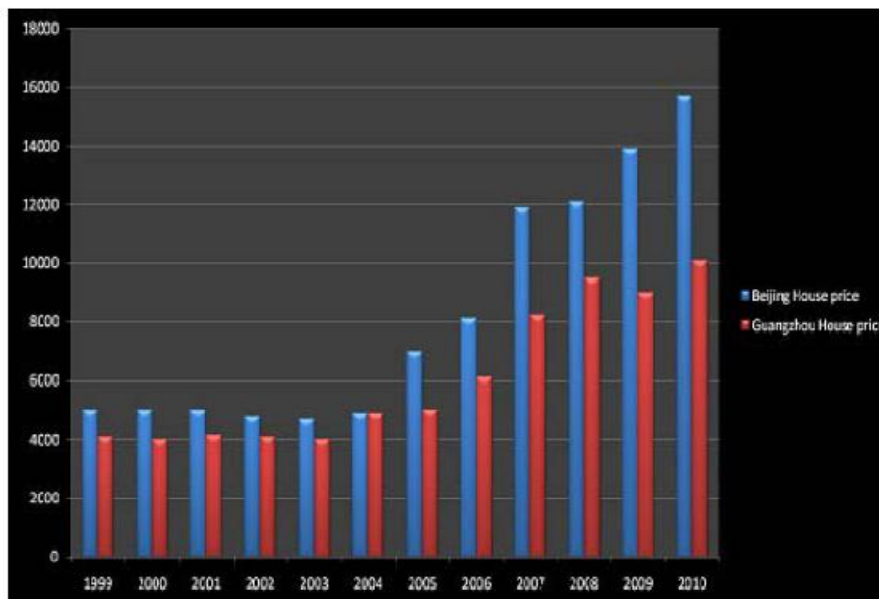


Figure 2: Beijing and Guangzhou historical prices

The increasing of housing price caused the general low-income people can't afford to buy room directly. Combined with the coverage of low-rent housing did not follow up quickly, so the sandwich layer phenomenon has become a common social phenomenon: low income can't afford to buy a house but have low-rent housing security, low and middle income also can't afford to buy a house but no housing guarantee. Low and middle income earners can't afford to buy commercial housing in the first stage, and no government guarantee "sandwich layer", they incurred between lower and higher income earners, suffered by lacking of housing necessities, commercial housing purchasing power changes impact on the housing problems of different groups are shown in TABLE 2.

**TABLE 2: Commercial housing purchasing power changes impact on the housing problems of different groups**

Income type	Before change	After change	Government Security
Low income	Cannot afford	Cannot afford	Guaranteed
Medium income	Can afford	Cannot afford	Not Guaranteed
Middle income	Can afford	Can afford	Not Guaranteed
High income	Can afford	Can afford	Not Guaranteed

## RESULTS

The speculative demand of housing: Housing is not innate investments, but housing is inherently for investment. A set of valuable property, in decades and even nearly hundred years consumption in stages, and one valuable housing estate can bring very considerable profits, or get a multiplier premium after trading. At the same time, under the condition of the investment is not rich, the multi-level capital market is not developed, and housing is being considered as speculation. At the time of the commercial housing market just developed, housing speculative demand is rarely, that because property of the people is less at that time; and speculative real estate is less available. When the commercial housing market rapidly ripped, the housing speculation is more and more, most East Asian countries and regions have similar experiences. Kim *et al* (2012) indicated that there are many factors that can affect housing speculation, such as housing mortgage system, social disparity between the rich and the poor, power rent-seeking, and so on. However, for most people who invest in housing, the most direct impact is prices. This is because the prices can affect the speculative demand from two aspects: on the one hand, housing prices-property-investment conduction path. Along with the accelerating of urbanization, the house prices of original edge of the city is rising, that means that investors are now owned property rise in value investor wealth increase, investors will have more speculative capital. Zhu (2013b) indicated that investors will have to have real estate cash, will have more capital invest into new edge of the city, expected to reap greater return on investment. The edge of the city goes to expand; rising prices are beginning to outward going round. The second aspect: prices - differential rent - investment conduction path. Differential rent is originally Marx described factors such as geography, soil and mineral deposits under the precondition of land business monopolies. In fact, land use control will produce differential rent. Because, each city land total gauge is fixed, the annual land use index is limited; use arable land without permission will be strictly punished. Under this background the land use control artificially drew a red line on the edge of the city differential rent. Enda and Scott (2014) studied show that land supply has always been state monopoly in certain areas and a certain period of time. Rising house prices, supply quickly followed means that the total index and annual index of land used for urban surplus less and less. After the scarcity value, naturally legal of new town construction land price is higher and higher. That's the most fundamental reason why land king record has been broken every year in every city. Increase in the price of flour, steamed bread will rise. Wu *et al* (2012) concluded that the commercial housing is increasing with the Land price rising. Institutional differential rent increases, resulting in land prices and housing prices rise. This information is public information. Speculators in the game will use this information in the production of inflationary expectations, investment constantly, constantly pushed up house prices, and this caused vicious cycle. No matter which of the two kinds of transmission path, eventually rise in house prices will push up demand. At the same time, because of the faster the rising housing prices, the rise of the housing property and differential rent are faster, the

speculative demand growth speed will be faster, so the speculative demand is increasing function of house prices, and speculative demand growth or increasing function of house prices. Abdul-Aziz *et al* (2014) concluded that housing prices increase will also produce acceleration, speed up the speculative demand. This kind of acceleration as a musical, will eventually become a "pond's scheme", speculators will eventually sold to speculators. This kind of crazy rise is not the end. The finish is the housing bubble burst, like the Beihai, Hainan in the early 1990 s, or crisis in Japan.

The crowding out effect between housing speculative demands for housing consumption demand: The self living consumption of housing demand and the speculative demand for housing exist in a housing market at the same time, but different prices and different stock of housing conditions shows dominant alternately.

First of all, at the beginning of the housing market reform, it is dominated by self living consumption demand. At this stage, the housing demand curve is same as other commodities demand curve, is leaning to the lower right, and very gentle, housing price elasticity is very big, house prices rose slightly, residents' purchasing ability is limited, quickly reflect market supply atrophy. In order to simplify the analysis, we can take housing consumption demand curve as a reduced prices function  $D_1=a-bP$ ,  $D_2$  means consumer demand,  $a$  is absolute rigid demand, namely regardless of price, is always a new urban residents housing required for living,  $b$  means unit price changes the marginal tendency of the change of the housing consumption demand,  $P$  means house prices. Secondly, at the peak of the real estate development, the investment demand curve is the leading power. The most notable features of this stage is the high housing prices, housing stock, high asset for the urban residents. Due to the housing price to income ratio has been rising sharply, the masses of low-income groups in quickly out of the market, retained some high earners as demand in the market. They on the one hand, since the childhood, constantly change rooms to improve living conditions, retained the less self living consumption demand; On the other hand, their asset growth, income growth, relative to the increasing affluence of low-income groups, their speculative expectations are rising. They believe that the current housing supply, the more means for future housing will be less and less, differential rent could become more and higher.

The resulting speculative housing demand curve also became a very special demand curve. In order to simplify the analysis, we use vicariate function speculative to express demand curve  $D_2=CP^2$ , among it  $D$  means speculative demand,  $P$  means house prices,  $c$  means speculative demand increment and the marginal propensity to the growth of housing prices, it is a normal number, means that prices, speculative growth will accelerate. The market only considers the money; do not distinguish which is used for speculative or consumer. In reality, the market is always a price corresponding to a demand. Therefore two kinds of theory of demand curve, will meet in reality become a demand curve, and is the actual market demand curve. About at the beginning of the housing market reform is finished in two phase transition during the peak of the commodity housing development, housing demand curve deflects, turn gentle slope at the lower right, to the upper right rise sharply. In the end, the composition of demand curve is no longer like the traditional demand curve, but became a special reverse parabola:  $D=D_1+D_2=cP^2-bP+a$ , the  $D$  means the overall demand for housing after synthesis, speculative demand-led housing affordability partition see Figure 3.

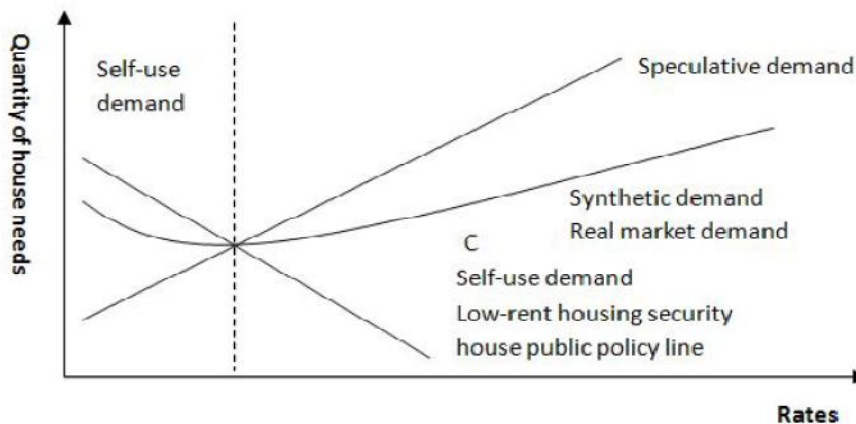


Figure 3: Speculative demand-led housing affordability partition

Above the dashed line is market demand a turning point in, is the housing marketization reform after the completion of the initial two stages of transition to commercial housing development climax period. The right side, on the dotted line is the housing market is dominated by the speculative demand. This market demand (i.e., purchase intention and purchase power), can be divided into: area A high income group area, is based on speculative demand line border, on top of this area. Their behavior to speculative money is that buy a house for the main purpose. They purchase is for self-use consumption (including a second set of improving housing). They are the biggest features of have the ability to purchase ordinary goods. Low-income areas in area C namely, sandwich layer crowd area, in the synthesis of demand between line and line of the self living consumption demand. They could purchase ordinary commercial housing (because they lived in since the type of consumer demand over the line), but as a result of speculative demand driving up prices, they are in the market, unable to afford ordinary commercial housing. As a result, the low-income groups are essentially by high income group of speculative demand pushed out of the housing market. D area one of the low-income group's areas lived in the area under the demand line. Any country, any time the absolute poverty population, basic unable to afford commercial housing. In the housing supply and demand in accounting is always balanced, namely is said after the event always charge to an account balance. This is because the vacant housing speculation can also be regarded as developers building it to pay for the hoarding. Zhu (2013) studied show that balance between supply and demand at the same time, most of the time we said is refers to the balance of supply and the speculative demand and consumption demand aggregation. However, if the speculative demand proportion is more and bigger, the continuous extrusion consumption demand, then there is a big part of the consumer demand is not met for a long time. In reality, on the supply side, a place empty city, the rapid development of a ghost town; On the demand side, more and more speculative housing, the majority of town worker that most families have more than two sets of housing, speculators who have dozens or even hundreds of homes, but can't afford to buy room of the new generation of migrant workers and university graduates "sandwich layer" population growing rapidly, in the most need of home ownership, but only at room. The real estate bubble is bigger, the bigger the more wind.

The uncovered vacuum on affordable housing: Our country low-rent housing policy is successful and effective. Seeking truth from facts, however, over the years, the housing public policy is only designed for low-income people, and did not take care of those unable to purchase, and cant rent the low-rent housing.

Kevin (2012) showed that in practice, a low-rent housing security has become almost the only housing public security. It roughly with the live line, potential meaning is when we make policy we only considered the self living consumption demand, without considering the speculative demand for self living consumption demand of crowding out. This is a line don't take good care of the low-income people, it is also not keep pace with the times. It is in the speculative demand for low-income crowd out continuously, public security does not follow up, and so made the low-income people in the housing market became sandwich layer who is "not on the market, non-stick under policy". Goodman and Thomas (2012) concluded that the fundamental cause of sandwich layer crowd housing is speculative demand dominant and rigid housing public security policies at the same time, in essence reflects the housing market the contradiction between the spontaneous regulation and public policy.

## DISCUSSION

Help land-lost farmers adapt to the city living environment and social environment: Changes in the environment of land-lost farmers are a challenge. Even it solved the housing security for them, but the change of living environment and social environment will impact to them. Therefore, it is very necessary to build residential environment in their public housing communities, added to some rural factors in order to keep the evolution of historical memory and cultural gene. At the same time, strengthen the health monitoring and security of the farmers, and strengthen the psychological counseling. The change of living environment, are likely to make the land-lost farmers unadoptable in

body and mind, so there is a very necessary for farmers to adapt to the process of natural positive intervention.

Low guaranteed strategy: It is very necessary to preserve "sandwich layer" the housing needs of the bottom line in public policy. No noticeable real estate, no perseverance. If even can't satisfy the basic demand for the low-income groups housing, it is may not be able to sustain social harmony. Therefore, Cho and Kim (2012) concluded that large-scale construction on public rental housing, giving "sandwich layer" crowd long-term stability, low rents of public rental housing is an effective way. The success of the group in Singapore and Hong Kong public practice proved that to provide housing for public goods is feasible, and can receive good social benefits. Chongqing first opened the prelude of large-scale construction of public housing, plans to use three to five years to provide about 200000 sets of public housing for 600000 city sandwich layers. At present several public housing estate rent already had check in and obtain good social repercussions.

Medium level expansion strategy: Efforts to increase the income of low-income groups, is the core content to expand the middle-income groups. It seems not public housing policy, but it has deeply influenced the housing public policy formulation, implementation and results. Among them, the most important thing is to establish the normal wage growth mechanism of employment population, ensure its synchronization with economic growth. If the low-income groups can get more incomes the purchasing power can be constantly improved, there will be more and more low and middle income groups buy commercial housing rely on their own income; at the same time, the commercial housing market will be able to develop more mature, market segmentation will be more clear, will tend to alleviate structural contradiction of supply and demand. Of course, also needs to have more direct housing public policy can services low and middle income earners to purchase commercial housing, such as the first set of housing accumulation fund loan quotas to dynamic association, the first set of housing to exempt transaction deed tax, the first set of housing mortgage rates down or discount, etc.

Curb speculation strategy: Earland Peng (2007) studied show that the market cause sandwich layer is speculative demand without constraint, malignant extrusion of low and middle income earners live in consumer demand. Therefore, limited the speculative demand constraint is fundamental. The premise of speculation is profit, when unprofitable there is no speculation. Therefore, real estate tax policy is urgently needed on the implementation of luxury rooms and suites, and real estate tax should adopt a progressive tax rate, must let the mortgage rate of luxury rooms and suites with speculative line gradually diminishing. At the same time, no housing mortgage for more than three sets of housing. Of course, the government should also be strictly curb speculation in such aspects as planning, real estate market management.

## CONCLUSION

Ensures the living environment of land-lost farmers is a social problem on a high-profile, is normal housing market supply and demand caused by interference by speculative demand. Ensure good housing demand of the farmers should rely on public policy comprehensive regulation of the real estate market, increase the cost of speculative demand of speculation, on the other hand, we must strengthen the housing security; increase the supply of public rental housing, also should improve living environment and the health of body and mind of the farmers "software" problem, after meet the housing hardware need.

## ACKNOWLEDGMENT

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