

# The Aging of the Population and Housing Reverse Mortgages in China

## VIEILLISSEMENT DE LA POPULATION CHINOISE ET EMPRUNT-LOGEMENT INVERSE

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**Abstract:** The aging of the population is the inevitable result of social and economic development, while at the same time it exerts a major impact on the socio-economic and cultural development. The housing reverse mortgages allow the elderly to change properties into cashes and increase pension funds through their own resources to improve the quality of life in old age, and open up a new way for solving the problem of pension. However, this project itself is huge, which calls for the government, the banks, insurance companies, social security departments and other relevant parties to unify their understanding, coordinate actions, and co-operate with each other.

**Key words:** the aging of the population, housing reverse mortgages, Social Security

**Résumé:** Le vieillissement de population est la conséquence inévitable du développement économique qui exerce en même temps une influence sur le développement social et culturel. La mise en application de l'emprunt-logement inverse peut encourager les personnes âgées à utiliser leurs propres ressources pour rendre la propriétés bâties en cash, augmenter leur pension de retraite, améliorer leur qualité de vie. C'est une nouvelle pensée pour résoudre les problèmes du vieillissement de la population. L'application de cette mesure est un travail colossal et complexe. Il faut que le gouvernement, les banques, les compagnies d'assurances et les départements de couverture sociale coordonnent leurs actions et travaillent en étroite collaboration.

**Mots-Clés:** vieillissement de la population, emprunt-logement inverse, couverture sociale

The ageing of the population is the inevitable result of social and economic development, while at the same time it also exerts a major impact on the socio-economic and cultural development. In the ageing of society today, it's of great social significance to reduce the negative influence by the ageing of the

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population, solve the economic problems of the elderly and improve their life quality. These problems have become the hot issues concerned about by the governments and societies around the world.

At present, the practice of housing reverse mortgages in foreign countries, especially in America, proves to be a mature channel of financing and effective way of pensioning. It has a great significance in compensating for the deficiencies of social security, improving the economic situation of the elderly, and improving the quality of life for the elderly.

## **1. INTRODUCTION OF HOUSING REVERSE MORTGAGES IN AMERICA**

Housing reverse mortgages, also known as the model of pensioning by housing, is originated in Netherlands. Its development in the United States is the most mature and the most representative one. In the 1980s, there were a large number of "house rich, cash poor" people in the United States. Thus housing reverse mortgages came into being.

Housing reverse mortgages refer to that the property owners of the houses who have reached the 62-year-old mortgage the property rights to insurance companies or financial institutions accordingly, which give a comprehensive assessment of the value of the house, the future appreciation and depreciation. After the assessment of the house and the average life expectancy calculation of the elderly, cash is paid monthly or annually to the insured elderly. This fixed payment continues until the elderly dies. The elderly enjoys the incomes and the right to live in the house. The insurance companies or financial institutions accordingly could get the property right of the house upon the death of the elderly and they can rent or sell or auction the house. Currently, in foreign countries, there is regulation stating that upon the establishment and enforcement of the valid contract, the insurance companies shall pay monthly regardless of the actual life of the insured. If the actual life of the insured is shorter than the life expectancy, the insurance companies can also take over the property.

In the United States, the interest rate of reverse mortgage is slightly higher than that of the average mortgage. The financial institutions will get the appreciation of the property besides the principal and interest upon the death of the owner and the sale of the house. The appreciation and the interest are the sources of profits for the financial institutions. However, if the owner lives longer than expected, or the amount of the appreciation of the property is not as much as expected, the actual recovery of loan interest of the financial institutions will decrease, and even the principal is hard to recover. Therefore, the business has to run against certain risks.

The U.S. housing reverse mortgage was initiated and implemented by the U.S. Federal Mortgage Association in 1986. The government set up a special department for the housing reverse mortgages under the Federal Housing Authority (FHA). The legitimate lending institutions authorized by the FHA have the exclusive rights of carrying out reverse mortgages. The legitimate lending institutions mainly refer to: banks, trust companies, the National Bank of Union, the savings banks, savings and loan associations, the Federal Reserve Bank, the federal savings and loan associations, credit Union, the Federal Credit Union, and other entities with special authorization by the FHA.<sup>2</sup>

Housing reverse mortgages in the United States have a history of more than 20 years. In the past 20 years, housing reverse mortgages not only matured as a means of financing and were accepted by more and more people, more importantly, it has changed the way of life of many Americans who rely mainly on investment returns to support the life after retirement. Housing reverse mortgages make the elderly not have to worry about their investment every day. They need only contract with insurance companies or related financial institutions and then live a richer and more affluent life after retirement once and for all.

Housing reverse mortgages enable retirees to enjoy a more comfortable life after retirement and more economic independence. It also makes the retirees avoid falling into the awkward position of "house rich,

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<sup>2</sup> Chang, Y. S. (2001). *Study on China's Real Estate Financial System*. Beijing: Economic Science Press.

cash poor". Meanwhile, it helps the elderly solve the pressing needs, such as paying for medical expenses, crediting the accidents loss. Therefore, in recent years, when the interest rate of America is at a lower level, the number of people applying for housing reverse mortgages increases constantly. This tendency reveals that more and more people have realized housing reverse mortgages is a very good personal financial product. And housing reverse mortgages make the poverty rate of America decrease by about 4%. There are 20,492 transactions of reverse mortgages until the end of July, 2004.<sup>3</sup>

Housing reverse mortgages make the elderly own a fixed income to improve the quality of life without selling their houses. Undoubtedly, the implementation of housing reverse mortgages is of great significance in the present society with the ageing of population.

## 2. THE SIGNIFICANCE OF IMPLEMENTING HOUSING REVERSE MORTGAGES IN CHINA

Basically, the elderly in China have invested their life savings on the house property. In addition to the house, they don't have much money at hand and the life for them is not easy. With the ageing of population, it's bound to exert an extensive and profound influence on people's life. Therefore, it's necessary to implement housing reverse mortgages in China as soon as possible.

### 2.1 China has entered an ageing society and social security faces tough challenges

#### 2.1.1 The elderly population of China ranks first in the world

China is the world's most populous country, which exceeded 1.3 billion on January 6, 2005, accounting for a quarter of the total population in the world. At the same time, the elderly population of China also ranks first in the world. In 2006, the elderly population aged over 60 has reached 145 million accounting for one fifth of the total number of older persons in the world.<sup>4</sup> According to the experts predication, China's elderly population aged over 60 will exceed 200 million around 2015, which accounts for 15% of the total population of China. This number will rise to 300 million around 2025, which means one individual of every five will be over 60. In 2050, China's total number of older persons will reach 440 million, accounting for 25% of the total population. At that time, there will be one elderly person in every four and China will be a country with high degree ageing of population.<sup>5</sup> Dealing with the challenge of ageing has become China's major issues in the 21st century.

#### 2.1.2 China's ageing population has displayed an obvious tendency of senior ageing

It's stated in the Demographic that people between 60 and 69 are young elderly population, between 70 and 79 middle-aged elderly population, and above 80 senior elderly populations. From 1999 to 2000, the senior elderly population above 80 increased to 11.99 million from 7.68 million, with an average annual growth rate of 4.56%, faster than 3.0% of world average and 2.0% in developed countries.

It is estimated that by 2025, the senior elderly population in China will increase to 25.74 million from the current 13 million. This number will reach 100 million in 2050. At that time, there will be one senior elderly person in every 10 persons or 4 elderly persons.<sup>6</sup> The rising population of the senior elderly demands more medical and nursing staff. The cost for medical and nursing staff will increase. The

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<sup>3</sup> Hu, H. P. (2005). Reverse mortgages: The elderly fiscal "Gospel". Shanghai Securities News, August 15.

<sup>4</sup> Guo, A. T. (2005). The 1.3 billion citizen was born in Mainland and China's population will be over the limit in 30 years. Beijing: Jinghua Times, January 6.

<sup>5</sup> Cai, F. (2001). *China's Population Problem Report*. Beijing: Social Sciences Documents Publishing House.

<sup>6</sup> United Nations Secretariat, Department of Economic and Social Affairs, Population Division. World Population Prospects, (The 2000 Revision). United Nations, New York, 2001.

requirements for the society are more and more pressing.

### **2.1.3 People are aged before getting rich**

The ageing of population in China is ahead of the development of social economy. In 2000, when China entered the ageing society, GDP per capita was only 856 U.S. dollars, ranking after 100 in the world. At the same time, the food and clothing problems of a considerable number of people were not solved. The Engel coefficient (the ratio of food consumption accounting for day-to-day expenditure), which reflects the rich and poor level of the society, was about 50, falling into the range of barely adequate food and clothing stated by the United Nations. The particularity of the economic conditions decides the followings. On the macro level, the state and the society still lack a solid economic strength and material basis to provide adequate financial security and rich material life for the huge number of ageing population. On the micro level, most elderly people begin their life in old age under the conditions of incomes not high, accumulations not enough, and materials not rich. Our old-age retirement system makes the retirees difficult to share the fruits of economic growth fairly. Their actual standard of living may decline further in case of inflation and price rising. At the end of November 2005, the number of enrollment in China's basic endowment insurance, medical insurance, and unemployment insurance was 160 million, 160 million, and 103 million respectively. Despite the impressive growth rate in enrollment numbers, there is still a long way to go to reach the standard of sound social security system. The traditional model of family providing pension for the aged can play a role to a certain extent. However, with the increase of empty nest and families of a couple with one child and four parents, pension provided by families faces great challenges. In China, people are aged before getting rich, and the development of economy lag behind the ageing of population. These factors make China face the increasingly heavy pressure of social security, and bring severe challenges towards the sustainable development of China's economy.

### **2.1.4 The level of social pension is low in China**

According to a survey by China's Old Age Research Center, at present there are 10 million people over 80 in need of care. Among the investigated elderly in cities, 98% rely on self-endowment. There are a total of 40,000 state-run welfare institutions, with more than 1.09 million beds, and adoption of 830,000 people. Compared to hundreds of millions of the welfare clients, these beds only account for a litter more than 0.7% and the number of people adopted is less than 0.6%, far from that of developed countries which is 5% to 7%.<sup>7</sup> How to solve the problem of providing pension for the elderly and ensuring their life quality become the major issue in front of the government.

### **2.1.5 The pension funds face the predicament that the income is inadequate to meet the expenses**

At present, China's public pension system is accounting on a cash basis. The rapid ageing of population and the declining of labor force will build up of pressure on the public pension system due to the increase of retirees and the decrease of people paying for pensions. Currently, the gap for China's pension has reached 2.5 trillion yuan, equivalent to China's total revenue of the national economy in a year. If this condition can't be improved, the pension funds will face the serious predicament of income inadequate to meet the expenses, and consequently a large number of elderly people face the predicament of not being able to receive pensions.

**2.2** The implementation of housing reverse mortgages will enable the elderly to change the property into cash, increase the pension funds, and improve the quality of life in old age through their own resources, which opens up a new way for solving the problem of pension funding.

The implementation of housing reverse mortgages achieves the pensioning through house property. It is a forceful supplementary to the present ways of pensioning, and develops a useful and viable path for

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<sup>7</sup> China has entered the ageing society, and there are 10 million elderly people need to be taken care of. Accessed from <http://www.xinhuanet.com> on October 14, 2000.

old-aged security issues faced by the state, society and families. The housing reverse mortgages connects the family housing, old-aged securities and finance and insurance investment, which make the housing play triple functions: for living, for pensioning and for investment.

**2.2.1** On the basis of being looked after in old age by children and living on savings, the elderly can live on housing reverse mortgages to reinforce the old-aged security, which reduces the pressure of the state in social security.

The coverage of old-age security in China is narrow. Numerous workers in non-state-owned units are not included in the system. And the demands of many social members cannot be met. The housing reverse mortgages opens up a new way for the old-age security. The elderly can own a fixed income to maintain and improve life in old age without selling their houses through housing reverse mortgages, which greatly eases the pressure on the national social security, promotes the development of social welfare system and play a positive role in safeguarding social stability and promoting social harmony.

**2.2.2** Housing reverse mortgages provides a new way of thinking in optimizing the allocation of resources owned by the family, which is helpful to increase the income and improve the life quality of the elderly.

Chinese urban residents have spent most of the incomes in purchasing the house property, putting their children through schools, helping their children complete the marriage and daily expenses. As a result, when they are old, they have only a little the accumulated current assets and they are difficult to maintain the high standard of living under the condition of income declining, while health and medical spending increasing. The housing reverse mortgages provide a new source of funds for the elderly, to make them continue to enjoy the function of residential use but also enjoy the benefits brought by added value. This method broadens the ways old-age income and increases the pension funds. Meanwhile, it makes the elderly more independent economically, to pursue a higher quality of life.

**2.2.3** The elderly should achieve self-protection. The children should achieve self-reliance. The over-reliance between the two generations should be changed into relative independence of each other, which is helpful to build new inter-generational relations that is adapted to the market economic system.

The first generation since China's family planning policy is close to 30 years old. They will have to shoulder the responsibility of supporting the elderly in the near future. A 40-year-old couple will face four parents whose ages are between 65 and 70 years old man and a 15-year-old child. Under the imperfect condition of China's social security system, the couple has to bear a heavy economic burden and stress.<sup>8</sup> The implementation of housing reverse mortgages can largely reduce the fund pressure of children to support their parents. At the same time, this practice is helpful to advocate a general mood of self-reliance and fair competition in the society, encourage the reasonable allocation and consumption of assets between inter-generations, encourage the young people to set up their own business and rely on themselves, and reduce the reliance on their parents.<sup>9</sup> This is of great significance to the enhancement of the competitiveness of the entire nation.

**2.2.4** Housing reverse mortgages is helpful to the diversification of the business of financial institutions.

Housing reverse mortgages not only brings new business to the banks and insurance companies, but also deepens the reform and innovates the business of commercial banks and other institutions. It diversifies the business and incomes at one hand. At the other, it promotes the financial institutions to combine the social responsibilities and goals of making profits, achieving the win-win effect.

**2.2.5** Housing reverse mortgages is helpful to reduce the social savings rate, release social consumption, and promote economic development.

The ageing of the population make people deposit savings in consideration of pension in the old age.

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<sup>8</sup> Hong, C. (2003). The significance and difficulties of China's introduction of housing reverse mortgages. *Population and Economy*,10.

<sup>9</sup> Chongqing is expected to launch inverted mortgage and pilot the pensioning through housing. The Internet version of the Chongqing Morning News, accessed from <http://www.cqcb.com/gb> on February 14, 2006.

In response to the possible arrival of the threat of unemployment, the substantial payment for the pension and medical cost, the increase of children's education expenses and commercialization of housing, it's a wise choice for the urban and rural residents to increase savings and change recent consumption into long-term consumption. In recent years, the lack of consumption has been plaguing China's economic development. The saving rate in the urban and rural residents is high and recent consumption is changed into long-term consumption. These factors lead to the insufficient consumer demands which restrict China's economic development. And reverse mortgages can change the value of the housing property into realizable cash when the residents are old. This method is effective in lifting the worries of the middle-aged, promoting people to reconsider the effectiveness of current consumption, and releasing some consumer demands. It is helpful to lower the social saving rates, enhance the flow of goods and materials, and promote the healthy development of China's economy.

With the deepening of housing reform, an increasing number of urban families owned their own properties. In cities, the families owning personal properties have reached 80%. As to these families, housing has become the major component of their private properties. With this material basis, it's possible to combine the building of a sound social security system for the elderly and housing property rights obtained by the residents.

### **3. SUGGESTIONS TO HOUSING REVERSE MORTGAGES IN CHINA**

Through the above analysis, we can see that the implementation of housing reverse mortgages have a social significance in China. According to China's national and local conditions, we have to develop housing reverse mortgage system that is suitable to China's national conditions. In the process, we should pay attention to the following aspects.

#### **3.1 Systems, policies and regulations should be in the first place**

Housing and pension concerns the social stability and harmony, therefore, the government should develop a series of relevant laws, regulations and policies to implement housing reverse mortgages and realize old-age pension by housing.

##### **3.1.1 Construction of policies and legal protection**

The implementation of housing reverse mortgages must be related to the operation platforms and system security, including the amendments to the current relevant laws and regulations and the establishment of new laws and regulations. In China, the urban land is owned by the State. And each individual has a limited duration of use upon payment. The longest duration of service for the residential land is 70 years and after that the land use right is recovered by the state free of charge together with the buildings on it. With the increase of years, the value of the house together with the land will not always keep increasing. After a period of increasing, its value will depreciate with the approaching of the land use period. As a result, relevant laws need to be adjusted to implement the housing reverse mortgages. At the same time, it's a tradition in China to leave the house as a heritage to children. The attraction of housing reverse mortgages can be increased through the introduction of inheritance tax. In addition, the borrowers of housing the reverse mortgage are basically the low income elderly, and the state should give tax relief, fiscal policy and discount support to them.

##### **3.1.2 The establishment of national guarantee agencies to develop a reasonable accounting method**

China should set up similar guarantee agencies to the Federal Housing Authority to guarantee the loan and review whether the loan is in line with norms. Housing reverse mortgage is different from ordinary mortgages. Its calculation of the amount of loans involves many factors, including the age of the borrower, the depreciation of the housing value and the interest rate. Consequently, a set of reasonable

accounting method is needed.

### **3.1.3 Effective risk control**

The implementation of housing reverse mortgages runs against many risks due to its long continuation of time, many factors of change, and the huge funds needed. For example, there are many risks, such as payment risk-whether a lot of money supplies needed by the special entities in each phase can be insured, the realizable risk -whether the value can be recovered and profits can be made after market realization of the property recovered upon due, interest rate risk- the expected changes in interest rates, policy risks-the country's future domestic policy changes, urban planning risk-the planning and design changes, such as residential demolition, etc., purchasing power risk-the future changes in the real estate market and the trend of prices rise and fall for the housing, children risk due to their inheritance and then opposition to housing reverse mortgages, life expectancy risk when the actual life exceeds the expected life, credit risk of moral hazard and the risk of price fluctuations, etc.<sup>10</sup>

At the same time, as China's socialist market economic system reform deepens, the uncertainty of the future society is increasing, and all kinds of risks will also increase. Therefore, they have to be reduced through various internal and external systems design.

### **3.1.4 Securitization of reverse mortgages**

In foreign countries, the housing reverse mortgage securities will usually be issued upon the implementation of the mortgages. The assets will be sold to investors under the guarantee of future cash flow. The liquidity of assets will be enhanced and the risks will be spreaded. Although the reverse mortgage business in America started as early as the 1980s, it didn't develop vigorously until the mid-1990s. One of the main reasons is that in the 1980s the U.S. financial markets was far from developed as today, and the securitization of reverse mortgages didn't truly develop yet, so the assets lack mobility. In March 2005, the People's Bank of China announced China Construction Bank as the experimental units to pilot the securitization of housing reverse mortgages. The steady development of housing reverse mortgage in China calls for the achievement of securitization of reverse mortgages.

## **3.2 Demand of cooperation by government, banks, insurance institutions, social securities departments and other relevant parties**

Housing reverse mortgage business is a huge system project, which calls for the government, the banks, insurance companies, social security departments and other relevant parties to unify their understanding, coordinate actions, and co-operate with each other.

### **3.2.1 The Government should play an important role.**

The role of government can be broadly reflected in the following areas.

#### **3.2.1.1 Supervision**

The elderly generally lack adequate financial knowledge, and cannot make a comprehensive and accurate understanding to the reverse mortgages and they are easy to be misled in case of incomplete information. Government must strengthen the supervision of the main players in the market, including lending institutions and intermediary organizations. The disclosure of information by the lender must be clear, including the interest rate, cost, etc. Government must ensure the service quality of the intermediary organizations through certification and monitoring, strengthen the enforcement of various rules and regulations, monitor the implementation effectively, and handle the consumer complaints timely and give rapid responses.

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<sup>10</sup> Feng, J. S. International reference and practice of housing reverse mortgage loan. *Financial Theory and Practices*, 5.

### **3.2.1.2 Policy support**

Government should provide preferential policies to reverse mortgage services, including cash tax exemption for money obtained in housing reverse mortgages, and tax concessions for the revenues obtained by the banks, insurance companies in reverse mortgage.

### **3.2.1.3 As the main market participation**

When China offers reverse mortgages, the Government can appear as an advisory body. It will not be affected in the process of consultation, and provide non-biased opinion from the perspective of neutrality. Government owns the advantages of credibility that can not be matched by any private sectors.

### **3.2.1.4 Central Bank for assistance when necessary**

When the lending institutions in the reverse mortgage business are short of funds, they can apply for special loans from the Central Bank. When the lending institutions or the insurance companies offering the business of reverse mortgages go bankrupt, the Central Bank will take over the relevant businesses or order the receiving bodies to be responsible for the continuation of reverse mortgages.

### **3.2.2 The insurance companies are an effective strength**

Insurance companies are most suitable for offering housing reverse mortgage, especially life insurance companies, which is specialized in dealing with the payment and repayment of pension insurance, suitable for the implementing of housing reverse mortgages. At the same time, the borrower's life expectancy has to be considered in designing housing reverse mortgages, and the insurance companies have great advantages in the product designs. What is more, insurance companies need to cooperate with banks and real estate sector fully due to the involvement of mortgages issuing, and assessment, maintenance and sale of housing.

### **3.2.3 Commercial banks are the main force**

Commercial banks have more abundant funds. And among the individual savings deposits, the funds for the purchase of housing and the pension also account for a large proportion. What is more, the traditional real estate loans are offered by the banks, so they have accumulated certain experience in developing financial products related to real estate, auditing the borrowers' qualification, reviewing the assessment of mortgage assets, designing of the way of loans, etc. to create opportunities for the implementation of housing reverse mortgages. The implementation of housing reverse mortgages has significant market risks due to its long continuation of time and many factors of change. Only by the intervention of insurance products, the recovery risk can be effectively dispersed. Thus, the commercial banks and insurance companies must cooperate with each other for the steady development of this new financial product.

### **3.2.4 The social security institutions are active advocates and collaborators**

It is the responsibility of the social security institutions to establish an effective social security system, add new channels pension fund-raising, and support the cause of pension. However, the implementation of this business, such as house purchase transaction, house sale transaction, assets evaluation and the final ownership of the house is fully run by the lending institutions which recover the loans by auctioning. This series of work are not the strengths of the social security institutions. Therefore, the social security institutions should cooperate actively with insurance companies, banks, real estate companies to play the role of advocate and collaborators.

### **3.2.5 The active participation of other relevant agencies is essential**

Housing reverse mortgages involve a variety of industries and institutions, such as assessment, consulting, insurance, legal, financial, and housing disposal institutions. So it calls for the active participation of real estate sector, accounting firms, law firms and other institutions. The development of these institutions will directly influence the efficiency and effectiveness of housing reverse mortgages.

Housing reverse mortgage can provide a stable and reliable cash flow for the elderly extending



through the end of their life, and strengthen the protection of life in old age, provide new ideas and new methods for growing problem of China's pension. At present, with China's aging of population and the deepening of housing system reform, particularly reform of financial institutions, we are necessary and have the conditions as well to implement housing reverse mortgages as soon as possible.