

## **Chapter 6**

### **Conclusions and Discussion**

#### **6.1 Conclusions**

Until 2008, the reverse mortgage has not been available in Taiwan. Nevertheless, the growing number of research has illustrated the urgency to apply for RM for who may have adequate pension. The current study also suggests that RM could not only secure elderly retirees, but also preserve their quality of life.

The study reported in this paper has demonstrated that RM could be practically implemented and provide adequate results as follows:

On the aspect of borrowers: (1) investigation result shows over one-third percent of middle-aged homeowners have the intention to apply for RM. It implies the great potential to implement RM in Taiwan; (2) the motivation to willingly apply for RM were mainly in order to improve the quality of life and to share the daily consumption; the type of payment which respondents were more interested in is annuity payment; (3) the respondents had no intention to apply for RM are concluded to the following main reasons: most of them planning to make their house as a bequest, or lacking of understanding of RM, or keeping their house after paying off debts; (4) there were 6 out of the 18 variables statistically significant in the logistic regression model. The findings revealed that having insurance, ownership of stocks or bonds or funds, the intention to live without children, and higher education level were positively related to the intention to apply for RM. On the contrary, the results indicated that the more wealthy respondents, the less likely they were willing to apply for RM. Besides, the concept that parent has to make the house as bequest had negative relation to the intention to apply for RM.

On the aspect of lenders: (1) the simulation result shows the RM with the insurance program have higher LTV the lender could offer compared to the RM without insurance program under the break-even hypothesis. And it is suggested that the insurance program could provide a reliable system in RM market. (2) The LTV value in lump-sum payment has higher value than in annuity payment.

The reasonable explanation is that those two payments have different pattern in mortgage balance. (3) The simulation result shows the great opportunity for the application of the RM in Taipei city and Taipei county due to the higher house value and the relatively stable housing price changing. (4) This study define the risk value as  $CTE_{90}$  value, and the simulation result shows the LTV and  $IRR_{RM}$  value under the  $CTE_{90}$  approach is basically lower than the value under the mean approach other research used. However, the  $CTE_{90}$  value should be more accurate in reflecting the RM lender in reality. And the study also suggests the RM lender could adopt the different risk level in offering the RM to different borrowers. (5) Furthermore, in the  $IRR_{RM}$  at different wage level, it shows the senior women could be the major beneficiary from RM.

To summarize, the current study demonstrated the feasibility of application of RM in Taiwan. The result shows that reverse mortgage could be the alternative for Taiwanese in planning for their life after retirement. Furthermore, reverse mortgage could also be a way to cope with the serious aging problem in the coming decades.

## **6.2 Policy Implications**

In Taiwan, the government has launched some schemes of social policy to cope with the aging problem. The National Annuity System has implemented in 2008, it is expected the older people could receive more welfare from the government. However, except the social policy, the government should play an active role in promoting the development of some financial products for people to plan for their retired life. Through appropriate asset allocation, it could be more effective to meet the specialized financial needs for the elderly. The Reverse Mortgage could provide the mechanism in helping the elder homeowners to transfer their home equity into cash. Besides, the “aging in place” policy could be implemented more successfully because the RM allows the elder homeowners not to move out.

Nevertheless, results in this study show the traditional conception is the major impediment of the implementation of RM in Taiwan. To cope with the aging trend, the government needs to focus on regulation regarding the RM. A counseling system of RM may help to reduce the suspicion and let the elderly

could accept the RM more easily. In addition, complementary policies should be established according to the changing markets, and consequently the RM secondary markets may be developed for lenders to hedge risks. This study suggests that the RM with insurance program could be implemented at the early stage, and the government may serve as the insurer to reduce the uncertainty. The premium rate and the risk level could be more flexible to meet the needs of RM borrowers. And the payment receipts from the RM should be tax-free due to the income is generated from the equity of borrowers' property.

### **6.3 Limitations**

Even though this study provides valuable insights on the implementation of RM, it still encounters some limitations. First, although the results of descriptive analysis have shown the overall patterns of respondents' attitudes towards RM, there is little we can predict the intention of the population if the RM is really executed in the future. Second, only 396 observations were used in the survey. This sample of survey is too small for generalization. Third, the housing transaction data in the study is collected from one real estate agency, and the data only consists of nine regions in Taiwan, which may be not enough to represent the whole housing market in Taiwan.

### **6.4 Recommendations for Further Research**

This study presents the preliminary results of the feasibility of RM in aging countries. Nevertheless, the potential of the implementation of RM clearly needs further exploration. Besides, it would be beneficial to conduct similar survey on a larger population group. To summarize, this study takes Taiwan as an example to show the feasibility of application of RM in aging countries. Results show that reverse mortgage could be the alternative for elderly people in aging societies in planning for their life after retirement.