Abstract

World over societies are grappling with the aging crisis. Social security, where it exists, is in dire financial straits; the pay-as-you-go system, which taxes current workers to support current retirees, no longer seems to be a feasible model. There are fewer workers paying ever-higher benefits to a growing number of retirees. Rapid demographic transitions, coupled with increased longevity of the elderly and declining fertility rate means the age profile of many developed countries is growing more and more inverted. The decline of family-based support and the reduced role of the government and other institutions mean that the individual is left to fend for himself/herself after retirement.

Housing wealth is one of the most important assets that individuals hold during their lifetime, with more than 58% of the urban elderly and close to 63% of the rural elderly holding property in India. (NSS, 52nd Round, 1995-1996) The lifecycle theory of consumption states that individuals accumulate assets during their initial working life and steadily decumulate to finance their retirement. While this is true of financial assets, owner-occupied housing, which is both consumption and an investment good, cannot be easily decumulated in stages. Ideally, financial assets are infinitely divisible and can be subject to continuous accumulation and decumulation, whereas physical assets by their very nature are generally indivisible in both accumulation and decumulation phases. Just like the introduction of mortgage lending for housing allowed the equivalent of accumulation of housing by annuitizing payments made on the house over a period of time, reverse mortgaging allow investors to decumulate from owner occupied housing as an annuity.

A reverse mortgage is a financial instrument that allows the ‘house-rich cash-poor’ elderly to draw down on their home equity while retaining possession of the property and allowing the elderly to ‘age-in-place’. It is designed so that people can tap into their home equity while staying in the house and the loan is not payable till either the death of the beneficiary (borrower, also the home owner) or till he moves out. While the instrument has a lot of advantages, there are not as many takers for the product as expected and this has been variously attributed

to high transaction costs, fear of outliving the reverse mortgage payouts, bequest motive etc.

This thesis reviews literature pertaining to the reverse mortgage decisions of individuals and applies the same to India. The thesis deals with some important points on the introduction of reverse mortgage in India: Is the introduction of reverse mortgage as envisaged in the 2007-2008 Union Budget likely to increase the welfare of the elderly in India given their levels of housing equity and income? The Monte-Carlo simulation based approach is used to study the welfare increase of the elderly due to the introduction of reverse mortgage. A two period analytical framework is derived to identify the conditions under which a reverse mortgage leads to greater welfare for the elderly. Given the paucity of data in India on home appreciation rates, a pilot home appreciation index is created for the select cities of India, which is subsequently used in further simulation to derive results on the increase in utility to buyers of a reverse mortgage product.

Reverse mortgage products are not as popular as expected in spite of literature suggesting that annuitization of assets is the most optimal solution for retirement wealth. There could be a real options value to the time delay in reverse annuitization and this may be one of the reasons why a reverse mortgage may not be an attractive option. The real options value of a reverse mortgage is explored by comparing the financial implications of the time delay in reverse-annuitizing the house.

The study concludes on the note that the wealth effects from a reverse Mortgage are quite substantial for the elderly and that the reverse mortgage is a policy tool to encourage private saving in lieu of public pensions. The model variables and research design is discussed in detail and the contributions of this study and its policy implications are detailed in the later chapters.