Challenges on Improved Life Spans in India—the Actuarial Implications

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Abstract

Life spans in India have been increasing for six decades, and now the change is noticeable. While this has challenged India, it has also led to many business opportunities. Noticing the challenge India, endeavoured on liberalization to arrive at an optimal solution. This was a planned move, and India experienced unprecedented economic growth in the past decade. This paper attempts to analyze the implications of this scenario, as set out in the synopsis. Every effort is taken to stick to the synopsis and digressions, if any, are only to sustain the flow. All currency is mentioned in U.S. dollars (converted at: 1 US $ = 40 Indian Rupees) for facility. The gist of the paper is as follows:

Present Conditions

1. Challenge of a large, rising population with increasing proportion of the aged
2. Changing demographic and socioeconomic profile and increasing life expectancy
3. Inadequacy of existing social security system and government's inability to handle the financial load
4. Large possibility of the problem spiralling in the future
5. Non-availability of adequate mortality and morbidity data
6. Large availability of employable youth and trained manpower

Conclusions and Concerns

1. Need of exploring alternative ways to tackle mortality study
2. Ensure professionalism in handling social security
3. Need to push revamp of social security systems and effectively implement the decisions
4. Concern on building up needed data
5. Uncertainty of effective implementation of reforms specified
6. Uncertainty of future developments in longevity study
7. Concern on acceptance of foreign/private players in the Indian market

Synopsis

A brief synopsis of items covered in the present paper is given below. The same has been proposed and accepted by the committee set up for the purpose. The narrative is in the same order as far as possible.

1. The history of life expectancy (LE) in India and its trend so far as recorded in the various censuses over the decades
2. A study on the results of experience studies in the Indian context vis-à-vis the United States and European countries has been attempted since the LE in India is following more or less on the same lines with a time lag of about 50 years. The latest census statistics available, as well as the experience studies of Indian insurers, have been used to the extent available. International mortality comparison, especially at the Asian level is also undertaken to study the shape of things that may come in India.
3. Special analysis of mortality/morbidity data on higher ages, say 85 and over since the generally accepted actuarial principles for smooth graduation of q_x over the ages such as Balducci Assumption etc. do not strictly hold good here. This is intended to be a detailed version including education, health status, marital status and causes of death and mode of living and financial status. Another important aspect covered with a special focus is mortality of surviving spouses after the death of a spouse, as the female LE in India is increasing considerably as compared to males.
4. Economic implications of increased life span with special reference to its social implications, as well as whether the social framework is adequate and whether the social security measures are in tune to meet the oncoming challenge.