Chapter 1:Introduction

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INTRODUCTION

1.1 Overview Of The Study

The word insurance owes its origin to the word "insure". It means to secure the payment of a sum of money in the event of loss or damage to either life or property as per the contract made thereof against a periodical contribution or premium. Insurance may be defined as "a social device for reducing risk by combining a sufficient number of exposure units to make their individual losses collectively predictable. The predictable loss is then shared proportionally by all those in the combination" (www.ezinarticles.com). Insurance is a form of risk management used to hedge against the risk of a contingent, uncertain loss. The term insurance is, however, popularly used in the context of a contract or a promise of compensation. As per www.investorwords.com, insurance is "a promise of compensation for specific potential future losses in exchange for a periodic payment." Therefore, the term insurance maybe defined as a cooperative mechanism to spread the loss caused by a particular risk over a number of persons who are exposed to it and who agree to ensure themselves against the risk (E.Dharmaraj, 2008).

The concept of insurance dates back to the history of mankind. Insecurity can be considered as the father of insurance. The urge of security gave birth to the concept of what we now term as 'insurance'. So, it is not something new. It was practiced by our ancestors and the ancient civilization. The religious scriptures like the *Hammurabi* and *Manu Smritis* mention the existence of insurance during those days. *Rig Veda*, the Hindu scripture mentions the term *Yogakshema* which points to the practice of some form of insurance by the Aryans. There are also evidences of insurance being practiced in the Mohenjodaro and Egyptian civilization. But, the risk mitigation practice during those days was in the form of non-life insurance involving insurance of ships, caravans etc. Thus, the development and existence of non-life insurance was prominent during the earlier years of the human civilization. The emergence of life insurance developed many years later. Life insurance in its present form was initially practiced in nations like US, Europe and England. However, due to the absence of mortality tables, the business took the form of a gamble. As a result, it was realized that a scientific approach was required to be developed which happened in the eighteenth century. A study into the history of development of life insurance industry in India shows that insurance in the form of business started way back in 1818 when it was introduced for the English Widows. Till the end of the nineteenth century, insurance companies in India were mainly the overseas companies investing in insurance

activities in India. A series of changes in the form of Acts were passed from time to time in the twentieth century in order to give a better shape to the industry through regulatory measures.

Major set of reforms took place in the life insurance industry in the post-independence period starting with the passage of the Life Insurance Corporation Act, 1956. It followed the establishment of the Life Insurance Corporation of India (LICI) in 1956 which operated as a monopoly for more than four decades. Another set of revolutionary changes were implemented in 1999 with the passage of the IRDA Act, 1999 following the recommendation of the Malhotra Committee in 1994. Since then competition has become tough with the increase in the number of private life insurers from 4 in 2000-01 to 24 in 2012-13 and 26 in 2017-18. It is also seen that there is an increase in the life insurance penetration and density levels during the first decade of the 21st century. Insurance penetration reached 3.4 percent in 2015-16 (IRDA Annual report 2016). Moreover, the industry growth rate has crossed a CAGR of 30% during the last decade. An interesting point is that the life insurance giant, Life Insurance Corporation of India, has retained 84.8% (at the end of 2016- 17) of market share for single premium even after emergence of 26 private life insurers (www.statista.com).

The above mentioned development in the industry makes it immensely important to study the life insurance sector as a whole and also to focus on the individual players' performance during the last decade. With the increase in financial turmoil thought the globe like development of financial crisis in US in 2008 followed by the Eurozone crisis in 2011 and thorough changes in the financial sector of India especially opening insurance sector for private and foreign participants essentially called for an indepth study about the life insurers operating in India in terms of their financial strengths and weaknesses apart from their efficiency.

1.2 Objectives Of The Study

The objectives of this study are mentioned below:

(a) To study the development of the life insurance industry in India,

(b) To measure financial performance of the public and private sector life insurers,

(c) To compare performance of life insurance companies during the period under study.

(d) To determine relative efficiency of all life insurers operating in India,

(e) To measure efficiency on the basis of different parameters,

(f) To put forward suggestions and policy recommendations.

1.3.Research Methodology (In A Nutshell)

For the purpose of our research, mainly secondary data has been used which are available from different sources. In this study, we considered all the 24 players (23 private players and 1 public sector company namely, Life Insurance Corporation of India) which are operating in the life insurance industry (as at the end of 2015-16) for analysis. The last four companies are just new entrants to the sector so not included in this study. The different data and facts that are mentioned in this study are based on extensive research on the information collected from different IRDA Annual Reports, monthly journals available from the IRDA website, Company annual reports and website of the Life Insurance Council. Apart from this, the other sources used for collecting secondary data included Life Assurance Annual reports of various years during British rule, books, journals and e-journals, e-newspapers, magazines, newspapers etc.

The study period for analysis of financial performance is from 2001-02 to 2015-16. In the preliminary part of the study, CARAMELS framework has been used to calculate different ratios. According to the CARAMELS framework, there are some important indicators which can be applied at both the macro-level and micro-level to understand the measure of financial soundness. The broad areas that are covered by the ratios are Capital Adequacy, Asset Quality, Reinsurance Issues, Actuarial Issues, Management Soundness, Earnings and Profitability, Liquidity and Sensitivity to Market Risk. Then, by giving equal weight to all the ratios, a cumulative average ranking for each insurer has been drawn on the basis of which the final ranking has been done.

The final analytical part of the research focused on the determination of efficiency scores of both private and public sector life using DEA. This helped to assess their relative position in respect of the efficiency levels. DEA is a tool which aims to determine the relative efficiency level of different decision-making units. It determines the best-practice firms against whom the efficiency level of other firms are determined. The unit which is found to be relatively most efficient secures a score of one and the others get values ranging from zero to less than one. In order to capture all aspects of efficiency, the overall efficiency is divided into three components: Pure Technical Efficiency (PTE), Scale Efficiency (SE) and Technical Efficiency (TE). The relationship between the three is as follows: Technical efficiency (using CCR model) = Pure Technical Efficiency (using BCC model) x Scale Efficiency.

There are two basic models of the DEA technique – (a) CCR model developed by Charnes, Cooper and Rhodes in 1978 and (b) the BCC model developed by Banker, Charnes and Cooper in 1984. The difference between these two models is with regard to the assumption about returns to scale. While the former considers constant returns to scale, the latter considers variable returns to scale. The result of these two models helps us to know the scale efficiency as a residual component. The three inputs that are used for our research are Owner's equity, Commission and Operating expenses, whereas the three outputs considered are net premium, Assets under management and benefits and death claims paid.

It is often seen that after the initial application of DEA, the result is such that two decision-making units or DMUs (here life insurers) attain the same relative score. This makes it difficult for the researcher to make a proper discrimination and identify the better one. In such a situation, in order to arrive at exclusive ranks for each DMU (instead of tied ranks), the super-efficiency model (proposed by Anderson and Peterson) is run to arrive at a proper ranking and also to eliminate the outlier, if any.

We have also used the dynamic DEA model for the purpose of our analysis. The softwares used for determining the efficiency results are DEA-Solver Pro and MS-Excel Solver (developed by Zhu in 2003).

1.4. LIMITATIONS OF THE STUDY

The study is very unique as it has extensively covered most of the key areas and covers a long period of time. Still there are some limitations of the study, which are as follows:

(a) The CARAMELS framework involves various aspects but the study could not cover the sensitivity aspect as the data was not available.

(b) Recent techniques of DEA could not be applied.

(c) Dearth of adequate Software was a great hindrance in the study.

1.5. Plan Of Work

The study has been divided into nine chapters which are as follows:

1. Introduction
2. Survey of Literature
3. Historical Development of Life Insurance Industry
4. Life Insurance Industry in India: Post Nationalisation

5. Life Insurance Industry in India: Post Deregulation
6. Assessment of Financial Performance of Life Insurers
7. Research Methodology
8. Analysis of Efficiency of Life Insurers operating in India
9. Findings, Observations and Policy Recommendations

Chapter 1 of the research touches upon the introductory part of the research. The chapter deals with overview of the study and points out its importance and relevance. It discusses the broad objectives of our research work. Furthermore, it also throws light on the research methodology applied for this study. This section also draws the skeleton of this study i.e. the plan of work where it mentions the chapters pertinent to this research work.

Chapter 2 mentions and discusses the main extract of the different literatures available on the aspect of insurance performance measurement. For better presentation of this section, the entire part is divided into three sections: (a) review of articles (b) review of books (c) review of reports and (d) review of Ph.D. Thesis. The understanding of the various literatures available helped us to identify the research gap and decide the direction of our research.

Chapter 3 discusses the route taken by the life insurance industry in the course of its development. It starts with the commencement of the concept of insurance and elaborates the gradual development of insurance as a business. In the later part it elaborates the lacunae that the industry suffered at different phases of development.

Chapter 4 discusses the development of insurance sector in India. The reforms brought about at different points in the post-independence period. The performance of the LIC in terms of its business, premium, life fund, rural business, investments etc. has also been touched upon by us. It also discusses the reforms in various sectors that took place in the last decade of the twentieth century resulting in the formation of IRDA. The chapter also elaborates the role of the regulator and measures taken by it for the growth and development of the sector.

*Chapter 5 de*scribes the different aspects in the growth and development of the industry after its opening up to the private players. It also gives a brief profile of the life insurers operating in the industry. It also emphasizes on the opportunities and the challenges the life insurance sector in India has to combat with. It brings to light the main factors that are acting as growth factors in the industry. At the same time, it points out the main obstacles that are coming in the way of its

realizing the potential. In brief, the overall discussion helps us to identify the potential and concerns of the industry

Chapter 6 focuses on the study of financial soundness of LIC and the private insurers. The analysis has been done by applying the CARAMELS framework which is analogous to the CAMELS model popularly applied to the banking industry. In the last section of the chapter, the insurers are ranked on the basis of different ratios that are analyzed for the purpose.

Chapter 7 deals with DEA methodology as an efficiency measurement technique. The accounting measures of efficiency and economic measures of efficiency. The later part of the chapter explains importance of DEA as an efficiency measurement tool. The various models for efficiency measurement have been also mentioned in this chapter. Finally selection of Input and Output variables and selection of DMUs have been elaborated in this chapter.

Chapter 8 deals with the application of the Data Envelopment Analysis to study the different aspects of insurers' efficiency. The efficiency is divided into three categories: technical efficiency, pure technical efficiency and scale efficiency. At first, all the private players and LIC are considered together. Then, by applying the super-efficiency approach, LIC is eliminated and relative position of only the private players is analyzed. A ranking following the DEA technique is finally done. The dynamic panel approach has also been applied to analyse the efficiency of the life insurers.

Chapter 9 summarizes the findings and arrives at conclusion of the study followed by suggestions in the form of policy recommendations on the basis of results obtained.