Analysis of Reforms in Life Insurance Sector in India

and

Identification of Determinants of Insurance Demand in Post-Reform Era

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"So long as the maintenance of a family depends
on the earning power of the breadwinner
So long as earning power can be destroyed
by death, old age or disability;
Just so long will life insurance continue to be
the key stone of the individual and
those who are dependent upon him..

Preface

Recent years have heralded a period of unprecedented changes in the Indian financial sector. Following the reforms in the banking sector and stock market, reforms in the insurance sector was introduced in 1999, which was a part of the overall financial sector reform. Insurance is very important for any economy and it is especially important for country like India as it works as an important vehicle of savings for the economy for longer period of time. The development of insurance and the overall spread of insurance are also important in India where there is an absence of any significant state welfare benefit for the people. People need to make provisions for their future financial eventualities and insurance can provide that benefit to the people. The low level of insurance penetration, higher premiums, less attractive products along with the monopolistic approach of the state life insurer has been highlighted in the Malhotra Committee report and the opening up of the insurance sector has been advocated.

The controversy that erupted thereafter was due to the concept of the liberalisation of the insurance sector. It is the same genus of motivation for which the nationalisation of life insurance business was propagated in 1956. Considering that the insurance industry in India evolved in 1818, the common people are not fully acquainted with the main features and development of the life insurance industry, a short historical review of the Indian life insurance industry has been briefly carried out with out eliminating key milestones achieved by the industry as this will serve as a background to explain the current liberalisation judgment. The journey of the Indian insurance industry from *private sector to nationalisation and again back to the opening up of the* insurance industry to the private players has been quite exciting.

After a long debate, among pro-reformists and anti-reformists, the insurance sector finally opened to the private and foreign equity in India in 2000 with the passing of IRDA Act, 1999. India is also a signatory member of WTO which advocates the opening of boundaries for international trade. The opening up of the life insurance industry has been discussed on the basis of Malhotra Committee report and on the arguments relevant to Indian context.

Since the opening of the Indian life insurance market 21 life insurers are operating in the market. After few years of open market in the insurance sector this study will highlight the basic issues and try to find out the answer whether

the reforms have benefited the Indian insurance sector, life insurance sector in particular, since the life insurance sector is the major part of the total insurance market in India.

It was argued that the opening of the life insurance sector would bring range of products before the consumers and competition will bring down the premium rates in the market which will ultimately improve the life insurance penetration in the country along with per capita life insurance consumption. In this study we tried to focus on the benefits gained in the post reform period by the consumers in respect of product choices, price dispersions, and payment options along with extra benefits and try to see how much the new policy has improved the penetration and density level in India.

Life insurance generates huge amount of saving from the common people and the use of those funds at their optimum level is very important for the life insurance companies itself as well as for the society. This is also important to maintain the liquidity and the solvency of the industry to settle the claims against them. Therefore, prudent investment regulations in this respect have been evaluated in this connection. This study also examined the post reform savings behaviuor of the Indians when new customized life products are available in the market.

The life insurance sector is also expected to emancipate certain rural and social obligations. The present obligations of the life insurers in this respect along with the future requirement and other needs have been discussed in this work.

Experience from the countries where the reforms initiated earlier, such as developed countries and few developing countries, shows that the role of an independent regulator is very important for the regulating and development of the industry. This study, therefore, discussed the role of IRDA in Indian conditions and found that IRDA prescribed rules and regulations from time to time to regulate the insurance industry and for the overall development of the industry in our country. In certain cases it has taken steps to protect the interest of the common investors.

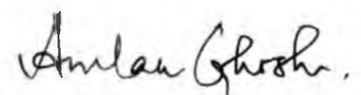
In dealing with the benefits of the insurance sector reforms in India, we tried to build a composite index to quantify the life insurance reforms as there are no standard measures available which can measure the life insurance sector reforms

in India. This is the first of its kind in India to assess the life insurance sector reforms quantitatively. We used the VAR and VECM to assess the life insurance sector reforms in India and found that the life insurance reform does affect the development of the life insurance industry and both have a long run relationship.

In dealing with the perception of the common people towards the new private domestic and foreign life insurance companies and also the future expectations from these companies, we constructed a questionnaire and collected the primary data through field survey.

After the introduction of the new economic policy, the Indian economy has witnessed a radical transformation in its structure. The share of agriculture in GDP has gone down and the share of services sector improved considerably. The implementations of new economic policy have improved the GDP for the last few years consecutively in and around 8%. This has improved the per capita income of the country. Rural India has also improves its earning from agricultural and non-agricultural incomes. On the other hand, rural people migrated into the urban areas for better job and earnings. The most important change has been seen in the demographic pattern of Indians. The average Indians are young and the rising of middle class peoples in India are acting as a catalyst in the post reform development in India. Under these circumstances this study also tried to find out the determinants of demand for life insurance in India in the post reform era.

The main problem we faced was that the dearth of data as the reforms in the life insurance sector started in 2000 only. Due to time lag in publishing official data, we have considered data up to financial year 2007-2008. The present study is expected to provide a brief overview on the overall impact of these reforms measures on the life insurance sector and answer the questions regarding the viability of the life insurance sector reforms in India and assess the present Indian life market. The findings and the suggestions of this study will be useful for the policy makers, leaders, potential insurers, researchers, academicians along with the general readers who are interested in the life insurance sector.



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The responsibility for errors remains mine alone.

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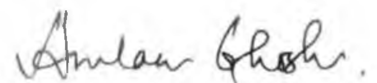

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List of Abbreviations

ADB	Asian Development Bank
ASSOCHAM	The association of Chambers of Commerce and Industry of India
CSO	Central Statistical Organisation
FICCI	Federation of Indian Chambers of Commerce and Industry
GATT	General Agreement on Trade and Tariff
GDP	Gross Domestic Product
GNP	Gross National Product
GoI	Government of India
ICS	Insurance Corporation of Sri Lanka
IMF	International Monitory Fund
IRDA	Insurance Regulatory and Development Authority
KVP	Kissan Vikas Patra
LDC	Least Developed Countries
LICI	Life Insurance Corporation of India
LIP	Life Insurance Policies
MFI	Micro Finance Institution
NEP	New Economic Policy
NSC	National Savings Certificate
NSSO	National Sample Survey Organisation
NPS	New Pension Scheme
PFRDA	Pension Fund Regulatory and Development Authority
PICC	People's Insurance Company of China
PLI	Postal Life Insurance
PO	Post Office
PSU	Public Sector Utilities
RBI	Reserve Bank of India
RPLI	Rural Postal Life Insurance
SBI	State Bank of India
SHG	Self Help Groups
SUSEP	Superintendence of Private Insurance
ULIP	Unit Linked Life Policies
UNCTAD	United Nations Conferences on Trade and Development
UNDP	United Nations Development Programme
VAR	Vector Autoregression
VECM	Vector Error Correrection Model
WDI	World Development Indicators
WPI	Wholesale Price Index
WTO	World Trade Organisation

Chapter - I

Introduction

1.1: Concept of Life Insurance

In India, insurance business is classified primarily as **Life Insurance** and **General Insurance.** Life insurance is basically associated with the risk of human lives. Life insurance provides protection to a household against the premature death of its bread winner or the income earning member. Sudden death of the principal earner would lead the family into severe economic crisis. In traditional Indian societies, joint family system itself provided a shield in such eventualities as there were other earning members in every joint family. But in modern days where nucleolus family system has become a part of our society due to some socio-economic conditions, life insurance products provide such an alternative arrangements. Individuals buy life insurance products by paying certain amount of money which is called 'premium' to the life insurance company for such contractual arrangements.

Therefore, **Life insurance** or **life assurance** is a contract between the policy owner and the insurer (the insurance company) where the insurer agrees to pay a sum of money upon the occurrence of the insured individual's or individuals' death. In return, the policyholder/ owner of the policy agree to pay a stipulated amount (premium) at regular intervals for a long term period or in lump sums. If such arrangements did not happen, then the families who faces such an eventuality would forced to face a financial crisis and drag itself to a lower strata of society. People from lower strata cost the society/nation by way of subsidies, poor education and so on. Life insurance helps to reduce such costs by making contractual arrangements with large number of individuals and sharing the risk of uncertainties. Life insurance is the only way to safeguard against any unpredictable risk of the future for the family. Life insurance helps people live financially solvent and maintain same standard of living. This risk sharing capability of the life insurance products makes it (life insurance) unique among all other financial products available in the financial market.

Any Life insurance product typically has two elements first, the risk element and the second one is the savings part. The part of the premiums paid by the policy holder goes toward buying the risk coverage and rest toward savings. Since the life insurance products have the savings elements in it, buying life insurance products has always associated with investment decision which makes the life insurance product comparable with the available investments options (e.g., bank deposits, mutual funds, equities etc.) offered by the other financial institutions. The savings component of the life insurance product and the long term nature of the contract in a life insurance policy make the life insurance an important financial instrument for mobilization of funds which is required for a long gestation period investment projects such as infrastructure projects. In any life insurance contract between insuree and the insurer, insuree agrees to invest funds periodically for a long period of times and can not cancel the insurance contract with out some penalties. Therefore, life insurance contracts provide a long term source of funds for the economy. There are other short term life insurance contracts available which are known as term life insurance products which only covers the risk associated with the human life.

1.2: Life Insurance in India

Life insurance was started in India in 1818 mainly to provide insurance to English widows. Though the periphery of such activities was subsequently extended, Indians were insured only scantly, and that too, at exorbitant premiums. Foreign insurance companies had profound dominance in this market even after the establishment of the first Indian life insurance company, viz. Bombay Mutual Life Assurance Society (BMLAS), in 1870. The main characteristic of such foreign companies was that they invested the proceeds of premium outside India so that Indian economy was not benefited thereby. This development, however, took place in the informal sector. The development of insurance business in the formal sector started with the enactment of twin acts, viz. The life Insurance Companies Act and The Provident Fund Act, both in 1912. A more comprehensive legislation was, however, introduced in India under the Insurance Act of

1938 to ensure strict control over insurance business and an effective check on large scale frauds that had evolved in this business during the 1930's[1].

The definition of life insurance business given in the Section 2(11), of the Insurance Act of 1938 as follows:

"Life Insurance Business" means the business of effecting contracts of insurance upon human life, including any contract whereby the payment of money is assured on death (except death by accident only) and the happening of any contingency dependent on human life, and any contract which is subject to payment of premiums for a term dependent on human life and shall be deemed to include

(a) the granting of disability and double or triple indemnity accident benefits, if so provided in the contract of insurance;

(b) the granting of annuities upon human life; and

(c) the granting of superannuation allowances and annuities payable out of any fund applicable solely to the relief and maintenance of persons engaged or who have been engaged in any particular profession, trade or employment or of the dependent of such persons.

Life insurance business got a boost in India rightly from the eve of the planning era on account of its capacity to mobilize resources from the cross section of population, and to channelise them in productive activities. By 1956 India accommodated as many as 154 Indian life insurance companies, 16 non-Indian companies and 75 provident fund societies issuing life insurance policies[2]. Total assets of these units were about Rs.441 crore on August 31, 1956 with around 57 lakhs policies and an employment level of 27 thousand. Their assured sum stood at more than Rs.1250 crore at that time[3]. The Government of India, however, nationalised these business units, and amalgamated them under Life Insurance Corporation of India (LICI) in 1956 with a view to utilising the then-emerging financial institutions in the successful implementation of Five Year Plans.

The LICI had made tremendous growth after its nationalization. New business that stood at Rs. 336.37 crore in 1957, accelerated to Rs 75606.62 crore in 1998-99. Again, total number of effective policies was around 917 lakhs and the total value of sum assured, Rs. 459201 crore in 1998-99, as against 57 lakh policies and Rs. 441 crore sums assured in 1956. Likewise, LICI's life fund increased from Rs. 410.40 crore in1956 to Rs 127389.06 crore in 1999; its investment in the socially oriented sector escalated from Rs 513.21 crore in 1969 to Rs. 88831 crore in 1999; and its claims settlement went up from 25 crore in 1957 to 7583.18 crore in 1999[4].

Though LICI grew amazingly in terms of business volume prior to 1999, it staggered in terms of geographical spread, especially in the countryside, as well as the number of lives coverage. Evidence indicates that its business had been confined to big cities, and within the cities, only to more affluent sections of the society. The rural sector shared only around 18 per cent of its business in 2000[5]. The Indian insurance market also fell short of the global standard. This is evident in the fact that the penetration level was only 1.39 per cent of GDP in India while it was 2.16 per cent in Malaysia, 2.65 per cent in Chile, 8.39 per cent in South Korea, 13.92 per cent in South Africa, and 10.30 per cent in the UK. India, however, scored ahead of China where the penetration level was 1.02 per cent in 1999. India's share in the global insurance market was also very meager in 1999. It was only 0.36 per cent, and ranked at 23. The scenario was slightly better for the global life insurance market where India's share was 0.43 per cent[6].

1.3: GATS & Life Insurance Industry

The Uruguay Round of GATT *(General Agreement on Trade and Tariffs)* advocated the removal of restrictions and non-tariff barriers of trade so that there will be free flow of international trade and services across countries. GATS *(General Agreement on Trade in Services)* are a part of world's trade agreement in WTO, which has been applied since

January 1995[7]. WTO, as an organization, has a different character from its predecessor, GATT *(General Agreement on Trade and Tariffs)*. GATT only regulated the international trade of goods by decreasing tariff barrier to make the flow of export-import run smoothly, while WTO does not only regulate the traffic of trade of goods, but also establishes the rules for the trade in services (GATS) and the protection of Trade Related Intellectual Property Rights (TRIPs)[8] The ratification of GATS has become the new episode-in the internationalization and institutionalization of service provision which include the insurance and insurance-related services under the head of financial service. Insurance and insurance-related services cover life and non-life insurance, reinsurance, insurance brokerage, agency service, consultancy and actuarial services[9]. Financial services are one of the sectors to be opened under the Agreement on Trade in Services (GATS) along with other WTO Agreements [10]. It is against this backdrop many countries have deregulated its insurance sector, e.g., South Korea and Taiwan in 1987, Argentina and Pakistan in 1990, Philippines in 1992, Japan in 1996 etc. and those countries which have already opened its insurance industry went further to deregulate their insurance market, such as Brazil, Peru, Hong Kong and Singapore[11]. India also opened its insurance sector as a part of the GATS commitments which are unbound except, insurance of freight, reinsurance with foreign re-insurers to the extent of 10 per cent of the premium of the market overall being reinsured abroad. Article VI (1) of GATS made it obligatory to open the sectors where specific commitments have been made by the members. The final commitments made by India in GATS are given in the Annexure 1. (I). The year 1991, however, witnessed a paradigm shift in India's overall development strategy. On the one hand, there has been steady removal of restrictions on the inflow of goods and services, including capital, and, on the other, the public sector has been increasingly privatised [12]. In fact, many provisions of GATT are consonant with the new economic policy adopted by India. The impacts of these new economic policies on LICI have been enormous[13]. Keeping these in view, a Committee on Reforms in the Insurance sector was set up under the Chairmanship of R.N. Malhotra in 1992. The recommendations of the Committee, submitted in 1994, were accepted in principle by the government. The major recommendations of the Committee[14] were as follows:

i. To raise the capital base of LICI from Rs.5 crore to Rs. 200 crore;

ii. To restructure LICI by way of delegating financial, administrative and operational authority to the Zonal Offices, leaving for the Central office the jobs like policy formulation, product development, investments, personal policies and accounts of the corporation;

iii. To allow limited number of private companies in the insurance sector with a restriction that no firm be allowed to operate in both lines of insurance (life and general).

iv. To ensure minimum paid-up capital for a new private company at Rs.100 crore with promoters holding not exceeding 40 per cent and at no time be less than 26 per cent of the paid-up capital.

v. To set up a strong and effective regulatory body with an independent source of fund before allowing private companies into the sector.

vi. To reduce mandatory investment of fresh accretions from the present level of 75 per cent which was considered to be high.

vii. To use modern technology at all levels.

The Government of India started implementing the recommendations of the Malhotra Committee since December 1999, thus heralding an era of liberalization in the country's insurance sector. The setting up of Insurance Regulatory and Development Authority (IRDA) and opening up of Insurance Business (life and general) to foreign capital up to 26 per cent were the initial steps in this direction[15].

It is widely acknowledged that the opening up of the insurance sector has been aimed at ushering in greater efficiency in the insurance business by maximising productivity and minimising transaction cost. Competition is believed to bring a wider choice of products at lower prices to the consumers, larger coverage of population, better customer service, superior information technology, higher returns to the policy holders, and so on[16].

1.4: Objectives

The role of financial sector towards economic development is well established by researchers in their empirical studies [e.g., Levine and Zervos[17] (1998), Levine[18] (1997), King and Levine (1993a[19] and 1993b[20]) Levine et. al[21], (2000), and Beck et. al[22], (2000)]. Now the research has been shifted from established link between financial development and economic growth to understand factors that affects the overall financial services, thereby the underlying factors that lead to improve the financial development. Economic literature has been given much of attention to the capital market and banking sector. Insurance is one of the important financial services that can trigger the growth in an economy by channelising the long-term savings for the productive purpose and providing a shield before the risk associated with any activity related to productivity, assets or life. However, literature on relationship between insurance sector and economic growth is very uncommon. Few recent studies showed that the insurance industry can improve the economic growth through financial intermediation, risk aversion and generating employment. For example, we can highlight the studies of Outreville (1990 b), Catalan et. al.[23] (2000), Ward and Zurbruegg[24] (2002). The recent empirical work on insurance market by Browne and Kim[25] (1993), Ward and Zurbruegg[26] (2002), Beck and Webb (2003) and Esho et. al.[27] (2004) have shown that the level of insurance demand can be influenced by the economic, demographic and legal factors.

Despite these studies on the contribution of life insurance sector there are hardly few studies on the individual emerging markets in Asia such as India during the post liberalization period. Though we could find few studies on China such as Hwang and Gao[28] (2003), Hwang and Greenford[29] (2005), Zhang and Zhu[30] (2005). However, there are very few studies on Indian life insurance market available which are worth mentioning like Sinha (2004), Joshi[31] (2003) and Rajagopalan[32] (2004). In his study Rajagopalan (2004) tried to asses the impact on the cost effectiveness of term life insurance products in the post reform era while Joshi (2003) showed the changing customer expectations in insurance sector during the post liberlised period. Sinha (2004)

dealt with the overall development of the insurance sector which explains the challenges and opportunities in the years to come before the insurance industry more of theoretically. We do not find any research work on the long run relationship between life insurance reforms and the impacts of those reforms on the development on the life insurance industry in India. In this background, the present study will assess the impact of the insurance sector reforms on the overall development of life insurance in India. The development of this sector will be measured in terms of certain well accepted indices like insurance density, insurance penetration, new policies issued etc. To do this, the present study will formulate and calibrate a theoretical model that will be appropriate to measure the life insurance sector reforms numerically in India as no such study has yet delved into the question of efficacy of these new policies, and their success in terms of their stated objectives.

This present study will also seek to identify the factors that have significant bearings on the overall development of life insurance demand in India in the post-reform era. The determining factors of life insurance demand vary from country to country. The plausible set of such factors have not yet been identified for India in any published study except Sadakh[33] (2006) who have shown certain naive statistical relationship among the potential dependent variables. The present study will investigate into this field and seek to bring out the variables that have been directly or indirectly influencing the development of life insurance business in the post-reform period in India.

In short the broad objectives of this study are:

1. To investigate the implications (positive/negative) of the insurance sector reforms in the Indian life insurance sector;
2. To assess the welfare implications of this reform, and
3. To identify the factors responsible for this development.

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Chapter II

HISTORICAL BACKGROUND OF INSURANCE BUSINESS IN INDIA

2.1: Ancient concept of Life insurance in India

The need for security against risk or any uncertainty is one of the basic motivating forces to develop the concept of insurance in this world. The urge to provide protection (insurance) against the loss of life and property must have indulge the people to make some kind of sacrifice (premium) willingly in order to get the security through "collective co-operation". The Aryans had evolved a system of village and community life, which was proof against the depredation of time and gave sustenance to everyone. A reference is available in the Rig Veda as stated by F. J. McLean in his book *'Human Side of Insurance'*. It is stated that the Sanskrit term **'Yogakshema'** (means well being) in the Rig Veda was practiced by the Aryans in India nearly 3000 years ago. The 'Manu Smriti' also supports the system of "collective co-operation" as practiced by the Aryans[1].

The Indian social system, guided by its basic philosophy of benevolence, gave the birth of joint family system where all the family members stay together and share every eventuality. The joint family system is the basic unit of Indian society. For ages, joint family system, in India, continued to provide adequate protection to all its members. Education and marriage of children, taking care of old and infirm members of family and unfortunate windows were the main responsibilities of all the members of a joint family. The basic objective of life insurance, viz. taking care of financial needs of a family in case of premature death of the principal wage earner, provision for the old age, are fully taken care of by the system of joint family mechanism. We can term the joint family system as a little insurance concern that take care the members of the respective family members. Apart from the system of joint family, the caste system, temples also used to provide protection to a person and/or dependants in times of need. Various systems prevailed in different parts of India but the underlying idea was the same – 'Yogakshema', that is, the idea of welfare including the idea of prosperity and happiness.

2.2: Modern concept of insurance in India (1818-1870)

As the time progresses, the system of joint family gradually came under pressure with the rapid industrialization and urbanization in India. Now individualistic approach towards the

family has evolved. The responsibility, which was previously shared by the all-family members together, now came upon to an individual himself. Now an individual himself has to look towards the security of his own and his family and property in the time of eventualities. It is, perhaps, against this background the concept of life insurance in its modern form came to be accepted in our society.

Until the 19th century, the Indians were unaware of the advantages and the utilities of life insurance and there was widespread superstition among the people that to insure one's life was to court death. In local languages, life insurance is often termed as *'registration of death'*. The influence of Islam too, was against the usage of life insurance. The process of political and military dissolution of Moghuls that set in after Aurangzeb's regime was completed with the rise of East India Company. In the vacuum created by such dissolution, the western social, religious and educational ideas, which the British introduced in India, took the deep roots of the soil and its people. The spread of western education and ideas helped the political and spiritual resurgence in the country[2] The new ideas led to the changes in social, political and economic outlook of India and Indian people and that led to the establishment of modern institution in the field of banking and insurance. The first plan to form an insurance organization in India was proposed at the governmental level. Sir John child, who was the governor of Bombay (1681-1690), was instructed by the Court of Directors of East India Company "to constitute an insurance office on the (Bombay) island", but the reason/s behind such suggestion was not known though the earliest known insurance company was "Bombay Insurance Society"[3].

The life insurance in its modern form came to India in **1818**, with the establishment of the **Oriental Life Insurance Company** to provide life insurance to English widows only at Calcutta (now Kolkata). The venture of this first life insurance company was not quite successful and it was re-formed in 1829 and again in 1833 when many agency houses of Calcutta fell[4]. Prince Dwarkanath Tagore took the responsibility on his shoulder to re-organize the Oriental Life Insurance Company in the year 1834. The other two men who took an active part in the development of the company were Ramatanu Lahiri and Rustomjee Cowasjee.

Most of the early attempts to form insurance offices were in the province of Bengal because of its political and economical importance at that time. The head office of the East India Company was at Calcutta. Bombay and Madras, now Mumbai and Chennai respectively, were the other places where the English had their early settlements due to the spread of business activity of East India Company. On May 1, 1823, several entrepreneurs in Bombay started **"Bombay Life Assurance Company"**. According to the Insurance Encyclopedia by C. Walford, the Bombay Life Assurance Company did not issue whole life policies and its main business was to offer short-term protection[5].

"Madras Equitable" was founded in the year 1829 at Madras. This company was started by Messrs Arbuthnott and Co. to insure lives of British officers. Few people have referred to Madras as *"the birthplace of insurance"* as the company was the first in the country to issue regular life policies. There were few foreign insurance companies, which started operation during this time also. Prominent amongst the companies that came to India are **'The Universal Life Assurance Company'**, **'Medical, Invalid and General'**, and the **'Colonial Life Assurance Company'**.

The Universal Life Assurance Company established in England in 1836 and started its operation in India in 1840. This company enjoyed a long tenure of success until it was taken over by the **'North British'** in 1901. The Colonial Life Assurance Company established in 1846 mainly to extend the full benefit of life assurance to the colonies of Great Britain and to India. The company appointed agents with local board at Calcutta, Bombay and Madras. Later this company was taken over by the **'Standard Life'**. **'The Medical, Invalid and General'** established in London in 1841 and extended its work to India. Later it absorbed the **'Agra Life'** and in 1853, it took over the **'New Oriental'**[6].

We can get the, the then, story of life insurance industry in India from the Insurance encyclopedia of C. Walford and to quote "*'Bombay Life Assurance Company' was founded in Bombay on May 1, 1823. 'Madras Equitable' was founded in 1829. 'Madras widows' was started in 1834. 'Medical Invalid and General' was established in the United Kingdom in 1841 and soon started operating in India. It took over 'New Oriental' in 1853. It also took over 'Agra*

Insurance Company', 'Family Endowment and Indian Laudable'. The entire amalgamation of these five companies was absorbed in the 'Albert Life Insurance Company' in 1860, which went into liquidation in 1869"[7].

By 1870, there were nearly fifteen companies operating in India, out of which seven were established in India and eight foreign companies with their head offices in Great Britain. Until 1870, the life insurance coverage was only extended to the lives of Europeans and/or their descendents born in India. The premium charged by these companies were not the same as in England as the high mortality rate due to residence in India and perhaps due to the absence of proper mortality data. Until 1870, Indians were subjected to great discrimination when being insured, just as the then ruler unequally treated them in all other matters. Indians denied insurance because their lives were considered risky, sub-standard and sometimes value less. When some Indians were insured, though the numbers of such cases were very low, their lives were accepted with exorbitant extra premiums[8].

The development in this sector between 1818 and 1870 was the stepping-stone for writing life business in India and gave the direction towards the promotion of Indian life insurance companies. Indian insurance companies were not governed by any act until 1866 and later it was covered under the Indian Companies Act, which was passed in 1866 by the then Government.

2.3: Era of Indian companies (1870-1900)

As the Indians are not entitled to insure their lives by the then insurance companies and even though few have accepted that too with extra premium amount. Indian lives were considered risky and sub-standard and loaded with 15 to 20 percent extra premium. This discrimination led to the demand to treat Indian lives at per with the British. We should also note that the role of social reformers to the development of life insurance was commendable. We can highlight the contribution made by Raja Ram Mohan Roy, who rose in revolt against the practice of 'SATI', tried to motivate rich and influential natives to start life insurance institution through

the columns of newspapers with which he was associated. He wrote in "SAMBAD KAUMUDINI" in 1821, to quote,

*"There has been a fund established by the Laudable Society called the Civil and Military Widows' Fund, for the purpose of supporting the children of deceased, both of civil and military services, but there is among Hindus no provision for the maintenance of poor widows.......... .... To remedy this, if two or three respectable native gentlemen were to institute a **life insurance**, this would be most advantageous to people to narrow circumstances"*[9].

During the period of 44 years from 1824 to 1868, was marked by rapid development in the insurance sector in England where 285 life insurance companies were formed. During the decade following 1860, a large number of indiscriminate amalgamations took place in England and India. Due to the bad selection, bad management along with few other reasons 174 companies ceased to exit the business. The failure of Albert Life Assurance Company in August 1869 had far-reaching consequences in the world of life insurance business. The Albert Life Assurance Company was formed in1838 and it had absorbed 26 other life insurance companies, of which five companies were from India. The failure of the Albert Life Assurance Company along with others led to the passing of the **"Life Insurance Companies Act,1870"**, by the British parliament[10].

The progress in the life insurance sector in England was closely watched in India and the demand for the state controlled insurance company to insure the lives of the citizens of India rose. Nevertheless, Government turned down the demand of Indian people on the following grounds. In the first place, the Government did not have the adequate statistical information regarding the mortality of Indian lives and European statistics can not be used to operate insurance business in India. Secondly, it was stated that it was not possible for the Government to operate other parts of India except the presidency towns, thereby, making the insurance operation uneconomical and unjustifiable for the state as it would increase the expenses of the Government. It was also stated by the Government that the Indian themselves did not want insurance. This led to the development of an India insurance company that will insure the Indian

lives. To quote the silver jubilee souvenir published by the Indian Life Assurance Offices Association (ILAOA):

"Notwithstanding the opinion of the government of India, some influential citizens of Bombay decide to form Indian companies themselves, so that the controlling of business would remain in their own hands instead of the speculative promoters in England. They also intended to accept Indian lives freely on the same rate as the European lives in India"[11].

To quote from C.Walford's Encyclopedia: *"On 3rd December, 1870, G.A. Summers, Asstt. Registrar, Bombay High Court, gathered six of his personal friends around him and the seven earnest men, seven willing pockets, just seven rupees for initial expenses gave shape to a plan offering insurance without the risk of ruin and the* ***Bombay Mutual Life Assurance Society (BMLAS)*** *came into existence"*[12].

After the Bombay Mutual Life Assurance Society (BMLAS), the next insurance company that came into operation was **'Indian Life Assurance Company Ltd'**, in the year 1871 with its head office at Meerut. This could be found out from the Director's report of the 'Bombay Mutual', for the year 1876, which states, *"one member who had applied for a policy of Rs. 10,000 has been reassured in the Indian Life Assurance Company Ltd. for a period of five years to the extent of Rs. 5,000."*

After the plea of Raja Ram Mohan Roy toward the natives of Indian to form an insurance company, another great social reformer and educationist, Pandit Ishwar Chandra Vidyasagar founded the **'Hindu Family Annuity Fund'** in June 1872 in Calcutta[2]. This insurance company was formed mainly to cater the financial needs to Hindu widows and orphans through annuities. The rules of the fund, printed in 1872, stated *inter* alia; *"that the object of the fund shall be, by voluntary donations and by subscriptions, to provide for the maintenance of parents, widows and children and other relatives of Hindu inhabitants of Bengal proper, who shall subscribe to it..."*[13].

The next most important Indian life insurance company was the **'Oriental Government Security Assurance Company'**, which was established on May 5, 1874 in Bombay by a

distinguish actuary Mr. D. M. Slater. The first and foremost importance of this company was to make genuine effort to provide security to policyholders and re-established their faith in insurance by making most of the investments in Indian Government Securities and doing so, keep the management and the funds in the country under local controls. This company made a modest effort to reach insurance within the reach of Indians by placing Indian lives at per with the English lives in this country. In the later years, this company emerged as leader in the insurance business in India[14].

Some citizens of Goa, who were settled in Karachi, promoted an insurance company in 1892 named **'Indian Life Assurance company Ltd.'** in Karachi. Mr. M.C. Duarte was the secretary and the company was set up to provide the insurance services on the scientific basis. The Indian Life was acclaimed as one of the leading sound Indian life insurance companies[15].

Nearly up to the end of the 19th century, foreign insurance companies enjoyed some kind of monopoly and Indian proprietary insurance companies were up against this stiff competition. On the other side Indians had faced unfair discrimination in the matter of premium rates charged to them. Indian lives were insured with extra premium up to 20 percent which was a common practice[16]. This has provoked many Indians. The feeling of this resentment was quite strong as we could see from the declaration from Lala Harkishenlal, who declared: *"Never in Punjab will we allow the Britishers to treat Indians with a difference. When we take up insurance we will do so on equal terms"*. Lala Harkishenlal, *'the Napoleon of Indian Finance'* launched the **'Bharat Insurance Company'** at Lahore (now in Pakistan) in 1896 with a number of influential natives[17].

Another milestone was achieved in the life business sector in India when the alliance between the orient and the Occident took place and a new company **"Empire of India"** emerged in the year 1897 at Bombay. Earnest Frederik Allum and Rustomji Bharucha were the main architects behind the creation of Empire of India and the key characteristics of this company were the liberal policy conditions and relatively low rates of premiums[18].

2.4: Foreign life insurance companies (1870-1900)

As a result of the spread of the English educational system India, a new middle class was coming into existence. This huge section of enlightened middle class developed the insurance demand in the later years. At the same time, small and useful societies were born to support the need of this section of people. This situation led to understand that the demand for life insurance among the people were alive. The vast field of life insurance market in India, due to the very small number of insurance service providers, a number of foreign insurance companies attracted and they came here with rapid succession. Again, the fascination of the local population for the foreign companies also drove the demand for foreign insurance companies in India.

The following are the companies, which came in early stage of the insurance business in India.

- **'The Commercial Union Assurance Co. Ltd.'**, established in the United Kingdom in the year 1861and the company extended its operation in India in 1870.
- **'City of Glasgow'** established its first office in Calcutta in 1881. This was the only company and first in India to charge Indian people and European people with the same rate of premiums.
- The *largest insurance company in the world*, **'Equitable Life Assurance Society of New York'** of America started its operation in India in the year 1882.
- Another American company, the **'New York Life'** came to India in 1885.
- The next insurance company to appear in the Indian market to write business was the **'Sun Life Assurance Company of India Ltd.'** of England in the year 1891.
- The **'Sun Life Assurance Company of Canada'** commenced its business operation in India by opening up an agency in Bombay, in 1892.
- The *next year (1893), India witnessed another two foreign companies opening their business* units. The names of those two were, the **'Gresham Life Assurance Society of England'** and the **'London and Lancashire'.**

The development of other foreign companies operating throughout the India was same and they generally offer insurance to their fellow citizens and selected Angliscised Indians, but they

were reluctant to issue life policies to natives of India, as they were considered risky and substandard[19].

2.5: Swadeshi Movement and development of life business in India

The educated and the progressive classes were the first to understand the benefit of insurance and the major share of insurance business used to go to the foreign companies. Up to the 19th century, the insurance business in India were dominated by the foreign insurance companies and the premiums collected through the insurance business were credited out side the country instead of being utilized and invested in India to promote the growth. Nationalist movement in India had a great impetus in the development of insurance industry. With the dawn of 20th century, the glorious renaissance of the Swadeshi Movement of 1905, the Non-cooperation movement of 1919 and the Civil Disobedience Movement of 1929 were the landmark in the history of development of insurance industry as these movements were responsible for generating the spirit of Indianness among the Indians. Referring to this spirit Lala Lajpat Rai appealed to the Indians to adopt the motto **"Be Indian and Buy Indian"**. The movement of boycott the British product and insurance from foreign companies to stop the drain of national resources, well to do Indians realized the potentiality of Indian business. This movement gave birth of several Indian insurance companies in India to serve the needs of Indians and to meet the aspirations of all Indians in the light of national integrity[20].

The Swadeshi Movement found its concrete expression in Madras with the formation of the **'United India Life Assurance Company'** in the year 1906. The M/s. Lingam Brothers floated this company and it was controlled and managed by exclusively by the Indians. The objective of this company, as stated in its memorandum of association " providing the poorer and middle class people life assurance at a moderate cost".

As the centre of all nationalist movement and economic activity, Calcutta was also witnessed formation of few Indian insurance companies in the line with the spirit of Swadeshi Movement. The **'National Insurance Company Ltd.'** founded by Sri Pannalal Banerjee in the year 1906. The company was known for its steadiness and consistency and had no craze for new

business to be secured at any cost. The slogan of the company was *"National is the Nation's own"*. Another great life insurance company, **'Hindustan Co-operative Insurance Company'** was established in one of the rooms of the Jorasanko house of the great poet Gurudev Rabindranath Tagore at Calcutta in 1907. The main objective of this company was to offer the service of insurance for the development of country's economy by collecting and mobilizing the small income and small savings of India. The story of success of 'Hindustan Co-operative Insurance Company' can best be seen by the words of Gurudev Rabindranath Tagore, on the occasion of its Silver Jubilee celebration on February 13, 1934 and he said:

"It gives me no little pleasure on the occasion of this Silver Jubilee, to look back on the day when the infant institution with the then ambitious-sounding name Hindustan Co-operative Insurance Society had its birth in one of the rooms of my house in Jorasanko. The reason why I was tempted to do what little I could to help in ushering it into the world was my own strong faith in the principles embodied in its constitution. When over 25 years ago, the scheme of this Insurance Society was laid before me, a picture of the long and arduous road that needs must be traversed by such an institution, flashed vividly through my mind. But it was this very difficulty of achievement that chiefly attracted me to its programme and the other attraction was the strangeness of the spectacle that it conjured up of our Bengali Countrymen thus banding together to organize a vast wealth-producing organization on upto-date lines"[21].

The wave of Swadeshi Movement also reflected in the sea shore of Bombay. Sir Lalubhai Samaldas, a business magnate of Bombay, established another life insurance company from actuarial and statistical point of view on March 4, 1908. As the company owed its origin to the Swadeshi Movement, it is named after the same as **'Swadeshi Life Assurance Company'**. The company got the momentum in its business when the movement was in full swing as it was related to the sentiments of common Indians. But due to the development in the political activity and the heavy crack down on the movement by the then government the company received complaints from some of its chief agents that they were not able to secure enough business as people were afraid that they might be shadowed by the police if they insured their lives with a Swadeshi concern and request to change the name of the company. Later the management changed the name from 'Swadeshi' to **'Bombay Life'** in 1913[22].

The Swadeshi movement not only gave the birth of Indian life insurance companies in large cities, it also encouraged other small cities to develop new insurance companies. Ajmer of Rajasthan was one of them. There was no insurance company founded in the whole Rajasthan at that time when **'General Assurance Society'** was formed in July 1907. During these time country was witnessed launching of two other successful companies: the **'Co-operative Assurance'** at Lahore in 1906 (later this company was shifted to Amritsar in Punjab) and **'India Equitable'** of Calcutta in 1908[23].

Quite a few numbers of India life insurance companies were formed during the first *decade of the 20th century. The prominent name out of those companies were* **'Asian'** *founded in* Bombay in 1910, the **'Arya'** in Assam, 1910, the **'Methodist Annuitant'** in Madras, 1911 and the **'Unique'** in Bombay in 1912[24].

The overall scenario of Indian life insurance industry was at the end of the first decade of the 20th century was that about fifty small life insurance companies issuing new policies mostly of endowment assurance to the amount of Rs. 6 lakhs each on average. Companies invested bulk of its income in the government securities earning interest at the rate of 4 to 5 percent per annum. These companies were faced the stiff competition from the foreign companies. The fact was that during the same time the influxes of foreign companies were also in high. The prime reason behind the formation of foreign companies in Indian soil was that the funds contributed by the policyholders in India were used elsewhere and the Indian policyholders had practically no voice in the investment, safety and security of the funds and in the management of the companies. *Foreign companies continued to establish themselves in large numbers with the* collaboration of the existing companies operating in India and the support of European population residing in India along with the Europeanised section of Indian society who were mostly elite class and educated. At the beginning of the 20th century, two Scottish companies started their operation in India. Firstly, the **'Scottish Amicable Life Assurance Society'** commenced writing its business in Calcutta in 1902, and secondly, the **'Scottish Union and National Insurance Company'** started its business in 1905.

The '**Liverpool Victory Insurance Corporation**' of England also started operation in India in the year 1906. according to the Indian Insurance Manual, 1907, the other foreign insurance companies operating in India were; '**English and Scottish Law Life**', '**Law Union and Crown**', '**Northern Assurance**', '**Provident Life**', '**Scottish Metropolitan**', '**Star**', '**Royal Exchange Assurance**', '**Alliance Assurance**', '**Atlas Assurance**', '**London Assurance**', '**National Mutual of England**', '**National Mutual Life Association of Australia**', '**China Mutual**', and '**Norwich Mutual Life Insurance Society**'[25].

Table 2.1: **No. of Life Insurance Companies: 1870 – 1912**

	Promoted	Exited	Remained
Indian Companies	**58**	**28**	**30**
Foreign Companies	**30**	**21**	**09**
Total	**88**	**49**	**39**

Source: G R Desai, 1973, Life Insurance in India: its history and dimensions of growth.

2.6: First Insurance Legislation (1912)

Prior to 1912, there was no regulation/s that could regulate the insurance business in India. All the insurance business was governed by the Companies Act, passed in 1866 by the government that cover all the companies, including insurance companies. In India, due to some lucrative benefits (discussed earlier) foreign companies was mushrooming along with the Indian companies which were formed mainly to serve the Indians at per with the Europeans in the spirit of nationalist movement. Five of the eight in Bombay, four of the five in Madras, six of the seven in Punjab and eleven of the fifteen life insurance business offices of Bengal, all were established during the tenure of 1903 to 1912. went into liquidation. Most of these insurance companies were promoted by the new middle class people who were trained professionals but lack of experience in promoting and organizing business institutions and lack of business acumen made them unsuccessful at the test of practical business. On the other side, along with the life business, there was huge development of small Provident Societies (provident fund

companies were the pension funds) to cater the needs of small income groups. Many of the societies come up in the wake of the Swadeshi Movement. These provident societies worked on dividing principle that had inherent defects in it and the societies were bound to fail in fulfilling the long-term objectives of the society itself[26].

In the world scenario, it was the time when other countries were enacting legislation to regulate the insurance business. We can highlight the case of America in this regard. A comprehensive Insurance Act was passed, following an enquiry into the working of life business, in the state of New York in America in 1906. A need was felt to check and regulate the operations of life businesses, so that the business can act on sound actuarial principles. The British parliament had passed an act (British Assurance Companies Act) in 1909 to this effect. In India too, two sets of legislations were passed in the year 1912: the **'Indian Life Insurance Companies Act'** and the **'Provident Insurance Societies Act'**. The passing of these two acts in 1912 was an important landmark in the progress of life insurance industry in India.

The main features of those acts were as follows:

- These were the first legislations that specifically made to regulate the life insurance business in India;
- These acts were only meant to control and regulate the Indian insurance companies and not for the foreign companies, which were operating in India though the model used in these acts, were the same as the British Act of 1909.
- These acts did not include the general insurance business in India.

The Indian Life Insurance Companies Act, 1912, brought in some measures to control over the life business in India by the Indian companies by requiring that an actuary should certify their rate tables and periodical valuations. The act made it mandatory to submit certain returns in a schedule form to the office of the Government Actuary. The new law also required that the Indian companies make deposits with the government, but foreign insurer were exempted on the basis that they carried on

insurance business in Britain and complied with the provisions of the **'British Assurance Companies Act'** of 1909[27].

The Actuary to the Government of India published the first report of the insurance companies in 1914. The report had some interesting information about the life insurance companies then operating. The report pointed out that the several Indian companies, which were operating on actuarially unsound basis, had either to drop such schemes or to modify those to conform to the actuarial requirements. The Indian life companies, which were paying dividends irrespective of profit, were stopped from declaring dividends except out of actuarially ascertained profit. Few foreign companies were also stopped writing life business in India due to the avoidance of the submission of reports to the Government. The first insurance yearbook also mentioned the names of 13 Indian life insurance companies that did not make the deposit requirement by the Insurance Act[28].

2.7: The World War I (1914-18) and Life Insurance in India

With the passing of the Insurance Act, 1912, many foreign and Indian companies stopped writing business but the act did not deter those people who had urge, self-confidence and business acumen to succeed from starting a new life business in India. The very next year of the passing of the said act, two life insurance companies were formed—**'The Western India Life Insurance Company'** at Satara and **'The Industrial and Prudential Life Insurance Company Ltd.'** in 1913[29].

The year 1914 saw the beginning of the World War I, which had a disastrous effect on the Indian economy. Although the trade and industry recovered quickly by exporting goods to alternative markets and foreign goods were imported from neutral places otherwise substituted by local production. Economy was revived through the setting up of new factories and producing more goods and the war profits were ploughed back into industry. Indian industries were pulled back to its 1913 level. However, it was a bad period for Indian banking and the insurance industry which faced its repercussion. This was evident from the fact that in 1914, forty-four insurance companies wrote Rs.

3.20 crore of new business in India while two years later the same number of offices wrote only Rs.1.75 crore. The Year Book, 1917, stated: "*the summaries of the Indian companies showed a continued shrinkage in the new sum assured. It is, however, satisfactory to be able to state that many of the returns now being received show a marked recovery. Notwithstanding this new business, the total amount of sum assured remaining in force shows a decrease of only 3 percent. It is satisfactory to find a considerable decrease in the expense ratio, although this is partly due to the smaller amounts of new business transacted. Notwithstanding the decrease in funds, it is satisfactory to find that the amount of interest income had increased considerably. This is very important consideration in view of the fact that Indian companies issued mainly Endowment assurances and under that class of policy the principal source of profit is generally surplus interest*"[30].

Only two life insurance companies were formed during the World War I in India. These two were the **'Zenith'**, established in 1916 in Bombay and the **'G.I.P.R. Employees' Fund'** in 1917. Four other companies were also formed during the same tenure but went to liquidation. During the World War I, the average size of Indian insurance companies was small and the average amount of new life business was between Rs. 4 to Rs. 7 lakhs.

The boom that was seen in the Indian insurance market in1913 temporarily slowed by the sudden eruption of the World War I. However, the War showed, to the people of India, the urgent requirement of building up its own self-sufficient and balanced economy. The development of indigenous insurance became the main forefront of economic spirit. Many Indian industrialists came forward to establish new companies and the lead was taken by the house of Tatas. Realizing the need for an insurance company which catering the general insurance business, Sir Dorab Tata formed the **'New India Assurance company Ltd.'** in the year 1919. Another general insurance company was formed in the same year was the **'Jupiter General Insurance Company Ltd.'** which started its life business in the year 1928. in 1919, as many as nine companies were established in the field of general insurance, later they started operating life business. Out

of nine-business unit, eight were formed in Bombay and rest one was in Calcutta. Besides New India and Jupiter, the other companies were the **'Universal Fire and General'**, the **'Vulcan'**, and the **'British India'**[31].

From political perspective also national leaders patrons the setting up of insurance business in India. Mahatma Gandhi in his speech said, *"It is the duty of every Indian to support only Indian insurance. The keynote of our Swaraj is in placing all our insurance with our Indian companies"*. Again, Pandit Jawaharlal Nehru stated, *"I hope Indians will realise the importance of patriotism only through Indian insurance institutions"*. Thus, to extricate the Indian economy from the domination of foreign companies, Indian insurance became a national issue[32].

With the help of Pandit Motilal Nehru and Lala Lajpat Rai, Pandit K. Santhanam started the **'Laxmi Insurance Company'** in the year 1921 when the non-cooperation movement under the leadership of Mahatma Gandhi turned the nation into a mass movement against the ruling government. With the initiative of Dr. Pattabhi Sitaramaiah and other enlightened, enterprising and patriotic gentlemen founded the 'Andhra Insurance Company Limited' at Machilipatnam in 1925[33].

During the decade following 1928, the promotion of life insurance business offices continued to be almost a trend and companies were promoted in haphazard manner. The hasty growth of life insurance companies in India in the spirit of nationalist movement, limited the space available for writing business of the foreign life insurance companies. However, three life insurance companies from three different countries entered into the Indian market. **'Allianz and Stuttgartar Life Insurance Bank'**, a German company established in 1889, was the first to operate in India in the year 1929. The next was the **'Crown Life'** of Canada, established in 1900 at Toronto, to enter the Indian market in 1930. The only Swiss company entered the Indian life market was **'Winterthur Swiss Life'** in 1932. The first ***Insurance Year Book*** was published in the year 1914, gave the figure of Indian life business-in-force at Rs.22.44 crore. According to the Insurance Year Books from 1914 to 1938, the promotion of life companies, during the

next twenty-five years, rose to 176 from 44 in 1914. In 1938, out of 176 companies only 22 companies could cross the Rs. 1 crore mark in respect of business-in-force and the new business written of almost hundred companies were less than Rs. 5 lakhs each in that year. This unhealthy growth was harmful to the interest of policyholders and insurance business in India[34].

Table 2.2: **No of Life Insurance Companies: 1929 – 1939**

	Promoted	Exited	Remained
Indian Companies	**176**	**60**	**116**
Foreign Companies	**05**	**2**	**03**
Total	**181**	**62**	**119**

Source: G R Desai, 1973, Life Insurance in India: its history and dimensions of growth.

2.8: Development of insurance acts in India

The Indian Life Insurance Companies Act, 1912, brought in some measures to control over the life business of the Indian companies by requiring that an actuary should certify their rate tables and periodical valuations. The law also required that the Indian companies make deposits with the government, but foreign insurer were exempted from this provision. Thus, the said act made a clear discrimination between Indian and foreign companies. Indian insurer were demanding to amend the existing laws to bring the Indian and foreign companies at per. Public bodies, commercial associations along with the national leaders rose the issue in various platforms and were demanding amendments into the law. In 1924, many national leaders like, Deshbandhu C.R.Das, Pandit Motilal Nehru, Lala Lajpat Rai and others were the members of the Assembly and the Legislative Councils, where they fought against the discrimination of Indian insurance industry and drew public attention on this issue.

Due to the demand from different section of the country, the Government introduced a comprehensive bill in the Assembly in 1925. However, this bill was

deferred, as the out come of the investigation, to make British Assurance Companies Act, 1909, up-to-date, was not available.

Due to the relentless demand from Indian insurer and national leaders, Government decided to pass a 'stop-gap' legislation in 1928, by amending the Insurance Companies Act, 1912. The new act met the demand of the Indian insurer by introducing special feature in the old Insurance Companies Act, 1912, in the following manner: first, it made it mandatory for all insurance companies, including the foreign companies, to file the statistics with the Government. The next important amendment was that insurers could dispose surplus assets in the event of liquidation of an insurance company in the same proportions amongst the policyholders and shareholders as profits were distributed[35].

The growths of the insurance companies were in its pinnacle at this time in India. After the 25 years of passing the Insurance Companies Act, in 1909, there were 176 (Life and General) companies operating in India. The increase in the number of insurance companies did not appear to have any healthy effect on the business and on the contrary, they seem to have done more harm than any good to life insurance business in India. By this time, an all India organization called **'All India Life Offices' Association'** (AILOA) was formed, to represent the views of all life companies as a whole, with Mr. H.E. Jones of Oriental as founder president and Pandit K. Santhanam of Laxmi Insurance Company as secretary in 1928. This organisation played useful roles in expressing the views of the life insurance industry to the Government and it played a very important role to protect the interest of insurers during the time of enactment of insurance legislations. This organisation felt that the unprecedented growth of life insurance companies in Indian market was harmful to the interest of policyholders and to the insurance development in India, urged the Government in 1932, to introduce following legislations:

(1) Compulsory registration of all life insurance companies;

(2) A deposit of Rs. 2 lakhs from all life insurer; and

(3) Mandatory investments sufficient funds by the foreign life insurance companies in government securities to meet their liabilities under all the policies issued in India[36].

To protect the interest of the policyholders and the insurers and in response to the recommendations made by the AILOA, Government set up a consultative committee chaired by a well-known solicitor Mr.Sushil.C.Sen to study and report on the subject of amendments of insurance law, in 1934. The committee consulted a wide range of interested groups related with the insurance business and submitted its report along with the draft bill. The committee was in the opinion to dump the foreign insurance companies operating in India arguing that under the present conditions Indian companies were not in a fair position to grow and prosper. The committee in its report stated that Indian insurance companies required effective protection and provisions should be made to ensure that no new non-Indian insurance company should be given the license to write business in India for the next 20 years. This recommendation was for the both, life and general insurance sector in India as there was many insurance companies struggling for the existence in the market. Government appointed a committee chaired by the then Law Member Sir N.N. Sarcar to scrutinize the report of Mr. S.C.Sen and debated the report in the Legislative Assembly with regard to amendment of the insurance law in India in the year of 1937. Finally, in **1938**, the **Insurance Act** was passed[37].

The Insurance Act,1938, was the first comprehensive law, which covered both life and general insurance, to provide stringent state control over insurance business in India and brought the insurance business under a unified system of control. The new law covered supervision of insurance companies, deposits, investments, commissions of agents, directors appointed by the policyholders among others. In separate sub-sections, the law dealt with the provident companies, mutual offices and co-operative societies as well[38].

Insurers of Indian companies welcomed the new law as it eliminated the differences between the foreign and Indian companies through the statutory provisions made in the

law relating to deposits and submission of returns for all the companies operating in India. The act had an effective impact on the control over the business expansion and operation of insurance business in India. Many British insurance companies closed their operation in India immediately after the enactment of the law due to the stringent requirements of deposits and discloser of statistics to the government. The Indian companies that conducted schemes based on principle of assessments and on actuarially unsound basis had dropped their policies or altered the policy, conditions of insurance, insurance prospectuses to conform to the new law. Weaker companies were weeded out or merged with the healthy companies.

However, soon it was found that The **Insurance Act,** 1938, had its shortcomings in the field of commissions, licensing of agents, investments of funds of the insurance companies and others. Various amendments were made to the **Insurance Act,** 1938, in the coming years of 1939, 1941, 1944, and in 1945[39].

2.9: Growth of life business in India

It was viewed that the post-Act period would be an era of comparatively sound business practice in India. However, the World War II (1939-1945) slowed down the normal development of life business that might have followed in the event of the new insurance law. The war brought some problems before the Indian insurer in the line of attack of a fall in new business, increase in expenses and depreciation in securities. At that stage, the prices of the precious metals rose, which made rupee and other smaller silver coins out of market. Therefore, a panicky condition evolved in the market due to the demand of currencies, affected the stock market as well as the middle class people. In that effect, life insurance policies were surrendered in huge numbers and loans were taken to the limit though lapses were more than the surrendered policies and policy loans. The main objective of the **Insurance Act,** 1938, was to check the indiscriminate growth of life insurance companies with out adequate capital and management, the growth of formation of new insurance offices were continued to be seen in India. Four companies were registered in the year 1939. The **'Ruby General'**, which was founded in 1936,

started its life business in 1939, led by the house of Birlas. Another fund **'The Bengal Police Death Benefit Fund'**, which started its operation in 1926, found it difficult to maintain its existence due to the advent of the Insurance Act, 1938, converted itself into a regular life business unit in 1939[40].

Table 2.3: **Indian and Foreign Insurance Companies Operating in India**

Year	Number of Indian Office	Number of Non-Indian Offices
1928	97	138
1929	108	149
1938	200	143
1941	197	80
1945	234	81

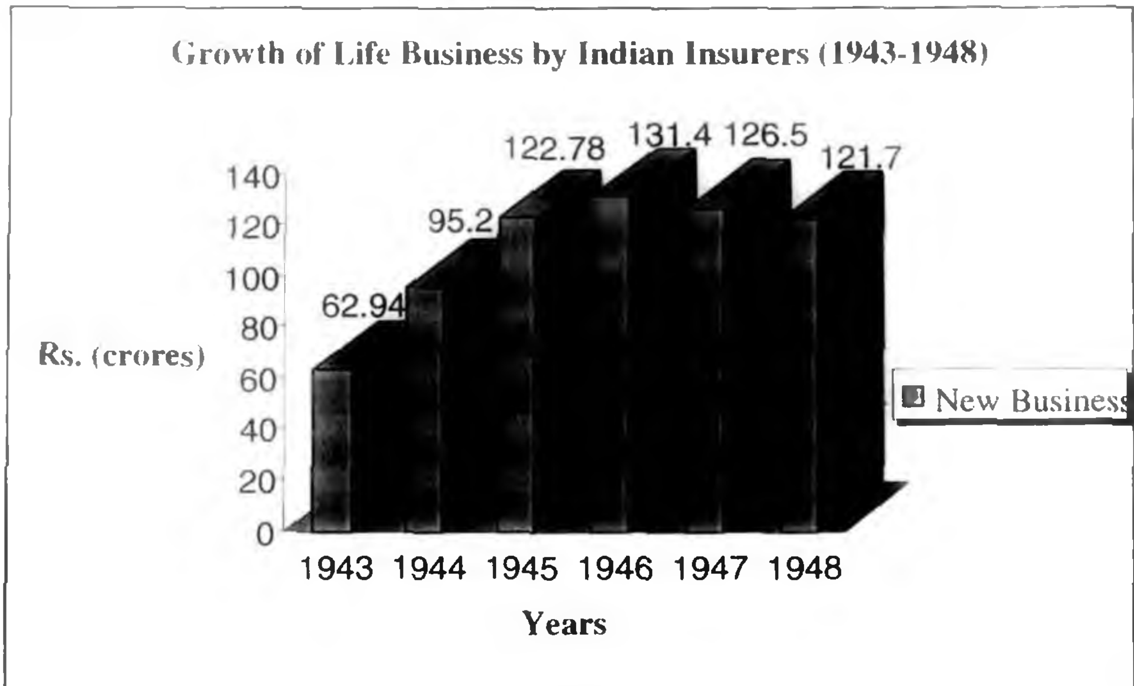
Source: Dr. A N Agarwala, 1961, Life Insurance in India: A Historical and Analytical Study

In 1941, as many as eight life companies were formed and continued working in 1955. The **'Dena Insurance Company'** and **'Eastern Life'** of Karachi were few of them. The year 1943 also had observed few formations of insurance companies in India. **'Jay Bharat Insurance Company'** at Bombay, **'New Great'** at Baroda, **'Prithvi Insurance Company'** at Madras were the major ones at that time. Some other players also joined the life market, for instance, **'The British India General'**, one of the largest general insurance company in India, took over the management of **'Zenith'** in 1943 and started issuing life policies from 1943. From this year onwards, the life insurance sector witnessed a surge in the volume of business done by the Indian insurance companies. The total volume of business done by the Indian insurance companies in 1943 was at Rs. 62.94 crores, which went up to Rs. 95.20 crores in 1944[41]. The year 1945 created a history, as the volume of total business by the Indian life companies crossed Rs. 100 crores mark. Indian insurer reached the pinnacle of new business in the very next year, 1946, when their business volume touched Rs. 131.40 crores. If we add up the total business done by the foreign insurance companies, then the total business of the industry

ended up at Rs. 140.9 crores. Speedy elimination of unemployment, inflation, large amount of profits earned by the industry and those other industries associated with the business activities related to war contributed to this surge in the life business in India. As far as the growth was concerned, until 1946, it was very smooth and uninterrupted for the Indian insurance industry in one hand and on the other; the share of foreign insurers in the total business fell from 16.2 percent to 9.3 percent[42].

On 15th of August 1947, India freed from the domination of British Government and became an independent country. Due to the partition in 1947 and the assassination of Mahatma Gandhi on January 30, 1948, the political and economic condition of the country deteriorated. This, along with the increase in the cost of living and general premium rates, had a direct negative impact on the life insurance business in India in 1947-48[43].

Fig 2.1



2.10: Insurance Act, 1950

The development in the insurance sector in India was manifested with much malpractice, frauds, liquidation of many life insurance companies and large industrial houses and managing agencies were controlling the bulk of insurance business in India. The same situation prevailed despite the introduction of new legislations in the insurance sector and implementing the further amendments to control and regulate the industry. In 1945, a committee was appointed by the Government, under the chairmanship of Sir Cowasji Jehangir, to enquire into the undesirable developments in the management of the insurance companies and to recommend the measures to control such frauds, manipulation of funds and interlocking between banks and insurance companies by the financiers having control of the company[44].

The Jehangir committee submitted its report and recommended important amendments in the Insurance act. The report suggested that no two companies doing life insurance business should have a common director. It also recommended that the insurer should not do other business other than insurance. The Bill was introduced in the parliament in April 1946 but could not be passed due to the political turmoil prevailed at that moment in the country.

In 1950, the Indian Parliament passed the same Bill as **Insurance Act, 1950** and the main features of the act were as follows:

(1) The interlocking of interest between insurance companies and banks was prevented.

(2) The superintendent of insurance was abolished and Controller of Insurance was created with more powers.

(3) New changes were introduced in the regulation of insurance act to control over the insurance companies.

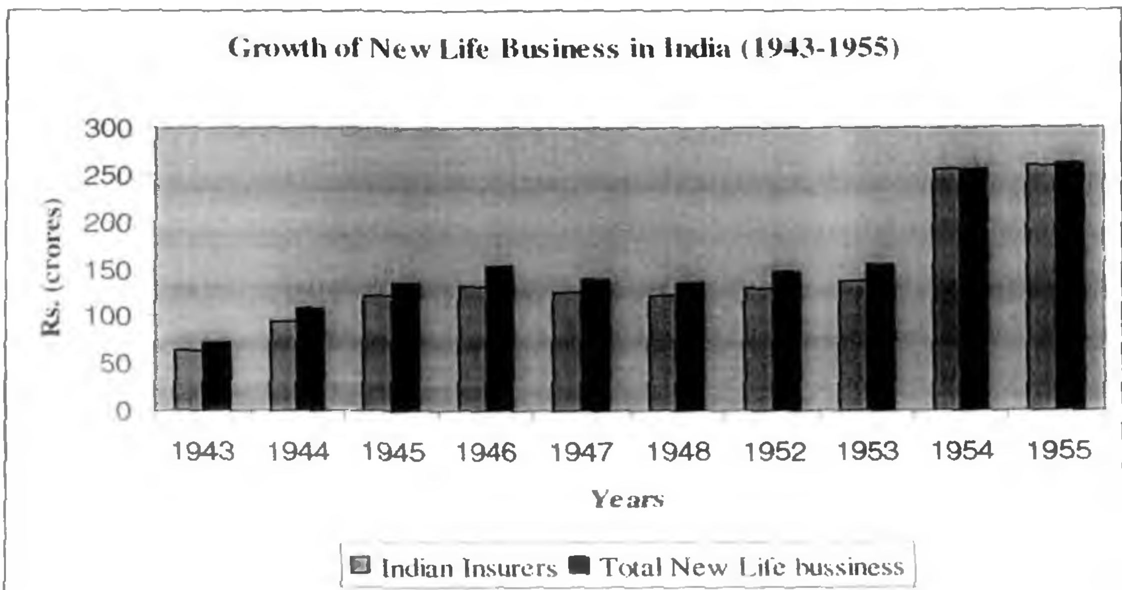
(4) Lists of approved securities were introduced and the minimum level of investments in the government and other approved securities were fixed.

(5) Statutory bodies like Life Insurance Council and General Insurance Council were formed.

(6) The Controller of Insurance was given the power for inspection of the insurers' book.

(7) The appointment of Administrator to manage the business of financially unsound concerned was provided in the act[45].

Fig 2.2



The most important aspect of the new act was the almost all the new provisions had the support of the vast majority of insurance executives. The insurance councils set up under the Act of 1950, made serious efforts to ensure the standard business practices. The amended new Act had good impact on the life insurance companies and the growth of life business in India for a few years. The total business of Indian insurers increased to Rs. 130 crores in 1952 and Rs. 138 crores in the year 1953. In 1954, the Indian companies achieved a new record as the average new business per year per office crossed Rs. 1 crore mark and touched Rs. 1.38 crores that went on crossing its own record in 1955 and reached to Rs. 1.48 crores. The total new business written by the Indian life insurance companies were Rs. 255 crore and Rs. 261 crores in the year 1954 and 1955 respectively. The foreign life insurers found it exceedingly difficult to withstand the

competition from Indian life insurers and merely managed to get the 7 percent share of the total new business in 1955. Out of 105 foreign companies, which were operating in India, only 15 were transacted life business in 1955[46].

2.11: Nationalisation of Life Insurance Business

By 1956, there were 154 Indian life insurance companies operating in India along with 16 non-Indian insurer and 75 provident fund societies. However, the spread of life insurance business was mostly city oriented, especially around big cities like Calcutta, Bombay, Madras and Delhi and more to the affluent section of the societies. The total numbers of lives covered were very low in size too. There was no such attempt to cover the lives of small income groups were made by the insurers and, their businesses, mostly, were governed by the short-term considerations[47].

Tab 2.4: **Insurance Business in India (1947 – 1957)**

Year	New Business		Total Business in Force	
	No. of Policies (in Lakhs)	Amount (Rs. In crores)	No. of Policies (in Lakhs)	Amount (Rs. In crores)
1947	5.44	139.60	29.36	706
1948	4.86	134.60	30.25	724
1949	5.44	142.20	33.03	765
1950	4.98	139.50	32.80	780
1951	4.74	147.90	34.14	873
1952	5.34	146.70	39.25	922
1953	5.58	155.20	40.79	966
1954	7.73	255.25	47.82	1177
1955	8.31	260.84	47.92	1220
1956	5.67	200.28	——	——
1957	7.95	281.90	56.83	1473

Source: S.R.Bhave, 1970, Saga of Security: Story of Indian Life Insurance (1870-1970); LIC.

During this tenure of life business in India, a number of malpractices and misuses of power occurred in the industry. The industry was also suffering from mismanagement and misutilization of funds collected as premiums from the policyholders causing loss to the innocent public. Premium rates and the expenses of the insurer were comparatively high, even after the adjustment for the Indian conditions, such as, lower average sum assured, high mortality rate, etc. The gloomy picture of the industry exposed when, for the first time in 1951, Government of India obtained detailed returns of investments made

Table 2.5: Comparative Overall Expense Ratio of India, USA and UK insurers

(In percentage of total expenses)

Year	INDIA	USA	UK
1930	29%	-	-
1940	28.5%	-	-
1950	28.9%	16.8%	13%
1951	27.2%	16.5%	14%
1952	27.1%	16.7%	14%
1953	27.3%	17%	14%
1955	31.8%	-	-

Source: G.R.Desai, (1973), Life Insurance in India: Its History and Dimensions of Growth; Macmillan.

by the management of the insurance companies. Loans were issued to every type of security irrespective of its status. Loans were also given on agricultural land, shares, standing sugarcane crops and libraries and sometimes with out any security. Innocent policyholder's money was invested in property at inflated price. Another obnoxious and risky development in the insurance industry was that the business houses, which promoted these companies, diverting a large amount of money, which were collected as insurance premiums from the policy holders, for their other concerns. All such investments and expenses led to a situation where insurance companies were not in a position to honour their commitments to their own clients. During 1945-1955, as many as 25 life insurance companies went into liquidation and almost the same numbers of companies merged with or transferred their business to other big companies. Amongst the

existing companies that were operating, 75 numbers of them could not declare any bonus at the end of 1953-54 financial year[48].

The efforts made by the Government of India to regulate the insurance industry through various legislative measures were not enough to bring about a change in the workings of the insurance companies. Addressing to the debate on the **Life Insurance (Emergency Provisions) Bill, 1956,** the then Finance Minister, Dr. C.D. Deshmukh said in the Parliament that

"The industry was not playing the role expected of insurance in a modern state and efforts at improving the standard by further legislation we felt, were unlikely to be more successful than in the past. The concept of trusteeship, which should be the corner stone of life insurance, seemed entirely lacking. Indeed, most management had no appreciation of the clear and vital distinction that exists between trust moneys and those which belong to joint stock companies"[49].

After the independence, India implemented the National Planning model of Soviet Union. Under this planning both public sector and the private sector placed with their respective field of work. The main principle was that all those activities that were strategically important in the process of economic development of the country were to be managed by the public sector. With the introduction of the planned programme (five-year planning model) for the country's economic development, it was necessary for the Government to mobilize the savings, as the savings are the prime movers of economic development in any country.

A reference to the nationalisation of insurance could be found in a letter addressed to the Prime Minister of India by Shri Jayaprakash Narayan, dated 22nd March, 1953, as a forwarding note to the draft 'Fourteen Point Programme for Socialism'.

"You will find that we have suggested nationalisation in two spheres (1) Banking and Insurance and (2) Mining. You had told me that while you considered it unnecessary

to nationalise everything, the state must occupy the strategic point in the economy. We considered that one of the most strategic points is Banking and Insurance. Ashoka Mehta told me that Mr. Deshmukh himself was thinking somewhat on the lines"[50].

The Government did not keep its view secret and stated that the Controller of Insurance had been advised to utilize the opportunity of his visit to Australia and New Zealand in 1954 to observe the workings of the state run industries schemes in those countries. The Congress party at its Avadhi session of 1955 formally included the concept of socialist pattern of society in its manifesto and urged the nationalisation of life assurance business. This demand was more intensified in the context of the Dalmia case where Seth Ramkrisna Dalmia defrauded his own company, Bharat Insurance Company, of Rs. 2.25 crores in January 1956. Later he admitted the defoliated securities and was convicted to two years rigorous imprisonment[51]. Accordingly it was decided that the nationalisation of the life insurance sector would be accomplished in two stages; initially taking over the managements of the insurers by an Ordinance, and later, the ownership by the means of a comprehensive Bill.

On January 19, 1956, the management of all 245 companies (154 Indian life insurance companies, 16 non-Indian insurer and 75 provident fund societies) was taken over by the Central Government through the **Life Insurance (Emergency Provisions) Ordinance, 1956.** The names of those companies are given in Annexure 2. (A). Explaining the rationale of the action taken by the government, the Finance Minister, Shri C. D. Desmukh said:

"The Planning Commission, in order to organize the credit system of the country, envisaged the need of the involvement of the whole mechanism of finance such as the banking system, insurance, the stock exchange and other intuitions connected with investment, for it is only thus that the process of mobilising savings and utilising them to the best advantage becomes socially purposive."

"Nationalisation of life insurance is a further step (After the nationalisation of Imperial Bank) in the direction of more effective mobilisation of the people's savings." "With the Second Plan, involving an accelerated rate of investment and development, the widening and deepening of all possible channels of public savings has become more than ever necessary. Of this process, the nationalisation of insurance is a vital part"[52]

He then went on saying, *"The total life insurance in force exceeds Rs. 10,000 millions that is little over Rs. 25 per head. Quite recently, it was claimed on behalf of a private enterprise that business in force could be increased to Rs. 80,000 millions and per capita insurance to Rs.200. I am in complete agreement. There can be no doubt as to the possibilities of life insurance in India and I mention these figurers only to show how greatly we could increase our savings through insurance"*

He further added, *"thus even in insurance which is a type of business which ought never to fail if it is properly run. We find that during the last decade as many as twenty five life insurance companies went into liquidation and another twenty five had so frittered away their resources that their business had to be transferred to other companies at loss to the policyholders"*[53]

The Finance Minister expressed the Government's determination as, *"to see that the gospel of insurance is spread as far and wide as possible, so that we reach out beyond the more advanced urban areas well into the hither to neglect rural areas."*

To nationalise the life insurance business in India, a Finance Bill was introduced in the Lok Sabha on 18th February, 1956. Later, after the discussion the Bill was referred to the Joint Select Committee of the Parliament to review on 19th March 1956. After the report of the said committee, the Bill was taken up in the Lok Sabha and adopted the motion on 18th May, 1956. The Bill was referred to the President of India for his assent after the discussion in the Rajya Sabha.

The Bill became An Act of Parliament on 1st September, 1956, after the President's assent, as the **Life Insurance Corporation Act, 1956,** and a new organisation, **Life Insurance Corporation of India (LICI)**, was formed with capital contribution of Rs. 5 crore from the government of India, with enough autonomy so that the life insurance business run on the business principles[54].

Thus the objectives of nationalisation of life insurance business were

(1) to mobilize the required savings for the development of the country as the country chosen the state planning for development,

(2) to reach to the poor and rural areas with the insurance protection as the social objective of the government

(3) to conduct the business in the spirit of trusteeship,

(4) to overcome the malpractices and inefficiencies in the life insurance business, and

(5) To restore public confidence and ensure maximum security to the policy holder's capital under direct government control.

2.12: Post Nationalisation Growth

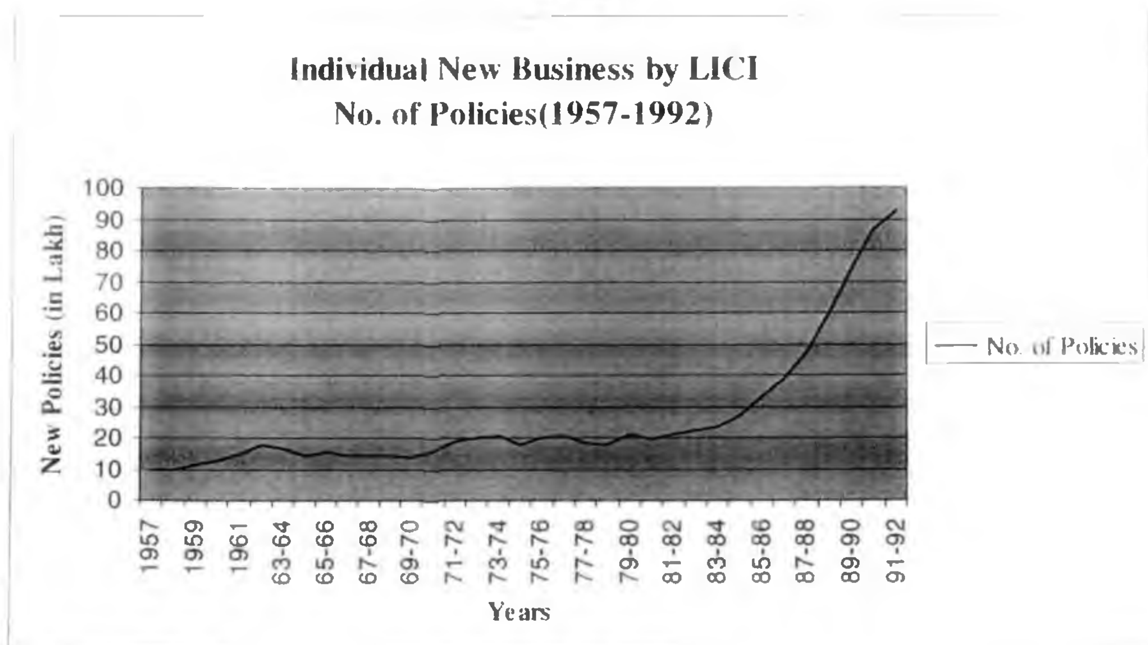
The period immediately after the nationalisation of the insurance industry was not good for the life insurance industry in India. The economic condition of the country was not in good shape in 1957, as the investors suffered losses and shown lack of confidence in the market, money position was tight, and common person affected with the increase in the cost of living with out any substantial increase in their income levels. Agriculture which was the backbone of Indian economy, hit severely due to floods and droughts and the famine condition prevailed in few parts of the India. In these adverse circumstances common people was not in a condition to save during 1957, yet newly formed Life Insurance Corporation of India (LICI) shown some positive results.

The first statutory report of the corporation was presented in the parliament on 13th March 1959 for the sixteen months of its operations which ended on 31st December 1957.

New business written by LICI by the end of December 1957 stood at Rs. 281.90 crore under 794,585 policies that was the highest level of business ever achieved by the insurance industry in India. At the end of 1957, the business volume of LICI, including bonuses, stood at Rs. 1474 crore under 56.86 lakhs of policies of which Rs.1375 crore under 54.17 lakhs policies were from India[55].

After the formation of Life Insurance Corporation of India (LICI), the first few years were mainly devoted by the corporation in setting up administrative procedures, rules and regulations of the new organisation, and restructuring the divisional offices and branch network with human resource development to achieve the overall targets.

Fig 2.3



***Source: Annual Reports, LICI (various years); Sinha, T., (2004); "Tryst with Trust" (1991),* LIC of India, Bombay, India.**

However, the macroeconomic conditions were not conducive for the growth of life insurance business in India due to sustained low rates of financial savings, lack of knowledge of life insurance because of mass illiteracy, poverty and lack of co-ordination in the planning and operation divisions of the corporation. It was only after 1980s when

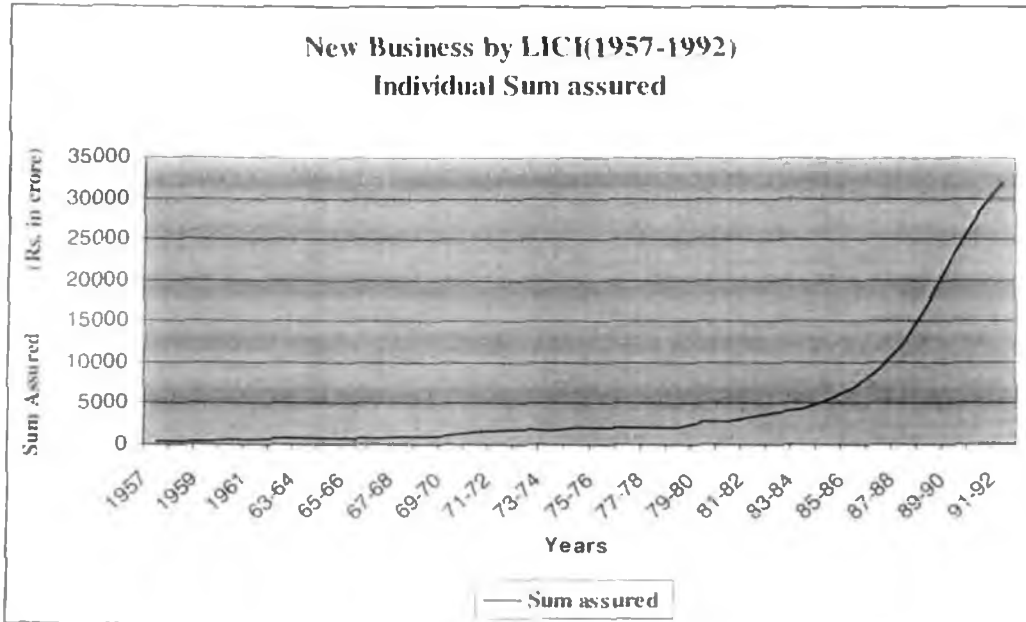
India witnessed few favourable improvement in the economy such as, growth of industry, increasing rate of financial savings, improvement in the capital market[56] along with the introduction of new business and marketing strategy of LICI by decentralizing its organizational and administrative structures such as opening of market and research cell, transferring decision making powers to branch offices, the corporation could see its business increasing. In accordance with the recommendations of the Administrative Reforms Committee in 1974, the LICI formulated its objectives to spread life insurance more widely and in particular to the rural areas, including socially and economically backward classes at a reasonable price. On the other side, the consequences of the *'Green Revolution'* helped to increase the GDP and the adding towards the income levels of the rural people.

The largest segment of the life insurance business done by the LICI had been individual life insurance. The number of individual new life insurance policies sold by the corporation each year went from 9.5 lakh policies in 1957 to 92.38 lakh in 1991-92 and the volume of sum assured towards the new life business increased from Rs. 329.3 crore in 1957 to Rs.32064.4 crore in 1991-92[57].

Fig 2.4

Source: Annual Reports, LICI (various years); Sinha, T., (2004); "Tryst with Trust" (1991), **LIC of India, Bombay, India.**

Fig 2.5



Source: Annual Reports, LICI (various years); Sinha, T., (2004); "Tryst with Trust" (1991), **LIC of India, Bombay, India.**

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Chapter III

Reforms in India's Life Insurance Sector: A Comparative Study

3.1: Introduction

Liberalization of the domestic financial market had been a common characteristic of a number of economies since late 60's. This was particularly true in case of industrially advanced countries like Australia, Japan, UK, and France. However, this had not been confined to these industrially developed countries only. In recent years, many LDCs had taken macroeconomic reforms, which involved structural adjustment programme. Main concentration was towards the financial system, especially banking and insurance sectors, which typically either owned or controlled by the state itself. The developing country like India along with other semi-industrialised countries had opened up their financial sector[1].

The New Economic Policy (NEP) introduced in India in June 1991 by the then newly elected government and the process of liberalization of Indian financial sector was a part of that new policy. The main thrust of reforms in the financial sector was the creation of efficient and stable financial institutions and markets. Reforms in the banking and non-banking sectors focused on creating a deregulated environment, strengthening the prudential norms and the supervisory system, changing the ownership pattern, and increasing competition. The main idea was globalization, privatization, deregulation and liberalization[2].

With the paradigm shift in the development strategy, the economy was increasingly opening up and there was a step forward towards market orientation. Consequently, some financial markets such as capital market, for-ex market and banking sector had been reformed subject to various levels of degrees. The public sector utilities (PSUs) such as power, airline, postal and telecommunication had also been reformed by introducing more and more private participation. The insurance sector was yet to receive the reform initiatives for securing the benefits out of the global changes that occurred in the recent past. The Uruguay Round of GATT (now WTO) also advocated the removal of restrictions and non-tariff trade barriers for free flow of international services across countries so that domestic market of LDCs could improve its efficiency and

competitiveness and eventually improve their economic growth. It was against this backdrop that many countries had deregulated its insurance sector. Countries, which already allowed private insurance business, further deregulated their reinsurance business such as Brazil (1991) and Peru (1991). Table: 3.1 summarizes the year when different countries opened up their insurance industry. The insurance business remained a state monopoly only in Cuba, Myanmar, North Korea and in India[3].

Table 3.1: Country specific year of opening of domestic insurance market

Country	Years
South Korea	1987
Taiwan	1987
Argentina	1990
Pakistan	1990
Czechoslovakia	1992
Philippines	1992
Japan	1996

Source: Compiled from various sources.

In India, the reforms in the insurance sector (Life and General) commenced with the setting up of the **Committee on Reforms on Insurance Sector** under the chairmanship of Dr. R.N.Malhotra, the ex- governor of RBI, by the GOI in April 1993 for examining the structure of insurance industry.

3.2: Malhotra Committee Report

The **Committee on Reforms on Insurance Sector**[4], which was also known as Malhotra Committee, submitted its report in January 1994. The terms of reference of the said committee were:

(1) To examine the structure of the insurance industry and to assess its strengths and weaknesses in terms of the objective of creating an efficient and viable insurance industry providing wide range of insurance services to the masses and an effective instrument for mobilisation of financial resources for development.

(2) To make recommendations for change in the structure of the insurance industry and the general frame work of policy for the pursuit of above mentioned objectives consistent with the structural changes in the economy and financial sector.

(3) To make specific suggestion regarding the LICI and GICI to help in the functioning of these organizations in the changing economic environment.

(4) To review the present structure of regulations and supervision of the insurance sector and to make recommendations for strengthening and modernizing the regulatory system in the changing economic environment.

(5) To review and make recommendations on the role of surveyors, intermediaries and other ancillaries of the insurance sector.

(6) To make recommendations on such other matters as the committee considers relevant for the health and long-term development of the Indian insurance sector.

The Malhotra Committee covered both general and life insurance sector and came up with the recommendations in January 1994. The following section of this chapter will discuss the major recommendations for the insurance sector in general and those recommendations that have direct implications for the life insurance business in India as the study focuses on the life insurance sector only. The Committee appointed MARG[5] to conduct a market survey among users of life insurance to find out their satisfaction levels with LICI and to assess their perceptions regarding a possible liberalisation of the

insurance sector. Based on the growth statistics of LICI and the findings of the said survey, the committee highlighted some positive and negative aspect of the development of LICI which may be stated as under:

A) On the positive side, LICI had,

1) Spread the insurance culture widely across India.
2) Mobilised large savings for national development and financed socially important sectors such as housing, electricity, water supply and sewerage.
3) Acquired considerable financial strength and gained confidence of the insuring public, and
4) Built up a large talented pool of insurance professionals.

B) On the negative side,

1) The vast marketing and services network of LICI was inadequately responsive to customer needs,
2) Insurance awareness was low among the public,
3) Marketing of life insurance with reference to the customer needs left much to be desired.
4) Term assurance plans were not being encouraged and unit linked assurance was not available,
5) Insurance covers were costly and returns from life insurance were significantly lower compared to other savings instruments due to

   a) Excessive government directed investments of LICI funds,
   b) The marketing organisation was weak and turnover of agents were extremely high,
   c) Development Officers (D.O) concentrated on their incentives to the neglect of training the agents and building up an efficient agency organisation,
   d) There was excessive lapsation of policies,

6) The management of LICI was excessively hierarchical, especially at the central and the zonal offices, and was overstaffed,
7) Work culture within the organisation was unsatisfactory,
8) Trade unionism had contributed to the growth of restrictive practices;
9) Failure to adequately computerise had seriously affected the efficiency of the organisation and the quality of customer service;

The main recommendations of the Malhotra Committee may be discussed under the following major headings as stated below:

3.2.1: Liberalisation:

- The committee recommended that the state monopoly of writing life insurance business should be broken up by opening the market for competition and limited number of private companies (domestic and foreign) to be allowed to operate in this sector but no firm to be allowed to operate in both lines (life and general) of insurance business.
- Minimum paid up capital for a new entrant should be Rs 100 crore (except in case of state level co-operative institution) with promoters' holding should not exceed 40 percent of the total and less than 26 percent.
- Foreign life companies may be allowed to enter the industry in collaboration with the domestic companies.
- No person other than the promoter should be allowed to hold more than 1 percent of the equity.
- Postal Life Insurance should be allowed to operate in the rural market

3.2.2: Restructuring:

- The Committee recommends the restructuring of LICI involving delegation of administrative, operational and financial authority to zonal offices. The central office should focus on policy formulation, product development, pricing of

products and actuarial valuations, investments, personnel policies and the accounts of the corporation.

- Raising the capital base of LICI from Rs. 5 crore to Rs. 200 crore, half retained by the government and the remaining 50 percent to be held by the public at large including employees of the organisation.
- The committee recommends the comprehensive computerization of LICI for effective management information system and better customer service in the era of information technology.

3.2.3: Investment Regulations:

- The Malhotra Committee recommends reduction in the mandated investments and recommends certain modifications in Sec 27 of Insurance Act as follows:
    (1) Investment in central government securities within prudential norms should remain not less than 20 percent and the special deposits with the government should continue to be considered as investment in central government securities.
    (2) State government securities and government guaranteed (state and central) securities should not be less than 40 percent than the earlier 50 percent statute.
    (3) Investment in social sector including the above should not be less than 50 percent from the existing not less than 75 percent which is considered to be high.

3.2.4: Supervision and regulations

- Controller of Insurance (COI) should be empowered as prescribed in the Insurance Act as an interim measure.
- The committee recommends the setting up of Insurance Regulatory Authority (IRA), a strong and effective regulatory body, on similar lines of Security and Exchange Board of India (SEBI) before allowing private sector.

- IRA should be empowered with supervisory powers with full functional autonomy and operational flexibility in all aspects of insurance to conduct the business and to protect the interest of the customers.
- To finance the IRA, the committee proposes that 0.05 percent of yearly premium income of insurance companies should be levied.

3.2.5: Others

The committee also recommends other steps in the insurance sector to popularize insurance and extend the benefit of insurance to the masses in India. Those are summarized as follows:

- The committee recommends newer marketing strategies from the insurance companies to reach the life insurance coverage to the weaker sections of society including working women and introduction of cheap term insurance coverage to improve the insurance coverage in India.
- *To ensure rural business, the committee proposes, new entrants into the life* insurance business should be required to write a specified proportion of their new business in rural areas.
- The committee also proposes penalties for that life insurance company which fails to write specified portion of their business in rural areas by the IRA.
- Unit linked schemes encouraged to float in the market.
- Private pension funds schemes allowed to operate in the market under the vigil of IRA.

3.3: The Debate about Opening Up

The recommendations of the Malhotra Committee have been accepted by the government in principle and the same has been placed before the parliament to make the recommendations in effect. Among all the recommendations the committee has made the recommendation of the privatization of the insurance industry and the foreign

participation in it came under heavy debate and delayed the process of implementing the recommendations in the insurance sector.

The recommendation of privatization of the life insurance industry has been based on several factors such as mobilization of savings from the economy, insurance awareness and coverage and also to tackle the fiscal measures which have taken in the new economic policy. The other sectors of financial market have seen some degree of reforms and if the insurance sector wants to harvest the benefit of the global and domestic changes it needs to come out of the insulation for the greater benefit of the consumers. Though the LICI has done commendable job in spreading and providing the benefit of life insurance in the country, it still fall short of international standards in terms of coverage, cost efficiency, technical skills, managerial skills and product innovations.

By 1993, the LICI has only 566.12 lakh policy holders where as estimated middle class population is around 250 million. It is visible from the statistics that less than 23 percent of the insurable population is being covered[6]. Further only 99.68 lakh new policies were issued in that year. Other life insurance development indicator such as penetration *which is the percent of premium income over the GDP*, density *which is the ratio of direct gross premium volume to the population in a country* shows that there exists huge market potential yet to be exploited. This in itself calls for more private players in the market to fill the gap. The privatization in the life insurance market will bring competition and enhance the efficiency of the operators through improved resource utilization which will ultimately benefit to the end consumers of life policies in terms of reduced premium price and wider range of available product choices before them. Once the market is open to the private players, they will come with array of products before the consumers and eventually the demand for newer products will increase. In advanced countries life insurance is not merely treated as a means to protect the dependants in adverse situations, it is considered an alternative financial form of saving. With the introduction of computerisation with more and more private players operating in the life insurance market, productivity will increase and the demand for newer products will increase the demand for more skilled labour force.

The debate on life insurance reforms escalate more when it comes to allowing foreign life companies to operate in Indian soil. The committee recommends the participation of foreign players as the Indian insurance industry is lagging behind the international standards in terms of technical skills and knowledge and managerial know how. Only privatization will not solve this problem as this stands true in case of all domestic private players too. Therefore foreign participation is a must to improve the efficiency in the life insurance market due to the long isolation from the world market. Once the foreign firms (mostly MNCs) are allowed to operate in the domestic market they will bring in technical and managerial know how which will have its effect on the market as a whole. As the foreign firms operate at a better efficient level, domestic firms will try to emulate them through the *'demonstration effect'* and the over all efficiency level at the domestic market will improve. This will help to reduce the cost of writing new business through the cost cutting measure in the premium rates and the premium fixation would be more scientific and precise as the MNCs have better actuarial understanding. Apart from these advantages foreign companies have more diversified portfolios and efficient portfolio management as they work globally. The other imperative benefit which will accompany with the MNCs is the variety of tailor made products that will available before the consumers to choose from[7].

Finally, the recent policy change in the greater perspective of the economy due to the BOP crisis makes it crucial to open up the domestic insurance market to the foreign players which will bring foreign capital into the system for a longer period of time as the life insurance contracts are long-term in nature. Therefore, opening up the life insurance market to foreign insurers would fetch foreign capital which can be invested in the much needed infrastructural development projects in the country for long period.

If such benefit can be derived out of privatization and from the foreign life insurance players then why the debate against the privatization and opening of the domestic life insurance market to foreign companies are there?

In case of privatization of the life insurance business in India, it is based on the outlook that the privatization will bring more players into the market and competition will improve the efficiency of the existing players through better resource utilization as stated earlier. Competition will bring more and more private insurer in the market at the initial stage and there will be more premium cuts price war among the insurers to capture the market share. But in the circumstances of competitive competition, only fittest can survive in the market in the long run. This competition will prompt the insurers to charge premium rates below the cost to capture the greater share of market and in doing so they end up losing their own reserves in servicing their claims or liabilities. This leads to the bankruptcy and liquidation of the firms as they are not in a position to provide service of settlement of claim to its policy holders. Again the income from premium income and investments made by the insurers are used to meet the current operation cost of life insurance and expenses of the management. Once the income from the underwriting life insurance premiums fall due to the price cut below the level which the firms can sustain, the profit get squeezed. The moment private insurers find it difficult to attain profit they may exit or lead the insurers to indulge in immoral activities such as investing funds of innocent policy holders' in equities, speculative activities and other subsidiary activities. In times of crisis such as crash of stock prices and slowdown of overall economy, the income from these sources also affects unfavorably and leads to liquidation as the net worth and the assets values goes down. The worst sufferers will be the small firms which will force them to exit the market or merged with the efficient or big firms. This will lead to the concentration of total life insurance market into the hands of few efficient big life insurers[8].

Only privatization of life insurance market will expand the existing market with the help of the array of products which all the insurer will bring does not hold good as the per capita income and the savings in the form of life insurance is very low in India. The development of life insurance market is highly co-related with the economic development of the country. Therefore, it will take long time to develop the life insurance market in India and privatization is not the only solution to develop an existing market. In actual fact well established state owned and regulated life insurance companies contributed

substantial finance in the form of investment in governmental securities and bonds, investments in priority sectors and in the form of taxes; for example India and Argentina. Foreign life insurance players will influx huge amount of capital in the economy at the beginning of their operation as they operate globally with other related financial services. With this enormous capital they try to obtain major part of the market share by reducing the cost of their premiums. The same will be difficult for the domestic life companies as they do not have that much of capital which will support them to cut the premium rates and sustain for a longer period of time. To keep the present market share and to have more the foreign players will further cut the price of insurance products at a level where domestic firms will no longer be able to sustain and ultimately collapses or merges with the big players or with the foreign players. This leads the whole life insurance market in the hands of few players who can easily now manipulate the market in their own interest later. Due to the severe cut in the premium rates and high expenditure in the form of advertisement, salaries, commissions at the beginning of their operation, foreign insurers starts increasing the premium rates gradually as they enjoys almost a monopoly in the market after the collapse of the domestic firms. Such collapses or the exits of the domestic insurance firms will have serious macro-economic and socio-economic implications in India[9]. In the Indian perspective, as the foreign life insurance players operate globally and they have the exposure of the global financial market, the performance of these companies will not solely depend upon the performance of the Indian economy. Therefore, any meltdown in the global financial arena will definitely affect the performance of these players. The collapse or the exits of these life insurance players will have severe social consequences due to the fact that millions of middle or lower middle class people in India by the life insurance products not only to take care of themselves but for their dependants. For example, a person can opt for a policy to safe guard himself in his old age, or for the education of his son/daughter, or for the marriage of his daughter after a certain period of time. Therefore, the social cost of such failure or collapse will be more than the economic cost and the end sufferers will be the common policy holders.

The resistance before the new reform policy in the insurance sector also comes from the trade unions as they fear of 'retrenchment of labour' from the insurance industry *due to computerisation and demand for more skilled labour.*

3.4: Independent Regulatory Authority

If we study and consider the different opinions against the privatization of the life insurance market and opening the sector before the foreign firms then we will find that those problems are basically due to the weak institutional and legal framework which persisted in the industry for a long period. Therefore, to address the same the Malhotra Committee laid down few recommendations regarding the regulatory and supervisory framework of the new liberlised life insurance industry. Among all the recommendations the most important is the formation of a strong, effective and independent regulatory body of insurance sector as **Insurance Regulatory Authority (IRA)** in India to protect the interest of the policy holders and the proper development of the total life insurance industry. *As stated earlier, the insurance business has not only its economic significance* in an economy but also it has its social implications in that economy. Privatization may lead the insurers to indulge themselves in speculative acts, restrictive business practice or forming cartel to enjoy monopoly in the market which ultimately bring the firms into the door steps of liquidation and eventually breaks the confidence of the normal policy holders or the investors. Therefore, for the development of the life insurance industry in India and to achieve the desired objectives of privatisation the formation of IRA, which is recommended by the reforms committee, is a necessary. In fact, many developing countries faced huge losses in the absences of such strong regulatory body. For example, Chile, Mexico, Peru and Uruguay. The main role of the proposed IRA can be summarised as,

(1) to promote the growth of insurance market in India;

(2) to protect the interest of the policy holders, and

(3) to ensure financial soundness of the insurers.

In performing its role the IRA prescribed certain well defined norms[10] to regulate and administer the insurance industry. Those norms are as under,

- provide a conducive environment to the growth of the insurance industry,
- entry restrictions through licensing or initial capital requirements,
- defining the premium rate to stop the price war among the insurers,
- introduction of mandatory and stipulated business norms in the rural areas for the insurers and imposition of penalties for violation of such norms,
- introduction of disclosure, solvency and capital adequacy norms,
- introduction of prudential norms to regulate the investments made by the insurance companies arising out of the policy holders premiums in a specified areas for safe return,
- regulations of insurance intermediaries such as agents, brokers, and surveyors,
- informing the end consumers through better education.

To achieve these objectives IRA entrusted with statutory legal provisions to enforce insurance laws and powers to prosecute and convict the insurers/brokers/agents for their default in performing or delivering services to the general investors with minimum government involvement. Thus IRA's functioning is financed by levying a small fee on the premium income of the insurance firms operating in the market and ensuring an autonomy to function independently with out government cost and control. The independence of the new regulatory body is a fair indicator before the market by the Government to ensure that the private companies can operate on a level playing field and no preference is shown to the State owned enterprises.

3.5: Steps towards Deregulation

After the submission of the Malhotra Committee Report on January, 1994 the journey of the Indian life insurance industry, controlled and regulated for 45 years, towards deregulation was quite eventful. In order to make the transition from State

monopoly to free market, the Committee recommended that only potential and serious players should be permitted to enter the market and an independent regulatory mechanism should be established to inculcate confidence among the prospective policyholders in the financial viability of the private insurance companies. Soon after the recommendation of the Malhotra Committee to set up an independent regulatory mechanism, a new committee (called the Mukherjee Committee[11]) was formed to make concrete plans for the requirements of the newly formed insurance companies by the Government of India in 1995. Since there was support for the opening of the sector with a strong and effective regulatory authority, the government established an independent interim Insurance Regulatory Authority (IRA) by executive order in September 1996, for the insurance industry along with modifications required to remove the State monopoly in this area. The IRA Bill was introduced in the Parliament in December 1996 with a proposal of 40 percent stake of foreign companies in a newly formed life insurance company. After a debate in the house the Bill was referred to the Standing Committee of the Ministry of Finance which submitted its report in May 1997. The Bill incorporating the recommendations of the standing committee was introduced once more for consideration by the UF government but it could not be passed due to opposition from the BJP and the Left with a demand of reducing the foreign equity and eventually was withdrawn by the government. Unfortunately, the instability in Central Government, changes in insurance regulation could not be passed through in the parliament but the Government allowed greater autonomy to LIC, GIC and its subsidiaries with regard to the restructuring of boards and flexibility in investment norms aimed at channeling funds to the needed infrastructure sector.

In the mean while the Mukherjee Committee submitted its report in 1997 but the recommendations of the Mukherjee Committee were never made public. The information that came out from informal sources, it became clear that the committee recommended the inclusion of certain ratios in the balance sheets of insurance companies to make sure transparency in accounting standards. But the Finance Minister objected the proposals made by the said committee and argued (probably on the opinion of some of the potential entrants) that it could affect the prospects of a developing insurance company[12].

In 1998, BJP led, a new government came into power at the centre. In the budget speech of 1998, the policy of the government was announced by the then Finance Minister Mr. Yashwant Sinha to open up the insurance sector and also to make IRA a statutory regulatory authority. The new government reconstituted the Tariff Advisory Committee (TAC) and brought under IRA. Accordingly, the Insurance Regulatory Authority Bill 1998 was introduced in the Lok Sabha in December 1998 to permit the entry of private "Indian companies" into the Insurance sector. The Bill was referred to the Standing Committee on Finance, headed by Mr. Murli Deora in January 1999 for examination and report. The standing committee suggested some amendments and proposed to reduce the foreign equity stake to 26 percent from 40 percent, which were accepted by the government and the Bill was circulated in March 1999. The IRA Act was renamed as the Insurance Regulatory and Development Authority (IRDA) Act. This Bill too could not be taken up for consideration in the Lok Sabha due to the fall of the NDA government and the deregulation was put on hold once again.

An election was held in 1999 and a new BJP-led government came to power. On October 1999, the revised bill of IRA as IRDA Bill was introduced in the Lok-Sabha by the newly elected government. A long debate over the issue was witnessed in the Parliament and later followed by a walkout of Left and non-Congress parties. The Congress party, which was the main opposition party, supported the new insurance bill by stating that the government had accepted the amendments, which have recommended by the party to incorporate in the new bill. On December 7, 1999, the new government passed the Insurance Regulatory and Development Authority (IRDA) Bill. The President of India gives Assent to the Insurance Regulatory and Development Authority (IRDA) Bill, in April 2000, and the bill became The **Insurance Regulatory and Development Authority (IRDA) Act**, which repealed the monopoly conferred to the Life Insurance Corporation of India (LICI) in 1956 and to the General Insurance Corporation in 1972[13].

3.6: Features of IRDA Act 1999.

The Insurance Regulatory and Development Act of 1999 embarked for the establishment of an Authority to protect the interests of policy holders of insurance, to regulate, promote and ensure orderly growth and development of the insurance industry. The Act effectively reinstituted the Insurance Act of 1938 with minor modifications. Whatever was not explicitly mentioned in the 1999 Act referred back to the 1938 Act. On July 14, 2000, the Chairman of the IRDA, Mr. N. Rangachari laid down a set of regulations in an extraordinary issue of the Indian Gazette. The salient features of the 1999 IRDA Act[14], which are related to the life insurance business, are discussed below.

3.6.1: Licensing

The IRDA Act, 1999, sets out details of registration of an insurance company together with renewal requirements. The minimum capital requirement for the entry into the life insurance business is 100 crore (i.e. INR 1 billion). The IRDA regulates the entry and exit of life insurance firms, capital norms, and maintains a stringent watch on the equity and solvency situation of insurers. Once the application to conduct business is rejected, the applicant will have to wait for a minimum of two years to make another proposal, which will have to be with a new set of promoters and for a different class of business. For renewal, the Act, stipulates a fee of one-fifth of one percent of total direct gross premiums written by an insurer in India during the financial year preceding the renewal year. It also seeks to give a detailed background for each of the following key personnel: chief executive, chief marketing officer, appointed actuary, chief investment officer, chief of internal audit and chief finance officer.

Currently, India allows foreign life insurers to enter into the domestic market in the form of a joint venture with a local partner, while holding no more than 26% of the company's shares. If we compare the reforms in the Indian life insurance sector with that of the rest of the developing economies, especially in respect of BRIC (Brazil, Russia,

India and China) countries along with the neighboring countries. India's position (see Table: 3.2) is far more competitive and liberal.

Table: 3.2 **Development of Life Insurance Industry**

(BRIC and Neighboring Countries of India)

Countries	Pre-Regulatory Regime	Regulatory Change	Regulator	Foreign Ownership
Sri Lanka[a]	Nationalisation of life insurance business in 1961 to form ICS.	100% private participation since 1986	The Insurance Board of Sri Lanka (IBS). (2001)	Maximum of 90% equity participation in local companies.(2001)
Pakistan[b]	Merger of 34 life insurance companies to form State Life Insurance Corporation in 1972.	100% private participation allowed since 1992	Securities and Exchange Commission of Pakistan (SECP). (1999).	Allowed
Bangladesh[a]	Formation of state owned life insurer *Jiban Bima Corporation* in 1973.	50% private participation since 1990	Department of Insurance (*Ministry* of Commerce)	Not allowed
Brazil[b]	**Privatisation initiated in the early 1990s.**	**Private participation *since 1994***	***The Superintendence of Private Insurance* (SUSEP)**	**Allowed**
Russia[c]	**After Soviet era, Ingosstrakh (International State Insurance) and Rosgosstrakh (Russian State Insurance) have been *privatized in 1991*.**	**The Russian Federal Law on Insurance (1999)**	**Insurance Supervision Department (ISD), Ministry of Finance.**	**Maximum of 49% only through acquisition of established Russian insurance companies.(2001)**
India[d]	***Nationalisation of life* insurance business in 1956 to form LICI.**	***100%* private participation since 1999**	***Insurance* Regulatory and Development Authority(IRDA), (1999)**	**Maximum of 26% equity participation in local joint ventures.(1999)**
China[a]	**PICC's monopoly ended with the creation of 5 new insurers in 1985.**	**Foreign entry allowed *since 1992.***	**China Insurance Regulatory Commission(CIRC), (1998)**	**Allowed (2002)**

Sources: [a] Kwon, W. Jean (2001), IIF Occasional Paper, No.3[15]; [b] Karimov, T.R. (2002)[16];

[c] http://www.commercialdiplomacy.org/ma_projects/karimov3.htm.

[c] http://www.commercialdiplomacy.org/ma_projects/karimov.htm.

[d] IRDA.

Note: ICS: Insurance Corporation of Sri Lanka; LICI: Life Insurance Corporation of India; PICC: People's Insurance Company of China.

In case of The Russian insurance industry, it is subjected to a 25 percent limit upon participation by foreign entities in the aggregate capital of Russian insurance companies. A Russian insurance company whose charter capital is more than 49 percent held by one or more foreign parties becomes subject to certain qualitative limitations upon the scope of its activities (i.e., it cannot offer life insurance). In china, there is certain geographical restriction which regulates the foreign life insurers to operate in the licensed regions only. In Brazil total life insurance market activity represents only 24% compared to India where life insurance is a major part of total insurance industry[17]. Out of the four BRIC countries India and Brazil became the member of WTO in 1995 where as China has just entered WTO in 2001. Surprisingly, Russia, perhaps the only developed country, which is out side of WTO and still negotiating. WTO is showing intense activity to include major developing/developed economies such as Russia[18].

3.6.2: Solvency controls

The IRDA has set up strict guidelines on asset and liability management of the insurance companies along with solvency margin requirements. Initial margins are set high as compared with developed countries. Life insurers are required to maintain a required solvency margin, as per Section VA of the Insurance act, 1938. The IRDA (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000, describes in detail the method of computation of the Required Solvency Margin[19]. As per provisions of the Insurance Act and the regulations made there under, every life insurer is required to maintain an excess of value of his assets over the amount of his liabilities of not less than Rs. 50 crore (Rs. 100 crore in the case of a re-insurer) or a sum equivalent based on a prescribed formula , as determined by regulations not exceeding 5% of the mathematical reserves and a percentage not exceeding 1% of the sum at risk for the policies on which the sum at risk is not negative, whichever is highest. In addition, at the time of registration all the new insurers have been required to maintain a solvency ratio of 1.5 times the normal requirements[20].

Previously the required solvency margin of the life insurers was monitored by the IRDA on annual basis. But considering the importance of this ratio, IRDA has now asked the insurers to submit quarterly returns on the solvency margin[23].

3.6.3: Investment norms

The new IRDA Act modified the Section 27 of the Insurance act 1938 in conformation with the objectives of improving confidence among the potential policy holders and diverts the funds into the infrastructural development. The new provisions under the IRDA (Investments) Regulations, 2000, made it obligatory for the insurers to perk at least half of the total investments to be invested in the government securities or other approved securities as these investments are considered to be safest of all because of government guarantee[24].

Table: 3.3 **Investment Regulation of Life Business**

	Type of investment	Percentage
I	Government securities	At least 25%
II	Government securities or other approved securities (including (I) above)	Not less than 50%,
III	**Approved investments as specified in Schedule I** a) Infrastructure and social sector Not less than 15% Explanation: for the purpose of this requirement, infrastructure and social sector shall have the meaning as given in Regulation 2(h) of Insurance Regulatory and Development Authority (Registration of Indian Insurance Companies) Regulations, 2000, and as defined in the Insurance Regulatory and Development Authority (Obligations of Insurers to Rural and Social Sector) Regulations, 2000, respectively.	Not less than 15%
	b) Others to be governed by exposure/prudential norms specified in Regulation 5	Not exceeding 20%
IV	Other than in approved investments to be governed by exposure/ prudential norms specified in Regulation 5	Not exceeding 15%

Source: Gazette of India Extraordinary Part III Section 4: Insurance Regulatory and Development Authority (Investment) Regulations, New Delhi, the 14th August, 2000

3.6.4: Business conduct

As well as licensing and solvency regulations, the IRDA Act also prescribes guidelines and regulations on business conduct. It specified the creation and functioning of an Insurance Advisory Committee that sets out relevant rules and regulation.

The Act stipulates that the "Appointed Actuary" has to be a Fellow of the Actuarial Society of India and the appointed actuary has to be an internal company employee particularly in case of Life Insurance Company. Given that there has been a scarcity of actuaries in India with the qualification of a Fellow of the Actuarial Society of India, the IRDA is in the process of replacing the Actuarial Society of India by a newly formed institution to be called the Chartered Institute of Indian Actuaries (modeled after the Institute of Actuaries of London). The Appointed Actuary would also be responsible for reporting a detailed account of the company to the IRDA[22].

Further, all the insurers are obligatory to provide some coverage for the rural and social sector which is known as the "Obligations of Insurers to Rural Social Sectors"[23]. Life insurers have to maintain the following mandatory coverage in the **Rural Sector** (where the population is not more than 5000; population density not more than 400 per Sq. Km; and at least 75% of male working population is engaged in agriculture) as.

(a) five percent in the first financial year;
(b) seven percent in the second financial year;
(c) ten percent in the third financial year;
(d) twelve percent in the fourth financial year; and
(e) fifteen percent in the fifth year of total policies written direct in that year.

In case of **Social Sector** (includes unorganised sector, informal sector, economically vulnerable or backward classes and other categories of persons, both

rural and urban areas) obligation, life insurers have to keep up the following obligatory covers as under;

(a) 5000 lives in the first financial year;

(b) 7500 lives in the second financial year;

(c) 10,000 lives in the third financial year;

(d) 15,000 lives in the fourth financial year; and

(e) 20,000 lives in the fifth financial year.

3.6.5: Others regulations

Few more regulatory features of the IRDA Act' 1999, are as follows,

(1) Insurance agents should have at least a high school diploma along with training of 100 hours from a recognized institution. More than a dozen institutions have been recognized by the IRDA for training insurance agents.

(2) Through a Government of India notification, dated 11 November 1998, the Insurance Ombudsman was created to address grievances of the policyholders and to protect their interest. Twelve Ombudsmen have been appointed across the country to expedite disposal of complaints. Ombudsmen have jurisdiction in respect of personal lines of insurance where the contract value does not exceed INR 20 lakh. The Ombudsman is bound to come with a judgment within three months from the date of receipt of the complaint.

3.7: Development of LICI during 1992-2000

The debate on reforms in the life insurance sector and the report submitted by the Malhotra Committee put pressure on LICI to improve its performance which is visible in its overall results. It would be unfair to say that the reform initiatives in the life insurance sector alone created an environment which drives the performance of the LICI in the north direction. The new economic policy initiated by the government, especially the reforms in the financial sector, helps to improve the basic indices of economic

development which ultimately reflected in the performance of the LICI. Due to the implementation of the new economic policy, India witnessed a rise in its macro-economic conditions which affects the per capita income positively and the savings of people in the financial products also seen improved over the years[25]. In the 1997 the government gave greater autonomy to LICI in respect of policy formulation, product development and decentralisation of the corporation in decision making process at the zonal levels for the development of quicker operational efficiency.

Table: 3.4 **New Business of LICI: Individual Assurance (1991-2000)**

Year	No. of Policies (in lakh)	Sum Assured (Rs. in crore)
1991-92	92.38	32064
1992-93	99.58	35957
1993-94	107.26	41814
1994-95	108.75	55229
1995-96	110.21	51816
1996-97	122.68	56741
1997-98	133.11	63618
1998-99	148.57	75316
1999-00	169.99	91214

Source: LICI Annual Reports: various issues.

The largest segment of the life insurance business done by the LICI has been individual life insurance. The number of individual new life insurance policies sold by the corporation each year went from 92.38 lakh policies in 1991-1992 to 169.77 lakh policies in 1999-2000 and the volume of sum assured towards the new life business increased from Rs.32064 crore in 1991-1992 to Rs. 91214 crore in 1999-2000. The total business in force in India has increased almost four times from 1991 to 1999. At the end of March 1992, number of policies was 508.26 lakh which increased to 1012.99 lakh

policies at the end of March 2000. The volume of sum assured stood at Rs.5, 34,589 crore in 1999-2000 from Rs.1, 45,929 crore in 1991-1992[26].

Table: 3.5 **Growth of Life Business in Force in India (LICI)**

Year	No. of Policies (in lakh)	Sum Assured (in crore)	Annual Premium (in crore)
1991-92	508.63	1,45,929	5946
1992-93	566.12	177268	7146
1993-94	608.00	207601	8758
1994-95	654.52	253333	10385
1995-96	708.78	294336	12094
1996-97	776.66	343018	14500
1997-98	849.15	398959	17066
1998-99	916.37	457435	20234
1999-00	1012.99	534589	24540

Source: LICI Annual Reports: various issues.

The numbers of new policies written by the LICI, nearly half of the policies are written in the rural areas. The share of rural business in 1999-00 went up to more than 57 percent from the level of nearly 44 percent in 1991-92[27].

LICI's role in increasing the business in the rural areas would socially be essential but commercially it would be a loss making venture. In performing its social responsibility, LICI introduced social security group insurance schemes which is applicable to 23 approved occupational groups that includes self-employed women, rickshaw puller, beedi rollers etc. which covers around 50 lakh lives. LICI also sells specific subsidized group insurance policies to unorganized and rural sector in meeting its social and rural obligations. The number of lives covered under the new group insurance scheme stood at 22.5 lakh at the end of 1999-00[28].

Table: 3.6 **Growth of Rural Business (in percent)**

Years	No. of Policies	Sum Assured	Share in Total New Business	
			Policies	Sum Assured
1991-92	12.3%	20.8%	44.7%	38.8%
1992-93	7.6%	13.2%	44.6%	39.2%
1993-94	9.4%	18.4%	45.3%	39.9%
1994-95	0.9%	29.3%	45.1%	39.1%
1995-96	7.2%	-1.4%	47.7%	41.0%
1996-97	14.8%	14.2%	49.2%	42.8%
1997-98	13.4%	13.5%	51.4%	43.3%
1998-99	18.8%	28.4%	54.7%	47.0%
1999-00	19.5%	24.9%	57.5%	48.7%

Source: LICI Annual Reports; various issues; EPW: January 20, 2001.

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Chapter IV

Methodology

4.1: Literature review

The role of financial institutions and financial intermediaries in fostering the economic growth [Levine and Zervos[1] (1998), Levine[2] (1997), King and Levine (1993) (a)[3] and (b)[4] Levine[5] et al. (2000), and Beck[6] et al. (2000)] by improving the efficiency of capital accumulation, encouraging savings and ultimately improving the productivity of the economy has been well accepted by now. Recently, the research has shifted from established link between financial development and economic growth to understand factors that affects the overall financial services, thereby the underlying factors that lead to improve the financial development. Insurance is one of the important financial services that can trigger the growth in an economy by channelising the long-term savings for the productive purpose and providing a shield before the risk associated with any activity related to productivity, assets or life. Recent studies show that the insurance industry can improve the economic growth [Outreville[7] (1990 b), Browne and Kim[8] (1993), Browne[9] et. al (2000), Catalan[10] et al, (2000), Ward and Zurbruegg[11] (2000), Beck and Webb[12] (2002) and Esho[13] et al (2004)] through financial intermediation, risk aversion and generating employment.

Despite the findings of several influencing factors affecting the life insurance demand and the promotion of life insurance development, there is meek guidance for the policy makers to focus on specific factor/s to foster the life insurance development and thereby financial development which improves the economic development. No such study has yet been published so far on Indian life insurance market *after the implementation of reforms* in this sector in 1999 and to the best of author's knowledge this is first such an attempt to measure the effects of life insurance reforms empirically. The only published literature available on Indian life insurance industry is the study of Sadhak[14] (2006) who has shown certain naive statistical relationship among lead factors. The objective of this study is to determine the factors which affect the demand for life insurance in the post reform period and doing so, provide guidance for the policymakers on how to promote life insurance development in India and there by economic development.

4.2: Objective of the study

The basic objective of this study is to analyze the effects of life insurance sector reforms on the total development of life insurance industry in India. To achieve this objective the present study has been organized in the following manner:

first, we will examine the effects of life insurance reforms on overall development of life insurance consumption in India and try to find out whether the reforms in the life insurance sector has actually improved the life insurance demand in India or not and the overall development of the life insurance industry itself.

And in the second stage, we will examine the potential determinant factors (economic and non-economic) of life insurance demand in the post reform period in India.

4.3: Data Source

All the data series are annual aggregate data for the period starting from 1991 to 2008 and secondary in nature. All the annual data are collected from, annual reports of LICI and IRDA, Handbook of Statistics on Indian Economy, RBI; Human Development Reports of UNDP, World Development Indicators of the World Bank, IFS data base from IMF, CIA fact book on India, UNCTAD reports, various issues and reports from Swiss Re. life insurance penetration, density and new policy issue data are collected from sigma issues, annual reports of LICI and annual reports of IRDA. All the economic variables are collected from RBI and IMF whereas the non-economic data are collected from UNDP and the World Bank.

4.4: Sample Size

The financial sector reforms was started in India with the implementation of new economic policy in 1991 by the then finance minister Dr. Man Mohan Singh who is the

present Prime Minister of India. Insurance sector reforms are the part of the total financial sector reforms initiative. The first step towards insurance sector reforms was the setting up of the Malhotra Committee in 1992-93 and consequently the opening of the life insurance sector in 1999 and setting up of an independent regulatory body IRDA. This study focuses on to find out the relationship between economic and non-economic factors and the consumption of life insurance in India in the post reform period which consists of the annual data series from 1991 to 2008.

4.5: Empirical methodology

The present study will extensively use various statistical methods to address the problem under concern. We intend to employ time series analysis for the purpose of assessing the gain in efficiency in India's insurance sector after liberalisation. Since the economic liberalisation took place in India in 1991 and insurance reforms started only in 1992, time series analysis may involve the problems of small sample. We will, therefore, alternatively use OLS to measure the gain in efficiency.

The methodology adopted for this study includes different econometric models which would evaluate the implications of life insurance sector reforms on the development of life insurance industry in India along with the determinant factor affecting life insurance demand. **In the first section**, we will measure the effects of life insurance reforms on the overall progress of life insurance industry. But there is no such accepted measure is available to quantify the reforms in the life industry to be used in our model. Therefore, we will construct a composite index of life insurance reforms which can be used in our study to find out the existing relationship between reforms and the development of the life market in India. To construct the index, (detailed given in the next chapter) which has been named as **Life Insurance Reforms Index (LIRI),** we will consider only those fundamentals which are post reform phenomenon, i.e., those elements which manifest the reforms initiatives in this sector. Total life insurance premium volume (LIP) will be used to measure the development of life insurance business in India. **In the second section**, different economic and non-economic variables

have been used in our econometric model. However, before going on to time series regression analysis, it is imperative to investigate the univariate properties of all the variables under consideration. Formally, Augmented Dickey Fuller (ADF) and/or Philips Perron (PP) unit root test is going to be used to check the stationary properties of the variables whether the variables are stationary or non-stationary because using non stationary time series variable in the regression may give spurious results[15]. Non-stationary variables may be used in our model provided the series are co-integrated in the same order. Therefore Engle-Granger co-integration will be employed to verify co-integration among the variables. We also check the short run dynamics of our model by using the VAR-VECM technique.

4.6: Unit Root Test

Unit root tests are conducted to verify the stationary properties of the time series data to avoid the spurious results of the regression[16] if the series are non-stationary. A series is said to be stationary if the mean and autocovariances do not depend on time. Any series which is not stationary is said to be non-stationary series. Generally, stationarity of the macro-economic variable data series are non-stationary by nature and the stationarity is attained by differencing the data once or twice in some cases. A series is said to be integrated of order (d), if it has to be differenced by (d) times before it becomes stationary. If a series need to differenced once (i.e., first difference) to make the series stationary then series is said to integrated of order one, denoted as $I(1)$[17].

4.6.1: Dickey-Fuller Unit Root Test

Dickey and Fuller[18] (1979) have shown that under the null hypothesis i.e. $\delta = 0$, the estimated t value of the co-efficient of Y_{t-1} in equation $\Delta Y_t = \delta Y_{t-1} + u_t$ follows the (τ) ***tau statistics***. The Dickey-Fuller Unit Root Test is based on the following three regression forms:

1. Without Constant and Trend $\quad \Delta Y_t = \delta Y_{t-1} + u_t \quad$ (4.1)
2. With Constant $\quad \Delta Y_t = \alpha + \delta Y_{t-1} + u_t \quad$ (4.2)

3. With Constant and Trend $\Delta Y_t = \alpha + \beta T + \delta Y_{t-1} + u_t$ (4.3)

The hypothesis is: $H_0 : \delta = 0$ (Unit Root) [time series is non-stationary]

$H_1 : \delta \neq 0$ [time series is stationary].

Decision rule:

If t* > ADF critical value, ==> not reject null hypothesis, i.e., unit root exists.

If t* < ADF critical value, ==> reject null hypothesis, i.e., unit root does not exist.

4.6.2: Augmented Dickey Fuller (ADF) Test

In DF test it is assumed that the error term u_t is uncorrelated. But in case it is found to be correlated then there will be confusion to determine whether the series are stationarity or not. Dickey and Fuller have addressed this problem and developed a test which is known as Augmented Dickey Fuller (ADF) unit root test. In this test Dickey and Fuller have augmented the above three equation by adding the lagged values of the dependent variable ΔY_t as follows

$$\Delta Y_t = \alpha + \beta T + \delta Y_{t-1} + \sum_{i=1}^{m} \alpha_i \Delta Y_{t-i} + \varepsilon_t \tag{4.4}$$

Where ε_t is a pure white noise error term and $\Delta Y_{t-1} = (Y_{t-1} - Y_{t-2})$, $\Delta Y_{t-2} = (Y_{t-2} - Y_{t-3})$ etc. Here, we also test whether δ = 0 and ADF test follows the same asymptotic distribution as the DF statistics[19].

4.6.3: Phillips-Perron Unit Root Test

ADF test correct the serial correlation problem in the error term by adding the lagged difference terms of the regressand, but Phillips and Perron[20] (1988) have proposed a nonparametric method to correct a wide variety of serial correlation and heteroskedasticity situations in the error term without adding any lagged difference terms. PP test follows the same asymptotic distribution as the ADF statistics. The unit root test

and the order of the integration would be preformed on both the original series and the differences of the series using both the ADF and PP tests.

4.7: Co-integration Test

The purpose of the co-integration test is to determine whether a set of non-stationary series is co-integrated or not. Co-integration tells us about the presence of any long run relationship among two or more variables. The concept of co-integration was first developed by Engle and Granger[21] in 1987. Engle and Granger points out that if the linear combination of two or more non-stationary series is stationary then the non-stationary time series are said to be co-integrated. For two series to be co-integrated, both need to be integrated of the same order, I or above. If both the series are stationary or integrated of order zero, i.e. *I* (0), there is no need to do co-integration test as the standard time series would then be applied. If the variables are not integrated of the same orders, it is easy to conclude that the series are not co-integrated. However, if some variables are *I* (1) and some are *I* (2), we still can continue with co-integration analysis and able to determine whether the variables are Multicointegrated[22]. But lack of co-integration means there is no long run relationship among the variables. There are basically two tools are available to determine the co-integration i.e. long run relationships among variables and they are:-

(1) Engle-Granger's (1987) Residual Based Test, and

(2) Johansen and Juselius's[23] (1990) Maximum Likelihood Test.

In this study the Engle-Granger's (1987) residual based test will be used to determine the long run relationship among the variables.

The two non-stationary series with the same order of integration may be co-integrated if there exists some linear combination of the series that can be tested for stationarity i.e. *I* (0). Engle and Granger propose a two-step procedure to test Co-integration between two time series.

$$X_t = \alpha + \beta Y_t + U_t \qquad (4.5)$$

$$Y_t = \alpha + \beta X_t + V_t \qquad (4.6)$$

First, Co-integration regression is estimated by OLS, and then in the second stage, the residuals from the regression are tested for stationarity. DF unit root test will be applied on these residuals to determine their order of co-integration. If the test statistics indicates that the residuals are stationary, i.e. $I(0)$, then there is a Co-integration between X_t and Y_t i.e. they have long run equilibrium.

In case of more than two variables, all time series are subjected to unit root analysis to determine the order of integration among them and if all the variables are integrated in the same order then a co-integrating regression equation will be estimated as follows,

$$Y_t = \alpha_t + \beta_1 X_t + \beta_2 W_t + \beta_3 Z_t + \beta_4 V_t + e_t \qquad (4.7)$$

This can be rewrite as,

$$e_t = Y_t - \alpha_t - \beta_1 X_t - \beta_2 W_t - \beta_3 Z_t - \beta_4 V_t \qquad (4.8)$$

Since, e_t must be stationary, this means that the linear combination of the non-stationary (integrated) variables given in the right hand side must also be stationary[24]. Stationarity of the error term (e_t) will be checked by both the ADF unit root test and Philip-Perron unit root test. If the residuals e_t, from the above equation, found to be $I(0)$ i.e. stationary then the variables are said to be co-integrated and they have a long run relationship among themselves.

4.8: Vector Error Correction Model (VECM)

Even if there exists a long run equilibrium relationship between the two series, there may be disequilibrium in the short run. Engel–Granger (1987) identifies that the co-integrated variables must have an ECM (Error Correction Model) representation and a VAR model can be reformulated by the means of all level variables. The Vector Error Correction specification restricts the long run behaviour of the endogenous variables to converge to their co-integrated relationships while allowing a wide range of short run dynamics, hence, one can treat the error terms (*ET*) as the "equilibrium error"[25]. Through the co-integration term, the deviation from the long run equilibrium is corrected gradually

in the course of a series of short run adjustments. Indeed VECM is a special type of restricted VAR model[26]. Therefore, VECM gives us important information about the short run relationships between these two co-integrated variables. The general form of this modified equation by employing variables of our study is presented below.

$$\Delta X_t = \alpha_1 + \beta_1 ET_{1t-1} + \sum_{i=1}^{n} \delta \Delta X_{t-i} + \sum_{i=1}^{n} \gamma \Delta Y_{t-i} + \varepsilon_t \quad (4.9)$$

$$\Delta Y_t = \alpha_2 + \beta_2 ET_{2t-1} + \sum_{i=1}^{n} \theta \Delta Y_{t-i} + \sum_{i=1}^{n} \lambda \Delta X_{t-i} + \omega_t \quad (4.10)$$

Where, Δ denotes first difference operator, ε_t and ω_t are white noise error terms, ET_{1t-1} and ET_{2t-1} are error correction terms which is the long run effect and lagged independent variables are short run effect. That is, changes in the dependent variables are effected by the ET, ΔX_{t-i}, and ΔY_{t-i} .

4.9: The causal relationship

Engel–Granger (1987) identifies that if co-integration exists between two variables in long run then there must be either unidirectional or bi-directional Granger causality between these two variables. The basic design behind the test is to check whether the lagged values of one variable do or do not affect the present value of another variable or the same variable itself. The Granger causality test model for two variables can be represented as follows,

$$X_t = \sum_{i=1}^{n} \alpha X_{t-i} + \sum_{i=1}^{n} \beta Y_{t-i} + \varepsilon_{1t} \quad (4.11)$$

$$Y_t = \sum_{i=1}^{n} \theta Y_{t-i} + \sum_{i=1}^{n} \delta X_{t-i} + \varepsilon_{2t} \quad (4.12)$$

Where, X_t, Y_t are the two variables under study, $\alpha, \beta, \theta, \delta$ are coefficients on each variables and ε_{1t} and ε_{2t} are the error terms of the model. It is found that granger test statistics follows chi-square distribution instead of F-distribution. Therefore, we would follow the chi-square distribution in determining the direction of causality.

In determining the factors which affects the life insurance demand in India, the initial estimation equations (comprising all the potential factors) are subject to subsequent simplification by removing the most insignificant variable from the equation. This process will repeat until further deletion of any insignificant variables from the equation causes autocorrelation in the residuals. Every equation will, therefore, be tested for the presence of residual serial correlation before and after the simplification process. If the serial correlation is not present in the residuals then most insignificant variable form the equation will be removed. If the residual serial correlation is detected as a consequence of removing the most insignificant variable from the estimation equation, indicates that the variable should not be removed from the equation at that stage and the initial estimation equations need to be re-specified to get the final regression equation[27].

4.10: Testing for Autocorrelation

In time series regression there is a possible lack of independence in the residuals and it is also possible to have correlation between residuals more than one time period apart. An alternative approach to check the autocorrelation is to compute the autocorrelation function or ACF and plot them as correlogram. But this measure gives us a rough guide as to the significance of each correlation. The more accurate test is the Durbin-Watson test (DW test) for autocorrelation[28]. The DW test statistics is computed as follows,

$$DW = \frac{\sum_{t=2}^{n}(e_t - e_{t-1})^2}{\sum_{t=1}^{n} e_t^2} \qquad (4.13)$$

The numerator comprises total sum of square of differences between successive errors and the denominator is simply the sum of squared errors. The DW statistics ranges in value from 0 to 4, with an intermediate value of 2. The rule of thumb is that the DW

stat close to 2 represents that there is no residual serial correlation. In fact, the DW test statistics is very close to $2(1-r^2)$ where r is the autocorrelation at lag one.

4.11: Testing Normality

Several tests are available to test the normality such as, histogram of residuals, normal probability plot, the Jarque-Bera[29] (JB) normality test etc. a histogram of residuals is the simplest graphical presentation used to learn the shape of the distribution but empirically more accurate test is the JB test. This test is based on OLS residuals and uses the following test statistics,

$$JB = n\left[\frac{s^2}{6} + \frac{(k-3)^2}{24}\right] \qquad (4.14)$$

Where, n = sample size, s = skewness coefficient and k = kurtosis coefficient. For a normally distributed variable, s=0 and k=3 and in that case JB test statistics is expected to be 0 which follows the chi-square distribution with 2df. If the computed p value of the JB statistics is very low then one can reject the null hypothesis that the residuals are normally distributed. But if the test statistics is reasonably high one can not reject the hypothesis[30]. The JB statistics at 5% significance level will be used to make decision regarding normality of the residuals.

In addition to secondary data the present study will also require primary data especially to measure the indices like consumer satisfaction / dissatisfaction, awareness for the life insurance etc. Necessary field survey will be undertaken among the existing policy-holders and also prospective policy-holders. To undertake the field survey, necessary questioners will be prepared to evaluate the awareness of common people in India along with the perception towards life insurance companies and their offerings in the post reform years. Since the primary data will be collected from different strata of our society, closed ended questioners will be prepared to achieve our basic objectives keeping in mind all the qualities of a good questionnaire[31]. Appropriate statistical tools[32] will be employed for this purpose. In this study we will use the statistical software E-views to evaluate the econometric results of the pre estimated models of this study.

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Chapter V

Effects of the Insurance Sector Reforms in India

5.1: Introduction

After the initiation of the liberalisation process in the year 1993 and finally the opening up of the life insurance market in 1999 the Indian life insurance market has seen few changes in its operation and in the basic structure of business. The life insurance market was opened to the private players not only due to the domestic factors such as, low penetration of life insurance, non-availability of different customer oriented products, low level of customer satisfaction, higher premium rates and lack of professionalism on the part of the insurer and above all very low spread of life insurance in the country, but also due to the global conditions prevailed in the financial market[1]. There was a belief that the open economy would lead to higher growth of domestic economy and savings rate and participation of foreign players would generate competition among the insurers which improves the service quality of all the insurers operating in the market. This section will highlight the post liberalisation scenario in the life insurance sector in India and to make out whether the objectives behind the opening of the life insurance market have been achieved or on the right direction towards achieving the objectives laid down by the policy makers. As the Indian economy is based on service-led growth, it would be motivating to evaluate the effects of privatisation of life insurance market in India.

Just after the opening up of the life insurance market to the domestic private insurers and foreign insurance companies in the form of joint venture with domestic insurers, there were many players queued for the registration with the IRDA to commence their business operation in India. The IRDA Bill was passed in December 1999 and became an Act in April 2000. Once the legislation was put through, the actual process of inducting private players into the market had gone off smoothly. Although there were long debates over the issue of opening up the insurance sector to private players and foreign insurers, there was no other sector in this country where the transition from state monopoly to free market has been as hassle free as the insurance sector. After the first meeting of the Insurance Advisory Committee, IRDA notified 11 essential regulations relevant for the insurers entering into the Indian insurance market. Immediately after the passing of the IRDA Act in April 2000, many companies made public announcement that they are in the

process of setting up new joint ventures with foreign companies to operate in the Indian life insurance market[2] (see list below in table: 5.1).

Table: 5.1 ***INDIAN COMPANIES WITH FOREIGN PARTNERSHIP***

(Life and General Insurance Companies)

Indian Partner	International Partner
Alpic Finance	Allianz Holding, Germany
Tata	American Int. Group, US
CK Birla Group	Zurich Insurance, Switzerland
ICICI	Prudential, UK
Sundaram Finance	Winterthur Insurance, Switzerland
Hindustan Times	Commercial Union, UK
Ranbaxy	Cigna, US
HDFC	Standard Life, UK
Bombay Dyeing	General Accident, UK
DCM Shriram	Royal Sun Alliance, UK
Dabur Group	Allstate, US
Kotak Mahindra	Chubb, US
Godrej	J Rothschild, UK
Sanmar Group	Gio, Australia
Cholamandalam	Guardian Royal Exchange, UK
SK Modi	Group Legal & General, Australia
20th Century Finance	Canada Life
M A Chidambaram	Met Life
Vysya Bank	ING

(Source: U.S. Department of State FY 2001 Country Commercial Guide: India[3])

However, not all the joint ventures which were planned became the successful one. Several partnerships broke down during the year 2000 and, interestingly, those who have separated tied knot with other partners. For example, Alpic Finance and Allianz Holding, Germany, broke their partnership and later on Allianz has announced a new partnership with Indian scooter major Bajaj. Similarly partnership between Kotak Mahindra and Chubb, Dabur and Allstate, Hindustan Times Commercial Union broke at an early stage. Later Dabur announced a new partnership with Commercial Union of UK[4].

In October 2000, first license were issued to private players to operate in the Indian life insurance market and thus India became a liberalized insurance market. The opening of the life insurance sector has resulted in a large number of financial institutions (banking and non-banking) entering the insurance arena resulting in a sudden increase in the capacity to underwrite risk and to explore the untapped potential life insurance market in India[5]. The entry of State bank of India (SBI), a joint venture (74: 26) with Cardif SA, the insurance wing of BNP Paribas Bank, France, was significant as this was the first bank to operate in life insurance market and the venture needed the clearance of RBI as the banks were allowed to operate in other businesses on case by case basis[6]. The following table (Table: 5.2) gives us the details of the insurers operating in the Indian life insurance market at the end of 31st December, 2008.

Table: 5.2

INDIAN LIFE INSURANCE COMPANIES* WITH FOREIGN PARTNERSHIP (as on 31.12.2008)

Sl. No.	Registration Number	Date of Reg.	NAME OF THE COMPANY
1	101	23.10.2000	HDFC Standard Life Insurance Company Ltd.
2	104	15.11.2000	Max New York Life Insurance Co. Ltd.
3	105	24.11.2000	ICICI Prudential Life Insurance Company Ltd.
4	107	10.01.2001	Kotak Mahindra Old Mutual Life Insurance Limited

5	109	31.01.2001	Birla Sun Life Insurance Company Ltd.
6	110	12.02.2001	Tata AIG Life Insurance Company Ltd.
7	111	30.03.2001	SBI Life Insurance Company Limited .
8	114	02.08.2001	ING Vysya Life Insurance Company Private Limited
9	116	03.08.2001	Bajaj Allianz Life Insurance Company Limited
10	117	06.08.2001	Metlife India Insurance Company Ltd.
11	121	03.01.2002	Reliance Life Insurance Company Limited.
12	122	14.05.2002	Aviva Life Insurance Co. India Pvt. Ltd.
13	127	06.02.2004	Sahara India Insurance Company Ltd.
14	128	17.11.2005	Shriram Life Insurance Company Ltd.
15	130	14.07.2006	Bharti AXA Life Insurance Company Ltd.
16	133	04.09.2007	Future Generali India Life Insurance Company Limited
17	135	19.12.2007	IDBI Fortis Life Insurance Company Ltd.
18	136	08.05.2008	Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd.
19	138	27.06.2008	Aegon Religare Life Insurance Company Ltd.
20	140	27.06.2008	DLF Pramerica Life Insurance Company Ltd.
21	142	13.01.2009	Star Union Dai-ichi Life Insurance Co. Ltd.,

Source: IRDA (annual reports of various years).

*This list excludes the only state life insurance company Life Insurance Corporation of India (LICI).

5.2: Effects on Penetration and Density

Life insurance *Penetration* and life insurance *Density* are the standard measure of the development of life business or the consumption in an economy. There are other means of measuring the development of life insurance are available such as growth in life premiums, life insurance fund, number of new issued policies but penetration and the density are the internationally accepted standard measures. Let's find out the development made by India in this regard in the post liberalized era in the life insurance sector.

Life insurance penetration is defined as the ratio of premium volume to Gross Domestic Product (GDP). It measures the relative importance of life insurance activity to the size of the economy. Malhotra Committee on insurance reform has highlighted the low level of penetration in India and we can visualize the poor situation if we compare India with the rest of the world in 1999, just before the liberalisation of the insurance industry made. The country which had the highest level of life insurance penetration was South Africa at 13.92% followed by United Kingdom (U.K) at 10.30%. The level of life insurance penetration in India was at dismal 1.39% and ranked 52nd in the world of total insurance (life and general) business. Despite the huge potential market Indian life insurance business was far behind few Asian countries such as South Korea (8.39%), Japan (8.87%), Hong Kong (3.63%), Singapore (3.25%), Taiwan (4.83%) and Malaysia (2.16%). India, though, was placed before China which had life penetration at 1.02% and ranked 58th in the world insurance business[7].

Table: 5.3 **International Comparison of Life Insurance Penetration* in 1999**

(*premiums in % of GDP in 1999)

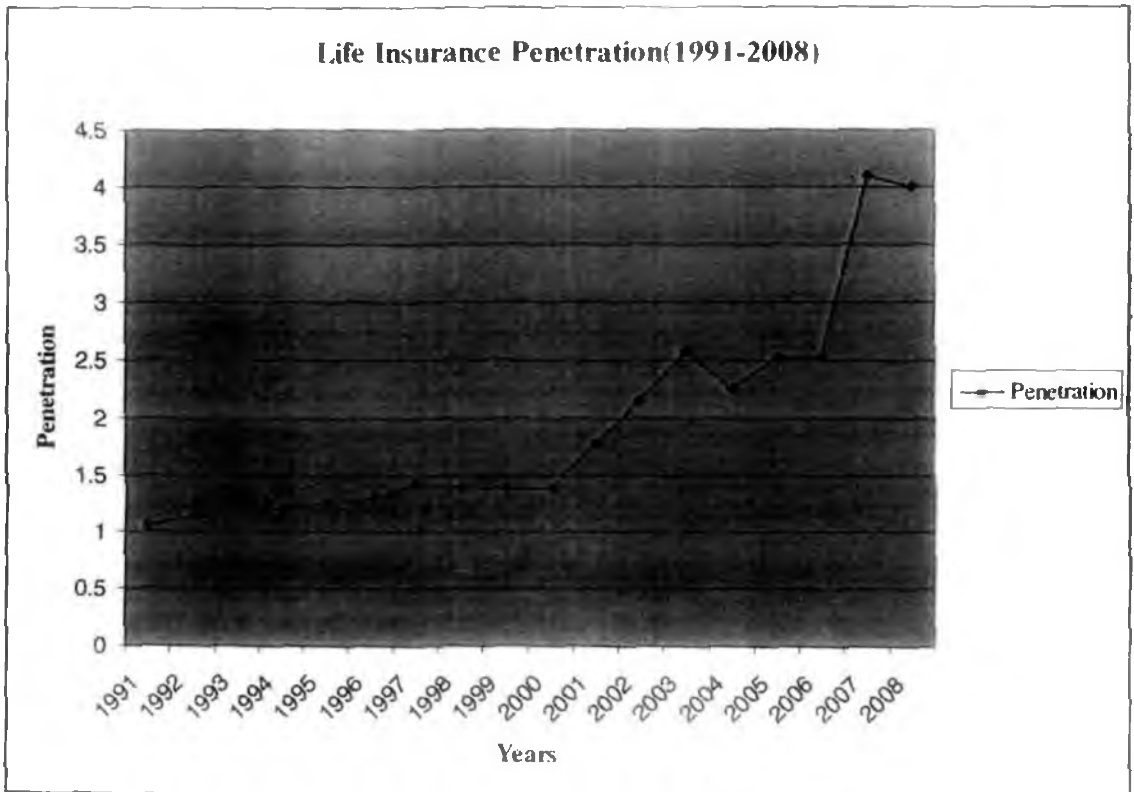
Country	Ranking	Total Business	Life Business
United states	11	8.55	4.23
Canada	17	6.49	3.19
Argentina	46	2.30	0.81
Brazil	51	2.01	0.35
Mexico	57	1.68	0.82
United Kingdom	2	13.35	10.30
Switzerland	3	12.84	8.06
France	12	8.52	5.70
Germany	16	6.52	2.96
Russia	49	2.13	0.78
South Korea	4	11.28	8.39
Japan	5	11.17	8.87
Hong Kong	25	4.72	3.63
Singapore	27	4.28	3.25
Malaysia	29	3.88	2.16
India	52	1.93	1.39
PR China	**58**	**1.63**	**1.02**
South Africa	1	16.54	13.92
Australia	7	9.82	6.43
World		7.52	4.57

Source: Swiss Re. sigma No. 9/2000. IRDA.

Due to the new economic policy initiated by the government in 1991, especially the reforms in the financial sector, India witnessed a rise in its macro-economic conditions which affects the per capita income positively and eventually the savings of people in the

financial products also have improved over the years[8]. In the 1997 the government gave greater autonomy to LICI in respect of policy formulation, product development and decentralisation of the corporation in decision making process at the zonal levels for the development of quicker operational efficiency[9]. This situation is motivated by the reforms initiatives in the life insurance sector with setting up of the Malhotra Committee on Insurance Sector Reforms. After the opening up of the life insurance sector in 2000, foreign players with their newly formed joint ventures started operating in the huge untapped Indian market. With their expertise knowledge in insurance sector along with the aggressive marketing strategy, the private insurers soon announced their presence in the market by snatching market share from the state monopoly LICI. With improved per capita income and increasing savings rate along with the availability of newer products of different insurers at competitive price, increases the consumption of life insurance products in India which can be seen by the improved penetration level showed below.

Fig: 5.1



Source: annual Reports, IRDA; Swiss Re, sigma, various issues, annual reports of LICI.

We can see from fig. 5.1. that the level of penetration has improved from 1% to 1.5% percent of GDP during 1991 to 1999 but a visible structural change in the penetration level can be seen since the year 2000. After 2000, the level of penetration goes up from level of 1.39% to 4.10% in 2007 and 4.0% at the end of 2008. We know that the life insurance sector was opened in 2000 and since then the sector has witnessed a number of players operating in the market to underwrite new life business. At the end of the financial year 2007-2008, if we compare India's position in the world insurance market with that of the position in 1999, we can see an improved performance.

Table: 5.4 **International Comparison of Life Insurance Penetration* in 2008**

(*premiums in % of GDP in 2008)

Country	Ranking	Total Business	Life Business
United states	13	8.90	4.20
Canada	20	7.00	3.20
Argentina	55	2.50	0.70
Brazil	47	3.00	1.40
Mexico	62	2.00	0.90
United Kingdom	2	15.70	12.60
Switzerland	8	10.30	5.70
France	9	10.30	7.30
Germany	22	6.60	3.10
Russia	56	2.40	0.10
South Korea	5	11.80	8.20
Japan	10	9.60	7.50
Hong Kong	6	11.80	10.60
Singapore	18	7.60	6.20
Malaysia	32	4.60	3.10
India	30	4.70	4.00
PR China	48	2.90	1.80
South Africa	3	15.30	12.50
Australia	21	6.80	3.80
World		7.50	4.40

Source: Swiss Re, Sigma No. 3/2008, IRDA

India stood at 30th position in the total insurance business and its life insurance penetration level reached at 4% which is best among the BRIC (Brazil, Russia, India, China) countries and better than Australia (3.80%), Malaysia (3.10%), Germany (3.10%), Canada (3.20%) and almost at per with United States which is at level 4.20%[10].

Life Insurance Density is defined as premiums per capita, that is, how much each individual or the inhabitant of a country spends on average on life insurance. It is the ratio of premium volume to population. We will express density in constant dollars so that we can compare life insurance density of different countries with India by eliminating exchange differences. The per capita expenditure on life insurance in India was also very poor compared to other countries and that have been highlighted by the Malhotra Committee in its report too. In 1991 the per capita consumption of life insurance in India was just at US $ 1.11. During 1991 to 1999 when macro economic indicators were improving due to the implementation of new economic policies, the per capita consumption of life policies increased from US $ 1.11 to US $ 6.1 which was far short of international standards. India was placed at 79th place in the total (life and general) per capita insurance consumption with US $ 8.5. If we compare the density level of India along with the other countries in 1999, we could find the differences were quite wide and open. The highest per capita consumption of life insurance policies was at US $ 3103.4 in Japan and the other countries which were at high level of per capita consumption were Switzerland (US $ 2914), United Kingdom (US $ 2502.8), United States (US $1446.6),Australia (US $ 1333.6), France (US $ 1392.3),Hong Kong (US $ 858.7), Singapore (US $ 858.3),Germany (US $ 762.2), South Korea (US $ 760.5) and others. If we look at the BRIC countries then the results are not at satisfactory level and India's position was lowest among them. Brazil, Russia, India and China have per capita consumption of life policies at US $ 11.8, US $ 9.9, US $ 6.2 and US $ 8.3 respectively[11].

Table: 5.5 **International Comparison of Life Insurance Density* in 1999 & 2008**

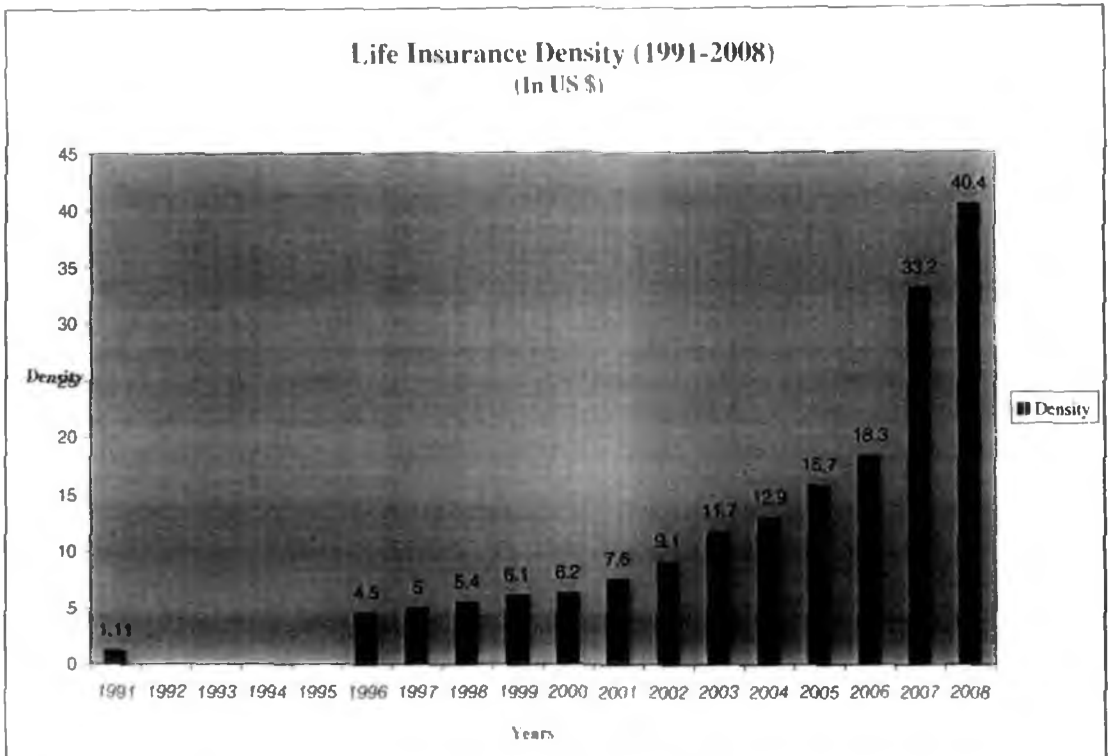
(*Density in US $)

Country	Ranking(1999) (Total Business)	Density(1999) (Life)	Ranking(2008) (Total Business)	Density(2008) (Life)
United states	4	1446.6	8	1922
Canada	17	674.6	15	1386.8
Argentina	34	62.3	56	46.6
Brazil	50	11.8	52	95.3
Mexico	47	41.3	55	75.8
United Kingdom	3	2502.8	2	5730.5
Switzerland	1	2914	4	3159.1
France	8	1392.3	6	2928.3
Germany	13	762.2	18	1234.1
Russia	61	9.9	50	6.1
South Korea	22	760.5	21	1656.6
Japan	2	3103.4	14	2583.9
Hong Kong	20	858.7	13	3031.9
Singapore	19	858.3	17	2244.7
Malaysia	37	78.1	44	221.5
India	79	6.2	77	40.4
PR China	**73**	**8.3**	**69**	**44.2**
South Africa	29	413.1	31	719
Australia	10	1333.6	16	1674.1
World		235.4		358.1

Source: Swiss re, Sigma No. 9/2000, 3/2008 and IRDA.

After the opening up of the insurance sector in 2000, the per capita consumptions of life insurance increased from US $ 6.2 to US $ 40.4 at the end of March 2008. We can see (fig.5.2) a sharp rise in the consumption level just after the liberalisation and privatisation of the life insurance sector in India.

Fig: 5.2



Source: annual Reports, IRDA; Swiss Re, sigma, various issues, annual reports of LICI

In 2008, if we again compare the BRIC counties, India and China are almost at same level of per capita consumption of US $ 40.4 and US $ 44.2 respectively. Brazil witnessed a higher increase in the per capita consumption at US $ 95.3 but Russia's performance was poor in life insurance sector which fell down from US $9.9 in 1999 to US $ 6.1 in 2008. The growth of world life insurance density from the level of 1999 to 2008 is 52.12% and the same in Asia is 17.55% where as India witnessed a growth of 551.61 % in *per capita life insurance consumption*[12]. *This growth is surely motivated by the reforms in* the insurance sector and financial sector as a whole.

The other means of judging the development in the life insurance sector are the development in the total premium income, life fund and number of new policies sold every year in the market. The rate of improved premiums (growth) is much faster in the post reforms period than the period during 1991 to 1999 and this development is visible in the fig.5.3. where the building blocks are higher up in the post 2000 years. In the year 1991 the total premium volume of life insurance industry in India was at Rs. 4,799 crore and the same went up to Rs. 24,630 crore in 2000. The total volume of premium reached to Rs. 201,351 crore in 2007-2008 from Rs. 24,630 crore in the year 1999-2000 which is more than 700 % increase[13].

In case of new policies issued by all the insurance companies every year in India, we could find a radical transformation in the consumption pattern of the life insurance policies in the post reform period. The total numbers of new policies sold (by LICI only) in 1991 were at mere 86.54 lakh which went up to 148.57 lakh in the year 1999. But due to the reforms in the life insurance market in 2000, the total number of new policies issued by the existing LICI and new insurers were at 169.99 lakh which ended up at 508.74 lakh policies in 2007-2008[14]. This is a three fold improved performance by the life insurance industry (see fig.5.4).

We, therefore, can say that the reforms in the insurance sector have affected in a positive manner and in near future we will be able to see more development in this segment.

Fig: 5.3

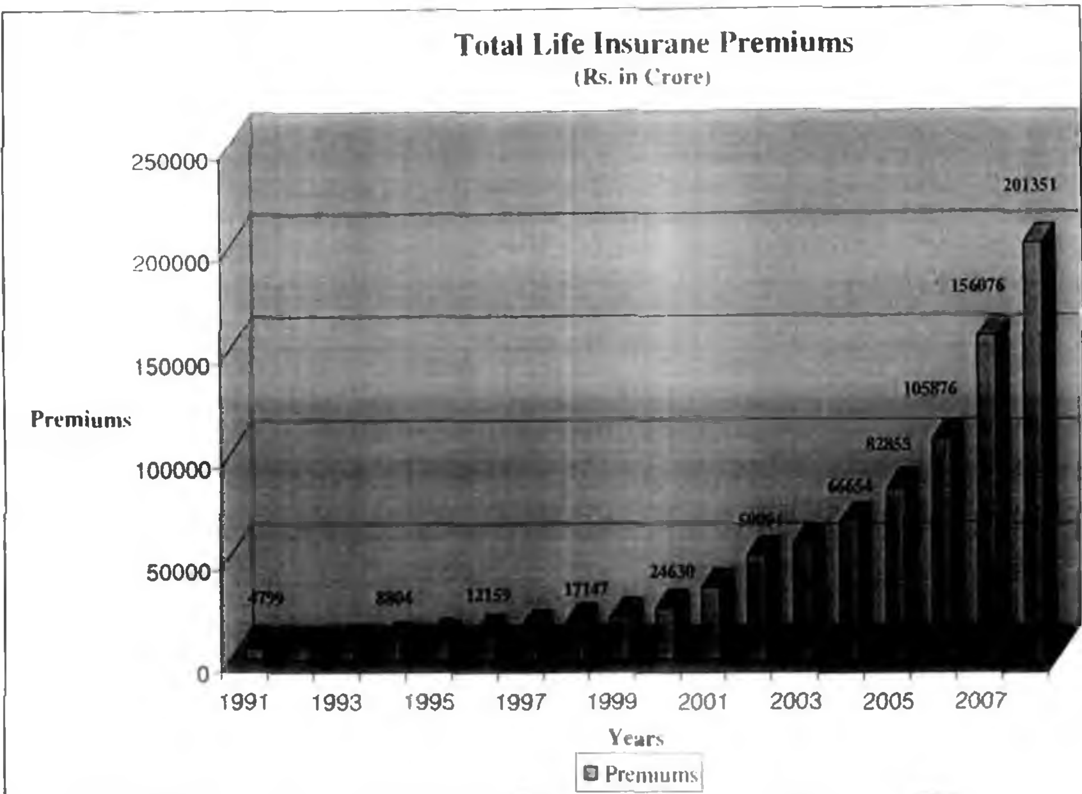
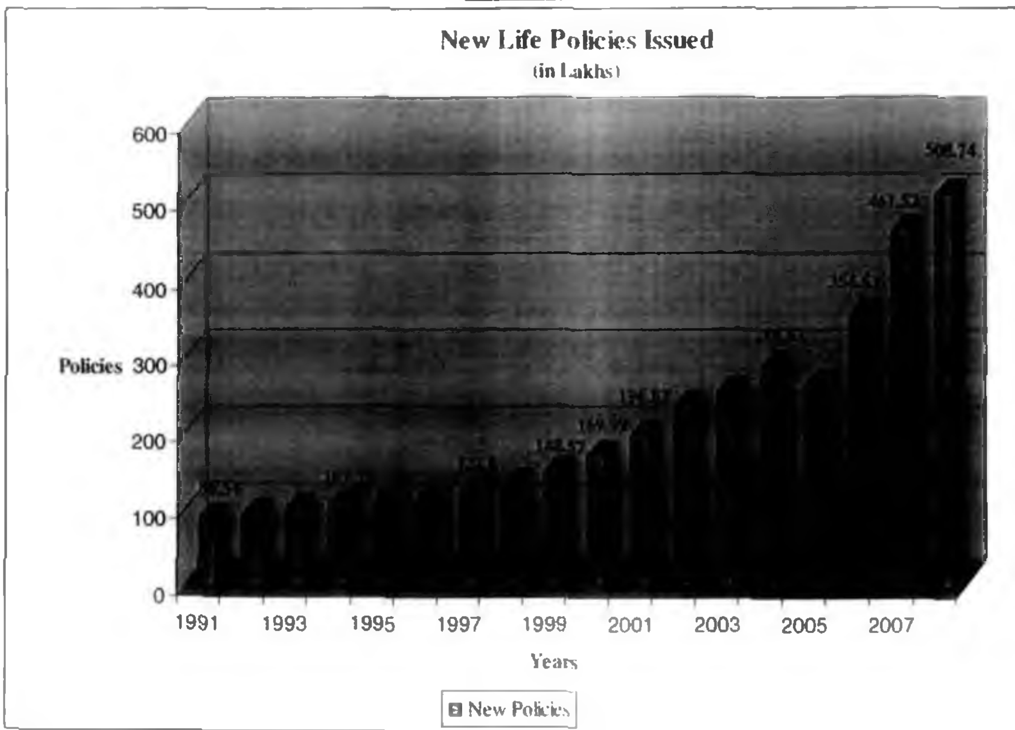


Fig: 5.4



Source: Annual Reports, LICI, (various years); Annual Reports, IRDA, (various years); EPW, Jan. 20, (2001).

5.3: Spread of life insurance in rural areas of India

The spread of life insurance in India compared to international standards especially the spread of life insurance in rural areas was poor and that has been one of the prime reason behind the reforms in this sector. The poor performance of Indian life insurance industry was mentioned by the Malhotra Committee in its report and advocated for the participation of private domestic and foreign insurers in the Indian insurance industry and recommended some mandatory obligations for the new participants in the life insurance industry.

All the insurers are obligatory to provide some coverage for the **rural and social sector** as stipulated in the IRDA Regulations, 2002, which is known as the "Obligations of Insurers to Rural or Social Sectors"[15]. Life insurers have to maintain the following mandatory coverage in the rural areas for the first five years as,

(a) five percent in the first financial year;

(b) seven percent in the second financial year;

(c) ten percent in the third financial year;

(d) twelve percent in the fourth financial year; and

(e) fifteen percent in the fifth year of total policies written direct in that year.

In case of social sector obligation, life insurers have to keep up the following obligatory covers as under;

(a) 5000 lives in the first financial year;

(b) 7500 lives in the second financial year;

(c) 10,000 lives in the third financial year;

(d) 15,000 lives in the fourth financial year; and

(e) 20,000 lives in the fifth financial year.

As the time progresses and the new insurers operating for the last eight years, IRDA issued new guidelines for the insurers in respect of rural and social sector obligations. With the new amendments in 2007-08, the obligation for the private life insurers' up to 10th year

of operations have been laid down along with the revised performance yard stick for the public sector unit LICI.

The obligations of the private life insurers according to the new amendment (F.No.IRDA/Reg/1/42/2008)[16] is as follows:

<u>In respect of rural sector</u>

(1) eighteen per cent (18 %) in the seventh financial year,

(2) nineteen per cent (19%) in the eighth and ninth financial year , and

(3) twenty per cent (20 %) in the tenth financial year,

of the total policies written direct in that year.

<u>In respect of social sector</u>

(1) twenty five thousands life in the seventh financial year,

(2) thirty five thousands life in the eighth financial year,

(3) forty five thousands life in the ninth financial year, and

(4) fifty five thousands life in the tenth financial year.

The obligations of the insurers towards the rural and social sector for the tenth financial year shall also be applicable in respect of financial years there after.

Based on the amendments notified by the IRDA(3rd January, 2008), the obligation of LICI in respect of rural sector and social sector[17] for the financial year 2007-08, 2008-09 and 2009-10 are as under;

<u>Rural sector obligations</u>

(1) twenty four per cent of the total policies written direct in 2007-08,

(2) twenty five per cent of the total policies written direct in 2008-09 and in 2009-10.

<u>Social sector obligation</u>

(1) twenty lakh lives should be covered or written for the years 2007-08 to 2009-10.

Before going into the post reform performances of the life insurance industry in spreading the life insurance through out the India, it would be pertinent to examine the

development made by the state owned life insurer LICI in the pre reform period. The following table gives us the clear picture of the development made by the LICI during its tenure of monopoly. Importantly, LICI had done a commendable job in spreading the life insurance in the rural areas (this was one of the main factors behind the nationalisation of the life insurance industry in 1956). LICI's share of policies in the total new business in the rural sector rose to 57.5 % in 1999-2000 from 44.7 % in 1991-92. At the end of the financial year 1999-2000, LICI has underwritten almost 50% of its total sum assured business from the rural sector. Though the share of total number of policies sold in rural areas is higher than that of the urban areas, the share in total business volume is low in the same area, which means that the premium volume is less in the rural India[18].

Table: 5.6 **Growth of Rural Business (in percent) (1991-2000)**

Years	No. of Policies (Growth)	Sum Assured (Growth)	Share in Total New Business	
			Policies	Sum Assured
1991-92	12.3%	20.8%	44.7%	38.8%
1992-93	7.6%	13.2%	44.6%	39.2%
1993-94	9.4%	18.4%	45.3%	39.9%
1994-95	0.9%	29.3%	45.1%	39.1%
1995-96	7.2%	-1.4%	47.7%	41.0%
1996-97	14.8%	14.2%	49.2%	42.8%
1997-98	13.4%	13.5%	51.4%	43.3%
1998-99	18.8%	28.4%	54.7%	47.0%
1999-00	19.5%	24.9%	57.5%	48.7%

Source: LICI Annual Reports: various issues; EPW: January 20, 2001

After the opening up of the insurance sector, IRDA issued new definition for the rural sector in the year 2000 to identify the rural areas of India for the life insurers as per the new census. The formal definition of the rural sector[19] is the one, *which is not urban.* Urban sector is defined to include all locations with municipality, corporation, notified town area and all other locations specifying the criteria,

(1) a minimum population of five thousand,

(2) at least 75 % of male workforce are engaged in non-agricultural activities, and

(3) a population density of over 400 people per sq. km.

On the basis of new definition of the rural sector[20], LICI's new business in terms of policies in the rural area revised at around 18 % which was 57 % according to the old yardstick. At the end of financial year 2007-08, LICI has written 21.67 % of its new policies from the rural sector.

Growth rate in the rural and social sector has definitely been picking up as a result of the IRDA's focus on this sector. India's life insurance firms have exceeded expectations in terms of growing their business in rural India, and most firms in the business are actually ahead of targets laid down by Insurance Regulatory and Development Authority. An analysis of data from seven life insurers for 2007-08 which accounted for more than 80% of the life insurance market, reveals that all of them achieved their individual targets laid down by IRDA (see Table: 5.7). The targets vary according to the number of years of operation of the individual insurer. The seven firms are Aviva Life Insurance Co. India Ltd, Birla Sun Life Insurance Co. Ltd, ICICI Prudential Life Insurance Co. Ltd, Life Insurance Corporation of India (LICI), Max New York Life Insurance Co. Ltd. Reliance Life Insurance Co. Ltd and SBI Life Insurance Co. Ltd.

The statutory target in the rural sector for the Aviva Life Insurance Co. India Ltd was 18 % and the company achieved to sell 19 % of its total new policies in the rural area. In the case of SBI Life, the firm was expected to sell 18% of all its policies in the rural areas, it ended up selling 22%. ICICI Prudential Life Insurance Co. Ltd achieved 22 % of its total new policies from the rural sector where the obligation was pegged at 18 %. Similarly. Birla Sun Life Insurance Co. Ltd and Max New York Life Insurance Co. Ltd managed to sell 21.6 % and 22 % of its new policies respectively in the rural sector when statutory obligation for the firms was at 19 %.

Table: 5.7 **Growth of life business in rural & social sector in 2007-2008**

Company	Rural sector (% of policies)		Social sector (no. of lives)	
	Target	Achieved	Target	Achieved
Aviva	18 %	19 %	25,000	464,918
Birla	19 %	21.6 %	35,000	86,138
ICICI	18 %	22 %	25,000	117,000
LICI	16 %	21.67 %	20,00,000	90,43,413
Max New York	19 %	22 %	35,000	81,961
Reliance	18 %	19.24 %	25,000	54,394
SBI	18 %	22 %	25,000	280,000

Source: Individual Company Reports: (2007-08).

"Social business" includes only the number of policies sold to poor and economically backward people where insurance penetration has been much lower than that in the rural sector. Significantly, in the post liberlised era, insurance firms did even better in terms of their social sector obligations are concern. Aviva Life Insurance Company sold 464,918 policies in the social sector where the stipulated target was only 25,000 policies in 2007-08 financial years. Similarly, ICICI Prudential Life covered 117,000 customers in rural areas as against its target of 25,000 in the same financial year. LICI has done an impressive job in this area by selling 90,42,413 policies in the social sector and the leading insurer in India in terms of volume and spread.

In June 2007, IRDA changed its insurance norms to ensure benefits of insurance to reach the socially and economically backward section of the population. Under the new guidelines, policies sold to the social sector need to have a minimum sum assured of Rs5,000 or a maximum of Rs50,000. It is being noticed that the all the insurers adhered to the task of meeting the mandatory rural and social obligations determined by the life insurance regulator, IRDA[22]. In spite of this development the rural life insurance penetration is still below any standard. According to a report, **'Insurance in Next 2 Years'**,

by ASSOCHAM, (www.assocham.org), May 2008, out of 78 per cent households having awareness about life insurance in rural India, only 24 per cent was policy owners. Rural India may offer a business opportunity worth US$ 23 billion for the insurance companies if the segment can be wooed with innovative saving schemes at affordable premiums.

5.4: Efforts made by the private life insurers

In spreading life insurance through out the country, the efforts made by the life insurers are encouraging in the present scenario. In the post reform period the growth in the number of life insurance agents is much faster than ever before in India. In the first year of reform (2000-2001) the total numbers of life insurance agents working in the life insurance industry were 115,715 which consisting 66,777 and 48,938 life agents from urban and rural sector respectively[23].

Table: 5.8 **Number of Rural Agents of Life Insurers**

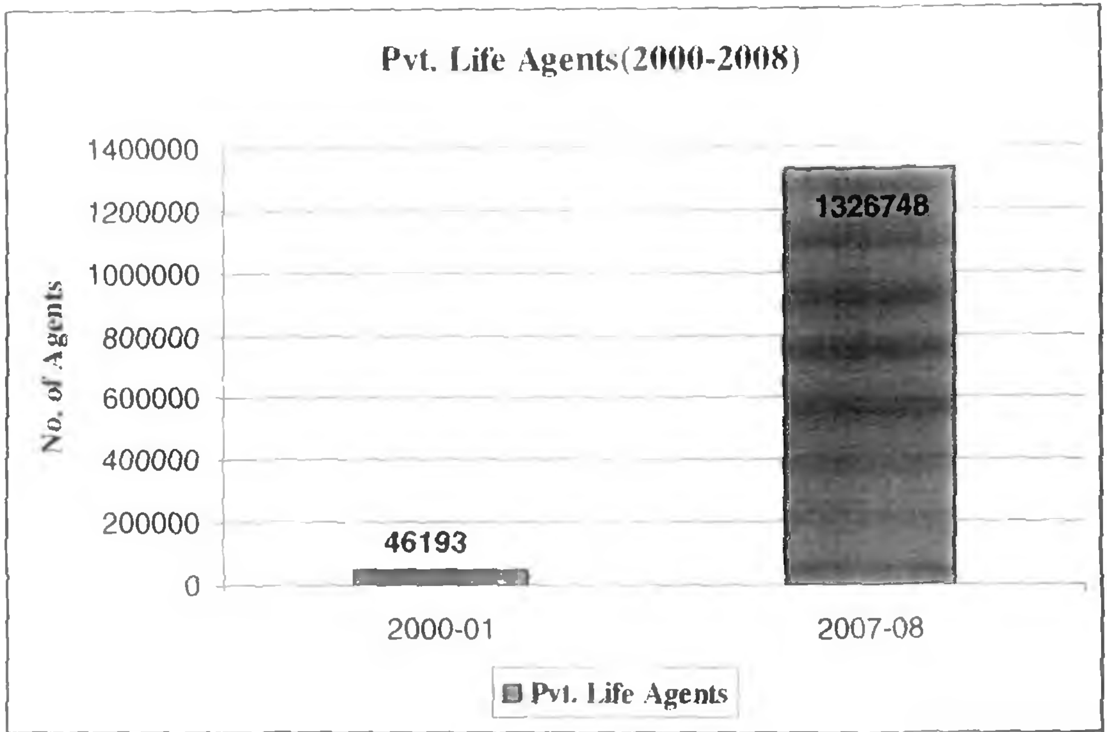
Years	LICI	Pvt. Ins. Comp.	Total
2000-01	48930	08	48938
2001-02	191302	485	191787
2002-03	479432	2690	482122
2003-04	714666	7109	721775
2004-05	894481	14087	908568
2005-06	1179638	41199	1220837

Source: IRDA Annual Reports; Various years.

In the first financial year of reforms, IRDA issued 46,193 agent licenses to the private life companies. The growth in the total number of insurance agents in the private sector is much more than the state life insurer. At the end of financial year 2007-08, the total number of private life insurance agent stood at 13,26,748 and the total number

(Private insurers and LICI) of life agents working in the Indian life insurance industry is 25,20,492.

Fig: 5.5



Source: IRDA Annual Reports, Various years.

To tap the potential customers, insurers also expanded their branches through out the country. Total number of life insurance branches of all the life insurance companies in India (private & state) goes up to 8913 at the end of 31st March 2008 from 2199 in 31st March 2001. The growth in the total number of offices in the present financial year is over 65% (from 5373 in 2007 to 8913 in 2008). The fig 5.6 shows that the increase in the total number of branches started pocking after 2004. In fact, to get the share of huge untapped Indian insurance market private life insurance companies left behind LICI in 2006-07 financial year in respect of number of branches operating in the life insurance market. At the end of 31st March 2008, the total number of private life branches stood at 6391 from 3072 in 2006-07 (a growth of almost 110 %). Where as, in case of LICI, it is 2522 in 2007-08 from 2301 in 2006-07 (a growth of around 10 %)[24].

Fig: 5.6.

Source: IRDA Annual Reports; Various years.

Significantly, the growth in the rural branches has also increased, showing the potentiality of the Indian rural sector. The table exhibits that in 2007-08, the growth in the total rural branches of life insurance companies is more than 110 %. That is, the number of total rural life branches increased from 1318 in 2006-07 to 2797 in2007-08.

Table: 5.9 **Number of Rural Branches of Life Insurers (2007-208)**

Insurers	No. of Rural Branches (2007)	No. of Rural Branches (2008)
Pvt. Ins. Comp.	546	1902
LICI	772	895
Industry Total	1318	2797

Source: IRDA Annual Reports; (2006-07) & (2007-08)

Surprisingly, private life insurance companies' growth in the rural areas is better than the expected state life insurer LICI. In 2007-08, the private life insurers outdo LICI in rural branch network in India. Private life insurance companies registered a growth of more than 250 % in 2007-08 where LICI's growth was mere at 16 %. Out of the total rural branches of 2797, private life insurers are having 1902 branches and LICI has 895 branches in India in 2007-08. Private life insurers now trying to penetrate the potential rural market by establishing new branches in the rural sector and they have out lined the LICI in this respect[25].

5.5: Impact on generating employment

The policy behind the opening of the insurance industry was to generate more employment opportunity in the economy directly from the insurance industry as well as indirectly. It was argued that the more and more life companies will generate employment opportunity through direct employment in their organisation in the form of managerial and office staffs and most importantly issuing licenses to the life insurance agents. On the other hand, life insurance companies generate long term savings in the economy which can be invested in different sectors to create more employment opening in the country. This section will deal only with the direct employment openings of the life insurance industry after the opening up the same in 1999.

During the tenure of 2000-2008, the number of total life insurers increase from 1 to 21 including the state life insurer LICI. This implies that the total number of life insurance offices also increased and the increasing number of offices are filled with the employees consisting officers, development officers and supervisory and clerical staffs along with the huge numbers of life insurance agents appointed by all the life insurers to market their products. The recent development in the Indian life insurance sector can be witnessed by the spread of life insurance offices through out the country. The total number of branches of life insurance companies increased to 8913 at the end of 31st March 2008 form 2199 at the end of 31st march 2001. The development in the number of life offices in case of private life insurance companies is quite impressive. The number of total branches of private life

companies was just 13 at the end of 31st March 2001, but the same increased to 6391 branches by the end of financial year 2007-08. *Private life insurance companies surpass the* LICI in the total branch networking (see Fig. 5.6) during the financial year 2006-07 and the momentum of opening up of new branches are stiff. During the second quarter of financial year 2008-2009, the life insurance industry added another 1480 branches (www.indiaonestop.com/insurance/insurance.htm) and crossed the 10,000 mark. Importantly, out of 1480 new branches 1293 branch offices were set up by the private life insurance companies.

Total number of direct employees in the life insurance sector is also increasing year by year. As the new companies emerge in this sector to tap the potential of untapped market in India, they employ more and more people in their portfolio. But LICI is still the major employer in the life insurance industry with 114,045 direct employees at the end of financial year 2007-08. Out of this 21,297 are class I officers and 23,011 are development officers and the rests are supervisory and clerical staffs. During the second quarter of financial year 2008-2009, the life insurance industry has added 53,332 employees directly and the total numbers of employees (www.indiaonestop.com/insurance/insurance.htm) of the industry now increased to more than 3 lakhs.

Table: 5.10. **Individual New Business Premium of Life Insurers for 2007-08**

(Channel Wise)
(In percent)

Life Insurers	Individual Agents	Corporate agents	Brokers	Direct Selling	Total New Business
Pvt. Comp.	59.81	29.92	1.50	8.78	100
LICI	98.36	1.59	0.05	-	100
Industry Total	83.75	12.33	0.60	3.33	100

Source: IRDA annual report, 2007-08.

Another employment opportunity provided by the life insurance industry is the issuing of agent licenses to the people. This is the only form through which individual life

insurance policies are sold in India (except corporate agents and brokers) as the companies can't sell their products directly. This shows the importance of life agents in this industry. The total number of individual life agents of the industry at the end of 2007-08 financial year increased to more than 25 lakhs (25,20,492 in exact figure) from 115,715 life agents in 2001-02 financial year. During the financial year 2007-08, private life companies together surpass LICI in employing number of life agents in the insurance market.

Table: 5.11.

Development of Individual Agents of Life Insurers

Years	Pvt. Comp.	LICI	Industry Total
2000-2001	2,737	1,12,978	1,15,715
2005-2006	3,70,846	10,52,993	14,23,839
2006-2007	8,90,152	11,03,047	19,93,199
2007-2008	13,26,748	11,93,744	25,20,492

Source: IRDA annual report, various years

Since the opening of the life insurance sector in 2000, private life insurers have issued 13,26,748 life agent licenses working for them to explore the vast Indian market. With direct employment in the life insurance companies along with the direct life agents, Indian life insurance industry has employed more than 28 lakhs people with-in the eight years of reforms[26]. This direct employment is excluding the other opportunities created by the efforts made by this industry in the form of investments in the other sectors with the help of mobilization of long term savings. For example, investment in capital market, infrastructure, housing etc. along with advertisement industry. Since the Indian life insurance industry is at its nascent stage, it is expected that the development in life insurance market would fetch huge employment opportunities in the near future. Every year few new companies are coming to India to explore the huge potential market which would require man power to reach to the people and to do business.

5.6: Introduction of New Types of Policies

The insurance sector was opened up for private participation on the opinion that in spite of colossal contributions made by the public sector insurer, LICI, to expand spread and awareness of life insurance, the interests of the consumers would be better served if there is competition among the insurers. It was also recognized that the vast potential Indian market can be explored only when there will be a large number of companies spreading their wings across the country and offering a variety of products catering to the demands of different sections of the population.

Before the opening up of the life insurance sector in India, LICI was the only service provider of life insurance products and enjoyed complete monopoly in the market. Due to this advantageous positioning in the life insurance market LICI never made any effort to meet the customer's need. The focus was mainly to provide basic services to the huge untapped life insurance market[27]. The largest segment of total life business has been the individual life insurance and the most popular life product was a protection policy named "Jeevan Suraksha" with or with out money back. The policies were sold mainly whole life policies, endowment policies and money back polices. But the term policy was the largest selling product in LICI. However, after the liberalisation of the life insurance market in 2000, there is a change in the mindset of the insurers in India. Insurers bring *innovations in the product design and offering products which suits the customer's need* and offers benefit to the customers in terms of premium payment options, returns and requirements. Focus has been shifted to customized products to suit all sections of population so that people can take policies according to their needs. Since 2000, the innovation in the products segment bring array of customized and need based policies before the common people which can be seen from the product portfolios of different companies operating in India. For example, India have witnessed the introduction of ULIPs (Unit Linked Insurance Plan- which offers life insurance as well as investment), new pension schemes, health insurance policies, single premium products and micro insurance products along with improved annuities, child's plan, education plans and money back policies. Indian life insurance market has also witnessed the introduction of variety of term

insurance plans and few special plans for women, retirement and total risk cover for families. This innovation can be seen from the bouquet of products offered by the insurers in India to cater the needs of common masses in the form of life insurance products, given in the Box. 5.1, below[28];

Box: 5.1 Life Insurance Products Offered by the Insurers Operating in India

Money Back • Jeevan Chhaya(LIC) • Jeevan Surabhi(LIC) • Money Back Policy(LIC) • Jeevan Rekha(LIC) • Jeevan Samriddhi(LIC) • Money Back(HDFC) • *Flexi Cash Flow(Birla Sun Life)* • ICICI Pru CashBak (ICICI Pru) • KotakMoney Back Plan(OM Kotak) • Money Saver Plan (TATA-AIG) • Cash Care(Allianz-Bajaj) • Cash Gain(Allianz-Bajaj) • Maximizing Life Money Back Plan (ING Vysya) • Dhana Shree (AMP Sanmar) • Met Sukh (MetLife) • *Met Junior MB(MetLife)* **Multiple Covers** • Double Endowment(LIC) • Jeevan Mitra (Double) (LIC) • Jeevan Mitra (Triple) (LIC) **Pure Risk Covers** • New Bima Kiran(LIC) • *Bima Sandesh(LIC)* • Convertible Term Assurance(LIC) • Convertible Whole Life(LIC) • Ltd. Payment Whole Life Plan(LIC) • Whole Life Plan(LIC) • Anmol Jeevan(LIC)	**For Women Only** Jeevan Bharati(LIC) **For Married Couple** • *FJeevan Saathi(LIC)* • Jeevan Saritha(LIC) • Joint Life Plans(LIC) **For Disabled Dependants** • Jeevan Aadhar(LIC) • Jeevan Vishwas(LIC) **For Home** • *Mortgage Redemption Plan(LIC)* • *Loan Cover Term Assurance (HDFC)* • Mortgage Redemption Plan (MetLife) **Rural Life** • Bima Kavach Yojana(Birla Sunlife) • Kotak Gramin Bima Yojana (OM Kotak) **Group Life schemes** • Group Mortage Redemption Assurance *Scheme(LIC)* • Group Leave Encashment Scheme(LIC) • Group Gratuity Scheme(LIC) • Group Insurance Scheme(LIC) • Group Savings Linked Scheme(LIC) • Group Superannuation Scheme(LIC) • Development Insurance Plan(HDFC) • Group Term Insurance(HDFC) • Kotak Term Grouplan(OM Kotak) • *Kotak Credit-Term Grouplan(OM Kotak)* • Kotak Gratuity Grouplan (OM Kotak) • Group Protection Solutions (Birla Sun Life)

- Flexi Life Line(Birla Sun Life)
- Birla Sun Life Term Plan(Birla Sun Life)
- Premium Back Term Plan (Birla Sun Life)
- ICICI Pru Life Guard(ICICI Pru)
- Whole life Plan(Max New York Life)
- Level Term Policy (Max New York Life)
- 5 year term renewable and convertible Insurance(Max New York Life)
- 15 Year Lifeline (with Return of Premiums) Plan(TATA-AIG)
- Assure Lifeline Plans(TATA-AIG)
- Mahalife(TATA-AIG)
- Term Assurance Plan(HDFC)
- Risk Care(Allianz-Bajaj)
- Term Care(Allianz-Bajaj)
- Lifetime Care(Allianz-Bajaj)
- Kotak Term Assurance Plan(OM Kotak)
- Kotak Preferred Term Plan(OM Kotak)
- Fulfilling Life Anticipated Whole Life Plan (ING Vysya)
- Rewarding Life (ING Vysya)
- Conquering Life(ING Vysya)
- Nitya Shree (AMP Sanmar)
- Raksha Shree (AMP Sanmar)
- MET 100 Gold (Participating Limited Pay Whole Life)(MetLife)
- MET 100 Platinum (Participating Limited Pay Whole Life) (MetLife)
- Met 100 (Non Participating Limited Pay Whole Life)(MetLife)
- Suraksha (Met Life)
- LifeLong (Aviva Life)
- Secure life (Aviva Life)
- LifeShield (Aviva Life)
- Amar Suraksha (Aviva Life)
- Swadhan (SBI Life

For Children

- Children's Deferred Assurance Plan(LIC)
- Group Superannuation Plan(Birla Sun Life)
- Group Gratuity Plan(Birla Sun Life)
- Super Suraksha & Swarna Ganga (SBI Life)
- Group Risk Care Plan Employer - Employee(Allianz Bajaj)
- Group Risk Care Plan - Non Employer - Employee(Allianz Bajaj)
- Group Credit Care Plan - Employer - Employee(Allianz Bajaj)
- Group Credit Care Plan Non Employer - Employee(Allianz Bajaj)
- Group Gratuity Plan (ICICI Pru Life)
- Group Term Assurance(ICICI Pru Life)
- Group Term Assurance AMP Sanmar
- Creditplus(Aviva Life)

ULIP

Unit Linked Insurance Plans

For Retirement

- Bima Nivesh -2004 (LIC)
- Jeevan Akshay II(LIC)
- New Jeevan Dhara I(LIC)
- New Jeevan Suraksha I(LIC)
- Varishtha Pension Bima Yojana (LIC)
- ICICI PRU Forever Life(ICICI Pru)
- Sanjeevan(SBI Life)
- Kotak Retirement Income Plan(OM Kotak)
- Nirvana Pension Plan (Tata-AIG)
- Life Long Pensions (SBI Life)
- Bhagya Shree (AMP Sanmar)
- Easy Life Retirement (Participating) Plan(Max New York)
- Flexi Securelife Retirement Plan(Birla SunLife)
- Pensionplus (Aviva Life)
- Swarna vishranthi (Allianz Bajaj)
- Met Pension(par) (Met Life)
- AEGON Religare Pension Plan (AEGON Religare)

Investment Plans

- Jeevan Baalya(LIC)
- Jeevan Kishore(LIC)
- New Children's Deferred Assurance Plan(LIC)
- Komal Jeevan(LIC)
- SBI-Scholar(SBI Life)
- ICICI Pru Smart Kid (ICICI Pru)
- Kotak Child advantage plan (OM Kotak)
- Children's Endowment Policy(Max New York)
- Yuva Shree(AMP Sanmar)
- Children's Plan(HDFC)
- Met Bhavishya (MetLife)
- My Child (Birla sunlife)
- Young Achiever (Aviva Life)
- Jeevan Sukanya(LIC)[for girls only]

Special Plans

- Jeevan Saral (LIC)
- ICICI Pru Life Time(ICICI Pru)
- HealthFirst(Tata AIG)
- Setubandhan(SBI Life)
- Medicare(Birla SunLife)

- Bima Plus(LIC)
- ICICI PRU Assure Invest (ICICI PRU)
- ICICI PRU Life Link(ICICI Pru)
- ICICI Pru ReAssure(ICICI Pru)
- ICICI Pru Cash Plus(ICICI Pru)
- Kotak Safe Investment Plan(OM Kotak)
- Young Sanjeevan (SBI Life)
- Flexible Bond(HDFC)
- Single premium insurance bond(Max New York Life)
- Single Premium Bond (Birla Sun Life)
- LifeBond(Aviva Life)

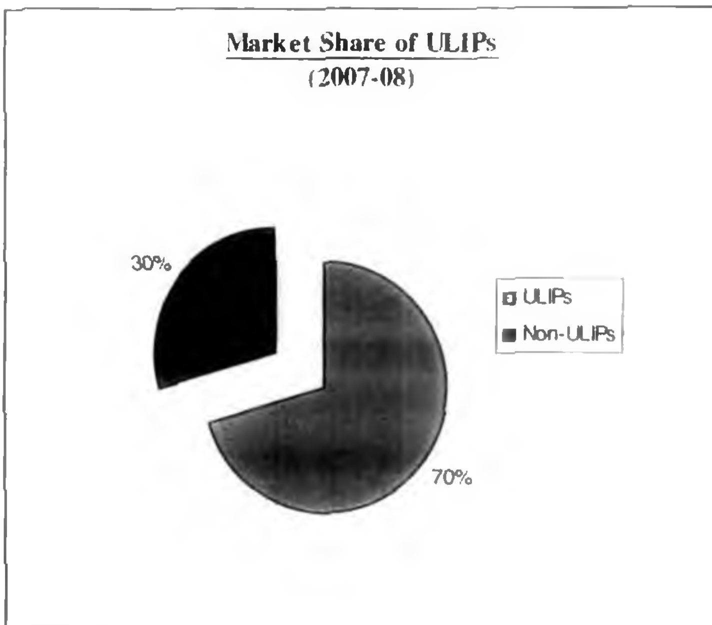
Sources: www.bimaonline.com. www.irdaindia.gov.in.

5.6.1: ULIPs in India

The most marked development in the Indian life insurance market was the introduction of Unit Linked Insurance Plans (ULIPs) in the post reform period (2000). Traditionally endowment policies have invested funds into government securities and other safe investments to ensure of the safety of the investor's fund and eventually those funds ended with lower return due to more safe investments. Now investors are no longer happy only with the risk portion of the life insurance products with low returns, they want more return on their investments and they are willing to take more risk ever before. Unit Linked Insurance Plans (ULIPs) are insurance policies that combine risk coverage with investing in the stock/debt markets. In effect, they are designed to behave as normal insurance policies plus mutual funds. An investor's contribution to ULIPs gets invested in specific

types of portfolios that he/she chooses. The policy typically pays back based on market returns on investments at the end of the insured period. Therefore, it forms an interesting savings instrument that can get good risk cover. The basic objective behind the ULIPs was to provide higher returns on the investment to hedge the inflationary pressure through a contract of insurance. ULIPs in India were launched at a time when the domestic economic condition was good and importantly the stock market was in boom. The ULIPs are preferred by the investors because they are more flexible, transparent, liquid and optional. Now the total life insurance market is almost taken over by the ULIPs which can be visible from the figure 5.7, below.

Fig: 5.7



Source: IRDA Annual report, (2007-08).

ULIPs are now captured more than 70 percent of the total market share. It is also noticeable that the private life insurers are giving more attention towards this market. Out of their total business in the life insurance industry, more than 90 percent are from ULIPs. As the life insurance industry is now driving by the wave of ULIPs, the state run insurer LICI is also not much behind the private players in the same market. LICI has also improved their business share from 30% (29.76) in 2005-06 to 62% (62.31) in 2007-08[29].

Despite the huge success of ULIPs in the life insurance market and the increasing popularity of ULIPs among the investors who still rely immensely on the advice made by the agents before them. The complicate design made it difficult for the policyholders/investors to understand the product design and the risk associated with it. Recently the insurance regulator, IRDA directed fourteen ULIPs such as Bajaj Alianz's Capital Unit Gain and Aviva to be simplified. These products are actually the actuarial funded ULIPs where charges are adjusted in returns evenly which give the impression of higher returns[30]. *In many developed countries actuarial funded ULIPs are not allowed and they have been withdrawn from the market subsequently after the introduction of such* products. But in India, the issue is not the actuarial funded product design; it is the issue of disclosure. According to the statement of former chief, IRDA, C.S. Rao, and I quote, "....... *The use of expression in the policy was not a part of the glossary that IRDA had issued*"[31]. The unscrupulous agents use the opaqueness to miss-sell the ULIPs to customers with a promise of higher returns.

Being a driving force of the total life insurance industry, ULIPs are very important for the whole industry and it is important to make ULIPs simpler to understand before the investors so that people should encourage investing in. IRDA has steeped in and taken some measures to tackle complaints on miss-selling of ULIPs such as usage of simple language, standard method of computing NAV, Fifteen days free lock-in period for the investors in case they are not satisfied with the terms and conditions of the policy. In few cases IRDA has fined the insurance companies for not complying with the norms issued by the IRDA for ULIPs, e.g., Max New York Life Insurance Company has been charged penalty of Rs. 500,000 under section 102(b) for violating directions issued by the authority in respect of ULIPs during the financial year 2007-08[32]. In an interview with a leading news paper, The Economic Times, dated 05.08.2008, the IRDA chief Hari Narayan says on tackling the miss-selling issue of ULIPs that,"*we have made it mandatory for companies to give a break-up of the charges in ULIPs and the exact amount that will be available for investment during the premium payment period. The policyholder and the marketing official selling the product have to sign the premium-cum-charges statement. Any change in*

the charges while underwriting or finalising the deal also has to be approved by the policy holder".

The markets for ULIPs are growing in Asian countries such as Korea, Taiwan and countries of South-East Asia. In India, it is also rising and driving the insurance market almost alone. The successes of ULIPs are dependent on the performance of the capital market or narrowly on the stock market. The recent effect of sub-prime crisis hit the financial markets of India and the growth of ULIPs takes knock on stock market slump[33]. With equity markets back on track, life insurance companies are trying to woo investors with ULIPs that require limited premium payments. Companies such as ICICI Pru Life, HDFC Standard and Max New York Life have recently launched ULIPs with a limited premium paying terms ranging from 1 to 5 years. According to the industry experts, people prefer to pay premiums for a shorter period and hence, life insurance companies are preparing products to bridge this gap. ICICI Prudential Life has launched its Secure-Save product aimed at retail customers; HDFC Standard's Unit Linked Wealth Multiplier targets High Net-worth Individuals while Max New York Life Insurance has played it safe with Smart Xpress, a limited premium payment ULIP product offering many options[34]. Since the exposure of the Indians in the capital market is limited, the decision of investors to choose ULIPs or Mutual Funds is dependent on the need of the investor. Mutual Funds are essentially short term or medium term in nature where as ULIPs are made for the longer duration along with an element life cover. It is important for the investors to understand his/her financial goals or requirements and take an informed decision.

5.6.2: Micro Insurance (Life) in India

For a long time a need has been felt for life insurance product that can be afforded by rural and urban poor in India. The draft paper by the Consultative Group to Assist the Poor (CGAP) working group on micro-insurance defines the micro-insurance as "the protection of low income households against specific perils in exchange for premium payments proportionate to the likelihood and cost of the risk involved". Since the coverage of life insurance in lower strata was too poor, GoI constituted a Consultative Group on Micro

Insurance in 2003 to examine existing insurance schemes for rural and urban poor with specific reference to pricing, products, outreach, servicing and promotion[35]. The report of the consultative group has brought out certain key issues relating to micro-insurance in India, such as,

- Micro-insurance has not penetrated the rural market;
- *Micro-insurance is not viable as a standalone insurance product;*
- The design of micro-insurance should be simple and flexible;
- Partnership between insurers and the social organizations NGO would be desirable to promote the benefit of micro-insurance at grass root level.

Building on the recommendations of the consultative group, the newly formed regulatory body of insurance, IRDA as part of its developmental role, put across the concept of micro-insurance in August, 2004 for comments from the prospective players. A large number of comments and suggestions were received and the draft regulations were discussed in the Insurance Advisory committee and also in the IRDA board before it were notified on 10th November, 2005. The main focus of the micro-insurance regulations was to provide a platform and rules to provide life insurance to the targeted segment of the population[36]. The main features of the IRDA (Micro-Insurance) Regulations[37], 2005, are as follows:

- tie up between one life and one non-life insurance company to make micro-insurance products;
- NGOs/MFIs and SHGs are allowed to distribute micro-insurance products as micro-insurance agents. Normal distribution channels such as agents, corporate agents and brokers can also distribute micro insurance products;
- All life insurance products are available for a maximum term of fifteen years;
- Some restriction are prescribed in the minimum and maximum sum assured for endowment, term and health insurance,

- The minimum qualification for appointment as an micro-insurance agent is removed;
- All the products sold as micro-insurance products have to be cleared by the IRDA;
- The insurance contracts are to be delivered in local languages to prospective policy holders and
- All micro insurance products will necessarily be underwritten by insurance companies only.

The flexibility in the regulation made it easy for the insurers to design micro-insurance products to cater the services to the rural and urban poor. A modest beginning has been made in the first year of micro-insurance notification by the IRDA. But the passage of Rural and Social Sectors' Obligation changed the landscape of the micro-insurance market dramatically in India when it is clarified by the IRDA that micro-insurance would form the part of the Rural and Social Sectors' Obligation under the provision of the Insurance Act, 1938[38].

The growth of micro-insurance (life) is decent though the volume is still too small. A major percentage of micro-insurance business in 2007-08 was procured under group business which amounted to Rs. 201.27 crore under 1.22 crore lives, while individual business accounted for Rs. 18.23 crore under 9.38 lakh life policies. The bulk of the micro-insurance business contributed by the state run life insurer LICI which has managed to acquire Rs. 16.13 crore from 8.54 lakh individual lives and Rs. 192.56 crore group premium from 1.14 crore lives. The number of micro-insurance agents has increased more than 300% in 2007-08 financial years. Once again state run insurance company, LICI has beaten the private life insurance companies convincingly in providing the micro-insurance

to the poor section of the society. The performance of the private life insurance companies are under scanner as they need to comply with the Rural and Social Sectors' Obligation under the new guidelines issued by IRDA every year. This quota of number of lives to be cover in one financial year creates a pressure on the life insurers operating in the market. IF the insurers fail to comply with the prescribed numbers of lives under the Rural and Social Sectors' Obligation; there is some instances that IRDA has fined some insurers[39]. According to the study of CGAP Working Groups on Micro-insurance, 2005, there have some unverified report that few private life insurers are dumping poorly serviced micro-insurance products to meet the quota requirements and some are stop selling micro-insurance

Table: 5.12

Micro-Insurance Agents: Life Insurers

Insurers	Agents (31-03-2007)	Agents (31-03-2008)
Pvt. Life Insurance Companies	79	418
LICI	1232	4166
Industry Total	1311	4584

Source: IRDA annual report, 2007-08.

products once they meet their target which was specified by the regulator, IRDA[40]. Nine life insurers have so far launched 26 micro-insurance products of which 13 are individual products and the rest 13 are group micro-insurance products[41].

Table: 5.13

List of Micro Insurance Products with UIN's:

Financial Year	Name of Insurer	Name of the Product/Rider	Product/Rider UIN No.	In operation	
				From (opening date)	To (closing date)
2007-08	Bajaj Allianz Life Insurance Co. Ltd.	Bajaj Allianz Jana Vikas Yojana	116N047V01	4-Apr-07	
2007-08	Bajaj Allianz Life Insurance Co. Ltd.	Bajaj Allianz Saral Suraksha Yojana	116N048V01	4-Apr-07	
2007-08	Bajaj Allianz Life Insurance Co. Ltd.	Bajaj Allianz Alp Nivesh Yojana	116N049V01	4-Apr-07	
2007-08	AVIVA Life Ins. Co. India Pvt. Ltd.	Grameen Suraksha	122N039V01	16-Mar-07	
2007-08	Birla Sun Life Insurance Co. Ltd.	Birla Sun Life Insurance Bima Suraksha Super	109N032V01	13-Aug-07	
2007-08	Birla Sun Life Insurance Co. Ltd.	Birla Sun Life Insurance Bima Dhan Sanchay	109N033V01	13-Aug-07	
2008-09	ICICI *Prudential Life* Insurance Co. Ltd	ICICI *Pru Sarv* Jana Suraksha	105N081V01	2-Jun-08	
2007-08	ING Vysya Life Insurance Co. Ltd.	ING Vysya Saral Suraksha	114N032V01	3-Sep-07	
2006-07	Life Insurance Corporation of India	LIC's Jeevan Madhur	512N240V01	14-Sep-06	
2008-09	Met Life India	Met Vishwas	117N042V01	2-Jun-08	
2007-08	SBI Life Insurance Co. Ltd.	SBI Life Grameen Shakti	111N038V01	6-Sep-07	
2007-08	SBI Life Insurance Co. Ltd.	SBI Life Grameen Super Suraksha	111N039V01	6-Sep-07	
2006-07	TATA AIG Life Insurance Co. Ltd.	Ayushman Yojana	110N042V01	30-May-06	
2006-07	TATA AIG Life Insurance Co. Ltd.	Navkalyan Yojana	110N043V01	30-May-06	
2006-07	TATA AIG Life Insurance Co. Ltd.	Sampoorn Bima Yojana	110N044V01	2-Jun-06	
2006-07	TATA AIG Life Insurance Co. Ltd.	Tata AIG Sumangal Bima Yojana	110N061V01	3-Jun-08	
2006-07	Sahara India Life Insurance Co. Ltd.	Sahara Sahayog (Micro Endowment Insurance without profit plan)	127N010V01	21-Apr-2006	
2007-08	Shriram Life Insurance Co. Ltd.	Shri Sahay	128N011V01	7-Feb-07	

Source: www.irdaindia.org.in (Product list updated as on 01.07.2008).

5.6.2.1: Demand for micro-insurance in India

Micro-insurance offers an innovative new way to fight against poverty by helping the rural and urban poor systematically manage financial risks to their livelihoods and lives. Approximately 950 million people in India (i.e., up to 90%) are excluded from the insurance market, which according to the study by the United Nations Development Programme (UNDP), *"Building Security for the Poor: Potential and Prospects for Micro-insurance in India"*, (2007), represents a powerful 'missing market'. The study also expressed its concern that there is a severe mismatch between services offered by insurers and the needs of the common rural and urban poor people and presently, only 2% of poor people have been covered under the umbrella of micro-insurance in India. Thus micro-insurance represents an untapped market of nearly US$2 billion in India[42]. In another report titled *"Selling Life Insurance in Rural India"*, by an international consultancy firm, Celent, highlighted life insurance penetration in rural India is as low as 3% and that Indian rural market holds tremendous opportunity for mainly the private life insurer as the market is expected to touch to Rs. 7,800 crore ($ 2.9 billion) by 2015[43].

Healthy economic growth is one of the important factors contributing to emerging opportunities for micro-insurance in India, which is increasing the income level among rural households. The contribution of the SHGs (Self Help Groups) can't be ignored in this respect which has led to more entrepreneurial activity in rural areas mostly of poor women. The poor wants to protect the money they earn but they not only want life insurance at an affordable price but also some other types of protection against high frequency risks such as health, accidents, fire etc. But insurance companies mostly offer standardized products for a clientele that is relatively better off i.e., urban people. The main factors behind showing less interest by the insurance companies towards micro-insurance for rural market are high cost of servicing the product and the difficulty in distribution of micro-insurance products. There is also exist challenges in product design due to the lack of a historical database on claims that compels the insurers to calculate premiums based on imprecisely macro aggregates which eventually affects the pricing of the product as the insurance companies become overcautious on margins. The insurance regulator in India, IRDA, has

Box: 5.2
Post Office and Life Insurance

The basic objective of life insurance policies is to protect people financially when some eventualities develop. This requirement is more of a need when the government not in a position to meet all the social security needs of the countrymen especially the poor and more specifically to rural poor. There is an inverse co-relation between life insurance consumption and social security expenditure by the government. If the individual consumption of life insurance policies increases in rural areas, government spending in social security will be less which would leave the government with some amount free to channelised in other sector for developmental purposes. In India, more than 70% people live in rural areas and out of that only 27 % (rural penetration) has been covered under the life insurance umbrella. Therefore, the low coverage and huge untapped population in the rural sector need to be cover with the protection of life insurance. We should be looking for new ways to provide insurance to the larger section of population which lives in the rural areas.

Here, post offices can play a pivotal role in spreading the life insurance cover to the rural India especially the new micro-insurance products. Though India Post has its own life products, it would be better if the post offices sells and distribute the other micro-life insurance products of the different life insurers. Following are the reasons why POs should be considered as a vehicle for rural life insurance penetration,

- **Credibility:** POs have a tradition of delivering and distributing financial services since 1882. it has trust and credibility among every section of population to serve any kind of financial services.
- **Geographical Reach:** India Post has the largest postal network (155333 post offices of which 139074 (89%) are in the rural area) in the world. It has more than double the number of branches of all the commercial banks operating in India. None of the financial institution has such a big network to reach to the bottom of population as India Post has.
- **Experience:** the largest retail bank in terms of network, which double the size of all banking network put together in India. Recently, India Post has launched Postal Finance Mart (PFM) manned by staffs having Association of Mutual Funds of India (AMFI) and Insurance qualifications to enable them to provide investment advices to depositors. Again, over 250 India Post branches distributing mutual funds and bonds of Principal/Prudential ICICI/SBI/ICICI Capital/-IDBI bonds.
- **Employees:** At the end of financial years 2007-08, India Post has 500,883 employees of whom 220,081 are departmental employees and 280,802 are Gramin Dak Sewaks. In addition to this staff strength, India Post has more than 4 lakhs registered agents who help to market financial services on a commission basis. These huge potential staffs, which have the physical touch and relation to every corner of the country, can be explored by the POs to provide micro-insurance to the poor. An analysis of strength, weakness, opportunity and threat (SWOT) of India Post is presented below.

SWOT Analysis

STRENGTHS	OPPORTUNITIES
Large physical network	Redeployment of work force
Human resource	Growing market
Logistic Infrastructure	[illegible]
Credibility and trust of workers	[illegible]
Good Public image	[illegible]
Knowledge of rural needs	[illegible]
Income generation through [illegible]	
Experienced in financial [illegible]	

WEAKNESS	THREATS
Low customer awareness	[illegible]
No business culture	More individual agent network
Low skill labour	Corporate agents
Bureaucratic mentality	Own Products (PLI&RPLI)
Regulating monopoly	

taken few major steps to boost the micro-insurance coverage among the needed such as, putting the micro-insurance business by any insurers in the Rural and Social Sector's Obligation stipulated every year by the authority, making mandatory to offer micro-insurance products in local languages etc. The IRDA also recognizes the importance of SHGs and MFIs in serving the rural poor. The study of Mitra and Ghosh[44] (2007) highlighted the importance of the post offices in spreading the life insurance coverage in India in detail. The vast network of post offices can be used as means of spreading micro-insurance in India too. The study of Ghosh[45] (2007) showed that the post offices could offer micro finance in more affordable rate than any other sources. Using customized post office micro-insurance products could lead to the spur in the micro-insurance industry as this would reduce the cost of serving micro-insurance in rural areas in India. The recent study of UNDP (2007) emphasized the use of ICTs (information and communications technology) to cut down on costs to rural micro-insurance clients. Development of the micro-insurance sector needs a longer-term perspective that combines responsiveness to client priorities through the development of customized product which is financially viable with more and more effective distribution channels to reach to the rural market.

5.6.2.2: Role of Government in Spreading the Micro-Insurance

The spread and the growth of micro-insurance (life) in India will depend on how the insurers response to the needs of the rural poor. But the role of the government is also equally very important in this endeavor. In meeting its social obligations Government of India launched a special scheme named "**Aam Aadmi Bima Yojana**" (AABY) on October 2nd, 2007, covering the death and permanent disability for the benefit of rural landless households. The scheme will provide for insurance of head of the family or an earning member of the family of rural landless household between the age of 18 to 59 years against both natural and accidental death, and partial or permanent disability. The scheme is being implemented by Life Insurance Corporation of India (LICI). No premium is to be paid by the poor. The annual premium of Rs. 200 will be paid by the Central and State Government in the ratio of 50:50 and for this the Government has approved creation of two funds for Rs.1000 crore and Rs.500 crore for meeting its liability towards premium payment and

expenditure on scholarships respectively. At present, 14 State/Union Territories have agreed to implement the above mentioned scheme[46].

Addressing at the release of the Commemorative Postage Stamp and Awards Ceremony on the occasion of Quasquicentennial celebrations of Postal Life Insurance, on 11th February, 2009, the Union Minister of State for Communications and Information Technology, Shri Jyotiraditya M. Scindia said that the Government is planning to launch a new Rural Postal Life Insurance Scheme soon to give protection to the rural people for any eventuality. The new policy will be of Rs. of 1, 00,000/- of sum assured in which a person has to contribute only Rs.15/- per year as premium. The customers don't have to go to District Headquarters for medical check up for taking up the new RPLI as it can be done locally through Government Doctors and those who don't possess standard age proof documents can now take Rural PLI policies of up to Rs. One lakh Sum Assured. When this policy will be launched, the RPLI will certainly be the real Jeevan Bima (life insurance) for the 'Aam Aadmi'[47]. This effort is highly admirable on the part of Government to eradicate the financial risk of rural poor and to meet the insurance requirement of the rural poor. The government should try to improve the awareness level among the rural poor for better understanding of the micro-insurance products and its benefits and the role of the insurance regulator (IRDA) is exceedingly important in this regard.

5.6.3: Growth of Pension Sector in India

Till about 2001, the only pension plan (except the mandatory pension schemes in government organizations) which was available for the common people in india was 'Jeevan Suraksha' offered by, Life Insurance Corporation of India (LICI) with certain benefits for retirees. 'Jeevan Suraksha' offered guaranteed returns as pension, reducing the 'uncertainty' of income in an otherwise uncertain period of one's life. After the reforms in the Indian life insurance sector, private life insurers are also offering different kinds of pension plan to the investors along with other mutual funds but life insurance companies dominate the pension market.

Today, Life insurers offer ULIP options in pension plans as also traditional plans. The latter guarantee additions to the premium with bonuses added—that accumulates over time. ULIP pension funds invest in equity and debt and have a lock-in period of three years. Due to the higher returns, unit-linked pension plans have gained popularity over the last few years. According to a new research report by a leading research organisation, RNCOS, titled "**Indian Pension Fund Market Forecast to 2013**", pension and annuity funds managed by life insurers in India are forecasted to grow at a CAGR of approx. 35% between 2008-09 and 2012-13 due to the growing life expectancy and huge working population base. The same report indicates that the pension product's contribution to the Indian life insurance industry will continue to rise in coming years as majority of the working population in India expects to have better quality of life or at least maintain the current living standards post-retirement. Pension plans account for close to 40% of the life insurance industry in terms of premium. Life Insurance Corporation (LIC) dominates the pension market while private life insurers are yet to take off. Private life insurers contributed just 7.5% to total pension insurance premium in 2007-08 but it is expected to rise to about 15% by 2012-13[48]. The different products offered by life insurer are provided in the Box: 5.3.

Box: 5.3 Pension Plans Offered by Insurers in India

SBI Life Insurance Co. Ltd.	**Aviva Life Insurance Company India Limited.**
SBI Life - Unit Plus II	PensionPlus
SBI Life - Immediate Annuity	Secure Pension
SBI Life - Horizon II	**Reliance Life Insurance Company Limited.**
SBI Life - Lifelong Pensions	Reliance Golden Years Plan Plus
Shriram Life Insurance Co. Ltd.	Reliance Total Investment Plan Series II - Pension
Annuity Plan	Reliance Golden Years Plan Value
ShriVishram	Reliance Golden Years Plan
Sahara India Life Insurance Co. Ltd.	**Kotak Mahindra Old Mutual Life Insurance Limited**
Sahara Swabhimaan	Kotak Retirement Income Plan (UNIT LINKED)
Sahara Amar Jeevan	Kotak Jeevan Sukhi Plan
Max New York Life Insurance Co. Ltd.	Kotak Retirement Income Plan
Easy Life- Retirement (Par) Plan	
SMART Invest- Pension Plan	
ING Vysya Life Insurance Company Ltd.	

New Future Perfect Best Years ING Golden Life **Bajaj Allianz Life Insurance Company Limited** Pension Guarantee New UnitGain Easy Pension Plus RP Future Secure Future Income Generator New UnitGain Easy Pension Plus SP Swarna Vishranti **Birla Sun Life Insurance Co. Ltd.** Birla Sun Life Insurance Freedom 58 Birla Sun Life Insurance Flexi SecureLife Retirement Plan II **AEGON Religare Life Insurance Company Ltd.** AEGON Religare Pension Plan AEGON Religare Insta Plan **Met Life India Insurance Company Ltd.** Advantage Plus - Unit-linked Pension Plan (Non Par) MET Pension - Participating Deferred Annuity	**Tata AIG Life Insurance Company Limited** Tata AIG Life Nirvana Tata AIG Life Nirvana Plus Tata AIG Life MahaLife Gold Tata AIG Life Easy Retire Tata AIG Life InvestAssure Future **HDFC Standard Life Insurance Co. Ltd.** Unit Linked Pension II Unit Linked Pension Maximiser II Unit Linked Pension Plus Unit Linked Pension Personal Pension Plan **ICICI Prudential Life Insurance Co. Ltd.** Forever Life Life Stage Pension Immediate Annuity Life Time Super Pension Premier Life Pension **Life Insurance Corporation of India.** New Jeevan Suraksha - I Jeevan Akshay Jeevan Nidhi New Jeevan Dhara - I **Bharti AXA Life Insurance Company Ltd.** Dream Life Pension

http://www.apnainsurance.com/pension-plans-india/kyi.html

According to an estimate, only 11% of the working population in the un-organised sector in India has been covered under the pension plans. This leaves a huge number of people from un-organised and organised sector outside the scope of any statutory/mandated pension scheme[49]. Most of the private companies in India do not provide pensions and employees typically depend on their provident fund for finance after retirement. In fact, provident fund financing in most of the cases remains insufficient to maintain the current living standards.

Demographic indicators show that India is witnessing a new emerging demographic structural change in the coming decade. According to the report of the World Bank, life expectancy in India is expected to increase to 75.4 years in 2030 from the present level of 62.3 years in 2000. It means that the number of people above 60 years is going to increase from 76 million in 2000 to more than 218 million in 2030 and eventually, dependency ratio is going to increase from present level of 15.4% to around 40% in 2030[50]. This simple statistics shows the need for greater expansion of pension system to cover these huge *populations. The Malhotra Committee also reported the poor development of the pension* market in India in its report[51].

The field of pensions involves complex questions of political economy, and interlocking considerations spanning finance, labour markets, demography, public finance, macroeconomics and behavioral science. For these reasons, pension reforms worldwide have been difficult to execute, and often achieve second-best or third-best outcomes. Pension reforms are one of the most important and yet the hardest component of India's "second generation" economic reforms. India embarked on pension reforms in 1998. Three reports which have examined old age financial security in India are as follows,

(1) The OASIS Committee Report, (29th December, 1999)
(2) "Pension Reforms in Unorganised Sector" by IRDA, (October, 2001) and
(3) *Report of High Level Expert Group on New Pension System, GoI,* (February 2002)[52]

Based on these report, an interim, Pension Fund Regulatory and Development Authority (PFRDA) was established by the Government of India on 23rd August 2003 to promote old age income security by establishing, developing and regulating pension funds, to protect the interests of subscribers to schemes of pension funds and for matters connected therewith. New Pension Scheme (NPS) introduced for central (civil) government employees in January, 2004 and from 1st May, 2009 **PFRDA (Pension Fund Regulatory and Development Authority)** has opened **New Pension Scheme (NPS)** to all Indian citizens. Any Indian citizen will now be able to start a New Pension Scheme account and

can start investing any amount up for a pension. According to recent research report by the IIMS Dataworks, titled "The Sleeping Giant: Private Pension Markets in India" which estimates India's private pension market at Rs.12 trillion (US$300 billion) by 2019-20[53].

5.7: Price Dispersion in Life Insurance Products

It is argued that the opening up of the insurance sector will bring lots of players in the life insurance market which will create a competition among the insurers and ultimately consumers will be benefited with the lowering of premium cost offered by the different insurers to capture the market share. It is already being found that the opening of insurance sector bring array of newer product choices in the life insurance market. Now newly introduced life insurance policies have come up with the extra advantages/benefits which are called 'Riders'. Naturally, with new customized design along with riders, prices will be different for different kinds of policies and prices will also vary from insurer to insurers. As stated earlier that the competition would bring efficiency in the life insurance sector and consumers will be benefited with competitive price quote of life insurers to allure the investors in the market.

There are different types of life policies available in the market, i.e., whole life polices, endowment policies, money back policies etc. These policies have two basic elements in it, first, security and the second is the savings. There is a provision of paying back to the customer even after the duration of policy if the policy holder survives. Therefore, the premium of such policies is perplexing as these are associated with pay back along with protection. It would be more difficult to investigate and compare prices of such policies across all the sellers when they come with additional benefits (riders). The simplest way to compare price quotes of all the insurers operating in the market is to find a product which has the common feature, mainly the basic protection element of life insurance, with out any rider. Therefore, I choose term policy which has only one basic element of risk coverage to the policy holder. The term policy pays to the beneficiary in case of death of the policy holder within the policy duration or the specified time period mentioned in the policy deed.

To investigate the competitive price quotes in India, I have selected different private life insurers operating and providing term insurance policies in India along with LICI. In comparing the different term insurance policies offered by the life insurers in Indian market, the first job was to come at a common platform where all the products of different companies will be at per in relation to sum assured, type and premium paying option. In the process of investigating term policies, it is found that life insurance companies differ in their offerings in fulfilling minimum requirements, e.g., few companies offer term insurance policies with a minimum sum assured of Rs. 3lakhs or 2 lakhs or even few companies starts offering at Rs. 5 lakhs. Again, in case of premium amount payable per year, some companies have minimum ceiling amount required to be fulfilled by the consumers in selecting the term polices. For example, Reliance Life Insurance Company Limited has a minimum premium requirement of Rs. 2000 and Kotak Mahindra Old Mutual Life Insurance Limited has minimum of Rs. 1800 for offering term insurances.

In another similar kind of study by Rajagopalan[54] (2004) calculated the premium amounts on the basis of sum assured value Rs. 500,000 and then convert those values for sum assured Rs. 100,000. But premiums for Rs. 100,000 sum assured likely to be higher as those values are calculated on the basis of Rs. 500,000 assurance. To resolve this situation, an amount of sum assured of Rs. 10 lakhs has been selected so that minimum requirement criteria of sum assured value as well as minimum premium amount payable per year across all types of term insurance provided by the different insurers can be satisfied. In this study, policies of 5, 10, 15 and 20 years for a 30 year old ordinary male for sum assured of Rs. 10,00,000 has been investigated for Life insurance Corporation of India (LICI), Future Generali India Life Insurance Company Limited(FGLI), Birla Sun Life Insurance Company Ltd. (BSLI), ICICI Prudential Life Insurance Company Ltd (ICICI-Pru), Tata AIG Life Insurance Company Ltd (TATA-AIG), Bajaj Allianz Life Insurance Company Limited (BALI), Max New York Life Insurance Co. Ltd (MNYL), SBI Life Insurance Company Limited (SBIL), Reliance Life Insurance Company Limited (RLI), Kotak Mahindra Old Mutual Life Insurance Limited (KMML), Aviva Life Insurance Co. India Pvt. Ltd. (ALI) and Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd. (CHOL).

The computed premium quotes for sum assured amount of 10 lakh and 5 lakh are given in the Tables.5.14 and 5.15 respectively.

Table.5.14

Comparison of Premiums[1] for Term Insurance Policies[2] in India as on 01/04/2009

Sum Assured: 10, 00,000 (Premiums/year in Rupees)

Company Names	Term Years			
	5	**10**	**15**	**20**
Life insurance Corporation of India.	2564	2564	2812	3227
Future Generali India Life Insurance Company Limited	2956	2956	2956	2989
Birla Sun Life Insurance Company Ltd.	3254	3254	3254	3320
ICICI Prudential Life Insurance Company Ltd.	-	2186	2384	2623
Tata AIG Life Insurance Company Ltd.	-	2228	2438	2669
Bajaj Allianz Life Insurance Company Limited.	**3485**	**3552**	**4390**	**4875**
Max New York Life Insurance Co. Ltd.	2170	2280	2430	2710
SBI Life Insurance Company Limited.	**2042***	**2042***	**2150***	**2454***
Reliance Life Insurance Company Limited.	2230	2230	2290	2600
Kotak Mahindra Old Mutual Life Insurance Limited.	2471	2261	2338	2504
Aviva Life Insurance Co. India Pvt. Ltd.	2650	2660	2890	3120
Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd.	3303	3371	3438	3517
Maximum/Minimum Ratio	**1.71**	**1.73**	**2.04**	**1.99**

*Indicates the best deal for consumers.

[1]Premiums are calculated for ordinary male of 30 years.

[2]Details of policy names are given company wise in table 5.16.

Source: Individual company web sites.

Table.5.15

Comparison of Premiums[1] for Term Insurance Policies[2] in India as on 01/04/2009

Sum Assured: 5, 00,000 (Premiums/year in Rupees)

Company Names	Term Years			
	5	10	15	20
Life insurance Corporation of India.	1282	1282	1406	1614
Future Generali India Life Insurance Company Limited	1974	1974	1974	1991
Birla Sun Life Insurance Company Ltd.	2068	2068	2068	2101
ICICI Prudential Life Insurance Company Ltd.	-	1507	1605	1725
Bajaj Allianz Life Insurance Company Limited.	1743	1776	2195	2438
Max New York Life Insurance Co. Ltd.	1410	1415	1450	1580
SBI Life Insurance Company Limited.	1171*	1171*	1225*	1377*
Maximum/ Minimum Ratio	1.77	1.76	1.79	1.77

*Indicates the best deal for consumers.

[1]Premiums are calculated for ordinary male of 30 years.

[2] Details of policy names are given company wise in table 5.16.

Other insurers' premiums are not calculated as the minimum premium criteria didn't match.

Source: Individual company web sites.

From the above tables, it is quite evident that the maximum and minimum premium ratios (for sum assured Rs. 10, 00,000) are quite high, which means that the insurers are charging different prices for the same kind of products to the consumers. The max/min ratio is the highest in case of 15 years term policies (2.04) and lowest in case of 5 years term policies (1.71). It is quite interesting to note that the same company is consistently offering the lowest premium rates for the term insurance policies in India and one single company is quoting highest charges for the term insurance policies. The consumers are getting best deal from SBI Life Insurance Company Limited where as consumers are charged highest premiums by Bajaj Allianz Life Insurance Company Limited. In case of sum assured Rs. 500,000, the results are almost similar with few exceptions. Here, max/min ratio is highest for 15 years term policies with 1.79 and lowest for 10 years term plan with 1.76. Noticeably, it is the same company (SBI Life Insurance Company Limited) which is providing the best deal to the consumers for all term insurances while highest

premiums are charged by the Birla Sun Life Insurance Company Ltd for 5 and 10 years term insurance policies and Bajaj Allianz Life Insurance Company Limited for 15 and 20 years term insurance policies.

If we compare the results of this study with the results of Rajagopalan (2004) who calculated the premiums on Oct 31, 2002, then we could see that those maximum-minimum ratios are going down eventually as the years are progressing. The max/min ratio for 20 years term policy was 2.57 in 2002 which came down to 1.79 in 2009 again the lowest max/min ratio was 2.16 in 2002 for 5 year term policies which is now at 1.77[55].

Table.5.16

Company Wise Policy Names

(Used in the analysis)

Company Names	Policy Names
Life insurance Corporation of India.	Anmol Jeeban
Future Generali India Life Insurance Company Limited	Future Care
Birla Sun Life Insurance Company Ltd.	Stand Alone Term Policy
ICICI Prudential Life Insurance Company Ltd.	Pure Protect Classic
Tata AIG Life Insurance Company Ltd.	Raksha
Bajaj Allianz Life Insurance Company Limited.	Term Care
Max New York Life Insurance Co. Ltd.	Level Term Policy
SBI Life Insurance Company Limited.	SBI Life Shield
Reliance Life Insurance Company Limited.	Reliance Term Plan
Kotak Mahindra Old Mutual Life Insurance Limited.	Term Plan
Aviva Life Insurance Co. India Pvt. Ltd.	Life Shield
Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd.	Life Pure Term Plan

Source: Individual company web sites.

5.8: Effects of Insurance Reforms on Savings in India

Any Life insurance product typically has two elements first, the risk element and the second one is the savings part. Since, in India, most of the business comes from the annuities, endowment and money back life policies; buying life insurance product has always associated with investment decision. Life insurance products are compared with the available investments options offered by the other financial institutions in the Indian market such as bank deposits, mutual funds, NSCs, KVPs etc. After the nationalisation of life insurance business in 1956, with an endeavor to generate savings for the infrastructural investments, LICI has not made any considerable contribution in the total savings mobilization by the economy. The dismal results were mainly due to the fact that low interest paid on life insurance funds which had to allocate 75% of its resources to government securities and rest 25% in the other debts yielding only 1-2 percent (Muhleisen[56], 1997) in the early 1990s. A study by (Loayza and Shankar[57], 2000) also confirms that the real interest rates are positively associated with private savings rates. The other factors which increases the total cost of the LICI and reduces the competitiveness among the other financial instruments were overstaffing, high administrative costs, lack of use of technology and meeting social obligations[58]. This situation can be witnessed from the table: 5.17, where we can see that the financial savings as percent to GDP mottled within 11% to 14.4% in India. Out of the total financial savings in India, life insurance funds contributed barely 1.3 % of total GDP in 1998-99 where as the contribution of the pension funds was more than double (2.7% of GDP in 1998-99) than that of the life insurance sector. This was due to the fact that pension funds were treated as safe as other savings alternatives and the rate of return was much higher than the rate what has been offered on life funds. During this tenure we can also see that the best contributor to the total financial savings is the bank deposits which varied from 3.2% to 6.5 % of GDP.

Table: 5.17

Components of Financial Savings (1990-1999)

(As % of GDP)

Years	90-91	91-92	93-94	94-95	95-96	96-97	97-98	98-99
Financial savings	11.0	11.0	12.8	14.4	10.5	11.6	11.3	12.0
Currency	1.2	1.3	1.6	1.6	1.4	1.0	0.8	1.3
Bank Deposits	3.7	3.2	5.4	6.5	4.5	5.6	5.3	4.7
Stocks	1.6	2.6	1.7	1.7	0.8	0.8	0.3	0.4
Claims on Govt.	1.5	0.8	0.8	1.3	0.8	0.9	1.5	1.6
Insurance Funds	**1.0**	**1.1**	**1.1**	**1.1**	**1.2**	**1.2**	**1.3**	**1.3**
Pension Fund	**2.1**	**2.0**	**2.1**	**2.1**	**2.2**	**2.2**	**2.1**	**2.7**

Source: CSO database, IRDA.

In India, bank deposits were always considered as a better option of savings than any other means of saving alternatives. The main reason behind using bank deposit as one of the savings instrument, in India, was the lower per capita income, which made it difficult for the common people to save more in the long term investments and other justification may be the non-availability of any alternative, hassle-free investments options. It was believed that the life insurance reforms will bring newer products before the potential investors to invest at competitive rates because of competition among the life insurers, to take hold of the market share, would compel them to quote price lower or even at less than cost prices. This competition will help to reduce the overall cost of the insurers by increasing the efficiency and eventually consumers will be benefited with higher returns on their investments. Customized products with expected higher returns will boost the savings through life insurance and overall savings of India will improve which was one of the core objectives behind the reforms in the insurance sector.

5.8.1: Post reforms savings through life insurance

The association between high growth rates and savings, in the macro-economic sense, is well known to us from the classical growth theory. McKinnon[59] (1973) and

Shaw[60] (1973) also found that the financial liberalisation would lead to greater mobilization of savings for the economic development. It was believed that the financial reforms will improve savings and economic growth, through (Levine, Loayza and Beck[61], 2000) generating income level. India liberalized its economy in 1991. Since then there has been a substantial change in the total savings through improved income level (GDP) which is shown in the table: 5.18. Gross domestic savings of Indian economy improved after the liberalisation in 1991. In 1990-91 the percent of savings in respect of GDP was at 25.24 which increased to 41.35 at the end of financial year 2008-09. Gross savings of Indian economy comprises of the public sector savings, the private corporate sector savings and the household sector savings which is the main source of total mobilized savings. Household sector saving's contribution toward the total gross domestic savings was 66.51% in 1960-61 which increased to 80.60% in 1990-91 at current price. The same improved to 94.25% in 2001-02 but could not maintain its contribution as it was gone down to 64.62% at the end of 2008-09 financial year. Household sector savings made of two components of savings (a) physical savings (land, real estate, gold, etc) and (b) financial savings (currency, bank deposits, claims on government, pension funds and life insurance funds)[62].

The share of life funds in the total financial savings augmented ever since the economy was liberalized in India in 1991 (11.27%) and the performance of the life funds improved much faster especially after the insurance liberalisation (13.87% in 1999-00 to 23.29% in 2007-08) in 1999-2000. Insurance liberalisation, as a part of the financial liberalisation, in India comes with several elements in the insurance market which include the ending of state monopoly (LICI) in life insurance business along with the setting up an independent regulatory body (IRDA) for the development of the insurance industry and to protect the consumers by formulating prudential norms for the insurance industry. After the insurance reforms in India, consumers get the opportunity to invest in several financial products offered by the different life insurers. Due to the emergence of several life insurers, there is a certain increase in the different types of life insurance products in India which was absent in the pre-reforms period (see the types of product in this section) such as

ULIPs (Unit Linked Life Insurance Policies). Few years back the endowment policies were preferred by the investors in the life insurance sector as the policies attract investments

Table: 5.18

Components of Savings

(At Current Prices) (Rs. Crore)

Years	GDP	GDS	GDS (% of GDP)	HS	HS (% of GDS)	FS	FS (% of HS)	LF	LF (% of FS)
1960-61	16512	1952	11.82	1136	58.19	456	40.14		
1970-71	42981	6571	15.28	4371	66.51	1371	31.36	207	15.09
1980-81	132520	26881	20.28	18724	69.65	8610	46.15	915	10.62
1990-91	515032	130010	25.24	104789	80.60	49640	47.37	5599	11.27
1991-92	594168	141089	23.74	103495	72.64	62101	60.00	7003	11.27
1992-93	681517	159682	23.43	123315	77.22	65367	53.08	7114	10.88
1993-94	792150	189933	23.97	149534	78.72	94738	63.35	9548	10.07
1994-95	925239	247462	26.74	188790	76.29	120733	63.95	11370	9.41
1995-96	1083289	291002	26.86	201015	69.76	105719	52.59	13894	13.14
1996-97	1260710	313068	24.83	220973	70.58	141661	64.10	16121	11.37
1997-98	1401934	363506	25.92	270308	74.36	146777	54.29	19410	13.22
1998-99	1616082	389747	24.11	329760	84.60	180346	54.69	23428	12.99
1999-00	1786525	484256	27.10	412516	85.18	206602	50.08	28664	13.87
2000-01	1925017	499033	25.92	454853	91.14	215219	47.31	33861	15.73
2001-02	2097726	534885	25.49	504165	94.25	247476	49.08	41237	16.66
2002-03	2261415	647970	28.65	569134	87.83	253255	44.49	52009	20.53
2003-04	2538171	821027	32.34	670776	81.69	313260	46.70	52240	16.67
2004-05	2877706	1000424	34.76	725110	72.48	318264	43.89	67986	21.36
2005-06	3275670	1227348	37.46	866756	70.62	420841	48.55	83540	19.85
2006-07 (P)	3790063	1441423	38.03	985822	68.39	467985	47.47	114889	24.54
2007-08 (QE)	4303654	1779614	41.35	1150135	64.62	553289	48.10	128877	23.29

Source: Handbook of Statistics on Indian Economy, RBI; CSO database; PIB, GOI;

GDP: Gross Domestic Product. GDS: Gross Domestic Savings. HS: Household Sector Savings. FS: Financial Savings. LF: Life Funds (includes State/Central Government and postal life insurance funds). (P): Provisional; (QE): Quick Estimates.

along with life cover. Endowment policies were investing funds into fixed interest bearing government securities which were considered to be safest in the market. Due to the rising inflationary pressure in the economy, policyholders noted that the sum assured guaranteed on maturity had depreciated in its real value. Investors were looking for alternative investments plans for their investments. Several mutual funds helped the investors to perk their money for better return but at the cost of no life cover. Life insurers then introduced the ULIPs into the market which has addressed the concerns of the investors i.e. liquidity, flexibility and transparency on investments along with life cover. ULIPs were introduced in the Indian market when stock market is moving towards north direction and the sentiment of the market is positive. ULIPs give investors an option to invest a part or full (depending upon the risk bearing capacity of the investors) in various investment portfolios and obtain benefits depending upon the performances of those investment funds. The common funds which are available are Secure Fund, Bond Fund, Growth Fund, Protector Fund, Index Fund and Balance Fund. Investors can choose funds (equity/debt/combination of both) to invest and has the flexibility to choose desired sum assured and premium volume. Investor also enjoys the flexibility to change assets allocation by switching funds and even withdraw money after certain time. After the introduction of ULIPs in the Indian market, it becomes progressively more popular due to the flexibility in the product design which is visible from the market share of ULIP products in the total business of the life insurers. The following table: 5.19 show the increasing trend of ULIPs in India for the last three consecutive years. Out of the total business done by the life industry, 70% business is contributed by the ULIPs in 2008-09 financial year whereas NLP (non-linked policies) contributed only 30%[63].

Table: 5.19

Trends in ULIP Business in India (in percent)

Years	2005-06		2006-07		2007-08	
	ULIPs	NLPs	ULIPs	NLPs	ULIPs	NLPs
Pvt. Life Insurers	82.30	17.70	88.75	11.25	90.33	9.67
LICI	29.76	70.24	46.31	53.69	**62.31**	37.69
Total Life Industry	41.77	58.23	56.91	43.09	70.30	29.70

Source: IRDA annual reports. ULIP: Unit Linked Life Policies; NLP: Non-linked Life Policies.

The growth in the ULIPs business was primarily driven by the private life insurance companies, which started its operation after the reforms in life insurance sector, are generating more than 90% of total business from ULIPs at the end of financial years 2008-09. State life insurer LICI also is not far behind from them. Due to the immense competition among the life insurers, LICI had to foray into the ULIP market and now it is generating more than 60% of its total business from ULIPs from 40% in 2005-06[64]. Due to the less exposure of common households of India in the capital market the ULIPs are the best possible way to gain from the stock market along with risk coverage. The higher returns out of the ULIPs made the common investors to invest more instead of investing funds into secure long term pension funds and government securities. The share of life funds to the total GDP increased from 1.5% in 1999-2000 to 2.8% in 2006-2007. Table: 5.20 and fig: 5.8 show that after the financial year 2003-04 the share of life fund to GDP crossed the share of pension funds to GDP and continued to increase upward. RNCOS, a leading market research firm (www.rncos.com) has forecasted in its report "Booming insurance market in India (2008-2011)" that the saving tendency of Indians are favoring life insurance sector as the total life insurance premium in India will grow to Rs. 1,230,000 crore by 2010-11, largely driven by the ULIPs.

Table: 5.20

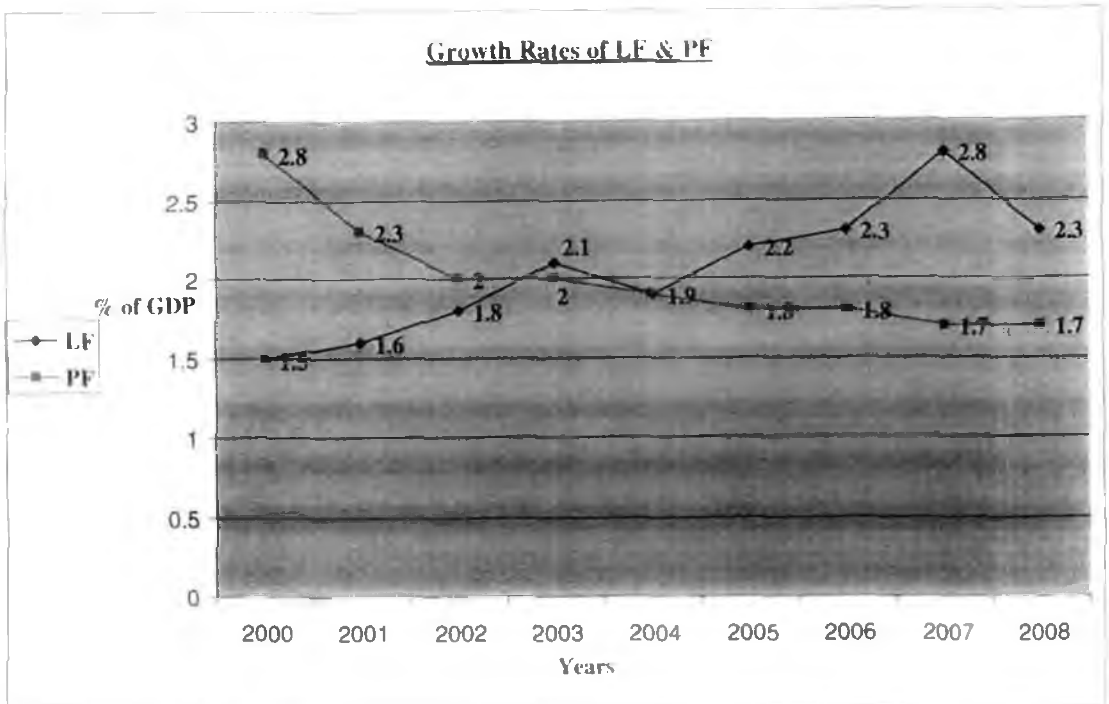
Components of Financial Savings (1999-2008)

(As % of GDP)

Years	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
Financial savings	**12.2**	**11.9**	**12.7**	**13.1**	**13.8**	**13.9**	**16.7**	**18.5**	**16.7**
Currency	1.1	0.7	1.2	1.2	1.5	1.2	1.5	1.6	1.5
Bank Deposits	4.4	4.9	5.0	5.4	5.3	5.2	7.9	10.3	7.8
Stocks	0.9	0.5	0.3	0.2	0.0	0.2	0.8	1.2	0.9
Claims on Govt.	1.5	1.9	2.3	2.3	3.2	3.4	2.4	1.0	2.4
Insurance Funds	**1.5**	**1.6**	**1.8**	**2.1**	**1.9**	**2.2**	**2.3**	**2.8**	**2.3**
Pension Fund	**2.8**	**2.3**	**2.0**	**2.0**	**1.9**	**1.8**	**1.8**	**1.7**	**1.7**

Source: CSO database, IRDA.

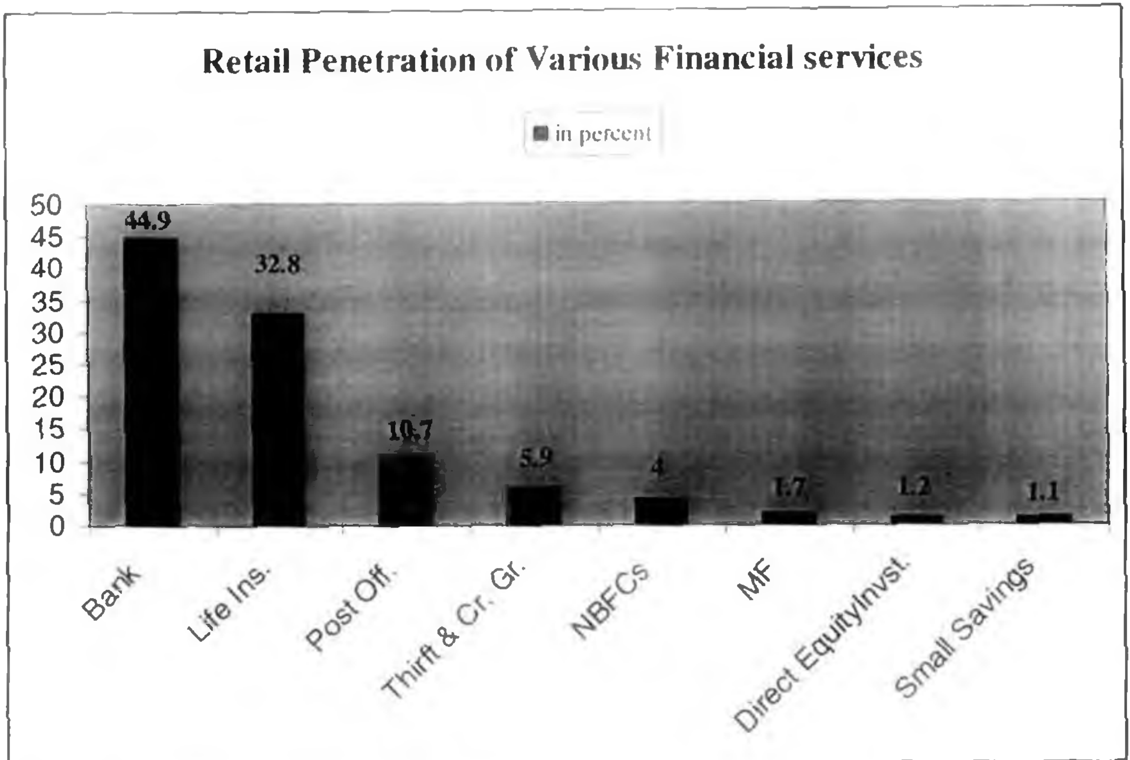
Fig: 5.8



Source: IRDA annual reports.
LF: Life Fund; PF: Pension Fund.

It is evident from the above argument that people are increasingly investing in the life insurance products which are considered to be better than mutual funds and pension funds because of better returns along with risk coverage. With ULIPs investors can actually gain from stock market with less exposure and life cover. Insurance reforms in India, actually, improve the savings rate by generating savings through customized life insurance products which is not in line with the findings of Nair[65] (2003), Bandiera et. al[66], (1999), and Ranade and Ahuja[67] (2001). A recent study by Joshi[68] (2003) showed that the motivating factor for considering life insurance as savings, improved in the post libralised era to 34% from 14% in the pre liberalized era. In fact in the post reform period, the retail penetration among all the available financial instruments/services in India, life insurance is next only to bank deposit with 32.8%. Surprisingly, penetration of Mutual Fund is found to be too low at 1.7%[69]. It is expected that the improved growth rate in the GDP (income) will boost the savings rate through life insurance products in the near future as well and that will in tern promote higher growth in the economy.

Fig: 5.9



Source: Invest India Incomes and Savings Survey 2007

5.9: Effects of Insurance Reforms on Investments

Life insurance is an important method through which savings are mobilized and invested for the overall growth in an economy. Generating long term finance for the industrial and infrastructural development in India was the main reason behind the nationalisation of life insurance industry in 1956[70]. Though LICI has done a commendable job in mobilizing small savings and reinvested them in the capital market, it was felt that there need a much greater scale of mobilization of funds for infrastructural development. The new economic policy was introduced in 1991, and insurance reforms were part of the financial reforms initiated in India[71]. It was expected that reforms in insurance sector will bring many new insurers in the market which will increase the competition among them and will be able to mobilize savings from the economy as the insurers will quote the life policies at competitive price. It is believed that the reforms in life insurance sector will bring customized products before the potential investors to encourage them to invest in

such products which will give them better returns to their investments. People will start to save through life products and as a consequence total mobilization of savings will improve which will be reinvested in the economy in the longer term to foster growth. To study the relationship between insurance sector growth and economic development are not common in the economic literatures. But few studies have been made to explore such relationships, such as Rule[72] (2001), Catalan et. al.[73] (2000), Ward and Zurbruegg[74] (2000), Arena[75] (2008). In his study, Catalan (2000) found that the contractual savings (pension funds and life funds) promote the financial development and economic growth and contractual savings institutions are most effective, in respect of other financial institutions, at development of capital market. Very recently, Arena (2008) finds that life insurance have a positive and significant causal effect on economic growth. In a recent report of CEA[76] (2006), shows the contribution of insurance sector towards economic growth and employment generation in European Union. In India, there is no published literature available on the nexus between life insurance sector and the economic growth. Life insurance products have two aspects, one associated with risk and the other with investments that is savings. This savings characteristic of life insurance products make them competitive with the other alternative savings instruments offered by the different financial institutions such as banks, mutual funds and equities. In case of life insurance policies, the savings element is contractual in nature and for longer period and an insuree can't reclaim/demand the savings with out any penalty which is not in case of a bank deposits where a depositor can demand or reclaim his/her savings on demand. For the mutual funds it is also short term in nature and savings can be withdrawn or investments can be made liquid after certain time period. But life insurance provides a stable and long term flow of investments for the economy as the products are contractual in nature. Thus, long term contractual savings component (though there are other short duration term insurance policies available) of life insurance products make life insurance an important contrivance to mobilize funds for the long gestation investment projects which are typically the infrastructural projects which require higher investments for longer period. Substantial investments in the infrastructural projects are essential for the development of the economy and to maintain the pace of the growth of the economy in a developing country like India. The premiums paid by the policyholders are transmitted as savings in the economy through

the capital market and the range of investments in which life insurers can invest their funds within a given economy depends on the development of the capital market itself and the regulations for investments in that economy.

5.9.1: Pre-Reform Investment Regulations

Prior to 1912, there was no regulation/s that can regulate the insurance business in India. All the insurance business was governed by the Companies Act, passed in 1866 by the government that cover all the companies, including insurance companies. The development of insurance business in the formal sector started with the enactment of twin acts, viz. **The life Insurance Companies Act**. and **The Provident Fund Act**, both in 1912. A more comprehensive legislation was, however, introduced in India under the **Life Insurance Act of 1938** to ensure strict control over insurance business and an effective check on large scale frauds that had evolved in this business during the 1930's[77]. However, soon it was found that **The Insurance Act**, 1938, had its shortcomings in the field of commissions, licensing of agents, *investments of funds* of the insurance companies and others[78]. Various amendments were made to the **Insurance Act**, 1938, in the coming years of 1939, 1941, 1944, and in 1945. The development in the insurance sector in India manifest with much malpractice, frauds, liquidation of many life insurance companies and large industrial houses and managing agencies were controlling the bulk of insurance business in India. In 1945, a committee was appointed by the Government, under the chairmanship of Sir Cowasji Jehangir, to enquire into the undesirable developments in the management of the insurance companies and to recommend the measures to control such frauds, *manipulation of funds* and interlocking between banks and insurance companies by the financiers having control of the company[79]. The Jehangir committee submitted its report and recommended important amendments in the Insurance Act. The report suggested that no two companies doing life insurance business should have a common director. It also recommended that the insurer should not do other business other than insurance. In regard to investments of insurance funds, (Section 27A of the Insurance Act) the following were the main recommendations[80] made by the committee.

- Life insurance companies should invest 25% of their assets in government securities,
- Another 25% into government securities or other approved securities,
- Another 35% into approved investments in stocks and bonds of publicly traded blue chip companies,
- Rest 15% could be invested in other areas with the approval of Board of Directors (BoD).

The Bill was introduced in the parliament in April 1946 but could not be passed due to the political turmoil prevailed at that moment in the country. In 1950, the Indian Parliament passed the same Bill as **Insurance Act, 1950.** In 1958, the investment regulations of life insurance funds (Section 27A of the Insurance Act) were modified in the wake of nationalisation of life insurance business in 1956. The modified investment regulations[81] were as follows,

(a) Central government securities of not less than 20%,

(b) Loans to National Housing Bank including (a) above should not be less than 25%,

(c) In State Government securities including (b) above should not less than 50%,

(d) In socially oriented sectors including public sector, co-operative sector, house building by policyholders, own-your-own-home schemes including (c) above should not be less than 75%.

The table: 5.21, shows the investments of life funds in different sectors by the LICI. During the tenure of 1980-2000, just before the reforms in the life insurance sector, the total loans to state and central government and their corporations and boards has fallen gradually from 41.7% in 1980-81 to 19.8% in 1999-00 and the investment in the government securities increased to almost 78% in 1999-00 from 55% in 1980-81. LICI became, along with SBI, largest investor in the government securities which earned steady but limited interest to LICI and due to the very minimum exposure to the equity market,

return on investment in life policies were not comparable that with the other investment options available in the market.

Table: 5.21

Investment Portfolio of LICI (1980-2000)

Years	Loans to Government	Government Bonds	Special Central Government	Unapproved	Foreign	Total
1980-81	41.7%	55.0%	1.6%	1.1%	0.6%	100%
1990-91	33.6%	59.2%	5.6%	1.1%	0.5%	100%
1991-92	4.9%	85.5%	6.9%	1.9%	0.8%	100%
1992-93	34.1%	60.1%	4.2%	1.1%	0.5%	100%
1993-94	31.4%	63.4%	3.6%	1.1%	0.5%	100%
1994-95	28.7%	66.4%	3.3%	1.1%	0.6%	100%
1995-96	26.5%	69.0%	2.9%	1.2%	0.5%	100%
1996-97	24.8%	71.2%	2.6%	0.9%	0.5%	100%
1997-98	23.1%	73.3%	2.4%	0.8%	0.4%	100%
1998-99	21.7%	75.4%	1.8%	0.8%	0.3%	100%
1999-00	19.8%	77.9%	1.4%	0.6%	0.3%	100%

Source: LICI annual reports (various years), Sinha (2005).

5.9.2: Post-Reform Investment Regulations

The new **Insurance Regulatory and Development Authority (IRDA) Act, 2000,** modified the Section 27 of the Insurance act 1938 in conformation with the objectives of improving confidence among the potential policy holders and diverts the funds into the infrastructural development. At least half of the total investments made by the life insurers have to be in the government securities or other approved securities as these investments are considered to be safest of all because of government guarantee. Table: 5.22 depict the investments regulations for the life insurers operating in India in the new regulation framed by the regulator, IRDA.

Table: 5.22

Investment Regulation of Life Business (IRDA Act.2000)

	Type of investment	Percentage
I	Government securities	At least 25%
II	Government securities or other approved securities (including (I) above)	Not less than 50%,
III	Approved investments as specified in Schedule I	Not less than 15%
	a) Infrastructure and social sector Not less than 15%	
	Explanation: for the purpose of this requirement, infrastructure and social sector shall have the meaning as given in Regulation 2(h) of Insurance Regulatory and Development Authority (Registration of Indian Insurance Companies) Regulations, 2000, and as defined in the Insurance Regulatory and Development Authority (Obligations of Insurers to Rural and Social Sector) Regulations, 2000, respectively.	
	b) Others to be governed by exposure/prudential norms specified in Regulation 5	Not exceeding 20%
IV	Other than in approved investments to be governed by exposure/ prudential norms specified in Regulation 5	Not exceeding 15%

Source: Gazette of India Extraordinary Part III Section 4: Insurance Regulatory and Development Authority (Investment) Regulations, 2000; (www.irda.org.in)

Table: 5.23

Total Investments of Life Insurers: Instrument Wise (2005-2008)

(Rs. Crore)

Investments from Traditional products	2005-06	2006-07	2007-08
(1)Approved securities incl. Central Govt. Sec.	296377.00 (64.25)	335187.00 (62.40)	381101.00 (60.62)
1(a) of which Central Govt. Securities	238089.00 (51.62)	275099.00 (51.22)	297533.00 (47.33)
(2) **Infrastructure and Social Sector**	49638.50 (10.76)	69837.00 (13.00)	68600.00 (10.91)
(3) Investments subject to Exposure norms including Other than Approved Investments(OTAI)	115247.00 (24.99)	132106.00 (24.59)	178957.00 (28.47)
3(a) of which OTAI	26698.60 (5.79)	30049.00 (5.59)	36149.00 (5.75)
(A) Total (1+2+3)	461263.00	537130.00	628659.00
ULIP Funds			
(4) Approved Investments	23401.00 (90.39)	57587.24 (85.89)	111511.00 (83.60)
(5) Other than Approved Investments (OTAI)	2487.12 (9.61)	9462.56 (14.11)	21871.00 (16.40)
(B) Total (4+5)	25888.10	67049.80	133382.00
Grand Total (A+B)	487151.10	604179.80	762041.00

Source: IRDA annual report, 2007-08; Figures in brackets are percentage to total amount.

Table: 5.23 above, shows the total investments of life insurance companies' for the last three years in India increased to Rs. 762,041 crore in 2007-08 from Rs. 487151 crore in 2005-06. It is quite interesting to note that the share of ULIP funds has increased in the total investments made by the life insurers in India in the last few years. If we look at the contribution made by the different funds (see table: 5.24) in the total investments made by all the insurers then we will find that the contribution of the life funds, which is generated out of the general life business, has gone down to around 71% in 2007-08 from 88% in

2002-03 and the share of ULIP funds has increased to 17.5% from just 0.10% in 2002-03 financial year[82].

Table: 5.24

Contribution of Different Funds in Total Investments of Insurers (In percentage)

FUNDS	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Life Fund	88.14%	87.51%	85.48%	81.53%	77.06%	71.49%
Pension and General Annuity Fund	11.76%	2.71%	2.81%	7.65%	6.13%	5.7%
Group excluding group Pension and Annuity Fund	0.00%	9.66%	9.96%	5.50%	5.71%	5.31%
ULIP Fund	0.10%	0.48%	1.76%	5.31%	11.10%	17.50%

Source: IRDA annual reports, (various issues).

These savings can be made available by the life insurance industry to the private sector and Government in the form of equity and debt. Since life insurance are long term in nature, these funds can be invested in manufacturing and other sectors which will complement the banking industry as the banks, in general, lends for short term periods. Government can use these long term savings to develop infrastructure, which require funds for long gestation periods, for the development of the economy as it is considered to be most important stimulus for overall development in the economy. Table: 5.25 shows that the investment of life funds in the infrastructure/ social sector has increased substantially from around Rs. 33,000 crore in 2002-03 to Rs. 68,600 crore in 2007-08 financial year which is around 108% increase. These investments in infrastructure and social sector improve the domestic productivity which encourages the exports, leading to the employment opportunities.

Table: 5.25

Fund Wise Pattern of Investments of Life Insurance Companies (2002-2008)

(Rs. Crore)

Years	C.G.Sec.	SGS & OAS	Infrastructure/ Social Sector	Investment Subject to Exposure Norms (Incl. OTAI)	Other than Approved Investments (OTAI)	Total (Life Fund)
2002-03	123705	147086	**32963**	49600	6897	229649
2003-04	144666	174694	**38637**	93978	16846	307309
2004-05	170433	209908	**45521**	110791	26378	366220
2005-06	201678	245478	**49638**	102072	26699	397189
2006-07	233664	279309	**69837**	116410	30049	465555
2007-08	252055	317957	**68600**	158193	36149	544750

Source: IRDA annual reports (various years).

Note: CG Sec – Central Government Securities, SGS - State Government Securities, OAS – Other Approved Securities, OTAI – Other than Approved Securities.

Investments made by the life insurers helps to improve their portability and investors will get better return on their investments. This higher return on life products will generate new life products for the market and people will entice to save more through newly developed life products by the insurers. The recent development of ULIP products are the best example of such savings phenomenon. This improved savings will reduce the consumption level of the common people which will reduce any inflationary pressure that may exist in the economy. Higher domestic savings is essential for the development of any economy. The recent development of new types of life products in the life insurance market compel to rethink on the investment norms of the life insurers. The KPN committee on amendments to Insurance Act, has also recommended a re-look on the pattern of investments prescribed for insurers and have suggested amendments that would provide flexibility to IRDA in the manner of regulation on investments of insurance companies[83].

A Working Group was set up by the Insurance Regulatory and Development Authority (IRDA), in 2006, to review comprehensively the current regulatory and other provisions on Investments of Insurance companies and suggest changes considered necessary in the light of experience gained / the constraints faced by Insurance Companies, as well as the developments in Financial Markets. The Working Group reviewed the statutory provisions on the pattern of Investment, Operational and Policy issues of Investment Regulations and suggested amendments that would provide flexibility to the Authority in the manner of Regulation on Investment of Life and General Insurance Companies. The Group also looked into the concurrent modifications in the formats of the prescribed Returns to reflect the changes. The recommendations of the Working Group have been examined by the Authority in the light of legal provisions and keeping in view the interests of the stakeholders. The implementation of some of the proposals requires appropriate changes in Regulations and evolution of suitable regulatory framework. Accordingly, IRDA has initiated action, very recently, to amend the provisions of IRDA Investment Regulations (2000) in order to implement the recommendations of the Working Group and also to effect such changes that are considered necessary to clarify the existing regulatory requirements[84]. A brief summary of the proposed changes to be effected from 2009 in the Regulations is given in Box. 5.4.

Box: 5.4

AMENDMENT TO IRDA (INVESTMENT) REGULATIONS. 2000

REG NO	REGULATION	IMPLICATION OF AMENDMENT
1	**DEFINITIONS**	
	Investment Assets	a. Investment Assets of Life and General Insurance Companies have been defined along with valuation methods
	Group	b. Group will include Financial Institutions for the purpose of Exposure calculations.
	Money Market Instruments	c. Money Market Instruments include rated CDs.

REG NO	REGULATION	IMPLICATION OF AMENDMENT
		CPs, TDs, Repo, Reverse Repo, Treasury Bills, Call, Notice, Term Money, CBLO with maturity less than one year.
2	**RENAMING OF OTHER THAN APPROVED INVESTMENTS** The Insurance Act,1938 under section 27A (2) and 27B (3) refers to investment permitted under these sections as 'Otherwise than in an Approved Investments' and the IRDA (Investment) Regulations, 2000 had interpreted it as 'Other than Approved Investments'.	a. This category of Investments will henceforth be referred to as 'Other Investments'. b. All provisions of the Act, Regulations, Circulars and Guidelines pertaining to investments falling under Section 27A (2) and 27B (3) of Insurance Act, 1938 shall continue to be applicable as such
3	**REGULATION OF INVESTMENTS** Exposure Norms *Infrastructure Investments* Mortgage Backed Securities (MBS)	a. It is now proposed that the Exposure Norms would be applicable to ULIP Business also. b. Infrastructure facility had been aligned as per the definition of Reserve Bank of India. c. Infrastructure Investments would be subject to Investee, Group Exposure. d. Investment in MBS, rated as per Guidelines, will fall under 'Approved Investments' and will qualify for investment under 'Housing Sector' for the purpose of pattern of Investments. e. MBS will be subject to Industry Sector Exposure Norms.

REG NO	REGULATION	IMPLICATION OF AMENDMENT
	Approved Investments and Rating Requirement	f. It is now proposed to recognize securities complying with the following criteria as 'Approved Investments'. i. Bonds / Debentures issued by companies (including All India Financial Institutions, recognized by RBI as such) shall be rated not less than AA or its equivalent and P1 or Equivalent ratings for Short term Bonds / Debentures/ CDs and CPs. ii. Tier II Bonds of Banks, complying with the above rating criteria, will be classified under Approved Investments. g. Assets / Instruments, downgraded below the minimum rating prescribed above, should automatically be re-classified under 'Other Investments' category for the purpose of pattern of Investments. h. The above approach will be reviewed based on experience after a period of two years. i. Rating should not replace appropriate risk analysis and management on the part of the Insurer. The Insurer should conduct risk analysis commensurate with the complexity of the product(s) and the materiality of their holding, or could also refrain from such investments. j. The modification will be effective from 1st

REG NO	REGULATION	IMPLICATION OF AMENDMENT
		Aug. 2008
4	<u>COMPLIANCE TO EXPOSURE NORMS</u> IRDA (Investment) Regulations, 2000 requires exposure norms to be calculated based on Controlled Fund and Total Assets in the case of Life and General Insurance Companies respectively. Regulation 3 of IRDA (Investment) Regulations, 2000, in terms of explanation in Section 27A of the Act, had determined that assets relating to Pension Business, Annuity Business and Linked Life Insurance Business would not form part of Controlled Fund for the purpose of that section.	a. The Authority, to remove the differential treatment of provisions applicable to Public Sector and Private Sector Insurers, had amended the exposure norms as follows: b. 10% of Outstanding Shares (Face Value) or 10% of Fund size, which ever is lower, can be invested in Equity Shares of Investee Company. c. Sum of 10% of Subscribed Share Capital, Free Reserves and Debentures / Bonds of Investee Company or 10% of Fund size, which ever is lower, can be invested in Debt instruments of Investee Company d. A maximum of 5% of Investments Assets of General Insurers or 5% of Investment Assets of funds relating to life funds, pension and general annuity funds in the case of life insurer can be invested in Immovable Property as per Sec 27A(1)(n) of Insurance Act, 1938 e. A maximum of 25% of Investment Assets can be invested in Banking and Financial Sector instruments. f. Not less than 75% of debt instruments excluding Government and Other approved Securities – fund wise, in the case of life insurer and Investment assets in the caser of general insurer – shall have a rating of AAA or

REG NO	REGULATION	IMPLICATION OF AMENDMENT
		equivalent rating for long term and *P1+* or equivalent for short term instruments. This shall also apply to Unit linked funds(s).
		g. FDs, TDs, CDs invested as per Sec 27A(9) and 27B(10) of the Act and subject to Promoter Group Exposure limits, would not be deemed as Exposure to Banking Sector.
	Treatment of Free Reserves	h. Free Reserves of the Investee Company, recognized in Regulations 5 of IRDA *(Investment) Regulations, 2000* under Investee Company Exposure Norms will be considered under 27A(3), 27A(4), 27B(4) & 27B(5) in addition to the Subscribed Share Capital and Debentures of the Investee Company
		i. At any point of time, exposure to a single Investee Company under 27A (3) and 27B (4) shall not exceed 10% of the sum of Subscribed Share Capital, Free Reserves and Debenture / Bonds, taken as per the previous year Balance Sheet of the Investee Company.
5	**RETURNS TO BE FURNISHED**	
	Introduction of new periodical returns and amendment to existing returns.	a. All forms have been amended for the various decisions reached.
		b. All returns are required to be filed on a Quarterly basis. The period of submission has been increased from 21 to 45 days to ensure proper sync with Actuarial returns.
		c. FORM 3C is no more required to be filed.

REG NO	REGULATION	IMPLICATION OF AMENDMENT
		d. FORM 7A is introduced to capture details of Non Performing Assets.
6	<u>**CONSTITUTION OF INVESTMENT COMMITTEE AND INVESTMENT POLICY**</u> Investment Committee	a. Chief of Investment (CIO) and Chief of Finance (CFO) will be different individuals in the *Investment Committee (IC)*
	Investment Policy and Investment Department	b. Investment Policy need not be filed with the Authority. But is required to be drawn in respect of each Unit linked fund.
		c. Investment Policy should address all risks, Scope of Internal and Concurrent Audits including investment Statistics.
		d. To ensure internal control of Investment function, the Insurer is required to segregate operations and functions between Front, Mid and Back Office. Further, the Front office will report through CIO to the CEO. The Mid and Back Office, headed by separate personnel, will report through CFO to the CEO
		e. *Issues relating to Internal and Concurrent Audit* made clear. Audit is made to cover Investment Operations and System & Process supporting Investment Operations.

Source: IRDA.

5.10: Post Reform Consumer Awareness and Perception towards Life Insurers

Since the insurance sector was liberalized in 1999, effectively from 2000, it is very important for the policy makers to know about the perception of the common people regarding the new private and foreign life insurers operating in India as the consumers act upon their own belief and perception. Few studies to understand the perception and awareness of the investors have been done in the earlier stage of reforms, such as Joshi[85] (2003), AC Neilson-ORG MARG[86] (2003). Now it is almost ten years that India is witnessing the post liberlised market in the insurance sector. This study has been undertaken mainly to understand the perception of common people in India towards private life insurers and particularly to the joint ventures between Indian and foreign life insurers in the post-reform period and especially after the recent financial crisis where few big names in the world life business have been affected and some of them have received bail-out package to stop themselves from going into the liquidation.

5.10.1: Financial Crisis and Impact on India

The effect of the sub-prime crisis was evident from the collapse of Bear Stearns. As the housing market continued to move in the opposite direction, a recession was on the cards. But the severe financial crisis evolved just after the collapse of investment banker Lehman Brothers. The global financial crisis has deepened since then. According to the IMF, banks have suffered higher credit losses than the insurers. The impact of this financial crisis on the global life insurance industry is mixed. The direct impact of this crisis on life insurance has been observed only at those financial institutions which have other financial services[87]. For example, American International Group (AIG) and FORTIS, offers not only insurance but also banking services. Majority of the losses made by AIG and Fortis were considerably from financial products other than insurance such as derivatives and banking activities. Though the impact of the present crisis in the financial market is limited due to the extensive diversification of investments by the insurers, India cannot afford to remain insulated from this due to the exposure of the financial institutions in the global financial market[88]. The effect was first seen in India in the banking sector when ICICI Bank was

reported to have investments in US treasury market. Later, RBI confirmed that the financial health of ICICI Bank is well enough to have faith in its operations. ICICI has a joint venture with Prudential in the life insurance sector in India. Similarly, AIG's recent financial crisis could have some considerable blow on its businesses in India as AIG has a joint venture in life insurance sector with the Tata Group. On the other hand Fortis has a joint venture with IDBI Bank in India. The insurance regulator IRDA assured the investors that their money is safe after US insurer AIG get the access of Fed Reserve's borrowing window. In India, domestic insurance companies do not have any exposure overseas due to the investment regulation of IRDA, which stops insurers from investing funds abroad.

In the Indian context, as the foreign life insurance players operate globally and they have the exposure of the global financial market, the performance of these companies will not solely depend upon the performance of the Indian economy. Therefore, any meltdown in the global financial arena will definitely affect the performance of these players. The collapse or the exits of these life insurance players would have severe social consequences due to the fact that millions of middle or lower middle class people in India buy the life insurance products not only to take care of themselves but for their dependants. For example, a person can opt for a policy to safe guard himself in his old age, or for the education of his son/daughter, or for the marriage of his daughter after a certain period of time. Therefore, the social cost of such failure or collapse would be more than the economic cost and the end sufferers will be the common policy holders.

This recent global financial crisis created confusion or raise question of viability of the foreign insurers in the minds of common people as these companies have global exposure. Therefore, in this section, I will try to find out the level of awareness among the common Indian people regarding the life insurance and the perception of common Indians towards these private and foreign insurance companies after this recent out brake of financial crisis in the global market which has a spill over effect on Indian economy too.

5.10.2: Objectives of the study

Psychological factors such as values, beliefs, attitude and perception influence the consumer behaviour. Individuals or the consumers act and take decision on the basis of their perception and awareness. The basic objectives of this study are as follows:

- To study the awareness of life insurance among the urban and rural population.
- To study the awareness among the people about the functioning of private life insurance companies in India.
- To identify whether people are aware of the independent regulator of life insurance business in India.
- To study the service quality of private life insurers. This includes the day to day customer service, claim settlement or the service to the rural areas.
- To study the product quality (variety/additional advantages etc.) offered by the private life insurers.
- To investigate the psychology of investors regarding the investment in private life insurance companies.

5.10.3: Methodology of the Study

This study has been done concerning the Indian life insurance market as whole and therefore we tried to take a sample which could represent the mini India. To achieve this objective, four districts of Sikkim and six districts from North Bengal have been included in this study. Importantly the sample includes the city Gangtok which is the state capital and two important cities of North Bengal, Siliguri and Darjeeling besides the small size towns and villages. This particular area also defines the divisional operational area of LICI, Jalpaiguri. A non-probability convenience sample[89] of 300 respondents consisting different age groups, educational levels, income groups and religions of policy holders and non-policy holders have been collected to get the primary data for this analysis. The required primary data has been collected from personal interview with the help of a questionnaire [(see Annexure 5. (A)] which have been developed with open ended and close ended

questions[90]. Collected data has been analysed using percentages and interpreted for consequential inferences.

5.10.4: Sample Design

The sample consists of 147 respondents from rural and semi urban areas of North Bengal and Sikkim and 153 respondents from the Gangtok, Siliguri and Darjeeling city to represent the urban area of the said area.

The number of respondents (sample size): 300 people.

Of the total respondents 147 (49%) are from rural and Semi urban areas, and

Of the total respondents 153 (51%) are from urban areas.

5.10.5: Analysis and Interpretations

1. Awareness of Life Insurance Product

The first step to study the perception of people of India is to find out the percentage of people are aware of the life insurance and its importance in their lives. The following table suggests that the most of the people in India are aware of life insurance and the benefit of the life insurance cover as a whole. The awareness among the urban people is almost 100 percent and it is very high in the rural and semi-urban areas.

Table: 5.26 Awareness Level of Life Insurance

Sl. No.	Awareness	Number of Respondents	Percentage
1	Yes	297	99%
2	No	3	1%
Total		300	100%

Source: Field survey.

This finding is also the same with the results of the AC Neilson-ORG MARG (2003), which found 100 percent awareness about the life insurance products among the urban population and 99 percent in rural areas.

2. Awareness of Private Life Insurance Companies in India

Another aspect of this study, is to find out the percentage of people know about the private life insurance companies which are operating in the Indian market and offering life insurance products to the people. It is found that the people in general are aware (96%) of the private life insurance companies operating in India and very little percentage of rural people (3%) is not aware of the presence of private life insurance companies in India. It is also noticed that the percentage of people who are not aware of the presence of private life companies they mostly are not aware of the life insurance product itself and the benefit out of the same as they are economically very poor people and does not come under the insurable population.

Table: 5.27. Awareness Level of Private Life Insurance Companies

Sl. No.	Awareness	Number of Respondents	Percentage
1	Know	289	96%
2	Do not Know	11	4%
Total		300	100%

Source: Field survey.

3. Services Provided by the Private Life Insurers are Better than LICI

Liberalisation of the domestic life insurance market was accepted on the view that the common people will get better service from the private and foreign insurers as the new entrants will try to capture the market share with better service to the people. This study also tried to find out whether the services provided by the foreign insurers and the private insurers are better than that of the state run life insurer LICI. The respondents showed a mixed reaction regarding the services provided by the insurers.

Table: 5.28 Service of Private Life Insurance Companies

Sl. No.	Awareness	Number of Respondents	Percentage
1	Better than LICI	157	52%
2	Worse than LIC	143	48%
Total		300	100%

Source: Field survey.

The above table shows that the service rendered by the private life insurers are ahead of what LICI is providing right now in India. This perception, regarding the service, is an alarming bell to the LICI that people of India are not satisfied with the present level of services provided by the LICI. Private insurers are providing better services to the common masses.

4. Products of Private Life Insurance Companies are more Attractive

The product that life insurers sell is the life insurance policies. It was one of the main reasons behind the opening of the life insurance market in India in 1999. It was assumed that more and more private and foreign players will enter into the market with array of new policies to capture the market share and investors will get more opportunity of different life policies to choose from. Customer perception on private insurance companies' policies whether they are better alternatives of policies offered by the LICI is shown in the table below.

Table: 5.29. Products Offered by the Insurers

Sl. No.	Perception	Number of Respondents	Percentage
1	More attractive than LICI	175	59%
2	Less attractive than LICI	52	17%
3	Can not say	73	24%
Total		300	100%

Source: Field survey.

It is clear from the above table that almost 60% consumers perceive that the policies offered by the foreign or private life insurance companies are better alternatives and more attractive than that of the LICI. It is also surprising to know that the 24% of respondents could not conclusive about their opinion but only 17% respondents thinks that the policies of LICI are better than the policies offered by the private players.

5. Private Life Companies for Urban Population

This present study also tried to find out whether the private life insurance companies are meant to serve the urban population only or it also serves to the rural areas. The views of the rural sector are very important in this connection. Therefore, more respondents from the rural areas have been incorporated ion this case. How Indians identify private life insurers are given in the following table.

Table: 5.30 Private Life Companies Serve Urban Population

Sl. No.	Perception	Number of Respondents	Percentage
1	Yes	179	59%
2	Not	50	17%
3	Can not say	71	24%
Total		300	100%

Source: Field survey.

Out of the 300 hundred respondent 59% are saying that the private companies serving only to the urban people and they are meant to serve potential urban masses only and only 17% of the surveyed people are not in the same line with this view. Surprisingly 24% of people are not sure about the functioning of the private life insurers in India.

6. Safe to Invest in Private Life Insurance Companies

In this present situation of global financial crisis where few big foreign life insurers (e.g. AIG, ING, Fortis) badly effected, it is actually important to know how people perceive

the private life insurance companies (Indian/Foreign) as a safe investment option to invest their money. Respondents have been asked whether it is safe to invest in private life insurance companies in India. The following table summarises the response of the respondents.

Table: 5.31. Safe to Invest in Private Life Companies

Sl. No.	Perception	Number of Respondents	Percentage
1	Safe	44	15%
2	Not safe	173	57%
3	Can not say	83	28%
Total		300	100%

Source: Field survey.

It is found in the survey that the 57% of the respondents think that it is not safe to invest in private life insurance companies now and 28% respondents are not sure whether to invest in the private life insurance product or not. Therefore it is very much clear that people are not confident enough to invest in the private life insurance companies at this juncture.

7. Private Life Insurance Companies Serve People in Long Term

If people do not feel confident enough to rely on private insurers then it is obvious that they also expect that the private life insurance companies won't be able to serve for longer period. This is what we find in our previous case. But this perception may be short term in nature. Therefore, it is essential to find out the peoples' expectations about the private life insurers operating in India as the life insurance is long term in nature.

Table: 5.32 Serving People in Long Run by Private Life Companies

Sl. No.	Perception	Number of Respondents	Percentage
1	Serve in long term	99	33%
2	Won't serve in long term	88	29%
3	Can not say	113	38%
Total		300	100%

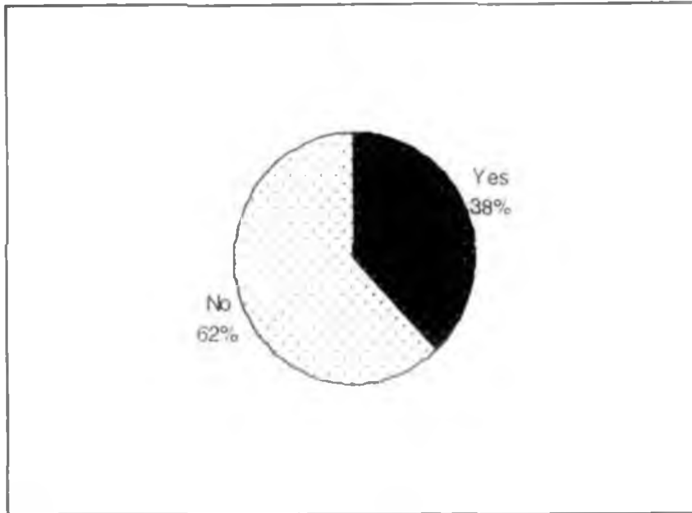
Source: Field survey.

The result of the survey is very interesting as people are not sure about future prospect of these firms. 33% of the respondents feel that the private life insurers can serve the Indian market in long run but 29% of the respondent showed a negative attitude whereas 38% of the surveyed people can't say about the future of private firms in the Indian market. This is probably due to the volatility which is prevailing in the financial market all over the world.

8. Knowledge about the Regulator of life insurance in India.

In dealing with the perception of common people towards the private life insurance companies operating in India, it is also very important to know about the knowledge/information about the independent regulator of life insurance business in India, the Insurance Regulatory and Development Authority of India (IRDA) among the masses. The finding of this study is very alarming and serious to the growth of life insurance business in India. It is found that only 38% of the people, including urban and rural, are aware of the existence of the IRDA. More alarming is that the out of these few percentage of knowledgeable people, only half of them are familiar with the correct role of IRDA in the insurance industry. 62% of the respondents are not familiar with the IRDA and they don't even know the existence of the IRDA. This depressing result may be due to the more incorporation of respondents from rural areas in this study but the result is also very miserable in urban areas too.

Fig: 5.10. Knowledge of IRDA



Source: Field survey

5.10.6: Conclusion and suggestions

The recent global financial melt down shattered the confidence level of common investors in India. The recent bail out of few big foreign life insurers who have joint ventures in India exaggerated the issue more before the investors. This is also complimented by the recent all time high inflation in Indian economy. Now people are afraid of investing funds in the foreign private insurers which are having global exposures in financial market. For the life insurers it is a bad time that they have to bear. But the good news to all the market players is that the common people are aware of the life insurance products and its importance in their life. It is apparent from this study that the private (domestic/foreign) life insurance companies are accepted in terms of product preferences and the quality of services. All they need to do is to improve the confidence level of the general investors. People are not aware of the very existence of an independent insurance regulatory authority (IRDA) and the role played by the IRDA in the insurance market to safeguard the interest of policy holders along with the development of the life insurance industry in India. The present initiatives taken by the IRDA, such as programmes in radio and television in regional languages, publicity campaign, 24 hour toll free call numbers to assist investors, grievances redressal cells, seminars and work shops, notice under Right to

Information Act, are not enough for the industry where absolute number of people outside the cover of life insurance umbrella is still too high[91]. Here, we need a collective measure of IRDA and all the life insurers to educate people about the structure of the life insurance industry and the viability of the companies operating and how IRDA works to protect the interest of individual investors. Once the potential investors are educated, it would be easier for the private life companies to regain the faith among the people. Private firms should bring out new and qualitative customized products for the different section of the masses to fit into their requirements to attract the potential investors. Meeting the mandatory benchmark in the rural area is not enough to wipe out the stigma of the private life insurance companies that they serve only in the urban areas. Semi-urban and rural mind sets are more than a little skeptical of city minds. Research for years has shown that building up trust requires the constant attention of marketers. Corporate and brand communication will not be enough to win the minds of rural people, hence, local presence of the life insurers is a must[92]. They should penetrate more into the rural sector to meet the needs of the rural areas with specific product that has been designed for the rural needs and inculcate lifelong faith and belief among the rural people because life insurance business is itself long term in nature.

5.11: Relationship between Life Insurance Reforms and the growth of life insurance business in India.

5.11.1: Introduction

This section deals with the impact on the growth of life insurance business in India after the reforms implemented in this sector. In this section we will try to evaluate the effect of this reform empirically to strengthen our earlier findings in this chapter. As far as my knowledge is concern no such attempt has been made so far, at least at the time of writing this section, by any researcher to investigate empirically the effects of reforms in the life insurance sector and its implications on the development of the life insurance market. And to do so, the first difficulty is how to measure the reforms in the life insurance sector. There is no such accepted measure is available to be used in our study. Therefore,

we considered to construct a composite index of life insurance reforms which can be used in our study to find out the existing relationship between reforms and the development of the life market in India. To construct the index which has been named as **Life Insurance Reforms Index (LIRI)**, the fundamentals which are post reform phenomenon, i.e., those elements which manifest the reforms initiatives in this sector have been considered. The major policy reforms and regulatory reforms in the life insurance sector have been measured to construct the LIRI. The following are the main categories which has been measured to construct the LIRI,

- FDI in life insurance business,
- Regulatory reforms in life insurance sector, and
- Life insurance penetration.

5.11.1(a): FDI in life insurance business

In the post reform period India witnessed joint ventures in the life insurance industry with foreign companies bringing maximum of 26 % capital which is stipulated by the regulator IRDA[93]. Since, there is a cap on the FDI in India, foreign companies can't operate individually in the insurance market in India. Due to this regulation foreign companies need to collaborate with a domestic company to enter into the life market. This FDI cap reduces the operational ability of foreign companies in India and therefore, we believe that the volume of FDI in every year would not show the exact picture of the life insurance industry in India. Thus we need to come up with a simple measure which could define the FDI in insurance sector. I have presumed the number of new entrant of foreign companies every year to proxy the FDI in life insurance sector. The scores in the FDI in life insurance sector would calculated as under,

FDI in life insurance sector = *1 for every one new entrant in this sector.*

= *2 for every two new entrant in this sector, and so on.*

That is, if in any given year there are six new foreign entries, then score would be 6 (six) in that particular year.

5.11.1(b): Regulatory reforms in life insurance sector

It is very demanding and complicated task to quantify the regulatory reforms process in life insurance sector and it is more difficult when these reforms are in nascent stage. Therefore, a scoring system has been developed which will, eventually, define the regulatory reforms initiated and taken by the government. To measure the regulatory reforms the following scoring system is being applied in this study.

Life insurance Regulatory reforms = '0' for no reforms initiatives and steps;
= 1 for setting up of any committee;
= 1 for report submitted by any committee;
= 1 for any report accepted by the government;
= 1 for passing any bill in the parliament; and
= 0.25 for every new regulations framed under the IRDA Act, 1999, till date.

In calculating the life insurance regulatory reforms, year 1993 has been taken as the initial year when the first step towards opening of the insurance sector was taken by the formation of the Malhotra Committee[94]. Thus a score of 1(one) is allotted in that year until any other major steps are taken. In 1994, the committee submitted its report which fetches another one point in the total score. Again, in 1995, another committee, named Mukherjee Committee was formed in the insurance sector[95]. This also adds up one more to the score of the life insurance regulatory reforms. This is how the scoring continued year wise to quantify LIRI [calculation of LIRI has been given in Annexure 5. (B)]. For the total development of the life insurance industry see the chronology of reforms in the life insurance sector and regulations framed under the IRDA Act 1999, in the appendix [Annexure 5. (C) & 5. (D)].

5.11.1(c): Life insurance penetration

Another measure which has been incorporated in constructing LIRI is life insurance penetration which is a relative measure of life insurance development in respect of the total

economy measured by GDP. Life insurance penetration of every year has been included to construct the index.

Thus, adding up all three indicators in each of the respective year, we come up with a composite index (LIRI) to represent the reforms in the life insurance sector. The constructed index is given in the appendix in detail.

5.11.2: Data and methodology

I have used two variables in our study to analyze the reform initiative in the life insurance sector in India. The total life insurance premium volume (LIP) has been used as a measure of development of life insurance business in India and a composite index (LIRI) to measure the life insurance reforms in India. To eliminate the heteroscedasticity, natural logarithm of life insurance premium has been used in this study[96]. The specified variables used in the study denoted as follows,

$$L_t = \log LIP \text{ and } R_t = LIRI$$

In this study we need to check the stationary properties of the variables at first stage since the non stationary time series variable might give spurious results[97]. Hence, ADF test[98] and PP test[99] will be used to verify the stationary properties of the time series variables. Non stationary variables may be used provided the series are co-integrated at the same order. Therefore co-integration study also been done to verify this property. Engle-Granger[100] (1987) co-integration test will be used to verify the co-integration among the variables. At the last stage the VAR-VECM technique will also be employed to study the short run dynamics of the model[101].

5.11.3: Stationarity tests

Standard regression with non-stationary data leads to spurious relationship with erroneous conclusion. It is, therefore, becomes pertinent to study the nature of the time

series data involved in our study. In this study one macro economic data series (total life insurance premiums) is used which generally follow the random walk. The stationarity of both the series has been checked by the unit root test which involves Augmented Dickey Fuller (ADF) tests and Philips Perron (PP) tests.

The results of the unit root tests are very sensitive to the assumptions about the time series under test, e.g. trend, intercept or both trend and intercept. To understand the importance of the nature of the time series under the unit root test, both the series have been plotted graphically at their level values and after differencing.

Fig: 5.11

Graphical Presentation of Life Premium and Life Insurance Reforms Index at Levels

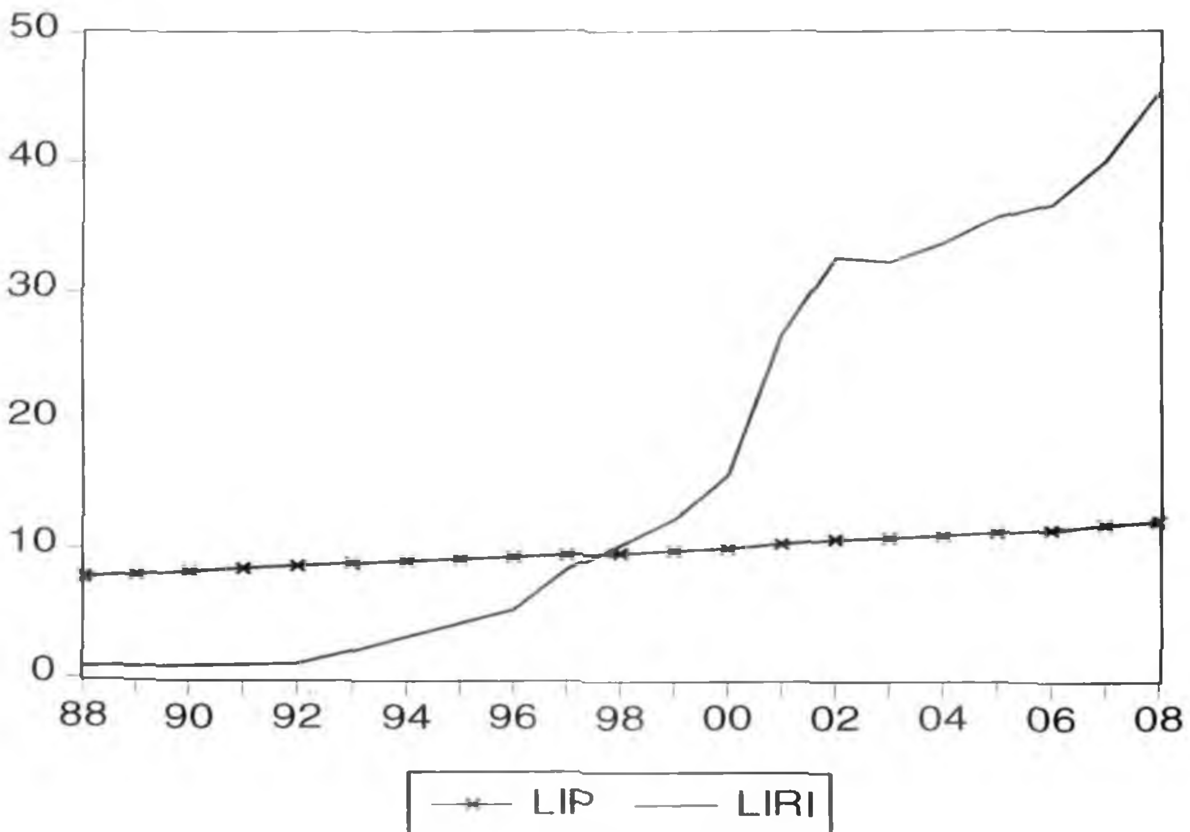
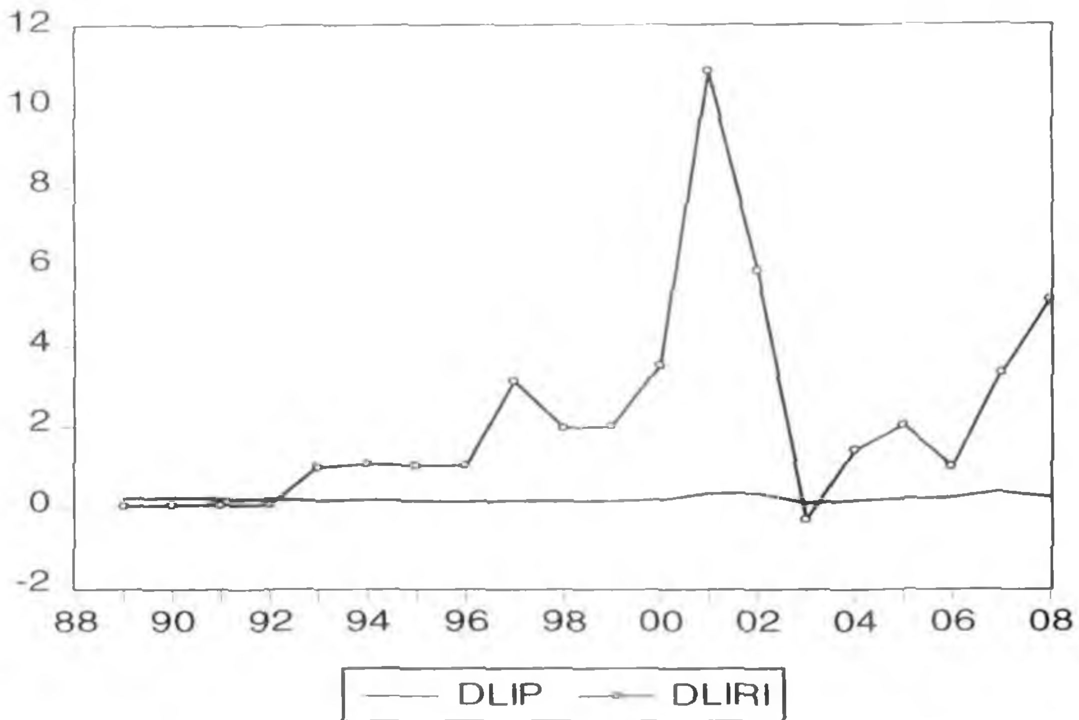


Fig: 5.12

Graphical Presentation of Life Premium and Life Insurance Reforms Index at First Difference



From Fig. 5.11, one can see that both the time series have some trend and intercept at their levels. Considering the particular nature of trend in both the series, I have differenced the data series once and the trends have been removed but the intercept remained which can be seen in the (Fig: 5.12). Based on these characteristics the ADF test and PP test are performed. The results of both the tests are summarised below in the table 5.33 and 5.34.

It is clear from the ADF test (Table: 5.33) that both the series (life insurance premiums and life insurance reforms index) have unit root at their level values at 10%, 5% and 1% significance level. That is, the series are non-stationary. The same properties of both the series are confirmed by the PP test which showed in (Table: 5.34).

Table: 5.33

ADF UNIT ROOT TEST

Lag Length: 1 (Automatic based on Modified AIC, Maximum Lag =4)

Variables	Null Hypothesis	ADF test Stat.	Prob*	DW stat	Critical Values 1%	5%	10%
L	L has a unit root (intercept & trend)	-1.6384	0.7381	1.8596	-4.5325	-3.6736	-3.2773
ΔL	L has a unit root (intercept)	-3.1677	0.0391	2.0366	-3.8573	-3.0403	-2.6605
R	R has a unit root (intercept & trend)	-2.2377	0.4442	1.7531	-4.5325	-3.6736	-3.2773
ΔR	R has a unit root (intercept)	-2.8005	0.0717	1.8674	-3.8573	-3.0403	-2.6605

* Mac Kinnon (1996) one-sided p-values.

Table: 5.34

PHILIPS-PERRON UNIT ROOT TEST

Bandwidth: 2 (Newey-West using Bartlett Kernel)

Variables	Null Hypothesis	PP test Stat.	Prob*	DW stat	Critical Values 1%	5%	10%
L	L has a unit root (intercept & trend)	-1.0116	0.9949	1.5461	-3.8085	-3.0206	-2.6504
ΔL	L has a unit root (intercept)	-3.0325	0.0498	1.8324	-3.8315	-3.0299	-2.6551
R	R has a unit root (intercept & trend)	-1.8836	0.6253	1.3110	-4.4983	-3.6584	-3.2689
ΔR	R has a unit root (intercept)	-2.3833	0.1590	1.7013	-3.8315	-3.0299	-2.6551

* Mac Kinnon (1996) one-sided p-values.

After the first differencing, the hypothesis of unit root is rejected in both series (see ADF test in Table: 5.33). That is, both the series become stationary after first differencing. So, they are integrated of order one, i.e., $I(1)$. These findings also confirmed by the PP test except in case of R. but the correlogram, which shows Autocorrelation Functions (ACF) and Partial Autocorrelation Function (PACF) at different lags (fig. 5.13 to fig. 5.16 in the appendix) confirms our findings.

5.11.4: Co-integration

Co-integration tests are conducted to ascertain any long run equilibrium relationship between these two series. The basic purpose of the co-integration test is to determine whether a group of non- stationary variables are co-integrated or not. Engel and Granger (1987) points out that the two non-stationary variables can be used in regression if the linear combination of the two non-stationary variables are stationary. In such cases, the variables are said to be co-integrated. For two series to be co-integrated, both need to be integrated in the same order. Since the two variables in this study are non- stationary and integrated of order I (1), the Engel-Granger co-integration test applied to know the co-integration properties. In order to test the co-integration of the series L_t and R_t, the following two equations have been estimated [equation (1) and (2)] and the residual series U_t and V_t of each estimated equation.

$$L_t = \alpha + \beta R_t + U_t \qquad \text{---------------------} (1)$$

$$R_t = \gamma + \delta L_t + V_t \qquad \text{---------------------} (2)$$

The results of the estimated equations are as follows,

$$L_t = 8.5453 + 0.0801 R_t \qquad \text{---------------------} (3)$$

S.E. (0.116) (0.005)

t (73.145) (15.639)

$$R_t = -97.7042 + 11.5743\, L_t \quad \text{------------------ (4)}$$

S.E. (7.376) (0.740)

t (-13.245) (15.639)

After obtaining the residuals, I plot them graphically (Fig. 5.17) to see whether they contain any trend or not and then we examined the same with the help of ADF test (Table: 5.35) and PP test (Table: 5.36) to check the unit root property.

Fig: 5.17

Graphical Presentation of Residual Series Ut and Rt

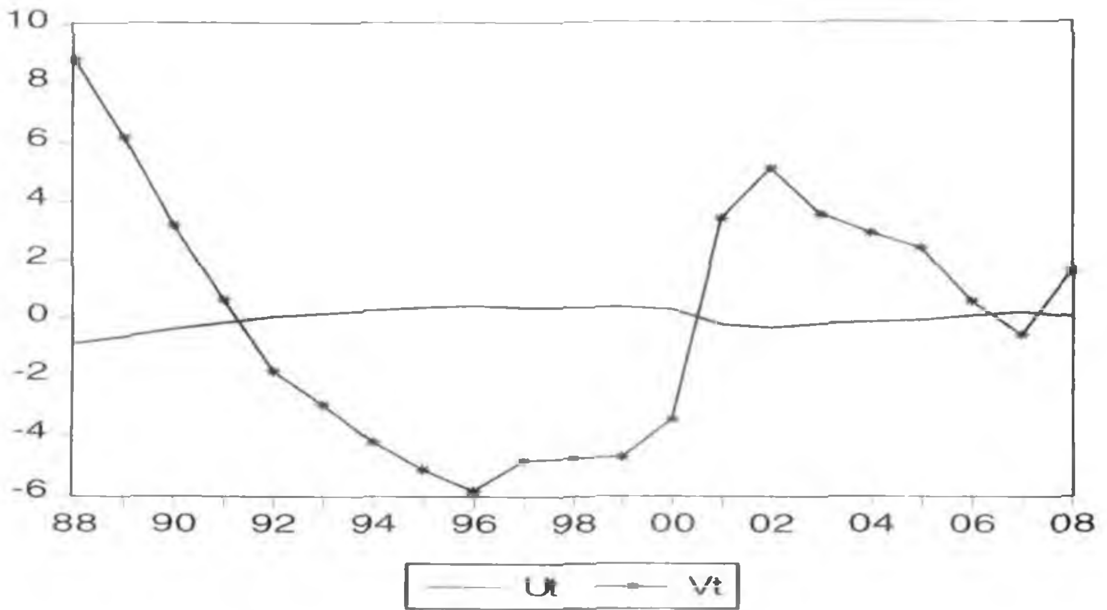


Table: 5.35

ADF UNIT ROOT TEST

Lag Length: 1 (Automatic based on Modified AIC, Maximum Lag =4)

Variables	Null Hypothesis	ADF test Stat.	Prob*	Critical Values		
				1%	5%	10%
U_t	U_t has a unit root (intercept)	-2.6923	0.0106	-2.6923	-1.9601	-1.6070
V_t	V_t has a unit root (intercept)	-2.2945	0.0245	-2.6923	-1.9601	-1.6070

* Mac Kinnon (1996) one-sided p-values.

Table: 5.36

PHILIPS-PERRON UNIT ROOT TEST

Bandwidth: 2 (Newey-West using Bartlett Kernel)

Variables	Null Hypothesis	PP test Stat.	Prob*	Critical Values		
				1%	5%	10%
U_t	U_t has a unit root (intercept)	-2.6561	0.0107	-2.6857	-1.9590	-1.6074
V_t	V_t has a unit root (intercept)	-2.2851	0.0249	-2.6857	-1.9590	-1.6074

* Mac Kinnon (1996) one-sided p-values.

The ADF test and the PP test on the residual series indicate that both the series are stationary at 5 % and 10 % level. Therefore, both the life insurance premiums and the life insurance reforms are co-integrated in the long run. The correlogram of the residual (Fig. 5.18 and Fig. 5.19 in appendix) series also confirms that they are stationary, i.e., $I(0)$. Now it can be said that there is a stable long run relationship between insurance reform and the development in the life insurance sector.

5.11.5: Vector Error Correction Model (VECM)

In this model, both the series become stationary after first differencing. But differencing may result in loss of information in long run relationship among the variables. Even if there exists a long run equilibrium relationship between the two series, there may be disequilibrium in the short run. Engel–Granger identifies that the co-integrated variables must have an ECM (Error Correction Model) representation and a VAR model can be reformulated by the means of all level variables. The Vector Error Correction specification restricts the long run behaviour of the endogenous variables to converge to their co-integrated relationships while allowing a wide range of short run dynamics, hence, one can treat the error terms (*ET*) as the "equilibrium error"[102]. Through the co-integration term, the deviation from the long run equilibrium is corrected gradually in the course of a series of short run adjustments. Therefore, VECM gives us important information about the short

run relationships between these two co-integrated variables. The general form of this modified equation by employing variables of our study is presented below,

$$\Delta L_t = \alpha_1 + \beta_1 ET_{1t-1} + \sum_{i=1}^{n} \delta \Delta L_{t-1} + \sum_{i=1}^{n} \gamma \Delta R_{t-1} + \varepsilon_t \text{ ---------------------- (5)}$$

$$\Delta R_t = \alpha_2 + \beta_2 ET_{2t-1} + \sum_{i=1}^{n} \theta \Delta R_{t-1} + \sum_{i=1}^{n} \lambda \Delta L_{t-1} + \omega_t \text{ ---------------------- (6)}$$

Where, Δ denotes first difference operator. ε_t and ω_t are white noise error terms, ET_{1t-1} and ET_{2t-1} are error correction terms which is the long run effect and lagged independent variables are short run effect. That is, changes in the dependent variables are effected by the ET, ΔX_{t-i}, and ΔY_{t-i} .

Before estimating the VEC Model with the co-integrated vectors it is necessary to identify and select the optimal lag length of initial VAR[103]. Therefore, different information criteria were computed for different time lags[104]. Based on the results of different information criteria (AIC, SIC, HQ, LR, FPE) optimal lag 4 has been selected in our study.

5.11.6: RESULTS OF VECM COEFFICIENTS ESTIMATION:-

Table: 5.37

Co-integrating Vector Coefficients

Variables	Coefficients	't' statistics	Standard Errors
L_{t-1}	1.0000		
R_{t-1}	-0.1080	-35.9628*	0.0030
C	-8.1141		

*Null hypothesis that estimated coefficient is equal to zero can be rejected at 1% level.

Table: 5.38 (a)

VECM Coefficients

Dependent variable	Explanatory variable	Coefficients	't' Statistics	Standard Errors
ΔL_t	Constant	0.5710	5.5507*	0.1028
	ET_{1t-1}	-0.1303	-2.5365**	0.0514
	ΔL_{t-1}	-1.1186	-2.8568**	0.3915
	ΔL_{t-2}	1.5009	1.9640***	0.7641
	ΔL_{t-3}	0.0427	0.1202	0.3556
	ΔL_{t-4}	-1.8100	-3.3833*	0.5349
	ΔR_{t-1}	0.0247	2.8912**	0.0085
	ΔR_{t-2}	-0.0437	-3.8155*	0.0114
	ΔR_{t-3}	-0.0399	-2.3412**	0.0170
	ΔR_{t-4}	0.0366	1.8016***	0.0203

Note: Null hypothesis that estimated coefficient is equal to zero can be rejected at 1% level (*), at 5% level (**) or at 10% level (***).

Table: 5.38 (b)

VECM Coefficients

Dependent variable	Explanatory variable	Coefficients	't' Statistics	Standard Errors
ΔR_t	Constant	5.8754	1.4398	4.0806
	ET_{2t-1}	4.5924	2.2527	2.0385
	ΔL_{t-1}	-10.1618	-0.6543	15.5307
	ΔL_{t-2}	91.7390	3.0267	30.3092
	ΔL_{t-3}	-23.0500	-1.6341	14.1050
	ΔL_{t-4}	-81.7135	-3.8511	21.2179
	ΔR_{t-1}	0.7677	2.2591**	0.3398
	ΔR_{t-2}	-1.8227	-4.0060*	0.4550
	ΔR_{t-3}	-0.7998	-1.1816	0.6768
	ΔR_{t-4}	2.8847	3.5727*	0.8074

Note: Null hypothesis that estimated coefficient is equal to zero can be rejected at 1% level (*), at 5% level (**) or at 10% level (***)

5.11.7: Findings from VECM

From VECM, the estimated equation functions has the following forms

$\Delta L_t = -0.1303\ (L_{t-1}-0.1080\ R_{t-1}-8.1441) - 1.1186\ \Delta L_{t-1} + 1.509\ \Delta L_{t-2} + 0.4276\ \Delta L_{t-3} - 1.8100\ \Delta L_{t-4} + 0.0247\ \Delta R_{t-1} - 0.0437\ \Delta R_{t-2} - 0.0399\ \Delta R_{t-3} + 0.366\ \Delta R_{t-4} + 0.5710$----- (7)

$\Delta R_t = 4.5924\ (L_{t-1}-0.1080\ R_{t-1}-8.1441) - 10.1618\ \Delta L_{t-1} + 91.7390\ \Delta L_{t-2} - 23.050\ \Delta L_{t-3} - 81.7135\ \Delta L_{t-4} + 0.7677\ \Delta R_{t-1} - 1.8227\ \Delta R_{t-2} - 0.7998\ \Delta R_{t-3} + 2.8847\ \Delta R_{t-4} + 0.5710$----- (8)

According to the co-integrating coefficient results in table: 5.37, in the long run, it can be expected around 35% increases in life insurance premiums if life insurance sector reforms increases only by 1%. In the short run, in case of equation (5), the lagged values of R_t (life insurance reforms) variable of consecutive three years has significant influence on L_t (life insurance premium volume) along with the lagged values of first, second and fourth year of L_t. On the other side, in equation (6), the dependant variable R_t significantly dependent on first, second and fourth year lagged values of R_t itself while other variables does not affect the life insurance reforms in short run. The positive sign of ET_{2t-1} shows that the change in the value of R_t (insurance reforms) positively depends on past errors.

5.11.8: The causal relationship

A long run relationship implies that there must be at least one causal relationship exists among the variables. Therefore, the next step is to find out whether reforms in the life insurance sector promotes the development of life insurance business in India or the overall development in the life insurance sector helps to increase the reform process in life insurance sector. The result of the Granger causality test (in Table. 5.39) shows that the relationship between the two variables in India is bi-directional which means life insurance reforms in India improves the total development in the insurance sector and the development in the insurance sector also promote the overall reforms in India.

5.11.9: VEC Granger Causality

Table: 5.39(a)

Dependent variable: ΔL

Excluded	Chi-sq	df	Prob.
ΔR	21.41123*	4	0.0003
All	21.41123	4	0.0003

* Significant at 1% level

Table: 5.39(b)

Dependent variable: ΔR

Excluded	Chi-sq	df	Prob.
ΔL	21.91092*	4	0.0002
All	21.91092	4	0.0002

* Significant at 1% level.

5.11.10: Conclusion

It is clear from the above empirical study that the life insurance sector reforms improved the overall development of life insurance development in the recent years in India. Therefore, policy makers should improve upon the reforms/reform process in life insurance sector for the development of life insurance sector itself and for the development of the Indian economy due to the important role played by the insurance industry. It is also found that the development in the life insurance sector itself helps to improve the reforms in this sector in India. This is probably due to the huge potentiality of the life insurance market which is still under served. The untapped market itself works as a catalyst in improving the reforms in this sector. If we could improve upon the reform process in the life insurance sector, we will be able to see more development in this segment and ultimately an improvement in the economy.

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Chapter VI

Determinants of Insurance Demand in India

6.1: INTRODUCTION

Liberalization of the domestic financial market has been a common characteristic of a number of economies since late 60's. This was particularly true in case of industrially advanced countries like Australia, Japan, UK, and France. However, this was not been confined to these industrially developed countries only. In recent years, many LDCs have taken macroeconomic reforms, which involve structural adjustment programme. Main concentration was towards the financial system, especially banking and insurance sectors, which typically either owned or controlled by the state itself. The developing country like India along with other semi-industrialized countries has also opened up their financial sector[1].

The New Economic Policy (NEP) introduced in India in June 1991 by the then newly elected government and the process of liberalization of Indian financial sector is part of that new policy. The main thrust of reforms in the financial sector was the creation of efficient and stable financial institutions and markets. Reforms in the banking and non-banking sectors focused on creating a deregulated environment, strengthening the prudential norms and the supervisory system, changing the ownership pattern, and increasing competition. The main idea is globalization, privatization, deregulation and liberalization[2].

With the paradigm shift in the development strategy, the economy is increasingly opening up and there is a step forward towards market orientation. Consequently, some financial markets such as capital market, for-ex market and banking sector have reformed subject to various degrees of level. The insurance sector yet to receive the reform initiatives to get the benefit out of the global changes that occurred in the recent past. The Uruguay Round of GATT (now WTO) also advocated the removal of restrictions and non-tariff trade barriers to free flow of international services across countries so that domestic market of LDCs improve its efficiency and competitiveness and eventually improve economic growth. It is against this backdrop that many countries have deregulated its insurance sector and countries, which already allowed private insurance

business further deregulated their reinsurance business such as Brazil (1991) and Peru (1991). Table: 6.1 summarizes the year when different countries opened up their insurance industry. The insurance business remains a state monopoly only in Cuba, Myanmar, North Korea and in India[3].

Table: 6.1 **Country specific year of opening of domestic insurance market**

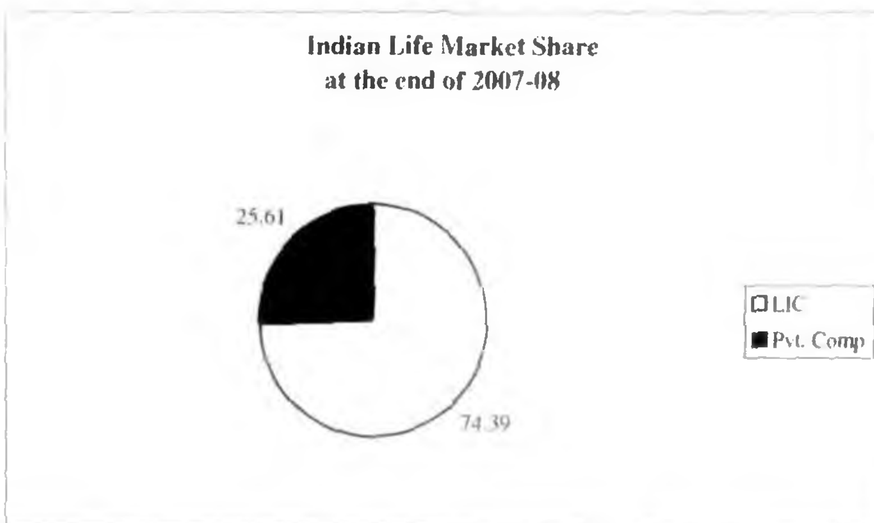
Country	Years
South Korea	1987
Taiwan	1987
Argentina	1990
Pakistan	1990
Czechoslovakia	1992
Philippines	1992
Japan	1996

Source: Compiled from various sources.

In India, the reforms in the insurance sector (Life and General) commenced with the setting up of the **Committee on Reforms on Insurance Sector** under the chairmanship of Dr. R.N.Malhotra, the ex- governor of RBI, by the GOI in April 1993 for examining the structure of insurance industry. The recommendations of the Committee was submitted in 1994 which was accepted in principle by the government and started implementing the recommendations since December 1999, thus heralding an era of liberalization in the country's insurance sector[4]. The setting up of **Insurance Regulatory and Development Authority (IRDA)** and opening up of Insurance Business (life and general) to foreign capital up to 26 per cent were the initial steps in this direction. It is widely acknowledged that the opening up of the insurance sector has been aimed at ushering in greater efficiency in the insurance business by maximising productivity and minimising transaction cost. Competition is believed to bring a wider choice of products at lower prices to the consumers, larger coverage of population, better customer service, superior information technology, higher returns to the policyholders, and so on.

At present there are 21 life insurers are operating in the Indian life insurance market along with the state own life insurer Life Insurance Corporation of India (LICI) and at the end of the financial year 2007-08, The total volume of premium reached to Rs. 201,351 crore in 2007-2008 from Rs. 24,630 crore in the year 1999-2000 which is more than 700% increase by 19 numbers of insurers (including LICI) in India. In India, private life insurers are slowly gaining the momentum to penetrate the market with their new products, services and the global knowledge of expertise in doing life business. This can be witnessed from their market share statistics which shows (Fig: 6.1) nearly 26 percent of the Market are in their hands at the end of 2007-08 financial year. Most important aspect is that their acceptability is on the rise though it is an urban phenomenon. The prominent private players operating actively are, ICICI Prudential Life, Bajaj Allianz Life, Max New York Life, TATA AIG Life, HDFC Standard Life, Birla Sun Life, Met Life, SBI Life, Aviva Life, Kotak Mahindra Life and Reliance Life Insurance Company[5].

Fig: 6.1



Source: IRDA annual report, 2007-2008.

The role of financial development and economic growth has been well established by the researchers and economic analysts in their empirical studies [Levine and Zervos[6] (1998), Levine[7] (1997), King and Levine (1993 (a)[8] and (b)[9], Levine et. al[10]. (2000), and Beck et. al[11] (2000)]. These studies established the role of financial institutions and

financial intermediaries in fostering the economic growth by improving the efficiency of capital accumulation, encouraging savings and ultimately improving the productivity of the economy. Now the research has shifted from established link between financial development and economic growth to understand factors that affects the overall financial services, thereby the underlying factors that lead to improve the financial development. Insurance is one of the important financial services that can trigger the growth in an economy by channelising the long-term savings for the productive purpose and providing a shield before the risk associated with any activity related to productivity, assets or life. Recent studies show that the insurance industry can improve the economic growth through financial intermediation, risk aversion and generating employment. For example, we can highlight the studies of Outreville[12] (1990 b), Catalan et. al.[13], (2000), and Ward and Zurbruegg[14] (2000).

By identifying, the factors that promote the demand for life insurance it would be possible to find out the factors actually work as a catalyst in promoting financial development and, thereby, economic growth. The recent empirical work on insurance market by Browne and Kim[15] (1993), Browne et al[16]. (2000), Ward and Zurbruegg[17] (2002), Beck and Webb[18] (2003) and Esho et. al.[19] (2004) has shown that the level of insurance demand can be influenced by the economic, demographic and legal factors. Despite the findings of several influencing factors affecting the life insurance demand and the promotion of life insurance development, there is meek guidance for the policy makers to focus on specific factor/s to foster the life insurance development and thereby financial development which improves the economic development. The objective of this study is to determine the factors which affect the demand for life insurance in the post reform period and in doing so, provide guidance for the policymakers on how to promote life insurance development in India. In the previous section we have investigated the relationship between life insurance reforms and demand for life insurance in India and found that the reforms do affects the life insurance business positively in India and need more reforms in this sector to boost the life insurance sector. In this section we will focus on the factors (macro level), *other than life insurance sector reforms*, which govern the life insurance demand in India.

6.2: LITERATURE REVIEW

Yaari[20] (1965) and Hakanson[21] (1969) were the first to develop a theoretical framework to explain the life insurance demand. Bequest motives and risk aversion, due to the pre mature death of the wage earner, were the main factors, which influence the purchasing behaviour of the consumers. According to Yaari, demand for life insurance is based on the consumer's lifetime allocation process. The consumer maximizes lifetime utility subject to a vector of interest rates and a vector of prices including life insurance premium rates. In contrast to the pioneer works of Yaari (1965) and Hakanson (1969) who stressed on bequest motives and risk aversion as the determinants of insurance demand, Lewis[22] (1989) has underscored the preference pattern of beneficiaries for its explanation based on the following model, which builds the theoretical starting points for many empirical works.

$$(1-lp)F=\max\left[\left(\frac{1-lp}{l(1-p)}\right)^{1/\delta} TC-W,\ 0\right] \qquad (6.1)$$

Where,

F = face value of life insurance written on the primary wag e earner's life;

l = policy loading factor (the ratio of the cost of the insurance to its actuarial value);

p = probability of primary wage earner's death;

δ = a measure of beneficiaries' relative risk aversion;

TC = value of consumption of each off spring from the current period until he/she leaves the household and of the spouse over his/her remaining life span.

W = *household's net worth.*

This model states that life insurance demand increases with the amount of beneficiaries' consumption and degree of risk aversion along with the probability of primary wage earner's death. This model recognizes that a number of variables may explain international differences in insurance demand. Based on these ideas of the Lewis (1989) model subsequent scholars have tried different sets of arguments to explain the insurance demand behaviour. Let us review those '*arguments*' concisely to examine their relevance in Indian context. Some studies are based on cross-section data of different

countries whereas others are country specific. No such study has yet been published so far, at least at the time of taking this research work, on Indian life insurance market after the implementation of reforms in this sector in 1999. The only published literature available on Indian life insurance industry is the study of Sadhak[23] (2006) who has shown certain naive statistical relationship among lead factors. But literature on many other economy/economies is available and the studies found that there are many factors operating simultaneously to influence the demand for life insurance products such as macro-economic factors, social factors and legal/political factors. All the factors are categorized under *economic* and *non-economic* heads for the simplicity of the above discussions.

6.2.1: Economic Factors

Income: Yaari (1965), Hakansson (1969), Fortune[24] (1973), Fischer[25] (1973), Campbell[26] (1980) and Lewis (1989) have shown the demand for life insurance is positively correlated with income. An individual's consumption increases with the increase with his/her income, which makes life insurance more affordable. As the income increases the need for life insurance also increases to protect the principal wage earner for the income flow in future and also to protect the dependants against the loss of premature death and to meet the expected consumption of his/her dependants. These results are also confirmed by the more recent cross country based works on life insurance of Benstock et. al[27], (1986), Truett and Truett[28] (1990), Browne and Kim[29] (1993), Outreville[30] (1996), Ward and Zurbruegg[31] (2002) and Beck and Webb[32] (2003).

Ward and Zurbruegg (2002) extended these findings by modern OECD economies with the emerging economies in Asia. They found, interestingly, that life insurance consumption becomes less sensitive to income growth in the countries with higher per capita income. This result was in line with the S-curve hypothesis by Enz[33] (2000) which states that at higher levels of income per capita, the demand for life insurance or insurance consumption becomes less sensitive as insurance product saturation reached. The main reason behind this low demand for life insurance is that at

higher level of income, consumers become so wealthy that they can afford to retain risk with their current financial portfolios. Enz's (2000) study also shows that, on average, Asians spends more on life insurance than in the developed countries of the world. This is in line with the findings of Ward and Zurbruegg (2002) that the consumption of life insurance products in OECD countries is three times less sensitive to changes in income that it is in Asia.

Previous studies of life insurance consumption have used gross national product (GNP) and gross domestic product (GDP) to proxy income. However, both GDP and GNP less accurately reflect the amount of disposable personal income.

Inflation: inflation has a significant negative impact on demand for life insurance product. A rising inflation rate leads to a devaluation of future benefits from purchasing life insurance. A country that is experiencing high inflation rate, life insurance may not be able to serve the interest of individuals and families as a savings product or as a product, which will benefit in future eventualities. Inflation erodes the value of life insurance.

Green[34] (1954), Fortune[35] (1973), Babbel[36] (1981) have shown that inflationary expectation have a significant negative impact on life insurance consumption. Moreover, Babble[37] (1979) and (1981) highlighted that anticipated inflation rate with the governmental regulations could surge the cost of life insurance even when policies are index linked by using empirical data from Brazil. The study of Browne and Kim[38] (1993) and Outreville[39] (1996) reveal the same impact on life insurance. However, the findings of Cargill and Troxel[40] (1979), Rubayah and Zaidi[41] (2000) are not in the line with the results of Browne and Kim (1993). Rubayah and Zaidi (2000) showed an insignificant positive relationship between inflation rate and life insurance consumption. Ward and Zurbruegg[42] (2002) pointed out that the impact of inflation and economic uncertainty on insurance demand is not same everywhere in the world. Inflation is around two and half times more important in Asian economies than in general OECD countries.

In India, inflation plays a vital role in day-to-day life of every citizen as it affects the household directly. Generally inflation pressure on food prices are more vulnerable than in any other segment of the economy as India is having three hundred million middle class populations along with 26% of population, which lives below poverty line[43]. As the inflation, hits the household directly in India, the inflationary pressure tend to reduce the savings behaviour of common people. This may have an effect on the demand for life insurance in India. We are not certain about the out come effect of inflationary pressure on the consumption or the demand for life insurance in India though we expect a negative relationship with the increasing inflation. Browne and Kim (1993) used an average inflation rate of the last eight years, Outreville (1996) used a weighted average of realized price changes over the last five years, Cargill and Troxel (1979) used percentage change in consumer price index (CPI) over a period of fourteen months and Rubayah and Zaidi (2000) used CPI as a basis for anticipated rate of inflation in their studies.

Interest rates: The findings on the relationship between the interest rates and the demand for life insurance are inconclusive. Cargill and Troxel[44] (1979) examined two kinds of interest rates, the computing yield on other savings products and the return earned by life insurance products. The findings on computing yields tend to negatively related to life insurance and inconsistent too. On the other hand, findings on return earned by the insurers are mixed. In another study, Outreville[45] (1996) has shown that the interest rates are not the determining factor affecting the life insurance demand. Outreville used the real interest rates (current bank discount rate minus anticipated inflation) and the lending rate to study the impact of those interest rates on demand for life insurance. On the other hand, Rubayah and Zaidi[46] (2000) used three types of interest rates in their study. First, the personal savings rate; second, the short-term interest rates; and third the current interest rates. The personal savings rate and the short-term interest rates are negatively associated and significant, while the current savings rate does not have any significant effect on life insurance demand.

The rate of interest are going to play an important role on demand for life insurance only when people are tend to take life insurance products as savings

instrument. A higher interest rate on alternative investment or savings product tends to make insurance product less attractive to the savers as a saving instrument. In India, as the evidence shows, the business or the spread of life insurance is yet to develop fully, the role of interest rates in determining the demand for life insurance product would be meager. It is only after 1999 when insurance market was opened, few new and big players have started to operate in India with their different array of products, which give Indians a choice of different products to invest. This is a new phenomenon in Indian insurance market. In India, life insurance considered as savings instrument only after it met the basic objective of life insurance, that is, future benefits arising out of premature death of the principal wage earner.

Financial Development: Outreville[47] (1996) finds a significant and positive relationship between financial development and life insurance development in developing countries. Whether financial development promote the development in life insurance or life insurance development promote financial development is a different issue and to know the causality relationship, we need different set of data and model that we are not intended to find out. In developing the model, Outreville (1996) assumed that, there exists a positive relationship between financial development and the individual's ability to buy insurance product.

Measuring financial development is very controversial as countries differ in their institutional structure and the level of development of each country's financial sector. In his study, Outreville (1990b, 1996) used two proxies to measure the financial development of developing countries. First, is the ratio of quasi money to broad money and the second, is the ratio between broader definitions of money to GDP. Broad money (M3) often taken as an adequate measure of the size of financial sector development in developing countries because of the predominance of the banking sector. Another reason to use this proxy to measure the development of financial sector is the lack of available data set on financial assets through out the different developing countries. This perhaps, one of the reasons behind using the banking sector development indicator as one of the

dependant variable in Beck and Webb[48] (2003) study, where they found that banking sector development is positively correlated with life insurance consumption.

Well functioning banking system may increase the confidence level of consumers have in other financial institutions; for example life insurance companies. Again, because of the well functioning banks life insurers and policyholders get an efficient payment system that helps to improve the consumption of insurance. This led us to use banking sector development measure as one of the variable in our study to proxy the financial development. We choose household access to banking system[49] in India to proxy the financial development as most of the reforms were initiated and introduced in banking system since the liberalization process begun in 1991 and India's financial system is dominated by the size and spread of banks.

Price of insurance: it is always true that the price of any product will always be the determining factor (not for exceptions) for the demand of that particular product and life insurance policies are not the exception. However, it is said that consumers face difficulty in comparing the price of insurance products because the price of life insurance policies depend on types of product, the design of the product, payment period, mode and provisions of the product and importantly on the age of the policy holder. Despite these reasons, studies such as Babbel[50] (1985), Beenstock et. al[51]. (1986), Browne and Kim[52] (1993), Outreville[53] (1996), Ward and Zurbruegg[54] (2002), and Lim and Haberman[55] (2005) suggest that the price affects the consumption of life insurance policies.

Measuring the impact of price on life insurance is difficult due to the problem of actuarially determining the price. To overcome this problem several studies [Beenstock et al. (1986), Outreville (1996), and Ward and Zurbruegg (2002)] used life expectancy at birth as it reflects the actuarially fair price for life insurance. This was based on the assumption that the longer the people are going to live, the more will be the payments of premiums. On the other hand, Browne and Kim (1993) used the policy loading charge as the price measure that is the ratio of life insurance premiums to the amounts of life insurance in force.

6.2.2: Non-Economic Factors

Life expectancy (at birth): Generally, it is assumed that the longer the people are going to live the greater will be the demand for life insurance. Outreville[56] (1996) and Ward and Zurbruegg[57] (2002) find a positive and significant relationship between the life expectancy and the life insurance demand. The positive relationship between this two variable implies that the population that have longer life will buy more life insurance because they would expect lower cost of insurance and greater capital accumulation as the cost of insurance spread over a longer period. Browne and Kim[58] (1993) used life expectancy to measure the probability of death in a country and found insignificant to affect the demand for life insurance products.

On the other hand, if we examine the life expectancy in its social context, it would be difficult to use this variable because life expectancy is highly related with nation's wealth, national income or per capita income. Therefore, it would be difficult to say whether life expectancy or the greater wealth or income is driving the demand for life insurance upward.

Social Security Expenditure: There is no unanimous conclusion regarding the effect of social security expenditure in a country on the premium expenditure on life insurance. The impact of social welfare provisions on life insurance demand has been tested by Babbel[59] (1985), Beenstock et. al[60]. (1986), Lewis[61] (1989), Browne and Kim[62] (1993), Outreville[63] (1996), Ward and Zurbruegg[64] (2002), Beck and Webb[65] (2003). They indicate that the needs for individuals to make private provisions for early death are reduced when government spending on social security increases. Browne and Kim (1993) also find that social security has positive, though insignificant, impacts in this regard. On the other hand, Ward and Zurbruegg (2002) highlighted that the impact of average social welfare expenditure on life insurance demand is insignificant in Asia. From this point of view, we just cannot agree that the low provisions of government expenditure in social welfare are driving the demand for life insurance. It should be emphasized here that the

effect of social security on the demand for life insurance varies from country to country due to the differences in social security system. In India, government spends on social welfare under the heads of education, medical and health, family welfare, housing, urban development and other social services and the provisions under these heads are not enough to meet all the social requirements of the huge masses especially those who live below poverty line (BPL). With the present level of spending on social security by the government is not going to reduce the demand for the life insurance products either. So the effect of social security investments on demand of life insurance products would be very negligible in case of India.

Education: Education lengthens the period of dependency and therefore increases the demand for life insurance. At the same time, however, a higher level of education leads to the perception of greater risk aversion among people. However, the literature suggests that education is not particularly significant as a promoter of life insurance demand [Beenstock et. al[66]. (1986), Beck and Webb[67] (2003)]. Browne and Kim[68] (1993), *in their study find education is inconsistent in their model and could not draw any* conclusion.

In measuring education Beck and Webb (2003) used average years of schooling in the population over 25 years and gross secondary enrollment rate whereas Outreville (1996) used average years of schooling of the labour force in his study. In India, where literacy is not as high as in the developed countries, a step increase or spread of education might lead to an increase in the demand for life insurance products as the education improves the level of perceived risk aversion and awareness among the people. To spread education among the all section of masses, GOI made elementary education mandatory for all children below 14 years and taken the Sarva Siksha Mission (SSM) programme to eradicate illiteracy.

Urbanization: The Beck and Webb[69] (2003) have studied the effect of urbanization on life insurance consumption and found it insignificant though it was expected a higher share of urban population to have higher level of life insurance

consumption. Outreville[70] (1996), using ratio of agriculture population to total employed population suggests that the life insurance development may be related to the status of country's social structure. The decline of agriculture population is likely to increase the urban population. In India, since the inception of life insurance business, life insurance is an urban phenomenon. *Mostly its business is concentrated in the urban areas of India.* In one hand, due to the decrease in the numbers of joint family [(1)] system in modern urban life, the reliance on formal life insurance product has increased in India in recent times. On the other hand, concentration of consumers in a geographical area makes the life insurance cheaper as the cost related to distribution of life policies; underwriting, premium collection, claim settlements and marketing are reduced. We expect a higher ratio of urban area is going to foster the growth of life insurance consumption in India. In India, life insurance is also treated as a luxury product, which is affordable to the higher income groups, mostly in the urban areas. In this study, urbanization ratio has been used as one of the measure of social structure of India. A summary of life insurance consumption studies is provided in the annexure 6.(A).

6.3: Measurement of Dependent Variables

Measuring Life Insurance: There are few variables, which are used to measure the life insurance consumption or demand in an economy by different researchers, such as life insurance *Penetration*, life insurance *Density*, life insurance *in force*, life insurance *premium volume*, life *insurance in savings* etc.

Life Insurance Penetration is the ratio of the direct gross premium volume to GDP in an economy. This is a relative measure of life insurance sector's contribution to the total economy. Many researchers have used life insurance penetration as a measure of insurance consumption (demand), e.g., Outreville (1996), Beck and Web (2003), Hwang

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[(1)] Why joint families require less life insurance products to avert risk can be explained by simple mathematical calculation. Let us assume a joint family has n numbers of earning members who generates income with random variables y1, y2, and y3 … y^n. If we calculate, the per capita income of this family stands at $\{(y^1+y^1+y^1+\ldots\ldots+y^n)/n\}$ which is more stable than any individual's income (y). The break up of such joint family into n numbers of families, increases the risk and consequently, require more life insurance product to negate the risk.

and Greenford[71] (2005), Zhang and Zhu[72] (2005). Since the penetration is the product of price and quantity, it sometimes mislead in understanding the demand or consumption pattern due to higher premium rates, competitiveness of insurance market (due to lack of players), high cost of writing of insurance policies due to governmental regulations and differences in the price of different policies sold by different insurers.

Life Insurance Density is the ratio of direct gross premium volume to the population in a country. It is average spending of people in life insurance in a country or per capita spending on life insurance. This particular variable to measure the life insurance is being used often by the researchers to represent the consumption of life insurance in an economy. For instance, Truett and Truett (1990), Browne and Kim (1993), Outreville (1996), Zhuo[73] (1999), Beck and Web (2003), Hwang and Gao[74] (2003), Hwang and Greenford (2005), Zhang and Zhu (2005).

Total Premium Volume represents the total life insurance premium written in a year in a given country. This variable has been used as dependent variable by different researchers in their study to analyze the consumption or demand pattern of life insurance; such as Babbel (1985), Goldsmith[75] (1983), Ferber and Lee[76] (1980), Beenstock et. al. (1986), Schwebler[77] (1984), Diacon[78] (1980), Browne and Kim (1993), Ward and Zurbruegg (2002), Lim and Haberman (2004).

Life Insurance in Force is equals the sum total of the face amounts of life policies plus dividends. Life insurance in force measures the mortality risk along with savings. Thus, life insurance in force measures the cash value of policies along with risk. This measure has been used as a dependent variable by Beck and Webb (2002), Browne and Kim (1993) in their studies

Life insurance penetration and density is the internationally accepted measure of life insurance development and all the financial institutions (life insurance companies, research firms, banks etc.) and international organizations such as IMF, World Bank, UNCTAD etc., report life insurance development with help of these two measures of life

insurance. In this study, both penetration and density will be used as dependent variables to determine the factors influencing the demand for life insurance in India. Density measures life insurance consumption with out adjusting income and we, therefore, expect density to be more elastic than penetration which measures the relative importance of life insurance business in an economy. We expect life insurance in force (the sum total of the face amounts of life policies plus dividends) will measure insurance consumption in a better way. *However, this measure also did not highlight the demand (quantity) of life insurance in an economy.* To do so, we have introduces a new measure to quantify the demand, the number of ***new policies*** issued by the insurance industry in every year to measure the overall demand for life insurance products in India.

6.4: Measurement of Independent Variables:

For the purpose of this study, the following definitions have been used to examine the independent variables.

Income (RDPI): Previous studies of life insurance consumption have used gross national product (GNP) and gross domestic product (GDP) to proxy income. However, both GDP and GNP less accurately reflect the amount of disposable personal income. To measure the effect of income on life insurance consumption we use per capita real personal disposable income in our study.

Inflation (WPI): Rate of change in the yearly wholesale price index (WPI) [(2)] is used here as a measure of inflation as it reflects the real effects on households all over India.

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(2) The variation in the price level in India can be measured in terms of the Wholesale Price Index (WPI), or the Implicit National Income Deflator (NID) or the Consumer Price Index (CPI). The WPI is the main measure of the rate of inflation often used in India justifiable on grounds of convenience as well as analytical reasoning. Firstly, the commodity coverage in WPI is wider than that in CPI, and secondly, WPI is computed on all-India basis whereas CPI is just constructed for specific centre and then aggregated to get the all-India index. Because of this feature majority of public, more easily understands WPI.

Interest rates (INTS): As the life insurance products are long-term in nature, we will use the commercial bank's savings rate for five and more years to assess the impact of interest rates on life insurance demand.

Financial development (FD): We use the percentage of people with deposit accounts in banking system to proxy financial development in our study. Household access to banking system is one of the new measures that has introduced by the World Bank very recently in their Financial Sector Development Indicators (FSDI).

Price of insurance (LEXP): We are going to use the life expectancy at birth as a proxy measure of price of life insurance in our study as the fair price of life insurance is not available and difficult to compute due to the reasons stated earlier in this study.

Education (EDUN): It is very difficult to use any measure of education to evaluate the impact of education on the demand for life insurance. Here we have used the adults literacy rates (ALR) prepared by the UNDP to present the overall educational status of India.

Urbanisation (URBN): We used the percentage of people in urban area in total population to study its impact on life insurance demand.
Based on the above propositions, the demand for life insurance is hypothesized to have following relationships with the economic and non-economic variables.

DEMAND = *f* [INCOME (+), FINANCIAL DEVELOPMENT (+), INFLATION (-), INTEREST RATES (-), LIFE EXPECTANCY (+), EDUCATION (+), URBANISATION (+)]

6.5: Sample Size

The financial sector reforms was started in India with the implementation of new economic policy in 1991 by the then finance minister Dr. Man Mohan Singh who is the

present Prime Minister of India. Insurance sector reforms are the part of the total financial sector reforms initiative. The first step towards insurance sector reforms was the setting up of the Malhotra Committee in 1992-93 and consequently the opening of the life insurance sector in 1999 and setting up of an independent regulatory body IRDA. This study focuses on to find out the relationship between economic and non-economic factors and the consumption of life insurance in India in the post reform period which consists of the annual data series from 1991 to 2008.

6.6: Data Source

All the data series are annual aggregate data for the period starting from 1991 to 2008 and secondary in nature. All the annual data are collected from, annual reports of LICI and IRDA, Handbook of Statistics on Indian Economy, RBI; Human Development Reports of UNDP, World Development Indicators of the World Bank, IFS data base from IMF, CIA fact book on India, UNCTAD reports, various issues and reports from Swiss Re. life insurance penetration, density and new policy issue data are collected from sigma issues, annual reports of LICI and annual reports of IRDA. All the economic variables are collected from RBI and IMF whereas the non-economic data are collected from UNDP and the World Bank.

6.7: Research Methodology

The analysis of the above mentioned study has been carried out in the following manner (Gujrati, 2007)[79], (Lim and Haberman, 2005)[80],

Transformation of Variables: For any time series data, transformations of variables are dependent on the model/s to be tested and on its values. A transformation is made on the variables at level value; however, variables of rate values are not transformed because they are already in a preferred form as they are a measure of change. Accordingly, the variables of rate value form, i.e., life insurance penetration (Pen), density (Den), inflation (WPI), financial development (FD), interest rates (Intrs),

Education (Edun), Life Expectancy (Lexp) and Urbanisation (Urbn) are not transformed as they are in the required form. But the variables of the level value form are subject to transformation by taking natural logarithm of their level values. In this case, total new policy issued (NP), and income (GDPI) has been transformed and transformed variables are used in the analysis.

Testing for Unit Root & Co-integration: All time series variables, whether transformed or not transformed, are subject to a statistical test to investigate their univariate properties. Formally, Augmented Dickey Fuller (ADF) unit root test[81] is used to check the stationary properties of the variables whether the variables are stationary or non-stationary because using non stationary time series variable in the regression might give spurious results[82]. Non stationary variables may be used in our model provided the series are co integrated. Therefore, Engle and Granger[83] (1987) co-integration study also been done to verify this property.

Initial Estimation Equation: Most of the previous studies have adopted the OLS (Ordinenary Least Square) technique to determine the factors affecting the life insurance demand. There are, however, variations in the underlying relationship of the demand functions. Few researchers have used the log-linear equations while others have used semi log-linear equations in their studies. The initial model consists of three-regression equation as the demand for life insurance is alternatively defined by life insurance *penetration* (PEN), *density* (DEN) and *new policies* (NP). To test our hypothesis, ordinary least squares is used to estimate the following equations,

$$(PEN) = \alpha_1 + \beta_{11} \ln(RPDI) + \beta_{12}(FD) + \beta_{13}(WPI) + \beta_{14}(INTS) + \beta_{15}(LEXP) + \beta_{16}(EDUN) + \beta_{17}(URBN) + e_{1t} \qquad (6.2)$$

$$(DEN) = \alpha_2 + \beta_{21} \ln(RPDI) + \beta_{22}(FD) + \beta_{23}(WPI) + \beta_{24}(INTS) + \beta_{25}(LEXP) + \beta_{26}(EDUN) + \beta_{27}(URBN) + e_2 \qquad (6.3)$$

$$(NP) = \alpha_3 + \beta_{31} \ln(RPDI) + \beta_{32}(FD) + \beta_{33}(WPI) + \beta_{34}(INTS) + \beta_{35}(LEXP) + \beta_{36}(EDUN) + \beta_{37}(URBN) + e_{3t} \qquad (6.4)$$

Where, ln = natural log (i.e., log to the base e), $RPDI$ = real personal disposable income, FD = financial development, WPI = wholesale price index, $INTS$ = interest rate, $LEXP$ = life expectancy at birth, $EDUN$ = education index, $URBN$ = urbanization rate, α_t = the intercept, $(\beta_1 \ldots \beta_7)$ = slope coefficients, and e_t = error term.

The above-mentioned three initial estimation equations are subject to subsequent simplification by removing the most insignificant variable from the equation. This process is repeated until further deletion of any insignificant variables from the equation causes autocorrelation in the residuals. Every equation will be tested for the presence of residual serial correlation before and after the simplification process. If the serial correlation is not present in the residuals then most insignificant variable form the equation is removed. If the residual serial correlation (we have used the Durbin-Watson statistics) is detected as a consequence of removing the most insignificant variable from the estimation equation, indicates that the variable should not be removed from the equation at that stage and the initial estimation equations need to be respecified to get the final regression equation.

6.8: EMPIRICAL FINDINGS

The first step is to transform the total new policy issued (NP) and income (GDPI) by taking natural logarithm of their level values. In the second step, the Augmented Dickey Fuller (ADF) unit root test is conducted to investigate stationarity properties of the variables. Using non stationary time series variable in the regression might give spurious results. Non stationary variables may be used in our model provided the series are co-integrated. Therefore, after conducting ADF unit root test, if the variables are found to non-stationary, a co-integration study using ADF also been done to corroborate that the variables are co-integrated before running the regression.

The results of the Augmented Dickey Fuller (ADF) unit root test indicate that the variables (dependant and independent) have unit root at their level values at 10%, 5% and

1% significance level. That is, the series are non-stationary and integrated of order (*I*). The results of the ADF unit root tests are summarised in the table: 6.2 as follows;

Table: 6.2

ADF UNIT ROOT TEST

Lag Length: (Automatic based on Modified AIC, Maximum Lag =3)

Variables	Null Hypothesis	ADF test Stat.	Prob*	DW stat	Critical Values 1%	5%	10%
Den	Den has a unit root (intercept)	8.8807	1.000	2.095	-3.8867	-3.0521	-2.6665
Pen	Pen has a unit root (intercept & trend)	1.7508	0.999	1.760	-4.8000	-3.7911	-3.3422
NP	NP has a unit root (intercept & trend)	-1.4144	0.818	2.031	-4.6162	-3.7104	-3.2977
RPDI	RPDI has a unit root (none)	3.1437	0.998	2.095	-2.7175	-1.9644	-1.6056
FD	FD has a unit root (intercept & trend)	-0.0765	0.989	2.216	-4.6678	-3.7732	-3.3103
EDUN	RPDI has a unit root (intercept)	2.3564	0.999	2.341	-4.0044	-3.0988	-2.6904
WPI	WPI has a unit root (intercept & trend)	-3.1805	0.122	2.117	-4.6678	-3.7732	-3.3103
LEXP	LEXP has a unit root (intercept & trend)	-1.9526	0.581	1.989	-4.6678	-3.7732	-3.3103
INTRS	INTRS has a unit root (intercept)	-1.9103	0.319	1.821	-3.9203	-3.0655	-2.6734
URBN	INTRS has a unit root (none)	2.0522	0.986	1.974	-2.7080	-1.9628	-1.6061

* Mac Kinnon (1996) one-sided p-values.

From the above table, it is observed that the computed ADF test statistics for all the data series are greater than the critical values (i.e., ADF test statistics lies to the right of the critical values). Since the computed ADF test-statistics is greater than the critical

values (at different level of significance), we cannot conclude to reject null hypothesis i.e., Ho. That means all the series has a unit root problem and the series is a non-stationary series.

Since the series under study is a non-stationary in nature we can't run a regression unless the variables of the series are co-integrated. Therefore, a co-integration test is conducted using ADF test. The basic purpose of the co-integration test is to determine whether a group of non- stationary variables are co-integrated or not. Engel and Granger (1987) points out that the two non-stationary variables can be used in regression if the linear combination of the two non-stationary variables are stationary. An equilibrium theory which involves non-stationary variables requires that the combination of the variables should be stationary.

We can rewrite the equation-(6.2) as follows,

$$e_{1t} = PEN - \alpha_1 + \beta_{11}\ln(RPDI) + \beta_{12}(FD) + \beta_{13}(WPI) + \beta_{14}(INTS) + \beta_{15}(LEXP) + \beta_{16}(EDUN) + \beta_{17}(URBN) \quad (6.5)$$

Since, e_{1t} must be stationary, this means that the linear combination of the non-stationary (integrated) variables given in the right hand side must also be stationary. Stationarity of the error term (e_{1t}) has been checked by both the ADF unit root test and Philip-Perron[84] unit root test and the results of the test are summurised below in Table: 6.3(a) & 6.3(b).

Table: 6.3(a)

ADF UNIT ROOT TEST

Lag Length: 0 (Automatic based on Modified AIC, Maximum Lag =4)

Variables	Null Hypothesis	ADF test Stat.	Prob*	DW stat	Critical Values		
					1%	5%	10%
(e_{1t})	(e_{1t}) has a unit root (none)	-4.902	0.0001	1.967	-2.7175	-1.9644	-1.6056

* Mac Kinnon (1996) one-sided p-values.

Table: 6.3(b)

PHILIPS-PERRON UNIT ROOT TEST

Bandwidth: 2 (Newey-West using Bartlett Kernel)

Variables	Null Hypothesis	PP test Stat.	Prob*	DW stat	Critical Values 1%	5%	10%
(e_t)	(e_t) has a unit root (none)	-7.133	0.0000	1.967	-2.7175	-1.9644	-1.6056

- Mac Kinnon (1996) one-sided p-values.

From the above tables, it is observed that the computed ADF/PP unit root test statistics for all the data series are smaller than the critical values (i.e., ADF/PP test statistics lies to the left of the critical values). Since the computed ADF/PP test-statistics is smaller than the critical values (at 1% level of significance), we can conclude to reject null hypothesis i.e., Ho. It means that the residual series (e_t) doesn't has a unit root problem and the (e_t) series is a stationary series at 1% significant level. The Durbin-Watson statistics is 1.96 that means, the (e_t) series does not have any autocorrelation problem. Now, we can use these non- stationary variables in equation-(6.2) as they are co-integrated. The results of the initial Ordinary Least Square (OLS) estimation of equation (6.2) are furnished in Table: 6.4.

The initial estimation of equation-(6.2) shows that the income (RPDI), financial development (FD), inflation (WPI), interest rates (INTRS), life expectancy (LEXP) and education (EDUN) are the important variables associated with the demand for life insurance in India. Both income and financial development are positively related with the demand for life insurance in India, whereas rate of interest is negatively related and significant. A close observation shows that the life expectancy, inflation and education variables are not consistent in spite of significantly related with the demand for life insurance. Since the above result includes an insignificant variable urbanization (URBN), the estimation is subject to further simplification and the insignificant variable (URBN), has been deleted from the initial estimation equation after confirming that there is no evidence of residual serial correlation. The result of the re-estimated equation is given in

Table: 6.4

The OLS estimation of initial equation (6.2) for the regression of demand (PEN) for life insurance on economic and non-economic variables

Dependent Variable: PEN

Method: Least Squares

Sample (adjusted): 17 (1992-2008)

Variables	Coefficient	Std. Error	t-Statistic	Prob.
RPDI	9.335621	3.350641	2.786219	0.0212
FD	0.212573	0.081927	2.594670	0.0290
WPI	0.075874	0.027557	2.753347	0.0224
INTRS	-0.100754	0.039140	-2.574208	0.0300
URBN	-0.148660	0.180134	-0.825275	**0.4305**
LEXP	0.296608	0.107514	2.758783	0.0222
EDUN	-0.416556	0.129027	-3.228435	0.0103
C	-89.10912	27.09999	-3.288161	0.0094
R-squared	0.982114	Akaike info criterion(AIC)		-0.429573
Adjusted R-squared	**0.968203**	Schwarz criterion		-0.037473
S.E. of regression	0.167576	F-statistic		70.59937
Durbin-Watson stat.	**2.426732**	Prob(F-statistic)		0.000000

the table: 6.5, which shows that, at this stage, all the variables become significant and there is no evidence of residual serial correlation in the estimation as the commuted DW statistics is significant at 1% level. Hence, the final regression model is obtained as under,

$$PEN = 7.1132*RPDI + 0.1584*FD + 0.0663*WPI - 0.1108*INTRS + 0.2335*LEXP - 0.3294*EDUN - 69.9805 \quad (6.6)$$

The result of the final estimation shows that RPDI, FD, WPI and LEXP have a significant positive relationship with the demand for life insurance in India and EDUN along with INTRS have significant negative relationship. The findings of RPDI, being positively related with the life insurance demand, is in line with the previous studies such

as, Lewis (1989), Truett and Truett (1990), Browne and Kim (1993), Outreville (1996), Ward and Zurbruegg (2002),Beck and Webb (2003), Rubayah and Zaidi (2000) and Hwang and Greenford (2005). FD is also found to be positively associated with the demand for life insurance in India and in line with the findings of Beck and Webb (2003), Outreville (1996) and Li et. al[85]. (2007). But the WPI is positively associated with the demand for life insurance in India which is contrary to the hypothesized proposition that inflation (WPI) is negatively related since the rising inflation rate leads to devaluation of future benefits from purchasing life policies. This finding is not in line with the findings of Green (1954), Fortune (1973), Browne and Kim (1993), Beck and Webb (2003) and Li et al (2007) where WPI found to impacted negatively. In case of LEXP, it is found to be significant and positively associated with the demand for life insurance in India and in line with the findings of Outreville (1996).

Table: 6.5

The OLS estimation for the final Test Equation of demand (PEN) for life insurance on economic and non-economic variable

Dependent Variable: PEN

Method: Least Squares

Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RPDI	7.113240	1.961714	3.626033	0.0046
FD	0.158478	0.048357	3.277224	0.0083
WPI	0.066335	0.024614	2.695048	0.0225
INTRS	-0.110858	0.036578	-3.030744	0.0127
LEXP	0.233503	0.074365	3.139959	0.0105
EDUN	-0.329485	0.073080	-4.508575	0.0011
C	-69.98056	13.81603	-5.065173	0.0005
R-squared	**0.980761**	Akaike info criterion (AIC)		-0.474272
Adjusted R-squared	**0.969217**	Schwarz criterion		-0.131184
S.E. of regression	0.164882	**F-statistic**		**84.96204**
Durbin-Watson stat.	**2.057721**	**Prob(F-statistic)**		**0.000000**

In this study, LEXP has been used as actuarially fair price to proxy the price of average life insurance based on the argument that the longer people are going to live, there will be more payments in the form of life premiums to the life insurance industry and not in the form of social context. Most significantly, this study finds that there is a negative relationship between educational development (EDUN) and life insurance consumptions. This is in contrast to the findings of Truett and Truett (1990), Browne and Kim (1993), Outreville (1996), Ward and Zurbruegg (2002), Beck and Webb (2003) and Li et al (2007) who found that education has appositive impact on the life insurance demand. This is probably due to the low level of literary in India and the lack of awareness among the people about the importance of life insurance products in their lives. It is possible that taking other alternative measures in education might give expected results but adult literacy rate has been considered in this study because it is the adults who take the decision of purchasing life insurance being an earning member.

The interest rates on alternative investments/savings instruments found to be significant and negative relationship with the development of life insurance demand in India which is in line with the findings of Cargill and Troxel (1979), Outreville (1996), Rubayah and Zaidi (2000) and Li et. al. (2007). High interest rates offered by the other alternative investment often preferred by the investors because of liquidity elements and sometimes the investments are short term in nature, i.e., mutual funds, bank deposits etc. From the results of Table: 6.5, it is clear that the above mentioned variables (RPDI, FD, WPI, INTRS, LEXP, and EDUN) collectively explain about 97% of the variance in the demand for life insurance in India being, adjusted **R^2 = 0.9692** and **P-value = 0.0000.** Only 3% of the variance is note explained by the regression model we have used in this study. The test for normality (JB Statistic =0.765185, P-value =0.682091) indicates that the residuals are normally distributed.

Similarly, we can rewrite the equation- (6.3) and (6.4) as follows to check the co-integration properties.

$$\begin{aligned}(e_{2t}) = (DEN) - \alpha_2 + \beta_{21}\ln(RPDI) + \beta_{22}(FD) + \beta_{23}(WPI) + \beta_{24}(INTS) + \beta_{25}(LEXP) \\ + \beta_{26}(EDUN) + \beta_{27}(URBN) + e_{2t}\end{aligned} \quad (6.7)$$

$$\begin{aligned}(e_{3t}) = (NP) - \alpha_3 + \beta_{31}\ln(RPDI) + \beta_{32}(FD) + \beta_{33}(WPI) + \beta_{34}(INTS) \\ + \beta_{35}(LEXP) + \beta_{36}(EDUN) + \beta_{37}(URBN)\end{aligned} \quad (6.8)$$

Stationarity of the both the error terms {(e_{2t}) & (e_{3t})} has been checked by ADF unit root test and Philip-Perron unit root test and the results of both the tests are summurised below in Table: 6.6 (a, b) & Table: 6.7(a, b).

Table: 6.6(a)

ADF UNIT ROOT TEST

Lag Length: 0 (Automatic based on Modified AIC, Maximum Lag =4)

Variables	Null Hypothesis	ADF test Stat.	Prob*	DW stat	Critical Values		
					1%	5%	10%
(e_{2t})	(e_{2t}) has a unit root (none)	**-5.008**	**0.0002**	**2.049**	-2.7175	-1.9644	-1.6056

* *Mac Kinnon (1996) one-sided p-values*

Table: 6.6(b)

PHILIPS-PERRON UNIT ROOT TEST

Bandwidth: 2 (Newey-West using Bartlett Kernel)

Variables	Null Hypothesis	PP test Stat.	Prob*	DW stat	Critical Values		
					1%	5%	10%
(e_{2t})	(e_{2t}) has a unit root (none)	**-5.1610**	**0.0000**	**2.049**	-2.7175	-1.9644	-1.6056

- Mac Kinnon (1996) one-sided p-values.

Table: 6.7(a)

ADF UNIT ROOT TEST

Lag Length: 0 (Automatic based on Modified AIC, Maximum Lag =4)

Variables	Null Hypothesis	ADF test Stat.	Prob*	DW stat	Critical Values		
					1%	5%	10%
(e_{3t})	(e_{3t}) has a unit root (none)	**-4.7485**	**0.0001**	**2.005**	-2.7175	-1.9644	-1.6056

* Mac Kinnon (1996) one-sided p-values.

Table: 6.7(b)

PHILIPS-PERRON UNIT ROOT TEST

Bandwidth: 2 (Newey-West using Bartlett Kernel)

Variables	Null Hypothesis	PP test Stat.	Prob*	DW stat	Critical Values		
					1%	5%	10%
(e_{3t})	(e_{3t}) has a unit root (none)	**-4.7925**	**0.0001**	**2.005**	-2.7175	-1.9644	-1.6056

- Mac Kinnon (1996) one-sided p-values.

Since the computed ADF/PP test-statistics is smaller than the critical values (at 1% level of significance), the null hypothesis can be rejected and we can conclude that the residual series (e_{2t}) and (e_{3t}) doesn't have any unit root problem and both the series are stationary series at 1% significance level. The Durbin-Watson statistics are 2.049 and 2.005 respectively, which means, both the series does not have any autocorrelation problem. Now, we can use these non- stationary variables in equation-(6.3) and (6.4) to estimate the life insurance demand function, as they are co-integrated. The initial estimation equations are subject to simplification and the variables which are not significant are omitted from the initial equations after confirming that there is no evidence of residual serial correlation. In case of dependent variable DEN, variables such as, INTRS, URBN and LEXP are removed sequentially from the estimation equation through the simplification process. Again, when dependent variable NP is used in the initial regression equation-(6.4), variables such as URBN and LEXP has been deleted

successively from the initial estimation equation after validating that there is no evidence of residual serial correlation. However, in the third round of simplification, the insignificant variable WPI cannot be removed from the estimation equation because residual serial correlation is detected while trying to delete WPI from the equation and further deletion of the variable WPI causes the autocorrelation problem in the residual. Therefore, simplification process [results of the simplification processes has been provided in the Annexure: 6. (B) and 6. (C)] had to stop at second stage of simplification and the final regression model has been obtained.

The results of Ordinary Least Square (OLS) estimation for the final test equation for dependent variable DEN and NP are furnished respectively in Table: (6.8) and (6.9).

Table: 6.8

The OLS estimation for the final Test Equation of demand (DEN) for life insurance *on economic and non-economic variable*

Dependent Variable: **DEN**

Method: Least Squares

Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob
RPDI	4144.925	630.8237	6.570654	0.0000
FD	*132.0328*	*17.31888*	*7.623630*	*0.0000*
WPI	17.35242	8.873514	1.955530	0.0742
EDUN	-107.4477	29.57408	-3.633170	0.0034
C	-39775.27	4674.746	-8.508541	0.0000
R-squared	**0.985413**	Akaike info criterion		11.54037
Adjusted R-squared	**0.980551**	Schwarz criterion		11.78544
S.E. of regression	68.80551	**F-statistic**		**202.6628**
Durbin-Watson stat	**1.996635**	**Prob(F-statistic)**		**0.000000**

Table: 6.9

The OLS estimation for the final Test Equation of demand (NP) for life insurance on economic and non-economic variable

Dependent Variable: **NP**

Method: Least Squares

Sample (adjusted): 17 (1992-20080

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RPDI	4.242079	0.528576	8.025488	0.0000
FD	0.032416	0.014930	2.171275	0.0527
WPI	0.006725	0.007473	0.899944	**0.3874**
INTRS	-0.034808	0.008299	-4.194223	0.0015
EDUN	-0.101468	0.025238	-4.020498	0.0020
C	-31.72155	3.911868	-8.109054	0.0000
R-squared	**0.992396**	Akaike info criterion		-2.601115
Adjusted R-squared	**0.988940**	Schwarz criterion		-2.307039
S.E. of regression	0.057569	**F-statistic**		**287.1365**
Durbin-Watson stat	**2.349831**	**Prob(F-statistic)**		**0.000000**

From the final results of the re-estimated equations, given in the Table: 6.8 & 6.9, the final regression representation is obtained for both the dependent variable DEN and NP as under,

DEN = 4144.9247*RPDI + 132.0327*FD + 17.3524*WPI - 107.4476*EDUN - 39775.2657 -- (6.9),

&

NP = 4.2420*RPDI + 0.0324*FD - 0.0348*INTRS - 0.1014*EDUN + 0.0067*WPI - 31.7215 -- (6.10).

From the results of Table: 6.8, it is clear that the above mentioned variables (RPDI, FD, WPI and EDUN) collectively explain about 98% of the variance in the demand for life insurance in India being, adjusted $\mathbf{R^2}$ **= 0.9805** and **P-value = 0.0000.**

Only 2% of the variance is note explained by the regression model that has been used in this study. The computed DW test statistics (1.996) is more than the table value of 1.710 at 5% significance level which means that there is no evidence of positive first order serial correlation problem in the residuals. The test for normality (JB Statistic =2.2515, P-value =0.3244) indicates (Kurtosis =3.290) that the residuals are normally distributed.

The results of the Table: 6.9, shows that the RPDI, FD, WPI, INTRS and EDUN variables jointly explains 98% of the variance with only 2% is unexplained. The residual examination finds that the residuals are normally distributed with Kurtosis =4.290 and computed DW test stat (2.349) is above the tabulated value of 1.847 at 1% significance level.

For life insurance, we find RPDI, FD and WPI are the only variables which have significant influence on all the three dependent variables. Surprisingly, the study could not find urbanization (URBN) to be an important variable which influence the life insurance demand in either directions on all the dependent variables though urban people are more likely to be aware of their risk perception and life insurance business are mostly driven by the urban population in India. This may be due to the low rate of urbanization in India. Since 70% population represents the rural sector in India, the importance of the urbanization is found almost insignificant in this study. Another non-economic variable, life expectancy at birth (LEXP) is found to be positively affecting the life insurance demand with only one dependent variable (PEN) in this study. Since LEXP has been used to proxy the price of average life insurance, it is very inconclusive. But it is expected that with the longer life expectancy people need more life insurance products (especially pension funds offered by the life insurers) for future eventualities.

The variable RPDI is positively associated with demand for life insurance in India. This result is in line with the previous findings of Browne and Kim (1993), Outreville (1996), Zhuo (1999), Ward and Zurbruegg (2002), Beck and Webb (2003), Rubayah and Zaidi (2000), Hwang and Greenford (2005) and Li et al (2007). This proves the fact that the increase in per-capita income (real disposable income in particular) is the

fundamental factor for the development of life insurance demand in India. We, also, find the financial development (FD) affects the growth of life insurance demand positively in India which means that the development in the financial sector or in the banking sector (as we have used the percentage of people with deposit accounts in banking system to proxy financial development in our study) would lead the growth of life insurance in positive direction in India. An overall sustained economic growth is a key to the life insurance consumption in India.

The most surprising finding of this study is that the variable education (EDUN) is found to be negatively allied with the life insurance demand in India with all three dependent variable and in contrast with the findings of previous studied such as Truett and Truett (1990), Browne and Kim (1993), Outreville (1996), Ward and Zurbruegg (2002), Beck and Webb (2003) and Li et al (2007) who found that education has a positive impact on the life insurance demand. Education actually helps people to understand the importance of life insurance in their life. This unanticipated outcome of education (EDUN), most likely, due to the fact that the level of education in total masses is very poor in India, especially rural people who represents around 70% of the population. Another explanation for this negative result is perhaps educated people try to evaluate the other alternative investments options and eventually ended up in investing other than life insurance products. In some cases it is found that illiterate persons may ended up investing in the life insurance products due to the huge network of the life insurance agents who performs all the required work (filling the forms, health certificate, choice of products, mode of payment etc.) on behalf of the investors where as formal financial institutions does not provide such advantages before the illiterate who always try to pass over the paper works. There is a gap in the literature about the behavioural pattern related to financial decisions of non-educated people in India and further research should be carried out to study behavioural pattern of life insurance investments made by the non-educated (formal) people in India.

The interest rates (INTRS) on alternative saving found to be negatively related with the life insurance demand in India with life insurance penetration (PEN) and number

of new policies (NP) issued. This means that the higher rates on other alternative savings instrument would affect the demand for life insurance adversely but any reduction in the alternative investment rates would certainly increase the savings (consumption) through life insurance in India. In India, life insurance industry faces challenge from the banking industry with their offerings of higher fixed deposits rates as the common Indians still find the bank deposits are more safe and liquid than life insurance products. This finding is consistent with conclusions of earlier works of Cargill and Troxel (1979), Outreville (1996), Rubayah and Zaidi (2000) and Li et al (2007).

We find inflation (WPI) is significant and positive with life insurance penetration and density. This finding does not lend support to the findings of Green (1954), Fortune (1973), Browne and Kim (1993), Beck and Webb (2003) and Li et al (2007) where WPI found to be negatively linked with the life insurance demand. On the contrary, this finding is in line with the Cargill and Troxel (1979), Rubayah and Zaidi (2000) and Lim and Haberman (2004). Even Nuemann[86] (1969), in his study, found that there was no significant effect of inflation on savings through life insurance in America. The result says that the higher rate if inflation in the economy increases the demand for life insurance in India. This behaviour is probably due to the existence of Money illusion[87] *(refers to the tendency of people to think of currency in nominal, rather than real terms)* which can also influence people's perceptions of outcomes and influences economic behaviour. There are several reasons why the money illusion is likely to be exists for many people in India. For example, a general lack of financial education and the price stickiness *(nominal prices are slow to change even where inflation has caused real prices or costs to rise)* in many goods and services.

In India, life insurance companies (especially by the state life insurance company) typically offer some life insurance policies with guaranteed returns. Some times people invest into such life insurance policies to negate the effect of depreciated value of money and to gain out of the depreciated money in the future with higher return in expectation that the present higher inflation rate is short term in nature and may vanish in the near future. This behaviour of investors in life insurance industry leads to conclude that the

effect of the inflation on the life insurance consumption is inconclusive though the results are significant.

Out of the seven determinants, this study (over a period of 1991-2008 in India) indicates income, financial development, education, inflation and interest rates on alternative investments are significant in explaining life insurance penetration, density and new policies. The major findings of this exercise are as follows:

(1) Income (Real Personal Disposable Income) and Financial Development (FD) are the most significant and positive factors in driving the life insurance demand upward in India.

(2) Education (EDUN) found to be most important factor among the non-economic factors which is significant but negatively associated with the life insurance demand.

(3) Inflation (WPI) is significant and positively related with the life insurance demand in India.

(4) Interest rate (INTRS) of alternative products is significant and negatively related with the demand for life insurance in India.

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Chapter VII

Summary of Recommendations and Conclusions

7.1: Introduction

The history of Indian life insurance business is very vast and wide. Though the life insurance in its modern form came to India in 1818 for the purposes of providing life insurance benefits to the English widows residing in the erstwhile Calcutta (now Kolkata) by the foreign life insurance companies but the conception of insurance in general and life insurance in particular started from the age of Aryans. From 1870 to 1900 AD has been designated as an era of foreign life insurance companies and the business of these life insurance companies mainly centered on the big cities of India. With the beginning of the swadeshi movement, India witnessed the growth of few domestic life insurance companies, promoted and managed by the Indians, to provide life insurance cover to fellow Indians. Both, Indian and foreign companies operated in the Indian life insurance market until the life insurance business was nationalised by the government in 1956 with the formation of Life Insurance Corporation of India (LICI) through the pronouncement of LICI Nationalisation Act, 1956. The basic objectives behind the nationalisation were to stop the malpractice evolved during the last few decades in the life insurance industry and to reach the poor. It also aimed to cover the rural areas with the insurance protection and thereby to channelise the savings of the common people in the desired sector of the planned economy. Since September 1956 to January 2000, LICI enjoyed absolute monopoly power so far as life insurance business is concerned in our country. If we analyze the performance of the LICI in respect of spread of life insurance in India, especially in the rural areas, LICI did a commendable job. But in respect of penetration and density (both *penetration* and *density* are internationally accepted measure of development in insurance sector) LICI is far behind the international standards. It was felt that the prime objective of nationalisation was not contented with the effort of LICI.

In the line of its new economic policy (implemented in 1991), the GoI decided to establish a committee under the chairmanship of (late) Dr. R.N. Malhotra, the ex-governor of RBI, for bringing effective reforms in the Indian insurance sector. The committee in its report (submitted in 1994) specifically opined for the opening up of the insurance market in front of private domestic and foreign insurance companies. The

committee argued that in spite of enjoying the monopoly power there was low penetration of life insurance in India. The levels of satisfaction of customers were absolutely lower and the premium rates offered by the LICI were much higher in comparison to other insurance companies operating in different parts of the world which ultimately led to the exploitation of the policyholders. GoI accepted the recommendations of the Malhotra Committee on principle and after a prolonged debate in both houses of the Parliament, the Insurance Regulatory and Development Authority (IRDA) Bill was passed on 7th December 1999 which got the assent of the President of India in the month of January 2000. The IRDA Act, 1999, repealed the monopoly of the LICI in the life insurance business and a lot of private life insurance companies entered into the Indian life insurance market though the Act stipulates the maximum foreign equity limit to 26%. Till date (as on 31st March, 2008) there are 21 private life insurance companies operating in the Indian life insurance market providing life insurance cover to the masses.

Before the nationalisation of the life insurance sector in 1956, life insurance companies were governed by The Indian Life Insurance Companies Act, 1912, and Insurance Act, 1938. With the establishment of LICI, both the Insurance Act, 1938 and LICI Nationalisation Act, 1956 became operative. In 1999, when market was opened once again in front of the private players, the Insurance Act, 1938 was reinstated with certain modifications as the Insurance Regulatory and Development Authority (IRDA) Act, 1999. Whatever was not mentioned in the IRDA Act, referred back to the earlier Insurance Act, 1938. This vicious-circle journey (*Foreign life comp. ---to-- Private Domestic Companies —to—nationalisation of life business (LICI) --and-- back to Private domestic/foreign companies*) of the life insurance industry in India raises certain questions in our mind.

(1) Does the reform in the life insurance sector (1999) bring the desired results in this sector? and,

(2) Do we need more reforms in this sector?

In this background, the present study has assessed the impact of the liberalisation policy on the development of this insurance sector in India. The development of this sector has been measured in terms of certain well accepted indices like insurance density, insurance penetration, investment in social sector etc. To do this, the present study will formulate and calibrate a hypothetical model to measure the impact of life insurance sector reforms empirically.

This study will also seek to identify the factors that have significant bearings on the development of life insurance sector in India. The determining factors of life insurance demand vary from country to country. The plausible set of such factors have not yet been identified for India in any published study. The present study will investigate into this field and seek to bring out the variables that have been directly or indirectly influencing the development of life insurance business in India in the post reform era.

The present study will seek to answer the following questions:

1. What is the effect of the opening up of insurance sector on the density and penetration level of life insurance business in India?
2. What is the effect of this reform process on the spread of insurance business in rural India?
3. What is the effect of this reform on the introduction of new types of policies in India?
4. What is the effect of this reform on the prices of life insurance policies in India?
5. How far does the liberalization era of life insurance affect the savings behaviour in India?
6. What is the effect of liberalization on the investment of insurance fund in infrastructure development in India?
7. What is the impact of this liberalization on generating new employment in India?

8. What are the perceptions of common people towards new private life insurance companies?

9. Is the present level of liberalization enough to bring efficiency in the life insurance market in India or we need more reforms initiative in this sector?

10. What are the factors that govern the insurance demand in India in the post-liberalised era?

7.2: Findings of the study

The study has been carried out with a broad objective to analyse the growth and development of the Indian life insurance industry with the framing of the above mentioned questions. The major findings of the study are summurised below.

7.2.1: Effect on Penetration and Density level in India

- The study found a visible structural change in the penetration level just after the life insurance sector was opened to the private domestic and foreign players. After 2000, the level of penetration goes up from 1.39% to 4.10% at the end of 2007-08 financial years. So it can be concluded that the reforms has got a positive impact on the level of life insurance business in India which has improved India's share of life insurance business in the world from a very dismal level to a hopeful one.

- Study also finds that there has been a substantial increase in the per capita consumption (density) of life insurance in India after the opening up of the life market. Density level was at US $ 6.2 in 1999 and the same improved to US $ 40.8 in 2008. So there has been a sharp rise in the consumption level of life insurance products after 1999.

7.2.2: Spread of Life Insurance Business in Rural India

In spreading the umbrella of life insurance in rural areas, the study brings the following out come:

- Total number of branches (rural and urban) increased from 2199 to 8913 all over India.
- The growth of rural branches improved in the post reform era, especially in the last two years. In 2007 out of total branches of all insurers operating in India, 24% was from rural areas which increased to around 32% in 2008.
- In 2007-08, the growth in the total rural branches (private companies and LICI) of life insurance companies is more than 110 % (from 1318 to 2797 branches).
- Rate of growth of private life insurers in the rural areas outpaced LICI. The rate of growth of spreading branches by the private companies in rural area in 2007-08, was almost 250% (from 546 to 1902 branches), whereas for LICI it was just around 16% (from 772 to 895 branches).
- The branch expansion of LICI has been almost stagnant throughout the last ten years and improved marginally due to the competition. But total branch net work of all the private life insurers crossed the network of LICI in 2006-07 financial years and now they have more than 2.5 times branch network than LICI to tap the potential India life market.
- The study also found that due to obligatory clause of IRDA in respect of rural business by every individual life insurers, all the insurers were adhering to the minimum requirement directed by the IRDA.

Therefore, we can say that the reforms in the life insurance sector have improved the rural penetration of life insurance consumption by way of allowing private life insurers to tap the rural market along with LICI. Private life insurers are now trying to penetrate the potential rural market by establishing new branches in the rural sector and they have out lined the LICI in this respect.

7.2.3: The Introduction of New Types of Policies in India

This study finds that since 2000, life insurance industry has seen some innovations in the product design. Now insurers offering products which suits the customer's need and offers benefit to the customers in terms of premium payment options, returns and requirements. Focus has been shifted to customized products to suit all sections of population so that people can take policies according to their needs. The following are the main innovations in the life market,

- To meet the investment requirement of the customers, insurers are now offering new Unit Linked Insurance Plans (ULIPs).
- New pension schemes have been introduced in the market by different life insurance companies with extra benefits.
- Now Unit Linked Pension Plans are also available in the market.
- Insurers are now offering newly designed micro-insurance products to suit the needs of the rural and urban poor.
- Improved annuity plans with rider, customized education plans are available in the market along with traditional improvised money back policies.

Due to the opening of the life insurance market, many insurers came to India to offer array of products to woo the investors. Competition among the insurers to get the share of the life market compels them to offer newer products to attract customers. Today Indian life market is flooded with ULIPs, new pension schemes, health insurance policies, single premium products and micro insurance products along with the introduction of variety of term insurance plans and few special plans for women, retirement and total risk cover for families which were absent in the pre-reform period. The role of IRDA is very important in this regard. It is found that the IRDA has done admirable job in protecting the interest of the policyholders. When required, IRDA intervened and clarified the regulations, and in certain cases, it has fined the life insurance companies who had not maintained the rules and regulations of IRDA Act, 1999. Role of IRDA in developing and implementing micro-insurance is also laudable as it has included the micro-insurance in the obligatory

and mandatory requirements of the insurers which improves the micro-insurance development.

7.2.4: The Prices of Life Insurance Policies in India

In its report, Malhotra Committee cited that the LICI, while enjoying monopoly, charge higher premiums for its policies than the other insurers operating in other developing markets. One of the the rationale behind the reforms initiative was that the opening up of the insurance sector would create a competition among the insurers and ultimately consumers will be benefited with the lowering of premium cost offered by the different insurers to capture the market share. The study found that after opening of the life insurance market in India, insurers started offering different products with added advantages to attract more customers. Due to the added features (Riders) it has become difficult to compare the cost structure of different polices with different offerings. So we compare only simplest form of term life insurance policies offered by the insurers in the market and found that.

- For similar kind of products different life insurers are charging different premium rates.
- Few companies are charging reasonably higher premiums.
- It is the same life insurance company who charges less in the life market.
- The maximum minimum ratio of premiums is highest in case of 15 years term policies at 2.04 and lowest in case of 5 years term policies at 1.71.
- The gap between max/min ratios is coming down.

The study reveal that the due to aggressive marketing of their products with strong sales force few private life insurers are charging higher premium rates. At the same time SBI life Insurance Company charging the lowest premiums most of the times in case of term life policies are concerned. With more stiff competition among the life insurance companies (with emergence of more life insurance players in the market)and increasing awareness of the common people, the difference between highest premium and lowest

premium is expected to come down and eventually be at the same level. It is to be noted that the insurance companies does not enjoy the free pricing system in India.

7.2.5: The Savings through Life Insurance in India

This study unveil that the financial savings as a percentage of the total household savings improved much faster after the life insurance sector reforms and the share of life fund to the total financial savings increased considerably. This is due to the fact that reforms in the life insurance sector provide an opportunity to invest in such a product (ULIPs) through which investors can get the benefit of booming stock market along with life risk cover which mutual funds were not able to offer. People find new customized ULIPs are better proposition for their investments than stock market (highly volatile with out life risk cover), mutual funds (no life cover) and pension funds(low return). The main outcomes are,

- People are saving more through ULIPs than PF, MF and direct investments in stock market.
- Newly designed life insurance products are better option as an investment before the savers.
- The higher expected return out of the ULIPs made the common investors to invest more in ULIPs instead of investing funds into secure long term pension funds and government securities.
- ULIPs are the main driver of savings instrument in the life insurance market and it contributes more than 70% of the total life business in India as on 31st March, 2008.

7.2.6: The investment of insurance fund in infrastructure development in India

The investments of the life insurance companies are guided by the specific regulations provided in the IRDA Investment Regulations, 2000, which modified the Section 27 of the Insurance act 1938 in conformation with the objectives of improving

confidence among the potential policy holders and diverts the funds into the infrastructural development. The investments in the government sector and other sectors are specifically mentioned. The study finds that the insurers invest in accordance to the IRDA Act, 2000. It is found that the investment by the life insurance sector in the infrastructure/social sector has increased substantially from around Rs. 33,000 crore in 2002-03 to Rs. 68,600 crore in 2007-08. IRDA strictly regulates the investments regulations so that the interests of the common investors are protected.

7.2.7: Generating New Employment in India

It was argued that reforms in the life insurance sector would bring more and more life companies which will generate employment opportunity through direct employment (in the form of managerial and office staffs and most importantly issuing licenses to the life insurance agents) as well as through generating new employment opportunities by mobilizing huge savings for the economy for longer term. The study has noted that the life insurance industry,

- Added 53,332 employees directly during the second quarter of financial year 2008-2009.
- The total numbers of employees of the industry has increased to more than 3 lakhs.
- The total number of individual life agents of the industry at the end of 2007-08 financial year increased to more than 25 lakhs from around 116,000 life agents in the financial year of 2001-02.
- Indian life insurance industry has employed more than 28 lakhs people since the reforms have been implemented in the year 2000.
- The life insurance industry has created opportunities in the form of investments in other sectors with the help of mobilization of long term savings.

Since the life insurance industry is at its preliminary stage of development, it is expected that more life companies will enter into the Indian market and penetrate the Indian population with its man power which will create new job opportunities.

7.2.8: The perceptions of common people towards new private life insurance companies

The reforms in the life insurance sector have been taken by the GoI due to the fact that reforms will bring better services to the people with attractive products to invest at a competitive price. It is almost ten years the reforms have been taken place in Indian life insurance market and it is important for us to know, how this reform has been perceived by the common investors' in India. Whether people are satisfied with the products and services of the private life insurance companies or not? Do the people want to invest in private life insurance companies in India or not? To know the above quarries, a non-probability convenience sample of 300 respondents consisting different age groups, educational levels, income groups and religions of policy and non-policy holders have been collected to get the primary data. The study unearth the followings,

- The awareness among the people about the benefits of life insurance is almost 100% in India (99%).
- 96% people know about the presence of private life companies operating in India.
- 59% of people believe that the products of private life insurance companies are *more attractive* than the products offered by the LICI.
- About 52% people think that the *services* provided by the private life insurance companies are *better*.
- Around 60% of people think that the private life insurance companies are *serving the urban populations* only.
- 57% people think that it is *not safe* to invest in the private life insurance companies at this juncture when world financial crisis is on.
- Only 33% people in India are *positive* about the fact that they can serve the Indian market in long run.

- The most important finding is that, 62% people are *not familiar* with the IRDA and its role and most of them don't even know the existence of the IRDA.

7.2.9: Relationship between Reforms and the growth of life insurance business in India

Till now we have discovered that the post reforms period in the life insurance industry is characterized with the major development of the life insurance penetration and density level in India. Reform has encouraged life insurers bringing new products before the consumers with additional benefits along with better services and coverage. The reforms also improved the level of savings mobilization through life insurance products in India. But this improved performance of life insurance industry may not only because of reforms in the life insurance sector. This may be due to some other reason/s, i.e., improved macro-economic conditions in India, or for some other reasons. Unless we know empirically the fact that reforms in life insurance sector improves the development of the life insurance industry itself, we can't come to a conclusion whether the reforms have brought any development in the life insurance industry. For this purpose we have constructed a composite index to quantify life insurance sector reforms for studying the relationship between reforms and the development of life insurance industry. The study uncovers that,

- *There is a stable long run relationship between insurance reform* and the development in the life insurance sector in India;
- In short run life insurance reforms improve the life insurance development in India; and
- There is a bi-directional causal relationship between reforms and development in life insurance sector.

Now, we can state that the life insurance sector reforms have improved the overall development of life insurance market in India and we can expect more development if further reforms are initiated in this respect. The development in the life insurance market itself will initiate more reforms in this sector.

7.2.10: The Determinant Factors of Life Insurance Demand in India

The present study has tried to examine the factors that have significant bearings on the development of life insurance and seek to bring out the variables that have been directly or indirectly influencing the life insurance demand in India in this post reform era. The major findings of the study are as follows.

- Income (Real Personal Disposable Income) and Financial Development (FD) are the most *significant and positive* economic factors in driving the life insurance demand upward in India.
- Education (EDUN) is found to be the most important factor among the non-economic factors which is significant but *negatively* associated with the life insurance demand.
- Inflation (WPI) is *significant and positively* related with the life insurance demand in India.
- Interest rate (INTRS) of alternative products is *significant and negatively* related with the demand for life insurance in India.

7.3: Concluding Remarks

It can be concluded finally that the opening up of insurance market in general and life insurance market in particular has brought high positive results in the overall growth of the insurance sector of our country. It has brought positive results in all spheres namely in penetration and density level of life insurance sector, savings mobilization through life insurance, newer product designs with convenient payment options, better services to the policy holders etc. the opening up of the life insurance sector has allowed foreign insurance companies to participate in the Indian market tying up with their Indian counter parts as on today maximum 26% of the foreign equity has been allowed by our government. This has also helped the insurance sector in a considerable way to improve the efficiency level of new players as well as the player which is owned by the government (LICI).

Apart from this overall development. Indian life insurance sector needs to improve a considerable way in certain cases. The most important aspect is the coverage of life insurance through out our country. In spite of development achieved in the last few years of liberalised regime in the life insurance sector, the rural life insurance penetration (27%) is still too poor. According to a Paper `**Rural India and Its New Investors'** by ASSOCHAM, (www.assocham.org), July 2008,at present 8-10% rural households are covered under life insurance schemes and remaining 90% can be targeted for new innovative insurance schemes. Rural investments are limited to their available option post offices and a few limited commercial banks rural extension counters. As per estimates of ASSOCHAM, over 700 million rural populations lived in India's villages out of which approx. 200 million rural populace have reasonable per capita income due to their double income from agriculture and non-agriculture sources. According to international consultancy firm Celent, (www.celent.com), the rural life insurance market will grow to a potential of US$ 1.9 billion by 2015 from the current US$ 487 million. India's untapped rural market holds tremendous growth opportunities for life insurance companies.

Now the question has come up whether the govt. should allow more foreign equity (proposed 49%) in the insurance sector or not ? it can be opined with out any hesitation that more and more foreign participation of equity will be helpful for our insurance sector to become more vibrant and effective. Life insurance business has a long gestation period and globally, companies begin to taste profits by the seventh or eighth year. There are several costs during the initial years, such as setting up a tied agency, branches and infrastructure as well as building the productivity of managers and advisors. New business comes with its costs, and insurers have to put away a portion of the premium as reserves, commission and management expenses. Given the high industry growth rate, more capital infusion would be needed in India. Sometimes, it becomes difficult to infuse capital from the domestic market and then foreign life insurers will comes into play. If foreign equity of 49% allowed in Indian life market, the difficulty in raising capital would be minimize especially after the recent financial meltdown and new demand of the market will be meet satisfactorily. Moreover, this hike in the equity capital participation will attract other big international life insurers (MNCs) in India as the

market is still underserved. This will create unbending competition among the existing and new life insurers which will bring down the premium rate disparity which has been observed in this study much faster than ever before and ultimately consumers will be benefited. This study also finds (empirically) that the reforms in the life insurance sector in India will bring more development in the life insurance business. In fact both, life insurance reforms and life insurance development help each other to improve themselves.

But at the same time strict adherence to the rules and regulations laid down by the IRDA from time to time must also be followed to ensure that the foreign investors cannot easily manipulate the market dominance and the interest of the common investors are protected. Therefore, the role of IRDA will be more than ever important in the emergence of more developed life insurance market in India. This study finds that the recent financial meltdown has flattened the confidence level in the investors in India. With the global financial meltdown taking a heavy toll on our stock markets, investors' appetite for life insurance has also taken a beating as the life insurance industry was mostly driven by the ULIPs. In 2008-09, the financial year that ended in March 31, 2009, India's life insurance industry written grossed total new premium of Rs 87,107.62 crore, 6 per cent lower than 2007-08. This study also looks into the fact that the 57% people think that investing in foreign life insurance companies are not safe. And only 33% think that private foreign players can serve in the long run. Most surprising fact is that majority of the people (62%) are not familiar with the IRDA and its role in the life insurance market. People need to be aware of the functioning of the regulator, IRDA, and its role in developing the life insurance industry. Even, IRDA needs to ensure that the insurers are adhering to the rules and regulations and take strict action/s against any malpractice.

7.4: India's present situation

India is fast emerging on the world map as a strong economy and a global power. The country is going through a phase of rapid development and growth. In recent years, India has been one of the fastest growing economies. Since 2004, the average GDP growth rate is closed to 9%. With the higher rate of growth India will be at per with

France and UK and little smaller than Germany [Sinha (2004)] in respect of GDP by 2020. All the vital industries and sectors of the country are registering growth and thus, luring foreign investors. And insurance sector is one of them. Presently, India is globally the fifth largest life insurance market in the emerging insurance economies, and its insurance market is growing at 32–34 per cent annually. By 2030, India's population will exceed China's and currently, one in five people in India is aged between 15 and 24. India is one of the youngest countries compared to other developed countries in the world. According to the Swiss Re Economic Research and Consulting, India's insurance market will remain wide open and continue to attract insurers as the strong growth in the insurance sector will sustain for 30-40 years before market reaches saturation as income elasticity starts to decline. With a huge population and large untapped market along with a rising middle class population of around 350 million (in comparative terms it amounts to much more than the entire population of the United States) insurance happens to be a big opportunity in India. Therefore, the market is well conducive for growth and development and we need more insurers to penetrate all over India. But the demographic indicators show that India is going to witness a new demographic change in the coming decade. With a lower fertility rate along with higher life expectancy there will be a gap between demand of pension products and the supply of such products as in India the pension reforms are yet to start. The bill regarding the pension is still hanging in the Parliament. There is a considerable scope for the development of new pension schemes by the life insurers in India and further research is endeavor in this regard from the researchers.

7.5: Suggestive Measures

Based on the observations of this present study and on the present market conditions in India, this study framed the following recommendations for the development of the Indian life insurance industry,

(1) The GoI should allow up to 49% foreign equity in the insurance sector. This will increase the competition in the market and solve the capital requirement problem.

(2) Minimum obligatory targets in the rural and social sector should be increased as the insurers try only to accomplish the stipulated required coverage;

(3) Micro insurance schemes should be keeping outside the ambit of the rural and social obligations of the insurers and a new micro-insurance obligation rules should be introduced by the IRDA to cover the real needy.

(4) There is an urgent need to improve the awareness of the common people about the functioning of IRDA which will improve the confidence level of the common investors. To do so, it is highly recommended that the IRDA along with the existing insurers should take the responsibility to educate the people about the role of IRDA through print advertisement, TV advertisement, hoardings, campaigning and through the oral communication of the life insurance agents.

(5) IRDA should closely monitor the operations of the life insurers and to see whether they comply with the rules and regulations of IRDA Act, 1999.

(6) It is found that the agents/advisors sometimes mislead the investors by not telling truth about the product's all features. It is highly recommended that inducting more and more agents is not enough in the industry; we need trained life insurance agents. For this reason IRDA should monitor the quality of trainings imparted to the life agents/advisors. More quality training institutes are required for this purpose.

(7) The development of the distribution channel into the rural areas is very important for the overall development of life insurance in India. Therefore, role of post offices is very important in this regard. Due to the huge network base in rural India and other specialized advantages, it is recommended that post offices should be employed as means of distributing and selling life insurance products (especially micro-insurance) of different life insurers throughout the country.

(8) The board of LICI should be given more and more autonomy and they should be held accountable for the performance and there is a need to stop the sovereign guarantee available to the policyholders of Life Insurance Corporation of India (LICI) by the central government under the LICI Act, 1956. This would place LICI at the same platform with the private life insurers, and

(9) Corporate culture should be introduced in the LICI. Being a corporate entity, LICI would be in a better place to regain its market dominance and it will also help the organisation to improve its products and services.

Life insurance premium rates are likely to drop over the next few months due to longer life expectancy, with a new mortality and morbidity table expected to be in place by the fourth quarter of 2009 to replace the current one, which is of 1994-96 vintage. The Mortality and Morbidity Investigating Centre (MMIC), an affiliate of the Institute of Actuaries of India (IAI), plans to publish the mortality table by October, 2009. This will certainly increase the consumption of the life insurance policies in the coming months. Presently, two important amendment bills relating to the insurance sector reforms are pending in the Parliament. The two bills are LIC (Amendment) Bill (seeking to raise LICI's equity capital to Rs.100 crore from Rs.5 crore) and the Insurance (Amendment) Bill, proposing to amend the Insurance Act 1938 and IRDA Act, 1999. One of the important amendments proposals in the Insurance (Amendment) Bill is the increase in foreign investment limit to 49 percent from the present level of 26 percent. The other proposed amendments are, allowing foreign re-insurers, reducing the start-up capital limit for pure health insurance companies to Rs.50 crore from Rs.100 crore; and enabling the IRDA to stipulate the expense and commission limits. In an active market conditions, it is better for the regulator to prescribe limits rather than giving exemptions to individual companies. With a more stable new government in the centre, the capital market is expected to revive from the recent meltdown and the unit-linked insurance policy (ULIP) segment may grow again and we expect the amendment bills to be passed very soon as it was this government that introduced them earlier in the Parliament. The combined effort of GoI, IRDA, all the insurers and the Life Insurance Council is very important in developing the life insurance sector in India.

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Annexure

Annexure: I. (A)

India
Schedule of Specific Commitments at WTO
(Insurance and Insurance Related Services)

Sector or sub sector	Limitations on market access	Limitations on national treatment	Additional commitments
FINANCIAL SERVICES			
A. Insurance and Insurance-Related Services Non-Life *(Insurance of freight)* Ex. 5(a)(i)(B)	1) Unbound except in the case of insurance of freight, where *there is no requirement that* goods in transit to and from India should be insured with Indian *insurance companies* only. Insurance is taken by the buyer or seller in accordance with the terms of the contract. This position will be maintained. Once under a contract the Indian importer or exporter agrees to assume the responsibility for insurance such as in the case of f.o.b. contracts for imports *into India or c.i.f. contracts* for exports from India, insurance has to be taken only with an Indian *insurance company.* 2) Unbound 3) Unbound 4)Unbound except as indicated in *the horizontal section*	1)Unbound 2) Unbound 3) Unbound 4)Unbound except as indicated *in the horizontal section*	
Reinsurance and Retrocession 5 a) ii)	1) *Reinsurance can be taken with* foreign re-insurers to the extent of the residual uncovered risk after *obligatory or statutory* placements domestically with Indian insurance companies. At present this *amounts to 10 per cent of* the premium of the market	1) *Unbound*	

Sector or sub sector	Limitations on market access	Limitations on national treatment	Additional commitments
	overall being reinsured abroad. This will be maintained. 2)Reinsurance can be taken with foreign re-insurers to the extent mentioned above 3) Unbound 4)Unbound except as indicated in the horizontal section	2) Unbound 3) Unbound 4)Unbound except as indicated in the horizontal section	
Insurance intermediation, limited to *reinsurance* 5 a) iii)	1)*Reinsurance of domestic risks* can be placed with foreign re-insurers through *overseas brokers, to the* extent mentioned under reinsurance and retrocession 2) *Same as above* 3) I) Overseas brokers are allowed to have *resident* representatives and representative offices who can procure *reinsurance* business from Indian insurance companies to the extent mentioned above. They can also place reinsurance business from abroad with Indian insurance *companies.*	1) *Unbound* 2) Unbound 3) Unbound	
	ii) Except for the business indicated above, the resident representatives and *representative offices* cannot undertake any other activity in India.		

Sector or sub sector	Limitations on market access	Limitations on national treatment	Additional commitments
	iii) All the expenses of the resident representatives and representative offices have to be met by remittances from abroad and no income can be received in India from Indian residents.		
	4)Unbound except as indicated in the horizontal section	4)Unbound except as indicated in the horizontal section	

Note: The commitments in financial services are made in accordance with the GATS. All the commitments are subject to entry requirement, domestic law, rules and regulations and the terms and conditions of RBI, SEBI and any other competent authority in India.

Source: (http://commerce.nic.in/wto_sub/services/GATS/sub_gats42-S4.htm)

Annexure: 2. (A)

List of Insurers whose Management was taken Over by GoI through the Life Insurance (Emergency Provisions) Ordinance, 1956

Indian Insurers

1. Adarsha Bima Co. Ltd.
2. Ajay Mutual Bima Corporation Ltd.
3. All India General Insurance Company Ltd.
4. Andhra Insurance Company Ltd.
5. Argus Insurance Company Ltd.
6. Aryan Champion Insurance Company Ltd.
7. Aryasthan Insurance Company Ltd.
8. Arya Insurance Company Ltd.
9. Asian Insurance Company Ltd.
10. Asiatic Government Security Life and General Assurance Co. Ltd.
11. Associacao Goana de Mutuo Auxilio Ltd.
12. Anudh Mutual Life Assurance Society Ltd.
13. Bangalakshmi Insurance Ltd.
14. Behar United Insurance Ltd.
15. Bengal Christian Family Pension Fund Ltd.
16. Bengal Insurance and Real Property Co. Ltd.
17. Bengal Secretariate Co-operative Insurance Society Ltd.
18. Bhaskar Insurance Co. Ltd.
19. Bombay Alliance Assurance Co. Ltd.
20. Bombay Co-operative Insurance Society Ltd.
21. Bombay Family Pension Fund of Government Servants Ltd.
22. Bombay Life Assurance Co. Ltd
23. Bombay Life Assurance Co. Ltd
24. Bombay Postal Employees' Co-operative Benefit Insurance fund ltd.
25. Bombay Zoroastrian Co-operative Life Assurance Society Ltd.
26. British India General Insurance CO. ltd.
27. Calcutta Customs Co-operative Benefit Society Ltd.
28. Calcutta Insurance Ltd.
29. Calcutta Postal and R.M.S. Co-operative Mutual Benefit Society Ltd.
30. Canara Mutual Assurance Co. Ltd.
31. Central Mutual Life Assurance Co. Ltd.
32. Central Railways Employees Assurance Fund Ltd.
33. Citizen of India Mutual Assurance Co. Ltd.
34. Commercial Insurance Co. Ltd.
35. Commonwealth Assurance Co. Ltd
36. Continental Mutual Assurance Co. Ltd.
37. Co-operative Assurance Co. Ltd.
38. Corporation Co-operative Insurance Society Ltd.
39. Crescent Insurance Co. Ltd.

40. Deepak General Insurance Co. Ltd.
41. Delhi Cloth and General Mill Insurance Co. Ltd.
42. Depositors Benefit Insurance Co. Ltd.
43. Devkaran Nanjee Insurance Co. Ltd.
44. Digvijay Insurance Co. Ltd.
45. Dominoin Insurance Co. Ltd.
46. East and West Insurance Co. Ltd.
47. East India Insurance Co. Ltd.
48. Eastern Co-operative Life Insurance Society Ltd.
49. Eastern Life Assurance Co. Ltd.
50. Eastern Mutual Assurance Co. Ltd.
51. Eastern Railway men's Co-operative Life Insurance Society Ltd.
52. Empire of India Life Assurance Co. Ltd.
53. Free India General Insurance Co. Ltd.
54. General Assurance Society Ltd.
55. Goodwill Assurance Co. Ltd.
56. Great Social Life and General Assurance Ltd.
57. Gujrat Parsi Co-operative Insurance Society Ltd.
58. Happy India Insurance Co. Ltd.
59. Hindu Family Annuity Fund Ltd.
60. Hindu Mutual Life Assurance Ltd.
61. Hindustan Mutual Assurance Co. Ltd.
62. Hindustan Co-operative Insurance Society Ltd.
63. Hindustan Ideal Insurance Co. Ltd.
64. Home Security Life Assurance Co. Ltd.
65. Howrah Insurance Co. Ltd.
66. Hyderbad Co-operative Insurance Society Ltd.
67. Ideal Mutual Insurance Co. Ltd.
68. India Life and General Assurance Society Ltd.
69. India Oriole Assurance Co. Ltd.
70. Indian Circar Insurance Co. Ltd.
71. Indian Economic Insurance Co. Ltd.
72. Indian Globe Insurance Co. Ltd.
73. Indian Mercantile Insurance Co. Ltd.
74. Indian Mutual Insurance Co. Ltd.
75. Indian Mutual life Association Ltd.
76. Indian Post and Telegraph Co-operative Insurance Society Ltd.
77. Indian Progressive Insurance Co. Ltd.
78. Industrial and Prudential Assurance Co. Ltd.
79. Insurance of India Ltd.
80. Jaybharat Insurance Co. Ltd.
81. Lakshmi Insurance Co. Ltd.
82. Long Life Insurance Co. Ltd.
83. Madhya Pradesh Mutual Insurance Co. Ltd.
84. Madras Life Assurance Co. Ltd.
85. Maha Gujrat Co-operative Insurance Society Ltd.

86. Mahabir Insurance Co. Ltd.
87. Managalore Roman Catholic Pioneer Fund Ltd.
88. Metropolitan Insurance Co. Ltd.
89. Midland Insurance Co. Ltd.
90. Modern Mutual Life assurance Co. Ltd.
91. Modern India Life assurance Co. Ltd.
92. Mutual Help Association Ltd.
93. Nagpur Pioneer Insurance Co. Ltd.
94. National Indian Life Insurance Co. Ltd.
95. National Star Assurance Co. Ltd.
96. National Insurance Co. Ltd.
97. Neptune Assurance Co. Ltd
98. New Asiatic Insurance Co. Ltd.
99. New Great Insurance Company of India Ltd.
100. New Guardian of India Life Insurance Co. Ltd.
101. New India Assurance Co. Ltd.
102. New Insurance Ltd.
103. New Metro Insurance Co. Ltd.
104. New Swastik Life New India Assurance Co. Ltd.
105. Oriental Government Security Life Assurance Co. Ltd.
106. Palladium Assurance Co. Ltd.
107. Peerless Life Assurance Co. Ltd.
108. Pioneer Fire and General Insurance Co. Ltd.
109. Police Co-operative Life Insurance Society Ltd.
110. Policyholder's Assurance Ltd.
111. Popular Insurance Co. Ltd.
112. Prabartak Insurance Co. Ltd.
113. Premier Life and General Insurance Co. Ltd.
114. Presidency Life Insurance Co. Ltd.
115. Prithvi Insurance Co. Ltd.
116. Punjab National Insurance Co. Ltd.
117. Radical Insurance Co. Ltd.
118. Railway Employees' Co-operative Insurance Society Ltd.
119. Rajasthan Insurance Co. Ltd.
120. Reliance Assurance Society Ltd.
121. Ruby General Insurance Co. Ltd.
122. Sahyadri Insurance Co. Ltd.
123. Saraswati Insurance Co. Ltd.
124. Servants of India Insurance Co. Ltd.
125. South India Co-operative Insurance Society Ltd.
126. South Indian Teachers' Union Protection Fund Ltd.
127. Sterling General Insurance Co. Ltd.
128. Sunlight of India Insurance Co. Ltd.
129. Swadeshi Bima Co. Ltd.
130. Swaraj Life Insurance Co. Ltd.
131. Tarun Assurance Co. Ltd.

132. Tilak Insurance Co. Ltd.
133. Tinnevelly Diocesan Mutual Insurance Co. Ltd.
134. Tropical Insurance Co. Ltd.
135. Trust of India Assurance Co. Ltd.
136. Union Life and General Insurance Co. Ltd.
137. United India Life assurance Co. Ltd.
138. United Karnatak Insurance Co. Ltd.
139. Universal Fire and General Insurance Co. Ltd.
140. Vanguard Insurance Co. Ltd.
141. Vasant Insurance Co. Ltd.
142. Vikram general Assurance Ltd.
143. Vishal Bharat Bima Co. Ltd.
144. Viswabharati Insurance Co. Ltd.
145. Warden Insurance Co. Ltd.
146. Western India Life Insurance Co. Ltd.
147. Western Railway Co-operative Life Assurance Society Ltd.
148. Western Railway Zoroastrian Co-operative Death Benefit association Ltd.
149. Yeshwant Mutual Insurance Co. Ltd.
150. Zenith Assurance Co. Ltd.
151. Mackinnon Mackenzie & Company's Employees' Co-operative Benefit Fund.
152. Patiala Insurance Corporation.
153. Mysore Government Insurance Department.
154. Travancore State Insurance department.

Non-Indian Insurance Companies

1. Crown Life Insurance Co. Ltd.
2. Sun Life Assurance Co. of Canada.
3. Jubilee Insurance Co. Ltd.
4. Christian Mutual Insurance Co. Ltd.
5. Eastern Federal Union Insurance Co. Ltd.
6. Indian Life Assurance Co. Ltd.
7. Commercial Union Assurance Co. Ltd.
8. Gresham life Assurance Co. Ltd.
9. North British and Mercantile Insurance Co. Ltd.
10. Norwich Union Life Insurance Society.
11. Pearl Assurance Co. Ltd.
12. Phoenix Assurance Co. Ltd.
13. Prudential Assurance Co. Ltd.
14. Royal Insurance Co. Ltd.
15. Scottish Union and National Insurance Co.
16. Yorkshire Insurance Co. Ltd.

Provident Societies

1. C.M.S Telegu Church Widow's Provident Fund.
2. Indian Industrial and Provident Assurance Co. Ltd.
3. Jagatseva Mutual Provident Insurance Co. Ltd.
4. Vidyaranya Commercial and Provident Society Ltd.
5. Chhota Nagpur Provident Insurance Co. Ltd.
6. Ministerial Officers' Co-operative Provident Insurance Society.
7. Anudh State Provident Insurance Co. Ltd.
8. Bombay Capital Provident General Insurance Co. Ltd.
9. Bombay Provident and General Assurance Co. Ltd.
10. Bullion Provident Insurance Co. Ltd.
11. C.KP. Family Relief Provident Co-operative Society Ltd.
12. Family Mutual Provident Insurance Co. Ltd.
13. Fortune Provident Insurance Co. Ltd.
14. Gujrat Popular Provident Insurance Society Ltd.
15. Hindu Benefit Provident Insurance Society Ltd.
16. Model Provident Insurance Co. Ltd.
17. New Provident Insurance Co. Ltd.
18. Samrath Provident Insurance Co. Ltd.
19. Security Provident Insurance Co. Ltd.
20. Social Service Provident Insurance Co. Ltd.
21. Swadeshi Provident Insurance Co. Ltd.
22. Union Provident Society Ltd.
23. Uplift of India Provident Society Ltd.
24. Western Provident and General Assurance Co. Ltd.
25. Your Own Provident Insurance Co. Ltd.
26. Maharashtra Brahman Provident Mandal Ltd.
27. Ahimsa Provident Assurance Ltd.
28. Teachers' Provident Insurance Society Ltd.
29. Post and Telegraphs Mutual provident Fund.
30. All India National Provident Insurance Co. Ltd.
31. Bharatha Mata Provident Insurance Co. Ltd.
32. Catholic Provident Fund Ltd.
33. Nazareth Indian Christian Provident Insurance Fund.
34. New Karnataka Provident Insurance Co.
35. Prithvi Mutual Provident Co. Ltd.
36. United India Provident Assurance Co. Ltd.
37. Vanguard Provident Assurance Co. Ltd.
38. All India and Burmah Provident Fund.
39. Bangalore Provident Insurance Corporation Ltd.
40. Mysore Provident Insurance Co. Ltd.
41. Kranti Provident Insurance Co. Ltd.
42. Keral Guilt-Edged Security Provident Assurance Co. Ltd.
43. Muthu Provident Insurance Co. Ltd.

44. Vijayabharathi Provident Insuarnce.
45. Policemen Provident Insurance Society Ltd.
46. Alpha Provident Insurance Co. Ltd.
47. Apollo Provident Insurance Society Ltd.
48. Bengal Industrial Provident Assurance Ltd.
49. Bengal Union Provident Insurance Co. Ltd.
50. City of Calcutta Provident Insurance Ltd.
51. Cordial Provident Fund Insurance Co. Ltd.
52. East End Provident Assurance Ltd.
53. Eastern Railway Employees Co-operative Provident Insurance Society Ltd.
54. Grand Jubilee Provident Insurance Ltd.
55. Hindustan Standard Provident Insurance Ltd.
56. Incorporated Provident Insurance Ltd.
57. India Provident Co. Ltd.
58. Inter Provincial Provident Society ltd.
59. Janakalyan Mutual Provident Society ltd.
60. Mahalkshmi Provident Insurance Ltd.
61. Mutual Hindu Family Provident Fund.
62. National Economic Provident Insurance Ltd.
63. National Industrial Provident Co. Ltd.
64. New Bengal Provident Insurance Co. Ltd.
65. Oriental Provident Insurance Ltd.
66. Provident Union Insurance Co. Ltd.
67. Railway Employees' Provident Insurance Society.
68. Standard Provident Insurance and Annuity Co. Ltd.
69. Urban Provident Insurance Society Ltd.
70. Windsor Provident Assurance Co. Ltd.
71. All India Postmen's Union Provident Fund.
72. Indian Railway Employees' Mutual Provident Society.
73. Central Railway man's Co-operative Provident Benefit Society.
74. Travancore General Provident.
75. Raksha provident.

Source: Desai, G.R., (1973), "*Life Insurance in India: Its History and Dimensions of Growth*"; Macmillan Press. New Delhi.

Annexure: 5. (A)

QUESTIONNAIRE

(1) Are you aware of Life Insurance?
Yes ☐ No ☐

(2) How do you come to know about Life Insurance?
(Tick one or more of the followings)
News Papers ☐ T.V. Adv. ☐ Radio Adv. ☐ Posters & Hoardings ☐ Insurance Employees ☐
Insurance Agents ☐ Others, if any.. ☐

(3) Do you know about the private Life Insurance companies operating in India?
Yes ☐ No ☐

(4) Do you have any Life Insurance Policy (LIP)?
Yes ☐ No ☐
(If No then go to Q. No.15)

If Yes

(5) How many policies you have? No. ......

(6) Type/s of Policy you owned/have?
Term Policy ☐ Children Policy ☐ Endowment ☐ ULIP ☐ Whole life ☐ Money back ☐
Others; (please specify).. ☐

(7) Why did you buy Life Insurance Policy?
(Tick one or more, as applicable to you and rank them in order of importance)
☐☐ To save money
☐☐ To save tax
☐☐ To cover the risk of your dependents.
☐☐ Others. (Please specify)..

(8) On an average how much do you spend per annum on Insurance Premium?
☐ Below Rs. 5000 ☐ Rs.(5000 – 8000) ☐ Rs.(8000 – 12000) ☐ Rs.(15000 – 20000)
☐ Rs.(20000 – 25000) ☐ Rs.(25000 – 30000) ☐ Rs.(30000 – 40000) ☐ Rs.(40000 – 50000)
☐ Rs.50000 and above.

(9) From which company you bought the Life Insurance Policy?
LICI ☐ PLI ☐ Private Company ☐

(10) Why did you prefer Govt. Insurance Company?
(Tick one or more, as applicable to you and rank them in order of importance)
☐☐ Insurance agent of Govt. insurer approached first.
☐☐ Do not know about private insurance company.
☐☐ No agent of private insurance company has approached.
☐☐ Popularity of Govt. insurance product
☐☐ Backed by Govt. guarantee.

(11) Why did you prefer private insurance company?

☐☐ Products are more suitable.

☐☐ Expected returns are better.

☐☐ Services are better.

☐☐ High pressure insurance agent made to buy.

(12) *Are you satisfied with the present services of your insurer?*

Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied

(13) Do you want to buy any more LIP in future?

Yes ☐ No ☐

(If No then go to Q.No. **16**)

If yes

(14) Why do you want to buy?

(Rank the following in order of importance)

☐ To save.

☐ To save tax.

☐ To ensure future commitment.

☐ Need more risk coverage. (Go to Q. No.**18**)

If No

(15) Do you want to buy any LIP (Life Insurance Policy)?

Yes ☐ (If Yes then go to Q.No.17) No ☐ (If No then go to Q.No.**16**)

(16) Why you do not want to buy LIP?

(Tick one or more, as applicable to you and rank them)

☐☐ Have enough LIPs & risk coverage

☐☐ Do not have enough money to buy LIPs due to inflation.

☐☐ Have strong financial position to avoid future risk.

☐☐ Want to invest in other sector [financial / real] instead of LIPs. (Go to Q.No. **21**)

If Yes,

(17) Why do you want to buy any Life Insurance Policy?

(Rank the following according to your needs)

☐ To safe guard the financial risk of your family / dependents.

☐ To save only

☐ To save taxes

(18) Which company would you prefer?

☐ Govt. ☐ Private ☐ Any

(19) Why would you like to buy LIP from Govt. insurance companies?

(Tick one or more, as applicable to you and rank them in order of importance)

☐☐ Insurance agent of Govt. company has approached.

☐☐ Do not know about private insurance companies.

☐☐ Not sure about the future prospect of private companies.

☐☐ Backed buy Govt. guarantee

(20) Why would you buy LIP from private insurance company?
(Tick one or more, as applicable to you and rank them)
☐☐ Agent of private company have approached
☐☐ Product suits you better
☐☐ Product price is reasonable
☐☐ Expected returns are higher.

(21) Are you aware of IRDA (Insurance Regulatory & Development Authority)?
Yes ☐ No ☐

(22) Do you have any other investment in
NSC ☐ KVP ☐ Recurring A/c ☐ Bonds ☐ MF ☐
Equity Shares ☐ Real Estate ☐ Fixed Deposits ☐ Others ☐.

(23) How will you allocate Rs. 50000 on the following investment alternatives?
(Please specify one or more of the following and indicate the amount you will allocate)
Rs.________________ to be kept in bank account.
Rs.________________ to be invested in LIPs.
Rs.________________ to be invested in stock market.
Rs.________________ to be spent on your wants.
Rs.________________ to be invested in your own business.

(24) What is your profession (designation):
....

(25) Your education:
☐ Up to 8th standard ☐ Secondary ☐ H.S. ☐ Graduate ☐ Post Graduate ☐ PhD
☐ Under Graduate technical education ☐ Graduate with technical education.

(26) Your income (Rs/pm)
☐ Below 2000 ☐ Below 3000 ☐ Below 5000 ☐ Below 10000 ☐ Below 15000 ☐ Below 20000
☐ Below 25000 ☐ Below 30000 ☐ Below 40000 ☐ 40000 & above

(27) *Family Structure:*

		Age	Sex	Employed Yes	Employed No
Father	☐	☐		☐	☐
Mother	☐	☐		☐	☐
Spouse	☐	☐	☐	☐	☐
Children	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

(28) What do you think about the private life insurance companies operating in India?
(Tick according to your preferences)

Statements	Agree strongly	Agree somewhat	Neither agree nor disagree	Disagree somewhat	Disagree strongly
	1	2	3	4	5
Do not have fair idea about Private Insurance Company					
Services provided by the private companies are better than Govt. companies.					
Product of private insurance companies are more attractive					
The expected return of the private insurance companies are better (because of better fund management)					
Premiums of Private LIPs are reasonable					
Private insurance companies are meant to serve the urban population in India					
Private companies will out perform the Govt. companies in future					
Private life insurance companies will be able to serve people in the long run					
It is safe to invest in private life insurance companies					
Claim settlement of private insurance companies are better					

Name:
....

Address:
....

Age: .... Sex: M ☐ F ☐ Religion: ....Place:
....

Annexure: 5. (B)

Calculation of Life Insurance Reforms Index (LIRI) in India

Years	Penetration	FDI (No. of Foreign Comp.)	Regulatory Reforms	LIRI Index
1988-89	0.91	0	0	0.91
1989-90	0.98	0	0	0.98
1990-91	1.05	0	0	1.05
1991-92	1.13	0	0	1.13
1992-93	1.13	0	1	2.13
1993-94	1.21	0	2	3.21
1994-95	1.25	0	3	4.25
1995-96	1.29	0	4	5.29
1996-97	1.42	0	7	8.42
1997-98	1.38	0	9	10.38
1998-99	1.38	0	11	12.38
1999-00	1.39	0	14.5	15.89
2000-01	1.77	10	15	26.77
2001-02	2.15	13	17.5	32.65
2002-03	2.59	12	17.75	32.34
2003-04	2.26	13	18.50	33.76
2004-05	2.53	14	19.25	35.78
2005-06	2.53	15	19.25	36.78
2006-07	4.10	16	20	40.10
2007-08	4.00	20	21.25	45.25

Annexure: 5. (C)

Chronology of Reforms in the Life Insurance Sector

1993	Setting up of The Malhotra Committee
1994	Recommendations of the Committee released
1995	Setting up of the Mukherjee Committee
1996	Setting up of (interim) Insurance Regulatory Authority (IRA).
1997	Mukherjee Committee report submitted but not made public. A Standing Committee on reforms created. Govt. gives greater autonomy to LICI
1998	Cabinet decides to allow 40% foreign equity in private insurance companies -26% to foreign companies and 14% to NRIs, OCBs and FIIs. Setting up of the TAC
1999	The Standing Committee headed by Mr. Murli Deora decides that the foreign equity in private insurance companies should be limited to 26%. The IRA Act was renamed as The Insurance Regulatory and Development Authority (IRDA) Act. Cabinet clears the IRDA Act
2000	The President gives assent to The IRDA Act.

Source: IRDA annual reports, various years.

Annexure: 5. (D)

Regulations Framed under the IRDA Act 1999

Sl. No.	Notification
1	IRDA (Member of Insurance Advisory Committee), 2000
2	IRDA Appointment of Insurance Advisory Committee Regulations, 2000
3	IRDA (Appointment Actuary) Regulations, 2000
4	IRDA (Actuarial Report and Abstract) Regulations, 2000
5	IRDA (Licensing of Insurance Agents) Regulations, 2000
6	IRDA (Assets, Liability and solvency Margin of Insurers) Regulations, 2000
7	IRDA (Registration of Indian Insurance Companies) Regulations, 2000
8	IRDA (Insurance Advertisement and Disclosure) Regulations, 2000
9	IRDA (Obligation of Insurers to Rural Sectors) Regulations, 2000
10	IRDA (Investments) Regulations, 2000
11	IRDA (Life Insurance -Reinsurance) Regulations, 2000
12	IRDA (Investments) (Amendment) Regulations, 2001
13	IRDA (Reinsurance Advisory Committee) Regulations, 2001
14	IRDA (Investments) (amendments) Regulations, 2002
15	IRDA (Preparation of Financial Statements and Auditors Report of Insurance Companies) Regulations, 2002
16	IRDA (Protection of Policyholders' Interest) Regulations, 2002
17	IRDA (Insurance Brokers) Regulations, 2002
18	IRDA (Obligation of Insurers to Rural and Social Sectors) Regulations, 2002
19	IRDA (Licensing of Corporate Agents) Regulations, 2002
20	IRDA (Protection of Policyholders' Interest) (Amendment) Regulations, 2002
21	IRDA (Manner of Receipt of Premium) Regulations, 2002
22	IRDA (Distribution of Surplus) Regulations, 2002
23	IRDA (Registration of Indian Insurance Companies) (Amendment) Regulations, 2003
24	IRDA (Investments) (amendments) Regulations, 2004
25	IRDA (Obligation of Insurers to Rural/Social Sectors) (Amendment) Regulations, 2004
26	IRDA (Qualification of Actuary) Regulations, 2004
27	IRDA (Insurance Advisory Committee) Regulations, 2005
28	IRDA (Micro-Insurance) Regulations, 2005
29	IRDA (Obligation of Insurers to Rural/Social Sectors) (Amendment) Regulations, 2005
30	IRDA (Licensing of Insurance Agents) (Amendment) Regulations, 2007
31	IRDA (Licensing of Corporate Agents) (Amendment) Regulations, 2007
32	IRDA (Insurance Brokers) (Amendments) Regulations, 2007
33	IRDA (Obligation of Insurers to Rural/Social Sectors) (Third Amendment) Regulations, 2008
34	IRDA (Obligation of Insurers to Rural/Social Sectors) (Fourth Amendment) Regulations, 2008
35	IRDA (Registration of Indian Insurance Companies) (Second Amendment) Regulations, 2008
36	IRDA (Conditions of Service of Officers and Other) (Second Amendment) Regulations, 2008
37	IRDA (Investments) (Fourth Amendment) Regulations, 2008

Fig – 5.13 Correlogram of L_t (lag=20)

```
Autocorrelation   Partial Correlation       AC      PAC     Q-Stat   Prob
  |******|         . |******|          1   0.843   0.843   17.145   0.000
  |*****  |        . *| .  |           2   0.688  -0.074   29.194   0.000
. |****   |        . | .  |            3   0.553  -0.027   37.395   0.000
. |***    |        . *| .  |           4   0.425  -0.059   42.535   0.000
. |**     |        . *| .  |           5   0.305  -0.061   45.345   0.000
. |*      |        . *| .  |           6   0.187  -0.082   46.475   0.000
. |*      |        . *| .  |           7   0.069  -0.099   46.639   0.000
. |       |        . | .  |            8  -0.033  -0.050   46.678   0.000
. *| .    |        . | .  |            9  -0.117  -0.049   47.232   0.000
**|       |        . *| .  |          10  -0.192  -0.068   48.858   0.000
.**| .    |        . *| .  |          11  -0.261  -0.076   52.138   0.000
***| .    |        . *| .  |          12  -0.321  -0.078   57.662   0.000
***| .    |        . *| .  |          13  -0.370  -0.071   65.917   0.000
***| .    |        . | .  |           14  -0.398  -0.039   76.842   0.000
***| .    |        . | .  |           15  -0.401  -0.012   89.805   0.000
***| .    |        . | .  |           16  -0.393  -0.037   104.71   0.000
***| .    |        . | .  |           17  -0.369  -0.013   121.14   0.000
***| .    |        . | .  |           18  -0.323   0.020   137.94   0.000
.**| .    |        . | .  |           19  -0.252   0.057   153.26   0.000
. *| .    |        . |* .  |          20  -0.141   0.141   162.89   0.000
```

Fig – 5.14 Correlogram of R_t (lag=20)

```
Autocorrelation   Partial Correlation       AC      PAC     Q-Stat   Prob
. |*******|        . |*******|         1   0.872   0.872   18.355   0.000
. |****** |        . *| .  |           2   0.743  -0.069   32.403   0.000
. |*****  |        . *| .  |           3   0.618  -0.061   42.649   0.000
. |****   |        . *| .  |           4   0.480  -0.131   49.191   0.000
. |***    |        . *| .  |           5   0.335  -0.124   52.569   0.000
. |* .    |        . *| .  |           6   0.185  -0.128   53.675   0.000
. | .     |        .**| .  |           7   0.018  -0.206   53.686   0.000
. *| .    |        . *| .  |           8  -0.132  -0.092   54.337   0.000
.**| .    |        . |* .  |           9  -0.228   0.076   56.438   0.000
**| .     |        . | .  |           10  -0.301  -0.005   60.416   0.000
***| .    |        . | .  |           11  -0.361  -0.052   66.722   0.000
***| .    |        . *| .  |          12  -0.409  -0.080   75.718   0.000
***| .    |        . | .  |           13  -0.431  -0.021   86.955   0.000
***| .    |        . | .  |           14  -0.416   0.038   98.875   0.000
***| .    |        . | .  |           15  -0.377  -0.014   110.34   0.000
***| .    |        . | .  |           16  -0.335  -0.051   121.20   0.000
.**| .    |        . | .  |           17  -0.283   0.007   130.87   0.000
.**| .    |        . | .  |           18  -0.224  -0.001   138.97   0.000
. *| .    |        . | .  |           19  -0.162  -0.022   145.32   0.000
. *| .    |        . | .  |           20  -0.089   0.011   149.17   0.000
```

Fig – 5.15 Correlogram of ΔL_t (lag=20)

<table>
<tr><th>Autocorrelation</th><th>Partial Correlation</th><th></th><th>AC</th><th>PAC</th><th>Q-Stat</th><th>Prob</th></tr>
<tr><td>. |**. |</td><td>. |**. |</td><td>1</td><td>0.280</td><td>0.280</td><td>1.8198</td><td>0.177</td></tr>
<tr><td>. *| . |</td><td>.**| . |</td><td>2</td><td>-0.184</td><td>-0.285</td><td>2.6459</td><td>0.266</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>3</td><td>-0.176</td><td>-0.036</td><td>3.4503</td><td>0.327</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>4</td><td>-0.175</td><td>-0.182</td><td>4.2952</td><td>0.368</td></tr>
<tr><td>. |*. |</td><td>. |**. |</td><td>5</td><td>0.195</td><td>0.311</td><td>5.4070</td><td>0.368</td></tr>
<tr><td>. |*. |</td><td>. *| . |</td><td>6</td><td>0.154</td><td>-0.135</td><td>6.1524</td><td>0.406</td></tr>
<tr><td>. | . |</td><td>. |*. |</td><td>7</td><td>-0.026</td><td>0.068</td><td>6.1754</td><td>0.519</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>8</td><td>-0.123</td><td>-0.171</td><td>6.7287</td><td>0.566</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>9</td><td>-0.161</td><td>0.048</td><td>7.7670</td><td>0.558</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>10</td><td>-0.063</td><td>-0.166</td><td>7.9412</td><td>0.635</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>11</td><td>-0.065</td><td>-0.068</td><td>8.1487</td><td>0.700</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>12</td><td>-0.048</td><td>-0.103</td><td>8.2732</td><td>0.763</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>13</td><td>-0.100</td><td>-0.114</td><td>8.8988</td><td>0.781</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>14</td><td>-0.098</td><td>-0.053</td><td>9.5987</td><td>0.791</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>15</td><td>-0.021</td><td>-0.074</td><td>9.6379</td><td>0.842</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>16</td><td>0.013</td><td>0.024</td><td>9.6571</td><td>0.884</td></tr>
<tr><td>. |*. |</td><td>. | . |</td><td>17</td><td>0.072</td><td>-0.010</td><td>10.417</td><td>0.885</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>18</td><td>0.023</td><td>0.004</td><td>10.538</td><td>0.913</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>19</td><td>0.002</td><td>0.001</td><td>10.539</td><td>0.938</td></tr>
</table>

Fig – 5.16 Correlogram of ΔR_t (lag=20)

<table>
<tr><th>Autocorrelation</th><th>Partial Correlation</th><th></th><th>AC</th><th>PAC</th><th>Q-Stat</th><th>Prob</th></tr>
<tr><td>. |*** |</td><td>. |*** |</td><td>1</td><td>0.427</td><td>0.427</td><td>4.2250</td><td>0.040</td></tr>
<tr><td>. *| . |</td><td>.**| . |</td><td>2</td><td>-0.064</td><td>-0.301</td><td>4.3241</td><td>0.115</td></tr>
<tr><td>. | . |</td><td>. |**. |</td><td>3</td><td>0.015</td><td>0.241</td><td>4.3302</td><td>0.228</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>4</td><td>0.024</td><td>-0.166</td><td>4.3463</td><td>0.361</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>5</td><td>-0.117</td><td>-0.048</td><td>4.7467</td><td>0.448</td></tr>
<tr><td>. | . |</td><td>. |*. |</td><td>6</td><td>0.035</td><td>0.192</td><td>4.7842</td><td>0.572</td></tr>
<tr><td>. |*. |</td><td>. *| . |</td><td>7</td><td>0.114</td><td>-0.095</td><td>5.2263</td><td>0.632</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>8</td><td>-0.081</td><td>-0.082</td><td>5.4683</td><td>0.707</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>9</td><td>-0.170</td><td>-0.060</td><td>6.6254</td><td>0.676</td></tr>
<tr><td>. *| . |</td><td>.**| . |</td><td>10</td><td>-0.171</td><td>-0.197</td><td>7.9122</td><td>0.637</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>11</td><td>-0.149</td><td>0.045</td><td>8.9954</td><td>0.622</td></tr>
<tr><td>. *| . |</td><td>.**| . |</td><td>12</td><td>-0.170</td><td>-0.197</td><td>10.588</td><td>0.565</td></tr>
<tr><td>. | . |</td><td>. |*. |</td><td>13</td><td>-0.027</td><td>0.144</td><td>10.634</td><td>0.641</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>14</td><td>0.042</td><td>-0.085</td><td>10.762</td><td>0.705</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>15</td><td>-0.009</td><td>0.008</td><td>10.769</td><td>0.769</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>16</td><td>-0.042</td><td>0.006</td><td>10.961</td><td>0.812</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>17</td><td>-0.045</td><td>-0.118</td><td>11.258</td><td>0.843</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>18</td><td>-0.065</td><td>0.014</td><td>12.192</td><td>0.837</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>19</td><td>-0.048</td><td>-0.057</td><td>13.199</td><td>0.828</td></tr>
</table>

Fig – 5.18 Correlogram of U_t (lag=20)

<table>
<tr><th>Autocorrelation</th><th>Partial Correlation</th><th></th><th>AC</th><th>PAC</th><th>Q-Stat</th><th>Prob</th></tr>
<tr><td>. |****** |</td><td>. |****** |</td><td>1</td><td>0.727</td><td>0.727</td><td>12.775</td><td>0.000</td></tr>
<tr><td>. |*** |</td><td>.**| . |</td><td>2</td><td>0.403</td><td>-0.268</td><td>16.897</td><td>0.000</td></tr>
<tr><td>. |* |</td><td>. *| . |</td><td>3</td><td>0.132</td><td>-0.101</td><td>17.367</td><td>0.001</td></tr>
<tr><td>. *| . |</td><td>. *| . |</td><td>4</td><td>-0.097</td><td>-0.165</td><td>17.633</td><td>0.001</td></tr>
<tr><td>.**| . |</td><td>. *| . |</td><td>5</td><td>-0.278</td><td>-0.155</td><td>19.970</td><td>0.001</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>6</td><td>-0.380</td><td>-0.097</td><td>24.624</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>7</td><td>-0.398</td><td>-0.066</td><td>30.076</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>8</td><td>-0.387</td><td>-0.144</td><td>35.628</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>9</td><td>-0.333</td><td>-0.072</td><td>40.087</td><td>0.000</td></tr>
<tr><td>.**| . |</td><td>. *| . |</td><td>10</td><td>-0.254</td><td>-0.095</td><td>42.920</td><td>0.000</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>11</td><td>-0.121</td><td>0.032</td><td>43.628</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. |* . |</td><td>12</td><td>0.057</td><td>0.089</td><td>43.800</td><td>0.000</td></tr>
<tr><td>. |**. |</td><td>. |* . |</td><td>13</td><td>0.234</td><td>0.098</td><td>47.113</td><td>0.000</td></tr>
<tr><td>. |**. |</td><td>.**| . |</td><td>14</td><td>0.214</td><td>-0.316</td><td>50.277</td><td>0.000</td></tr>
<tr><td>. |* . |</td><td>. *| . |</td><td>15</td><td>0.123</td><td>-0.094</td><td>51.499</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>16</td><td>0.049</td><td>-0.040</td><td>51.732</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>17</td><td>-0.020</td><td>-0.041</td><td>51.783</td><td>0.000</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>18</td><td>-0.081</td><td>-0.046</td><td>52.845</td><td>0.000</td></tr>
<tr><td>. *| . |</td><td>. | . |</td><td>19</td><td>-0.077</td><td>0.050</td><td>54.282</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>20</td><td>-0.013</td><td>0.035</td><td>54.370</td><td>0.000</td></tr>
</table>

Fig – 5.19 Correlogram of V_t (lag=20)

<table>
<tr><th>Autocorrelation</th><th>Partial Correlation</th><th></th><th>AC</th><th>PAC</th><th>Q-Stat</th><th>Prob</th></tr>
<tr><td>. |****** |</td><td>. |****** |</td><td>1</td><td>0.757</td><td>0.757</td><td>13.823</td><td>0.000</td></tr>
<tr><td>. |*** |</td><td>.**| . |</td><td>2</td><td>0.458</td><td>-0.268</td><td>19.146</td><td>0.000</td></tr>
<tr><td>. |**. |</td><td>. *| . |</td><td>3</td><td>0.197</td><td>-0.097</td><td>20.191</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>4</td><td>-0.042</td><td>-0.185</td><td>20.241</td><td>0.000</td></tr>
<tr><td>.**| . |</td><td>. *| . |</td><td>5</td><td>-0.249</td><td>-0.168</td><td>22.111</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>6</td><td>-0.382</td><td>-0.100</td><td>26.813</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>7</td><td>-0.448</td><td>-0.115</td><td>33.746</td><td>0.000</td></tr>
<tr><td>****| . |</td><td>. *| . |</td><td>8</td><td>-0.486</td><td>-0.185</td><td>42.532</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. | . |</td><td>9</td><td>-0.444</td><td>-0.038</td><td>50.467</td><td>0.000</td></tr>
<tr><td>***| . |</td><td>. *| . |</td><td>10</td><td>-0.363</td><td>-0.123</td><td>56.238</td><td>0.000</td></tr>
<tr><td>.**| . |</td><td>. | . |</td><td>11</td><td>-0.222</td><td>0.023</td><td>58.615</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>12</td><td>-0.032</td><td>0.064</td><td>58.670</td><td>0.000</td></tr>
<tr><td>. |* . |</td><td>. |* . |</td><td>13</td><td>0.173</td><td>0.093</td><td>60.469</td><td>0.000</td></tr>
<tr><td>. |* . |</td><td>***| . |</td><td>14</td><td>0.196</td><td>-0.353</td><td>63.131</td><td>0.000</td></tr>
<tr><td>. |* . |</td><td>. *| . |</td><td>15</td><td>0.147</td><td>-0.120</td><td>64.872</td><td>0.000</td></tr>
<tr><td>. |* . |</td><td>. *| . |</td><td>16</td><td>0.107</td><td>-0.077</td><td>65.973</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>17</td><td>0.065</td><td>-0.040</td><td>66.487</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. *| . |</td><td>18</td><td>0.017</td><td>-0.073</td><td>66.537</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>19</td><td>0.013</td><td>0.041</td><td>66.575</td><td>0.000</td></tr>
<tr><td>. | . |</td><td>. | . |</td><td>20</td><td>0.039</td><td>-0.004</td><td>67.293</td><td>0.000</td></tr>
</table>

Annexure: 6.(A).

A Summary of Existing Life Insurance Consumption Studies

Life Insurance Determinants	Relationship	Existing Research Studies
Income	+	Yaari(1965), Fischer(1973), Beenstock, Dickinson and Khajuria(1986), Truett and Truett(1990), Browne and Kim(1993), Outreville(1996), Enz(2000), Ward and Zurbruegg(2000,2002), Beck and Web(2003), Zhuo(1999), Hwang and Gao(2003), Hwang and Greenford(2005).
Inflation	+	Green(1954), Fortune(1973), Babble(1981), Browne and Kim(1993), Outreville(1996), Ward and Zurbruegg(2000,2002), Beck and Web(2003),
	-	Cargil and Troxel(1979), Rubayah and Zaidi (2000), Lim and Heberman(2005).
Interest rates	+/-	Cargil and Troxel(1979),
	+/-	Rubayah and Zaidi (2000),
	I	Outreville(1996),
Financial Development	+	Outreville(1996), Beck and Web(2003),
Price of Insurance	+/-	Outreville(1996), Ward and Zurbruegg(2002),
	-	Babble (1981), Browne and Kim (1993), Beenstock, Dickinson and Khajuria (1986), Lim and Heberman(2005).
	I	Hwang and Greenford (2005).
Life Expectancy	+	Outreville(1996), Ward and Zurbruegg(2002), Beenstock, Dickinson and Khajuria(1986),
	I	Browne and Kim(1993),
Social Security	-	Beenstock, Dickinson and Khajuria(1986), Browne and Kim(1993),
	I	Ward and Zurbruegg(2002),
	+	Browne and Kim(1993),
Education	+	Outreville(1996), Truett and Truett(1990), Beenstock, Dickinson and Khajuria(1986), Beck and Web(2003),
	I	Browne and Kim(1993),
Urbanisation	+	Beck and Web (2003), Outreville (1996), Hwang and Gao (2003), Hwang and Greenford (2005).

Note: + = positive relationship, - =negative relationship, I = insignificant relationship.

Annexure: 6. (B)

The OLS estimation of initial equation-(6.3) for the regression of demand (DEN) for life insurance on economic and non-economic variables

(a) First stage simplification

Dependent Variable: DEN
Method: Least Squares
Sample (adjusted): (17) 1992-2008

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	4341.639	1423.303	3.050398	0.0138
FD	137.2561	34.80132	3.943993	0.0034
INTRS	-0.146843	16.62595	-0.008832	**0.9931**
WPI	26.93931	11.70581	2.301362	0.0469
URBN	-52.00972	76.51834	-0.679703	0.5138
LEXP	54.93076	45.67039	1.202765	0.2598
EDUN	-128.0098	54.80881	-2.335570	0.0443
C	-42826.60	11511.67	-3.720276	0.0048
R-squared	0.988290	Akaike info criterion		11.67359
Adjusted R-squared	0.979183	Schwarz criterion		12.06569
S.E. of regression	71.18374	F-statistic		108.5143
Durbin-Watson stat	2.294788	Prob(F-statistic)		0.000000

(b) Second Stage Simplification

Dependent Variable: DEN
Method: Least Squares
Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	4348.041	1162.052	3.741692	0.0038
FD	137.3710	30.62341	4.485817	0.0012
WPI	26.92513	11.00023	2.447688	0.0344
URBN	-52.22112	68.94886	-0.757389	**0.4663**
LEXP	54.81579	41.52972	1.319917	0.2163
EDUN	-128.1298	50.37430	-2.543554	0.0292
C	-42875.60	9568.753	-4.480793	0.0012
R-squared	0.988290	Akaike info criterion		11.55596
Adjusted R-squared	0.981264	Schwarz criterion		11.89904
S.E. of regression	67.53112	F-statistic		140.6655
Durbin-Watson stat	2.294067	Prob(F-statistic)		0.000000

(c) Third Stage Simplification

Dependent Variable: DEN
Method: Least Squares
Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	3654.217	700.9722	5.213070	0.0003
FD	119.3851	18.95710	6.297648	0.0001
WPI	22.83101	9.392938	2.430657	0.0334
LEXP	27.16353	19.40503	1.399819	0.1891
EDUN	-97.44032	29.34244	-3.320798	0.0068
C	-36740.31	4993.594	-7.357488	0.0000
R-squared	0.987619	Akaike info criterion		11.49409
Adjusted R-squared	0.981991	Schwarz criterion		11.78816
S.E. of regression	66.20943	F-statistic		175.4857
Durbin-Watson stat	2.034299	Prob(F-statistic)		0.000000

Annexure: 6. (C)

The OLS estimation of initial equation (6.4) for the regression of demand (NP) for life insurance on economic and non-economic variable

(a) First stage simplification

Dependent Variable: NP
Method: Least Squares
Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	4.441315	1.237794	3.588088	0.0059
FD	0.038872	0.030265	1.284359	0.2311
WPI	0.011193	0.010180	1.099472	0.3001
LEXP	0.028308	0.039718	0.712722	0.4941
INTRS	-0.038468	0.014459	-2.660477	0.0260
URBN	-0.030544	0.066545	-0.459002	0.6571
EDUN	-0.117138	0.047665	-2.457511	0.0363
C	-33.98397	10.01128	-3.394568	0.0079
R-squared	0.992806	Akaike info criterion		-2.421215
Adjusted R-squared	0.987211	Schwarz criterion		-2.029114
S.E. of regression	0.061906	F-statistic		177.4381
Durbin-Watson stat	2.400858	Prob(F-statistic)		0.000000

(b) Second Stage Simplification

Dependent Variable: NP
Method: Least Squares
Sample (adjusted): 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	3.984695	0.706871	5.637088	0.0002
FD	0.027757	0.017425	1.592964	0.1423
WPI	0.009233	0.008869	1.041009	0.3224
LEXP	0.015342	0.026796	0.572543	0.5796
INTRS	-0.040544	0.013180	-3.076117	0.0117
EDUN	-0.099248	0.026333	-3.768951	0.0037
C	-30.05374	4.978377	-6.036854	0.0001
R-squared	0.992638	Akaike info criterion		-2.515722
Adjusted R-squared	0.988220	Schwarz criterion		-2.172634
S.E. of regression	0.059413	F-statistic		224.7130
Durbin-Watson stat	2.390313	Prob(F-statistic)		0.000000

(c) Third Stage Simplification

Dependent Variable: NP
Method: Least Squares
Sample (adjusted): 17 (1992-20080)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	4.242079	0.528576	8.025488	0.0000
FD	0.032416	0.014930	2.171275	0.0527
WPI	0.006725	0.007473	0.899944	0.3874
INTRS	-0.034808	0.008299	-4.194223	0.0015
EDUN	-0.101468	0.025238	-4.020498	0.0020
C	-31.72155	3.911868	-8.109054	0.0000
R-squared	0.992396	Akaike info criterion		-2.601115
Adjusted R-squared	0.988940	Schwarz criterion		-2.307039
S.E. of regression	0.057569	F-statistic		287.1365
Durbin-Watson stat	2.349831	Prob(F-statistic)		0.000000

(d) Fourth Stage Simplification

Dependent Variable: NP
Method: Least Squares
Sample: 17 (1992-2008)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPPC	2.251349	0.225214	9.996507	0.0000
FD	0.026910	0.017258	1.559279	0.1429
INTRS	-0.028744	0.011504	-2.498624	0.0267
EDUN	-0.006095	0.007806	-0.780829	0.4489
C	-17.33651	2.022709	-8.570936	0.0000
R-squared	0.983518	Akaike info criterion		-1.926714
Adjusted R-squared	0.978447	Schwarz criterion		-1.679389
S.E. of regression	0.082302	F-statistic		193.9374
Durbin-Watson stat	**1.618287**	Prob(F-statistic)		0.000000