INTRODUCTION

Change is the watchword for the life insurance sector. Insurance is an essential service to make life meaningful, dignified and worth living. Hence, the customers have the right to know and freedom of access to any information relating to insurance. More information flow will lead to better transparency and customers can make an informed choice. Customer needs, expectations and aspirations towards insurance products are also more demanding in nature.

Things have changed dramatically with the liberalization of the insurance sector and it has not only brought a totally new dimension in the selling process of life insurance but also in the design of many new products which offer better solutions to the customers for their needs. The outcome of the liberalization process has been proved positive and identified as the beginning of the new era with many heights to reach.

The potential for life insurance industry in India is very high and the profile of products has a different variety for every segment of the society. Today, these products have a large market in the country and some of these products have tremendous potential. The customer can now choose among a range of insurance products of various companies, suitable to his life style and needs. He is in a position to compare the policies of various companies, analyze and work out suitable calculations.

The insurance products act more as an umbrella for protection than as a financial instrument for saving and tax planning. With more and more customers demanding innovative insurance solutions to their problems, insurers have been competing with one another. The insurance industry faces a healthy competition which really benefits the public. The public sector has
improved its product varieties and designed attractive schemes to compete with the private sector.

Private players also seem to be slowly but steadily increasing their competitive strength on par with the public sector. In this context, priorities, preferences and brand positioning of insurance products have become essential for customers and also insurance companies. Private insurance companies have also schemes to gain the attention of the public. They can be more effective if they can extend more varieties to attract. The scope of bringing more individuals into the life insurance net is undeniable, provided the right type of products and services are made available to them.

India has been moving to a more dynamic situation wherein multiple changes have been taken place in the industry. This gives an opportunity to the insurers to design new products for meeting the new types of risks associated with developed economic activity, entry of latest technology and higher levels of consumer awareness. The insurers are required to upgrade the risk consciousness of the products with new combinations, new options and new riders, keeping in view the changes in customers’ needs and expectations.

A remarkable development in the life insurance market is the origin and evolution of market related products. These products have created larger success in sales. Though the quality of product becomes the focus area, the price sensitiveness, the market strategies of insurers, the levels of income of the customers have also made a dent in the customer retention and persistency. For a continued maintenance of success in business, generating and promoting innovative products is a major requirement of the insurers. The products give unique identity to the insurance players and these are the deciding factors for the eventual success of a business entity. The increasingly tough competition has actually changed the horizon of insurance
sector. The market is flooded with an array of products. The differentiators among different players are the products, pricing and service.

The profile of the Indian consumer is developing. Consumers have become increasingly more aware and are able to manage their financial affairs well. While boundaries between various financial products are blurring, people are increasingly looking at insurance not just as products, but also as integrated financial solutions that can offer stability of returns along with total protection\(^1\). Successful product development needs both a well developed and clearly defined internal process and also receptive external environment. The design driven by consumer needs, as opposed to design in the corporate boardroom ensures greater product acceptance and longevity.

**PRODUCT INNOVATION AND DEVELOPMENT**

Developing new products is a continuous process. The potential for new product development is very vast in life insurance portfolio. More competition is injected into the insurance industry making the environment conducive for developing new products. The product innovation and development needs a new vision, a new approach and a new strategy. This makes it essential that the insurance companies must assign due weightage to the development of services and schemes which cater to the changing needs and requirements of the customers.

Public and private players have to work together to ensure healthy growth and development of the insurance sector. The new entrants into the insurance market introduced innovative product line in order to tap the customers. In the wake of all this, even LIC has been forced to change its outlook and to take certain steps to customize products\(^2\). Insurance companies will need constantly to innovate in terms of product development

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to meet the ever-changing consumer needs. No product is competitive or successful during all periods and to all segments of population.

One of the significant aspects of the insurance industry has been its ability to use innovative approach to tackle complex changes in the financial environment. The customers’ choice of schemes and insurance planning opportunities has grown significantly. To launch innovative product, segmentation of client categories is more important. The target group comprises of people with varying characteristics like age, occupation, income and life styles. The recognition of these variations in the characteristics is important to ensure proper selection and ongoing acceptability of insurance products as an ideal vehicle.

It is a tough task to experiment an innovation in the markets. Even if the returns are not great initially, the insurers are not being discouraged and play with them for the long-term. To remain competitive, the insurers have to re-launch and even re-design some of the existing ones which were once proved more attractive to the customers.

Competition is believed to be the mother of innovations. Traditional insurance plans accounted for a majority of the first year premium, until ULIPs take centre stage during the bullish phase of the equity market. The insurance companies have now changed their strategies and the market-linked polices have started offering guaranteed products to attract new customers.

Innovation in designing a product is a psychological proposition. It is the right and a more opportune time to insurers to give some thought to innovative and modern trends in the product design with full insurance cover on the right lines and wean away the customers from the historical practices.

The development in science and technology at a rapid pace, socio-economic and psychic conditions and severe competition with the entry of new insurers have brought about many innovative trends in consumer needs
resulting in the necessity to design and develop suitable insurance products. Ideal and right designing of insurance policies involves introduction of new plans to cater to the needs of specific target groups and suitable alteration of existing plans for better product performance.

Product development has to be coupled with a lot of hard work in conducting research, understanding customers' needs, analyzing the changes and assessing their commercial viability. The role of actuaries in innovating and developing new products is also very important. By undertaking a thorough study of the past trends and applying the results to future trends, the actuary can generate innovative products that will stand the test of time.

Innovation in the life insurance market is generally attributed to initiatives taken by private companies. There has been a large number of new and innovative products offered by the new players, developed mainly from the exposure of their international partners. Customers have a tremendous choice from a large variety of these products.

With the changing life styles and also demographic variations, the demand for risk cover has also developed evolutionary by taking into account the needs of the insurance potentials. As such, there have been innovations in the design and types of products by the insurers. Continuous process of innovating new products result a wide array of flexible products to suit the needs of different age groups. Product innovation and development in life insurance sector has become essential for achieving the objectives of survival and growth of an insurer. It also involves many strategies like product positioning, packaging, labeling, branding and product supporting services.

Product diversification of life insurance business has yielded considerable results. People are attracted to purchase new policies of insurance which meet the demands of children’s education, marriage of
daughter, their risk coverage, pension benefits to the spouse and self, the periodical monetary requirements and risk coverage\(^3\).

An intelligently designed insurance product will shift the focus from mere medical care to proactive health protection. Insurers can learn from their more mature counterparts by developing new capabilities. These would include gaining insight into buyer behavior, streamlining product development, integrating technology and adopting a holistic approach to differentiation through tailored services. It is imperative for insurers to make product innovation a top strategic and operative priority.

**NEED ANALYSIS AND CUSTOMIZATION OF PRODUCTS**

Life insurance cover is needed by individuals for various purposes. The choice for a life insurance plan depends upon the need level of the individual. These needs include family protection, old age survival for self and dependents, needs for consequences of disability/mishappenings, diminution in the value of assets due to depreciation, inflation and other macro-economic factors\(^4\).

As insurance products are meant mostly for meeting long-term needs of the insured, the insurers are needed to design the new generation products on the basis of the opinions and feedback elicited from the customers. They are also required to keep the product design in such a manner so as to ensure that the insured will understand clearly the features of the product.

The middle class people have varied needs like success in business or profession, a higher level of education and acquiring professional qualification for children and financial security for parents. All these needs of the middle

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class are served by an insurance company by selling different types of products to them.

Further, equilibrium is also to be sustained to make the bottom line healthy while offering products to meet the ever-changing needs and demands of the insuring public. The understanding and assessment of customer needs has to be done by most insurance companies in the right perspective. The diversity of culture and life-styles of people in India create varied customer needs and expectations which a life insurance company has to oblige and fulfill.

The insurers have to ask the customers what they want and then listen carefully. They must analyze what a customer says and know how to put it in action. Change or motivation is inevitable for making the customer happy. The insurer has to move from an internal focus to an external one, centered on the customer’s perspective. The option of customizing insurance solutions according to the local needs is very important.

Personal interactions and home visits are considered to be customer friendly in some parts of the country. These are relevant for insurers to understand their choices and customize services suitably. It is very common that a satisfied customer will continue to stay with the insurer for the complete period of the contract. Insurers should be open to the changing needs of the customers. There should be a full-fledged system to get the customer feedback at least on some important issues. The insurer puts him in a position to attune to the needs of the customers and this would lead to a normal emergence of innovative products and a gradual evolution of developed products.

Good products are the successful products and they are very important to market success. A general trend in the life insurance market is a change in the knowledge level and also the expectations of the customers. The docile,
uninformed, risk averse and illiterate insurance customers have been changed into highly and aggressively demanding customers with a free flow of market information on insurance products. They are able to choose the products according to their needs through rider covers at a marginal extra cost. Hence, the product design should take into consideration the interest and willingness of the individuals and their ability to pay for the product.

The insurance companies have to develop the products under different types of needs i.e., family need, investment need, saving need, old-age need, readjustment need and special need. Insurance products are required to be customized to meet the needs of the customers. Insurance today has emerged as an attractive and stable investment alternative that offers good and complete protection. Customers also need products that offer flexible options. They prefer products with benefits unbundled and customizable to suit their diverse needs. The customization of products for the clientele should be in tune with their growing demands and global exposure. It has been the hallmark of the Indian insurance industry in the post-liberalized regime.

**UNDERWRITING**

Underwriting is the process by which an insurer determines whether or not to accept a risk and, if accepted, what terms and conditions are to be applied to the acceptance and the level of premium to be charged. The purpose of underwriting is to ensure that there is value addition to the relationship that develops between the insurer and the insured. It enables the insurers to be unbiased in their approach and ensures that the interests of both the insurers and the insured are protected. It is the lifeblood of insurance business. Knowledgeable underwriting is the key to a gainful future for an insurance company. Underwriting profits are directly proportional to the skill level of the underwriters.

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An underwriter is one who is entrusted with the responsibility to analyze risk-based information, by using insurance and actuarial applications to determine how to handle the volatility of the risk characteristic in each risk. His decision-making is highly subjective. It is based on his specialist technical expertise, the quality of his past underwriting experience, the degree of his perceptual and analytical talents for spotting all risk hazards. The underwriting is a function that encompasses the entire spectrum of assessing the risk in its totality and then arriving at a decision. An underwriter has to have a ‘sixth sense’ to detect the chances of an insured committing fraud on the insurer and to take appropriate action to minimize the chances at the acceptance stage.

Tele-underwriting has its origin in the early nineties. In this process, the call center professionals conduct interviews with insurance applicants over phone. This leads to both time and cost saving for the insurance companies. It helps the insurance companies to obtain applications and medical history through interviews on telephone. Tele-underwriting has turned out to be a win-win situation for all the participants in the insurance business process.

The intensifying competition within the industry has resulted in players resorted to good and reasonable pricing. The pricing of the product requires an accurate estimation of claim costs, acquisition costs, reinsurance premium, administrative expenses and profit margin. Discounts and loadings should follow the favourable and unfavourable conditions of risk proposed. A process is to be established to review the competitive price offering and the resultant fluctuation on the performance. Compliance with pricing policies and regulations should not be ignored.

The pricing falls in the realm of actuarial science. It is the responsibility of an actuary to determine premium rate appropriate to an insurance contract,

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which is viable on a long term basis. Pricing of life insurance products is simpler and life insurance rates are more stable and precise. In life insurance, the main factors used for determining the premium rates are – mortality, expenses and interest.

The insurers have mostly depended on the mortality statistics published from time to time in the Regulator’s Annual Reports. “In insurance, a rate is the price permit and a premium is the price paid for a particular contract”.

There is a limited scope to use price as a strategic weapon in life insurance. The actuary, on considerations that depend on the experience of the insurer in the past and his assessment of the trends in the future, decides the premium rates. These rates have been approved by the IRDA.

In an insurance contract, it is very important that the premium that is charged from a prospective client is appropriate and equitable. In order to arrive at a reasonable premium, the insurer calls for a host of details which provide the basis for the assessment of the risk. Since the premium is the consideration in the insurance contract, its payment is made a condition for the operation of the policy.

STRUCTURE

Analyzing the structure of insurance products helps the insurers to understand exactly what they are buying, in terms of pure insurance, investment and life annuity for protection against longevity risk. The most important factor is product attributes which refer to the product features that customers take into consideration before choosing an insurance product. In

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general, the potentials will like to buy a policy which involves lesser procedural formalities, provides tax incentives, suits to the requirements of individuals in terms of money back, endowment, whole life and pension.

The mode of payment of premiums on the insurance policies is also an important factor when it comes to the selection of insurance products. People from different market segments require different modes of premium payment facility, viz., single premium (one time payment), annual payment, half yearly payment, quarterly payment, monthly payment etc. to suit their requirements. The insurance policies should be designed in such a manner which permit premium payment as per customers’ convenience.

Product flexibility is another prerequisite. This facilitates selection of life insurance products. Basically, it refers to the designing of insurance products in such a way that it permits surrendering of policy if the customer is not interested in continuing the same due to some reason or another, getting a loan against the policy in the event of unforeseen circumstances or extreme emergency situation and revival of lapsed policy.

The maturity period of the insurance policies is also governed by the customer requirements. The insurance companies offer policies with long maturity period, medium maturity period and short maturity period and the customer chooses the term in accordance with his requirements.

By incorporating these factors in the best proportion, an insurance company can improve on the quality of its products and services to attract more customers and occupy a dominant market share in the life insurance market. Further, there is a scope to explore the market potential by proper market survey followed by systematic segmenting, targeting and positioning of products and services offered by the various insurance companies.

The companies should strive hard for maintaining a proper balance between their offerings and expectations of the customers. Various innovative
schemes can be thought of and implemented by insurance companies at regular intervals for retaining their customers. With more and more customers demanding innovative insurance solutions to their problems, insurers are competing with each other. Potential buyers are mostly driven to buy a policy not solely for tax benefit but for several other factors like security for the money invested and also fulfillment of the final objective. To win and retain customers, the insurers have to be clear in what they market and what they assume to the insured at different intervals and also at maturity.

The introduction of ‘combi-products’ is a step in the direction of innovation in product designing and it is hoped that insurers will come out with several products to suit the needs of the customers. Customers are also offered unbundled products with a variety of benefits as riders from which they can choose. Customer satisfaction is one area which witnessed the most significant change with the entry of new players.

Insurance has always been considered an area where simple language is used. The policies, terms and conditions and other documents of an insurance company are typically steeped in verbosity. Short words and short sentences wherever possible are to be used in the documents. Short paragraphs are to be given and each paragraph must center around a particular idea. Different examples are to be given to illustrate ideas or concepts. Illustrations or diagrams are also to be used to present ideas. All these make the policyholders understand the policy document easily.

PRODUCTS – DIFFERENT TYPES

An insurance product is a more visible component which creates a main link between an insurance company and its customers. The product should serve the needs of the customers and at the same time it must be viable for the insurer. Sustaining and improving good values of business will create a positive impression on the minds of the customers. There should not
be any possibility for mis-selling. The nature and character of the practices vary from one insurer to another insurer. But, the basic values should remain the same. Insurance products are traditionally perceived to offer risk cover along with moderate return of 3 to 4 per cent on investment. These products are positioned to satisfy the medium and long term needs of customers.

Traditional plans are considered to be the long-term products and are coupled with insurance and savings. These plans help the customers to save regularly. But these will not help them to earn an attractive investment return. It is only the tax benefits on such policies that make the returns better. But if the tax benefits are withdrawn in line with the new Direct Taxes Code, returns on traditional plans may drop. Traditional products are mostly 'participating' policies. Under these policies, the policyholder may get an addition to his policy by means of 'bonus' declared every year based on the surplus available in the pool of money managed by the insurer.

Bonuses are simple reversionary and reversionary compounded. In a simple reversionary bonus, the bonus declared will simply be added to the policy whereas in reversionary compounded bonus, the bonus of previous year would also eligible for bonus in future years. The bonus for traditional plans is declared for the sum assured and not for the premium paid. The following types of different insurance products are being sold by both public and private sector insurance players in our country:

**Term Insurance**

A term insurance plan allows a customer to have an affordable life cover protection. It is a pure risk cover and does not carry any separate cash value. Upon the death of the policyholder, the insurance company will pay the sum assured to the beneficiary. In the event of survival, the policy will not carry any maturity value.
The IRDA has decided to allow the life insurers to reduce the capital requirement in the case of pure term products. It is expected that the lower level of solvency for pure term products would provide relief to the life insurers both under individuals’ products and group products. This will also help insurers in launching more pure term products for sufficiently longer periods at affordable rates\textsuperscript{10}.

The Regulator has also asked the life insurers to popularize the more affordable term insurance policies. Term policies also allow riders or benefits such as critical illness benefit, accelerated sum assured and accident death on payment of additional premium. For life insurers, offering term plans during the initial stages has great advantage. The advantage is that term plans offer just risk coverage and are not savings-linked.

But, the term plans lapse more in some cases after the drop in premiums because customers find it beneficial to lapse their old policies and buy the new and cheaper ones. As the premiums are less on term policy, the customers feel that they do not lose anything if the policy lapses. An insured may feel that he enjoys a life cover for the premiums paid so far by him and therefore, discontinues paying premiums since there are no surrender values for the policy.

**Whole Life Insurance**

In the whole life insurance policy, the risk covered is for the entire life of the policyholder and the policy money and the bonus so accumulated are payable to the nominee or the beneficiary only on the death of the policyholder. The new whole-life policy has gone a step further and the customer gets a small sum of money at regular intervals while the policy runs its course.

\textsuperscript{10} Annual Report of IRDA, 2008-09, p.125.
Endowment Insurance

An endowment policy covers a fixed number of years. The designated beneficiary gets the death benefit equal to the policy amount if the insured dies within the period covered. If the insured survives at the end of this period, he is paid the policy amount. The investment component in an endowment policy yields a cash value to the insured in the event of cancellation prior to the completion of the policy term. An endowment policy covers risk for a specified period and at the end of which the sum assured is paid back to the policyholder, usually with accumulated amount of bonus.

An endowment policy is suitable for the policyholders who look to get back a lump sum at the end of a certain period to meet some planned financial goals in addition to a life cover. Endowment plans are more traditional by nature and perceived to be more transparent. Unit-linked endowment plans offer exposure to equity and debt markets. The customers can choose these plans based on their risk profile and financial goals.

Money-back Insurance

A money-back plan is a slightly modified form of the endowment plan. This plan makes partial payments periodically during the term and the remaining on the expiry of the plan. The emphasis is more on savings in these plans. The focus is more on the benefits to be accrued and received as opposed to the premium pay-outs.

Children's Insurance

Children's insurance plans are deferred assurance plans providing risk cover on life of the child after it has attained 18 years of age. The low premium rate under these plans is a great attraction. A parent can help his children to take a policy at a rate which is considerably lower than that what they would be called upon to pay at the attaining of majority. These policies are taken on the life of the child and not the life of the parent.
Annuity and Pension Insurance

In Annuity and pension insurance plans, the insured agrees to pay a series of premiums to the insurer and in return the insurer agrees to pay a specified sum to the beneficiaries. A pension is also an annuity provided by an employer to the employees or their dependents in consideration of the services rendered.

Annuities provide for an income benefit towards replacing income lost during the post-retirement period. The sharp fall in savings rates of the households in some areas and during some periods imply lower provision for future. This has led to a rise in annuity products and also innovation of other products for solving the problem of old age living.

Pension plans can also be unit-linked, providing exposure to the equity market. Investor can choose the right policy depending upon their needs and aspirations. The insurers are capable of offering customized pension products to maintain high brand equity with customers. Further, the companies today want to provide better benefits to their employees so that they can retain talent while group gratuity schemes fall under statutory liabilities, pension as well as leave encashment schemes are offered as perks.

Key man Insurance

Key man insurance is a new innovative concept in insurance business. It is a life insurance policy taken by a business organization on the life of an important employee to protect the business organization against any financial loss which may occur due to premature death of employee while in service.\(^\text{11}\)

In a significant move, the IRDA had directed all life insurance companies to sell the Key man insurance cover only as a term policy for sometime with effect from 29\(^{\text{th}}\) April, 2005.

High Net worth Individuals’ (HNI) Insurance

Another sector which holds high potential but mostly underinsured is the High Net worth Individuals sector. During the last few years, this sector has grown rapidly. The number of individuals drawing significant amount of salaries is also increasing. The insurers have brought some plans for these people. LIC has issued Jeevan Pramukh whereas other insurers have different comparable plans to capture this segment. Mostly high premium and high sum assured policies are sold under this category.

Substandard Lives’ Insurance

Substandard lives are those lives who can’t be insured as standard lives by the life insurers. The LIC has divided the substandard lives into three categories according to the incidence and intensity of extra risks involved in the insured lives as increasing extra risk, decreasing extra risk and constant extra-risk. They are treated by increasing premium, decrease in death benefits, change in class and period of assurance and any other combination of these methods. The LIC has introduced Jeevan Aadhar, Asha Deep, Jeevan Biswas, Jeevan Asha and Jeevan Bharati Policies for the benefit of substandard lives.

Housewives’ Insurance

Targeting the housewife segment can also be an intelligent strategy of the life insurers. Insurance cover can be packaged as a gift to some one you love and care for. The middle and high income group can definitely be brought into the net. There can be other niches as well that can be carved out in this category.

Loan Cover Insurance

The life insurance companies also offer a loan cover assurance policy that aims to protect financially a borrower’s family if the loanee fails to survive the loan’s duration.
Universal Life Insurance

Universal life policies are the products with features of both traditional and unit-linked plans. Under these polices, the policyholders have the choice to change their premiums, the term or the sum assured. The IRDA guidelines have classified all universal life policies as variable insurance products (VIPS). Consequently, all VIPS will only be offered under non unit-linked platform implying that they will now come under traditional plans.

The guidelines stipulated that VIPS should provide only mortality cover. The policy should be for a minimum period of five years. The sum assured should be at least ten times that of the annualized premium. All VIPS shall have a lock-in period of three years. Every policy shall have a corresponding policy account whose balance shall show the accrual to the policyholder. Insurers have to provide a policy account statement to customers every year giving details of opening and closing balance. The statement will also give a complete break-up of premium received, deduction towards mortality, commission and expenses and floor interest earned. VIPS are the regular premium products. Single or limited premium will not be allowed. Even group insurance contracts will be allowed, but there should not be any rider attached to the product.

Unit-Linked Insurance

Over a long-period, there is much dependence on traditional products because they give the insurers a regular income and are also a source of long-term inflow of money that can be used for investment purposes. Only the traditional policies like endowment and money-back policies were the popular options before the advent of unit-linked insurance plans.

Later, some factors have emerged and considered significantly responsible for the advent of Unit-Linked Insurance Plans (ULIPs). These are the entry of private insurers into the insurance sector and the decline of
expected returns on endowment plans. These plans have been the single-
largest innovation in the field of life insurance. The design of these plans
addresses and overcomes several concerns that customers have had in the
past, like liquidity, flexibility and transparency. ULIPs are differently structured
products and give many choices to the policyholder. The bullish market and
the increased levels of income of households and their saving rates have
created craze and popularity to the ULIPs.

The first Unit Linked Product was approved by IRDA on 13\textsuperscript{th} March,
2001. The product is designed to provide a customer with the dual opportunity
of getting financial security from unforeseen eventualities in the future and
also reaping good returns. ULIPs allow the flexibility of switching funds for a
given number of switches every year for free. However, the customer has to
bear the entry load for moving into a debt or equity fund. These are more
flexible than traditional products and consider stock market with a long-term
horizon. The plans are long-term oriented, comprehensive and also
customized solutions offering both savings and investment. Insurance trends
have also changed with the introduction of unit linked plans. The customers
can think that it is a good opportunity for investment. But, it should be
observed that this is a better investment if the money is kept within the
insurance company for a long period, say at least about 6 to 7 years.

With the huge success of unit-linked plans, the efficiency of the life
insurers in the area of investments also assumes greater importance. An
insurer’s acumen would certainly be a matter of great importance in pricing
the products, particularly in a volatile interest rate scenario. The ULIPs
completely has changed the definition of life insurance industry and the
insurers’ initiative in this has become so big that it quickly garnered about 70
per cent of the market share. Every insurer has started rolling out ULIPs one
after another and the focus shifted from projection to investment. These
products have been responsible in enhancing customer’s expectations of higher returns of 20 per cent within 5 years.

The significant reason why ULIPs are far more efficient on capital front is that the charges towards the policy are all applied in the beginning and therefore, there is no need to use the shareholder’s capital to pay for administrative charges. ULIPs which constitute more than 95 per cent of the portfolio of private insurers, almost 98 per cent of surplus goes to shareholders. Once the private insurers have entered into the market, the entire domain of the insurance sector has changed and the unit-linked insurance plans are gradually dominating the traditional plans.

However, the introduction of ULIPs has come under the heated discussion, debate and created a conflict between the Securities and Exchange Board of India (SEBI) and the IRDA. The SEBI has sent notices to 14 life insurers not to sell ULIPs without its approval as the ULIPs have similarities with mutual funds and as such fall under its control. A lengthy process of turf between the Regulators has continued and finally the matter was taken to the Supreme Court forcing the Government to bring out an ordinance which was later approved by the Parliament for settling the conflict in favour of the IRDA.

After nearly six months of uncertainty to many ULIP holders and also the life insurance industry, the ULIPs have come back in business with a number of regulations focusing both the protection of the life insured and also the savings objectives of life insurance.

The new regulatory measures on ULIPs effective from 1st September, 2010, have a significant impact on the creating awareness on the products which is very much needed in the present day insurance society. An important objective of the new regulation is to improve retail participation and make ULIPs more cost-effective and also transparent. Many insurers have found
that under the revised guidelines, ULIP marketing is made profitable only if policyholders continue to pay premiums over the complete term.

The new regulations on ULIPs have protected the long-term interests of the customers and also the industry. These will enhance the transparency of the ULIPs and also promote their attractiveness as a long-term saving and also investment product. As such, ULIPs will fulfill the dual benefit of providing prosperity and peace of mind to the customers and also their families.

The most notable changes in the guidelines pertain to surrender charges, five-year lock-in period, a cap on difference between growth yield to net yield for investments of period less than 10 years and a minimum guaranteed return of 4.5 per cent on pension products. The way forward with regard to ULIPs, at present, is that it will not be a pure investment product but a long-term savings-cum-protection oriented product. The insurance element in the product has also been increased.

While investors are willing to take risks by opting for ULIPs, the buoyancy in stock markets, the financial crises across the globe and the meltdown in the equity markets has affected adversely the sentiments of the investors. Many would like to invest their surpluses in safe and traditional financial instruments rather than taking risks. As such, preference will be shifted away from ULIPs and life insurers may have to design traditional products with good incentives. As such, the growth in life insurance business in near future may not be as robust as it was so far\(^\text{12}\).

**Micro Insurance**

Micro-insurance refers to the insurance of low-income people. Low-income households are vulnerable to risks and economic uncertainties. One way for the poor to protect themselves is through insurance. If governments, donors, development agencies and others working for the welfare of the

poorer community are serious about combating poverty, insurance has to be one of the weapons in their arsenal\textsuperscript{13}.

Micro-insurance is relatively a new concept. To make micro-insurance an integral part of life insurance system in India, the IRDA has notified the ‘Micro Insurance Regulations, 2005’. To make micro-insurance as an integral part of country’s wider insurance network, it is more relevant for every life insurer to adjust its costs of serving marginal customers in rural areas for collecting premiums and offering doorstep services.

The self-help groups should be developed as big institutions to sell insurance policies in bulk to a large number of groups. The skills of the members of the groups are to be upgraded in such a manner to convince the insurance potentials. The self-help groups are to be developed as financial co-operatives or village banks.

Most of the companies don’t get involved in the micro-insurance because they feel that the poor would not be able to afford and also the very low margin being involved. The preferred channels to market these micro-insurance products are panchayat samithis, rural banks, co-operatives and non-governmental organizations. Micro-insurance products provide risk cover to the downtrodden and underprivileged sections of the society at reasonable and affordable prices. This will go a long way to fulfill the insurers’ obligation towards societal public.

Micro-insurance is different from traditional insurance products. It aims at offering the poor and below poverty line people protection against the most vital risks. The targeted customers are the low income households. Selling micro-insurance products in rural areas should be seen by insurers not as a

commercial activity but as an activity coupled with a sense of responsibility towards the society.

Micro-insurance is a highly technical operation and it creates many problems and challenges. Operating costs to the insurers are high and experience indicates that it is very difficult for them to offer effective and sustainable insurance policies for poor people. The insurers have to re-design their organizational strategies to include low-premium group loans, treating them both as a business opportunity as well as a corporate social responsibility.

**Group Insurance**

Group insurance products are emerging as a business segment with considerable potential. The cost effectiveness, tax benefits and the increasing need for organizations to retain their skilled manpower and provide financial security drive this business. Group plans are cost-effective as the premiums are calculated for a group of people in the organization and it is bulk business. Moreover, the employers’ contribution is not treated as a perquisite in the hands of the employee. The organization is also allowed to deduct the premium paid as business expenses. Thus, it is a win-win situation for all the parties concerned, the employee, the employer and also the insurance company which has gained an expanded market.

In group insurance plans, the organization will be the policyholder who wishes to provide cover to its employees. In case an employee covered under the plan dies, the sum assured is paid out to the beneficiaries. The critical illness rider, accidental death benefit rider and accidental disability riders are also applicable to these policies by paying higher amount of premium.

Group superannuation schemes offered by insurance companies can be a good option for organizations to plan systematically for the increasingly crucial post-retirement days of their employees. A well-designed plan can give
a sizeable corpus in the hands of an employee. This corpus can be used by the retiring employee to take an annuity which will provide a revenue stream post-retirement. The annuity can be taken either on the entire corpus or a portion can be commuted and an annuity taken with the remaining amount.

Group insurance providers bring high-end technological interface. This interface is used to service on an individual member with customized billing and easy policy administration. Group insurance is a cover provided to a congregation of individuals who have commonality of purpose. The growth in group insurance business has also been impressive. The superannuation and gratuity business has grown on the strength of professional fund management and a host of value-added services\textsuperscript{14}.

Table 4.1 gives information on the growth rate and market share of the number of products cleared by the IRDA during the years 2000-01 to 2009-10. As per the instructions of the IRDA, both the public and private insurers are required to submit a complete profile of their newly designed products in a specified proforma for approval. Only after a clear approval by the Regulator, the insurers can notify these products to the public. During 2004-05 and 2007-08 there was a negative growth over the previous years in the number of products cleared by IRDA because of the unfavourable demand conditions and also the impact of global recession on the life insurance market. Only a small number of products were submitted to the Regulator for approval during those periods by the insurers.

During the ten-year period, on the whole, it may be observed from the Table that the LIC launched and put for sale only a limited number of products, whereas the private players introduced a large number of newly designed products in the market. As a result, the private players achieved a significant increase in their business due to the introduction of many new

products and secured a considerable share in the life insurance market. This has also been proved adequately in the regression analysis. They enjoyed a dominant share i.e. 97.24 per cent in the total number of products cleared by the IRDA during 2009-10. The remaining share was taken up by the LIC. Though LIC has a relatively small number of products in its portfolio, it concentrates its attention mostly on those products and improves its business.

Table 4.1

GROWTH RATE AND MARKET SHARE OF THE PRODUCTS CLEARED BY IRDA DURING 2000-01 TO 2009-10

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>2000-01</td>
<td>1</td>
<td>5.00</td>
<td>19</td>
</tr>
<tr>
<td>2001-02</td>
<td>12 (1100.00)</td>
<td>11.65</td>
<td>91 (378.95)</td>
</tr>
<tr>
<td>2002-03</td>
<td>12 (0.00)</td>
<td>11.76</td>
<td>90 (-1.10)</td>
</tr>
<tr>
<td>2003-04</td>
<td>5 (-58.33)</td>
<td>4.95</td>
<td>96 (6.67)</td>
</tr>
<tr>
<td>2004-05</td>
<td>1 (-80.00)</td>
<td>1.82</td>
<td>54 (-43.75)</td>
</tr>
<tr>
<td>2005-06</td>
<td>6 (500.00)</td>
<td>10.91</td>
<td>49 (-9.26)</td>
</tr>
<tr>
<td>2006-07</td>
<td>8 (33.33)</td>
<td>4.15</td>
<td>185 (277.55)</td>
</tr>
<tr>
<td>2007-08</td>
<td>5 (-37.50)</td>
<td>4.24</td>
<td>113 (-38.92)</td>
</tr>
<tr>
<td>2008-09</td>
<td>8 (60.00)</td>
<td>4.71</td>
<td>162 (43.36)</td>
</tr>
<tr>
<td>2009-10</td>
<td>9 (12.5)</td>
<td>2.77</td>
<td>316 (95.06)</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are annual growth rate percentage percentage
% indicates market share of the insurers
Source: Compiled from the Annual Reports of IRDA
RIDERS

In the liberalization period, the introduction of riders and the add-ons has added a new dimension in the designing of the products. A good and useful combination of riders with the base products would lead to many solutions which are customized in nature and insurers should utilize their energies to identify such workable combinations. As per the IRDA (Actuarial and Abstract) Regulations, 2000 ‘riders’ or ‘rider benefits’ mean add-on benefits which are in addition to the basic benefits under a policy. These are the additional benefits that can be bought and added to a basic insurance cover. The Riders are termed as supplements to the basic risk cover provided. A set of riders may be appended to the main policy by the insurance company. Due to a number of riders appended, the premiums will undergo an upward revision. The different types of riders commonly accepted by the customers are given below:

Accidental death benefit is a rider which ensures receipt of a sum beyond the basic sum assured. This provides an additional sum equivalent to a maximum of the basic sum assured if the insured dies during the period of the policy. The waiver of premium is another type of rider which ensures waiver of all premium payments if the permanent disability of the insured affects his capacity to earn. The critical illness rider is a common type of rider which pays compensation to the insured if he suffered by any of the critical illness.

The other two riders offered by the insurance companies are the major surgical procedure and the pre and post-hospitalization benefits. The first entails a pay-out, depending on the surgical procedure and the second covers the expenses involved in hospitalization subject to certain limits in terms of both the number of days in a year and also the amount. Unless the rider is cleared by the IRDA, it can’t be appended to the base products.
The Regulator also states that the insurers must not change the riders in any manner subsequent to clearance under the file and use procedure without the concurrence of the IRDA. The rider benefits are not usually provided with single premium policies. These benefits cease to exist when a policy becomes paid-up and also at age 60 or 65 even if the base policy continues for a longer period. Premiums for health riders are subject to renewal every five years.

Riders are popular in many markets. Every insurer has offered various riders to the customers. However, no adequate information is available on riders and their sales in our country. Riders present a win-win situation for all concerned – shareholders, customers and distributors. Now, it is that time the customers, buying life insurance products, ask the agents and the distributors for the riders. With more products and riders introduced in the market, there is a clear evidence of growth of business by private players in many cases. The popular single premium plans have lost their shine and created the way for other products such as market-linked plans and group insurance policies.

Table 4.2 shows the data on the growth rate and market share of the number of riders cleared by the IRDA during the years 2000-01 to 2009-10. Along with the products, the insurance players have to submit information to the Regulator about the riders also for approval. During the period, the insurers received approval for a total of 265 riders. Out of which LIC submitted 19 riders and private insurers designed 249 riders. These figures clearly show that the private insurers have taken greater interest in publicizing more riders or add-ons to their basic policies so as to fulfill the needs of the customers and also attract them in good number. As the number of private insurers has been on the increase, the total number of riders cleared by the IRDA will automatically increase and may be relatively more than the number of approved riders of LIC.
It is also seen from the Table that the private insurers have promoted newly designed add-ons by using the expertise of their foreign partners to improve their business. The market share of the private players is proved quite dominant and monopolistic in designing suitable riders and also publicizing the same to the customers.

Table 4.2

GROWTH RATE AND MARKET SHARE OF THE RIDERS CLEARED BY IRDA DURING 2000-01 TO 2009-10

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>2000-01</td>
<td>1</td>
<td>5.88</td>
<td>16</td>
</tr>
<tr>
<td>2001-02</td>
<td>1 (0.00)</td>
<td>2.22</td>
<td>44</td>
</tr>
<tr>
<td>2002-03</td>
<td>4 (300.00)</td>
<td>8.33</td>
<td>44</td>
</tr>
<tr>
<td>2003-04</td>
<td>3 (-25.00)</td>
<td>7.32</td>
<td>38</td>
</tr>
<tr>
<td>2004-05</td>
<td>5 (66.67)</td>
<td>23.81</td>
<td>16</td>
</tr>
<tr>
<td>2005-06</td>
<td>1 (-80.00)</td>
<td>14.29</td>
<td>6</td>
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<tr>
<td>2006-07</td>
<td>2 (100.00)</td>
<td>13.33</td>
<td>13</td>
</tr>
<tr>
<td>2007-08</td>
<td>1 (-50.00)</td>
<td>9.09</td>
<td>10</td>
</tr>
<tr>
<td>2008-09</td>
<td>1 (0.00)</td>
<td>3.33</td>
<td>29</td>
</tr>
<tr>
<td>2009-10</td>
<td>0 (-100.00)</td>
<td>0.00</td>
<td>33</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are annual growth rate percentage
% indicates market share of the insurers
Source: Compiled from the Annual Reports of IRDA

COMPARISON OF PRODUCTS

The private insurers are making steady inroads into a territory that was once LIC’s sole preserve. To a considerable extent, product innovation has played a vital role in this achievement as is indicated by the success of the unit-linked plans. The entry of private players into the insurance industry has
seen a veritable explosion of products that offer customers a much richer menu of options. For a choice-starved customer, their entry has been an inevitable feature.

While the basic policies introduced by private insurers have more or less remained the same, the never before concept of riders has taken the fancy of the Indian customer. An ideal mix for insurance is a balanced component of both market related and traditional products. There is also a need for retirement solutions in the country. ULIPs are also best suited for retirement solutions.

With the IRDA asking companies to give a guaranteed return of 4.5 per cent, the companies have to invest more in debt to give the guarantee. Hence, the insurers have to shift their focus to traditional policies. They are either launching new traditional plans or continuing their existing portfolio of traditional policies to fill the market gap.

Traditional plans may become attractive to agents to sell more number of policies due to better commission. This will lead to a change in the product mixes for these companies in favour of traditional policies. The endowment products have been very dominant in life insurance industry due to the psychology of the average Indian to face only minimal risk.

Single premium policies have been made popular. Unit-linked products and different riders have been also playing significant role in the life insurance market. Multi-featured packaged products are also attracted by the insurance potentials. These features include endowment, money back, whole life, single premium, regular premium, and rebate in premium to higher sum assured coupled with a number of riders to these base products.

Retirement solutions have become more popular as many people become aware of the needs to save for their benefits after retirement. There are many investment alternatives. But, the ideal one would be an alternative
that provides regular periodic returns during retired life coupled with security. LIC is the largest pension provider to the nation. Most of the new life insurance entrants provide health insurance benefits as riders to their base products\textsuperscript{15}.

The recent trends showed that there is a balance in the product portfolio of the life insurers which has given some edge over the savings component in life insurance products. The need identification and need-based selling have a great role to play in the overall quality of the portfolios of life insurers. A significant transformation has occurred in the nature of the products. Considering the benefits of starting early, the customers have been planning for the future with regard to insurance.

RURAL AND SOCIAL SECTOR

The rural and social sector obligations and the micro-insurance regulations of the IRDA will help promote financial inclusion and protection of the larger segment of the society. The insurance products are also specifically designed to serve the oppressed sections of the society who are not affordlde to pay for an insurance cover because of their lower levels of income. The specific challenges of both urban and rural population relating to their uncertainty in life are to be met adequately by the newly designed insurance products.

Formatting the rural and social sector obligations as stipulated by the IRDA, the life insurers have to expend lots of amount for setting up of the suitable infrastructure base. The insurance companies have not got rural business in any significant way. While some private insurers have managed to bring rural business as per the IRDA mandate, others have failed and paid fine.

To reach out to the social sector, the insurers have developed a wide range of products. But the question remains as what proportion of the business is done in respect of the social sector. LIC is better placed in this regard as they operate from many urban and semi-urban centers of the country and have been doing a great job in providing low-cost group insurance cover to the social sector.

**FREE-LOOK PERIOD**

In a way to curb mis-selling by agents and distributors and to give the policyholder an opportunity to get out of a wrong policy, the IRDA has put out a regulation which requires that all insurers have to offer a ‘buy it or leave it’ clause, valid for 15 days immediately after the sale to the insured. This regulation further states that in unit-linked policies, the insurer should repurchase the policy at current unit prices.

The customer can use this time period for clarifying his doubts and making sure that the policy he opted for is the right choice. The main objective behind this regulation is to make the process of buying insurance product more transparent, easy and fulfilling for the customer rather than leaving him at his own risk. This regulation provides a quick exit route to the policyholder at a small cost if he premised on a wrong interpretation of the particulars of the product or on the basis of wrong information given by an agent.

In case the insured is not able to exercise the free-look option within 15 days from the receipt of the policy bond, he has no option except to discontinue the policy. IRDA, however, noted that many policyholders may not even be aware of the introduction of the free-look provision under the clause 6(2) of the IRDA (Protection of Policyholders’ Interests) Regulations, 2002 as a result of which they may allow the policies to lapse.
POLICY LAPSAION

Lapsation of policies is very crucial for a life insurer. As the income of an insurer depends mostly on premium, it is important to keep a look on continuity of premium payments. The lapse of a policy is quite disruptive and also destructive to the regular routine of the life insurance industry.

The IRDA is contemplating a system similar to provisioning of Non-Performing Assets (NPAs) in banks for protecting the interests of policyholders in life insurance. But, the calculation of NPAs, like policies in the insurance sector, is quite complex as different life insurers have different grace periods for payment of premium after due date. The situation in insurance business differs from a Bank’s NPAs in the sense that insurance company will not lose money in case of a policy lapse.

The ‘termination of agency’ which is quite rampant in the industry, has rendered millions of policies ‘orphan’. Orphan policies are proved to be neglected due to lack of proper follow-up, servicing support and are known to lapse in large numbers. The Regulator has expressed concern over the rise in orphan policies.

Further, the agents and development officers are likely to follow-up the policies with limited premium payment more regularly since the parties would usually be high-end customers. This is capable of capping incidence of lapse of policies to a good extent\(^\text{16}\).

PRODUCT CONVERGENCE

A number of unitized products are sold on the premise that these are bundled with the features offered by funds. It is a trend which expects the product becoming stronger as more and more insurers come out with such schemes. The introduction of combi-products’ is a way forward in the direction

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of product innovation and development. The insurers need to use these products for aggressive marketing.

New products are key to successful business and product convergence is expanding business boundaries of divergent business while offering integrated service. The combi-products combine two related need-based features. One is the need for covering higher number of individuals at their prime age both for health and life insurance and the second one is the need for letting product innovation with value-added features.

Product differentiation may be understood as different life insurance companies bringing out differentiated products or plans which are relatively close substitutes for each other but not perfect substitutes. This can be achieved easily by mixing term assurance and pure endowment benefits in varying proportions or by providing for add-on benefits. Product differentiation is also achieved through effective sales promotion and aggressive selling activities.

NEW POLICIES ISSUED AND PREMIUM ANALYSIS

Insurance is a multi-service industry and the output of an insurance industry should be the aggregation of every service it provides. Such diversity in the services provided by an insurance company renders the measurement of output difficult. To achieve improvements in productivity, corporate planning combined with organizational restructuring become necessary. The important factors which count for the productivity of any life insurance company are new policies issued, new business or first year premium, renewal premium and total premium.

With liberalization of the insurance sector, the insurance companies have to become more competitive in ensuring the present market share and also to increase the share in the total life insurance market. Maintaining market share is a difficult challenge for the life insurance companies in an
environment of stiff competition. Private players have played a key role in increasing their incremental premium growth rate. The private players are snapping at its heels and their business bears testimony to this.

The opening up of the industry has helped insurance customers in general and the private insurers in particular. The private insurers have been growing remarkably since its inception. People have purchased private sector's insurance products mainly because of their professional approach and better service\textsuperscript{17}.

An analysis on the growth rate and market share of the life insurers during the ten year period of insurance liberalization relating to different indicators of insurance business development is worth mentioning because a company which is growing and also increasing its market share will increase its revenues faster than its competitors. It can also allow for achieving a greater scale in its operations and improving profitability. As such, all insurers are looking to expand their share in the total insurance market by appealing to a larger number of consuming public, lowering premiums and through intensive sales promotion techniques and advertising.

Further, investors who are willing to invest in different companies of the life insurance business want to know about information on the market share from different reliable sources like trade associations, regulatory bodies, etc. and often from the companies themselves to take rational decisions on their investment.

Table 4.3 presents information on the annual growth rate and the market share of the insurers in the total number of new policies issued by them during the years 2000-01 to 2009-10. It shows that the life insurance industry issued a total number of 5.32 crore new policies during 2009-10, of

which LIC issued 3.89 crore policies and private players 1.43 crore policies. While LIC registered an increase in policies by 8.22 per cent over 2008-09, the private players experienced a negative growth rate of 4.32 per cent. A significant decline in ULIP business and also an impact of global recession and economic meltdown on insurance business are the primary reasons to this negative growth of the private players. But, LIC registered a positive growth because of its well established network of agents and also the product portfolio dominating traditional products despite the existence of unfavorable business conditions during the period.

Contrary to this growth pattern, the Table shows that during 2004-05, LIC showed a negative growth of 11.09 per cent and private players represented a positive growth rate of 34.62 per cent. The reason for a positive growth in the new policies issued by the private insurers is the introduction of a plethora of new products and also suitable riders or add-ons to those basic products. ULIPs are also given utmost importance by the private players as these products are more profitable to them and also more attractive to the customers. A wider publicity about their products by the private insurers to the customers has also contributed to a great extent to this growth rate. The negative growth rate in new policies of LIC is the result of the continuation of the traditional policies and little reliance on ULIP business during that period.

As regards the market share, the LIC’s market share is 94.21 per cent whereas private insurer’s market share is only 5.79 per cent in 2003-04. This is due to the fact that LIC has been a significant player on traditional life insurance products and the sales of those products have increased with consistency. But, the private insurers have concentrated their attention mostly on the sale of the unit-linked plans. As most of the consumers are not aware of the features of these products, the sales of these products have not increased significantly during the initial years of introduction. Later, the market share of private insurers has increased due to their aggressive sales
promotion activities of the ULIPs. In addition to this, professional consultancy to the customers and efficient delivery of service has also increased their business. It is further observed from the Table though the LIC is an insurance major in India, its market share has been declining gradually over the period. In 2009-10, LIC's market share accounts for 73.02 per cent and the private players’ market share amounts to 26.98 per cent.

Further, it is seen from the Table that during the post-liberalisation period, the life insurance industry in our country registered a three-fold increase in the number of new policies issued. This indicates a higher level of awareness amongst insurance potentials and deeper penetration into the minds of the public about the importance of insurance.

Table 4.3

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC Number</th>
<th>LIC %</th>
<th>Private Sector Number</th>
<th>Private Sector %</th>
<th>Total Number</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>1,96,57,064</td>
<td>99.95</td>
<td>9,833</td>
<td>0.05</td>
<td>1,96,66,897</td>
<td>100.00</td>
</tr>
<tr>
<td>2001-02</td>
<td>2,24,91,114</td>
<td>96.70</td>
<td>7,67,535</td>
<td>3.30</td>
<td>2,32,58,649</td>
<td>100.00</td>
</tr>
<tr>
<td>2002-03</td>
<td>2,45,45,580</td>
<td>96.75</td>
<td>8,25,094</td>
<td>3.25</td>
<td>2,53,70,674</td>
<td>100.00</td>
</tr>
<tr>
<td>2003-04</td>
<td>2,69,68,069</td>
<td>94.21</td>
<td>1658847</td>
<td>5.79</td>
<td>2,86,26,916</td>
<td>100.00</td>
</tr>
<tr>
<td>2004-05</td>
<td>2,39,78,123</td>
<td>91.48</td>
<td>22,33,075</td>
<td>8.52</td>
<td>2,62,11,198</td>
<td>100.00</td>
</tr>
<tr>
<td>2005-06</td>
<td>3,15,90,707</td>
<td>89.08</td>
<td>38,71,410</td>
<td>10.92</td>
<td>3,54,62,117</td>
<td>100.00</td>
</tr>
<tr>
<td>2006-07</td>
<td>3,82,29,292</td>
<td>82.83</td>
<td>79,22,274</td>
<td>17.17</td>
<td>4,61,51,566</td>
<td>100.00</td>
</tr>
<tr>
<td>2007-08</td>
<td>3,76,12,599</td>
<td>73.93</td>
<td>1,32,61,558</td>
<td>26.07</td>
<td>5,08,74,157</td>
<td>100.00</td>
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<td>2008-09</td>
<td>3,59,12,667</td>
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<td>5,09,23,377</td>
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</tr>
<tr>
<td>2009-10</td>
<td>3,88,63,000</td>
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<td>1,43,62,000</td>
<td>26.98</td>
<td>5,32,25,000</td>
<td>100.00</td>
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</tbody>
</table>

Note: Figures in brackets are the annual growth percentages
% indicates market share of the insurers
Source: Compiled from the Annual Reports of IRDA
Statistical Analysis:

i. Mean, Standard Deviation and Skewness

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LIC Growth Rate</th>
<th>Private Sector Growth Rate</th>
<th>LIC Market Share</th>
<th>Private Sector Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
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<tr>
<td>Mean</td>
<td>8.58</td>
<td>900.35</td>
<td>29984821.50</td>
<td>5992233.60</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>13.18</td>
<td>2552.32</td>
<td>7305092.25</td>
<td>6102343.53</td>
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<td>Variance</td>
<td>173.74</td>
<td>6514351.43</td>
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<td>Skewness</td>
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<td>-0.00</td>
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<tr>
<td>Range</td>
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<td>Maximum</td>
<td>31.75</td>
<td>7705.71</td>
<td>38863000</td>
<td>15010710</td>
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</table>

The above table indicates that the average growth rate of the new policies issued by LIC is 8.58 and private sector is 900.35 per cent respectively during 2001-10. It shows that the growth rate of Private Sector is higher than the LIC. The standard deviation for LIC is 13.18 whereas and Private Sector is 2552.32 for the period under study. It portrays that the LIC has got stability over private sector in growth rate. A positive skewness 0.26 and 2.99 specifies that LIC and private sector growth rates are positively skewed distributions.

With regard to market share, it further highlights from the table that the average number of new policies issued by LIC is 29984821.50 and private sector is 5992233.60 during 2001-10. It shows that the average number of policies of LIC is higher than Private Sector. The standard deviation of new policies for LIC is 7305092.25 whereas private sector is 6102343.53. It indicates that both the insurers are maintaining stability in the issue of new insurance policies. A positive skewness 0.66 value indicates that the market share of new policies issued by private sector is a positively skewed distribution and the market share of new policies issued by LIC is a negatively skewed i.e., -0.00 distribution.
The relevant line graphs of the growth rate and market share of the LIC and Private Sector are given below:

Figure A: Line Graph of Growth Rate of the LIC and Private Sector

Figure B: Line Graph of Market share of the LIC and Private Sector

i) Regression Analysis

<table>
<thead>
<tr>
<th>Market Share (Dependent Variable)</th>
<th>Mth</th>
<th>Rsq</th>
<th>F</th>
<th>Sigf</th>
<th>b0</th>
<th>b1</th>
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<tr>
<td>Private Sector</td>
<td>LIN</td>
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<td>57.17</td>
<td>0.000</td>
<td>-3779937964.29</td>
<td>1887774</td>
</tr>
</tbody>
</table>

Independent Variable: Year
Regression Equations

a) The linear trend forecasting equation is

\[ \text{LIC (Market Share)} = -4510171130.23 + 2263852 \times \text{Year} \]

The regression coefficients are interpreted as follows:

- The Y intercept \(b_0 = -4510171130.23\) is the fitted trend value reflecting the predicted mean of the number of new policies issued by LIC during 2001-2010.

- The slope \(b_1 = 2263852\) indicates that number of new policies issued by LIC are predicted to increase by an average of 2263852 new policies per year.

The significance value of F (0.000) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (LIC Market Share). This table displays R squared (0.888). It is the proportion of variation in the independent variable (Year) explained by the regression model.

b) The linear trend forecasting equation is

\[ \text{Private Sector (Market Share)} = -3779937964.29 + 1887774 \times \text{Year} \]

The regression coefficients are interpreted as follows:

- The Y intercept \(b_0 = -3779937964.29\) is the fitted trend value reflecting the predicted mean number of new policies issued by private sector during 2001-2010.

- The slope \(b_1 = 1887774\) indicates that the number of new policies issued by private sectors are predicted to increase by an average 1887774 of new policies per year.

The significance value of F(0.000) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (Private Market Share). This table displays R squared (0.877). It is the proportion of variation in the dependent variable (Private...
Sector Market Share) explained by the independent variable (Year) in the regression model. Hence, it is clear from the above analysis that both the insurers’ market shares have significance value which is less than 0.05 and their ‘R’ squared value are close to 1.

![Figure C: LIC Market Share Regression Plot](image)

(Fitting a least squares trend line for Market Share)

![Figure D: Private Sector Market Share Regression Plot](image)

(Fitting a least squares trend line for Market Share)

The above Regression Plots show that the LIC and Private Sector are fit to the linear mathematical model as the observed figures are not away from the linear trend values. In order to reach the linear line on an average, LIC has to issue 22.64 lakh and Private Sector 18.88 lakh new policies every year.
The life insurance players are suggested to move towards the linear line so as to ensure further stability and sustenance in new business.

Table 4.4 shows data on the growth rate and market share of new business/first year premium underwritten by life insurers during the period, 2000-01 to 2009-10. It can be observed from the Table that during 2002-03, the first year premium of LIC shows a significant decline and registers a negative growth rate of 18.44 per cent. But, the private players have increased their first year premium by an annual growth rate of 259.65 per cent. This is because the private players have succeeded in establishing themselves in the insurance market through the adoption of intensive sales promotion methods. A small portion of the LIC’s business has been taken over by the private players due to their intense sales campaign. Despite private players’ positive growth in the first year premium, LIC’s negative growth in first year premium has influenced greatly the industry’s first year premium during the period.

Afterwards, the private players have increased their premium collections marginally during 2008-09 when the total industry has shown negative growth rate of 6.81 per cent due to the presence of the unfavorable Indian equity market conditions. During 2007-08, LIC has only a 6.71 per cent annual growth rate because of a fall in its share of ULIP premiums over the previous years.

As regards the market share, during 2007-08, the market share of the LIC has declined to 64.02 per cent and further to 60.89 per cent in 2008-09. The impact of economic downturn and the equity meltdown in share market are the reasons for this decline in its market share. But, with regard to private players, there is no such negative impact on their share during this period. However, their share has increased from 35.98 per cent in 2007-08 to 39.11 per cent in 2008-09 despite a shortfall in their ULIP business. Later, LIC’s
market share has increased to 65.08 per cent in 2009-10 due to its heavy reliance on traditional policies. This shows its potential for tapping the untapped insurance market in our country. But, private sector’s share has decreased to 34.92 per cent in 2009-10 due to its heavy slowdown in their ULIP business because of new regulations.

On the whole, it may be observed that during the ten-year period, the total first year premium of the industry has risen by around 10 times. As the first year premium is an indicator of new business, during the post-liberalization period, all the life insurers have recorded, on an average, a satisfactory growth in their business.

Table 4.4
GROWTH RATE AND MARKET SHARE OF NEW BUSINESS/FIRST YEAR PREMIUM UNDERWRITTEN BY LIFE INSURERS DURING 2000-01 TO 2009-10
(Rs. in crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>2000-01</td>
<td>9700.98</td>
<td>99.93</td>
<td>6.45</td>
</tr>
<tr>
<td>2001-02</td>
<td>19588.77 (101.93)</td>
<td>98.65</td>
<td>268.51</td>
</tr>
<tr>
<td>2002-03</td>
<td>15976.76 (-18.44)</td>
<td>94.30</td>
<td>965.69</td>
</tr>
<tr>
<td>2003-04</td>
<td>17347.62 (8.58)</td>
<td>87.67</td>
<td>2440.71</td>
</tr>
<tr>
<td>2004-05</td>
<td>20653.06 (19.05)</td>
<td>78.78</td>
<td>5564.57</td>
</tr>
<tr>
<td>2005-06</td>
<td>28515.87 (38.07)</td>
<td>73.52</td>
<td>10269.67</td>
</tr>
<tr>
<td>2006-07</td>
<td>56223.56 (97.17)</td>
<td>74.32</td>
<td>19425.65</td>
</tr>
<tr>
<td>2007-08</td>
<td>59996.57 (6.71)</td>
<td>64.02</td>
<td>33715.95</td>
</tr>
<tr>
<td>2008-09</td>
<td>53179.08 (-11.36)</td>
<td>60.89</td>
<td>34152.00</td>
</tr>
<tr>
<td>2009-10</td>
<td>71521.90 (34.49)</td>
<td>65.08</td>
<td>38372.12</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are the annual growth percentages
% indicates market share of the insurers
New Business/First Year Premium includes single premium also
Source: Compiled from the Annual Reports of IRDA
Statistical Analysis:

i. Mean, Standard Deviation and Skewness

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LIC Growth Rate</th>
<th>Private Sector Growth Rate</th>
<th>LIC Market Share</th>
<th>Private Sector Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>30.69</td>
<td>540.47</td>
<td>35270.42</td>
<td>14518.13</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>43.22</td>
<td>1323.18</td>
<td>22454.35</td>
<td>15593.91</td>
</tr>
<tr>
<td>Variance</td>
<td>1868.12</td>
<td>1750795.44</td>
<td>504197791</td>
<td>243170068</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.87</td>
<td>2.95</td>
<td>0.50</td>
<td>0.63</td>
</tr>
<tr>
<td>Range</td>
<td>120.37</td>
<td>4061.66</td>
<td>61820.92</td>
<td>38365.67</td>
</tr>
<tr>
<td>Minimum</td>
<td>-18.44</td>
<td>1.29</td>
<td>9700.98</td>
<td>6.45</td>
</tr>
<tr>
<td>Maximum</td>
<td>101.93</td>
<td>4062.95</td>
<td>71521.90</td>
<td>38372.12</td>
</tr>
</tbody>
</table>

The above table specifies that the average growth rate of the new business premium of LIC is 30.69 per cent and private sector is 540.47 per cent during 2001-10. It indicates that the growth rate of Private Sector is higher than the LIC. But, the standard deviation for LIC is 43.22 whereas Private Sector is 1323.18. It connotes that the LIC is maintaining stability over the private sector insurers in growth rate. The positive skewness values of 0.87 and 2.95 of LIC and private sector are stated positive skewed distributions.

It further states that with regard to the market share, the average amount of new business premium collected by LIC is 35270.42 and private sector is 14518.13. It shows that the average amount of new business premium of LIC is higher than the Private Sector. The standard deviation of new business premium for LIC is 22454.35 whereas Private sector is 15593.91. It indicates that both the insurers are maintaining stability in the collection of new business premium in life insurance. The positive skewness values of 0.50 and 0.63 of LIC and private sector are stated positive skewed distributions.
The relevant line graphs of the growth rate and market share of the LIC and Private Sector are given below:

Figure A: Line Graph of Growth Rate of the LIC and Private Sector

Figure B: Line Graph of Market share of LIC and Private Sector

ii. Regression Analysis

<table>
<thead>
<tr>
<th>Market Share (Dependent Variable)</th>
<th>Mth</th>
<th>Rsq</th>
<th>F</th>
<th>Sigf</th>
<th>b0</th>
<th>b1</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIC</td>
<td>LIN</td>
<td>0.862</td>
<td>49.95</td>
<td>0.000</td>
<td>-13773631</td>
<td>6885.52</td>
</tr>
<tr>
<td>Private Sector</td>
<td>LIN</td>
<td>0.890</td>
<td>64.96</td>
<td>0.000</td>
<td>-9732050</td>
<td>4859.92</td>
</tr>
</tbody>
</table>

Independent Variable: Year
Regression Equations

a) The linear trend forecasting equation is

\[ \text{LIC (Market Share)} = -13773631 + 6885.52 \times \text{Year} \]

The regression coefficients are interpreted as follows:

- The Y intercept \( b_0 = -13773631 \) is the fitted trend value reflecting the predicted mean of new business premium (Rs in Crores) underwritten by LIC during 2001-2010.
- The slope \( b_1 = 6885.52 \) indicates that the new business premium (Rs in crores) are predicted to increase by an average of Rs 6885.52 crores per year.

The significance value of F(0.000) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (LIC Market Share). This table displays R squared (0.862). It is the proportion of variation in the dependent variable (LIC Market Share) explained by the independent variable (Year) in the regression model.

b) The linear trend forecasting equation is

\[ \text{Private Sector (Market Share)} = -9732050 + 4859.92 \times \text{Year} \]

The regression coefficients are interpreted as follows:

- The Y intercept \( b_0 = -9732050 \) is the fitted trend value reflecting the predicted mean of new business premium underwritten by Private Sector during 2001-2010.
- The slope \( b_1 = 4859.92 \) indicates that the new business premium (Rs. in crores) are predicted to increase by an average of Rs. 4859.92 Crores per year.

The significance value of F(0.000) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (Private Market Share). This table displays R squared (0.890). It is the proportion of variation in the dependent variable (Private
Sector Market Share) explained by the independent variable (Year) in the regression model. Therefore, it is clear from the above analysis that LIC and Private Sector market shares have significance value which is less than 0.05 and the ‘R’ squared values are close to 1.

![Figure C: LIC Market Share Regression Plot](image)

![Figure D: Private Sector Market Share Regression Plot](image)

The above Regression Plots show that the LIC and Private Sector are fit to the linear mathematical model since the observed figures are not away from the linear trend values. In order to reach the linear line, on an average, LIC has to increase its new business premium by Rs 6885.52 crores and private sector by Rs. 4859.92 crores every year.
Table 4.5 refers to the growth rate and market share of renewal premium underwritten by life insurers during the years 2000-01 to 2009-10. The renewal premium is a function of new business underwritten in the previous year. The renewal premium underwritten by the private insurers has remarkably increased during 2002-03. It shows their performance in creating and nurturing new markets and also makes the new customers stick to their products. These players have also explored new business opportunities during this period. There is also a consistent increase in the growth rates of their renewal premium collection during the remaining period also. LIC, during this period, registers a volatile growth rate. However, it shows an increase in the absolute amount of renewal premium.

The Table further shows that the market share of the LIC in the total renewal premium has declined from 100 per cent in 2000-01 to 73.64 per cent in 2009-10 whereas the private players’ market share has increased from 0.01 per cent to 26.36 per cent during the period. The reduced market share with regard to LIC indicates clearly the higher amount of policy lapses due to heavy termination of agents and lack of proper follow-up by the existing agents. The positive growth with regard to private players is a testimony to the number of measures taken by them to reduce policy lapses. Further, the private players have done business mostly on ULIPs and hence early withdrawal of these plans has proved expensive to the customers. As a result, the policy lapses have decreased and the persistency ratio has increased.

As renewal premium collection is an indicator for determining the sustenance in growth of the insurance industry, a five-fold growth of renewal premium registered during the ten-year period has created a vibrant and customer-friendly business environment by both the public and private sector players.
Table 4.5

GROWTH RATE AND MARKET SHARE OF RENEWAL PREMIUM UNDERWRITTEN BY LIFE INSURERS DURING 2001-02 TO 2009-10
(Rs. in crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th></th>
<th>Private Sector</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Amount</td>
<td></td>
<td>Amount</td>
<td></td>
<td>Amount</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>2000-01</td>
<td>27461.71</td>
<td>100.00</td>
<td>----</td>
<td>----</td>
<td>27461.71</td>
<td>100.00</td>
</tr>
<tr>
<td>2001-02</td>
<td>30233.14</td>
<td>(10.09)</td>
<td>99.99</td>
<td>4.03</td>
<td>00.01</td>
<td>30237.17</td>
</tr>
<tr>
<td>2002-03</td>
<td>38651.73</td>
<td>(27.85)</td>
<td>99.60</td>
<td>153.37</td>
<td>(3705.71)</td>
<td>00.40</td>
</tr>
<tr>
<td>2003-04</td>
<td>46185.81</td>
<td>(19.49)</td>
<td>98.55</td>
<td>679.62</td>
<td>(343.12)</td>
<td>01.45</td>
</tr>
<tr>
<td>2004-05</td>
<td>54474.23</td>
<td>(17.95)</td>
<td>96.18</td>
<td>2162.93</td>
<td>(218.26)</td>
<td>03.82</td>
</tr>
<tr>
<td>2005-06</td>
<td>62276.35</td>
<td>(14.32)</td>
<td>92.82</td>
<td>4813.87</td>
<td>(122.56)</td>
<td>07.18</td>
</tr>
<tr>
<td>2006-07</td>
<td>71599.28</td>
<td>(14.97)</td>
<td>89.02</td>
<td>8827.36</td>
<td>(83.37)</td>
<td>10.98</td>
</tr>
<tr>
<td>2007-08</td>
<td>89793.42</td>
<td>(25.41)</td>
<td>83.42</td>
<td>17845.47</td>
<td>(102.16)</td>
<td>16.58</td>
</tr>
<tr>
<td>2008-09</td>
<td>104108.96</td>
<td>(15.94)</td>
<td>77.43</td>
<td>30345.43</td>
<td>(70.05)</td>
<td>22.57</td>
</tr>
<tr>
<td>2009-10</td>
<td>114555.41</td>
<td>(10.03)</td>
<td>73.64</td>
<td>41000.94</td>
<td>(35.11)</td>
<td>26.36</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are the annual growth percentages
% indicates market share of the insurers
---- There was no renewal premium collection of the private sector insurers as they entered into the sector only in 2000-01.
Source: Compiled from the Annual Reports of IRDA
Statistical Analysis:

i. Mean, Standard Deviation and Skewness

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LIC Growth Rate</th>
<th>Private Sector Growth Rate</th>
<th>LIC Market Share</th>
<th>Private Sector Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>17.34</td>
<td>520.04</td>
<td>63934.00</td>
<td>10583.30</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>6.16</td>
<td>1199.08</td>
<td>30580.36</td>
<td>14554.80</td>
</tr>
<tr>
<td>Variance</td>
<td>37.91</td>
<td>1437781.21</td>
<td>935158118</td>
<td>211842168</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.61</td>
<td>2.96</td>
<td>0.50</td>
<td>1.395</td>
</tr>
<tr>
<td>Range</td>
<td>17.82</td>
<td>3705.71</td>
<td>87093.70</td>
<td>41000.94</td>
</tr>
<tr>
<td>Minimum</td>
<td>10.03</td>
<td>0.00</td>
<td>27461.71</td>
<td>0.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>27.85</td>
<td>3705.71</td>
<td>114555.41</td>
<td>41000.94</td>
</tr>
</tbody>
</table>

The above table analyses the average growth rate of renewal premium underwritten by LIC which is 17.34 and Private Sector 520.04 per cent respectively. It shows that the growth rate of Private Sector is higher than the LIC. The Standard Deviation for LIC is 6.16 whereas the private sector is 1199.08. It shows that the LIC is maintaining stability over the Private Sector in growth rate. The positive skewness values of 0.608 and 2.96 indicate that LIC and private sector growth rates are the positively skewed distributions.

It further states that the market share of the LIC with regard to the average renewal premium underwritten is Rs.63934 crores and the Private Sector is Rs.10583.30 crores. It visualizes that the average amount of renewal premium of LIC is higher than the Private Sector. The standard deviation of renewal premium with regard to the market share for LIC is 30580.36 whereas private sector is 14554.80 during 2001-10. But, the Private Sector insurers have got more stability. The positive skewness values of 0.500 and 1.395 indicate that the LIC and the private sector market shares are positively skewed distributions.
The relevant line graphs of the growth rate and market share of the LIC and Private Sector are given below:

Figure A: Line Graph of the Growth Rate of LIC and Private Sector

Figure B: Line Graph of the Market Share of LIC and Private Sector

ii. Regression Analysis

<table>
<thead>
<tr>
<th>Market Share (Dependent Variable)</th>
<th>Mth</th>
<th>Rsq</th>
<th>F</th>
<th>Sigf</th>
<th>b0</th>
<th>b1</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIC</td>
<td>LIN</td>
<td>0.969</td>
<td>252.05</td>
<td>0.000</td>
<td>-20000000</td>
<td>9943.79</td>
</tr>
<tr>
<td>Private Sector</td>
<td>LIN</td>
<td>0.772</td>
<td>27.09</td>
<td>0.001</td>
<td>-8460563</td>
<td>4223.96</td>
</tr>
</tbody>
</table>

Independent Variable: Year
Regression Equations

a) The linear trend forecasting equation is

LIC (Market Share) = - 20000000 + 9943.79*Year

The regression coefficients are interpreted as follows:

- The Y intercept $b_0 = -20000000$ is the fitted trend value reflecting the predicted mean of renewal premium (Rs in crores) underwritten by LIC during 2001-2010.
- The slope $b_1 = 9943.79$ indicates that the renewal premium (Rs in crores) is predicted to increase by an average of Rs 9943.79 crores per year.

The significance value of $F(0.000)$ is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (LIC Market Share). This table displays $R^2$ (0.969). It is the proportion of variation in the dependent variable (LIC Market Share) explained by the independent variable (Year) in the regression model.

b) The linear trend forecasting equation is

Private Sector (Market Share) = - 8460563 + 4223.96*Year

The regression coefficients are interpreted as follows:

- The Y intercept $b_0 = -8460563$ is the fitted trend value reflecting the predicted mean of renewal premium (Rs in crores) underwritten by private sector during 2001-2010.
- The slope $b_1 = 4223.96$ indicates that the renewal premium (Rs in crores) is predicted to increase by an average of 4223.96 crores per year.

The significance value of $F(0.001)$ is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (Private Market Share). This table displays $R^2$ (0.772). It is the proportion of variation in the dependent variable (Private
Sector Market Share) explained by the dependent variable (Year) in the regression model. Hence, it is clear from the above analysis that LIC and Private Sector market shares have significance value which is less than 0.05 and ‘R’ squared values are close to 1.

Figure C: LIC Market Share Regression Plot

Figure C: Private Sector Market Share Regression Plot
The above Regression Plots show that both the LIC and Private Sector insurance companies are fit to the linear mathematical model. The figures available on renewal premium underwritten by the insurers are observed closely related to the linear trend values. As a way to meet the linear mathematical line requirement, on an average, LIC has to increase renewal premium by Rs.9943.79 crores and Private Sector by Rs.4223.96 crores per year.

Table 4.6 presents a brief review on the growth rate and market share of total premium collected by the life insurers during the years 2000-01 to 2009-10. Out of all the years, the life insurance industry has registered a highest annual growth rate of premium collections during 2006-07. The percentage growth rate is 47.40. This growth in premiums is made possible because of a significant increase in the ULIP business by all insurers. But, the growth rate in premium collection of LIC is found to be the lowest during 2008-09, i.e. only 5.01 per cent. This is mainly due to a fall in the share of ULIP premium of LIC to the total premium of all insurers. Many volatile changes have occurred in the share market and as a result, the customers have not shown interest to invest larger amounts in ULIPs as these products are mostly investment-oriented and based completely on share market price changes.

It is also evident from the Table that the growth rate in the total premium collection during 2001-02 is 43.54 per cent. The private insurers' premium amounts have increased exorbitantly by 4125.58 per cent over the previous year. When the insurance sector, being kept open for private sector, many private players have entered into the market and taken aggressive measures for promoting business in the early period itself. Many private players have expended huge amounts on advertisement and have also granted incentives and concessions to both insurance advisors and insurance potentials to attract larger segments of new business. Further, the high net worth individuals have also showed interest to participate in the policies of the
private players as this was a new trend to them. The policies of the private players have also been found more attractive to the customers. Some of the private players have taken initiative in selling a cluster of products. All these have resulted in a higher growth rate in premium collections during 2001-02. Moreover, after opening up of the insurance sector, the awareness levels among customers have also been increased.

It is further clear from the table that the monopolistic role of LIC is disturbed to a greater extent with the entry of private players into the life insurance sector after liberalization. The market share of the LIC has declined to 70.10 per cent in 2009-10 whereas the private players’ market share has increased to 29.90 per cent. During the ten-year period, the private insures have attracted many customers through product development, efficient customer service and product flexibility. The LIC has also taken many measures to attract insurance potentials through its well-established and well-structured network of agents and development officers. It is hoped by the LIC that its total premium collection may increase in the coming years and the future promises a positive improvement in its market share.

The total premium collections of the life insurance industry have increased by around eight times during the post-liberalisation period. This is a welcome feature not only to the industry but also to an economy.
### Table 4.6

**GROWTH RATE AND MARKET SHARE OF TOTAL PREMIUM UNDERWRITTEN BY LIFE INSURERS DURING 2000-01 TO 2009-10**

(Rs. in crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC Amount</th>
<th>LIC %</th>
<th>Private Sector Amount</th>
<th>Private Sector %</th>
<th>Total Amount</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>34,892.02</td>
<td>99.98</td>
<td>6.45</td>
<td>0.02</td>
<td>34,898.47</td>
<td>100.00</td>
</tr>
<tr>
<td>2001-02</td>
<td>49,821.91</td>
<td>99.46</td>
<td>272.55</td>
<td>0.54</td>
<td>50,094.46</td>
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<tr>
<td>2002-03</td>
<td>54,628.49</td>
<td>97.99</td>
<td>1,119.06</td>
<td>2.01</td>
<td>55,747.55</td>
<td>100.00</td>
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<td>2003-04</td>
<td>63,533.43</td>
<td>95.32</td>
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<td>66,653.75</td>
<td>100.00</td>
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<tr>
<td>2004-05</td>
<td>75,127.29</td>
<td>90.67</td>
<td>7,727.51</td>
<td>9.33</td>
<td>82,854.80</td>
<td>100.00</td>
</tr>
<tr>
<td>2005-06</td>
<td>90,792.22</td>
<td>85.75</td>
<td>15,083.54</td>
<td>14.25</td>
<td>1,05,875.76</td>
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<tr>
<td>2006-07</td>
<td>1,27,822.84</td>
<td>81.90</td>
<td>28,242.48</td>
<td>18.10</td>
<td>1,56,065.32</td>
<td>100.00</td>
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<tr>
<td>2007-08</td>
<td>1,49,789.99</td>
<td>74.39</td>
<td>51,561.42</td>
<td>25.61</td>
<td>2,01,351.41</td>
<td>100.00</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,57,288.04</td>
<td>70.92</td>
<td>64,497.43</td>
<td>29.08</td>
<td>2,21,785.47</td>
<td>100.00</td>
</tr>
<tr>
<td>2009-10</td>
<td>1,86,077.31</td>
<td>70.10</td>
<td>79,373.06</td>
<td>29.90</td>
<td>2,65,450.37</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are the annual growth percentages
% indicates market share of the insurers
Source: Compiled from the Annual Reports of IRDA


### Statistical Analysis:

i. Mean, Standard Deviation and Skewness

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LIC Growth Rate</th>
<th>LIC Market Share</th>
<th>Private Sector Growth Rate</th>
<th>Private Sector Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Mean</td>
<td>21.01</td>
<td>98977.35</td>
<td>563.98</td>
<td>25100.38</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>12.76</td>
<td>52475.00</td>
<td>1338.50</td>
<td>29653.96</td>
</tr>
<tr>
<td>Variance</td>
<td>162.80</td>
<td>2753625294</td>
<td>1791583.73</td>
<td>879357471</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.95</td>
<td>98977.35</td>
<td>2.96</td>
<td>25100.38</td>
</tr>
<tr>
<td>Range</td>
<td>37.78</td>
<td>151185.29</td>
<td>4102.52</td>
<td>79366.61</td>
</tr>
<tr>
<td>Minimum</td>
<td>5.01</td>
<td>34892.02</td>
<td>23.06</td>
<td>6.45</td>
</tr>
<tr>
<td>Maximum</td>
<td>42.79</td>
<td>186077.31</td>
<td>4125.58</td>
<td>79373.06</td>
</tr>
</tbody>
</table>

The above table shows information on the average percentage of growth rate of total premium underwritten by the life insurers during 2001-10. It is 21.01 per cent for LIC and 563.98 per cent for Private Sector. It indicates that the growth rate of Private Sector is higher than the LIC. The standard deviation for LIC is 12.76 whereas Private Sector is 1338.50. It connotes that the LIC has got stability than the Private Sector in growth rate. The positive skewness values of 0.951 and 2.96 of LIC and Private Sector indicate that their growth rates are positively skewed distributions.

It further highlights from the table that the average total premium underwritten by LIC is Rs.98977.35 crores and the Private Sector is Rs.25100.38 crores with regard to their market share during 2001-10. The standard deviation of total premium for LIC is 52474.99 whereas Private Sector is 29653.96 during the period. It indicates that the Private Sector insurers are having stability in collection of total premium than LIC. The positive skewness values of 0.47 and 0.95 of LIC and Private Sector indicate that their market shares are positively skewed distributions.
The relevant line graphs of the growth rate and market share of the LIC and Private Sector are given below:

**Figure A: Line Graph of Growth Rate of LIC and Private Sector**

**Figure B: Line Graph of Market share of LIC and Private Sector**

### ii. Regression Analysis

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th>Rsq</th>
<th>F</th>
<th>Sigf</th>
<th>b0</th>
<th>b1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.957</td>
<td>177.06</td>
<td>0.000</td>
<td>-34000000</td>
<td>16953.2</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>0.860</td>
<td>49.20</td>
<td>0.000</td>
<td>-18000000</td>
<td>9083.68</td>
<td></td>
</tr>
</tbody>
</table>

Independent Variable: Year
Regression Equations

a) The linear trend forecasting equation is

LIC (Market Share) = -34000000 + 16953.2*Year

The regression coefficients are interpreted as follows:

- The Y intercept $b_0 = -34000000$ is the fitted trend value reflecting the predicted mean of total premium (Rs. in crores) underwritten by LIC during 2001-2010.

- The slope $b_1 = 16953.2$ indicates that the total premium (Rs. in crores) is predicted to increase by an average of Rs 16953.2 crores per year.

The significance value of $F$ (0.000) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (LIC Market Share). This table displays $R$ squared (0.957). It is the proportion of variation in the dependent variable (LIC Market Share) explained by the independent variable (Year) in the regression model.

b) The linear trend forecasting equation is

Private Sector (Market Share) = -18000000 + 9083.68*Year

The regression coefficients are interpreted as follows:

- The Y intercept $b_0 = -18000000$ is the fitted trend value reflecting the predicted mean of total premium (Rs. in crores) underwritten by Private Sector during 2001-2010.

- The slope $b_1 = 9083.68$ indicates that the total premium (Rs in crores) is predicted to increase by an average of 9083.68 crores per year.

The significance value of $F$ (0.001) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (Private Market Share). This table displays $R$ squared (0.860). It is the proportion of variation in the dependent variable (Private Sector Market Share) explained by the independent variable (Year) in the regression model. It is clear from the above analysis that both the insurers’
market shares have significance value which is less than 0.05 and their ‘R’
squared values are close to 1.

The above Regression Plots of both the sectors of life insurance
industry are fit to the linear mathematical model. The observed figures are
closely related to the linear trend values. In order to maintain the linear line,
the LIC has to increase total premium by Rs.16953.2 crores and Private
Sector by Rs.9083.68 crores, on an average, per year in future to ensure further sustenance and stability in their growth rate and market share.

As the information on the break-up of single premium in the new business/first premium underwritten by the life insurers is available only from 2004-05, an analysis of the growth rate and the market share of the insurers with regard to single premium is given with the help of the Table 4.7. It is observed from the Table that the LIC has experienced a gradual increase in the single premium amount. The outlook for insurance industry during 2008-09 is seen mostly uncertain. Despite a very little increase in the growth rate by the LIC, the total industry has suffered a lot and registered a negative growth rate of 3.34 per cent. This is mainly due to a larger decline in the amount of single premium collection by private players during this period. The private players have experienced a negative growth rate of 30.91 per cent in their single premium collection. The decline in single premiums during this period is the result of the reduced demand, low interest rates and the need for additional capital by many private insurers to promote business.

It appears clearly from the Table that during 2005-06, both LIC and private sector players have collected only smaller amounts of single premium as the non-single premium policies have occupied a greater share in the total business. Though single premium policies are dominant in U.S. life insurance market, our market has not reached to that stage. Later, there is a consistent increase in the amount of single premium collected by the LIC. But, the private sector insurers have experienced a decline in the single premium collection during 2008-09 and their market share has declined to 7.81 per cent whereas the LIC’s share has increased to 92.19 per cent.

On the whole, it can be observed that during the six-year period of analysis, both the public and private insurers have offered customized solutions to the customers rather than traditional solutions. While the unit-
linked products are well-received by the customers, the private insurers are instrumental in selling these products to the customers in good number ranging from 90 to 95 per cent of their total business. As single premium products are attractive only to a limited number of customers like celebrities in different fields and the individuals having uncertain incomes, there is only a five-fold increase in the amount of premiums during this period.

Table 4.7

GROWTH RATE AND MARKET SHARE OF SINGLE PREMIUM UNDERWRITTEN BY LIFE INSURERS DURING 2004-05 TO 2009-10

(Rs. in crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>LIC</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
</tr>
<tr>
<td>2004-05</td>
<td>8994.82</td>
<td>87.02</td>
<td>1341.48</td>
</tr>
<tr>
<td>2005-06</td>
<td>14787.84 (64.40)</td>
<td>84.35</td>
<td>2742.78 (104.46)</td>
</tr>
<tr>
<td>2006-07</td>
<td>26337.22 (78.10)</td>
<td>86.96</td>
<td>3950.82 (44.04)</td>
</tr>
<tr>
<td>2007-08</td>
<td>33774.56 (28.24)</td>
<td>86.99</td>
<td>5049.80 (27.82)</td>
</tr>
<tr>
<td>2008-09</td>
<td>34038.47 (0.78)</td>
<td>90.70</td>
<td>3488.97 (-30.91)</td>
</tr>
<tr>
<td>2009-10</td>
<td>45337.42 (33.19)</td>
<td>92.19</td>
<td>3842.37 (10.13)</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are the annual growth percentages
% indicates market share of the insurers
Source: Compiled from the Annual Reports of IRDA
Statistical Analysis:

i. Mean, Standard Deviation and Skewness

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LIC Growth Rate</th>
<th>Private Sector Growth Rate</th>
<th>LIC Market Share</th>
<th>Private Sector Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Years</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mean</td>
<td>40.94</td>
<td>31.12</td>
<td>27211.72</td>
<td>3402.70</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>30.68</td>
<td>49.61</td>
<td>13455.03</td>
<td>1256.84</td>
</tr>
<tr>
<td>Variance</td>
<td>941.35</td>
<td>2461.22</td>
<td>181037875</td>
<td>1579649.69</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.04</td>
<td>0.51</td>
<td>-0.173</td>
<td>-0.654</td>
</tr>
<tr>
<td>Range</td>
<td>77.32</td>
<td>135.37</td>
<td>36342.60</td>
<td>3708.32</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.78</td>
<td>-30.91</td>
<td>8994.82</td>
<td>1341.48</td>
</tr>
<tr>
<td>Maximum</td>
<td>78.10</td>
<td>104.46</td>
<td>45337.42</td>
<td>5049.80</td>
</tr>
</tbody>
</table>

The above table indicates the average percentage of growth rate of single premium underwritten by life insurers during 2001-10. It is 40.94 for LIC and Private Sector for 31.11. It shows that the growth rate of LIC is higher than the Private Sector. The standard deviation for LIC is 30.68 whereas Private Sector is 49.61. It signifies that both the insurers are having stability in collection of single premium. The positive skewness value of 0.51 of the Private Sector indicates a positively skewed distribution of the growth rate. The negative skewness value of -0.04 indicates that the LIC’s growth rate is a negatively skewed distribution.

It further analyses from the table that the average single premium underwritten by LIC is Rs.27211.72 crores and the Private Sector is Rs.3402.70 crores with regard to the market share during 2001-10. LIC has a higher market share than the Private Sector. The standard deviation of single premium for LIC is 13455.03 whereas Private Sector is 1256.84 during the study period. It indicates that the Private Sector is having consistency in collection of single premium. The negative skewness values of -0.173 and -0.654 of LIC and Private Sector market shares are stated negatively skewed distributions.
The relevant line graphs of the growth rate and market share of the LIC and Private Sector are given below:

Figure A: Line Graph of Growth Rate of LIC and Private Sector

Figure A: Line Graph of Market Share of LIC and Private Sector

ii. Regression Analysis

<table>
<thead>
<tr>
<th>Market Share (Dependent Variable)</th>
<th>Mth</th>
<th>Rsq</th>
<th>F</th>
<th>Sigf</th>
<th>b0</th>
<th>b1</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIC</td>
<td>LIN</td>
<td>0.962</td>
<td>101.49</td>
<td>0.001</td>
<td>-14134394.75</td>
<td>7054.35</td>
</tr>
<tr>
<td>Private Sector</td>
<td>LIN</td>
<td>0.454</td>
<td>3.33</td>
<td>0.142</td>
<td>-905249</td>
<td>452.629</td>
</tr>
</tbody>
</table>

Independent Variable: Year
Regression Equations

a) The linear trend forecasting equation is

\[
\text{LIC (Market Share)} = -14134394.75 + 7054.35 \times \text{Year}
\]

The regression coefficients are interpreted as follows:

- The Y intercept \( b_0 = -14134394.75 \) is the fitted trend value reflecting the predicted mean of single premium (Rs in Crores) underwritten by LIC during 2001-2010.
- The slope \( b_1 = 7054.35 \) indicates that the single premium (Rs. in crores) is predicted to increase by an average of Rs 7054.35 crores per year.

The significance value of \( F(0.001) \) is smaller than 0.05. Then the independent variable (Time: Year) do a good job explaining the variation in the dependent variable (LIC Market Share). This table displays R squared (0.962). It is the proportion of variation in the dependent variable (LIC Market Share) explained by the independent variable (Year) in the regression model.

b) The linear trend forecasting equation is

\[
\text{Private Sector (Market Share)} = -905249 + 452.629 \times \text{Year}
\]

The regression coefficients are interpreted as follows:

- The Y intercept \( b_0 = -905249 \) is the fitted trend value reflecting the predicted mean of single premium (Rs. in crores) underwritten by Private Sector during 2001-2010.
- The slope \( b_1 = 452.63 \) indicates that the single premium (Rs. in crores) is predicted to increase by an average of 452.63 crores per year.

The significance value of \( F(0.142) \) is more than 0.05. Then the independent variable (Time: Year) do not explain the variation in the dependent variable (Private Market Share). This table displays R squared (0.454). It is the proportion of variation in the dependent variable (Private Sector Market Share) explained by the dependent variable (Year) in the
regression model. It is clear from the above analysis that the LIC’s market share has a significance value which is less than 0.05 and ‘R’ squared value is close to 1 than the Private Sector.

![Figure C: LIC Market Share of Regression Plot](image1)

The above Regression Plots show that the LIC is fitted to the linear mathematical model and its figures are closely related to the linear trend values. But, the Private Sector significance value is more than 0.05 and it is not fitted to linear mathematical model. In order to meet the linear mathematical line, the LIC has to maintain an increase, on an average, an amount of Rs.7054.35 crores per year in the collection of single premium to ensure stability in the life insurance business in future.