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LIFE INSURER'S INVESTMENTS IN SELECTED FUNDS AND ITS PERFORMANCE WITH SPECIAL REFERENCE TO IRDA FROM 2005 TO 2014

Abstract:
IRDA is playing vital role in the field of investment and boosting the Economy. This paper Contains points like Indian Insurance in the global scenario, World Insurance Scenario, IRDA's Functions and Importance, About Selected Funds (Insurer) Areas like Life fund, Pension and General Annuity & Group Fund, Unit Linked Fund, Research Methodology which includes Data Tables of last ten years of selected Funds Area and Hypotheses testing. On the basis of hypotheses testing its result, Conclusions is given followed by References.

Key Word:
IRDA, Insurer, Life fund, General Annuity, Unit Linked Fund,

1) Introduction:

IRDA is most important authority for insurance and investment sector in India. Looking to Indian insurance sector contribution in global scenario, the share of life insurance business in total premium was 56.2 per cent. However, the share of life insurance business for India was very high at 79.6 per cent while the share of non-life insurance business was small at 20.4 per cent. In life insurance business, India is ranked 11th among the 88 countries, for which data is published by Swiss Re. India's share in global life insurance market was 2.00 per cent during 2013. However, during 2013, the life insurance premium in India declined by 0.5 per cent (inflation adjusted) when global life insurance premium increased by 0.7 per cent. The Indian non-life insurance sector witnessed a growth of 4.1 per cent (inflation adjusted) during 2013. During the same period, the growth in global non-life premium was 2.3 per cent. However, the share of Indian non-life insurance premium in global non-life insurance premium was small at 0.66 per cent and India ranks 21st in global non-life insurance markets.Now looking to World Insurance Scenario: As per World Insurance Report 2013 published by reinsurance major Swiss Re, global economic growth was about the same in 2013 as in 2012, and still below long-term trends. Global real gross domestic product (GDP) grew by 2.5 per cent in 2013, a little changed from that of 2012 and below the 10-year average of 2.8 per cent. Economic growth in advanced markets was unchanged at 1.3 per cent with the US slowing to 1.9 per cent from 2.8 per cent in 2012 and Western Europe returning to a low growth of 0.3 per cent from –0.2 per cent the year before. While growth in German and UK economies were robust, growth in the French and the southern economies (Greece, Italy, Portugal and Spain) improved but continued to lag. The US led the advanced economies in 2013, its growth based on a recovery in domestic consumption and investment spending. In Japan, Premier Abe launched unprecedented expansionary fiscal and monetary policy to reignite economic growth and escape two decades of stagnation. This led to a weaker yen and stronger exports. However, it could also generate rising yields if inflation expectations rise, which in turn would increase financing costs. The consumption tax hike in April 2014, while reducing the government deficit, could also dampen economic growth. Global life insurance premiums written were USD 2608 billion in 2013, with growth slowing to 0.7 per cent from 2.3 per cent in 2012. Strong growth in Western Europe and Oceania was offset by a contraction in North America and stagnating sales in advanced Asia. Premiums contracted by 7.7 per cent in the US. This was mainly because large corporate deals that had boosted group annuity business in 2012 were not repeated. In emerging markets, life premium growth improved to 6.4 per cent in 2013. Growth was significant in Latin America and Africa; and has once again resumed in China and India. In advanced countries, post-crisis average premium growth has been well below pre-crisis levels. In emerging markets the same is true in Asia only. This is because of sharp declines in China and India coming after regulatory changes in both the markets in 2011. In the non-life insurance market, global non-life premium growth slowed down to 2.3 per cent in 2013 from 2.7 per cent in 2012, with total premiums of USD 2033 billion. The advanced markets barely moved up, with premiums up just 1.1 per cent (2012: +1.5 per cent) due to stagnation in Western Europe and a slowdown in advanced Asia. In Oceania, growth remained significant at 5.1 per cent and in North America it was roughly unchanged at 1.9 per cent. The emerging

markets continued to drive global growth. Performance was from across all emerging regions with the exception of Central and Eastern Europe (CEE). Expansion in emerging Asia was based on sustained strong growth in Southeast Asia and China; and growth was also robust in Latin America (premiums up 7.2 per cent). Post-crisis average premium growth from 2009 to 2013 was well below pre-crisis rates in advanced markets. The post-crisis average was also lower, but still strong (+7.6 per cent), in the emerging markets. The prospect for life premium growth is expected to resume in the advanced markets and improve in the emerging ones. The farming economy and labour markets in North America and Western Europe will support growth in life and non-life; and growth should hold up in emerging markets also. In the life sector, China and India in particular could see notable strengthening in premium growth.

2) Objectives:

- To know the Functions and Importance of IRDA's.
- To study and analyses the data of last ten years (From year 2005 to 2014) related to Life fund, Pension and General Annuity& Group Fund and Unit Linked Fund

3) IRDA's Functions and Importance

- To protect the interest of and secure fair treatment to policyholders;
- To bring about speedy and orderly growth of the insurance industry (including annuity and superannuation payments), for the benefit of the common man, and to provide long term funds for accelerating growth of the economy;
- To set, promote, monitor and enforce high standards of integrity, financial soundness, fair dealing and competence of those it regulates;
- To ensure speedy settlement of genuine claims, to prevent insurance frauds and other malpractices and put in place effective grievance redressed machinery;
- To promote fairness, transparency and orderly conduct in financial markets dealing with insurance and build a reliable management information system to enforce high standards of financial soundness amongst market players;
- To take action where such standards are inadequate or ineffectively enforced;
- To bring about optimum amount of self-regulation in day-to-day working of the industry consistent with the requirements of prudential regulation.

4) About Life fund, Pension and General Annuity & Group Fund and Unit Linked Fund.

LifeFund (insurance) is a contract you sign with an insurance company, obligating it to
pay a death benefit of a certain value to the beneficiaries you name.
In most cases, the payment is made at the time of your death, but certain policies allow you to take a portion o f the death benefit if you are terminally ill and need the
money to pay for healthcare.You may select either term or permanent insurance.With a term policy, you are in sured for a specific period of time. When the term ends,you must renew the policy for another term or change your coverage. Otherwise, you're no longer insured. With a permanent policy, you canbuy coverage for your lif etime.You pay an annual premium, typically billed monthly or quarterly, for the coverage. The insurer sets the c ost, based on your age, health,lifestyle, and other factors. With a permanent policy, your premium is fixed, but with a term policy it typically increases when you renew yourcoverage to reflect the fact that you're older.

The Indian annuity market and identifies steps that must be taken by the government and the industry to enable the industry to grow. Specifically, the arguments are:

- Better data are needed on expected mortality rates of different sub-groups within the diverse Indian population, and on probable improvements in these rates over time.
- Long term financial instruments, including long term government bonds (possibly price-indexed) must be further developed, to enable insurance companies to match the long term liabilities implied by annuities.
- Investment regulations and regulatory authority should be modernized.
- New products, including variable (participating, for-profit) annuities with and without floors, need to be constructed, to attract consumers with diverse preferences for risk. This, in turn implies more complex standards and regulations.
- Mechanisms should be developed for dispersing information about products and payouts offered by various insurance companies, as they enter the market.

Some reasons for the low participation in the annuity market may be:

- Myopia. People do not see a need for annuitizing their savings.

- Bequests. People may wish to leave their assets to their families rather than using it all up in an annuity.
- Precautionary saving. People may save for precautionary reasons and want access to their money when needed for emergency purposes (sickness, dowries or weddings, etc); annuities normally do not allow flexibility in the time stream of income.
- Control over investment strategy. Annuities may be seen as inflexible instruments, which do not give the annuitant any control over risk-return trade-offs or investment strategy.
- Adverse selection. The high longevity of annuitants leads to low payouts, which in turn makes annuities unattractive to the average population member.
- High discount rates. While the insurance company must discount according to rates they receive on investments, many people have higher discount rates; this may be true, in particular, of middle and low-income groups who need their money for immediate or near-term consumption.

Unit linked fund is also known as ULIP is an abbreviation for Unit Linked Insurance Policy. A ULIP is a life insurance policy which provides a combination of risk cover and investment. The dynamics of the capital market have a direct bearing on the performance of the ULIPs. In a ULIP, the investment risk is generally borne by the investor. The investment in ULIPs is denoted as unit and is represented by the value called Net Asset Value (NAV). In a ULIP, the amount of premium to be invested after deducting for all charges and premium for risk cover are pooled together to form a fund. The value of fund at any time is equal to the amount of units multiplied by value of unit at that time. Karuna (2009) highlighted on Relevance of ULIPs as a good investment tool' to observe traditional life insurance plans offered by LIC took care of only the insurance needs of people. However, with the ever changing demands of customers a new product called ULIP was launched which combines the benefits of insurance, investment and tax benefits. The author observed that ULIPs were better suited to investors who have 15-20 years as their time horizon to spread the expense over the longer period and reap the benefits. Divya Y. Lakhani (2011) had conducted a research study to identify the relation between returns and Sensex, investors' preference for ULIP and Equity, growth and penetration of ICICI Prudential and the performance of some of its ULIP schemes. The major finding of this study was that the NAV for equity based fund options moves in tandem with Sensex while for debt based fund options it is not much affected by the movement of Sensex. Udayan Samajpati (2012) enhanced the performance evaluation of ULIPs is carried out through Risk-Return Analysis, Treynor's Ratio, Sharpe's Ratio and Jensen's Measures. The schemes selected for study were ICICI Life Stage RP-Maxi miser (Growth) Fund, Bajaj Allianz New Family Gain-Equity Index Fund II and ING High Life Plus-Growth Fund. The results of performance measures suggested that all the three ULIPs schemes have outperformed the market. Among the three schemes ING Vysya ULIP was best performer. Insurance sector of India by comparing traditional (Life Fund + Pension & General Annuity + Group Fund) and ULIP Policies. The objective of the study was to observe the evolution of ULIPs in India, the growth of ULIPs over traditional Policies, risk factors involved in ULIPs over traditional policies and to suggest various measures to develop and stabilize the growth of ULIPs. The period from 2007 to 2009 was covered in the study. The study considered 5 companies to compare growth, namely, LICI, HDFC Standard Life, ICICI Prudential Life, SBI Life and Bazaz Allianz Life. It was revealed from the study that there was remarkable growth in ULIP compared to traditional policies as the new private entrants targeted ULIPs for market penetration[2].

5) Research Methodology:

Selected Schemes of Investment:

- Life Fund
- Pension and General Annuity& Group Fund
- Unit Linked Fund

Time of Study: Ten Years (from 2005 to 2014)

Data Sources: Secondary Data Sources is used.

Tools of Analysis: Statistics tools, *t*- test, Mean, Mode, Medium, Co-relation, etc.

Hypotheses:

1) H_0 = LIC and Private Life Insurer do significantly invested in Life Fund in India.
   H_1 = LIC and Private Life Insurer do not significantly invested in Life Fund in India.
2) H_0 = LIC and Private Life Insurer does significantly invested in Pension and General Annuity& Group Fund in India.
   H_1 = LIC and Private Life Insurer does not significantly invested in Pension and General Annuity& Group Fund in India.
3) H_0 = LIC and Private Life Insurer does significantly invested in Unit Linked Fund

in India.

H_1 = LIC and Private Life Insurer does not significantly invested in Unit Linked Fund in India.

4) H_0 = There is no Negative Co-relation between LIC and Private Insurer.

H_1 = There is a Negative Co-relation between LIC and Private Insurer.

For Hypotheses Testing

Here Observation is less then < 30 hence t- test is recommended

For, t – test μ value is necessary

In this case Mode (Z) value is recommended for μ value

(All calculations done manually by research)

6) About Life Fund

Table No.1 Investments of Life Insurers in Life Fund (As on 31st March) (Rs. Crore)

Life Insurer	Life Fund									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
LIC	361428	389447	453440	526105	606487	698153	798291	914614	10,37,656	11,81,000
Private	4790	7741	12115	18645	23163	33137	42784	60006	82,343	1,07,225
	366218 (85.48)	397188 (81.53)	465555 (77.06)	544750 (71.49)	629650 (68.71)	731291 (60.31)	841075 (58.81)	974620 (61.64)	11,19,999 (64.19)	12,88,225 (65.81)

(Source: Various Annual Reports of IRDA)

(Note: 1. The figures for the year 2005 to 2014 are based on provisional return filed with IRDA. 2. Figures in brackets are percentages of respective funds to the total funds)

Statically work

Hypotheses:

H_0 = LIC and Private Life Insurer do significantly invested in Life Fund in India.

H_0 = μ= 1288

H_1 = LIC and Private Life Insurer do not significantly invested in Life Fund in India.

H_1 = μ ≠ 1288

Mean(x) = 735.4 Thousand Crore Rs., Median (M) = 731 Thousand crore Rs.

Mode (Z) =1288 Thousand Crore Rs.

$\sum xi = 7354$, $\sum di = 4$, $\sum di^2 = 791260$, $x = 735$, $S = 281.29$

$t = 5.89$

degree of freedom (d.f.) = n-1 = 10-1 = 9

5% level of significant st 9 d.f.= 2.262

t -Calculation > *t*- table

5.89 > 2.262

t –Calculation value is higher than t- table value

(*t*- table value is taken from statistic table of *t* -Distribution)

Hence, H_0 = is Rejected, H_1 = μ ≠ 1288

Result of Hypotheses Testing

H_1 = LIC and Private Life Insurer do not significantly invested in Life Fund in India.

H_1 = μ ≠ 1288

7) About Pension and General Annuity& Group Fund

Hypotheses:

H_0 = LIC and Private Life Insurer does significantly invested in Pension and General Annuity& Group Fund in India. H_0 = μ= 337

H_1 = LIC and Private Life Insurer does not significantly invested in Pension and General Annuity& Group Fund in India. H_1 = μ ≠ 337

Table No. 2 Investments of Life Insurers of Life Fund (As on 31st March) (Rs. Crore)

Life Insurer	Pension and General Annuity& Group Fund									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
LIC	11462	36157	35062	40200	107135	133588	173282	212754	2,51,011	2,98,818
Private	561	1106	2001	3274	6817	10038	16646	23913	31,375	38,761
Total	12023 (2.81)	37264 (7.65)	37063 (6.13)	43474 (5.70)	113952 (12.44)	143627 (11.85)	189927 (13.28)	236667 (14.97)	2,82,386 (16.18)	3,37,579 (17.25)

(Source: Various Annual Reports of IRDA)

(Note: 1. The figures for the year 2005 to 2014 are based on provisional return filed with IRDA 2. Figures in brackets are percentages of respective funds to the total funds)

Statically work

Hypotheses Testing

Mean(x) = 143.4 Thousand Crore Rs. Median (M) = 143 Thousand Crore Rs.

Mode (Z) =337 Thousand Crore Rs.

$\sum xi = 1434$, $\sum di = 1$, $\sum di^2 = 118255$, $x = 143$, $S = 108.74$,

$t = 5.35$

degree of freedom (d.f.) = n-1 = 10-1 = 9

5% level of significant st 9 d.f.= 2.262

t -Calculation > t- table

5.35 > 2.262

t –Calculation value is higher than t- table value

(t- table value is taken from statistic table of t -Distribution)

Hence, H_0 = is Rejected, $H_1 = \mu \neq 337$

Result of Hypotheses Testing

H_1 = LIC and Private Life Insurer does not significantly invested in Pension and General Annuity& Group Fund in India. $H_1 = \mu \neq 337$

8) About Unit Linked Fund

Hypotheses Testing:

H_0 = LIC and Private Life Insurer does significantly invested in Unit Linked Fund in India. $H_0 = \mu = 399$

H_1 = LIC and Private Life Insurer does not significantly invested in Unit Linked Fund in India. $H_1 = \mu \neq 399$

Table No.3. Investments of Life Insurers in Unit Linked Fund (As on 31st March)

(Rs. Crore)

Insurer	Unit Linked Fund									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
LIC	2758	11428	36252	67978	85972	160589	177016	141703	1,14,324	94,479
Private	4768	14459	30797	65404	86791	176951	222099	228269	2,28,184	2,37,183
Total	7526 (1.76)	25887 (5.31)	67049 (11.1)	133382 (17.50)	172763 (18.85)	337540 (27.84)	399116 (27.91)	369972 (23.40)	3,42,508 (19.63)	3,31,662 (16.94)

(Source: Various Annual Reports of IRDA)

(Note: 1.The figures for the year 2005 to 2014 are based on provisional return filed with IRDA. 2. Figures in brackets are percentages of respective funds to the total funds)

Statically work

Hypotheses

Mean(x) = 219 Thousand Crore Rs. Median (M) = 143 Thousand Crore Rs.

Mode (Z) =399 Thousand Crore Rs.

$\sum xi = 2189$, $\sum di = 8$, $\sum di^2 = 187686$, $x = 219$, $S = 137$

$t = 4.96$

degree of freedom (d.f.) = n-1 = 10-1 = 9

5% level of significant st 9 d.f.= 2.262

t -Calculation > *t*- table

4.96 > 2.262

t –Calculation value is higher than t- table value

(*t*- table value is taken from statistic table of *t* -Distribution)

Hence, H_0 = is Rejected, $H_1 = \mu \neq 337$

Result of Hypotheses Testing

H_1 = LIC and Private Life Insurer does not significantly invested in Unit Linked Fund in India. $H_1 = \mu \neq 399$

9) Total Funds

Hypothesis Testing:

H_0 = There is no Negative Co-relation between LIC and Private Insurer.

H_1 = There is a Negative Co-relation between LIC and Private Insurer.

Table No. 4. Investments of Life Insurers of Total Funds (As on 31st March)

(Rs. Crore)

Insurer	Total of all Funds									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
LIC	375648	437032	519299	634283	799594	992331	1148589	1269070	14,02,991	15,74,296
Private	10119	23306	44913	87323	116771	220127	281528	312188	3,41,902	3,83,169
	385767	460338	564212	721606	916365	1212458	1430118	1581259	17,44,893	19,57,465

(Source: Various Annual Reports of IRDA)

(Note: The figures for the year 2005 to 2014 are based on provisional return filed with IRDA)

Table No. 5. Co–relationship between LIC and Private Insurer

		Year wise Total of all Funds									
	Insurer	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
X	**LIC**	375648	437032	519299	634283	799594	992331	1148589	1269070	14,02,991	15,74,296
Y	**Private**	10119	23306	44913	87323	116771	220127	281528	312188	3,41,902	3,83,169
		385767	460338	564212	721606	916365	1212458	1430118	1581259	17,44,893	19,57,465

Calculation $\sum d^2 = 0$

Formula of Rank Co-relation **(R)** $= 1 - \frac{6\sum d^2}{n(n^2-1)}$

$$R = 1 - \frac{6 \times 0}{10(10^2-1)} = 1 - \frac{0}{10(100-1)} = 1 - \frac{0}{10(99)} = 1 - \frac{0}{990}$$

R= 1 – 0

R= + 1.00 its shows positive relationship between LIC and Private Insurer

Result of Hypothesis testing no. 4

Hence, here H_0 hypothesis is accepted, therefore There is no Negative Co-relation between LIC and Private Insurer

10) Conclusion:

IRDA is working with good motives and strategies but need to more improvement in specific area. From the above statistical work I can say that and Private Life Insurer does not significantly invested in Life Fund in India. Both insurers try to encourage investors to make more investment in this kind of skims so it would more beneficially for insurer and investors in future. LIC and Private Life Insurer do not significantly invested in Pension and General Annuity& Group Fund in India. Both insurers attempt to promote investors to make more and more investment in this type of skims so it would more helpfully for insurer and investors in future. LIC and Private Life Insurer do not significantly invested in Unit Linked Fund in India. Both, insurers should effort to support investors to make more and more investments in this type of skims. So it would more favorably for

insurer and investors in future. There is no Negative Co-relation between LIC and Private Insurer mean both are progressing in relevant manner.

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