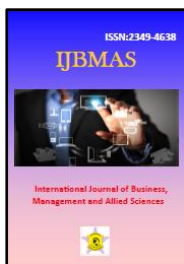

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**INVESTMENT PATTERNS OF LIFE INSURANCE COMPANIES IN
INDIA**

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ABSTRACT

Indian insurance market has always been talked about in the economy. Life insurance industry has always created a buzz in the market especially over the last one and half decades life insurance industry is growing because of the edged benefits it offers over other instruments of saving along with it provides risk cover to the individuals. Not only this they are the crucial role players in the process of mobilizing the savings of the people of different income groups ensuring better returns and overall growth in the economy. The three funds namely life fund, Pension and annuity fund and ULIP fund of life insurance are invested into various instruments as stated in norms for serving the purpose in an orderly way. This paper aims at analyzing the investment pattern of the life insurance companies over the past one and half decades as well as the growth of the funds over the period of 16 years.

KEY WORDS: Investment patterns, Pension and Annuity Fund, Life Fund, ULIP fund, IRDA regulations.

Introduction

Life insurance is a long term contract which generates investable surplus and portfolio managers invest the surplus in such a way to fulfill the safety and security of the funds which is spread over in different categories. Presently, investing money in financial markets has become a very complex task. Majority of financial institutions irrespective of their corporate structure, capital, status etc. are fascinated by investments. Investment is an economic activity in which every person is engaged in one form or another. Even though the basic objective of making investment is earning profit, not everybody who makes investment benefits from it. All investments are risky to some degree or other as risk and return go together. The art of investment is to see that the return is maximized with the minimum degree of risk.

The insurance industry in India is subjected to a comprehensive set of rules and regulations. The regulations strictly specify forms of security bin which insurer may investment and limit their share in the total amount. Insurance companies are required to invest minimum amounts of their

invested assets in government securities, and restrictions are likewise placed on the amount to be invested in approved investments and other investments, as per a detailed list that includes specific equities and corporate bonds as well as bank deposits. Approved investments are in companies that have a strong, multi-year dividend payment record. The objectives behind such comprehensive set of regulation and are the preservation of the real value of funds in the coeval circumstances of an unstable investment setting as well as support the insurers in satisfying their commitment toward policy holders at any time. Apart from this insurance investment professionals should be familiar with economic, accounting and regulatory frame works in the management of a company's investment port folios.

IRDA Investment Norms for Insurance Firms

The insurance regulatory and development authority (IRDA) has re-worked the investment norms for insurance companies. The regulatory has now mandated that a life insurance company should invest not less than 25% of its total corpus in central government securities. The total investment of such a company in central and state government securities and other approved securities – all put together – should not be less than 50%.

The IRDA has also prescribed the investment limit for life insurance firms and infra structure bonds. While permitting them to invest in these bonds, the regulator has made it clear that a life insurance company, total exposure to these bonds should not be less than 15 % of its corpus however the IRDA has prescribed that a double "A "rating of bonds is a must for insurance firms to consider investment. For companies carrying pension funds annuity and group business the new IRDA guidelines have prescribed that not less than 40% of their total fund should be invested in the government bonds and approved securities. In the case of Unit-Linked insurance business the IRDA notification made it clear that.

"The investment in approved investments shall not be less than 75% of such funds in each such segregated fund."The regulator also prescribed floor limits for general insurance including health insurance to invest in government securities and other approved housing bonds.

The investment regulation provides pro active and dynamic investment management system, envisages monitoring the investment operations to assess in management decision making and measurement to support effective monitoring of the investment practices.

Investment Pattern of Insurance Sector-Post Reforms Period

The IRDA has mandated the pattern of investments to be followed by the insurance companies. Investments in Government securities, approved securities, approved investments and in infrastructure and social sectors have been prescribed in the Insurance Act, 1938. The Authority has also specified that every insurer carrying on the business of life insurance shall invest and at all times keep invested their controlled fund (other than funds relating to pension and general annuity business and unit-linked life Insurance business) in the following manner:

Table 1: Pattern of Investments in Life Fund

S.No	Type of investment	percent to funds
1	Central Government Securities	Not less than 25%
2	Central Government Securities , State Government Securities (Or) Other Approved Securities	Not less than 50%(including (1) above)
3	Approved Investments	Not exceeding 50%
4	Other Investments	Not exceeding 15%
5	Investment In Housing And Infra Structure (as per respective Housing Sector Norms)	Total investment in housing and infra structure (i.e.) (i) , (ii) , (iii) & (iv) above taken together shall not be than 15% of the funds under regulation

Source: Revised IRDA annual report 2015-2016

Table 2: Pattern of Investments in Pension, General and Annuity Fund

S.No	Type of investment	percent to funds
1	Central Government Securities	Not less than 20%
2	Central Government Securities , State Government Securities (Or) Other Approved Securities	Not less than 40%(including (1) above)
3	Approved Investments	Not exceeding 60%

Source: - Revised IRDA annual Report 2015-2016

In the case with unit linked life insurance business every insurer shall invest and at all times keep invested his segregated fund in unit linked life insurance business as per pattern of investment offered to and approved by policyholders. Unit linked policies may only be offered where the units are linked to categories of assets which are both marketable and easily realizable. However, the total investment in other than the approved category of investments shall at no time exceed 25% of the fund.

Table 3: Pattern of Investments in Linked Life Insurance Business

S.No	Type of investment	percent to funds
1	Approved investments	Not less than 75%
2	Other Approved Securities	Not more than 25%

Source: Revised IRDA annual Report 2015-2016

Approaches to Investment Patterns

Modern Portfolio Theory

Modern portfolio theory propounded in 1950s by Nobel Laureates Harry Markowitz and William Sharpe has in recent decade become best practice among asset managers (Swiss reinsurance company ltd, 2010). The main objective of investment is to obtain an optimal risk and return level by allocation of the portfolio to properly diversified composition of assets and in some cases liabilities i.e. leveraging the portfolio by borrowing. The precondition for such an optimal risk and return level is ability to attain the frontier of efficient portfolios, where there is no likelihood of increasing return without increasing risk or of reducing risk without reducing return.

Asset Liability Management

Since insurers have to pay claims as a part of their underwriting operations, the asset allocation strategies for insurance companies are different from that considered by Markowitz and others (Liu & Hailiang Yang, 2004). 129 Insurance companies are in business of collecting money in the form of insurance premiums and investing that money to earn a higher return than they will pay to their lenders. Investment portfolio of insurance companies mainly consists of investment in government securities, stock, loans, real estate and bonds. Liabilities of insurance companies include all the money they owe to policy holders. In order to honor their liabilities, insurance companies must properly manage their investment portfolio. Therefore, asset/liability relationship is essential for the formulation and evaluation of investment policies which strive to ensure that investment risks to solvency become at the helm of insurers. ALM is not recently developed concept in finance literature. The concept has been used to address interest rate risk in U.S., which became a major concern in the 1970s, when rates increased sharply and became more volatile than they were earlier (Parekh, 2008). For the life insurance industry, the momentous idea of ALM was proposed by Remington in 1952 (Shimpi, 2003). ALM helps to avoid a situation where asset values fall short of the liabilities arising out of the insurance contracts which can in extreme cases lead to bankruptcy or insolvency of the insurer (Parekh, 2008). Asset-liability management is also termed as liability driven investments and stochastic dynamic financial analysis.

Objectives of the Study

- To study the investment patterns of insurance companies.
- To study the growth and trends of investments of the insurance sector in India during the study period (2001 - 2016)

- To analyze the total investment of insurance sectors in life fund, pension and general annuity group fund, ULIPS.

Research Methodology

a. Collection of data: The study based on secondary data collected from the published records of IRDA annual reports, journals, books etc.

b. Tools of analysis: The collected data recorded, analyzed and interpreted in the significant manner with the help of AGR and CAGR.

c. Period of study: The data was collected during the period 2001-16.

Growth and Trends of Investments of the Insurance Sector in India during Post Privatization

Insurance industry is the trustee of public money as by nature of business it attracts long term funds. Insurance companies are now among the major institutional investors around the globe. The insurance sector is a colossal one and growing at healthy rate. Over the last few years, insurance industry has been gone through intense changes and faced more challenges. At meantime, when the economy needs long term funds to start ball rolling on future growth, insurance can provide right balance in terms of volume as well in terms of tenure. However, insurance companies are mandate to follow investment norms prescribed by IRDAI which hampers insurance companies' investments in capital market to fund growth of either infrastructure projects or manufacturing sector.

Table 4: Total Investments of Insurance Sector (Rs. in crores)

YEAR	LIFE	GROWTH (%)	NON LIFE	GROWTH (%)	TOTAL	GROWTH (%)
2001-2002	230369	-	23400.4	-	253769	-
2002-2003	260552	13.10	30334.3	29.63	290887	14.62
2003-2004	352625	35.33	34074.9	12.33	386699	32.93
2004-2005	428452	21.50	37412.0	9.79	465864	20.47
2005-2006	487151	13.70	42332.4	13.15	529483	13.65
2006-2007	604180	24.02	50382.8	19.01	654563	23.62
2007-2008	765969	26.77	56280.1	11.70	822249	25.61
2008-2009	916365	19.63	58893.3	4.64	975258	18.60
2009-2010	1212458	32.31	66371.9	12.69	1278830	31.12
2010-2011	1430118	17.95	82520.2	24.33	1512638	18.28
2011-2012	1581259	10.56	99268.5	20.29	1680527	11.09
2012-2013	1744894	10.34	122992.0	23.89	1867886	11.14
2013-2014	1957466	12.18	139809.0	13.67	2097275	12.28
2014-2015	2247522	14.81	160714.0	14.95	24082236	14.83
2015-2016	2502068	11.33	188126.0	17.06	2690194	11.71
CAGR	17.23%		14.90%		17.04%	

Source: Annual Reports of IRDAI from 2001 to 2016

Table.4 reveals data on investment of life insurance sector, non-life insurance sector and insurance industry as a whole. Total investment of insurance sector was Rs.253769 crore at the end of 2002 and touched Rs.2690194 crore at the end of 2016. It expanded at a CAGR of 17.04 per cent. Investment of life insurance sector was Rs.230369 crore at the end of 2002 and reached Rs.2502068 crore at the end of 2016. It increased at a CAGR of 17.23 percent. Investment of non-life insurance sector was Rs.23400.4 crore at the end of 2002 and reached to Rs.188126.0 at the end of 2016. It grew at a CAGR of 14.90 per cent. It can be observed from the table that investment of insurance sector has grown consistently over the study period. The highest growth rate of life insurance sector was 35.33 per cent in 2004 and lowest growth rate of 10.34 per cent was registered in 2013. The highest growth rate of non-life insurance sector was 29.63 per cent in 2003 and lowest growth rate of 4.64 per cent was

registered in 2009. The highest growth rate of insurance industry was 32.93 percent in 2004 and lowest growth rate of 11.09 per cent was registered in 2012.

Investments of Life Insurers

Life insurance companies involve huge amount of fund with longer maturity because most life insurance contracts are long-term nature. Life insurance companies' investible funds are classified into three major categories like life fund, pension, general annuity & group fund and unit linked fund. These funds differ in term of nature of investment and regulation.

Table 5: INVESTMENT PATTERNS OF LIFE INSURANCE COMPANIES: LIFE FUND

(Amount Rs.in Crores)

YEARS	CENTRAL GOVERNMENT SECURITIES	STATE GOVERNMENT (OR) OTHER APPROVED SECURITIES	HOUSING & INFRASTRUCTURE INVESTMENTS	APPROVED INVESTMENTS	OTHER INVESTMENTS	TOTAL LIFE FUND
2001-2002	128813.10	3364.38	20740.87	60928.74	16521.65	230368.74
2002-2003	123704.98	23380.50	32962.63	42703.36	6897.04	229648.52
2003-2004	144665.52	30028.12	38636.84	77132.81	16845.63	307308.91
2004-2005	170433.39	39474.78	45521.01	84412.93	26377.73	366219.85
2005-2006	201678.32	43799.61	49638.45	75373.17	26698.56	397188.65
2006-2007	233664.31	45644.64	69836.78	86360.96	30048.61	465553.30
2007-2008	250793.31	67045.41	63262.13	118338.70	42190.44	541629.99
2008-2009	269091.17	88755.04	66673.33	153870.47	51260.39	629650.40
2009-2010	307095.57	113644.46	85674.54	190398.99	34477.30	731290.86
2010-2011	353376.05	141357.66	89180.75	215000.98	42159.12	841074.55
2011-2012	394780.00	177933.28	97319.92	258324.79	46262.23	974620.33
2012-2013	440990.60	214456.88	118878.35	296590.39	49083.72	1119999.94
2013-2014	518824.47	255469.45	155025.90	329787.31	29117.83	1288224.97
2014-2015	623292.85	328728.88	174510.99	342583.28	26193.14	1495309.14
2015-2016	696565.69	377438.21	186111.54	404192.44	33145.06	1697452.94
CAGR	11.78%	36.55%	15.58%	13.30%	4.7%	14.09%

Source: Annual Reports of IRDAI from 2001 to 2016

Table.5 represents data regarding investment pattern of Life fund during 2001-2016. Investments in central government securities were Rs.128813.10 crore at the end of 2002 which increased to Rs.696565.69 crore at the end of 2016. Investments in these securities grew at a CAGR of 11.78 per cent. Investments in state government or other approved securities were Rs.3364.38 crore at the end of 2002 which increased to Rs.377438.21 crore at the end of 2016. CAGR stands 36.55 per cent for these securities investments. Housing & infrastructure investments were Rs.20740.87 crore at the end of 2002 and reached to Rs.186111.54 at the end of 2016. These investments grew at a CAGR of 15.58 per cent. Approved investments were Rs.60928.74 crore at the end of 2002 which increased to Rs.404192.44 crore at the end of 2016. These investments increased at a CAGR of 13.30 per cent. Other investments were Rs.16521.65 crore at the end of 2002 which increased to Rs.33145.06 at the end of 2016. These investments grew at a CAGR of 4.7 per cent.

Table 6 :Investment Pattern of Life Insurance Companies: Pension and General Annuity group fund**(Amount in Crores of Rupees)**

Year	Central Government Securities	State Government & Other Approved Securities	Approved Investment		Total
2001-2002	-	-	-		-
2002-2003	16234.34	5112.19	9291.53		360638.05
2003-2004	24546.62	8567.91	10512.76		43627.30
2004-2005	31116.51	11712.11	11876.01		54704.63
2005-2006	36410.66	14488.56	13174.69		64073.91
2006-2007	41434.52	14443.79	15696.40		71574.70
2007-2008	45894.15	18152.70	27215.01		91261.86
2008-2009	46918.58	18434.55	48598.49		113951.62
2009-2010	53351.21	23591.16	66684.57		143626.93
2010-2011	67575.74	32375.68	89975.83		189927.26
2011-2012	73302.35	36581.92	126782.51		236666.78
2012-2013	71189.19	51532.31	159665.25		282386.76
2013-2014	85826.06	78481.50	173271.88		337579.44
2014-2015	99662.23	101825.33	187985.02		389472.00
2015-2016	134483.75	150767.43	178952.17		464203.35
CAGR	14.97%	25.03%	21.56%		1.53%

Source: Annual reports of IRDAI from 2001 to 2016

Table.6 reveals that insurance companies had not invested in central government securities, state government or other approved securities and approved investments at the end of 2002. Investments in central government securities were Rs.16234.34 crore at the end of 2003 which increased to Rs.134483.75 crore at the end of 2016. Investments in these securities grew at a CAGR of 14.97 per cent. Investments in state government or other approved securities were Rs.5112.19 crore at the end of 2003 which increased to Rs.150767.43 crore at the end of 2016. These securities investments expanded at a CAGR of 25.02 per cent. Approved investments were Rs.9291.53 crore at the end of 2003 which increased to Rs.178952.17 crore at the end of 2016. These investments decreased at a CAGR of 21.56 per cent. Insurance investment regulation holds that insurance companies shall not invest their pension, general annuity & group fund in 'Other Investment'.

Table 7: Investment Pattern of Life Insurance Companies - Unit Linked Funds (ULIPs)**(Amount in Crores of Rupees)**

YEAR	APPROVED INVESTMENTS	OTHER INVESTMENTS	TOTAL (ULIP FUNDS)
2001-2002	0.00	0.00	0.00
2002-2003	260.36	5.55	265.91
2003-2004	1577.38	110.93	1688.31
2004-2005	6731.78	795.66	7527.45
2005-2006	23401.01	2487.12	25888.13
2006-2007	57587.24	9462.56	67049.80
2007-2008	111629.43	21448.05	133077.48
2008-2009	151489.89	21272.87	172762.76
2009-2010	311668.71	25871.42	337540.14
2010-2011	371898.63	27217.13	399115.76
2011-2012	346340.05	23631.74	369971.79

2012-2013	325282.95	17224.23	342507.19
2013-2014	322455.98	9205.18	331661.16
2014-2015	352371.00	10369.00	362740.00
2015-2016	328974.12	11437.88	340412.00
CAGR	60.22%	65.47%	60.35%

Source: Annual Reports of IRDAI from 2001 to 2016

Table.7 represents data regarding investment pattern of unit linked fund during 2001-16. Table reveals that insurance companies had not invested in approved investments and other investments at the end of 2002. Approved investments were 260.36 crore at the end of 2003 which increased to Rs.328974.12 crore at the end of 2016. These investments grew at a CAGR of 60.21 per cent. Other investments were 5.55 crore at the end of 2003 which increased to Rs.11437.88 at the end of 2016. These investments expanded at a CAGR of 65.47 per cent.

Conclusion

Insurance companies collect premium from millions of policy holders over a long period. In turn, they assure financial aid to the beneficiary on happening of specified event. Therefore, insurance companies should invest their funds judiciously with the combined objectives of liquidity, profitability and safety. However, insurance companies have been following investment pattern stipulated by the provisions of the Indian Insurance Act 1938 and investment regulations of IRDAI. These regulations specify the amounts of their invested assets in government securities, approved investments and other investments. Because of these regulations, insurance companies are unable to utilize their fund according to their discretion. Most of investment has been in fixed income securities particularly in government securities. Therefore, the time has come to re-examine the regulations and move to another model of investment.

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