A Synopsis

On

"An Analytical Study of Financial Management Practices of Selected Private Sector Life Insurance Companies in India"

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1. INTRODUCTION

Unpredictability, all of us lives with it, not knowing what each new day will bring. This uncertainty shows the way to development of insurance business & it is related to risks. Actual insurance contracts originated in the 13th century with ship owners who wanted to protect themselves against the possibility of catastrophic losses. At that time wealthy individuals agreed to receive a certain amount of money from each ship owner in exchange for a promise to pay for the loss of ship when it occurred. Note that it is not loss but possibility of a loss. The purpose of insurance is to restore the insured to their original financial position, not to provide an opportunity for making a profit. This can be understood as a possibility of adverse effects arising as a result of perils that operate on one's property or person. Insurance is a mechanism to reduce or alleviate the adverse financial effects of such damage or loss. In olden times, arrangements existed for such sharing and reduction of losses, in ways that were different from the ways of insurance as we know it today. (Balchandran & Kaikini, 2014).

Now a day, Insurance sector has experienced strong premium growth with a unique financial engineering, and technological innovation. it strengthened the focus towards enhancing professional delivery of products and services, customer satisfaction and operational efficiency. The potential and performance of the insurance sector is universally assessed with reference to two parameters i.e. insurance penetration and insurance density. The measure of insurance penetration and density reflects the level of development of insurance sector in an economy. Insurance Penetration is measured as the ratio or percentage of Insurance Premium to Gross Domestic Product (GDP), while Insurance Density is calculated as the ratio of Premium to the Total Population (Per capita premium).

Average level of life insurance penetration in India has been observed 3.47% for the study period 2006-07 to 2015-16. In the year 2006-07 it was 4% and it has been reduced to 2.72% in the year 2015-16. Despite the huge potential market Indian life insurance business was far behind from the other countries but India was placed before their neighbour countries like china, Pakistan and Sri Lanka, it has shown high level of penetration 2.72% in 2016 where as china stood at 2.34%, Pakistan 0.63%, and Sri Lanka 0.52% in 2016. In India, Per capita premium has increased from US $ 40.4 to US $ 46.5 it sows increasing trend but in comparison with other countries differences were quite wide and open. This is happened partly because of its huge population which reduces per head level of insurance. Overall, Global Density of life insurance decreased from 2006-07 to 2015-16 i.e. US $ 358.1 to US $ 353.

Table 1 Penetration of Life Insurance Markets (In Per cent)

Countries	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	3.80	4.40	3.40	3.10	3.00	2.84	3.00	3.80	3.50	2.99
Brazil	1.40	1.40	1.60	1.60	1.70	1.99	2.20	2.10	2.10	2.28
France	7.30	6.20	7.20	7.40	6.20	5.64	5.70	5.90	6.20	6.06
Germany	3.10	3.00	3.30	3.50	3.20	3.12	3.10	3.10	2.90	2.75
Russia	0.10	-	-	-	0.10	0.09	0.10	0.20	0.20	0.25
South Africa	12.50	12.50	10.00	12.00	10.20	11.56	12.70	11.40	12.00	11.52
Switzerland	5.70	5.50	5.40	5.50	5.50	5.25	5.13	5.10	5.10	4.72
United Kingdom	12.60	12.80	10.00	9.50	8.70	8.44	8.80	8.00	7.50	7.58
United States	4.20	4.10	3.50	3.50	3.60	3.65	3.20	3.00	3.10	3.02
Asian Countries										
Hong Kong	10.60	9.90	9.60	10.10	10.10	11.02	11.70	12.70	13.30	16.20
India	**4.00**	**4.00**	**4.60**	**4.40**	**3.40**	**3.17**	**3.10**	**2.60**	**2.70**	**2.72**
Japan	7.50	7.60	7.80	8.00	8.80	9.17	8.80	8.40	8.30	7.15
Malaysia	3.10	2.80	2.90	3.20	3.30	3.08	3.20	3.10	3.40	3.15
Pakistan	0.30	0.30	0.30	0.30	0.40	0.43	0.50	0.50	0.50	0.63
PR China	1.80	2.20	2.30	2.50	1.80	1.70	1.60	1.70	2.00	2.34
Singapore	6.20	6.30	5.10	4.60	4.30	4.43	4.40	5.00	5.60	5.48
South Korea	8.20	8.00	6.50	7.00	7.00	6.87	7.50	7.20	7.30	7.37
Sri Lanka	0.60	0.60	0.60	0.60	0.60	0.54	0.50	0.50	0.50	0.52
Taiwan	12.90	13.30	13.80	15.40	13.90	15.03	14.50	15.60	15.70	16.65
Thailand	1.80	1.80	2.40	2.60	2.70	2.95	3.80	3.60	3.70	3.72
World	**4.40**	**4.10**	**4.00**	**4.00**	**3.80**	**3.69**	**3.50**	**3.40**	**3.50**	**3.47**

Source: Compiled from Handbook on insurance statistics 2014-15 (IRDA)

Table 2 Density of Life Insurance Markets (In US Dollars)

Countries	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1,674.1	2,038.0	1,524.8	1,766.3	2,077.0	1,987.7	2,056.0	2,382.0	1,830.0	1,558.5
Brazil	95.3	115.4	127.9	169.9	208.0	225.5	246.0	222.0	178.0	195.5
France	2,928.3	2,791.9	2,979.8	2,937.6	2,638.0	2,239.2	2,391.0	2,552.0	2,263.0	2,227.7
Germany	1,234.1	1,346.5	1,356.7	1,402.2	1,389.0	1,299.3	1,392.0	1,437.0	1,181.0	1,150.6
Russia	6.1	5.4	4.5	6.4	8.0	12.1	19.0	20.0	15.0	22.4
South Africa	719.0	707.0	574.2	854.6	823.0	882.3	844.0	748.0	688.0	615.8
Switzerland	3,159.1	3,551.5	3,405.6	3,666.8	4,421.0	4,121.1	4,211.0	4,391.0	4,079.0	3,700.3
United Kingdom	5,730.5	5,582.1	3,527.6	3,436.3	3,347.0	3,255.8	3,474.0	3,638.0	3,292.0	3,033.2
United States	1,922.0	1,900.6	1,602.6	1,631.8	1,716.0	1,808.1	1,684.0	1,657.0	1,719.0	1,724.9
Asian Countries										
Hong Kong	3,031.9	2,929.6	2,886.6	3,197.3	3,442.0	4,024.7	4,445.0	5,071.0	5,655.0	7,065.6
India#	**40.4**	**41.2**	**47.7**	**55.7**	**49.0**	**42.7**	**41.0**	**44.0**	**43.0**	**46.5**
Japan	2,583.9	2,869.5	3,138.7	3,472.8	4,138.0	4,142.5	3,346.0	2,926.0	2,717.0	2,803.4
Malaysia	221.5	225.9	206.9	282.8	328.0	329.9	341.0	338.0	316.0	298.3
Pakistan	2.6	2.8	3.0	3.2	4.0	5.3	6.0	7.0	8.0	9.2
PR China	44.2	71.7	81.1	105.5	99.0	102.9	110.0	127.0	153.0	189.9
Singapore	2,244.7	2,549.0	1,912.0	2,101.4	2,296.0	2,471.8	2,388.0	2,840.0	2,932.0	2,894.5
South Korea	1,656.6	1,347.7	1,180.6	1,454.3	1,615.0	1,578.1	1,816.0	2,014.0	1,940.0	2,049.6
Sri Lanka	10.2	12.8	11.8	13.7	15.0	14.8	16.0	17.0	19.0	21.2
Taiwan	2,165.7	2,281.1	2,257.3	2,756.8	2,757.0	3,107.1	3,204.0	3,371.0	3,397.0	3,598.7
Thailand	70.8	77.2	91.7	121.9	134.0	156.5	214.0	198.0	215.0	222.0
World	**358.1**	**369.7**	**341.2**	**364.3**	**378.0**	**372.6**	**366.0**	**368.0**	**346.0**	**353.0**

Source: Compiled from Handbook on insurance statistics 2014-15 (IRDA)

The disparity between the current penetration level and future penetration level makes the Indian insurance market a lucrative opportunity for investors. With low insurance penetration as compared to the large Indian population base, there is tremendous scope for the life insurers to capitalize on. In India insurance had existed during ancient period and founded deep root of it in Manu (Manusmrithi), Yagnavalkya (Dharmasastra) and Kautilya (Arthasastra). It talks in terms of pooling of resources that could be re-distributed in times of calamities such as fire, floods, epidemics and famine. Life insurance in its modern form came to India from England in 1818 with the formation of Oriental Life Insurance Company (OLIC) in Calcutta. This company however failed in 1834. In 1829, Madras took initiative in life insurance business. British Parliament enacted Insurance Act 1870, the Bombay Mutual (1871), Oriental (1874) and Empire of India (1897) were started in the Bombay Residency. This era, however, was dominated by foreign insurance offices which did good business in India, namely Albert Life Assurance, Royal Insurance, Liverpool and London Globe Insurance and the Indian offices were up for hard competition from the foreign companies. The Indian Life Assurance Companies Act, 1912 was the first statutory measure to regulate life business. In 1928, the Indian Insurance Companies Act was enacted to enable the Government to collect statistical information about life insurance companies. In 1938 with a view to protecting interest of public the earlier legislation was consolidated and amended by the Insurance Act, 1938. Due to allegation of unfair trade practices and high competition among insurance companies the government of India decided to nationalize insurance business in 1950. Life insurance Company of India came in to existence in 1956. The LIC had monopoly till the late 90s when the Insurance sector was reopened to the private sector.

During 1993-1999 - Malhotra Committee recommended opening up the insurance sector for private players. IRDA, LIC and GIC Acts were passed in 1999, and IRDA the statutory regulatory body for insurance leads towards ending the monopoly of LIC and GIC. 2000 onward Post liberalization, the insurance industry recorded significant growth; the number of private players increased. Customers are more conscious of the benefits of insurance and its importance for a secure future. The industry has been spurred by product innovation, vibrant distribution channels, coupled with targeted publicity and promotional campaigns by the insurers. The insurance industry of India consists of 57 insurance companies of which 24 are in life insurance business and 33 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public-sector company. Following table 3 shows list of life insurance companies in India as on 31st March 2017. Whereas table 4 shows summary of life insurance sector indicating growth of the business for the ten years from 2007-08 to 2016-17.

Table 3. List of Life Insurance Companies in India

No	Name of the Companies	Foreign Partners	Date of Registration	Year of operation
Public Company				
1	Life Insurance Corporation of India	---	01-09-1956	1956-57
Private Companies				
1	HDFC Standard Life Insurance Co. Ltd	Standard Life (Mauritius Holdings) 2006, Ltd. UK	23-10-2000	2000-01
2	Max Life Insurance Co. Ltd	Mitsui Sumitomo Insurance Company Ltd. Japan	15-11-2000	2000-01
3	ICICI Prudential Life Insurance Co. Ltd	Prudential Corporation Holdings Ltd. UK	24-11-2000	2000-01
4	Kotak Mahindra Old Mutual Life Insurance Limited	Old Mutual Plc, UK	10-01-2001	2001-02
5	Birla Sun Life Insurance Co. Ltd	Sun Life Financial(India) Insurance Investment Inc, Canada	31-01-2001	2000-01
6	Tata AIA Life Insurance Company Limited	American International Assurance Company (Bermuda) Ltd.	12-02-2001	2000-01
7	SBI Life Insurance Co. Ltd	BNP Paribas Cardif, France	29-03-2001	2001-02
8	Exide Life Insurance Company Limited	---	02-08-2001	2001-02
9	Bajaj Allianz Life Insurance Company Limited .	Allianz, SE Germany	03-08-2001	2001-02
10	PNB Metlife India Insurance Co. Ltd.	Metlife International Holdings Ltd., USA	06-08-2001	2001-02
11	Reliance Life Insurance Company Limited.	Nippon Life Insurance Company Ltd. Japan	03-01-2002	2001-02
12	Aviva Life Insurance Company India Limited	Aviva International Holdings Ltd., UK	14-05-2002	2002-03
13	Sahara India Life Insurance Co, Ltd.	----	06-02-2004	2004-05
14	Shriram Life Insurance Co, Ltd.	---	17-11-2005	2005-06
15	Bharti AXA Life Insurance Company Ltd.	AXA India Holdings, France	14-07-2006	2006-07
16	Future Generali India Life Insurance Company Limited	Participatie Maatschapij Graafsschap Holland NV, Netherlands	04-09-2007	2007-08
17	IDBI Federal Life Insurance Company	Aegis Insurance International NV Netherlands	19-12-2007	2007-08
18	Canara HSBC Oriental Bank of Commerce Life Insurance Company Ltd.	HSBC Insurance (Asia Pacific) Holdings Ltd, UK	08-05-2008	2008-09
19	AEGON Religare Life Insurance Company Limited.	Aegon India Holding BV, Netherland	27-06-2008	2008-09
20	DHFL Pramerica Life Insurance Co. Ltd.	Prudential International Insurance Holdings Ltd., USA	27-06-2008	2008-09
21	Star Union Dai-ichi Life Insurance Co.	Dai-ichi Life Insurance Company Ltd. Japan	26-12-2008	2008-09
22	IndiaFirst Life Insurance Company Limited	Legal & General Middle East Ltd.	05-11-2009	2009-10
23	Edelweiss Tokio Life Insurance Co. Ltd.	Tokio Marine &Nichido Fire Insurance Company Ltd. Japan.	10-05-2011	2011-12

Source: IRDA Handbook

Table 4. Summary of Indian Life Insurance Sector												
Particulars	**Remarks**	**Unit**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
No of Companies												
Public			1	1	1	1	1	1	1	1	23	23
Private	As on 31st March	Numbers	17	21	22	22	23	23	23	23	1	1
Total			18	22	23	23	24	24	24	24	24	24
Total No of Branch Offices	As on 31st March	Numbers	8913	11815	12018	11546	11167	10285	11032	11033	11071	10954
Total Life Insurance Premium												
Public			1,49,790	1,57,288	1,86,077	2,03,473	2,02,889	2,08,804	2,36,942	2,39,668	2,66,444	300487
Private	for F. Y	In Crore	51,561	64,497	79,370	88,165	84,183	78,399	77,359	88,433	1,00,499	117989
Total			2,01,351	2,21,785	2,65,447	2,91,639	2,87,072	2,87,202	3,14,302	3,28,101	3,66,943	418477
Growth In Premium												
Public			17.19	5.01	18.30	9.35	-0.29	2.92	13.48	1.15	11.17	12.78
Private	for F. Y	In %	82.50	25.09	23.06	11.08	-4.52	-6.87	-1.33	14.32	13.64	17.40
Total			29.01	10.15	19.69	9.87	-1.57	0.05	9.44	4.39	11.84	14.04
Market Share based on Total Premium												
Public	for F. Y	In %	74	71	70	70	71	73	75.39	73.05	72.61	71.81
Private			26	29	30	30	29	27	24.61	26.95	27.39	28.19
Share of each fund in Total Assets Under Management												
Life Fund			541630	629650	731291	841075	974620	1120000	1288225	1495309	1697453	1907953
Pension & Group Fund	As on 31st March	In Crore	91262	113952	143627	189927	236667	282387	337579	389472	464203	566399
ULIP Fund			133077	172763	337540	399116	369972	342507	331661	362740	340412	379841
Total			765969	916365	1212458	1430118	1581259	1744894	1957465	2247521	2502068	2854193
Profit / (Loss) after tax	As on 31st March	In Lakh	-341281	-488301	-98882	265704	597354	694839	758783	761131	741497	772789
Equity Capital	As on 31st March	In Crore	12296	18255	21020	23662	24932	25519	25939	26240	26691	26956.9

Source: Data Compiled from IRDA Handbook of different years.

2. RATIONALE OF THE STUDY

The insurance is primarily a social device adopted by civilized society to reduce the uncertainty towards unforeseen contingencies. Insurance is the business of accepting risk from various policyholders', which expose the insurance company to multiple risk such as market risk, credit risk, liquidity risk, morbidity and mortality risk, persistency risk etc. with these types of risks, life insurance products come in a variety of offerings, investment needs and objectives of different kinds of investors in the form of term insurance policies, money back policies, endowment plan, unit-linked investment policies, pension policies, children policies etc.

Life Insurance is the one of the fast-growing sector in India at the rate of 15-20%. Together with banking services, insurance services add about 7% to the country's GDP. A well-developed and evolved insurance sector is a boon for economic development as it provides long- term funds for infrastructure development and at the same time strengthening the risk-taking ability of the country. Government has liberalized their policy, allowed Private players and FDI from 26% to 49%. India has ranked 10th among 147 countries in the life insurance business.

The Indian Life Insurance industry has matured significantly after globalization and has witnessed intense competition, significant expansion of customer base, number of product and operational innovations. The industry is currently facing slow growth, rising costs, deteriorating distribution structure and stalled reforms because of tightening and standardizing rules of the business to protect the interest of policy holders by The Regulator, IRDA.

Life Insurance Corporation of India is the biggest player in the life insurance industry in India with acquiring 70% market share in total business. It focuses more on traditional plans. Whereas other private life insurance companies provide investment plan with the risk coverage. i.e. ULIP. The advantage with unit linked plans is that they offer policyholders more transparency in terms of cost, annual returns and bonus calculations. Switch from traditional products to unit linked plans gain momentum and the returns on such policies are linked to the equity market. Growth is coming faster in insurance companies with unit linked plans. The private sector is known for paying high salaries, but they are managing their expenses using innovation & technologies in products.

The competition has intensified not only between private and public-sector companies but also amongst private sector companies. There is now a sense of benchmarking globally which is indeed a very healthy trend. Most of the private insurance companies are joint ventures with recognized foreign players across the globe. This has resulted in development of new insurance products, reduction of premium, improved customer service, increased visibility through print & electronic media, discussions, symposia and seminars etc. ultimately benefitting the insuring public. There is an increased use of technology, financial engineering & actuarial science in private sector life insurance business. This has enabled financial decisions to be made with more confidence by analyzing past, modelling the future, assessing the risk involved and communicating what the results mean in financial terms. In India few researches have been don on this subject, although foreign countries have worked significantly on it. Due to regulatory framework, continuously changing environment, various laws prevailing in India and to survive with dominant public player i.e. life insurance corporation of India, it is a biggest challenge for the private players in India.

In the context of the above, it is very pertinent to carry out a research study which focuses on various variables having impact on the financial performance and position of the insurance companies and analyze the effectiveness of financial management practices adopted by the companies.

3. REVIEW LITERATURE

In order to find out the gaps in research, the literature already available pertaining to the problem is to be reviewed. The literature on life insurance industry in India includes books, compendia, thesis, dissertations, study reports and articles published by academicians and researchers in different periodicals. The review of this literature gives an idea to concentrate on the unexplored area and to make the present study more distinct from other studies. The literature available is presented below:

Shinde Sanjaykumar (2011) compared Life Insurance Corporation of India and private life insurance companies of India in his Ph.D. thesis. This study predicted the volume of new business and total premium of life insurance companies in India and to compare the cost efficiency of life insurance companies in India. Study concluded good financial condition of Life Insurance Corporation as compare to private life insurance companies of India.

Mark S. Dorfman (2002) in his book on “Introduction to Risk Management and Insurance” reviews the salient features of the insurance industry and the role played by the private enterprise. The different types of insurance intermediaries are also discussed at length with suitable illustrations incorporated wherever necessary.

Malik (2011) determined the relationship of profitability and internal factors of insurance companies in Pakistan. For determining specific factors, multiple regression model was applied where profitability taken as dependent variable while age, size of company, volume of capital, Leverage and loss ratio as independent variables. The study covered the period from 2005 to 2009. The findings suggested that there was no relationship of profitability with age, but significant positive relationship with size and volume of capital, and significantly negative relationship with loss ratio and leverage.

Modi Manisha (2011) in her Ph.D. thesis compared performance of general insurance public sector companies of India with financial efficiency, profitability, financial strength and efficiency of general insurance public sectors companies for the last seven-years (2001-02 to 2007-08)

Gulati and Jain (2011) analyzed business performance of all life insurers in industry based on various indicators. The study indicated that even after the entry of private sector, the growth of public sector undertaking had not resulted in downfall even after facing various opportunities and challenges.

Showket Ahmad Dar & Javaid Ahmad Bhat (2015) have analysed financial performance and soundness of selected public and private life insurance companies using CARAMEL framework for the period of 2005-06 to 2012-13. The overall results reveal that the capital adequacy level of selected private life insurers is far better than the mean capital adequacy level of public life insurer.

Charumathi (2012) studied the factors that determine the profitability of life insurers operating in India. The sample for the study included 1 public and 22 private players and period of three years i.e. 2008-09 to 2010-11 was studied. For achieving the purpose, regression analysis was performed which resulted that profitability of life insurers was positively affected by size and liquidity but negatively influenced by leverage, premium growth and equity capital.

Kumara (2013) analyzed the financial performance of both public and private life insurance industry. For this purpose, various parameters such as number of life insurance companies, private sector offices, insurance penetration and density, growth in premium income, size of insurance market were discussed. Financial performance was observed by calculating various financial ratios. The study resulted that there had been a significant increase in the overall business performance of Indian life insurance industry after privatization.

Yuvaraj Sambasivam & Abate Gashaw Ayele (2013) the main objective of the study is to identify and compare the factors determining the financial performance of the Ethiopian insurance companies for the period of 2003 to 2011. It revealed that leverage, size, volume of capital, growth and liquidity are most important determinant of performance of life insurance sector whereas ROA has statistically insignificant relationship with, age and tangibility. As the findings shows that liquidity do have negative impact on profitability and it provides further implication on the effective risk management practices in the companies.

Ram Pratap Sinha (2007) in his paper "Operating Efficiency of Life Insurance. Companies: An Assurance Region Model" analyzed technical efficiency using the assurance region approach for 13 selected life insurance companies in India for the period of 2002-03 to 2005-06. The study reveal that mean technical efficiency has improved in 2003-04 then maintain same level in 2004-05 and decline in 2005-06.

Joy Chakraborty (2017) in his paper entitled "Efficiency Analysis of Indian Life Insurance Firms: A DEA Investigation" examined the efficiency of the country's life insurance sector using panel data-set of 1 public company and 17 private life insurance companies. The study period covered from 2008-09 to 2014-15, against the backdrop of the US financial crisis. It has pointed out the inconsistencies in operational efficiencies of the life insurer, along with the direction for improvement.

Abhijit Sinha (2013) in his paper entitled" Efficiency Analysis of private life insurers in India: An application of Data Envelopment Analysis" analyzed technical efficiency, pure technical efficiency and scale efficiency by applying DEA. All private life insurance companies have taken in to consider with the study period from 2001-02 to 2011-12. This study based on two inputs Commission & Operating expense and two outputs net premium and benefits paid. It has been concluded that SBI Life has been found to be the only player performing consistently well in all aspects of efficiency.

Kshetrimayum Sobita Devi (2011) in her Ph.D. thesis examined efficiency and productivity of the 15 selected life insurance companies including one public company (i.e. LIC) for the period of 9 years from 2001-02 to 2009-10. she has used DEA and Malmquist productivity index as tool for research. It has been included two inputs, Commission & operating exp. & two outputs, premium and benefits paid. The Malmquist Productivity Index or the total factor productivity has been calculated in this study measures the change in the production frontier and how the current frontier relates to the firms' frontiers over time.

Nancy Bawa, Neelam Dhanda (2016) have evaluated assets under management segregating in to investments of life fund, pension and general annuity funds, group funds and of unit linked funds of Indian Life Insurance Industry. They have used statistical tools such as percentage share, mean, standard deviation, coefficient of variation and frequency distribution. The study concluded that LIC is consistently using funds for investment as compared to private sector life insurance companies which reflects the efficient investment behaviour of Life Insurance Corporation of India.

Ketan H Popat (2015) has analyzed financial performance using CARAMEL framework for selected non-life insurance companies during the period of seven years. From the analysis, it has been concluded that the entire research unit for defining financial sector indicators shows average outcomes in comparison to standard norms of financial tools of Non- Life insurance industries.

4. RESEARCH METHODOLOGY

4.1. Statement of Problem

This is an attempt to undertake an Analytical Study of Financial Management Practices of Selected Private Sector Life Insurance Companies in India in order to suggest the suitable strategies to sustain and/or improve their financial performance & position. It is conducted in the light of objectives referred below for a period of ten years i.e. from 2007-08 to 2016-17.

4.2. Objectives of the study

The overall basic objective of the research study is to identify, understand and analyse various financial management practices followed by selected private sector life insurance companies in order to improve their performance and financial soundness. Analysis of financial Management practices of life insurance companies based on their operational efficiency, financial soundness, risk management and the most important how they are managing their funds towards settlement of policyholders' liabilities and meeting the expectations of shareholders' by evaluating their investment pattern and yield on investment.

However, it is essential to segregate the overall objective in to various sub objectives based on certain important parameters related to the insurance sector. For each of the selected private sector life insurance companies, for the period under consideration i.e. 2007-08 to 2016-17, the objectives are enumerated as follows:

1. To analyse and evaluate overall growth of the business.
2. To analyse relative operational efficiency.
3. To assess and evaluate Financial Soundness.
4. To analyse and understand financial management practices as regards Investment pattern and yield on Investment.
5. To study risk management practices as regards various risk exposures in the context of regulatory risk management prescriptions.
6. To assess and evaluate the impact of financial management practices on shareholders wealth.
7. To carry out inter firm comparison and offer relevant suggestions/ recommendations.

4.3. List of Illustrative Hypothesis

Appropriate set of hypotheses have been framed taking into consideration the nature of analysis. They have been discussed in the chapter outline separately given below.

4.4. Sample Selection

At present, in India, life insurance business is undertaken by public sector enterprise i.e. Life Insurance Corporation of India and private sector enterprises comprising of 23 players. The study is exclusively based on private sector life insurance companies. Out of the 23 companies, on the basis of establishment 12 companies are segregated, these 12 companies are incorporated for more than 15 years and having more than Rs. 1,000 crores of net worth, out of that 12 companies seven companies have been selected based on criteria such as business (i.e. premium) and market share.

Following are the selected private sector life insurance companies.

No.	Companies
1	HDFC Standard Life Insurance Co. Ltd
2	Max Life Insurance Co. Ltd
3	ICICI Prudential Life Insurance Co. Ltd
4	Kotak Mahindra Old Mutual Life Insurance Limited
5	Birla Sun Life Insurance Co. Ltd
6	SBI Life Insurance Co. Ltd
7	Bajaj Allianz Life Insurance Company Limited.
8	Reliance Life Insurance Company Limited.

These eight companies which have been selected, have captured almost 80% of market share in terms of premium & policies. Therefore, they are considered as representative of the whole private life insurance market in India.

4.5. Data Collection

The present study is based on the secondary data collected mainly from Annual Reports & Public Disclosures of selected companies, Annual Reports of IRDA & various IRDA Publications issued time to time.

4.6. Method of Data Analysis

The data collected from various sources has been analyzed and interpreted using various financial tools such as ratio analysis, growth rate of various parameters and statistical tools such as Averages, Standard Deviation, Coefficient of Variance, Compounded Annual Growth Rate (CAGR), Mean Comparison Analysis, Regression Analysis, Data Envelopment Analysis (DEA) etc. one model relating to financial soundness indicator i.e. CARAMEL framework has also been used. For smooth interpretation and presentation of analyzed data, pie charts and graphs have been used.

4.6.1. Analysis of Data

As per the design of the research, the collected data is subjected to the statistical analysis, ratio analysis and percentage analysis of different years.

4.6.2. Parameters in the Research

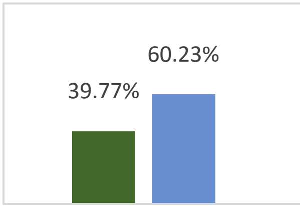
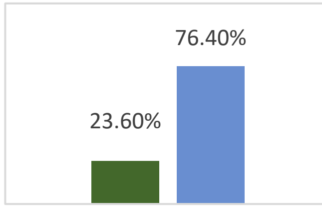
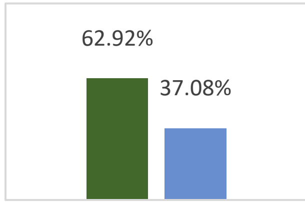
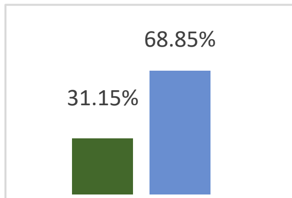
The following parameters are considered for the purpose of analysis:

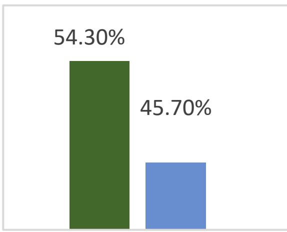
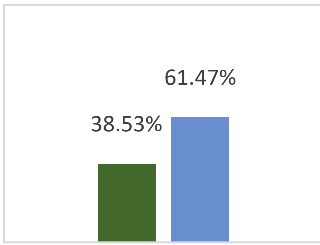
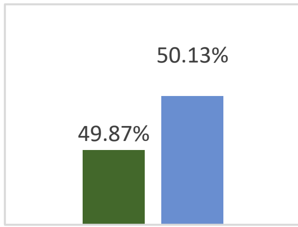
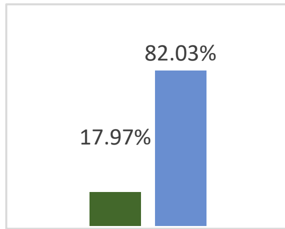
- Income parameters
- Expenditure parameter
- Assets parameters
- Liabilities parameters

4.6.3. Tools and Techniques Used

- Financial Techniques:
  a. Ratio analysis
  b. Percentage analysis
  c. Growth rate of various parameters
- Statistical Tools:
  Averages, Standard Deviation, Coefficient of Variance, Compounded Annual Growth Rate (CAGR), Mean Comparison Analysis, Regression Analysis, Data Envelopment Analysis (DEA) etc.
- Diagrammatic Representation: for smooth interpretation and presentation of analyzed data, pie charts and graphs are used.

4.7. Profile of selected private sector life insurance companies in India

No.	Particulars	HDFC	MAX	ICICI	KOTAK
1	Establishment	23-10-2000	15-11-2000	24-11-2000	10-01-2001
2	Year of Operation	2000-01	2000-01	2000-01	2001-02
3	No of Years Completed up to 31st March 2016	15 Years	15 Years	15 Years	14 Years
4	Foreign Partners	Standard Life (Maur itius Holdings) 2006, Ltd. UK	Mitsui Sumitomo Insurance Company Ltd. Japan	Prudential Corporation Holdings Ltd. UK	Old Mutual Plc , UK
5	No. of Offices as on 31st March 2016	398	210	519	228
6	No. of Individual Agents as on 31st March 2016	82381	45276	121016	86303
7	No. of Corporate Agents as on 31st March 2016	12	19	11	23
8	Equity Capital as on 31st March 2016 (₹ in Crore)	199529	191881	143232	51029
9	Profit/Loss after Tax for the year 2015-16 (₹ in Lakh)	81840	43911	165046	25075
10	Grievances Resolved during the year 2015-16	13726	14161	8912	3326
11	Persistency of Policies (for 13 Months)	71.33	74	78.7	76.82
12	Individual Business (Within India) Non-linked Business Linked Business				

Sr.No.	Particulars	BIRLA	SBI	BAJAJ	RELIANCE
1	Establishment	31-01-2001	29-03-2001	03-08-2001	03-01-2002
2	Year of Operation	2000-01	2001-02	2001-02	2001-02
3	No of Years Completed up to 31st March 2016	15 Years	14 Years	14 Years	14 Years
4	Foreign Partners	Sun Life Financial (India) Insurance Investment Inc, Canada	BNP Paribas Cardif , France	Allianz, SE Germany	Nippon Life Insurance Company Ltd. Japan
5	No. of Offices as on 31st March 2016	507	774	697	823
6	No. of Individual Agents as on 31st March 2016	110658	92619	89975	129693
7	No. of Corporate Agents as on 31st March 2016	32	60	37	8
8	Equity Capital as on 31st March 2016 (₹ in Crore)	190121	100000	15071	119632
9	Profit/Loss after Tax for the year 2015-16 (₹ in Lakh)	14000	86103	87897	-19728
10	Grievances Resolved during the year 2015-16	12412	9403	14556	14345
11	Persistency of Policies (for 13 Months)	54	69.25	53.95	55.8
12	Individual Business (Within India) Non-linked Business Linked Business				

5. CHAPTER OUTLINE

The study consists of seven chapters covering the aspect of financial management practices of selected private sector life insurance companies in India for the period under consideration.

I. Introduction:

This chapter gives the overview of life insurance industry from ancient period (i.e. inception) to modernization, in which evolution phase, growth and regulatory updates during pre-nationalization phase (before 1956), post nationalization phase (1956 to 2000) & post liberalization phase (2000 onwards) has been discussed. It has been followed by research methodology and brief profile of selected companies.

II. Review Literature:

In order to find out the gaps in research, the literature already available pertaining to the research area is to be reviewed. The literature includes books, compendia, thesis, dissertations, study reports and articles published by academicians and researchers in different periodicals etc.

III. Operating Efficiency Analysis

This chapter gives overview of business operation and analyzed various aspect of operations such as Individual Business in force (Number of policies issued), New Business Premium (Including Single Premium), Renewal Premium, Commission Paid, Operating Expenses, Benefits Paid (Net), and Income from Investment. Analysis comprising with different statistical tools like average, coefficient of variance, compounded annual growth rate, and compare the mean of selected parameters with illustrated hypothesis given below for the selected private life insurance companies during the study period.

1. Ho: There is no significant difference in new business premium collected.
2. Ho: There is no significant difference in renewal premium collected.
3. Ho: There is no significant difference in management of expenses (which include commission and operating expenses) paid.
4. Ho: There is no significant difference in benefits paid.
5. Ho: There is no significant difference in income from investment.
6. Ho: There is no significant difference in surplus generated.

Over and above this chapter has also analysed operating efficiency. Operating efficiency is about how efficiently a company is managing its resources in the course of its day to day activities. Based on literature review operating efficiency has been measured using non-parametric test i.e. Data Envelopment Analysis (DEA). DEA is more likelihood and important in result concerning the asymptotic properties of estimators. (Grosskopf, 1996).

As it has been stated above that Data envelopment analysis (DEA) is a non-parametric method of measuring relative efficiency of the decision-making units (DMUs) such as firms or public-sector agencies etc. DEA involves the use of linear programming methods to construct a non-parametric piece-wise surface (or frontier) over the data. Efficiency measures are then calculated relative to this surface.

DEA segregates best practice firms from the sample and the more efficient (best practice firm) firm attains a score of 1 and the relatively inefficient firms secure a score between 0 and 1 by their distance from the production frontier. It measures efficiency using two approaches 1. input oriented and 2. output oriented. Present study has adopted output-oriented CRS (Constant Returns to Scale) & VRS (Variable Returns to Scale) Model with two inputs commission paid & operating expenses and one output i.e. premium. This study has undertaken all 23 private life insurance companies to make the efficiency result more reliable but more emphasise has been given to 8 selected companies.

IV. Evaluation of Financial Soundness

Financial soundness is the outcome of financial management & this chapter analyse financial soundness of selected life insurers. To assess the financial soundness some of the financial soundness indicators have been used in the form of CARAMEL framework, which is developed by world bank and international monetary fund.

These financial soundness indicators are based on balance sheet and income statement data which evaluates individuals financial position using selected set of ratios under financial soundness indicators (FSIs) of the CARAMEL. This abbreviation stands C- Capital adequacy, A- Asset quality, RA- Reinsurance & Actuarial issues, M- Management soundness, E- Earnings and profitability, L- Liquidity. The ratios used in this framework are divided in two part one is ‘Core Set’ and second is ‘Encouraged Set’ i.e. additional ratios to measure financial soundness. There are 11 ratios have been used for the six different indicators.

Component	Core Set	Encouraged Set
Capital Adequacy (C)	Capital to Total Assets	Solvency Ratio
	Capital to Technical Reserves	
Assets Quality (A)	Equities/Total Assets	
Reinsurance and Actuarial Issues (RA)s	Risk Retention Ratio (Net Premium to Gross Premium)	
	Net Technical Reserves/Average of Net Premium Received in last three years	
Management Soundness (M)	First Year Premium/ Gross Premiums	Operating Expenses/Gross Premium
Earnings & Profitability (E)	ROE (Net Income/ Equity)	Net Profits to Assets (ROA)
Liquidity (L)	Current Assets to Current Liabilities	

Source: Compiled from IMF Working Paper on ‘Insurance and Issues in Financial Soundness, WP/03/138 (2003)

The above analysis also carried out with the following illustrated hypothesis for the selected private life insurance companies during the study period.:

1. Ho: There is no significant difference in capital adequacy norm expressed in terms of capital to total assets ratio.
2. Ho: There is no significant difference in capital adequacy norm expressed in terms of capital to technical reserves ratio.
3. Ho: There is no significant difference in capital adequacy norm expressed in terms of solvency ratio.
4. Ho: There is no significant difference in assets quality norm expressed in terms of equities to total assets ratio.
5. Ho: There is no significant difference in reinsurers & actuarial norm expressed in terms of net premium to gross premium ratio.
6. Ho: There is no significant difference in reinsurers & actuarial norm expressed in terms of net technical reserves to average of net premium received in last three years ratio.
7. Ho: There is no significant difference in management soundness expressed in terms of first year premium to gross premium ratio.
8. Ho: There is no significant difference in management soundness expressed in terms of operating expenses to gross premium ratio.
9. Ho: There is no significant difference in earning and profitability expressed in terms of return on equity ratio.

10. Ho: There is no significant difference in earning and profitability expressed in terms of return on Assets ratio.
11. Ho: There is no significant difference in liquidity position expressed in terms of current ratio.

V. Analysis of Assets Under Management

Life insurance business is very complex and dynamic in which premiums are paid in advanced and policies average duration ranges from 20 to 40 years. Thus, life insurers have longest maturities to pay liabilities, they can be invested until needed to pay claims and expenses. Investment is a vital blood stream of life insurance business because shareholders fund or surplus only are not able to meet policyholders' liability. Therefore, present chapter have focused more on importance of investment, investment regulations prescribed by the IRDA, investment pattern followed by the companies and yield on investment fund wise. This chapter has also been found out the relationship between investment, yield on investment and Sensex with regression model, in relation to it illustrative hypothesis has been enumerated as follows for the selected private life insurance companies during the study period:

1. Ho: There is no relationship between Investment, Yield on investment and Sensex.

Assets under management term is closely associated with investment. It is a measure of money that insurance companies manage on behalf of policyholders and shareholders. Ultimately it is the total market value of the funds that insurance companies contain. It is an indicator of the size and success of the fund. This chapter has also analyzed assets under management & its correlation with Sensex. Moreover, shareholders wealth has also been measured using assets under management as multiple of share capital. New model for measuring shareholders' wealth has been explained in this chapter.

Illustrative hypothesis is as follows for the selected private life insurance companies during the study period:

1. Ho: There is no relationship between assets under management, Sensex and share capital.

VI. Risk Management

This chapter attempts to describe risk management practices as regards various risk exposures in the context of regulatory risk management prescriptions. Various types of risks faced by the insurers and policies adopted for mitigation of risk by insurers have been discussed with the key indicator conservation ratio, persistency ratio, and outstanding claims to total claims payable ratio.

Illustrative hypotheses are as follows for the selected private life insurance companies during the study period:

1. Ho: There is no significant difference in conservation ratio.
2. Ho: There is no significant difference in persistency ratio.
3. Ho: There is no significant difference in outstanding claims to total claims payable.

VII. Conclusion, Findings & Suggestions

Based on above analysis an appropriate conclusion, findings and suggestions have been given in this chapter.

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