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### Role of Insurance Regulator in Risk Management of Life Insurance Companies in the Private Sector in India

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#### ABSTRACT

This article is an attempt to study the role of the Insurance Regulator of India namely Insurance Regulatory and Development Authority of India (IRDAI) in the regulating and mitigating the following selected key financial and the Investment related risks faced by the life Insurance companies in the private sector India.

1. Solvency Risk
2. Liquidity Risk
3. Asset Liability Management
4. Persistency Risk
5. Credit Risk
6. Market Risk -Equity
7. Market Risk -Interest Rate
8. Concentration Risk
9. Operational Risk
10. Expense Risk

This has become more relevant in the wake of Life insurance Companies started going public in this year and the stakeholders now will include the general public in large

**Keywords:** Life Insurance companies, IRDAI, Policies and Regulation, Securities Exchange Board of India (SEBI), Insurance Laws, Risk Management.

## **1. INTRODUCTION**

In India, financial sector consists of three main pillars namely Banking sector, Mutual Funds and Insurance sector both Life and general put together. Each financial sector has its own main regulator to regulate and monitor the respective sector. Reserve Bank of India (RBI) the Central Banker regulates all Banks, Securities Exchange Board of India (SEBI) takes care of all asset management Companies of mutual funds and finally Insurance Regulatory and Development of India (IRDAI) regulates the Insurance sector.

Coming to life insurance sector, from 2000 it is open the private sector after the formation of IRDAI. It is interesting to note that IRDAI was to be named as Insurance Regulatory Authority (IRA) since they wanted their main focus was to play a Regulator role. But it was thought that since the life industry has been opened up and it has to reach maximum possible insurable population and there should be some organization to develop the same Based on this premises the name of IRA has been made as IRDA including the development function.

Given the size of the Industry and its impact on the Indian economy, the regulator's role becomes important in bringing out the regulations to monitor the various risks faced the Life insurance Companies in India.

## **2. REVIEW OF THE LITERATURE**

In the international scenario, use of derivatives as instruments to manage insurable and uninsurable risk began in 1970s and developed very quickly during 1980s. It was also in the 1980 the companies began to consider financial management or portfolio management. Financial risk management has become complementary to pure risk management for many companies. Financial institutions including banks and insurance companies intensified their market risk and credit management activities during the 1980s. Operational risk and liquidity risk management emerged in the 1980s.

International regulations of risk also began in 1980s. Financial institutions developed internal risk management models and capital calculations models to protect themselves from unanticipated risk and reduce regulatory capital. At the same time governance of risk management became essential, integrated risk management was introduced and Chief Risk Manager (CRO) position was created. [1]

When it comes to Indian scenario about risk management in life insurance Industry, in spite of sound legislative frame work, the life insurance industry had to be nationalized in 1956 because of the threat of insolvencies and gross misuse of policyholders' funds by the insurance companies. All the Life Insurance companies were merged into a single corporation and LIC was created.

The nationalization did solve some of the problems but there was a growing recognition that the consumer did not benefit in the absence of competition in terms of wider choice and competitive pricing.

Subsequent to the recommendations of the Malhotra Committee it was decided to allow private enterprise to enter into the insurance sector but with an appointment of an Independent regulatory mechanism should be established to instill confidence among the prospective policy holders in the financial viability of the private insurance companies. Following this recommendations, the IRDA Bill was passed in December 1999 and became an Act in April 2000. [2]

Thus it can be seen that the insurance sector went through a full circle of phases from being unregulated to completely regulated and then currently being partly deregulated. It is governed by a number of acts.

Now there are 23 companies in the Life Insurance space in the private sector and they are managing an asset under management of Indian Rupees 5,34,532 Crores (5345320 millions) as on 30<sup>th</sup> September 2016 based on their public disclosures.

### **3. OBJECTIVES OF THE STUDY**

Insurance Industry is regulated by the following:

The Insurance Laws and its subsequent amendments

The Insurance Act of 1938 and its subsequent amendments

The Insurance Rules 1939

The IRDA act 1999 and its amendments with the following provisions,

- IRDAI regulation
- Guidelines
- Circulars
- Notices
- Orders

In this article, the role of IRDAI in regulating, mitigating and monitoring the following ten Key risks in Life Insurance industry in the private sector in India, is being studied

- Solvency Risk
- Liquidity Risk
- Asset Liability Management
- Persistency Risk
- Credit Risk
- Market Risk-Equity
- Market Risk-Interest Rate
- Concentration Risk
- Operational Risk
- Expense Risk

### **4. DATA AND METHODOLOGY**

We have gone through the following acts and circulars with reference Life Insurance Companies in the private sector. In addition the Insurance Act of 1938, the IRDAI through The IRDA act 1999 and its amendments have issued regulations, Circulars, guidelines to be followed by the Life Insurance Companies.

We have given the reference of those circulars. Since the circulars are being issued from the Year 2000, we focused on the latest acts and the circulars given below that are being in force pertaining to the above selected risks

- IRDA Investment Regulations (Investment) Regulations, 2016 dated 1st August 2016
- IRDA/ACTL/CIR/ALM/005/01/2012 dated 3rd January 2012
- IRDA/ACTL/CIR/GNL/045/03/2011 dated 7th March 2011
- IRDA/F&I/INV/CIR/138/06/2014 dated June 11.2014.
- INV/CIR/008/2008-09 dated 22nd August, 2008 – annexure II and III
- IRDA/F&I/CIR/EMT/085/04/2012 dated April 12,2012
- IRADA/ACT/CIR/MISC/035/01/2014 dated January 23
- Expenses of Management Insurers transacting Life Insurance business) regulations, 2016 published in the Gazette of India on 9th May 2016
- The Insurance Laws (Amendment) Ordinance,2014 and which became as an act from 26th December 2014
- IRDAI in their discussion paper on Listing of Insurance Companies vide circular IRDA/F&A/MISC/LSTD/162/08/2016 dated August 11, 2016

In addition to the above, we have also studied the relevant circulars of Securities Exchange Board of India (SEBI) referred by IRDAI.

- SEBI circular no MFD/CIR/14/088/2001 dated March 28, 2001
- SEBI circular CIR/CFD/POLICY CELL/7/2014 under Listing guidelines under clause 49 of the Equity

## **5. MAIN DISCUSSION ON THE RISKS AND THE ROLE OF THE REGULATOR**

In this section we start discussing the risks one by one and the regulations and the relevant circular and the act.

### **Solvency Risk**

As already mentioned under Liquidity risk the insurer should have sufficient liquidity to cover their liability at all times and this is taken care of by addressing Solvency Risk also in addition to ensuring investment in better quality of Debt and equity scrips as detailed under Liquidity risk.

To address this risk IRDAI has taken the following steps.

At the time of issuing of applications and subsequent screening for setting up Life Insurance Company in the private sector, it has put enough filters to weed out unscrupulous and dubious promoters to get into this sector. There are detailed information obtained regarding the Promoters' background, assessing the capability for running a Life Insurance company, their infrastructure in place their financial strength etc.,

Also it has set a limit of Indian Rupees 100 crores (1000 Millions) as the minimum capital that the promoters should bring in for setting a Life insurance Company.

The Solvency margin which is defined excess of Assets over Liabilities should be 150%. And it is being monitored on a quarterly basis and should be certified by the Appointed Actuary of the Insurance Company.

IRDAI has given detailed guidelines as to how the different assets are rated and valued for the purpose of calculation of solvency margin. [6]

### **Liquidity Risk**

It is the risk of not having sufficient cash to meet operational needs at all times. It is related to the market risk as much as liquidity of the overall portfolio and need to be taken into account in portfolio selection.

It is not sufficient that insurers' assets are more than to cover the liabilities and which is reflected in the solvency margin. In addition it should be seen that these assets are sufficiently liquid to tide over the current as well as the future cash requirements when required for future expansion etc.,

In one way it also refers to situation where the insurer is not able to meet its financial obligations. It is the not only the risk of inadequate cash to meet the obligations but also having excess liquidity that is not being managed and invested properly.

For addressing the issue of Liquidity risk IRDAI has taken the following measures.

In case of equity it has stipulated that Insurers should not invest in thinly traded shares

Liquid mutual funds should consist of investment in Government securities and money market instruments and this only comes under the definition of Approved Investment category.

As mentioned under Credit risk, the mandatory investments in Approved Investments mitigate the risk of investment in illiquid stocks.

For the mitigating the risk of having excess cash it has mandated that the maximum limit for investment in Liquid mutual funds that are categorized under Approved investment can be only 10 % in Life Fund and 10 % Unit Linked Insurance Plan (ULIP) funds. [3]

### **Asset Liability Management Risk (ALM)**

Keeping in mind that the Life insurance is a long term contract and this period can start from minimum 5 years to in many cases extend up to 35 years, the life insurance company should invest in such a way that its assets should match its long term liabilities to avoid mismatching.

Average duration of the assets can be less than the average duration of the liabilities thus exposing the company to reinvestment risk. It is the risk of not selecting appropriate assets that match liabilities in nature and term.

IRDAI requires that the Company has to set up Asset Liability Management Committee consisting Directors of the company and should include the Appointed Actuary, Chief Finance Officer and Chief Investment Officer.

This will meet at least once in a quarter to assess the Asset Liability Match and measures taken by the company to manage the same and this should be reported to IRDAI on a quarterly basis.

By reviewing the Asset Liability gap quarterly by the ALM committee, the appointed Actuary recommends to the company about these gaps and by investing the future investments in the respective years of longer duration and bridge the gap of mismatch.

Asset Liability mismatch may arise due to the following:

- Market related risk which affects the price of the equity volatile and in a worst scenario may bring the investment in equity come down drastically.
- Interest rate risk which may bring Reinvestment risk in the case of falling interest scenario
- Liquidity risk which may arise due to illiquidity of the assets that are held
- Expense risk
- Underwriting risk

Asset Liability Management and Stress Testing include the following:

- There should be a Board approved ALM Policy
- The insurer shall examine all risk requiring the coordination of its assets and liabilities
- The Insurer should include Market risk covering interest rate risk, equity risk, currency risk and related credit risk in addition to Underwriting risk and Liquidity risk.
- Impact on duration due to fall in Equity values by 30%, 100 basis point fall in yield on Fixed income securities, adverse deviation of 10% in mortality/morbidity, expenses, withdrawal/lapse rate and decrease/increase of 25% in New business volumes [7].
- Stress Testing. This helps to know the vulnerabilities in different scenarios and they have prescribed the minimum requirement for the stress testing [8].

The Appointed Actuary is required to submit a report on the above points on a quarterly basis.

### **Withdrawal or Persistency Risk**

This is the risk of withdrawal of the policy holders by not renewing his policy especially after paying one the first premium.

Every insurer spends considerable expenses for acquiring life insurance premium in the first year. They expect that this Life Insurance policy will run their term of 10/15 years and their expenses spent in the first year get evened out during the long policy term. In this context if the policy holder does not renew his policy the insurer cannot recover the expenses incurred in the first year. Also the policy holder loses his insurance cover and considerable portion of his premium paid. Thus both the insurer and the policyholder lose in this bargain. In addition to this, existing policy holders stand to lose for having to bear the additional expenses.

Persistency of policies is the backbone of life insurance industry long term sustainability and growth. Persistency can be measured both in terms number of policies as well as the premium returned in the books of an Insurer since inception.

They have also expressed their disappointment over the low persistency rates in 13th month and subsequent months, which was very unhealthy compared to new business growth rates. They have mandated that life insurers to comply with the methodology and other requirements stipulated in the circular.

They have prescribed the method of computation of 'n'th month persistency rate. They have made the Appointed Actuary responsible for the analysis and reporting in the annual report and public disclosures

They wanted the report on persistency to be approved by the Board of Directors. The Appointed and Chief Executive Officer to certify that information provided to the Authority on persistency is accurate and complete. [9]

### **Credit Risk**

It is the risk that a counter party to an agreement will be unable or unwilling to fulfil their obligation.

For a life Insurance company's angle, the credit risk predominantly arises in the form of not receiving of Interest or no repayment of principal or both, in case of debt securities.

With regards to Debt securities IRDAI has stipulated the following to mitigate the risk of default of interest.

Debt securities with Credit rating of SEBI approved credit Agencies like CRISIL, CARE and FITCH etc., should be of AA rating, to be considered as Approved Investments as defined.

They have also cautioned that they should not go merely by the credit rating alone but do detailed analysis of the financial and other parameters before investing in debt securities and this should be monitored on a periodic interval.

In case of Life Fund which consists of Shareholders' and Policy Holders' fund, IRDAI has mandated that approved Investment (equity and debt put together) should be 85% of the Fund and in case of Unit Linked Insurance Products (ULIP) fund it should be 75% at the Individual segregated Fund level. In case Pension and General Annuity Funds which caters to Group Insurance schemes, Gratuity and Annuity schemes the Approved investments should be 100% since it involves Pensioners funds.

At least 75% of the Investment in Debt securities including Government securities should be of AAA credit rating for Long term bonds and A1 Plus for short term instruments and this is applicable to all the Funds namely Life Funds, ULIP Funds and Pension and General Annuity Funds.

It has also mandated that the insurer will disclose in their quarterly investment return under FORM-2 Part A, details of those debt scripts that has been downgraded during the quarter and the any movements in the previous downgraded debt securities.

Also the insurer has to disclose their nonperforming Assets where the company has not received the interest or repayment of Principal pending more than 90 days.

IRDAI also has mandated that the insurer is to have a mechanism in place to keep track of the movement in the credit ratings of the debt scripts in their books. [3]

### **Market Risk – Equity**

It is the risk pertaining to equity component relating to changes in the value of the portfolio due to movement in the market value of the assets held.

Exposure to equity Market although beneficial in the long run depending upon the market cycle. This can be mitigated to some extent by taking care of Concentration risk and by hedging.

### **Market Risk-Interest Rate**

It is the risk of an adverse effect of interest rate movements on a firm's profits or Balance sheet. It affects a firm in two ways-by affecting the profits and by affecting the value of its assets or liabilities. It becomes all the more important in case of Life Insurance companies whose liabilities are long term in some cases extending up to 30/35 years. The risk arises if the assets and liabilities do not match in their exposure in interest rate movements. It is due the sensitivity of the interest income/expenditure or values of assets/liabilities to the interest rate fluctuations.

In the case of interest rate falling scenario there is a reinvestment risk for investing the fresh inflows of the new business premium or the inflows that comes out of debt securities that have matured. These funds will fetch now a lower return if invested since the interest rate has come down.

For taking care of this issue IRDAI has come with a circular on interest rate derivatives allowing companies to deal in rupee interest rate derivatives [9] & [14].

The circular covers types of Interest Derivatives

1. Forward Rate Agreements (FRAs)
2. Interest Rate Swaps (IRS)
3. Exchange Traded Interest Rate Futures (IRF)

The above instruments will help the insurers to take measures to mitigate the Interest Risks.

IRDAI has made it a point to see that the interest derivatives are used for hedging purposes and not for speculation?

To ensure hedging effectiveness at the time buying interest derivatives and ensuring monitoring the same in periodic intervals. The following steps are to be put in place before a life insurer buys interest rate derivatives.

1. The company should have a derivative policy in place approved by the Board which covers aspects that apply to the functioning of the derivative transactions undertaken to substantiate the hedge strategy to mitigate the interest rate risk.
2. Identification of various types of risks faced by the Insurer and establishing clear and comprehensive set of limits to control these.
3. Solvency/Capital impact due to the use of derivatives.

They have also made the Investment Committee (IC with an oversight of the Board of Directors.

4. The Board shall ensure that the Rupee Interest rate Derivatives are suitable for the portfolio handled by the Insurer and the liabilities undertaken by the insurer. The Board shall supervise whether suitability and appropriateness was evaluated by the market maker [10].



## **Concentration Risk**

There is a risk of concentration of investment in the following ways

- Single investee company
- Single investee business group
- Single Industry sector
- Promoter group company of the Life Insurer
- Investment in Term Deposits in a particular Bank

For addressing the above risk, IRDAI has put in place the following under exposure norms

Single investee company investment is limited to lower of 10% of the Fund or 10% of the Investee Company's equity at their face value.

In case of Debt it is limited to lower of 10% of the Fund or 10% of the Investee Company's equity plus debts put together.

Investment in a Single investee company's group is restricted to 15% of the Fund.

In case of Industry the insurer has to follow the Industry classification as per National Industry Classification (NIC) and exposure in any single Industry sector should not be more than 15% of the Fund except in case of Infra structure sector. However they have relaxed this limit to 25% in case of Financial and Insurance Activities.

And in case of Investment in Promoter Group Companies of the Insurer this exposure is limited to 5% of the Overall fund.

For investment in a scheduled Bank the exposure is limited to 3% of the overall fund or 5% of the segregated ULIO funds whichever is lower.

These limits are to be adhered all times and this is monitored through the Quarterly Investment returns submitted to IRFAI. The Concurrent Auditor has to certify that the insurer has complied with these exposure norms in their report.

## **Operational Risk**

It is the risk of loss due to fraud or mismanagement within the Fund management organisation itself.

These are risks of losses resulting from inadequate or failed internal process, people and systems.

There should be segregation of the Investment department of the Life Insurance into the following departments to take care of the operational risk.

*Front Office:* Consists of Fund Managers, Research Analysts and Dealers all for equity and Debt. This will be headed by Chief Investment Officer. This department be responsible for deciding the Asset Class, the specific script taking into account availability of funds and at the same time taking care of all compliances including Insurance Act, IRDAI investment guidelines and circulars Investment Policies and other Internal norms of the Company.

*Mid Office:* takes care of Compliances with reference to Investments, monitoring of Performance Analysis of Funds and risk management and submission of Quarterly Investment returns to IRDAI.

*Back Office:* This takes care of Trade settlement, Accounting and Net Asset Value (NAV) computation the Unit Insurance Funds Both Mid Office and Back office should be reporting to Chief Finance Officer.

Thus by segregating the Investment functions and settlement and monitoring functions separately IRDAI has introduced Risk mitigations of the operations of the Investment Department.

IRDAI has also mandated that there should be a quarterly concurrent Audit on the Investment Risk Management Systems for those Life Insurers whose assets under management have crossed Rupees 500 Crores.

They have also said that the auditors should cover 100% of the transactions of the Investment department during the quarter in addition to checking daily NAV computation. They have made a detailed check list of prepared by the Institute of Chartered accountants of India.

This check list is very comprehensive one and covers IRDAI circulars on Pattern of Investments, exposure norms and inter fund transfers etc., covering functions of Front office, Mid Office and back office. The concurrent auditors' report format has been prescribed with few Annexures.

Also in their quarterly Investment returns in Form 4 (read with regulation 10)

Exposure/Prudential and other investment norms–Compliance certificate consisting the following:

- A. Exposure-Compliance-All insurers- This covers compliance on exposure norms with reference to Investee Company, entire Group of the Investee Company, Promoter group company of the Insurer, Industry sector, Rating Criteria regarding Approved Investments and other investments as well as credit rating criteria
- B. Confirmations-All Insurers-this covers Confirmations on Policy/systems & Procedure which includes about the software application for the investment operations are fully automated without manual intervention, Investment policies of the Insurer. Segregations of front, mid and back office, whether Standard Operating Procedures (SOP) is in place and reviewed periodically etc.,

- C. Confirmations-Life Insurers-this covers regarding the following pertaining to ULIP business

Reconciliation of premium received under each Product and fund wise

Reconciliation of Units for each ULIP fund between the Custodian and the Investments system of the Insurer

Reconciliation of the Investments at the scripts level fund wise

Compliance to all the information should be certified by the Chief Executive Officer, Chief of Finance, Chief of Investments and Chief Risk Officer of the Insurer.

The above certification by the Key management personnel including the Chief Risk Officer of the Insurer has put the onus on part of the Insurer to see that the compliances requirement of the IRDAI is being followed and ensuring risk management.

Information Technology System risk is also part of the operational risk and IRDAI vide their Circular no INV/CIR/008/2008-09 dated 22<sup>nd</sup> August, 2008 – annexure II, has prescribed that Information system to be conducted once in three years by an auditor with a Certificate Information and System (CISA) qualified and with experience similar type of audit. They have prescribed detailed check list comprising of the following:

1. Review of Standard Operating Procedure (SOP) covering ‘Systems and Processes’  
This covers a check list about the controls of the Investments department including Maker Checker Process, Compliance to SOP, avoidance of short selling etc.,
2. Review of information Technology (IT) Systems and Processes supporting Investment Operations  
This covers the existence and compliance to IT Policy, Incident Management Procedures, Access Control Procedures, Testing and Maintenance of Business Continuity Plan (BCP), Net -work Performance Measurement, Information back up etc.

They have mandated that this Audit has to be conducted now once in Two years to see that it is not one- time exercise [11].

### **Expenses Risk**

This risk is due to disproportionate increase in expenses that adversely affects the policy holders as well the profitability of the insurers. This becomes more relevant in wherein every Life insurance company with the help of foreign investors are trying to get a bigger slice of the insurance market in India and are ready to spend money for the same.

There is a very stiff competition among insurers and some were willing increase the top line premium income by overspending at the cost of Policy holders. This was affecting the profitability of the Insurers also. Noticing this trend IRDAI brought out a detailed notification

Expenses of Management (EOM) limits were based on certain percentage of the premium depending upon the no of years of completion of operation. Every Insurer was required to submit a return to the IRDAI a Statement of Expenses of Management annually within a prescribed time [12].

Subsequently IRDAI has brought in detailed guidelines on the limits on expenses covering the following:

**Part I:** Covering scope and definitions

**Part II:** Limitations of Expenses of Management (EOM) in Life Insurance business that covers

- (a) Commission or other remunerations paid to Insurance Agents and insurance intermediaries.
- (b) Commission or Expenses reimbursed on reinsurance issued.
- (c) Operating expenses

**Part III:** Head office Expenses

**Part IV:** Allocation of Apportion of EOM which explains about having a documented policy for allocation of direct expenses and apportionment of indirect expenses.

**Part V:** It describes about the returns to be submitted on EOM and duly certified by the Statutory Auditors of the Insurer.

This return along with the Statutory Auditors certificate shall be reviewed by the Audit Committee prior to being placed before the Board Statement of EOM duly adopted by the Board shall be filed with Authority within stipulated time.

In essence this circular restricts the Life insurers who have completed 10 years are operation should not be spending more than 120% of the new business premium in the year 2016-17 and gradually they should bring the expenses to 110% and 100 % in the subsequent years that follows.

Head Office (HO) expenses should be limited to 5% of the Gross premium income.

**Part VI:** Power to exempt and action for Non Compliance: it includes directing that excess expenses incurred shall be borne by the Shareholders' Funds and also the Authority may stop the Insurer from underwriting new business premium. [13]

Thus it can be seen that IRDAI has put in place a well thought about mechanism to mitigate the Expense Risk thus protecting the Policy holders' interest and at the same time bringing about a stricter financial discipline.

### **Limitations of the Study**

The Insurance Act and the IRDAI regulations are highly technical especially with reference to Actuarial subjects. Since the purpose of this articles is focus on the essence of the measures taken by IRDAI we have not gone in details of each circular on certain topics and definition but captured the essence of the circular.

There are other circular relating Investments, Actuarial and Finance and accounts and we have taken for the purpose of this study certain important circulars which we thought will be sufficient bring the focus.

The scope of Risk management is vast including the Enterprise Risk Management (ERM) which covers the entire gamut, including the organizational structure, Risk culture, Corporate Governance etc. we have restricted ourselves certain risk mainly focusing on financial risks and other important risk connected with the same.

### **Implication of the Research**

We find that IRDAI in all earnestness have brought in enough regulations for helping and controlling the risk management of certain risks chosen for this study and it has taken into all the important aspects and by complying and adhering to these regulations the life insurance companies will be able to mitigate the effects of these risks.

The present study is done taking into account certain risks mostly on Investments and other financial related. There are other risks Compliance Risks, Underwriting risks, Business risks, Mortality risks, Competitors' Risk etc., which are equally important. Research on these also may throw some more light about the role of the Regulator in addressing these issues.

The present study has taken on role of the regulator taking in to account their based on the circulars and guidelines. Further study can be undertaken to see the impact of these on the risk management of the Life insurance companies with reference to their compliance.

The scope can further expanded by looking into comparison into what other regulators namely RBI and SEBI have implemented for the risk management with reference to Banking sector and Mutual Fund Industry respectively.

In this study we have taken only study of Life Insurance Companies and we can also compare to look into the risk management of General Insurance companies.

## **6. DISCUSSION AND CONCLUSION**

It can be seen that the regulator has formulated their regulation based on the experiences of the Regulators of the Banking and Mutual Funds industry. Life insurance Industry has been growing at a good rate and there no serious complaints from the public about the functioning of the Life Insurers. Also the IRDAI has through their periodical inspection mechanism have found deviations of the compliances and have taken action against the Life Insurance companies penalties and warnings.

Also since many of the promoters of life insurance companies were banks and established Nonbanking Finance Companies (NBFCs). Added to this there are enough foreign partners who have their own rich experience in their own countries in running life insurance business and these factors have definitely helped in the risk management.

Also the IRDAI has been conducting regular inspection of the Insurers regarding the compliance of the circulars and have levying heavy penalties for noncompliance, states that failure to comply with provisions of section 27, section 27A, section 27B, section 27C, section D and section 27E will (all these section pertain to investments) shall be liable to a penalty not exceeding Indian Rupees 25 Crores (250 millions) [4].

This will be a deterrent to the Life insurance companies and they will be extra careful in complying with these regulations.

Recently ICICI Prudential Life Insurance Company has come out with a public issue of shares in September 2016 and there are other companies waiting for their opportunity to go public. The Life Insurance companies who have completed ten years of operations should go public and this is being debated. [5]

Once the Life insurance companies go public their responsibilities and the role of the regulator also increase because of the involvement of public at large who have now become shareholders.

Also in the wake of possibility of Life insurer going public within next three years and they will be bound by Listing guidelines by SEBI and compliance to them will pose additional challenge and it will be worthwhile to study the scenario at that point of time [15].

## **References**

Georges, D. (2013), Risk management: History, definition, and critique. *Risk Management and Insurance Review*, 16(2), 147-166 DOI: 10.1111/rmir.12016.

- C.S. Rao (2006), Life Insurance Industry: His KLN Prasad Memorial lecture delivered at the Administrative College of India on 21<sup>st</sup> April, 2006 on Life Insurance Industry.
- Insurance Regulatory and Development Authority of India (2000), IRDA in their Investment Regulations, 2016 dated 1<sup>st</sup> August 2016.
- The Insurance Laws (Amendment) Ordinance (2014) dated 26<sup>th</sup> December 2014.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their discussion paper on Listing of Insurance Companies vide circular IRDA/F&A/MISC/LSTD/162/08/2016 dated August 11, 2016.
- Insurance Act (1938), Insurance Act 1938 in clause 27A for Solvency margin.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their Circular (IRDA/ACTL/CIR/ALM/005/01/2012 dated 3<sup>rd</sup> January 2012) on Asset Liability Management.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their Circular (IRDA/ACTL/CIR/GNL/045/03/2011 dated 7<sup>th</sup> March 2011) on Stress Testing.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their Circular (IRADA/ACT/CIR/MISC/035/01/2014 dated January 23) on Withdrawal or Persistency Risk.
- Insurance Regulatory and Development Authority of India (2000) IRDAI in their Circular (IRDA/F&I/INV/CIR/138/06/2014 dated June 11.2014) on Interest Rate Derivatives.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their Circular (INV/CIR/008/2008-09 dated 22<sup>nd</sup> August, 2008 – annexure II and III) on Operational Risk.
- Insurance Regulatory and Development Authority of India (2000), IRDAI in their Circular (IRDA/F&I/CIR/EMT/085/04/2012 dated April 12, 2012) on Expenses Risk.
- Insurance Act (1938), Insurance Act 1938 section 40 B read with Rules 17 D of the Insurance Rules of, 1939 on Expenses of Management.
- Reserve Bank of India (n.d.a). RBI in their clause 8.3 of guidelines issued Circulars [DBOD No.BP.BC.86/21.04.157/2006-07 (RBI/2006-2007/333) Dt. April 20, 2007 & DBOD. No. BP. BC.27/21.04.157/2011-12 (RBI/2011-12/136) Dt. 2 August, 2011] on Rupee Interest rate Derivatives.
- Securities and Exchange Board of India. (2014), SEBI circular (CIR/CFD/POLICY CELL/7/2014) Listing guidelines under clause 49 on Equity.