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Public Disclosure by Indian Life Insurers – An Empirical Study

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ABSTRACT

As the Indian insurance industry was characterized by the presence of only public sector players and with the life insurance side being a monolithic structure devoid of even little competition, information disclosure has never been considered very vital. The present day insurance industry, however, boasts of a more number of players. It has embarked upon the process of public disclosures being made by insurers in the recent past (January 2010). Public disclosures provide information to the policyholders to make necessary decisions before entering into a contract and strengthen corporate governance and market discipline for the insurers. In light of establishment of the apex body, Insurance Regulatory and Development Authority of India (IRDA) in 1999 and its introduction of standards on public disclosures for the insurers, this study, using content analysis, analysed the public disclosures made by the Indian life insurers on their websites. It is an empirical study and the sample included all the Indian life insurers both public (1) and private (22) numbering 23. Public Disclosure by Indian life insurers is mandatory and given in a set of 42 statements containing specific information about the working of an insurance company targeting the stakeholders at large. For the purpose of this study, an original Life Insurer Public Disclosure Index (LIPDI) was developed by classifying the statements into six attributes which relate to actuarial, investment, corporate governance, financial, policyholders and insurance agent. Through content analysis method, the availability, completeness and relevance of the information given in the public disclosures were analysed. The period of the study ranges from 2005-06 to 2010-11. This study used statistical tools such as Chi Square Test, Correlation and ANOVA. It was found that there is adequate public disclosure by Indian Life Insurers but there exists a significant company-wise difference. Public disclosures lend a higher level of credibility only when there is uniformity, lucidity and accuracy in the type of disclosures made as also the periodicity and entirety at which the information is provided in order to make meaningful comparison.

Keywords: Indian Life Insurance Industry, Public Disclosure, Life Insurer Public Disclosure Index (LIPDI), Content Analysis

JEL Classification: G22

INTRODUCTION

As the Indian insurance industry was characterized by the presence of only public sector players and with the life insurance side being a monolithic structure devoid of even little competition, information disclosure has never been considered very vital. The present day insurance industry, however, boasts of a bigger number of players. The most important function of the regulators and the supervisors is to ensure that the stability of the system remains intact at all times. The failure of a player for whatever reason will shake the confidence of the average consumer whose knowledge of the insurance business is not at a very high pedestal. One way of ensuring that the conduct of a player is at par with the expectations of the stakeholders, in general, and the regulator, in particular, is by ensuring that the various business statistics and other relevant information are displayed for public viewing at frequent intervals.

REVIEW OF LITERATURE

There are studies available in the area of disclosure practices by life and general insurers. Few relevant studies are presented in the following section. Coffin and Bill (1997) examined the role played by webmasters in managing the insurance companies' electronic commerce strategies by analysing the strategies followed by different companies. The role of a webmaster in the context of an insurance company had become matured enough to include electronic commerce strategies, marketing and customer relations apart from programming, web site design, and network support. The services offered by an insurance company through its website had to cater to the needs of its agents, insured and consumers in a rapid, accurate and updated manner as there is a possibility of the website becoming obsolete very easily. Insurers which have added more content on their websites focussing on life advice information have been largely benefited as consumers get back to a trusted adviser when they were in need of products. Insurers also use their web site for internal merchandising to make people aware of the business units and corporate

entities, the capabilities of the web and what the companies were trying to do with their web site. Bell and Allison (1998) summed up the views of the analysts on the need for better reporting by the insurers about their operations. Investors have an obvious interest in the earnings reports of insurers along with their source. Financial reports of insurers showing combined sales figures for radically different products do not provide utility to the investor. Segment reporting for major products in logical groups based on the source of earning profits is essential when the products generate their income in drastically different ways.

Franzis (2000) surveyed the websites of top 250 property/casualty insurance firms (based on 1997 net written premiums) and found that the insurance industry had lagged behind the other industries in using the internet as a new medium of doing business. Also, the larger companies had more sophisticated websites and majority of the surveyed companies used the websites only as marketing vehicle for familiarising their products in the public domain. Only a few companies provided interactivity, providing online real time quotes and online policy issuance. Patten (2002) identified the level of financial and social responsibility information disclosures included on the web pages of 40 property and casualty insurance firms during August 2000. The results indicated that the level of financial disclosure by the insurance firms was only moderate, and that social responsibility disclosure levels tend to be very low. Also, insurance firms who were taking the lead in terms of developing the web for potential financial gain were not outperforming the others with respect to information disclosure.

Yao (2004) presented an overview of the current state of e-commerce in the New Zealand insurance industry and measured the extent of e-commerce usage by surveying the website content of insurers. The survey found that all of the insurers had websites but less than half of these were New Zealand ones as most of the companies used an international website to service all their global customers with majority of these sites not including many features specific for New Zealand customers. Overall it was found that the uptake of electronic commerce is relatively slow and the insurance industry is only employing the Internet to distribute information, with few companies offering the capability of online transactions.

Yannis, Pollalis, and Vozikis (2007) have described the state of the insurance market in Greece, paying attention to the key metrics that define the size and shape of the industry, explored the e-business landscape in Greece and unveiled the relations between the internet and insurance practice. E-insurance presence and

profile of the insurance companies in Greece have been delineated through the evaluation of their web sites, using various criteria. A frame of a web strategy had been suggested in order for the insurers in Greece to take the lead in moving the insurance industry into 21st century technology capabilities. Charumathi (2011) measured the extent of information disclosure made by Indian life insurers on their websites by developing an original Insurance Disclosure Attribute Index (IDAI). The information disclosed on the websites were compiled and classified into different attributes such as general attribute, financial attribute, insurance agent/advisor attribute, corporate governance attribute, policyholders attribute and shareholders attribute with scores assigned for each attribute and finally arrived at overall disclosure score for each insurance company using IDAI. The study concluded that websites of Indian life insurers although well developed to a larger extent pose a dilemma for the user in the context of comparability, due to the lack of uniformity and absence of vital information relating to various attributes by certain companies on their websites.

Adams (1997) investigated the motives for voluntary disclosure of public annual reports of New Zealand-based life insurance companies. A framework was drawn from the Gibbins et al. (1990) model of corporate disclosure. Interview evidence was gathered from 22 financial managers and/or senior executives in 12 life insurance companies selected purposefully between October 1994 and April 1995 and content analysis was used. The empirical evidence suggested that voluntary disclosure was a complex phenomenon which was influenced both by organizational antecedents, such as company culture and tradition, and environmental conditions, such as industry norms and market competition. Adams and Hossain (1998) applied the managerial discretion hypothesis to explain the differences in the level of voluntary disclosure of information in the annual reports of New Zealand life insurers. The managerial discretion hypothesis implied that the level of voluntary disclosure by the life insurers, was related to eight firm-specific factors, namely organizational form, assets-in-place, product concentration, reinsurance, localization of operations, number of non-executive directors on the board, firm size and type of distribution system. The relationship between voluntary disclosure and the eight explanatory variables were specified in a fixed-effects regression model using 1988 to 1993 data of the New Zealand's life insurance industry. The results indicated that organizational form, firm size, product diversity and distribution system, were positively related to the level of

voluntary disclosure, while, assets-in-place and localization of operations were not significant variables. The independent variables, non-executive directors and reinsurance were statistically significant in the opposite direction to that predicted.

Prefontaine et al. (2011) analysed the informational content of voluntary embedded value public financial disclosures by Canadian life insurers during the 2000-2010 time period. As opposed to traditional statutory balance sheet and earnings' reporting, embedded value voluntary disclosure attempted to estimate the present value of future earnings generated by a life insurer's current book value of various insurance businesses. The results in the study indicated that embedded value of voluntary financial disclosures provided relevant informational content from the years 2000 to 2007, but failed to communicate intrinsic informational content and to provide value relevance to external stakeholders as they were not found to be closely associated with life insurers' market value of equity and credit ratings during the recent 2007-2010 period of market turmoil. Edmondo et al. (2011) outlined the emergence of voluntary disclosure of Embedded Value (EV) by major European life insurers. EV, a forward-looking measure captured the expected net value of the underlying insurance contracts as a component of equity and profits calculated as the change in equity between two consecutive periods. Value relevance of voluntary EV disclosures adopted by 28 European life insurers during 2005-2010 had been empirically tested. Preliminary results were consistent with the value relevance of EV disclosures.

Gaa and Krinsky (1988) focused on the desirability of uniformity in reporting financial information to insurance regulators by insurers and how uniformity may be achieved. Desirability of uniformity was analysed as a part of the mechanism of assessing and achieving insurers' solidity. Concepts of cooperative game theory were employed to analyse the need for a regulator in promulgating uniform standards, or that uniformity be achieved directly by insurers themselves. It was found that during instances of serious constraints on the ability of policyholders to process information, uniformity may convey substantial benefits to policyholders, investors, and insurers. Also, the inability of a competitive system to ensure uniform reporting system even though it may be in the interest of every insurer and policyholder provides an economic justification for the existence of insurance commissioners to promulgate standards directly. Guidance paper on Public Disclosures by Insurers (2002) recognized the role of supervisors in encouraging insurers to make effective risk disclosures, critical to market discipline. Public

disclosure by insurers enables market participants to understand an insurer's current financial condition and future viability. Quality of public disclosures depends on its relevance, timeliness, accessibility, comprehensiveness, reliability, comparability and consistency in facilitating decision making by market participants. Public information should include descriptions of financial position, financial performance, risk exposures and how they are being managed. Disclosures should also include an adequate description of how information is prepared, including methods applied and assumptions used along with information about an insurer's business, management and corporate governance to help market participants assess an insurer's efficiency and overall strength, future prospects and ability to respond to change.

NEED FOR THE STUDY

The emphasis on public disclosures is a worldwide phenomenon. Insurance supervisors globally have emphasised the players to make the business information public in order that a true assessment of their efficacies can be made by the stakeholders. The Indian insurance industry has embarked upon the process of public disclosures being made by insurers in the recent past. For a domain that is looking towards attaining global standards, the resultant analyses of the disclosures would create the right impetus for the industry to make improvements. In the light of establishment of the apex body, Insurance Regulatory and Development Authority of India (IRDA) in 1999 and by the introduction of standards on public disclosures for the insurers, it is worthwhile to analyse the public disclosures made by life insurers in India. Further, there is dearth of studies which deal with the extent of public disclosure made by Indian insurers. Hence, the present study tries to close this gap.

STATEMENT OF THE PROBLEM

Timely and reliable public disclosures of risks faced by the insurers are critical for ensuring fair and orderly growth of the insurance sector. International Association of Insurance Supervisors (IAIS) has recognized that the insurers have an equal if not greater responsibility towards the policyholders than their duty towards the investors as policyholders lose much more money than the investors in the event of the insurer's insolvency. Public disclosures provide information to the policyholders to make necessary decisions before entering into a contract and strengthen corporate governance and market discipline for the insurers. Several Indian life insurers

completing the statutory period of 10 years may be allowed by the IRDA to go for the Initial Public Offer (IPO). In this context, it is essential that the investors are fully aware of the financial performance, company profile, financial position, the risk exposure, the corporate governance and the management of the insurers well before the companies go for an IPO.IAIS has also prescribed that disclosures by the electronic means may be encouraged to ensure availability of historical data on a continuous basis to the various stakeholders. In this context, an empirical study on the extent of public disclosures made by Indian life insurers is significant.

OBJECTIVES OF THE STUDY

This study has the following objectives:

1. To identify the items of information disclosure by Indian life insurers and classify them into six attributes, viz., Actuarial Attributes, Investment Attributes, Corporate Governance Attributes, Financial Attributes, Policyholders' Attributes and Insurance Agent Attributes.
2. To construct ***Life Insurer Public Disclosure Index (LIPDI)*** based on the above items.
3. To measure the extent of Information Disclosure by Indian life insurers using the above index (LIPDI).
4. To compare the extent of information disclosure, company-wise, year-wise and attribute-wise.

RESEARCH METHODOLOGY

The present study is an empirical one using content analysis to examine the extent of public disclosures made by Indian life insurers on their websites. The sample for this study includes all the Indian life insurers both public (1) and private (22) numbering 23 (Table I). The abbreviations used and the names of Indian Life Insurers are given in Appendix. Public Disclosure by Indian life insurers is mandatory and given in a set of 42 statements containing specific information about the working of an insurance company targeting the stakeholders at large. For the purpose of this study, 42 statements were classified into six attributes such as actuarial attributes, investment attributes, corporate governance attributes, financial attributes, policyholders' attributes and insurance agent attributes. The attributes are classified into six categories and an original Life Insurer Public Disclosure Index (LIPDI) was constructed as shown in Table II. While constructing the index, equal weight age of 100 points was given for each item in the statement.

Table I: Sample Size

Year	No. of Companies
2004-05	14
2005-06	15
2006-07	16
2007-08	18
2008-09	22
2009-10	23
2010-11	23

Source: IRDA Annual reports 2004-05 to 2009-11

Table II: Life Insurer Public Disclosure Index (LIPDI)

I. Actuarial Attributes	Score	V. Financial Attributes	Score
L-24 Valuation of Net Liabilities	100	L-1 Revenue / Policyholders' Account	100
L-32 Solvency Margin	100	L-2 Profit & Loss / Shareholders' Account	100
L-42 Valuation Basis	100	L-3 Balance Sheet	100
Sub-total	300	L-4 Premium Schedule	100
II. Investment Attributes		L-5 Commission Schedule	100
L-26 Investment Assets	100	L-6 Operating Expenses Schedule	100
L-27 Unit Linked Business	100	L-7 Benefits Paid Schedule	100
L-28 ULIP-NAV	100	L-8 Share Capital Schedule	100
L-29 Detail regarding Debt Securities	100	L-10 Reserve and Surplus Schedule	100
L-33 NPAs	100	L-11 Borrowings Schedule	100
L-34 Yield on Investments	100	L-15 Loans Schedule	100
L-35 Downgrading of Investments	100	L-16 Fixed Assets Schedule	100
Sub-total	700	L-17 Cash and Bank Balance Schedule	100
III. Corporate Governance Attributes		L-18 Advances and Other Assets Schedule	100
L-9 Pattern of Shareholding Schedule	100	L-19 Current Liabilities Schedule	100
L-30 Related Party Transactions	100	L-20 Provisions Schedule	100
L-31 Board of Directors and Key Person	100	L-21 Misc. Expenditure Schedule	100
Sub-total	300	L-23 Receipts and Payments Schedule	100
IV. Policyholders' Attributes		Sub-total	1800
L-12 Investment Shareholders Schedule	100	**VI. Insurance Agent Attributes**	
L-13 Investment Policyholders Schedule	100	L-25(I&II) Geographical Distribution Channel- Individual& Group	100
L-14 Assets Held to Cover Linked Liabilities Schedule	100	L-37 Business Acquisition through Different Channels (Group)	100
L-22 Analytical Ratios	100	L-38 Business Acquisition through Different Channels (Individual)	100
L-36 Premium and Number of Lives Covered by Policy Type	100	Sub-total	300
L-39 Data on Settlement of Claims	100		
L-40 Claims Data for Life	100	**Total**	**4200**
L-41 Grievance Disposal	100	**(300+700+300+800+1800+300)**	
Sub-total	800		

Note: This LIPDI is constructed by the researchers. Note: L-1 to L-42 is the code used by Life Insurers for various items.

The public disclosures were verified for their availability, completeness and correctness. The period of the study ranges from 2005-06 to 2010-11. Scores were assigned for each statement and finally overall disclosure scores and attribute-wise scores for each insurance company were arrived at using LIPDI. Later, the disclosure scores were converted into percentages by using the formula, viz., **Disclosure % = Total Scores / 4200 *100.** This study used statistical tools such as Chi Square Test, Correlation and ANOVA.

HYPOTHESES

For achieving the objectives of this study, the following null hypotheses were tested:

H_{01}: All the life insurers have no adequate:

H_{01}a: overall public disclosure and

H_{01}b: public disclosure on six categories of attributes.

H_{02}: There is no significant correlation between the overall public disclosure and its six attributes, viz., actuarial **(H_{02a})**, investment **(H_{02b})**, corporate governance **(H_{02c})**, financial **(H_{02d})**, policyholders **(H_{02e})** and insurance agent **(H_{02f})**.

H_{03}: There is no significant company-wise difference in the overall public disclosure and its six attributes, viz., actuarial **(H_{03a})**, investment **(H_{03b})**, corporate governance **(H_{03c})**, financial **(H_{03d})**, policyholders **(H_{03e})** and insurance agent **(H_{03f})**.

H_{04}: There is no significant year-wise difference in the overall public disclosure and its six attributes, viz., actuarial **(H_{04a})**, investment **(H_{04b})**, corporate governance **(H_{04c})**, financial **(H_{04d})**, policy holders **(H_{04e})** and insurance agent **(H_{04f})**.

H_{05}: There is no significant difference among the various attributes of public disclosure by the Indian life insurers.

IRDA REGULATIONS RELATING TO PUBLIC DISCLOSURES

The apex body Insurance Regulatory Development Authority (IRDA) is entrusted with maintaining an efficient, fair and stable insurance market necessary for the growth of the industry as well as for the protection of the interests of policyholders. IRDA has been bringing out various regulations for fulfilling its mandate and one of the important measures to strengthen Corporate Governance and market discipline of the insurers is through a standard on public disclosures by insurers.

Public disclosures need to meet the following ends:

a) *Relevant* to decisions taken by market participants;
b) *Timely* so as to be available and up-to-date at the time those decisions are made;
c) *Accessible* without undue expense or delay by the market participants;
d) *Comprehensive and meaningful* so as to enable market participants to form a well- rounded view of the insurer;
e) *Reliable* as a basis upon which to make decisions;
f) *Comparable* between different insurers and other companies; and
g) *Consistent* over time so as to enable relevant trends to be discerned.

Exposure Draft on Public Disclosure by Insurers dated 8th October, 2009 proposed to bring out guidelines for the public disclosure of insurers to be effective from 1st November, 2009. The disclosures proposed were grouped into six heads viz., Company profile, Investment profile, Liability Valuation, Risk concentration, Solvency and Business statistics.

The additional disclosures, which at present are not being submitted to IRDA and being proposed include sensitivity analysis, related party transactions and reinsurance risk concentration.

IRDA Circular dated 28th January 2010 observed that the public disclosures were to be made by insurers and were required to ensure that the compliance of the circular is in place latest from period ending 31st March, 2010. Insurers may also need to host on their website the disclosures for a minimum period of 5 years under archives latest by 15th April, 2010. The disclosures will be effective from the period ended 31st March, 2010 through publication in News Paper and publication on Websites. Insurers shall host all the forms including Revenue Account, Profit & Loss Account, Balance Sheet, segmental reporting, schedules to accounts and other forms, on their website on quarterly/half yearly/ yearly basis.

The forms should be displayed on the web-site under advice to IRDA

- Not later than 45days from the quarter ending June, September, December and March.
- For the half year ending September – within 2 months of the close of the half year or 15 days from the date of approval of the accounts by the Board of Directors, whichever is earlier?

- For the annual account ending March – within 6 months of the close of the financial year or within 30 days from the date of adoption of final accounts by the Board of Directors, whichever is earlier?
- In order to have uniformity, Authority has standardized the key analytical ratios mandated for life and non-life insurers.
- Disclosures for the earlier quarters should be available under archives for a minimum period of 5 years.

Guidelines on Periodic Disclosures dated April 4th, 2010 provided that,

1. Insurers are not required to display last 5 years data on quarterly / half yearly basis and are required to display information based on the yearly audited statement. This clarification applies to disclosures pertaining to geographical distribution; claim Ageing/Quarterly Claim data etc.
2. The information for last 5 years will be based upon the audited statements. There is no need to revise the audited financial statements. Financial year ending 31st March 2010 would be considered as the end of the block of five years for the disclosure of past data.

Circular on Public Disclosure Dated 26th May 2011

Effective from the year ending March 2011, all insurers were required to file a certificate confirming compliance with the stipulations on public disclosures as under:

(1) Compliance with disclosure requirements on the Insurer's website and
(2) Compliance with the requirements on publication in the Newspapers.

The certificate was required to be submitted to the authority within one week of applicable timelines under respective disclosure requirements as stipulated in the circular under reference.

RESULTS AND DISCUSSION

Table III(A): Level of Public Disclosure by Indian Life Insurers for Various Attributes

		Actuarial Attributes (%)						Investment Attributes (%)					
Sl. No.	Company	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
1	Aviva	100	100	100	100	100	100	100	100	100	100	100	100
2	Bajaj	100	100	100	100	100	100	100	100	100	100	100	100
3	Birla	100	100	100	100	100	100	100	100	96	100	100	100
4	HDFC	100	100	100	100	100	100	86	86	86	100	100	100
5	ICICI	100	100	100	100	100	100	100	100	100	100	100	86
6	ING	100	100	100	100	100	100	100	100	100	100	93	100
7	Max	100	100	100	100	100	100	100	100	100	100	100	100
8	Met	100	100	100	100	100	100	100	100	96	100	100	100
9	Kotak	100	100	100	100	100	100	100	100	100	100	100	100
10	Rel	100	100	100	100	100	100	100	100	100	100	100	100
11	Saha	100	100	100	100	100	100	100	100	57	95	100	100
12	SBI	100	100	100	100	100	100	100	100	71	100	100	100
13	Shri	100	100	100	100	100	100	100	100	100	93	100	100
14	TATA	100	100	100	100	100	100	100	100	100	100	100	100
15	LIC	50	100	67	100	100	100	57	54	64	68	57	89
16	Bharti	NE	100	100	100	100	100	NE	71	71	100	93	100
17	Future	NE	NE	100	100	100	100	NE	NE	100	100	100	76
18	IDBI	NE	NE	100	83	100	100	NE	NE	86	100	100	100
19	Aegon	NE	NE	NE	100	100	67	NE	NE	NE	100	100	100
20	Canara	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
21	DLF	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
22	Star	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
23	India	NE	NE	NE	NE	100	100	NE	NE	NE	NE	100	100

Note: Results computed using LIPDI based on the information disclosed by the Indian Life Insurers. NE-Not in Existence

Table III(A), III(B), III(C), III(D) and III(E) shows the total scores, descriptive statistics and chi-square results of all Indian life insurers(both public and private) for each of the six attributes and overall disclosure in percentage.

From Table III (A) & III (E), it is clear that the public disclosures on actuarial attribute ranges from a minimum of 50% (LICI Life Insurance Company) to a maximum of 100% (all public and private life insurers) with mean value of 98.86%

and SD of 6.47. Public disclosures on investment attribute ranges from a minimum of 54% (LICI Life Insurance Company) to a maximum of 100% (All private life insurers) with mean value of 96% and SD of 10.36.

Table III(B): Level of Public Disclosure by Indian Life Insurers for Various Attributes

		Corporate Governance Attributes (%)						Financial Attributes (%)					
Sl. No.	**Company**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
1	Aviva	100	100	100	100	100	100	100	100	100	100	100	100
2	Bajaj	100	100	100	100	100	100	97	100	100	100	100	100
3	Birla	100	100	100	100	100	100	100	100	100	100	100	100
4	HDFC	100	100	100	100	100	100	97	97	97	97	97	97
5	ICICI	100	100	100	100	100	83	97	92	97	97	97	100
6	ING	100	100	100	100	100	100	100	100	100	100	100	100
7	Max	100	100	100	100	100	100	100	100	100	100	100	100
8	Met	100	100	100	100	100	100	100	100	100	100	100	97
9	Kotak	100	100	100	100	100	100	100	100	100	100	100	100
10	Rel	100	100	100	100	100	83	100	100	100	100	100	100
11	Saha	100	100	100	100	67	100	94	97	97	97	97	94
12	SBI	100	100	100	100	100	100	100	100	100	100	100	97
13	Shri	100	100	100	100	100	100	100	100	100	100	100	100
14	TATA	100	100	100	100	100	100	100	100	100	100	100	100
15	LIC	100	100	67	100	67	100	100	100	100	100	100	97
16	Bharti	NE	100	100	100	100	100	NE	100	100	100	100	100
17	Future	NE	NE	100	100	100	100	NE	NE	100	100	100	100
18	IDBI	NE	NE	100	100	100	100	NE	NE	100	100	100	100
19	Aegon	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
20	Canara	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
21	DLF	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
22	Star	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
23	India	NE	NE	NE	NE	100	100	NE	NE	NE	NE	100	94

Note: Results computed using LIPDI based on the information disclosed by the Indian Life Insurers. NE-Not in Existence

From Table III(B) & III(E), it is clear that the public disclosure on corporate governance attribute ranges from a minimum of 67% (Sahara Life Insurance Company and LICI Life Insurance Company) to a maximum of 100% (all public and private life insurers) with mean value of 98.86% and SD of 5.68.Disclosures on financial attribute ranges from a minimum of 92% (ICICI Prudential Life Insurance

Company) to a maximum of 100% (all public and private life insurers except HDFC Life Insurance Company and Sahara Life Insurance Company) with mean value of 99.36 % and SD of 1.48.

From Table III(C) &III(E), it is clear that the public disclosures on policyholders attribute ranges from a minimum of 63% (LICI- Life Insurance Company) to a maximum of 100% (Aviva Life Insurance Company, HDFC Life Insurance Company, Max Life Insurance Company, Reliance Life Insurance Company, TATA AIA Life Insurance Company, Future Generali Life Insurance Company, IDBI Federal Life Insurance Company, AegonReligare Life Insurance Company and Canara HSBC Oriental Bank of Commerce Life Insurance Company) with mean value of 92.2% and SD of 8.04. Disclosures on insurance agent attribute ranges from a minimum of 50 % (LICI- Life Insurance Company) to a maximum of 100% (all private life insurers) with mean value of 98.43% and SD of 6.09.

Table III(C): Level of Public Disclosure by Indian Life Insurers for Various Attributes

		Policyholders' Attributes (%)						Insurance Agent Attributes (%)					
Sl. No.	**Company**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
1	Aviva	100	100	100	100	100	94	100	100	100	100	100	100
2	Bajaj	94	94	94	94	94	100	100	100	100	100	100	100
3	Birla	94	94	94	94	94	94	100	100	100	100	100	100
4	HDFC	100	100	100	100	100	100	100	100	100	100	100	100
5	ICICI	88	88	81	81	88	94	100	100	100	100	100	100
6	ING	88	88	88	88	100	100	100	100	100	100	100	100
7	Max	100	100	100	100	100	100	100	100	100	100	100	100
8	Met	88	88	88	88	88	94	100	100	100	100	100	100
9	Kotak	88	88	88	88	88	94	83	100	100	100	100	83
10	Rel	100	100	100	100	100	100	100	100	100	100	100	100
11	Saha	88	81	81	81	88	88	83	100	100	100	100	100
12	SBI	75	88	88	88	88	94	100	100	100	100	100	100
13	Shri	88	81	81	81	88	94	100	100	100	100	100	100
14	TATA	100	100	100	100	100	100	100	100	100	100	100	100
15	LIC	69	69	69	63	81	88	83	83	83	83	50	92
16	Bharti	NE	88	88	88	94	94	NE	100	100	100	100	100
17	Future	NE	NE	100	100	100	100	NE	NE	100	100	100	100
18	IDBI	NE	NE	100	100	100	94	NE	NE	100	100	100	92
19	Aegon	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100

20	Canara	NE	NE	NE	100	100	100	NE	NE	NE	100	100	100
21	DLF	NE	NE	NE	88	88	88	NE	NE	NE	100	100	100
22	Star	NE	NE	NE	88	88	94	NE	NE	NE	100	100	100
23	India	NE	NE	NE	NE	88	94	NE	NE	NE	NE	100	100

Note: Results computed using LIPDI based on the information disclosed by the Indian Life Insurers. NE-Not in Existence

From Table III (D) & III (E), it is clear that the level of Public Disclosure measured by using LIPDI ranges from a minimum of 82% (LICI Life Insurance Company) to a maximum of 100% (Aviva Life Insurance Company, Max India Life Insurance Company, Tata AIA Life Insurance Company and Canara HSBC OBC Life Insurance Company) with a mean value of 97.29% and a SD 3.52.

Table III(D): Level of Public Disclosure by Indian Life Insurers Using LIPDI (%)

Sl. No.	Company	2006	2007	2008	2009	2010	2011
1	Aviva	100	100	100	100	100	99
2	Bajaj	98	99	99	99	99	100
3	Birla	99	99	98	99	99	99
4	HDFC	96	96	96	99	99	99
5	ICICI	96	94	95	95	96	95
6	ING	98	98	98	98	99	100
7	Max	100	100	100	100	100	100
8	Met	98	98	97	98	98	98
9	Kotak	96	98	98	98	98	98
10	Rel	100	100	100	100	100	99
11	Saha	94	95	88	94	94	95
12	SBI	95	98	93	98	98	98
13	Shri	98	96	96	95	98	99
14	TATA	100	100	100	100	100	100
15	LIC	82	85	82	86	83	94
16	Bharti	NE	93	93	98	98	99
17	Future	NE	NE	100	100	100	96
18	IDBI	NE	NE	98	99	100	98
19	Aegon	NE	NE	NE	100	100	98
20	Canara	NE	NE	NE	100	100	100
21	DLF	NE	NE	NE	98	98	98
22	Star	NE	NE	NE	98	98	99
23	India	NE	NE	NE	NE	98	96

Note: Results computed using LIPDI based on the information disclosed by the Indian Life Insurers. NE-Not in Existence

H_{01}: *All the life insurers have no adequate*
H_{01a}: *overall public disclosure and*
H_{01b}: *public disclosure on six categories of attributes.*

Table III(E): Descriptive Statistics & Chi-Square Results

Particulars	AA	IA	CGA	FA	PHA	IAA	Overall
N	117	117	117	117	117	117	117
Minimum	50	54	67	92	63	50	82
Maximum	100	100	100	100	100	100	100
Mean	98.86	96.00	98.86	99.35	92.20	98.43	97.29
Std. Deviation	6.46	10.36	5.675	1.47	8.03	6.08	3.52
Chi-Square	3.198E2[a]	8.150E2[b]	2.050E2[c]	2.030E2[a]	1.162E2[d]	2.763E2[a]	2.360E2[e]
Deg. of freedom	3	11	2	3	6	3	15
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000

Note: Results computed using SPSS 17.0

Chi Square Test is applied to know the association of the score of each life insurance company with its benchmark score. The mean values of overall public disclosure and each of the six attributes is considered as benchmark value. Applying Chi Square Test, *the Null hypothesis, H01a, is rejected. Thus, there is adequate overall public disclosure by Indian life insurers. The null hypothesis, H01b, is also rejected for actuarial attribute (0.000), investment attribute (0.000), corporate governance attribute (0.000), financial attribute (0.000), policyholders' attribute and insurance agent attribute (0.000). Thus, there is adequate public disclosure of six categories of attributes by Indian life insurers.*

H_{02}: *There is no significant correlation between the overall public disclosure and its six attributes, viz., actuarial* ***(H_{02a})****, investment* ***(H_{02b})****, corporate governance* ***(H_{02c})****, financial* ***(H_{02d})****, policyholders* ***(H_{02e})*** *and insurance agent* ***(H_{02f})****.*

Table IV: Pearson Correlation Matrix between Overall and Various Public Disclosure Attributes

Disclosures Attributes	AA	IA	CGA	FA	PHA	IAA	OA
Actuarial Attributes (AA)	1	.360**	.225*	-.077	.260**	.259**	.464**
Investment Attributes (IA)	.360**	1	.341**	-.011	.487**	.563**	.854**
Corporate Governance Attributes (CGA)	.225*	.341**	1	.007	.217*	.502**	.468**
Financial Attributes (FA)	-.077	-.011	.007	1	.105	-.002	.210*
Policy Holders' Attributes (PHA)	.260**	.487**	.217*	.105	1	.418**	.801**
Insurance Agents' Attributes (IAA)	.259**	.563**	.502**	-.002	.418**	1	.671**
Overall Attributes (OA)	.464**	.854**	.468**	.210*	.801**	.671**	1

**. *Correlation is significant at the 0.01 level (2-tailed).*

*. *Correlation is significant at the 0.05 level (2-tailed).*

Table IV shows the correlation between the public disclosure items, viz., overall and six attributes of public disclosure. Actuarial attribute has a significant positive correlation with the investment, corporate governance, policyholders' and insurance agent attributes. Investment attribute has a significant positive correlation with corporate governance, policyholders' and insurance agent attributes. Corporate governance attribute has a significant positive correlation with policyholders' and insurance agent attributes. Policyholders' attribute has a positive correlation with insurance agent attribute only.

Applying the correlation test, it is found that the correlation between the overall public disclosure and the six different categories of public disclosure attributes (actuarial, investment, corporate governance, financial, policyholders and insurance agent) is significant at the 0.05 level (2-tailed) and at 0.01 level (2-tailed). Hence, *the null hypotheses, H_{02a}, H_{02b}, H_{02c}, H_{02d}, H_{02e} and H_{02f} are rejected. Thus, there is a significant correlation between the overall public disclosure and its six attributes, viz., actuarial (H_{02a}), investment (H_{02b}), corporate governance (H_{02c}), financial (H_{02d}), policyholders (H_{02e}) and insurance agent (H_{02f}).*

***H_{03}:** There is no significant company-wise difference in the overall public disclosure and its six attributes, viz., actuarial (H_{03a}), investment (H_{03b}), corporate governance (H_{03c}), financial (H_{03d}), policyholders (H_{03e}) and insurance agent (H_{03f}).*

Table V: Analysis of Variance (Company-wise)

Disclosure	Source of Variation	SS	df	MS	F	p-value
Actuarial Attributes (AA)	Between Companies	1445.275	22	65.694	1.815	.026
	Within Companies	3402.778	94	36.200		
	Total	4848.053	116			
Investment Attributes (IA)	Between Companies	7423.135	22	337.415	6.307	.000
	Within Companies	5028.986	94	53.500		
	Total	12452.122	116			
Corporate Governance Attributes (CGA)	Between Companies	866.572	22	39.390	1.290	.199
	Within Companies	2870.370	94	30.536		
	Total	3736.942	116			
Financial Attributes (FA)	Between Companies	164.114	22	7.460	7.902	.000
	Within Companies	88.735	94	.944		
	Total	252.849	116			
Policy Holders' Attributes (PHA)	Between Companies	6101.379	22	277.335	18.738	.000
	Within Companies	1391.276	94	14.801		
	Total	7492.655	116			
Insurance Agents' Attributes (IAA)	Between Companies	2565.735	22	116.624	6.336	.000
	Within Companies	1730.324	94	18.408		
	Total	4296.059	116			
Overall Attributes (OA)	Between Companies	1201.943	22	54.634	21.128	.000
	Within Companies	243.066	94	2.586		
	Total	1445.008	116			

Note: Results computed using SPSS 17.0

Table V gives the company-wise results based on the ANOVA test. As the p-value is less than 0.05 for actuarial attribute (AA), investment attribute (IA), financial attribute (FA), policyholders' attribute (PA) and insurance agents' attribute (IAA), *the Null Hypotheses, H_{03a}, H_{03b}, H_{03d}, H_{03e}, and H_{03f} are rejected. Thus, there is a significant company-wise difference in the various categories of public disclosure such as actuarial attribute, investment attribute, financial attribute, policyholders' attribute and insurance agents' attribute. As the p-value is more than 0.05 for corporate governance attribute (CGA), the null hypothesis, H_{03c},*

is accepted. Hence, there is no significant company-wise difference in the corporate governance attribute. As the p-value is less than 0.05 in respect of overall public disclosure, the Null Hypotheses, H03, is rejected. Thus, there is a significant company-wise difference in the overall public disclosure.

***H_{04}:** There is no significant year-wise difference in the overall public disclosure and its six attributes, viz., actuarial (H_{04a}), investment (H_{04b}), corporate governance (H_{04c}), financial (H_{04d}), policyholders (H_{04e}) and insurance agent (H_{04f}).*

Table VI: Analysis of Variance (Year-wise)

Disclosure	Source of Variation	SS	df	MS	F	p-value
Actuarial Attributes (AA)	Between Years	137.384	5	27.477	.647	.664
	Within Years	4710.669	111	42.438		
	Total	4848.053	116			
Investment Attributes (IA)	Between Years	812.019	5	162.404	1.549	.181
	Within Years	11640.103	111	104.866		
	Total	12452.122	116			
Corporate Governance Attributes (CGA)	Between Years	151.327	5	30.265	.937	.460
	Within Years	3585.615	111	32.303		
	Total	3736.942	116			
Financial Attributes (FA)	Between Years	8.344	5	1.669	.758	.582
	Within Years	244.505	111	2.203		
	Total	252.849	116			
Policy Holders' Attributes (PHA)	Between Years	429.188	5	85.838	1.349	.249
	Within Years	7063.467	111	63.635		
	Total	7492.655	116			
Insurance Agents' Attributes (IAA)	Between Years	81.817	5	16.363	.431	.826
	Within Years	4214.242	111	37.966		
	Total	4296.059	116			
Overall Attributes (OA)	Between Years	56.751	5	11.350	.908	.479
	Within Years	1388.258	111	12.507		
	Total	1445.008	116			

Note: Results computed using SPSS 17.0

Table VI gives the year-wise results based on the ANOVA test. As the p-value is more than 0.05 in respect of actuarial attribute (AA), investment attribute (IA), corporate governance attribute (CGA), financial attribute (FA), policyholders' attribute (PA) and insurance agent attribute (IAA), *the null hypotheses, H_{04a}, H_{04b}, H_{04c}, H_{04d}, H_{04e}, and H_{04f} are accepted. Thus, there is no significant year-wise difference in the various categories of public disclosure such as actuarial attribute, investment attribute, corporate governance attribute, financial attribute, policyholders' attribute and insurance agent attribute. There is no significant year-wise difference in the overall public disclosure and the null hypothesis, H_{04}, is accepted. Thus, there is no significant year-wise difference in the overall public disclosure.*

H_{05}: *There is no significant difference among the various attributes of public disclosure by the Indian life insurers.*

Table VII: Analysis of Variance (Attribute wise)

Source of Variation	SS	df	MS	F	p-value
Between Attributes	4454.966	5	890.993	18.747	.000
Within Attributes	33078.680	696	47.527		
Total	37533.646	701			

Note: Results computed using SPSS 17.0

Table VII gives the attribute-wise results based on the ANOVA test. As the p-value is 0.000, which is less than 0.05, the null hypothesis, H05, is rejected. Hence, there is a significant difference among the various attributes of public disclosure (such as actuarial, investment, corporate governance, financial, policyholders' and insurance agent) of Indian Life Insurers.

Table VIII: Status of Non-Compliance of IRDA Public Disclosure Norms by Indian Life Insurers during 2005-06 to 2010-11

Sl. No.	Particulars of Missing statements	Names of companies in the year					
		2006	2007	2008	2009	2010	2011
1.	Only Previous or Current year data (instead of both years) in statements - L-1, L-11, L-16, L-13, L-23,L-36, L-42	Bajaj HDFC ICICI Sahara	Bajaj HDFC ICICI Sahara Shri	Bajaj HDFC ICICI Sahara Shri	Bajaj HDFC ICICI Sahara Shri	Bajaj HDFC ICICI Sahara	HDFC Met Sahara SBI LIC

2.	Claims statements combined (instead of individual and group claims separately) in statements - L-39 & L-40.	Birla ICICI ING Met Kotak Sahara SBI Shri	Bharti Birla ICICI ING Met Kotak Sahara SBI Shri LIC	Bharti Birla ICICI ING Met Kotak Sahara SBI Shri LIC	Bharti Birla DLF ICICI ING Met Kotak Sahara SBI Shri Star	Bharti Birla DLF ICICI India Met Kotak Sahara SBI Shri Star LIC	Bharti Birla DLF ICICI India Met Kotak Sahara SBI Shri Star LIC
3.	Non-Disclosure of statements – L-17, L-23, L-25, L-26, L-27, L-28, L-30, L-31, L-34, L-37, L-39, L-41, L-42	HDFC SBI LIC	Bharti HDFC ICICI LIC	Bharti HDFC IDBI Sahara LIC	LIC	Sahara LIC	Future ICICI India
4.	Partial disclosure of statements – L-25(i) & (ii), L-26, L-29, L-31, L-33, L-34, L-35, L-36	Kotak Sahara LIC	LIC	Birla Met SBI LIC	Sahara Shri LIC	Bharti LIC	Future IDBI Kotak Rel LIC
5.	Correct data but wrong year and *vice versa*L-16, L-27, L-32, L-36, L-40, L-42	Sahara LIC	-	LIC	IDBI LIC	ING	Aegon Aviva

Note: Found through verification and compiled by researchers.
Source: Public Disclosures of years 2005-06 to 2010-11

Table VIII shows the status of non-compliance of IRDA Public Disclosure norms by Indian Life Insurers during 2005-06 to 2010-11.The life insurers have not complied the norms by disclosing either the previous year or current year data (instead of both) in respect of certain statements, combining the claims data (instead of individual and group claims separately), non-disclosure of statements, partial disclosure of statements and statements containing correct data but wrong year and vice versa.

CONCLUSION

Among the several measures taken by the IRDA in regulating the Indian life insurance industry, setting standards on public disclosures by insurers is an important one. Life insurers going public and making an Initial Public Offer (IPO) after having completed 10 years of existence, presupposes the existence of a vibrant

and dynamic system of public disclosures by the insurers. Public Disclosures lend a higher level of credibility only when there is uniformity, lucidity and accuracy in the type of disclosures made as also the periodicity and entirety at which the information is provided in order to make meaningful comparison. Several corporate debacles globally, followed by a long stint of financial meltdown emphatically put a large onus on corporate governance. Being additionally transparent would be the best way of ensuring good governance. To achieve this, the Indian life insurers have to improve their public disclosure than ever before.

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APPENDIX List of Indian Life Insurance Companies		
Sl. No.	**Abbreviation**	**Name of Life Insurer**
1	Aviva	Aviva Life Insurance Company
2	Bajaj	Bajaj Allianz Life Insurance Company
3	Birla	Birla Sun Life Insurance Company
4	HDFC	HDFC Standard Life Insurance Company
5	ICICI	ICICI Prudential Life Insurance Company
6	ING	ING Vysya Life Insurance Company
7	Max	Max Life Insurance Company
8	Met	Met Life India Insurance Company
9	Kotak	Kotak Mahindra Old Mutual Life Insurance Company
10	Rel	Reliance Life Insurance Company
11	Saha	Sahara India Life Insurance Company
12	SBI	SBI Life Insurance Company
13	Shri	Shriram Life Insurance Company
14	TATA	Tata AIA Life Insurance Company
15	LIC	Life Insurance Corporation of India
16	Bharti	Bharti AXA Life Insurance Company
17	Future	Future Generali India Life Insurance Company
18	IDBI	IDBI Federal Life Insurance Company
19	Aegon	AEGON Religare Life Insurance Company
20	Canara	Canara HSBC Oriental Bank of Commerce Life Insurance Company
21	DLF	DLF Pramerica Life Insurance Company
22	Star	Star Union Dai-ichi Life Insurance Company
23	India	India First Life Insurance Company
24	Edel	Edelweiss Tokio Life Insurance Company (came into existence during 2011-12)