



# Journal

April 2008



## Need Based Protection - Life Insurance Products

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irda

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## From the Publisher

Life insurance products have always been regarded by the general public as saving instruments with income tax benefits. The growth in the traditional insurance products was primarily fuelled by the inherent tendency of the middle class to save and simultaneously reduce the tax burden. Risk cover was only incidental to the whole process. We have not got out of this mind set as yet. The traditional products have now been replaced by the unit linked policies in view of the positive developments in the stock market in the last few years. As a result, pure risk products providing adequate life cover at reasonable rates have not yet emerged in the Indian insurance scene.

In view of the accent on returns on investment, there is a tendency to take advantage of the gains at short intervals. Early lapsation of contracts is undoubtedly a huge drain on the resources which eventually adds to costs. In a competitive regime, such incidences contribute towards poorer business growth, apart from affecting the reputation of insurers. Hence, there is need to design products in such a manner that the

policyholders are encouraged to continue for the entire chosen term of the contract. Towards achieving this, there must be flexible options for the policyholders to select the modes of premium payment as per their convenience. Loyalty bonuses provided by some life insurers for fulfilling the accepted term of the contract is a good example of encouraging long term retention. In order to attain higher levels of business retention, there is need to design products sensibly and also ensure that the marketing personnel identify the needs of the clientele and suggest suitable products.

'Products in Life Insurance' is the focus of this issue of the **Journal**. Profitable investment is a major source of income for insurers and it presupposes an efficient management of the assets and the liabilities. 'Asset Liability Management for Insurers' will be the focus of the next issue of the **Journal**.

*C.S. Rao*  
C.S. Rao

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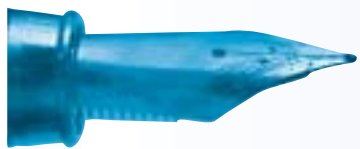
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## Need Based Products - Secret of Success

Life insurance in India has largely been driven by the savings component of the products as also the tax sops provided by the state from time to time. In a domain that is predominantly semi-literate as far as financial education is concerned, there is nothing greatly objectionable to such a phenomenon but it meant that term insurance which is in the real sense of risk coverage had to take the back seat. This trend has continued to be very dominant in the Indian insurance market even after opening up for private participation. Although we have seen the introduction of several new products and riders in the new domain, term insurance has not yet made rapid strides of progress.

Some of the reasons attributed for such a trend are the average Indian psyche which is heavily tilted towards tangible benefits; low remuneration levels for the distribution personnel etc. The recent introduction of regulatory concessions to solvency requirements for term insurance business is a great positive step that would eventually bring down the costs of term insurance and is expected to bring in a better balance of the product portfolio of life insurers.

Another very important feature that would need to be addressed with a sense of urgency is the need-based selling of a particular product. This presupposes that the distributor clearly understands the needs of the clientele and makes a good match of the need and sale. This will go a long way in improving the business retention levels of life insurers. Further, the improvement in the quality of business is certain to bring about a sense of accomplishment for the insurers that would lead to better efficiency levels and also add to their market reputation. There is need for ensuring that the analytical levels of the distribution personnel take a quantum jump and also that they evince a better sense of responsibility in fulfilling the needs of their clients.

'Life Insurance Products' is the focus of this issue of the *Journal*. One aspect that has come to be observed, whether it is the American market, the European market or the Indian market; is that need identification and need-based selling have a great role to play in the overall quality of the portfolios of life insurers. We open the issue with an article by Mr. Jean Pierre Lepaud of SBI Life who was earlier associated with the European insurance industry, in which he talks about the tremendous transformation that has occurred in the nature of the products; and the way forward. In the next article by Ms. Elaine F. Tumicki, we get to see the general trend of life insurance products universally and the role that distribution can play in promoting better products. Mr. David Chandrasekharan, in his article that follows, brings in all his experience in identifying the mantra for long-lasting success in life insurance business. In another article that throws light on the increasing importance of life insurance in the lives of people, Ms. Anuradha Sharma discusses several aspects pertaining to life insurance and products.

In the 'Thinking Cap' section that follows, we have an article by Mr. G.V. Rao, in which he describes the various risks that are confronting the insurers in the detariffed market. We have a 'Research Paper' in this month's issue by Mr. Anurag Rastogi that talks in detail about the changes that need to be considered in premium reserving in general insurance.

Profitability and liquidity are both very important aspects for a financial entity; and an efficient asset liability management eventually ensures its success. 'Asset Liability Management for Insurers' will be the focus of the next issue of the *Journal*.

U. Jawaharlal

# Report Card:LIFE

## First Year Premium of Life Insurers for the Period Ended February, 2008

Sl No.	Insurer	Premium u/w (Rs. in Crores)			No. of Policies / Schemes			No. of lives covered under Group Schemes		
		Feb, 08	Up to Feb, 08	Up to Feb, 07	Feb, 08	Up to Feb, 08	Up to Feb, 07	Feb, 08	Up to Feb, 08	Up to Feb, 07
1	<b>Bajaj Allianz</b>									
	Individual Single Premium	57.30	566.38	957.42	9522	79453	112261			
	Individual Non-Single Premium	607.68	4511.13	2011.26	373728	3019546	1271997			
	Group Single Premium	0.03	8.32	4.79	0	0	1	297	6474	2287
	Group Non-Single Premium	3.28	44.75	23.63	42	288	197	341627	1212485	636591
2	<b>ING Vysya</b>									
	Individual Single Premium	5.02	24.10	22.89	753	2615	1667			
	Individual Non-Single Premium	69.18	518.76	318.45	34795	290915	165371			
	Group Single Premium	0.79	3.84	2.31	0	1	0	172	799	517
	Group Non-Single Premium	0.01	2.52	6.23	2	20	43	598	92506	68735
3	<b>Reliance Life</b>									
	Individual Single Premium	35.20	233.18	89.03	9729	54160	14553			
	Individual Non-Single Premium	237.92	1521.23	484.67	130957	791879	295404			
	Group Single Premium	23.87	229.59	22.21	2	49	24	8237	77790	20299
	Group Non-Single Premium	1.17	22.22	8.64	19	236	153	27099	344511	237013
4	<b>SBI Life</b>									
	Individual Single Premium	123.51	1040.40	387.64	18385	144899	57827			
	Individual Non-Single Premium	391.24	1924.00	840.74	122313	588265	351381			
	Group Single Premium	30.71	207.82	196.47	0	0	2	13612	102974	117627
	Group Non-Single Premium	128.88	376.57	287.14	9	57	279	542117	1069280	1151000
5	<b>Tata AIG</b>									
	Individual Single Premium	4.83	36.87	16.60	1068	6516	1907			
	Individual Non-Single Premium	84.14	639.48	440.00	44859	398899	345787			
	Group Single Premium	5.27	56.96	47.95	0	4	7	27351	335164	260403
	Group Non-Single Premium	2.38	52.86	41.96	4	64	74	12908	195336	208972
6	<b>HDFC Standard</b>									
	Individual Single Premium	15.04	118.86	109.80	18428	229203	118669			
	Individual Non-Single Premium	241.55	1833.16	992.47	79049	609001	283090			
	Group Single Premium	12.31	87.92	134.63	28	136	101	27674	168736	166979
	Group Non-Single Premium	1.29	52.97	61.20	4	44	29	3593	37060	49072
7	<b>ICICI Prudential</b>									
	Individual Single Premium	40.77	341.15	360.16	7428	54787	54393			
	Individual Non-Single Premium	840.24	5641.19	3095.54	371134	2458944	1520013			
	Group Single Premium	17.11	234.04	248.92	5	141	135	85576	495478	137507
	Group Non-Single Premium	74.21	548.38	364.24	11	302	276	19328	396454	330558
8	<b>Birla Sunlife</b>									
	Individual Single Premium	4.09	24.12	32.77	14091	86615	67821			
	Individual Non-Single Premium	163.60	1310.80	532.39	67994	413921	238203			
	Group Single Premium	1.03	5.50	6.87	0	3	0	1815	6946	3870
	Group Non-Single Premium	8.16	95.68	79.33	9	110	131	7842	139804	54816
9	<b>Aviva</b>									
	Individual Single Premium	3.14	20.25	29.03	469	3057	3282			
	Individual Non-Single Premium	95.50	792.74	529.90	47455	316138	237923			
	Group Single Premium	0.06	1.79	2.87	0	0	1	54	1038	1609
	Group Non-Single Premium	1.32	23.65	21.09	8	101	76	61554	597700	328587

10	<b>Kotak Mahindra Old Mutual</b>									
	Individual Single Premium	3.49	26.43	30.67	438	3504	3348			
	Individual Non-Single Premium	100.44	682.72	370.43	35434	235091	117469			
	Group Single Premium	2.82	22.90	11.47	0	2	9	14535	163868	62803
	Group Non-Single Premium	2.44	52.98	31.09	15	221	158	21124	402752	250264
11	<b>Max New York</b>									
	Individual Single Premium	24.05	233.00	81.79	1028	14711	5997			
	Individual Non-Single Premium	124.46	1009.96	633.81	77641	672872	452512			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	2.66	38.67	4.29	6	269	110	16742	474091	58414
12	<b>Met Life</b>									
	Individual Single Premium	1.56	18.93	6.63	177	2903	1351			
	Individual Non-Single Premium	77.93	553.28	213.38	21073	179047	85496			
	Group Single Premium	6.76	16.51	0.00	6	59	0	29527	182271	0
	Group Non-Single Premium	0.00	0.00	14.82	0	0	193	0	0	398407
13	<b>Sahara Life</b>									
	Individual Single Premium	6.04	36.26	15.20	1510	9331	4042			
	Individual Non-Single Premium	7.84	55.83	9.53	8961	76243	20495			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.00	0.00	0.94	0	6	3	0	271	103191
14	<b>Shriram Life</b>									
	Individual Single Premium	18.85	154.06	68.98	3315	27781	14941			
	Individual Non-Single Premium	12.39	103.32	55.65	6714	63209	53539			
	Group Single Premium	0.04	0.09	0.00	1	3	0	4825	9458	0
	Group Non-Single Premium	0.00	0.00	0.00	0	2	0	0	623	0
15	<b>Bharti Axa Life</b>									
	Individual Single Premium	0.91	3.27	0.00	180	537	0			
	Individual Non-Single Premium	16.75	80.63	4.48	12138	58265	3412			
	Group Single Premium	1.08	1.77	0.00	1	1	0	446	817	0
	Group Non-Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
16	<b>Future Generali*</b>									
	Individual Single Premium	0.00	0.00	0.00	0	0	0			
	Individual Non-Single Premium	0.01	0.13	0.00	47	53	0			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.04	1.83	0.00	1	7	0	1031	67244	0
	<b>Private Total</b>									
	Individual Single Premium	343.80	2877.25	2208.60	86521	720072	462059			
	Individual Non-Single Premium	3070.87	21178.36	10532.70	1434292	10172288	5442092			
	Group Single Premium	101.87	877.05	678.48	43	399	280	214121	1551813	773901
	Group Non-Single Premium	225.82	1313.10	944.58	130	1727	1722	1055563	5030117	3875620
17	<b>LIC</b>									
	Individual Single Premium	2591.26	18557.11	16750.21	745397	5076191	5344099			
	Individual Non-Single Premium	1817.50	19893.75	19072.78	2379397	24441175	19800645			
	Group Single Premium	692.52	7274.46	7750.46	1810	19485	17265	1066939	18615869	12060881
	Group Non-Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	<b>Grand Total</b>									
	Individual Single Premium	2935.06	21434.37	18958.80	831918	5796263	5806158			
	Individual Non-Single Premium	4888.37	41072.11	29605.48	3813689	34613463	25242737			
	Group Single Premium	794.39	8151.51	8428.94	1853	19884	17545	1281060	20167682	12834782
	Group Non-Single Premium	225.82	1313.10	944.58	130	1727	1722	1055563	5030117	3875620

- Note: 1. Cumulative premium upto the month is net of cancellations which may occur during the free look period.  
2. Compiled on the basis of data submitted by the Insurance companies.  
3. \* Commenced operations in the November, 2007.



# The Challenge - Called ALM

'ASSET LIABILITY MANAGEMENT IS A HUGE CHALLENGE FOR INSURERS BECAUSE OF THE INHERENT NATURE OF BUSINESS; AND CALLS FOR EXCELLENT MANAGERIAL SKILLS' AVERS U. JAWAHARLAL.

For any financial concern, it is very important that it has sufficient assets to be in a position to meet the liabilities that fall due from time to time. It is, however, not as simple as it sounds, as liquidity works at cross purposes with profitability. It is here that a sound asset liability management has a huge role to play. In the case of insurance companies, the intricacy is even more pronounced as there is a great deal of uncertainty with the timing of liabilities. A sound ALM policy of an insurer has a lot to do with the identification of risks and their nature to ensure the best trade-off between risk and return. It should however be noted that ALM does not do away with risk totally, it only makes it possible for a better management of the risks.

Investments are a huge resource of income for insurers and it has to be ensured that this area is managed efficiently. However,

the nature of insurance business being what it is, it calls for great managerial skill, especially in the case of life insurance business where the contracts are for longer terms. It is very essential that mortality statistics that go into the reckoning of premiums are sustainable in the long run. In an environment where medical technology is undergoing rapid transformation, it is a huge challenge for insurers. Further, provision has to be made for such contingencies as epidemics or natural catastrophes so that the reputation of insurers does not take a beating.

In light of the emerging global paradigm and the dissolution of trade barriers between countries, arriving at a reasonable rate of interest for the investments is a huge challenge. While a very conservative rate is bound to lead to unprofitable investments, unreasonable trends of adventurism in this aspect could lead to

avoidable risk. There is need to strike a sound balance, considering the interest rate risk in the emerging global trends. Further, insurers should not lose sight of the solvency requirements and plan their investments accordingly. The recent amendments made to the solvency requirements with regard to Term Insurance business in the Indian domain are particularly relevant in this aspect.

ALM is an imperative of the top management and from the foregoing it can clearly be made out that it is not a one-off exercise but needs to be reviewed constantly from time to time; taking into account the changing risk profile of the insurers, the dynamics of the market and the global trends in interest rates etc. 'Asset Liability Management for Insurers' will be the focus of the next issue of the Journal.

## ALM for Insurers

*in the next issue...*





## TO ALL INSURERS

February 8, 2008

320.1/1/F&A/AR-R&SS/257/Feb./2007-08

The CEOs of All Insurers

Dear Sir,

Gazette Notification - IRDA (Obligations of Insurers to Rural or Social Sectors) (Third & Fourth Amendment) Regulations, 2008

The Authority has issued amendment Notifications to the IRDA (Obligations of Insurers to Rural or Social Sectors) Regulations, 2002 as under:-

IRDA (Obligations of Insurers to Rural or Social Sectors) (Third Amendment) Regulations, 2008: The amendments provide for the obligations of the insurers in the sixth year onwards of operations. The obligations of the public sector insurers from the financial year 2007-08 onwards have also been notified.

The amendment regulations also provide for alignment of obligations with the IRDA (Micro Insurance) Regulations, 2005.

IRDA (Obligations of Insurers to Rural or Social Sectors) (Fourth Amendment) Regulations, 2008: The amendments provide for the obligations of the insurers in the first year of operations.

Insurers are advised to comply with the above regulations effective the financial year 2007-2008.

The above gazette notifications issued are enclosed.

Yours faithfully,

sd/-  
(C. R. Muralidharan)  
Member

## CIRCULAR

11th February, 2008

054/IRDA/F&U/NOT/FEB-08

To  
All Insurers

Re: Regulation 4(1) and 4(4) of IRDA (Protection of Policyholders' Interests) Regulations, 2002.

Insurers' attention is invited to Regulation 4(1) & 4(4) relating to proposal for insurance under the IRDA (Protection of Policyholders' Interests) Regulation, 2002. Authority is in receipt of several complaints citing instances of policies being issued without collecting a proposal form in terms of Section 4(1) or where a proposal form is not used, without confirming the information collected from proposers to them within 15 days of collecting the information either orally or in writing, as required by Section 4(4) of the Regulations.

In particular, the number of complaints of policies being issued without the consent of the policyholders, either through tele-marketing and/or the banking channels, specially through credit cards, is on the rise.

In view of the above, Authority advises all insurers to strictly follow the provisions relating to 'Proposal for insurance' (Section 4) under the IRDA (Protection of Policyholders' Interests), 2002. Any instance of violation by an insurer shall be viewed seriously by the Authority and action as deemed fit, taken.

(C. S. Rao)  
Chairman

## ORDER

11th February, 2008

055/IRDA/F&U/ORD/FEB-08

This has reference to the Authority's order ref:IRDA/ADM/ORD/013/JUNE-06 dated 30 th June, 2006 regarding constitution of the Committee of Surveyors and Loss Assessors in terms of Regulation 11 of the Insurance Surveyors and Loss Assessors (Licensing, Professional Requirements and Code of Conduct) Regulations, 2000.

Sri Prabodh Chander, Executive Director, Insurance Regulatory and Development Authority stands inducted as a Member of the Committee in place of Sri M. M. Siddiqui, with effect from the

date of this order. Accordingly the Committee stands constituted as under:

Sri Prabodh Chander, Executive Director, Non-Life Department, IRDA, Hyderabad  
Sri Neeraj Kumar, DGM of National Insurance Company Ltd.  
Sri Saumil Mehta, Surveyor and Loss Assessor, Mumbai  
Sri Moinuddin Mohammed, Surveyor and Loss Assessor, Hyderabad  
Sri N Sundararajan, ED&CS (Retd.) in Ashok Leyland Ltd., Chennai

(C. S. Rao)  
Chairman

## TO ALL INSURERS

February 18, 2008

The CEOs of All Insurers

Dear Sir,

Gazette Notification - IRDA (Registration of Indian Insurance Companies) (Second Amendment) Regulations, 2008

IRDA (Registration of Indian Insurance Companies) (Second Amendment) Regulations, 2008: Currently the IRDA (Investment) Regulations, 2000 mandate investment in Infrastructure Sector, both from Life and General Insurance Companies. Compliance with the requirement is made with reference to insurer's investments in "Infrastructure related entities" as defined in the IRDA (Registration of Indian Insurance Companies) Regulations, 2000.

The definition of "Infrastructure" by RBI and IRDA are by and large similar in intent with some minor difference. However, in

the context of the report of the Deepak Parekh Committee set-up to examine the steps needed to enlarge flow of institutional funds to infrastructure, it has been decided by IRDA to harmonize the definition of "Infrastructure" to bring it in alignment with RBI definition.

The revised definition of "Infrastructure" in IRDA (Registration of Indian Insurance Companies) Regulations, 2000 has been approved by the Insurance Advisory Committee. The copy of the Gazette Notification is enclosed. (Link provided in the website)

Yours faithfully,

Sd/-  
(C. R. Muralidharan)  
Member

## CIRCULAR

March 11, 2008

To  
The CEOs of  
All Insurers and Re-insurer

Dear Sir/Madam,

IRDA (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000

The Authority had vide Circular No. 045/IRDA/F&A/MAR-06 dated 31<sup>st</sup> March, 2006 on the said subject.

At Para 2 (Valuation of Assets) of the Circular, attention was drawn to Schedule I of the Regulations under reference. Clause 2 (3) of the Regulations which provides that all assets of an insurer, other than those specified at (1) and (2), have to be valued in accordance with the IRDA (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2002.

It was clarified that as a matter of prudence and also consistent with the requirement of section 64 V (1) (i) of the Insurance Act, 1938 which states that "assets shall be valued at values not exceeding their market or realizable values", for the purpose of computation of solvency margin, debt securities shall be valued

Circular No. IRDA/F&A/060/Mar-08

at lower of the amortized cost and the market value.

It would be recalled that these clarifications were given, with the intent of aligning the statutory and regulatory requirements in valuation of debt securities and make it effective from the year ended 31<sup>st</sup> March, 2006 onwards. However, in view of certain difficulties expressed by the insurers in ensuring compliance with the requirements as stipulated in Section 64 V (1) (i) of the Insurance Act, 1938, the requirement had been kept in abeyance for the financial years 2005-06 and 2006-07.

In view of the requests received from the insurance companies in ensuring compliance with the stipulations as indicated in the Circular under reference, the Authority has taken a decision to defer the implementation of the directive for one more financial year 2007-08. The instructions would, therefore, be made applicable effective financial year 2008-09.

Yours faithfully,

(C. R. Murlidharan)  
Member



## CIRCULAR

March 12, 2008

Ref: 061/IRDA/Actl/March-2008

To  
The CEOs of all Life Insurance Companies

Sub: *Minimum Sum Assured under Unit Linked Life Insurance Products*

Please refer to IRDA circular No. 032/IRDA/Actl/Dec-2005 dated December 21, 2005, wherein the minimum sum assured to be provided for under ULIP products is specified in para 1.1 and 1.2 of the said circular.

With a view to improving the long term character of the unit linked products, it has been decided to allow the minimum sum assured / death benefit as follows:

Type of products	Minimum sum assured / death benefit
Single premium	125% of the single premium where the policy term is less than 10 years, and 110% of the single premium where the premium is 10 years or more.

Non single premium	Five times of the annualized premium.
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This comes into effect from April 1, 2008.

(R. Kannan)  
Member Actuary

## CIRCULAR

March 12, 2008

Circular No. IRDA/F&A/062/Mar-08

IRDA (Micro-Insurance) Regulations 2005 - Micro Insurance Agents  
Please refer to Para 2 (f) of IRDA (Micro-Insurance) Regulations, 2005 on the definition of Micro Insurance Agents.

It is clarified in this connection that the Non-Government Organizations (NGOs) referred to at Sub-Clause (I) of Para 2 (f) above would, in addition to those registered as a Society, include all non-profit organizations registered with non-profit objective under the appropriate law (including companies registered under Section 25 of the Companies Act) to be treated as Micro Insurance

Agent. The organizations should also concurrently satisfy all the eligibility criteria detailed in the above Regulation.

Insurers are advised to take note of the above clarifications while considering appointment of Micro-Insurance Agents as provided for under Regulation 5 *ibid*. All other terms and conditions of Micro Insurance Agents would remain unchanged.

(C. R. Muralidharan)  
Member

## PRESS RELEASE

March 12, 2008

IRDA (Micro-Insurance) Regulations 2005 - Micro Insurance Agents

Presently Micro Insurance Agents include, inter-alia, Non-Government Organizations (NGOs) as defined under Clause 1 Para 2 (f) of IRDA (Micro-Insurance) Regulations 2005 viz. those that are registered as a Society under any law. IRDA has clarified that a Non-Government Organization for the purpose of appointment of Micro Insurance Agent would henceforth include in addition to those defined in the above section, any non-profit

organizations registered with non-profit objective under the appropriate law (including companies registered under Section 25 of the Companies Act).

All other existing conditions to be satisfied by the NGO as specified in the Regulation would remain unchanged.

(C. R. Muralidharan)  
Member

**NOTICE**19<sup>th</sup> March, 2008

IRDA /DB 009/02

**CANCELLATION OF BROKER LICENSE NO 103.**

To  
The Principal Officer,  
M/S. Armour Consultants Pvt Ltd.,  
No.2A, Prakasam Road, T.Nagar,  
CHENNAI- 600 017.

Dear Sir,  
**ORDER**

Sub : CANCELLATION OF BROKER LICENSE NO 103.

WHEREAS, M/S. Armour Consultants Pvt Ltd., (hereinafter referred to as the 'Broker') having its Registered Office at 123, Angappa Naicken Street, Chennai 600 001 has been granted license by the Authority to act as a Direct Broker vide License No. 103 on 30 th day of January, 2003 pursuant to the provisions of the IRDA (Insurance Brokers) Regulations, 2002.

WHEREAS, the Authority, in exercise of powers granted under Regulation 29 of the IRDA (Insurance Brokers) Regulations, 2002, appointed its officers to conduct inspection of the Broker and whereas the findings of inspection report were communicated to the Broker under Regulation 32(1) of the IRDA (Insurance Brokers) Regulations, 2002 for his information and comments and whereas the explanation of the Broker to the findings of inspection report has been received and it is under examination.

WHEREAS, the Broker in the meantime vide its letter dated 7.01.2008 conveyed its decision to cease insurance broking activities and surrender their Direct Broker License and whereas, the Broker submitted the original license No.103 for cancellation w.e.f. 01.03.2008.

WHEREAS, the Broker has given an undertaking to service the existing clients whose policies are in force for a period of six months from date of cancellation of license i.e. 1 st March, 2008 as required under Regulation 40 of the IRDA (Insurance Brokers) Regulations, 2002, within which it has to make suitable arrangements with another licensed broker to service the contracts already concluded.

NOW, THEREFORE, pursuant to the request made by the Broker for voluntary surrender of the license, the Authority hereby cancels the Direct Broker License No. 103 granted to M/S. Armour Consultants Pvt Ltd, with effect from 01-03-2008 .

The Broker is advised to remit the annual fee payable for the year 2007-08 after finalization of accounts and as prescribed under Schedule II of IRDA (Insurance Brokers) Regulations, 2002 and as amended vide IRDA (Insurance Brokers)(Amendment) Regulations, 2007.

(Prabodh Chander)  
Executive Director

**CIRCULAR**

March 24, 2008

Circular No:065/IRDA ACTL/RSM/2007-08

To  
All CEOs of Life Insurance Companies

Sub: Determination of Required Solvency Margin under Life Insurance Business

One of the important objectives of opening up of the insurance sector is to increase the insurance penetration in India so that customers can avail products which would meet their requirements at affordable premiums. In the last three to four years, we have witnessed significant improvement in insurance coverage. However in order to improve the insurance penetration and to strengthen the same so that durable progress could be witnessed in the contribution of life insurance sector, the

Authority has considered various factors which have significant influence in attaining this objective. In this context one of the factors that could have significant impact on the life insurers is capital requirement under solvency margin regulation. Hence the Authority has considered the need for reviewing the solvency margin required for pure term products. The pure term products provide simple life cover and companies could design products which could reach various segments of the population so as to meet their insurance requirements. It is equally recognized that some progress is being made by life insurers in this direction.

In working out the required solvency margin, there are two factors, viz., the first factor which is applicable to the mathematical reserve under each policy and the second factor,



which is applicable to the sum at risk, which is the difference between sum assured and mathematical reserve under that policy.

The Authority proposes the following First Factor and Second Factor, with respect to non-linked business, in working out the required solvency margin. These new factors shall come into effect for the business as on March 31, 2008 and onwards. It may be noted that there is no change in the factors that pertain to linked and health business. Even under non-linked business, the factors remain the same for General Annuity and Pension business.

Item	Table	
	First factor	Second Factor
<b>Non-Linked Business</b>		
<b>Individual Business</b>		
01: Life Business		
Pure Term	3%	0.1%
Others *	4%	0.3%
02:General Annuity *		
	4%	0%
03:Pension*		
	4%	0%
<b>Group Business</b>		
Life: Premiums guaranteed for:		
04:not more than one year		
	1%	0.1%
05:more than one year		
	1%	0.1%
06:General Annuity*		
	4%	0%
07:Pension*		
	4%	0%

\* These factors remain the same as earlier.

Under this proposal, life insurance business under individual products (non-linked) is bifurcated into pure term and others. For pure term business, the first factor is fixed at 3 per cent while the second factor is fixed at 0.1 per cent. Earlier this portion of business was clubbed under life business where the first factor was 4 per cent and second factor was 0.3 per cent. The pure term business would henceforth, attract lower required solvency margin as compared with the earlier position.

Under non-linked group business for life, there are two categories, viz., premiums guaranteed for not more than one year and premiums guaranteed for more than one year. Under this proposal, both the categories are clubbed and attract a lower first factor of 1 per cent and another lower second factor of 0.1 per cent. With reference to the category under "Others" (which comprises all business other than pure term) the factors remain the same as that of 'life business' earlier.

Hence the proposed required solvency margin at lower level for pure term products would provide significant relief to life insurers both under individual products and under group products. This measure, it is hoped, would pave the way for enhancing the interest among insurers to launch pure term products for a sufficiently long period and at affordable rates, which would ultimately result in increased insurance coverage.

Please acknowledge the receipt of this circular.

(R. Kannan)  
Member (Actuary)

## GUIDELINES

March 26, 2008

No: 066/IRDA/F&U/Mar-08

To  
CEOs of all General Insurance Companies,

Re: File & Use Guidelines for General Insurance Products and Relaxation of Price Controls.

Insurers' attention is drawn to Para '2' of the File & Use Guidelines Circular No. 021/IRDA/F&U/SEP-06 dated 28th September 2006, which reads as under:

*Insurers shall not vary the coverage, terms and conditions, wordings, warranties, clauses and endorsements in respect of covers that are currently under tariff till 31st March 2008. Insurers may file their proposals for changes in cover, terms, wordings, etc for such products from a date to be notified by the Authority, but to be given effect to after 31st March 2008. In respect of products currently governed by tariffs, deductibles other than*

*the deductibles set out in the tariffs can be offered only after 31st March 2008. Insurance on first loss basis or partial insurance unless permitted under current tariffs shall not be permitted before 31.03.2008. Covers not permitted under tariffs should not be granted by way of 'difference in conditions' in insurance till 31.03.2008*

The Authority has decided that pending examination of common market wordings proposed by General Insurance Council, Insurers shall continue to use the coverage, terms & conditions, wordings, warranties, clauses and endorsements of the erstwhile tariff classes of insurance covers until further orders.

(Prabodh Chander)  
Executive Director

# Unit Linked Business

## PRODUCT DEVELOPMENT

JEAN PIERRE LEPAUD WRITES THAT WHILE THERE IS HUGE POTENTIAL FOR GROWTH IN THE INDIAN DOMAIN, THERE MUST BE CLEAR DISTINCTION BETWEEN TRADITIONAL PRODUCTS AND MARKET LINKED PRODUCTS; AND ALIGN THEM ACCORDINGLY.

**B**eing associated with life industry for more than seventeen years in different countries, I joined the Indian market seven years ago and since then I have been deeply associated with development of new products for the Indian market. With this background, I would like to share my views and thoughts on product development and unit-linked market in India.

In 2000, LIC was a monopoly in the life insurance business in India. 100% of the products sold to Indian customers were traditional ones with a quasi absence of individual pure protection products. More than 90% of the individual products sold were traditional savings cum protection products (endowment or money back). Group insurance business was only through formal Group Employer-Employee (Traditional products such as Term Assurance, Gratuity, Leave Encashment and Super Annuation).

From 2001 onwards, private players came into the picture and as on end of January 2008, they managed to capture a market share of 36% (1<sup>st</sup> year premium income). Within a period of seven years, life insurance industry has changed a lot in India. First of all, new distribution channels have appeared - Bancassurance, Brokers, Corporate Agents, Direct Sales through call centers and internet along with MFIs & NGOs for Micro Insurance. However, traditional tied agents still represent more than 60% of the business.

Secondly, new products have been developed such as Group Creditor Protection products for loan borrowers, individual term assurance products with a tough competition on the price. At the beginning of 2001, private players entered the market mainly with traditional products but with a major difference

compared to LIC products: customers were able to design the products according to their needs through rider covers at a marginal extra cost.

When IRDA approved the first Unit Linked product on 13/03/2001, I am quite sure the regulator wasn't thinking at all that ULIP products would have represented more than 90% of the new premium income for the Private Players and more than 80% for LIC.

Recently, life insurance companies have developed a range of Micro Insurance products (mainly Pure Term, and Term with refund of premium) for the benefit of the BPLP. These products are distributed through Micro Insurance Agents, NGOs and MFIs as well as Bancassurance. Five life insurance players have already launched stand alone health insurance products and a few more of them are in the process of doing the same.

The entire industry has benefited from the opening of the market. Indian life insurance market is moving much faster than any other life insurance market in the world which means more and more Indians have now access to insurance products through different distribution channels. The number of products has drastically increased in the recent past to 550 as compared to 55 in 2000 (IRDA website as on December 2007). Having a large number

**Indian life insurance market is moving much faster than any other life insurance market in the world which means more and more Indians have now access to insurance products through different distribution channels.**

**Competition, periodic product benchmarking by journalists, along with customer awareness are sufficient to dissuade companies to provide heavily loaded products.**

of products is not an end in itself; product diversification should be the ultimate value addition to the Indian customers.

Let us take the example of unit linked products to assess product innovation in this specific market segment which represents majority of the new business. All products have almost the same fund options available with similar charges structure. The main difference is more through packaging rather than innovation.

In 2005, a company introduced the concept of Horizon, management style where asset allocation is determined not based on customer choice but based on remaining time to maturity. A variation of this concept has been introduced by some companies where asset allocation is based on the age of the customer. Some contracts offer guaranteed addition based on annualized premium or average fund value. Recently another private player has offered a sort of structure fund where guarantee of the highest NAV is offered at maturity.

Compared to ULIP market products available abroad, there is a huge scope for product innovation in this segment provided the regulation is adapted to this specific business.

Even though the IRDA has issued several circulars specific to Unit Linked products, majority of the regulation applicable to insurance business and therefore to ULIP products, comes from a time where only traditional products were available and distribution channel was only through tied agents.

The current commission rules reflect these facts by making it compulsory to define commission rates as a percentage of the premium amount. This rule makes sense for traditional products, but for Unit Linked products it has an adverse impact regarding product design. Insurance companies do not have the flexibility to choose another commission type and they cannot use proper commission rates based on term of the products and /or product persistency. Unit linked products require more servicing than the traditional products and current commission rules do not encourage sales person to deliver such services. It results in a higher lapsation / surrender ratio for Unit linked products compared to traditional ones.

The commission structure as defined in the Insurance Act has also an impact in the charge structure of the products. Most of them have high charges in one way or the other in the first one or two years, resulting in comfortable commission amount for the sales force at product inception compared to much lower commission thereafter.

In Europe, commissions are not necessarily based on a percentage of the premium. It can also be a percentage of the FMC / Switching / Redirection charges for Unit linked products. Commission rates are freely set by each insurance company based on their internal sales strategy.

These rates may be different according to customer target, distribution channel, business achievement and product persistency.

The French regulator does not come into the picture; the only obligation for the insurance company is to disclose all applicable charges in the policy document and sales literature. Competition, periodic product benchmarking by journalists, along with customer awareness are sufficient to dissuade companies to provide heavily loaded products.

Currently, average entry charges for small regular premium ticket size (Rs. 3,000 to Rs. 30,000 per month) is between 1% to maximum 5% per annum throughout the policy term; for higher ticket size it is reduced to 0.5% to 2% maximum and for HNI entry charges are generally waived off! Sales personnel, within permissible limits defined by each insurance company, are also allowed to pass on the benefit of lower commission to the customer by reducing entry charges accordingly.

Another major difference in the Unit linked business in India compared to other countries is the restriction on the fund type offered under a Unit linked product. In India, all Unit fund options have to be based on approved local financial instruments and managed internally by the insurance company. Currently when a product offers more than six units fund, it is supposed to be well diversified whereas in Europe, it is quite common to have ULIP products with more than 100 unit funds managed internally and through different mutual fund companies. Investment can be done on local market or foreign market. HNIs, products may also be invested in foreign currency.

In fact, most of the mutual fund companies are happy to have access to policyholders as they know that their investment patterns are in the long term perspective.

Insurance companies have a ready made sales network to offer, mutual fund companies have management expertise on diversified markets. Combining the two competencies in a Unit linked product allows the company to offer at an efficient cost a larger number of investment options under long term insurance cum protection products.

Introducing the same concepts in the Indian market will facilitate product innovation and will benefit the customers. Having in-house Fund Managers is a very expensive solution for insurance companies and therefore impacts the cost for policyholders without being a guarantee of better fund performance. Offering Unit linked guaranteed product without proper hedging is a huge risk for the insurance company. Hedging requires adequate financial instruments such as derivatives which are at a nascent stage in India. It is therefore, for the time being, not possible to offer such structured Unit Funds even if there is a market demand for such fund which are commonly used to give guarantees on equity related products.

Another brake to product innovation is a psychological one. In India, any new product has to be filed and approved by the IRDA before launch. Product managers may restrict themselves regarding product innovation because they fear about a negative answer and / or huge delay in product approval.

In France, we do not need any product approval before launch of a new product. Does it mean that life insurance companies are doing whatever they want? Certainly not, as the French Regulator may check any product sold in the French market and if it is not following the regulation, the company will be in trouble. However, with this process, there is no uncertainty regarding the launch date as it is not linked to a pre-approval process with a regulator. Brushing up the regulation will help

insurance companies to design attractive products with innovative features. It is however important that regulations in place should not be amended too frequently to avoid feelings of uncertainty regarding rules applicable.

At this stage, let us assume majority of the above suggestions are implemented in India.

What could be the immediate impact in the Unit Linked business area? First of all mutual fund companies and life insurance companies will work together and customers will have a larger number of fund options in their ULIP products. Structured fund option with guarantee will be available.

Variable Annuity products with Guaranteed Living Benefits will be available in India. These products have been introduced in America first and Japan thereafter. Today, 80% of Unit Linked products sold in America are with Guaranteed Living Benefit options. Recently they have been introduced in European markets (UK in 2005, Germany 2006 and 2007 in Spain, Belgium, Italy and France). These products aim to combine the advantages of Unit linked products - the possibility for policyholder to select underlying investment funds according to their risk appetite - and traditional products - with some guarantees offered either as a rider or inbuilt in the product.

These products may help to provide guaranteed income for a defined period even if investment is done in a ULIP product. They may also be designed as retirement products where a minimum amount of annuity will be guaranteed at inception whatever the evolution of the financial market and mortality. It may also be designed to guarantee on a specific date, the maximum of fund value or the guaranteed amount as defined at the subscription stage.

**Brushing up the regulation will help insurance companies to design attractive products with innovative features. It is however important that regulations in place should not be amended too frequently to avoid feelings of uncertainty regarding rules applicable.**

Indian market offers huge opportunity for Unit linked products keeping in mind that such products should offer both protection and investment options. It is also understood that product managers will have to work hard on traditional products as they are very useful for those who do not want to take any risk when they invest in life insurance products. Here also, change in regulation will facilitate product innovation.

*The author is Head, Retail Marketing & Product Development, SBI Life Insurance Co. Ltd.*



# U.S. Individual Life Insurance

## TRENDS, ISSUES AND OUTLOOK

ELAINE F. TUMICKI OPINES THAT THERE IS NEED FOR DESIGNING SIMPLE AND EASILY COMPREHENSIBLE PRODUCTS, AIDED BY NEED-BASED SELLING BY THE AGENTS. SHE FURTHER FEELS THAT COMPANIES THAT CAN ADAPT TO COST-EFFECTIVELY REACH THE VAST NUMBERS OF UNINSURED AND UNDERINSURED CONSUMERS HAVE THE OPPORTUNITY TO REAP SUBSTANTIAL REWARDS.

LIMRA's Life Insurance Ownership studies have shown that ownership of individual life insurance has been declining in the United States. In 2004, only half of households owned any individual life insurance, down from a little under two thirds in the mid-eighties. (Table 1) Declines in ownership have occurred in nearly all income groups, although lower and middle income groups were most affected. Decline in ownership does not necessarily mean a decline in need. In a recent LIMRA U.S. study, 44 percent – 48 million households – said they needed more life insurance and 27 percent – 29 million households – said they planned to buy it in the next year. While the U.S. individual life insurance business is sometimes described as a mature business, these statistics indicate that there is still much opportunity.

LIMRA International is a worldwide research, consulting and professional development organization that helps more than 800 insurance and financial services companies in 70 countries increase their marketing and distribution effectiveness.

Despite this apparent opportunity, individual life insurance sales have been relatively flat over the last two decades. Annualized new premium<sup>1</sup> increased on average 1.6 percent per year. And this is in current dollars – using constant dollars, premiums would have declined by 25 percent over this time period. While new premium has been relatively flat, the number of new individual life policies sold has been declining steadily, from more than 17 million per year in the mid 1980s to about 10 million per year today.

Several factors have contributed to the relatively flat premium sales and the decline in new policies.

- There are fewer traditional affiliated

career agents (who have a primary relationship with one insurance company). And there are fewer companies using the career agent channel, resulting in fewer new recruits to the insurance sales business. More companies are using independent agents who are typically older, more experienced, and tend to focus on more affluent markets. That leaves younger, less affluent markets with fewer agents to serve them.

- Most individual life insurance is still sold by agents, whether affiliated or independent. Although newer channels such as banks and stockbrokers have been successful selling other insurance and financial products - annuities, for example - these channels have not yet captured a significant share of individual life insurance.
- Consumers are busier than ever. The number of dual income households has increased. Managing jobs and children leaves less time for meeting with agents about life insurance. Some may view that second income as a form of "insurance" and perceive less need for life insurance. Many working individuals have group life insurance through their

Table 1

Ownership of Individual Life Insurance

	1984	1992	1998	2004
Individual insurance	62%	55%	50%	50%
Group insurance	54	53	52	52
Any	81	78	76	78

Source: LIMRA's Life Ownership studies

<sup>1</sup> Annualized premium is recurring premium plus 10 percent of single premium. Excess premium is excluded, as is large case COLI/BOLI (cases over 200 lives)

**Most consumers do not have a good understanding of the various types of individual life insurance. Instead, they rely on their advisors for recommendations.**

employer and may view this as sufficient. However the typical amounts of coverage in a group life policy are inadequate in many cases.

Still, as LIMRA's research shows, many people recognize that they need more life insurance. So why haven't they bought it? LIMRA conducted a series of focus groups to answer this question. The report, appropriately titled *Every Excuse in the Book*, outlines the reasons why consumers who say they need more life insurance haven't bought it. Among the top reasons:

- Consumers dread the "high pressure sales tactics" that they associate with life insurance agents and other salespeople
- They have other financial priorities
- Life insurance is complicated and consumers don't know what type of insurance to buy
- They don't know how much life insurance they need
- And so, they procrastinate

### Sales Trends by Product

Although overall sales have been flat, product mix has been anything but. Ten years ago, fixed products – whole life and universal life – accounted for three quarters of new premium while equity-linked variable life products (variable

universal life and fixed premium variable life) represented less than 10 percent. From 1995 to 2000, variable life products grew by double digits every year and peaked at 36 percent of new premium in 2000. Since then, these products have dropped to 15 percent of new premium. On the other hand, fixed life products declined from the mid 1990s through 2000 and then started to rebound in 2001. In 2007, universal life (UL) captured 41 percent of new premium, its highest share to date. Contributing to the growth of UL is the proliferation of new products, particularly UL products with secondary guarantees. Secondary guarantee universal life offers lifetime or near lifetime no-lapse guarantees if the insured pays the minimum premiums specified in the product. If the required premiums are paid, the policy will not lapse, even if the cash value falls to zero. Although it's not just guaranteed UL that is selling; many companies are having success with more traditional current assumption UL products.

The mix of individual life insurance sales has followed trends in the equities markets fairly closely until recently. While the variable life share has tracked closely with the Standard & Poors 500 Index up through 2003, the fixed product share (whole life and universal life) has shown the opposite trend. The failure of equity-linked variable life products to recover as the stock market increased suggests that many producers are still wary of recommending variable products to their clients. Most consumers do not have a good understanding of the various types of individual life insurance. Instead, they rely on their advisors for recommendations. After the stock market declines in the early part of this decade, many agents had to tell their clients they needed to increase the funding in their variable life products to keep them from lapsing. These are conversations that agents don't like to have.

Term insurance has shown steady growth since the early 1990s. This can be attributed to changes in product design and

pricing. Traditional yearly renewal term (YRT) insurance has been replaced by products with level premiums. In 1990, YRT represented nearly two thirds of new term policies; now it's only 5 percent. Conversely, 20 year level premium term was only 1 percent of new term sales in 1990; now, it's nearly half. In addition, companies have developed more refined underwriting categories for term insurance, sometimes offering five or more different underwriting classes. Reinsurance companies participated in the growth of the term market, reinsuring a greater share of the face amount and assisting with developing products and pricing.

The trends in product share suggest that, in order to be successful, companies must have a robust product portfolio to meet the needs of clients in varying environments. When the stock market declined, the companies that did best were those that had competitive fixed products in their portfolio.

### Sales by Distribution Channel

The last decade has witnessed a shift in the methods of distributing life insurance. While affiliated agents once sold the lion's share of individual life insurance, independent producers took the lead in the late Nineties. However, most life insurance is still sold by the more traditional agent channels, whether affiliated or independent. Emerging channels such as direct response, stockbrokers and financial institutions have not yet captured a significant share of new premium.

### Sales Forecast Through 2012

Although new annualized premium has been relatively flat recently, LIMRA's individual life forecast model projects modest increases going forward. LIMRA's forecast model is based primarily on economic factors. However, other factors, both internal and external to the industry, could have an impact on results. For example, legislative activity could have a positive or negative impact on sales



**PRODUCT DEFINITIONS**

**Whole life** — Any traditional cash-value life insurance policy such as whole life continuous pay, limited pay, modified life, and current-assumption whole life.

**Universal life** — A flexible-premium permanent contract that credits cash values with current interest rates and deducts mortality and expense charges from the cash values.

**Variable life** — A Securities and Exchange Commission-registered fixed-premium permanent contract that houses cash values in a separate account. Cash values fluctuate depending on investment performance.

**Variable universal life** — A Securities and Exchange Commission-registered flexible-premium permanent contract that houses cash values in a separate account. Cash values fluctuate depending on investment performance.

**Term** — Life insurance issued for a specified number of years or to a specific age with no (or little) cash value.

(although more likely negative). On the other hand, efforts by the industry to improve workflow efficiencies or expand distribution to better penetrate underinsured markets could have a positive impact on sales. Examples include using straight-through processing (STP) to streamline the sales fulfillment process, expanding worksite marketing to better penetrate the under-insured middle market, and expanding distribution to non-traditional channels for life insurance such as banks and stockbrokers. These are not necessarily mutually exclusive efforts. For example, a company with an effective STP system might be more successful in selling through banks, where sales representatives are not familiar with or comfortable with the traditional application and underwriting processes for life insurance.

**Issues Facing the Individual Life Insurance Industry**

The individual life insurance companies in the U.S. face a number of issues and challenges in the next several years.

- The continuing lack of market penetration: Only half of U.S.

households own any individual life insurance. That leaves half that don't. And many recognize they have the need - they're just not sure what to do about it. Many of them are middle income consumers who don't have regular contact with agents.

- Competition: Life insurance companies compete for consumers' discretionary dollars, not only with each other but also with other financial product companies and with more tangible consumer goods.
- Distribution: Life insurance agents are aging and there are fewer new agents recruited. Since the vast majority of individual life insurance sales are through insurance agents, companies will need to expand their distribution, most likely with nontraditional channels. Some companies have had success reaching the middle market through agents selling at the worksite.
- Product development: Life insurance products have been coming out at a break-neck pace over the last several years. The growing reliance on independent distribution requires companies to stay ahead of – or at least

keep up with – their competitors if they want stay on the shelf. Improving speed to market has become a key component of life company strategy.

- Regulation and legislation: With looming federal government budget deficits, life insurance companies need to remain vigilant in protecting the current tax benefits of individual life insurance.

Despite the challenges, there is opportunity. With half the population not covered by individual life insurance and nearly half recognizing the need, there are plenty of prospects out there. The question is how best to reach them. LIMRA's research gives some clues on what consumers want, particularly the uninsured or underinsured middle market consumers:

- Simple and to the point. They want agents to use terms they understand, to tell them what the product is, what they get, and what they will have to pay
- No high pressure sales tactics.
- Someone they can trust. They want to agents to show an interest in them and understand what they need. They want to be able to ask questions and look the agent in the eye.
- Understand their situation. Understand not only their life insurance needs but also their financial situation and offer products they can afford.
- Appealing products. They want products that are simple and straightforward. They want life insurance for the traditional purposes of protecting their home, replacing income, paying final expenses and providing for children's education.

The companies that can adapt to cost-effectively reach the vast numbers of uninsured and underinsured consumers have the opportunity to reap substantial rewards.

*The author is Corporate Vice President and Head, Product Research, LIMRA's Product Research Center; and is a recognized industry expert on life insurance product and sales trends.*

# Ethics in Life Insurance Selling

## RELEVANCE OF PRODUCT

DAVID CHANDRASEKHARAN EMPHASIZES THAT IDENTIFYING THE RIGHT PRODUCT IS THE FIRST STEP TOWARDS ETHICAL SELLING. HE ADDS THAT ALTHOUGH IT SOUNDS VERY SIMPLE, IT IS HARD TO ACCOMPLISH, CONSIDERING THE NUMEROUS 'FACTORS' THAT GO INTO A SALE.

**E**thics in insurance selling has always been an oft debated subject among insurance people. The fact that the subject is often talked about is a sure enough indication of its importance and the concern that insurance selling should be 'ethical'. The questions that come up in this context naturally are the following: Are the sales taking place in the insurance market place by and large ethical? Has there been any significant change in this matter after opening up of the insurance market? And the more basic question: is ethical selling of insurance at all possible? In other words, is selling of insurance possible without resorting to unethical practices such as making untrue averments and the more common half truths and nondisclosure of material information regarding what the policy covers and what it does not?

In order to appreciate the main issue in ethical selling of insurance one has to only turn to the most fundamental principle of insurance, the principle of 'utmost good faith'. Readers will note that the language used here is very precise and pointed. Mere good faith is not good enough; it has to be 'utmost good faith'. Observance of the principle of utmost good faith applies with equal force to the insurer and the proposer. Court decisions have also confirmed that

the need for observance of utmost good faith is also the bounden duty of the insurer's representative, the Agent. The observance of the principle of utmost good faith is thus not merely on essential requirement in an insurance contract; it is also the bedrock of 'Ethical selling' by the insurance agent.

What this means in practical terms for the agents is actually quite simple: they must take an oath, and practice it in letter and spirit during the selling process, to tell the truth, the whole truth and nothing but the truth in explaining the product benefits; the conditions to be fulfilled for securing these benefits and what the exclusions are. If this principle is followed by agents and other marketing people, the quality of the sales made will improve vastly and volumes will come automatically in the long term. Believe me, it is possible to sell insurance and achieve good results without having to throw your ethics overboard.

Unethical selling tarnishes the image of the marketing fraternity in the insurance industry in general and creates a negative image of the insurance agent in the public eye making selling of insurance a tough proposition. If a new entrant into the insurance industry as an agent is sometimes meted out rough treatment in the market

**Is selling of insurance possible without resorting to unethical practices such as making untrue averments and the more common half truths and nondisclosure of material information regarding what the policy covers and what it does not?**

place which he does not deserve, you know the reason why. It also explains why many a promising agency dies before it has hardly taken off. The unprofessional conduct of a few can spoil the market for everyone. The hall mark of professional selling is

‘ethical’ selling which helps in building a good image of the insurance sales person.

Ethical selling of insurance is also about ‘need’ based selling. But whose need?. Sales Manager’s and Branch Manager’s; or the customer’s? Make no mistake about it, ethical selling has only one meaning in insurance selling: the customer’s need. The agents need (in some cases greed) for commission, his desire to qualify for MDRT, the Sales Manager’s dream to become eligible for a foreign jaunt, the Branch Manager’s ambition to earn quick promotion with high perks are all needs indeed. But all these are totally irrelevant in the context of selection of the plan term and sum assured. The marked reluctance to sell term and pension policies, the penchant for pushing Ulips without explaining what risks this policy is exposing the customer to - are all classic examples of selling without the customers’ interest in view.

What then is ‘ethical selling’? It is selling the right policy for the right Sum Assured, the right term and mode based on customer needs. Over selling in fact is bad for all the stake holders as it invariably results in lapsation. Under selling can be really tragic if the insured dies prematurely as what insurance pays is not adequate to meet the family’s need. Many a time underselling takes place as the agent is afraid that he may be bluntly refused and lose the business if he suggests a bigger policy which is what the customer actually needs.

There is a growing concern today about mis-selling in the insurance market place. This concern is an indication of the awareness about the problem. Unless this awareness leads to corrective action by the companies there is little hope that anything much will happen.

It may be observed here that a ‘good sale’

**Over selling in fact is bad for all the stake holders as it invariably results in lapsation. Under selling can be really tragic if the insured dies prematurely as what insurance pays is not adequate to meet the family’s need.**

which of course will be the result of ethical selling is a satisfactory proposition for all the stake holders - the customer, the agent and the company. Such sales can be described as win-win situations and they enhance the image of the agent as well as the company and become a model for others to follow.

It is a truism in life insurance selling to say that life insurance is always sold, seldom bought. Such a market affords ample scope for unethical selling and mis-selling. Only products yielding high commission may be sold without regard to the customer interest. If the situation has to change we need a well informed insuring public who can ask for and buy the product they need. How soon will this happen?

No doubt something has been done to

create insurance awareness in the country. The beating of the drum has indeed increased in intensity after the opening up of the insurance sector. But precious little has been done to educate the insuring public about the type of products on offer and the needs they serve. Since this initiative in customer education has to be industry specific and not company specific it has to come from the ‘Insurance council’ and the IRDA itself. In this context I recall what the ‘Loss prevention Association’ did sometime ago to educate people about loss prevention. It was a great campaign well done which had a good impact.

Something like that needs to be done by the insurance council and the Regulator. Extensive use of the print and electronic media may be made use of to get the message across to the opinion makers and the educated members of the public. They may be counted upon to pass on the message to others. Sebi now has a fund for investor education, why not we have a fund for educating the insuring public.

Today we recognize the need for our children to develop ‘life skills’ (also known as soft skills) to be able to succeed in life. These skills along with computer skills are now taught in schools. But there is an equally strong need for children to learn to manage money. They need to be also introduced to various financial products at the school level itself. By the time they complete their college education they would have to develop into financially savvy adults capable of making their money work for them. We are told that the share market legend Warren Buffet and the richest man in the world bought his first share at age 11 and now regrets that he started too late! Catching our young people young and helping them to learn to manage their money is therefore important as this is also an equally important ‘life skill’. Besides, there cannot be a better

safeguard against mis-selling and unethical selling than a financially savvy customer.

If the Indian insurance industry has to grow and grow on the right lines, the market mechanism should be fine tuned to deliver the right product to meet the need of every individual customer. The product package or product would need to be customized to suit his situation in life. The principle that one size fits all is unacceptable. Attempts to transplant an American model into India would not serve any purpose as conditions in the two countries are vastly different. We need to create an ethical agency force with a good understanding of the basic concepts of insurance; adequate product knowledge; and the capacity to understand and analyze customer needs; and recommend the appropriate insurance products that will meet the customer need. This is the only way to reduce the incidence of mis-selling and enhance the creditability of the insurance salesman.

People like me who have spent many years in the life insurance industry are often asked by prospective customers of insurance to suggest the best policy and the 'best company' selling the product. Shorn of the 'Bells and Whistles' all companies sell more or less the same products and the best company therefore is the one which enjoys a good reputation for service in the particular location and the best policy is one which is the 'best fit' for the particular customer and is also affordable. Having said that, I shall now venture to discuss a few plans and the need they fulfill.

It must be said to the credit of the new insurers that they have done much to publicise Term Assurance and Pension Plans in different versions. These two plans together enable us to tackle the two major risks we are exposed to: the risk of

premature death and the risk of living too long.

Let us take term insurance first. Often referred to as 'Pure Insurance' this is the first policy any one should take at a very early age whether single or married. When you are young and on your first job, single or married, you certainly need insurance. If you are married the need is quite obvious. You have let a woman in your life and having done so there is no getting away from the obligation to provide for her future in the event of your premature death. Even if single there is still an equally strong need: you may have elderly parents who have given you their all and made many sacrifices who now look to you for support in the evening of their lives. There may also be needs like higher education and marriages of younger siblings. Your expenses may be high on account of all these responsibilities and your need for cover is therefore high. Term assurance is the answer for you. Go for a cover as high as you can pay for.

Term Assurance is the only life insurance policy the savvy finance professionals recognize as insurance and advocate. Buy Term and invest the rest is what they will say. Sound advice indeed! But for ordinary mortals like us this does not work. We can certainly buy Term but can we regularly invest the rest for the entire term of the policy? The answer is a clear 'no'.

People therefore turn to the most popular policy in India, the Endowment policy which combines the benefits of a term plan and a savings plan. This policy can be appropriately called an 'Indian obsession' and continues to hold sway in the Indian market with riders tagged on and with unit linking too. This is a policy for all seasons and all situations.

This policy is also psychologically very satisfying. The Indian insurance customer

likes to see 'money' at the end of the term. Endowment gives you that, Term does not. For middle class people their PF contribution and insurance premium are the only savings. The endowment policy thus encourages the saving habit. That the term policy leaves the average Indian customer who survives the term dissatisfied is quite obvious. It is this dissatisfaction which has given birth to the 'Group Savings Linked Insurance' in the Group Insurance space and Term plans with 'frills' like return of premium at the end of the term in individual insurance.

In the late 1970's, I had an interesting encounter with an Indian who had settled in the US and in due course had become an MDRT Agent. He could not figure out why the large majority of policies then sold in India were Endowment. He also wanted to know why hardly any whole life policies were being sold by his counterparts in India

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unlike in the US where he said that whole life policies were the most popular. There may be many reasons for this. The first is the desire of course to see money in the hands at the end of the term. Secondly, for the large majority in our country income ceases at a certain point of time. So the policy proceeds at the end of the term is something they look forward to, like employees looking forward to their terminal benefits on retirement. It is relevant to note here that those were also the days when the insurer had very few annuity and term policies in his books.

This leads us naturally to a discussion on the Annuity Product. The good news is that these products are now being sold in reasonably large numbers with unit linking too if you want. Mention should be made

of a good development here: a sizable number of annuity buyers today are young people which was not the case earlier. Many of us bought our annuities out of our retirement funds. The fear of living too long finally seems to have seized hold of all of us. Buy your annuity policy when you are young to take advantage of the magic of compounding. This way you will have a regular monthly income when you retire which may even exceed your last drawn salary. There will also be no fall in your life style after retirement and you can live a life of dignity till your last days not having to depend on any one. Buy term and buy annuity when you are still young. You will have peace of mind for the rest of your life.

This discussion would not be complete without comments on the controversial Ulips. There is nothing wrong with the 'Ulips' *per se*. What is wrong is the way they have been designed by some companies giving scope for unethical selling and mis-selling. This has forced the regulator to come out strongly to 'Clean up' the act by issuing a set of guidelines. The guidelines make it clear what was wrong with the products put in the market and the manner in which they were being sold. The flaws identified by the regulator are (1) there was no fair insurance cover. (2) there was no transparency in the product terms and conditions. (3) the long term character of the insurance product was given the go by and (4) the disclosures by the company as well as the sales persons were grossly inadequate making it impossible for the prospective customer to take an informed decision. In view of these difficulties what was conceived as an insurance product with an investment element ended up becoming an investment product with an insurance element and sold as such. The terms and conditions offered ample scope for abuse and mis-selling by the salesperson who earned huge

commission. The product was good for the insurer too who saw unprecedented premium growth. But was it good for the customers who were exposed to market risk in the context of the falling sensex?

Whether the emergence of the new companies has brought about any significant change with regard to ethics in selling insurance is a big question mark. The intense preoccupation with producing results in the short term and beating the competition has been such an overwhelming concern that there is little evidence that anything is being done to promote ethics in selling.

All we can say in the present situation to the customer of insurance is 'Let the Buyer Beware'. He has to acquire the knowledge to take an informed decision. If this cannot happen let him turn to a knowledgeable friend or to a company official to satisfy himself that what has been told to him is right. Then he will have no regrets. I would like to mention here that in my long years of service in the insurance industry many were the occasions when it was my pleasure to offer clarification, advice and reassurance to people who were in doubt and who approached me.

*The author is a retired Executive Director, Life Insurance Corporation of India.*

# Life Insurance Evaluation

## CURRENT PERSPECTIVE

ANURADHA SHARMA OBSERVES THAT THE DEMAND FOR LIFE INSURANCE PRODUCTS IS DRIVEN BY SEVERAL ECONOMIC FACTORS LIKE PRICES OF INSURANCE, GOVERNMENT TAX, THE GENERAL ECONOMIC ENVIRONMENT, INCOME, INFLATION AND INTEREST RATES ETC.

### Introduction

According to Humbert O.Nelli: “History should explain the present and be guide for the future” (Journal of the American Society of Chartered Life Underwriters, July 1969). Study of human history reveals a universal desire for security. Earlier societies relied on family and tribe cohesiveness. Economic prosperity brought in the element of transfer of risk which required insurance of some form. United Nations Conference on Trade and Development in their annual convention has recognized insurance sector as central element of the trade and development matrix and one of the key pillars of the financial sector. Insurance is a financial means by which individuals exposed to a specified contingency contribute to a pool and if suffered from any of the covered events, are individually paid.

In 2005 global life premium income accounted to US\$3,426 billion. Industrial countries produce over 87 percent of global life premium income, while developing countries generate only 12.47 percent of it. The low level of premium income in developing countries has also

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been accompanied by a low level of premium expenditure *per capita*, which was US\$76.5 in 2005, compared to premium expenditure per capita of US\$518.5 and US\$3286.8 for the world average and industrial countries respectively (Swiss Re 2006). However figures for real growth rate and insurance density, i.e premium per capita, indicate

the potential for substantial growth within the insurance sectors of emerging markets.

The Indian economy has been among the fastest growing economies of the world for over a decade with annual sustained growth rates of 7-8 percent of GDP. The Indian life insurance market was opened for private insurance companies' participation in 1999 and the potential for the growth of life insurance business has attracted many international insurers to access this market (Gupta 2000; Swiss Re 2004; Sinha 2005). The life insurance market has seen an upward surge and business has achieved an average growth rate of almost 40 percent after privatisation in the year 2000. The opening of the insurance sector to private participation has generated considerable interest in this sector within and outside India. Though the reforms in the insurance sector came only towards the end of the last century, the process of change has been extremely smooth and now there is a thriving insurance industry with the public and private sector competing with each other on a level playing field and this process has resulted in expanding the coverage, deepening the penetration and



spreading the awareness about life insurance. The insurance industry has grown tremendously with increasing growth rates of industrialization, infrastructure, and savings rate and capital formation. India is on the threshold of rapid economic and social change. Indian customer's demands are changing for better products, diverse modes of communication and improved quality of life. Harnessing this enormous market potential in India is crucial to success for every market player. The products and services concept must also be in consonance with socio-cultural factors. There are various life insurance products available belonging to each class of losses such as:

Death (Assurance);

Living a certain period (endowments, annuities & pensions);

Disability (Disability insurance);

Injury or incurring a disease (Health Insurance)

### The importance of Life Insurance

Insurance provides financial protection for individuals, families, and businesses. Insurance assists in making savings possible and helps to furnish a safe and profitable investment. This encourages thrift, minimizes worry and increases personal initiatives. Life insurance is also helpful in reducing the financial burden on state. Insurers can accumulate money to be invested in the public and private sectors and thus create source of financing for new businesses, new homeowners, and for farmers and their equipment. The burgeoning insurance market in India has been able to generate considerable interest and awareness among people. Insurance field is creating new vistas for attracting talent and in this process has reduced unemployment. Within the

national economy, two measures are used to define insurance. One is insurance density which is average annual per capita premiums within a country and the other is insurance penetration which is a ratio of yearly direct premiums written to gross domestic product. India is ranked 31 in terms of insurance penetration (Swiss Re 2006b).

### Factors affecting Life Insurance

Indian insurance industry is witnessing dramatic changes in terms of a slew of new products and services, new channels of distribution along with the discernible shift in consumer preferences. The insurance market is in continuous state of flux as the impact of socio-economic changes like greater urbanisation, increasing job mobility, growth of the services industry, weakening of the traditional family structure with the impact of globalisation are becoming visible. There are various factors which influence demand of life insurance products. Previous international research studies have identified several factors which are increasingly becoming relevant in the context of Indian market. Economic factors like prices of insurance, government tax, the general economic environment, income, inflation and interest rates etc.

The demographic environment also influences the choice amongst consumers. Aging population, household structure, education, industrialization and urbanization and factors related to individual's social environment like culture and society also contribute towards increased demand for insurance products. Enhancing internationalization of insurance market has brought in positive dividends for the Indian insurance

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industry. Capital inflows from abroad have strengthened the financial capacity of insurers which has increased product development and enhanced market innovations. There is a plethora of life insurance products which cater to the changing demands of Indian consumers. The globalisation and internationalisation of Indian insurance market has increased the product awareness amongst Indian consumers. Indian consumer is willing and ready to adopt innovative products which provide solutions to modern day concerns. These products fall into various categories such as described below.

**Term life Insurance:** Term life insurance provides protection for limited number of years. The face amount is paid only if the insured's death occurs. Term policies are simpler than other policies. Most term

policies have conversion feature. This conversion feature permits the policyholder to exchange the term policy for a cash-value insurance contract.

**Endowment insurance:** Endowment policies pay the full face value on the death of the insured and also if he survives the whole term. There are different types of endowment policies: (1) Single premium: Mortgage loan companion policies (2) Modified E.P. provides set percentage of the insured amount over the policy term as well as the maturity amount.

## Whole Life Insurance policies

- **Ordinary Life Insurance:** Whole life insurance with premiums that are payable for the entire life and are also called straight life and continuous-premium whole life policies. They provide permanent protection at a modest annual outlay and offer great flexibility and value to the customer in serving as a quasi forced savings plan.
- **Limited payment Whole Life Insurance policies:** Premiums are payable for a limited number of years. Premium paying period can be set to a specified age or term. In this plan, larger policy values are offered.
- **Current Assumption Whole life Insurance:** CAWL products are low premium and high premium category. The initial premium is low for a definite term and then re-determined based on future interest and mortality. New premium is higher but are guaranteed never to increase further. They allow for easier company and policy owner administration. The level premium gives company greater control over the cash value build-up. CAWL policy will lapse if premium is not paid in time therefore

they provide discipline in methods of payment.

- **Variable life Insurance:** These unit linked policies provide life insurance values directly proportional to performance of capital markets. They help offset the effects of inflation on life insurance policy values. Premiums less expenses are paid into separate investment account. Cash values are not guaranteed and its value depends upon market value of the policy funds. Death benefit in these policies is composed of two parts. First is guaranteed minimum death benefit that comes with basic plan. The second part is variable and additional units of insurance are bought from excess interest credits. They are most popular in US, England, Canada, Japan etc. VLI is riskier than other traditional forms of life insurance.

## Importance of Genetic Testing

In order to avoid the hazard of asymmetric information, genetic testing is allowed for a person's diagnosis of vulnerabilities to inherited diseases. Genetic testing is "the analysis of human DNA, in order to detect heritable diseases for clinical purposes" (Holtzman & Watson 1997). In case of discovery of a life-threatening disease, it enables to make possible life-changing lifestyle to help in living longer. There is possible downside to genetic testing which involve the emotional, social, or financial consequences of the test results. Health insurers do not currently require applicants for coverage to undergo genetic testing. Genetic information is subject to the same confidentiality protections as any other sensitive health information. But the concern about the privacy of genetic information is on the rise. There is general fear amongst consumers about the implications such information may

have for their families, prospects for employment and career advancement, concern that insurers will use genetic tests to select only low-risk individuals, excluding many other individuals from coverage. All this led some to believe that insurers should not be permitted to consider genetic test results in determining the cost and availability of insurance products (Medicare Payment Advisory Commission, Report to the Congress-Selected Medicare Issues, June 1999).

In the United States, according to the Genetic Information Nondiscrimination Act, insurers are prohibited from using genetic information to deny benefits or raise premiums for both group and individual policies. It is also illegal to exclude individuals from a group plan because of their genetic profile. There is restriction on employers from collecting genetic information or using it to make decisions about hiring, firing or compensation. There is also a restriction

There is possible downside to genetic testing which involve the emotional, social, or financial consequences of the test results.

in place on the use of genetic tests in Austria, Belgium, Denmark, France, the Netherlands, Norway; and legislation prevents insurers from obtaining, or making use of, genetic test results in respect of insurance applicants. In Finland, Germany and Sweden, under industry codes of practice, insurers do not have access to genetic test results. In the Netherlands and Sweden, the prohibition on access to genetic test results applies only to policies with cover below a specified limit. In the UK, according to regulations, insurers will not require any genetic tests to be taken and will not expect to receive information about genetic test results in respect of applications for life insurance products with sums assured of less than £500,000, critical illness insurance with sums assured of less than 300,000, with corresponding annual amounts for income protection coverage (Report from the House of Commons Science and Technology Select Committee and interim recommendations from the Human Genetics Commission (HGC)).

In 1997, the Council of Europe adopted a Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine. Article 11 of the convention prohibits any form of discrimination against a person on grounds of his or her genetic heritage while Article 12 states that genetic testing may only be carried out for purposes of health care or research. However, in relation to other possible areas of discrimination, a distinction has been made in relation to the assessment of risk for insurance purposes, where different treatment can be justified by actuarial or statistical data (e.g. the Irish Equal Status Act 2002, the

proposed EU Directive implementing the principle of equal treatment between women and men in the access to and supply of goods and services). The Irish Insurance Federation's current code of practice<sup>3</sup> in relation to genetic testing provides that applicants will not be required to take a genetic test in order to obtain insurance. The legislation would ensure that there is no disincentive to take a genetic test. Life and health-related insurance will be accessible to individuals who have taken a genetic test and have found that they are likely to develop a particular condition. The proposed provision may lead to adverse selection for life and health related insurance products. Given the limited number of tests that are currently available, the overall cost of insurance is unlikely to rise significantly in the short term, but the increase could become much more significant as the scope of genetic testing increases. If standard premium rates were to rise significantly, low and medium risk individuals could abstain from purchasing insurance, and this could ultimately make some types of insurance inoperable. UK Human Genetics Commission in its 2002 report, "Inside Information: Balancing interests in the use of personal genetic data" proclaims that

*"a reasoned dialogue on a long-term approach to the use of personal genetic information in life and health insurance...needs to be informed by appropriate independent research and analysis. There also needs to be, in our view, a more fundamental debate about the merits of moving towards socially inclusive insurance pooling arrangements which can provide those with an adverse genetic test result with access to affordable insurance."*

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The current insurance market in India holds tremendous promise for growth owing to its sheer size, number and a very low penetration level. The poor reach of insurance in the country and the sheer numbers make India an attractive destination with tremendous potential. The family size in India has reduced over the past decade due to continuing increase of urbanisation. An extended family appears not to be common; and family economic support thus has weakened. In particular, with an ageing population, the governments will need to encourage working people to set up more financial provision for their old age and hence the importance of life insurance products.

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# Managing Risks in 21<sup>st</sup> Century

## ROLE OF INSURANCE INDUSTRY

G V RAO OBSERVES THAT RISK IS THE RAW MATERIAL FOR INSURERS; AND FURTHER ADDS THAT THE UNIVERSE OF RISKS HAS BEEN CHANGING DRAMATICALLY AND CALLS FOR THE READINESS OF INSURERS IF THEY ARE TO EMERGE SUCCESSFUL.

### Impact of detariffing on risk management scenario

**W**ith the dismantling of the tariff regime from January 2007; the accountability for assessing, managing, and pricing risk exposures has been thrust solely on the individual non-life insurers. The competitive market dynamics and the rules of engagement for price negotiations, between the two contracting parties on risk transfer mechanism, have dramatically changed the very character of the Indian insurance market. Insurers are now compelled to seek, obtain and understand risk-based information from insured to work out deals with them that have mutually satisfactory outcomes. The take-it-or-leave-it situation has now changed with one stroke to a let-us-discuss-it-please one.

While for the customer, premium price is the only issue of concern, for an insurer assessing and managing the accepted risk exposures, before justifying a price quoted, has become an additional issue. How equipped are the insurers, in the current free market environment, to perform these onerous, professional tasks; and on what learning curve should they be on for the future?

The 'universe of risks' (as Denis Kessler, currently the Chief Executive of SCOR, in a talk he delivered, at Zurich on 26<sup>th</sup> May 2000, at the General Assembly of the General Association, has called this

scenario), is continually and rapidly expanding, and also changing. This process has to be welcomed, as the raw material for insurance business - the prevalence of several risks - would continue to grow. The current profiles of risks are undergoing unforeseen, radical changes in their risk content, and in the frequency and severity of losses. New risk management techniques are being evolved to tackle the growing complexity of risk exposures and to keep them under check, if not in control.

### What is the source of 'raw material' for insurance?

Indian insurers have been led either to forget or to overlook - due to the prevalence of the Tariff rating regime for the last five decades - that they are in the insurance business of continually seeking out existing and new risks in the market, to enable risk transfer mechanisms to take place, in their selfish business interests. Risk, in fact, is the only raw material for the insurance industry, without which the industry has no rationale to exist. How are the Indian insurers currently handling the raw material of 'risk' offered to them?

### The thesis of this article

Risk management, insurers should visualize, is a fundamental process through which the risks offered need to be processed, for the underwriters of insurers to determine the ultimate premium price; which if a customer were to accept it,

**While for the customer, premium price is the only issue of concern, for an insurer assessing and managing the accepted risk exposures, before justifying a price quoted, has become an additional issue.**

would result in issuance of a final product called a policy document. The competitive excellence of each of the insurers, therefore, has to come forth from how superior is the risk management process of each of them to fine tune the price.

The sophistication of the risk management process that an insurer ultimately desires, flows from two streams; one through the risk management process that is already prevalent and practiced by the insured and his staff; and the other, of what the insurer

would desire, as a part of insurer's risk management program to ensure implementation of better loss control measures. This process would enable an insurer to consider offering more choices on rates. The premium price, no doubt, is a matter of compulsive market forces, but the fundamentals of risk management, desired by both the parties, have a common aim—that of reducing chances of occurrence of likely loss events, and of minimizing their loss potentials. The core purpose of insurance has to be understood; expertise does count.

Insurers, from a long-term point of their business, need to dwell more on the risk management processes and its sophistication; and less on current pricing alone. Dwelling solely on the pricing aspect, without making corresponding demands on the up-gradation of insured's risk management processes would only hurt insurers' bottom-lines; and if prices were to be raised later, it would invite only the opprobrium of the insured. It is hoped that the insurers are aware of the self-devised trap they are driving themselves into if this system is pursued. Every demand of the insured for price reduction should be countered by a measure by the insurer asking for enhancement of risk management practices.

### What we would discuss

This article seeks to discuss a few major foreseeable trends, impacting on the evolution of the present traditional risks and the emergence of new risk exposures, due to the impact of changing forces from the external environment: and their management by insurers. It is earnestly hoped that insurers would actively engage themselves in a serious debate – of the changes taking place in the core product of their sale to the public i.e., risk management of insured risks – to take control and shape the emerging risk horizon of the insurance industry.

On the risk management front, the

performance of the insurance industry can only be judged on the yardsticks of insurers' comprehension of the risk exposures they accept; and how their superior management of such risks, through their intervention, has helped in their loss prevention and loss control. Dismantling the tariff regime is a great opportunity. But how ready are the insurers to shape the future scenario of risk management, for them to be termed, true insurance professionals rather than good insurance administrators?

### The transactional patterns of the past

Before attempting to discuss their contribution, or the lack of it, one needs to understand what has brought the insurers to their present unsatisfactory position. The process of risk acceptance, till recently, was based entirely on the prescribed tariff premium rating structures. The regime had also the force of law. It did not require the insurers to undertake application of a risk-based analytical mind. It was also rather unnecessary, as such learning and understanding and application would not have helped insurers in pricing them eventually. The learning process would only have resulted in incurring additional costs, without securing any monetary beneficial returns.

Driving a message to the customers of their need to insure rather than assisting them to improve their risk management practices, became the only desirable goal to be pursued by the insurers. In one sense, they perceived their roles as mere providers of insurance covers, but not as risk managers to the insured. The industry was paternally led by the Tariff Advisory committee (TAC), a statutory body created to deal with harmonization of rates. Competition was based on the mythical element of service but not on price differentials. Spreading the insurance net wider was also the Govt. driven goal.

**The process of risk acceptance, till recently, was based entirely on the prescribed tariff premium rating structures.**

Now, with detarffing, as a fact of their business life, individual insurers have suddenly been thrust in to a new 'universe of risks' about which they have little or no personal experience, from a rating point of view. Differential and competitive pricing is permitted, whether or not the characteristics of the 'anatomy of risks' differed. But then the expertise to categorize them on an evaluation of their risk exposures, and pricing them independently calls for different levels of knowledge relating to the particular property and a set of analytical skills to interpret the data collected. To complicate matters further, the 'universe of risks' has been changing dramatically, even as insurers' perceptions of the changing risk spectrum have remained rooted to the past. This has proved to be a mental barrier for insurers to overcome, even while global modern risk management practices are changing rapidly.

### The new 'universe of insurable risks'?

The 'universe of risks' has moved on beyond recognition. The changing risk spectrum is being acted upon by the forces of globalization; new technologies; demographic shifts in age, gender,

cultures; aspirations and incomes; environmental changes; economic growth etc. leading to greater risk aversion by the society, instant gratification as a means to judge service levels, climatic changes impacting on the exposures of natural perils, the statutorily imposed directions imposing new liabilities etc. Internet has added on to this growing complexity of risk spectrum.

'Amplification of risks' - relating to modern risks of economic activities - does have a snowball effect; and it is a growing phenomenon. Floods can cause power outages, resulting in shut down of cold storage plants, resulting in spoilage of contents that can result in loss of market share etc. The loss chain, as a result of a single accident, has the force to influence several other unconnected loss events. It is no longer enough, if one were to look at a single risk; one also needs to look at a community of risks surrounding it, and the relative impact of risks on each other. Interaction of risks is another challenge. Increasingly risks are becoming co-related and interdependent, not incrementally but exponentially as well ending in catastrophic dimensions of losses.

### Insurance of intangible assets

Insurers know, however imperfectly, how to handle material risks, provided they are identified and inspected. But the growing services industry dealing with intangibles is a new challenge to insurers. Insurers are now asked to insure 'best advices' that impact on issues of reputation and image and financial liability. Globalization of manufacturing and service industries has brought in systemic failures, international crime, money laundering, insurance of derivatives and credit swaps, epidemics etc.

The demand for insurance for tangible property and intangible assets is rapidly rising. This demand is set to grow, at least in India, where the insurance penetration levels are low. But globalization of

economies is dictating that the Indian market should also be ready to deal with demand for insurance of intangible assets that service sector is throwing up. How ready are the Indian insurers to handle them with the required degree of knowledge and skills, in comprehending such a risk scenario? Traditional risks too are undergoing changes, as customer perspectives of risk aversion are changing. From what sources should Indian insurers really learn their expertise? That is at the root of the learning process.

### Changing nature of risk perceptions

Life insurance was earlier sought, as a means to provide for family, in the event of the untimely death of an insured. Now the fear of dying early is less; but the fear of living longer in old age, without adequate financial means is more, requiring one to look at life insurance in a new light. The risk perception in life insurance has changed. ULIPs have made persons look at life insurance not only as instruments of risk coverage, but savings and investment as well.

**The loss chain, as a result of a single accident, has the force to influence several other unconnected loss events.**

It is also becoming rather difficult to make a distinction between the risk to which an insured voluntarily exposes himself and that to which he is unwittingly exposed. Motor insurance is a classic case. Personal accident insurance is another. With the rate of accident causation going up, it shows that today's risks are less likely to be sudden and accidental, and more likely to be gradual. In the case of environmental damages, their effects are longer and sometimes irreversible.

Another change in the risk spectrum is that risks are increasingly foreseeable, storms and weather related events are predictable in their likely occurrence but are becoming less and less random. Insurers today are better able to obtain information on the development of risk, including those involving pandemics and epidemics, that was unavailable a couple of decades ago.

Risk management of moral hazard and adverse selection on the part of the insured is another aspect that insurers have to be savvy about. These features need to be addressed while underwriting the risk, rather than at the stage of claims handling. Information must be solicited on how - should a claim were to occur - would an insured behave? How could the claim processing be controlled (deductibles, co-payment designated repairers, warranties etc.) to reduce the claim value, without rupturing the customer relationship? This too is an important aspect of risk management. The present general expectation limiting risk management to pre-acceptance scrutiny must extend to post-claim occurrence stages as well. The moment of truth for the contracting parties would come alive, if a claim were to occur.

### Changing approaches to risk management

If one were to accept that the universe of risks is expanding and that the nature of risks is changing, it is evident that the risk management practices in general have also to change. Customers have become more

risk-sensitive and risk-averse. Many of the insured have a more rational approach to risk management and are more involved in managing their own risks.

There is a growing pressure for risk prevention in terms of reducing the frequency of occurrence and the average costs. There is also pressure to stop the spread of risks. Liability for failure to take preventive measures dictated by law is gaining ascendancy. There is more pressure from Governmental teams to test and audit to obtain their certification. Standards-based and benchmarking methods have gained an upper hand in the Indian context. 'New rules of conduct in the face of uncertainty', i.e. defining customers' attitudes to risk is an aspect that should receive the attention of Indian insurers, particularly when there is an unbridled customer demand to reduce prices. It has to be a give-and-take transaction; and not a one-sided one, as it is getting to be.

Another aspect of risk management is to contain or limit the ability and potential of an individual to cause huge damages, wittingly or unwittingly. It is difficult at any time to predict the behavior of an individual, who can use the system to deliberately cause huge damages to his employer. Exposures to the risk of terrorism, the financial manipulations, as they happened in the case of Societe Generale, ING Barings, sub-prime crisis etc. are new areas of uncertainty. Sabotage is another risk. Statistical and actuarial approaches alone are inadequate for proper risk management. The effectiveness of corporate governance of an insured, and its evaluation in the context of risk control is an aspect of risk management that should be scrutinized by insurers.

Risk management is no longer a management of homogeneous risks and pricing them. In a world that is getting more and more complex, where individuals play a more important role than the system to which they are subjected—thanks to IT—

## Statistical and actuarial approaches alone are inadequate for proper risk management.

it is now a question of treating risks individually, risk by risk, and for each individual risk-taker. 'Pooling of risks' and then 'individualizing' it at the same time is likely to be the future pattern of risk acceptance. Risk selection and then risk discrimination has become the norm.

Disclosure, transparency and confidentiality of information asked for and disclosed come in to the risk inspection horizon. Such information needs ethical handling by the insurers. Co-responsibility for risk management, in view of the dynamic nature of risks, between the insurer and the insured will have to be developed and has to be reflected in the new contracts.

### Role of insurers

Insurers are constrained by the fact that they are no longer the market price-makers. They are now emerging more and more as price-takers. It is the market that sets the prices, leaving insurers only to set up the coverage terms and conditions. In a competitive insurance world, it is the

coverage and conditions - very much a part of risk management - that is now substantially within the control of the insurers themselves. How should this opportunity to control the outcomes, so as to make them mutually acceptable, be used? Risk management processes, therefore, would have to undergo these perceptual changes, if Indian insurers have to retain a say in the price negotiations. Risk management negotiation is the key to their market survival.

Information on risks is increasingly getting passed on to other economic agents—such as banks, motor manufacturers and financiers. Hence more and more commercial banks are entering the market with captive customer bases, as insurers. Hire purchase financiers too are getting interested. 'Competitive contestability' for customers is getting all-pervasive adding another dimension to the market development. How does one manage these new market developments of the 21<sup>st</sup> century? How does an insurer deal with the changing behavioral patterns of their customers and their own shareholders that want more for less?

### Build databases

Insurers should develop databases of identified major risk exposures in each category of risks comprising their business profile. The types of risk management measures expected for each such major risk exposure should be shown against each. The insured's current practice must be examined for the extent of compliance in respect of each.

Similar databases in respect of claims that occurred in respect of each major exposure in each category should be available to all underwriters working for the insurer. The causes of accidents, the extent of losses, the preventive measures suggested should be listed against each claim for an underwriter to decide what package of risk management process he has to devise. Having done that; the minimum and

maximum pricing range can be suggested depending on the degree of compliance by the insured, of the warranties to be imposed. Multiple choices of prices are then available to an insured; but then he is required to decide on different packages of prices offered with their own obligations, and not one price alone and with no concessions required from the insured.

### Final word

The universe of risks - and the paradise of an insurer - is expanding rapidly, assuring them of a rapid growth in the market premium potentials. But their grip and clout on customers, is getting loosened due to more information, knowledge and resources employed by insurers being now available with the latter too. Behavioral pattern of risk exposure development even for traditional risks is getting individualized. The 'pooling of risks concept' for pricing these risks is turning out to be an inadequate tool when it comes to for future underwriting.

The changing nature of individual risks,

**There should, as far as possible, be no surprises on either side in the performance of insurance contracts.**

when they are co-related and interdependent, makes the pooling of risks pricing formula less and less representative. Risk discrimination, as a risk management tool, even among the cluster of 'pooled risks', should receive more scrutiny.

'Amplification of risks', a rising demand for insurance of intangible assets in the service sector by creation of emerging risk exposures under the common law or statutory liabilities, the extent and reliability on the risk management practices adopted and practiced by individual insured, risks impacting on moral hazard, adverse selection and the likely frauds that an unethical insured may indulge in - once he is insured - and other unforeseen risk exposures imposed by the changing forces of externalities, have continued to add not only new risks to the 'universe of risks'; but often have changed the very nature and risk content of even the traditional risks.

New risk management techniques have been brought into play by the insurers' community, to deal with them and to contain their impact. No less important is the challenge insurers confront to influence the behavior of the insured, at the time of risk acceptance and even more importantly, at claims handling stage. There should, as far as possible, be no surprises on either side in the performance of insurance contracts.

Evaluation of risk exposures should usually get reflected in the pricing strategy of the competing insurers. The current business strategies of insurers on premium rates have somehow given an impression to the insured public that they (the insured) are now better risk takers; or else the insurers have suddenly become more efficient managers of their costs.

With their individual brand names, technical expertise, financial strengths and ethical practices on display, the insurers now suddenly seem to have been reduced

to a lowest common denominator, of selling cheap insurance commodities, by the insurers themselves. Is the insured public wrong to conclude that there is no selective value proposition offered by any of the individual insurers? Value proposition comes in the form of risk management suggestions at the time of acceptance; and a hassle-free and quick claim settlement. Insurers should differentiate themselves on these two approaches.

Insurance that originated as a concept of sharing and spreading the risks of a generally homogeneous community is getting more complex, as individuals within the community differ on their exposures and on their risk management behavior. No longer are any two separately insured communities isolated, as earlier; but are now more interdependent on each other. With systems getting precedence over individuals, and with the ability of an individual to disrupt it for whatever reason, insurers need to know more about both of them.

The need of the hour for insurers is to develop new perceptions and approaches to risk management to deal with not only the current crop of risks, but the new risks that are emerging in the universe of risks. How they would plan to go about it would decide the ability of Indian insurers to weather the storms that threaten their bottom lines. Risk discrimination, based on risk management techniques practiced and or imposed, and then pricing the risks accepted should find more acceptability to all concerned. Do we have the technical competence to achieve that is the million-dollar question!

*The author is ex-CMD, Oriental Insurance Co. Ltd.*



# Premium Reserving in General Insurance

ANURAG RASTOGI WRITES THAT ALTHOUGH THERE HAS BEEN PROGRESSIVE DEVELOPMENT IN THE ASSESSMENT OF PREMIUM RESERVING IN MORE RECENT TIMES, THERE ARE STILL SOME GREY AREAS THAT NEED TO BE ADDRESSED SOONER THAN LATER.

Until a few years back, premium reserving in general insurance would mean reserve for unexpired risk only. This was calculated on a thumb rule basis of 50% of written premium for most of the lines and 100% for marine insurance. In the past few years, particularly after the opening up of the sector and the intervention of IRDA in bringing about a more scientific approach, things have improved significantly. In spite of this, there are some areas that need a little more clarity. This paper is an attempt to discuss some such areas and start a debate on the subject.

Premium reserves can be understood by three distinctly meaning but interrelated reserves, viz;

- Unearned Premium Reserve (UPR)
- Unexpired Risk Reserve (URR)
- Premium Deficiency Reserve (PDR)- (also known as Additional URR in some markets).

## Unearned Premium Reserve

Unearned Premium Reserve is a fund that contains the portion of the premium that has been paid in advance for insurance but has not yet been earned. Insurance companies write policies throughout the

accounting year, but close their financial accounts at the end of the year. For many policies, policy period does not expire by the end of that year and leaves a substantial portion of unexpired period to be run in the next accounting year (presuming these are annual policies, which most non life policies actually are). This unexpired risk period gives rise to Unearned Premium Reserve which needs to be carried forward to the next year and deducted from the written premium to arrive at the Earned premium, which will be the insurer's revenue for that year. Of course, the last year's UPR shall be brought forward and shall be earned this year. The calculation of UPR may not be uniform for all lines of business and shall depend on the spread of risk during the period of policy. The UPR calculation for the lines of business having different kinds of risk spread is discussed below:

## • Annual Insurance Covers With Uniform Risk Spread

Lines of business like Fire, Motor, Engineering (except project insurance), and Householders' insurance etc have almost a uniform spread of risk throughout the policy period. This is subject to the assumption that the risk exposure does not increase during certain seasons, say, during monsoon for Motor, or during Diwali for Fire. For all these categories of insurance, the most commonly adopted method is 1/365<sup>th</sup> method, where the UPR is the per day pro-rata premium for the number of unexpired days calculated for each policy written in the accounting year.

A simple example below clarifies the calculation:

Let us take some examples of policies written in year 2006 and assume that the

Policy Start Date	Policy End Date	Unexpired Policy Period	Written Premium	UPR
1-Jan-2006	31-Dec-2006	0	100	0
1-Apr-2006	31-Mar-2007	90	100	25
1-Jul-2006	30-Jun-2007	181	100	50

accounting period is same as calendar period. Then the UPR as at 31.12.2006 will be as given in the table below:

Policy Start Date	Policy End Date	Unexpired Policy Period	Written Premium	UPR
1-Jan-2006	31-Dec-2006	731	100	67
1-Apr-2006	31-Mar-2007	821	100	75
1-Jul-2006	30-Jun-2007	1277	100	87

• **Long Term Insurance Covers with Uniform Risk Spread**

The premium for long term policies should be recognized over the period of the contract and the UPR should be the per day pro-rata premium for the unexpired number of days for each policy written in the accounting year. If we replace annual policies in our above example with long term policies, the UPR calculation on 31.12.2006 will look like:

• **Short Term Insurance Covers with Uniform Risk Spread**

Policies issued for less than a year like Travel Insurance, WC Insurance for short term contracts, Event Insurance etc should earn premium uniformly during their policy period; and the UPR on the balance sheet date shall be the per day pro-rata premium for the unexpired number of policy days.

• **Policies Where Insurance Cover Triggers Much Later Than The Policy Writing Date: Extended Warranty Insurance**

Insurance covers like Extended Warranty Insurance trigger much later than the date on which these are written and the premium collected. Most of the Extended Warranty covers trigger after one, two or three years of the purchase of product covered under the policy, where the warranty is provided by the manufacturer of the product for the initial period of 1, 2 or 3 years.

This can be further explained with an example. Let us assume that Car X manufacturer has bought this one year cover on 01.01.2007 with a policy period beginning on 01.04.2007 and ending on 31.03.2008. The manufacturer provides warranty cover for two years from the date of purchase of the car. After the expiry of manufacturer’s warranty, the extended warranty cover triggers and provides cover for a period of another two years. We visualize this for two car buyers as below

**Buyer 1**

- Car bought on 01.04.2007
- Manufacturer’s warranty period 01.04.2007 to 31.03.2009
- Extended warranty insurance period 01.04.2009 to 31.03.2011

For this car the insurance cover triggers on 01.04.2009 and the insurer starts earning the premium from 01.04.2009 and earns it uniformly over a period of two years.

**Buyer 2**

- Car bought on 31.03.2008
- Manufacturer’s warranty period 31.03.2008 to 30.03.2010
- Extended warranty insurance period 31.03.2010 to 30.03.2012

For this car the insurance cover triggers on 31.03.2010 and the insurer starts

earning the premium from 31.03.2010 and earns it uniformly over a period of two years.

This means that the insurer will not earn anything during the two financial years 2007-08 and 2008-09 and the entire premium will be UPR. If the insurer knew the daily sales of cars and entered this information for each car in his premium register, then the earning can be calculated for each car on a “1/policy period” basis. However, in many cases, although the insurer may get the details of all cars sold, these may not be entered separately in the premium register due to large volume. In such cases we need to make some assumptions to decide on the pattern of earning the premium. Now assuming that the car sales are uniformly distributed during the period 2007-2008, we can assume that all cars were sold on the mid point of 2007-08, i.e. on 01.10.2007. This means that the insurer will be on risk on all these cars from 01.10.2009 to 30.09.2011. In turn this suggests that the first earning of the insurer will be shown during the half year 01.10.2009 to 31.03.2010 and this will be 25% of the premium collected on 01.04.2007.

If we generalize this, the earning can be calculated as below:

Policy written on	dd.mm.yyyy
Manufacturer’s warranty	D years
Extended warranty insurance period	n years
Earning of premium on the policy will commence on	dd. mm. (yyyy+D)
Earning during every financial year days/ (365x2n)	Expired policy

The above assumption for car sales is based on 1/2<sup>nd</sup> method where all cars are assumed to have been sold at mid-year. Other approaches that could be explored are

- 1/8<sup>th</sup> approach - assumption that cars sold in a quarter are sold at mid-quarter
- 1/24<sup>th</sup> approach - assumption that cars sold in a month are sold at mid-month
- Marine Insurance

#### *Specific Cargo Policies*

Specific marine cargo policies are voyage policies and do not have an insurance period. However, on an empirical basis, an estimate can be obtained for the likely period for which an insurance company remains on risk for policies involving different kinds of modes of transport. As an example, overseas ocean policies may be assumed to have a risk period of 90-120 days (maximum of 60 days after arrival at the destination port plus inland transit at both ends and storage period). Similarly overseas air cargo and inland transit policies may be assumed to have a risk period of 45 and 30 days respectively. Hence the premium for these policies may be recognized over their respective risk periods and on the balance sheet date, the UPR may be calculated on a per day pro-rata basis as above.

#### *Open Policies and Open Covers*

In cargo open policies, the entire premium is received in advance and underwritten. The transits covered under the terms of the policy are declared later through periodical declarations. It is these transit declarations that should earn the premium and not the open policy with efflux of time. Depending on the mode of transport, these declarations should earn the premium in line with the discussion above.

Cargo open covers also operate very similar to open policies. The only difference is that the money received for a cargo open cover is not underwritten at the outset, but is held as a deposit premium. For each transit covered under the open cover, a separate certificate is issued by debiting the deposit account and crediting premium account. Therefore for these individual transits premium must be earned exactly as discussed in 1.5.1.

#### *Duty Insurance Policy*

Duty insurance policy, which covers loss of customs duty paid, triggers only after the consignment has arrived inland. So essentially a duty policy covers an inland risk although it is granted in conjunction with an overseas transit. Hence if we are assuming a risk period of 120 days for an overseas ocean policy (which includes up to 60 days of risk after arrival of transit at the destination port), earning of premium for a duty policy could trigger after a lag of 60-75 days and the policy should then earn premium uniformly over a period of 60 days and accordingly UPR may be computed.

#### *Marine Hull Policy*

Most marine hull policies are time policies and may earn the premium uniformly over the policy period on a per day pro-rata basis. For voyage policies issued to ships, no standard method can be suggested and their premium earning will have to be calculated on the basis of the details of each voyage.

#### **Erection All Risks (EAR) And Contractors' All Risks (CAR) Insurance**

These policies have the following unique characteristics

- ❖ The risk exposure is not uniform throughout the period of insurance but

builds up from zero to 100% during the period of insurance.

- ❖ Period of insurance is usually longer than one year, but can be shorter than a year for small projects.
- ❖ The value at risk builds up till the erection is completed followed by 2-3 months of pre-commissioning, testing and commissioning period during which risk exposure is uniform at 100%.

The issue at stake is - "*How is the risk build-up distributed during the period of insurance?*"

Each project will have its peculiar risk development pattern depending upon several factors including:

- The nature of machinery and civil work involved
- Availability of material and labour
- Experience of the contractor in previous such kinds of projects
- Problems faced in the process of erection, e.g. labour, financial, nature related, political etc.

It is indeed hazardous to take a position in regard to the distribution that the risk build-up may follow for disparate projects of varying complexity carried out by contractors of different levels of expertise and know-how. The problem is compounded by non-availability of industry-wide data for different kinds of projects and their risk distribution.

A possible approach is presented below which is a culmination of a series of discussions with engineering insurance underwriters, claims managers and other industry experts. In the absence of credible data, the approach has been to construct theoretical distributions and see which one approximates best to the real life situation

Table 1.6.1.

Cumulative Value Build Up						
Month	Exponential	Cubic	Square	Parallel Line	X ^1.5	Sum of Digits
1	0.0000545	0.0006485	0.0072464	0.0833333	0.0244688	0.0133333
2	0.0001482	0.0051881	0.0289855	0.1666667	0.0692083	0.0400000
3	0.0004027	0.0175097	0.0652174	0.2500000	0.1271437	0.0800000
4	0.0010947	0.0415045	0.1159420	0.3333333	0.1957506	0.1333333
5	0.0029758	0.0810636	0.1811594	0.4166667	0.2735698	0.2000000
6	0.0080891	0.1400778	0.2608696	0.5000000	0.3596168	0.2800000
7	0.0219884	0.2224384	0.3550725	0.5833333	0.4531690	0.3733333
8	0.0597707	0.3320363	0.4637681	0.6666667	0.5536663	0.4800000
9	0.1624736	0.4727626	0.5869565	0.7500000	0.6606583	0.6000000
10	0.4416491	0.6485084	0.7246377	0.8333333	0.7737722	0.7333333
11	0.7208245	0.8242542	0.8623188	0.9166667	0.8868861	0.8666667
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

for this kind of insurance. The possible distributions are given below in the table, followed by their graphical representation in Annexure A and Annexure B.

The calculations to arrive at this table are given in the annexure C.

In annexure A, the value build up is shown on an incremental basis and horizontal line represents the equal distribution of risk throughout the contract period, something similar to one year fire insurance or motor insurance contract. Of course this is not a preferred risk development pattern for EAR/CAR insurance. All the curves taper off into a parallel line to x-axis after 10 months, which represents the Testing period for most CAR/EAR policies. During this period, the risk usually does not increase further, but remains at the fully built up value for the entire testing period. Annexure B shows the cumulative value build up for these curves.

These distributions presume a contract period of 12 months, for the sake of

illustration. However, the logic can be extended to contracts of any length of period. Similarly, we can visualize the following complications in the real life project life cycle

- Premium payment by installments, which is a norm for this class of business
- Longer project periods
- Extension of project period midway, thereby changing the course of risk build up midway
- Suspension of work during the course of erection and thus extension of project period, etc.

All these can be addressed by suitably modifying the curve to represent each of these situations. This can be worked on if there is a broad consensus about this approach in the industry.

If we now decide to go by the risk curve agreed to by the Engineering underwriters, i.e., the Cubic curve, we can look up the cumulative value build up table to find out the earned premium at different stages of

the project. According to this, the earned premium at the end of one month will be just 0.06%, growing to 14% by the end of 6 months, 82.42% by the end of 11 months and 100% by the end of 12 months (the values in table are given in decimals; to arrive at percentage, please multiply by 100).

### Unexpired Risk Reserve

Unexpired Risk Reserve is different from UPR in that it is a measure of likely amount of claims liabilities on the unexpired portion of the policies at the end of an accounting year. The amount of unexpired risk reserve can be substantially different from UPR in the situations discussed below:

- If the insurance policies have been underpriced, it is strongly likely that the expected claims on these policies plus Loss adjustment expenses (including allocated and unallocated expenses) shall be more than the premium for these policies. This indicates that the expected claims plus loss adjustment expenses on

the unexpired portion of the policies (which is URR) is also likely to be more than UPR. This situation can also be visualized when an insurer anticipates a worsening claims trend in the coming accounting year due to some recent developments affecting claims which was not built in the premiums when writing the policies in the earlier accounting period (say, a recent regulatory or judicial decision adversely affecting the liabilities on claims happening from a particular date, which was not factored in the premiums)

- On the other hand, if the insurance policies have been overpriced (which may be a hypothetical situation, at least in free pricing regime), or the insurer anticipates a favourable claims trend in the coming accounting year (although, such anticipation may not be advisable), URR may be lower than UPR

• Calculation of URR

While UPR can be calculated by using simple mathematics for the unexpired period of risk, calculation of URR requires actuarial intervention. This is because URR requires estimation of likely claims on the unexpired portion of policies. There are appropriate actuarial techniques to estimate URR e.g.

- ❖ Ultimate Loss Ratio method, which can be used to estimate the ultimate amount of losses on UPR
- ❖ Risk models, from which the estimated cost of claims can be calculated on the unexpired portion of policies
- ❖ Chain ladder method on an underwriting year cohort

Methods at serial number 2 & 3 are hardcore actuarial methods and are not discussed here. However, the

method at serial number 1 is a simple method and can be easily used by insurance accountants to calculate URR for their companies.

Ultimate Loss Ratio method for calculating URR

The method is briefly given below in steps:

- Step 1: Take written premium for the year
- Step 2: Bring forward and add Technical UPR of last year (technical UPR means UPR calculated from technical principles without regard to the regulatory minimum)
- Step 3: Carry forward and deduct the technical UPR of current year. Call this figure “Technical Earned Premium”
- Step 4: If the technical UPR of current year is less than 50% (assumed that the line of business under consideration is not marine Hull, for which alone regulatory minimum URR is 100%), calculate Additional UPR as the difference between 50% of written premium and technical UPR.
- Step 5: Deduct Additional UPR from “Technical Earned Premium” and call it “Regulatory Earned Premium”
- Step 6: Take incurred claims for the current year
- Step 7: Add IBNR strain for the current year (IBNR strain is the difference between IBNR

at the end and beginning of the current year). Call this figure “Ultimate Claims Amount”

- Step 8: Estimate staff claims servicing expenses (also known as Unallocated Loss Adjustment Expenses or ULAE in actuarial parlance), either as an absolute amount or as a percentage of incurred claims amount and add it to “Ultimate Claims Amount”. Call this figure “Ultimate Loss Amount”
- Step 9: Calculate “Ultimate Loss ratio” as “Ultimate Loss Amount” divided by “Technical Earned Premium”
- Step 10: Apply this Ultimate Loss Ratio to technical UPR of current year. This is the expected amount of ultimate loss amount on the unexpired risks. In other words this is the expected URR.

To help understand the calculations, please refer the illustration given in annexure D.

This approach suffers some actuarial inaccuracies but is a good approximation if actuarial approaches listed at serial number 2 & 3 are not possible for whatever reasons. The accuracy of URR calculated from the above method hinges on the following assumptions:

- IBNR has been calculated using sound actuarial methods or else the Ultimate Loss Ratio may be flawed to the extent of errors in the IBNR approximations.
- The Ultimate Loss Ratio calculated by the above method should be same as the

Ultimate Loss Ratio for the underwriting year in question, the likelihood of which is suspect for reasons given below:

- ❖ Incurred losses are calculated for financial year, to which have been added the IBNR calculated on accident year approach.
- ❖ Ultimate Loss Ratio thus calculated is assumed to be the same for policies written during the accounting period, which is akin to saying that financial year ultimate loss ratio will be same as underwriting year ultimate loss ratio.

• **Premium Deficiency Reserve**

Premium Deficiency Reserve is the difference between technically calculated URR and UPR. It is the estimated deficiency in the UPR, if the URR is higher than UPR. The regulator mandates upon the insurer to estimate this deficiency and provide a reserve for this at the end of every accounting period.

However, in the Indian context, insurers are not allowed to provide UPR calculated on technical basis, instead they have to provide regulatory minimum UPR @ 100% of written premium for Marine Hull insurance and 50% for all other lines of business. In such a situation, PDR will be recognized only if technically calculated URR is higher than regulatory minimum UPR. Therefore in the current Indian situation Premium Deficiency Reserve is the difference between technically calculated URR and regulatory minimum UPR.

At the end of illustration on URR calculation in annexure D, PDR has also been calculated for better clarity.

**Regulatory Provision on Premium Reserves**

Section 64V of the Insurance Act, 1938 provides that for the purpose of examining solvency margin, the reserve for unexpired risks should be:

- *50% of the premium net of reinsurances for Fire and Miscellaneous business;*
- *50% for Marine Cargo business; and*
- *100% for Marine Hull business.*

Hence the act requires a minimum URR in accordance with the proviso above. This means that the total of UPR and PDR should be a minimum as prescribed in the Act; and only for the purpose of calculating solvency, at that. The act does not require either URR or UPR to follow these floors for the purpose of insurers' financial statements. Let's now look at the regulations for financial statements.

The Preparation of Financial Statements Regulations, 2002 requires as below:

*“A reserve for unexpired risks shall be created as the amount representing that part of the premium written which is attributable to, and to be allocated to the succeeding accounting periods and shall not be less than as required under section 64 V(1) (ii) (b) of the Act.”*

What the regulation seems to require here is a provision for UPR, which is clear from the wordings “amount representing that part of the premium written which is attributable to, and to be allocated to the succeeding accounting periods”. However, this has been referred to in the regulations as URR. For the sake of discussion and to avoid confusion between UPR and URR, let us call it UPR here.

If, according to the regulations, UPR has to follow the floor prescribed by the act, the very purpose of calculating UPR by the

technically superior methods gets defeated. For marine insurance policies and other short term policies, the technically calculated UPR typically will be very small, but this gets defeated if insurers have to provide the minimum of 50% prescribed by the regulations. On the other hand most insurers provide only the regulatory minimum UPR for project insurance policies (EAR, SCE etc.), whereas on a technical basis it may be much higher than the regulatory minimum of 50%. For the purpose of solvency calculations, the insurers have to follow the floors prescribed by the act, but for the purpose of preparing financial statements, they should be allowed to reserve for UPR on technical basis rather than the regulatory minimum.

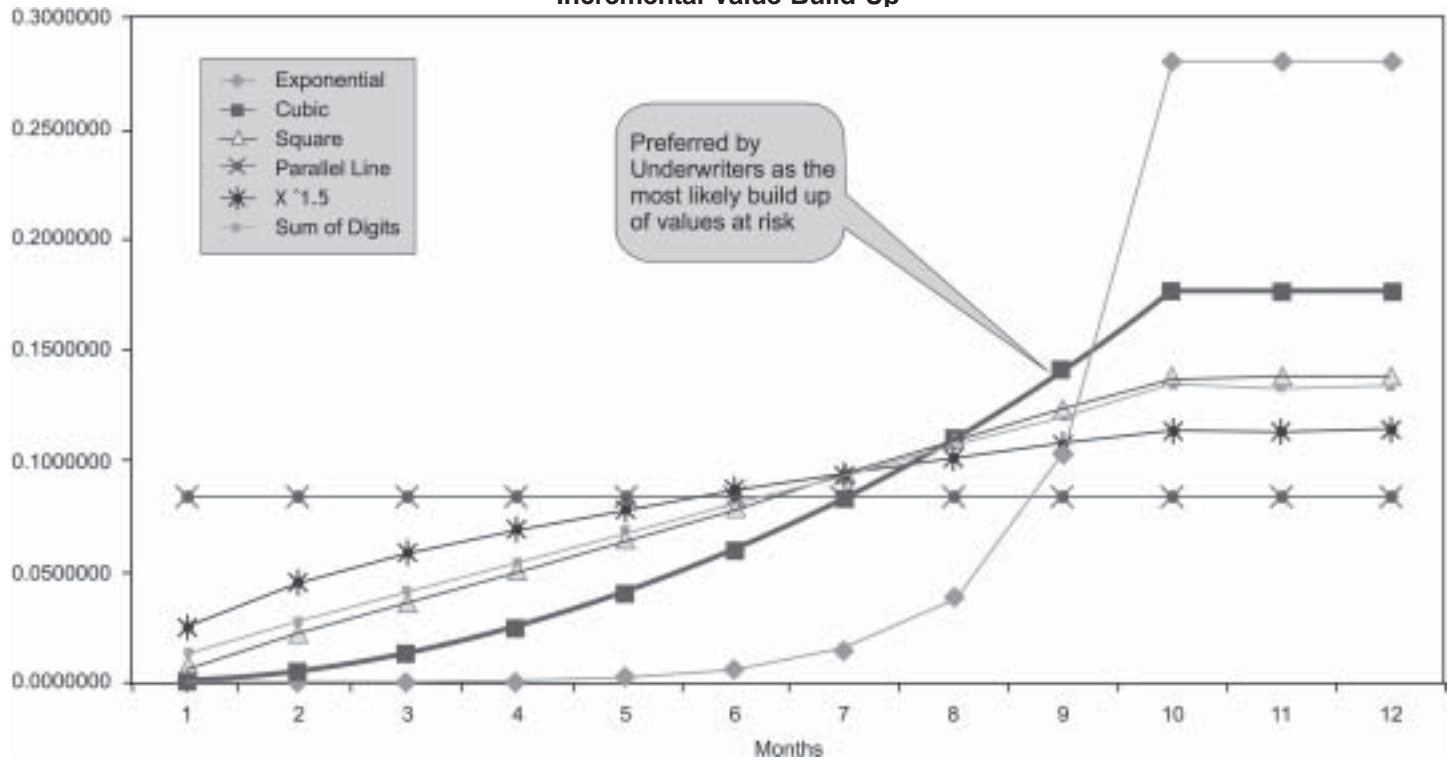
Through this write-up, I would suggest the adoption of following approach in respect of UPR, URR and premium deficiency reserve.

- Regulator may issue guidelines on standard method of calculation of UPR for different lines of business on technical basis.
- The regulations on preparation of financial statements may be amended to allow for UPR on actual basis.
- Separate guidelines on calculation of URR and Premium deficiency reserve may be framed by the regulator.
- For the purpose of financial statements, both the UPR and PDR should be provided for by insurers on actual basis.
- For the purpose of solvency calculations, the act stipulations on minimum URR may continue.

In these troubled times when insurers are squeezed hard for profitability, this will not only give them some temporary respite, but will also be technically correct.

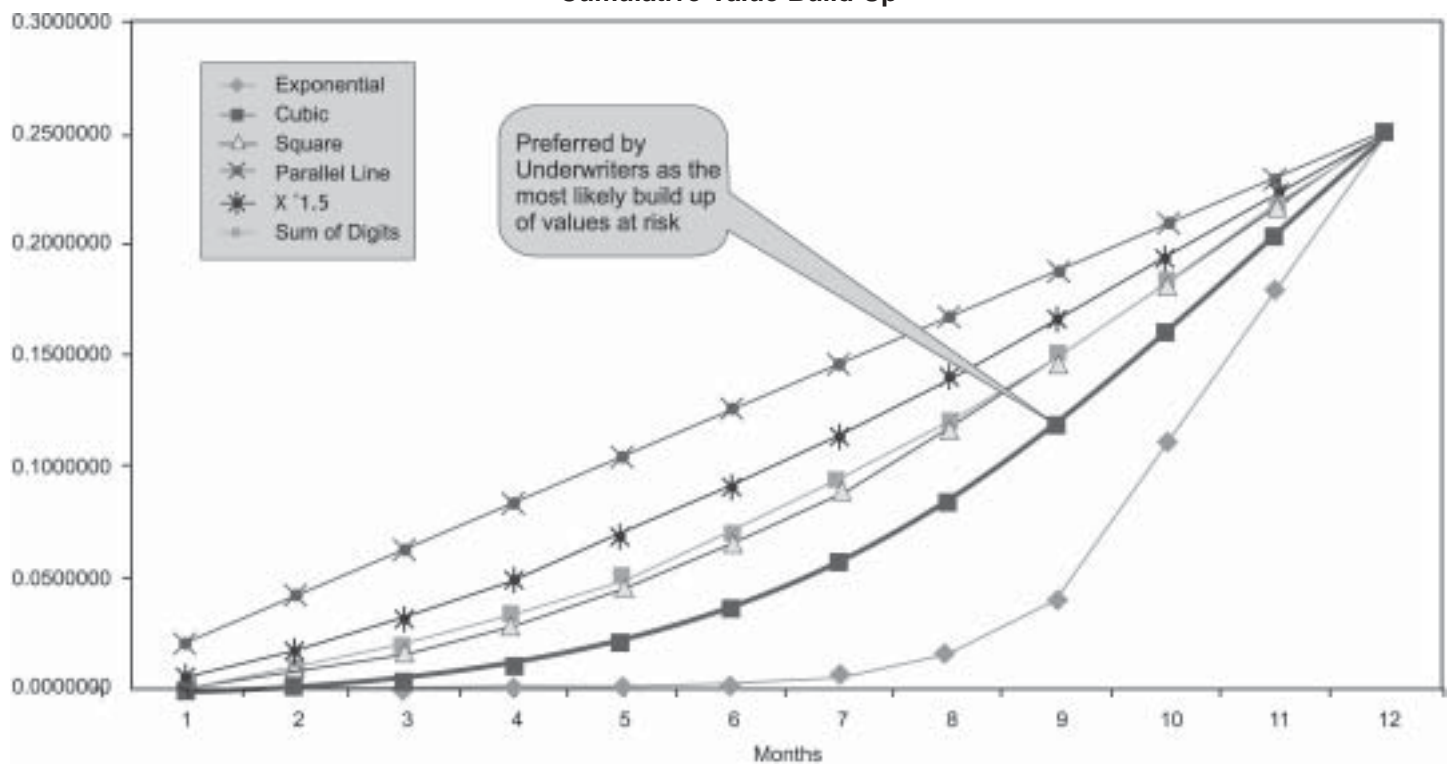
### Erection All Risks Insurance Incremental Value Build Up

Annexure A



### Erection All Risks Insurance Cumulative Value Build Up

Annexure B



Cumulative Value Build Up Table-Calculations

This table has been constructed in two steps.

**Step 1**  
The first step was to construct a table of values derived from applying these distributions to the number of months (variable x). The first table is given below:

Month	Exponential	Cubic	Square	Parallel Line	X ^1.5	Sum of Digits
1	0.0000167	0.0005787	0.0069444	0.0833333	0.0240563	0.0128205
2	0.0000454	0.0046296	0.0277778	0.1666667	0.0680414	0.0384615
3	0.0001234	0.0156250	0.0625000	0.2500000	0.1250000	0.0769231
4	0.0003355	0.0370370	0.1111111	0.3333333	0.1924501	0.1282051
5	0.0009119	0.0723380	0.1736111	0.4166667	0.2689572	0.1923077
6	0.0024788	0.1250000	0.2500000	0.5000000	0.3535534	0.2692308
7	0.0067379	0.1984954	0.3402778	0.5833333	0.4455282	0.3589744
8	0.0183156	0.2962963	0.4444444	0.6666667	0.5443311	0.4615385
9	0.0497871	0.4218750	0.5625000	0.7500000	0.6495191	0.5769231
10	0.1353353	0.5787037	0.6944444	0.8333333	0.7607258	0.7051282
11	0.2208835	0.7355324	0.8263889	0.9166667	0.8719325	0.8333333
12	0.3064317	0.8923611	0.9583333	1.0000000	0.9831392	0.9615385

Exponential curve:

The values from month 1-10 in the exponential column are derived from the formula

Exp (month)/Exp (12)

The value in the 11<sup>th</sup> month is

2 X value for 10<sup>th</sup> month -value for 9<sup>th</sup> month.....(1)

The value for 12<sup>th</sup> month is

Value for 11<sup>th</sup> month + value for 10<sup>th</sup> month - value for 9<sup>th</sup> month .....(2)

The values for 1-10 months for different curves are derived using the following formulae, while the values for 11<sup>th</sup> and 12<sup>th</sup> month are using the formula given at (1) & (2).

Cubic Curve (Month/12)<sup>3</sup>

Square Curve (Month/12)<sup>2</sup>

X<sup>1.5</sup> (Month/12)<sup>1.5</sup>

Sum of digits If  $x_i$  denotes the  $i^{th}$  month, then value for  $i^{th}$  month =  $\frac{\sum_{i=1}^i x_i}{\sum_{i=1}^{12} x_i}$

**Step 2**

In the second step, the values for each month have been rebased by dividing them by the value of the 12<sup>th</sup> month in each column to give the following table shown as table 1.6.1

This is nothing but rescaling all the values in each column by the 12<sup>th</sup> month value, so that by the 12<sup>th</sup> month, each curve reaches 100%.

Cumulative Value Build Up						
Month	Exponential	Cubic	Square	Parallel Line	X ^1.5	Sum of Digits
1	0.0000545	0.0006485	0.0072464	0.0833333	0.0244688	0.0133333
2	0.0001482	0.0051881	0.0289855	0.1666667	0.0692083	0.0400000
3	0.0004027	0.0175097	0.0652174	0.2500000	0.1271437	0.0800000
4	0.0010947	0.0415045	0.1159420	0.3333333	0.1957506	0.1333333
5	0.0029758	0.0810636	0.1811594	0.4166667	0.2735698	0.2000000
6	0.0080891	0.1400778	0.2608696	0.5000000	0.3596168	0.2800000
7	0.0219884	0.2224384	0.3550725	0.5833333	0.4531690	0.3733333
8	0.0597707	0.3320363	0.4637681	0.6666667	0.5536663	0.4800000
9	0.1624736	0.4727626	0.5869565	0.7500000	0.6606583	0.6000000
10	0.4416491	0.6485084	0.7246377	0.8333333	0.7737722	0.7333333
11	0.7208245	0.8242542	0.8623188	0.9166667	0.8868861	0.8666667
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000



### Illustration for URR and PDR Calculation

(Rupees in Crore)

		Scenario 1	Scenario 2	Scenario 3
Written Premium	A	1000	1000	1000
Technical UPR brought forward from last year	B	400	400	400
Technical UPR percentage	C	45%	45%	45%
Technical UPR carried forward for this year	$D = A \times C$	450	450	450
Regulatory minimum UPR	E	50%	50%	50%
Additional UPR to match regulatory minimum	$F = A \times E - D$	50	50	50
Technical earned premium for current year	$G = A + B - D$	950	950	950
Regulatory Earned Premium	$H = G - F$	900	900	900
Incurred Claims ration during the year (without IBNR)	I	80%	90%	95%
IBNR strain for the current year	K	95	95	95
Unallocated (Staff) claim servicing expenses	L	76	85.5	90.25
Ultimate Losses (sum of F9 to F11)	$M = J + K + L$	931	1035.5	1087.75
Ultimate Loss Ration	$N = M / G$	98%	109%	115%
Expected Ultimate Losses on unexpected risks	$O = N \times D$	441	490.5	515.25
Technically Calculated URR	$P = O$	441	490.5	515.25
Premium Deficiency Reserve	$P - D - F$	0	0	15.25

#### Notes

- In scenario 1, technically calculated URR is less than both the technical UPR and regulatory minimum UPR, hence premium deficiency is not recognized.
- In scenario 2, technically calculated URR is less than technical UPR and hence premium deficiency should have been recognized, but as per Indian practices, since regulatory minimum URR is greater than technically calculated URR, premium deficiency is again not recognized.
- In scenario 3, technically calculated URR is greater than both technical UPR and regulatory minimum UPR and hence premium deficiency has been recognized and should be provided.

#### Definitions

**Technical UPR:** UPR calculated using technical principles of risk exposure rather than regulatory minimum

**Technical Earned Premium:** Earned premium calculated on the basis of Technical UPR

**Regulatory earned Premium:** Earned premium calculated on the basis of Regulatory UPR

**IBNR Strain:** IBNR at the end of year less IBNR at the beginning of the year

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## • प्रकाशक का संदेश

**जी**वन बीमा उत्पादों को सधारण जनता द्वारा सदैव बचत प्रपत्र आयकर लाभ के साथ समझा गया है। परंपरागत बीमा उत्पादों में वृद्धि प्राथमिक रूप से मुख्य वर्ग उस प्रवृत्ति से जागृत हुई जिससे कर के बोझ को कम करना था। जोखिम आवरण सम्पूर्ण प्रक्रिया का मात्र घटक था। हम इस सोच से अब तक बाहर नहीं निकले हैं। परंपरागत उत्पादों अब युनिट लिंक अत्पादों में बदल गये हैं। यह देखते हुए की पिछले कुछ वर्षों में शेयर बाजार में काफी धनात्मक परिवर्तन आया है। परिणामस्वरूप शुद्ध जोखिम उत्पाद जो पर्यप्ति जीवन बीमा आवरण उचित दर पर उपलब्ध करवाते थे उनका प्रतिपादन भारतीय बीमा परिवेश में नहीं हो सका है।

निवेश पर वापसी को देखते हुए एक प्रवृत्ति

होती है कि छोटे समय अवधि की बढत का लाभ उठाया जाए समझौते को जल्द समाप्त करना स्रोतो को बडी संख्या में बाहर करता है जो अन्ततः लागत में जुड़ जाता है। एक प्रतिस्पर्धा की सत्ता में ऐसी घटनाएँ खराब व्यवसाय वृद्धि के लिए कार्य करते हैं, बीमाकर्ता की साख को प्रभावित करने के लिए समझौते का चुनाव करें। इस प्राप्त करने के लिए पालसी धारक के लिए यह विकल्प होने चाहिये की वह प्रिमियम देने के लिए अपनी सुविधानुसार विकल्प का उपयोग कर सके।

स्वाभीभक्ति बोनस जो कुछ जीवन बीमाकर्ताओं द्वारा प्रदान किया जाता है जिससे बीमा की अनुमानित अवधि को भरा जा सके यह लम्बे समय तक समझौते को जारी रखने का अच्छा उदाहरण है। उच्च बीमा स्तर अवधि को अपने

पास रखने के लिए एक आवश्यकता है कि उत्पादों को विवेकपूर्ण ढंग से जिज्ञाइन किया जाए तथा यह भी सुनिश्चित किया जाए कि मार्केटिंग व्यक्ति ग्राहक की आवश्यकताओं को समझे तथा उचित का सुझाव दें।

जीवन बीमा में उत्पाद जर्नल के इस अंक के केन्द्र बिन्दु में है, निवेश पर लाभ बीमाकर्ता का मुख्य स्रोत आय के लिए है तथा यह प्रभावशाली रूप से सम्पत्तियों तथा दायित्वों का प्रबन्धन करता है। बीमाकर्ता का सम्पत्ति, दायित्व प्रबन्ध जर्नल के अगले अंक के केन्द्र बिन्दु में होगा।

सी. एस. राव  
सी. एस. राव  
अध्यक्ष

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# दृष्टि कोण

वर्तमान उत्पादों के विभेद वे प्रत्येक प्रकार आवश्यक रूप से बड़ी नाजुकता तथा निवेश के विस्तृत लिखता प्रस्तुत करेंगे।

**श्री क्लेमेंट चुंग**  
कमीशनर बीमा, हॉंग कॉंग

हमने बाजार में उपलब्ध नये मुद्रा लिखित का अभिज्ञान लिया है तथा बीमा कंपनियों को इसमें निवेश करने का अनुमत दिया है। ऐसे समय हमने अधिक विवेक पूर्ण आवश्यकताओं को निर्मित किया है जैसा जौखिम मानक युनिट लिंक बीमा उत्पादों के लिए।

**श्री सी एस राव**  
अध्यक्ष, बीमा विनियामक विकास प्राधिकरण, भारत

माइक्रो बीमा अपेक्षा कृत एक नया घटनावृत्त है लेकिन यह विश्व स्तर पर व्यावसायिक बीमा कंपनियों का हित उत्कृष्ट कर रहा है।

**श्री क्लीम अब्बास**  
प्रथम माइक्रो बीमा अकादमी, पकिस्तान (एफ एम आई ए) मुख्य कार्य पालक

जैसे निधि बढ़ती है, यह महत्वपूर्ण है कि ट्रस्टियों को इस विकास को प्रबन्ध करने की कुशलता होनी चाहिये। हमें यह देखना चाहिये कि ट्रस्टियों के पास ठीक सलाह है जब ऐसी पहल को लागू किया जाए। हमें सीट प्रस्ताव से सहमत होकर उड़ना नहीं है।

**श्री स्टीफेन ग्लेनफिल्ड**  
आस्ट्रेलिया प्रूडेंशल विनियामक प्राधिकरण महा प्रबंधक

जापान में पुरुषों में धूमपान का प्रचलन अपेक्षाकृत अधिक है लेकिन महिलाओं में कम है जापान के धूमपान न करने वाले लोगो में विशेषतः महिलाओं में अप्रत्यक्ष धूमपान फेफड़ों में कैंसर के विकास के लिए मुख्य घटक है।

**डा नौरी कुराहिशी**  
नेशनल कैंसर सेंटर, टोकियो

जीवन सम्भाव्यता तथा सम्पत्ति में बढ़ती व्यक्तियों को सम्पत्ति सुरक्षा तथा हेल्थ बीमा सुरक्षा की मांग को बढ़ाती है साथ ही सम्पत्ति तथा आपात कालिन आवरण का भी।

**श्री हैग स्वीन कैन्ट**  
प्रबन्ध निदेशक, सिंगपुर की मोनेटरी अथारिटी

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# ग्रामीण आधारभूत संरचना के निर्माण में बीमा का योगदान

श्री प्रमोद कुमार वर्मा कहते हैं, मानव संसाधन किसी संगठन या संस्थान की आधारभूत या बुनियादी ढाँचे में शामिल किये जाते हैं।

**आ**धारभूत संरचना या बुनियादी ढाँचे को अंग्रेजी में Infrastructure कहते हैं, इस शब्द की उत्पत्ति 20 वीं शताब्दी के मध्य के पूर्व हुई। इसका प्रयोग सबसे पहले पाकिस्तान में उनके सैन्य स्थापना के लिए किया गया। इसके बाद इस शब्द का उपयोग अमेरिका में 1980 में हुआ। आधारभूत संरचना किसी भी अर्थव्यवस्था का मुख्य स्तम्भ माना जाता है, साथ ही साथ सामाजिक विकास के लिए भी। बहुत से रिपोर्टों एवं शोधों से स्पष्ट हुआ है कि भारत की अर्थव्यवस्था दुनिया की सबसे तेजी से विकसित होने वाली अर्थव्यवस्था है, लेकिन इस विकास को नियमित बनाये रखने के लिए आधारभूत संरचना की आवश्यकता पड़ेगी।

आधारभूत संरचना शब्द का अर्थ अलग-अलग लोगों के लिए अलग-अलग है लेकिन इसका अर्थ मुख्यतः सड़कों, संचार, सिंचाई, मकान बाँध, पुल, भवन, स्वास्थ्य सेवाओं, बन्दरगाहों, एवं शिक्षा इत्यादि से है। किसी व्यक्ति के लिए बुनियादी ढाँचे (संरचना) में उसके नजदीक, स्थानीय वस्तुओं को शामिल करते हैं, जिसमें उसके रहने के लिए मकान, खाने के लिए उपलब्ध खाद्य सामग्री, चलने के लिए वाहन, रात में बिजली, वार्तालाप के लिए संचार, समाज में बराबर स्थान प्राप्त के लिए शिक्षा, स्वस्थ संकट के समय चिकित्सालय सेवाएं, तथा स्थायी

अपंगता या आकस्मिक मृत्यु होने पर उसके परिवार एवं आश्रितों को क्षतिपूर्ति या आर्थिक सहायता तथा इस सबसे महत्वपूर्ण, उसके एवं उसके परिवार के लिए नियमित आय के स्रोत, जिससे एक व्यक्ति इन सभी सुविधाओं को प्राप्त

कर सकता है। ये सभी एक व्यक्ति के लिए आधारभूत संरचना या बुनियादी ढाँचे की सुविधायें हो सकती हैं। इसी तरह किसी संगठन या संस्थान के लिए तथा देश के सन्दर्भ में भी बुनियादी ढाँचे के अर्थ को समझा जा सकता है।

किसी संस्थान या संगठन के लिए बुनियादी ढाँचे के अर्थ में भवन का आन्तरिक संरचना, बाह्य संरचना, संगठन की मशीने प्लाण्ट, कच्ची उपलब्ध सामग्री, परिवहन की सुविधा, संचार की व्यवस्था, तथा जो इस सभी को संचालित करता है मानव संसाधन किसी संगठन या संस्थान की आधारभूत या बुनियादी ढाँचे में शामिल किये जाते हैं। देश के आधारभूत संरचना के अर्थ में इसके सम्पूर्ण संसाधनों को शामिल किया जाता है जिसमें प्रकृति एवं मानव निर्मित दोनों ही शामिल होते हैं। देश की आधारभूत संरचना को दो भागों में बाँट सकते हैं, शहरी एवं ग्रामीण, जिसमें असमान रूप से विकास हो रहा है। यदि हम वैश्वीक दृष्टि से अपने देश की आधारभूत संरचना पर ध्यान केन्द्रित करें तो पता चलेगा कि आर्थिक विकास की दर 6 प्रतिशत प्रति वर्ष बहुत है, लेकिन आधारभूत सुविधाओं की दर अन्य देशों की तुलना में कहीं अधिक कम और असामान्य है।

उपर्युक्त तालिका से स्पष्ट हो जा रहा है कि भारत अन्य देशों की तुलना में आधारभूत संरचना की स्थिति पर कहीं है, भारत की आधारभूत

**यदि हम वैश्वीक दृष्टि से अपने देश की आधारभूत संरचना पर ध्यान केन्द्रित करें तो पता चलेगा कि आर्थिक विकास की दर 6 प्रतिशत प्रति वर्ष बहुत है, लेकिन आधारभूत सुविधाओं की दर अन्य देशों की तुलना में कहीं अधिक कम और असामान्य है।**

## आधारभूत संरचना का वैश्वीक परिदृश्य में अन्तर

आधारभूत संरचना	भारत	अमेरिका	ब्रिटेन	चीन
बिजली उपयोग पर प्रति (KWH)	681	14240	6756	1684
सड़क प्रति मिलियन (km)	2983	21443	6467	1471
लोहा उपयोग दर प्रति (kg)	34	357	195	244
रेलवे प्रति मिलियन (km)	56	755	276	57
पेट्रोलियम रिफाइनरी प्रति (kg)	131	2900	1629	248
मालवाहक बन्दरगाह प्रति	572	7953	9793	4265
यात्रियों दर हवाई अड्डे का उपयोग प्रति (1000 यात्री)	71	4780	3518	151

**कृषिगत कार्यों से आय में निरन्तर गिरावट के कारण कृषि को छोड़कर गैर-कृषिगत कार्यों को अपना रहे हैं इन सबके पीछे आधारभूत संरचना की कमी का बहुत बड़ा हाथ है।**

संरचना उसके प्रतिस्पर्धा चीन की तुलना में भी कम है।

भारत की अर्थव्यवस्था में सकल घरेलू उत्पाद की वृद्धि दर वर्तमान वर्ष 2007-08 में 9.6 प्रतिशत है। भारत सरकार के अनुसार आधारभूत संरचना में विनिवेश करना, इसकी गति को समान बनाये रखेगा। भारत सरकार ने 11वीं पंचवर्षीय योजना अवधि (2007-2012)

में \$320 विलियन निवेश की आवश्यकता होगी। जिसकी अनुमान 2005-06 के मूल्य पर अनुमानतः निर्धारित किया गया है। इस तालिका में एक डालर को INRS:45.30 माना गया (2005-06 के मूल्य के अनुसार) नीचे तालिका में भारत में आधारभूत संरचना के विनिवेश हेतु सभी क्षेत्रों का उल्लेख एवं उसके लिए कोष की राशि निर्धारित की गयी है।

### आधारभूत संरचना (बुनियादी ढाँचे) संयोजित लक्ष्य

आधारभूत संरचना में विनिवेश के क्षेत्र	USD (बिलियन में)	INRS (करोड़ में)
बिजली	130	616,500
रेलवे	66	300,000
राष्ट्रीय राजमार्ग	49	220,000
सिविल विमानन	9	40,000
बन्दरगाह	11	50,000
उप कुल योग	265	1,226,500
अन्य क्षेत्र *	55	223,500
<b>कुल योग</b>	<b>320</b>	<b>1,450,000</b>

\* अन्य क्षेत्रों में संचार आर्थिक क्षेत्र, पानी, शहरी आधारभूत संरचना को सहायता, ग्रामीण सड़कों, पाइपलाइन, स्वच्छता अभियान इत्यादि को शामिल किया गया है। वर्तमान में आधारभूत संरचना का विकास 4.7 प्रतिशत प्रतिवर्ष की दर से हो रहा है, जिसका 11वीं पंचवर्षीय योजना के (2007-12) के अन्त तक 8 प्रतिशत प्रतिवर्ष की सम्भावना है।

जब बुनियादी ढाँचे की बात आती है तो सबसे बड़ा प्रश्न उत्पन्न होता है, शहरी एवं ग्रामीण क्षेत्रों में उपलब्ध बुनियादी ढाँचे की जहाँ शहरों में अधिक बुनियादी ढाँचे की सुविधायें हैं और इसके विपरीत ग्रामीण क्षेत्रों में बहुत कम, ये दो विपरीत स्थितियाँ हैं। ठीक यही स्थिति जनसंख्या को लेकर है, जहाँ शहरों में कुल जनसंख्या का 30 प्रतिशत जनसंख्या निवास करती है तो ग्रामीण क्षेत्रों में 70 प्रतिशत। ग्रामीण जनसंख्या के लिए कम सुविधायें एक शहरी जनसंख्या को अधिक। आधारभूत संरचना की सुविधाओं पर सरकार को अवश्य ही ध्यान देना चाहिए।

छ: लाख से भी अधिक गाँवों वाला भारत देश जहाँ ग्रामीण जनसंख्या पूरे भारत वर्ष में फैली हुई है। जिनकी आय का मुख्य स्रोत कृषि है वे कृषि पर ही प्रत्यक्ष एवं अप्रत्यक्ष रूप से निर्भर रहते हैं किन्तु कृषिगत कार्यों से आय में निरन्तर गिरावट के कारण कृषि को छोड़कर गैर-कृषिगत कार्यों को अपना रहे हैं इन सबके पीछे आधारभूत संरचना की कमी का बहुत बड़ा हाथ है। आधारभूत संरचना के लिए सबसे अधिक जरूरी पर्याप्त कोष का निर्माण करना। इस कोष के निर्माण के लिए भारत सरकार वित्त मंत्रालय एवं आर्थिक विकास विभाग मिलकर भारत के आधुनिक आर्थिक विकास के लिए प्रत्यक्ष रूप से कोष उपलब्ध कराते हैं किन्तु भारत सरकार ने अब यह योजना बनाई है जिससे निजी एवं सार्वजनिक साझेदारी (PPP) से भारत की आधारभूत संरचना के लिए कोष एकत्र कर सके। भारत के आधारभूत संरचना

के लिए अभी हाल ही में निजी एवं सार्वजनिक साझेदारी ने कुछ सुरक्षात्मक कार्य किये हैं। निजी एवं सार्वजनिक साझेदारी में अनेक संस्थानों में बीमा कम्पनियों का बहुत बड़ा योगदान है जिसमें सार्वजनिक कम्पनियों के साथ निजी बीमा कम्पनियाँ भी अपना योगदान देती हैं तथा जिसमें जीवन बीमा एवं गैर-जीवन बीमा (सामान्य बीमा) कम्पनियों द्वारा भी आधारभूत संरचना हेतु बड़ा योगदान किया जाता है। आर्थिक विकास की दर को बनाये रखने के लिए, भारत को आधारभूत संरचना की आवश्यकता की गर्मी महसूस होने लगी है जो भौतिक एवं मानव दोनों के विकास के लिए आवश्यक है। अभी तक भारतीय अर्थव्यवस्था में जो भी योजनाएँ बनायी गयी हैं उसमें आधारभूत संरचना हमेशा सबसे पीछे रहा है। सम्भावना यह भी है कि आने वाले बजट में सरकार भारतीय आधारभूत संरचना पर विशेष ध्यान देगी हाल ही में सरकार द्वारा ग्रामीण आधारभूत संरचना के लिए "भारत निर्माण" योजना लागू किया जो सराहनीय है। आधारभूत संरचना में कोष के निर्माण के लिए, प्रत्यक्ष विदेशी विनिवेश प्राप्त करने हेतु 100 प्रतिशत विनिवेश की नीति का अपनाया जा रहा है, जिससे पर्याप्त कोष का निर्माण हो सके। कोष का निर्माण हो भी जाए तो भी आधारभूत संरचना के निकास के लिए समय लगता है, इस समस्या को तुरन्त हल नहीं किया जा सकता परिणाम स्वरूप आधारभूत संरचना की समस्या भारत में कुछ समय के लिए बनी रहेगी, जब तक तकनीकी विकास नहीं होता, जिससे निर्माण क्रियाओं में लगने वाला समय कम हो सके और निर्माण के गुणों एवं मनकों का विकास हो सके। जिस तरह अर्थव्यवस्था को गति देने आधारभूत संरचना का योगदान होता ठीक उसी प्रकार आधारभूत संरचना में हम बीमा क्षेत्र के योगदान को इनकार नहीं कर सकते। बीमा सकल घरेलू उत्पाद में योगदान के अलावा बीमा उद्योग का सामाजिक

महत्व भी काफी अधिक है यह महत्व उन संक्यों, जोखिमों एवं अनिश्चितताओं के कारण होने वाली हानि से राहत पहुँचता है एक ओर बीमा कम्पनियाँ, व्यक्तियों से प्रीमियम प्राप्त करते कोष का निर्माण करती हैं और उन पर जब कोई संकट उत्पन्न होता है तो निर्मित कोष से उसकी सहायता करती है और हानि को समुहों में वितरित कर देती है। बीमा कम्पनियाँ प्राप्त प्रीमियम से जब कोष का निर्माण करती हैं तो उनको बीमा विनियामक एवं विकास प्राधिकरण के दिशा निर्देशों के अनुसार अपने प्राप्त प्रीमियम का कुछ अंश आधारभूत संरचना के कोष हेतु करना पड़ता है। बीमा से बहुत लोगों को रोजगार भी प्राप्त है लाखों लोग परोक्ष रूप से बीमा क्षेत्र में अभिकर्ता के रूप में कार्यरत हैं और संख्या दिनों दिन बढ़ती जा रही है।

बीमा क्षेत्र बुनियादी ढाँचे के विकास में निवेश के लिए न केवल दीर्घाविधि कोष उपलब्ध कराता है, बल्कि उनकी जोखिम उठाने की क्षमता में भी अभिवृद्धि करता है। अनुमान है कि अगले दस वर्षों में भारत को एक खरब अमेरिकी

डालर के निवेश की जरूरत आधारभू संरचना के लिए होगी, एक हद तक बीमा क्षेत्र इस निवेश की जरूरत की भरपाई कर सकता है, ताकि बुनियादी ढाँचे का विकास हो सके और देश के आर्थिक विकास की निरंतरता बनी रहे।

बीमा विनियामक एवं विकास प्राधिकरण द्वारा निर्धारित निवेश-निर्देशों के अनुसार जीवन बीमा कम्पनियों के लिये कम से कम 15 प्रतिशत तथा गैर-जीवन बीमा कम्पनियों को कम से कम 10 प्रतिशत राशि बुनियादी ढाँचे एवं सामाजिक क्षेत्र में निवेश करना अनिवार्य है जीवन बीमा निगम द्वारा इस क्षेत्र में सबसे बड़ा योगदान किया जाता रहा है अक्टूबर 2005 के महीने में अकेले जीवन बीमा निगम ने एक हजार करोड़ रुपये का निवेश बुनियादी ढाँचे में किया है।

मार्च 2006 को सभी कम्पनियों का सकल विनिवेश 529,484 करोड़ रुपये का था जो आधारभूत संरचना में अनिवार्य रूप से 54,620 करोड़ रुपये विनिवेश किया गया जो कुल का 10.32 प्रतिशत विनिवेश रहा।

## बीमा कम्पनियों द्वारा आधारभूत संरचना एवं सामाजिक सुरक्षा में विनिवेश

गैर जीवन बीमा	2003-04	2004-05	2005-06
कुल विनियोग	34,075	37,412	42,333
आधारभूत संरचना में योगदान	3,600	4,390	4,982
<b>जीवन बीमा</b>			
कुल विनियोग	3,52,625	4,28,452	4,87,151
आधारभूत संरचना में योगदान	38,637	45,521	49,638
कुल बीमा कम्पनियाँ विनियोग	3,86,700	4,65,864	5,29,484
<b>कुल विनिवेश</b>	<b>42,237</b>	<b>49,911</b>	<b>54,620</b>

**बीमा कम्पनियों का निष्पादन बनाम प्राधिकरण द्वारा प्राप्त**

सरकारी प्रतिभूतियाँ			आधारभूत संरचना एवं सामाजिक सुरक्षा	
जीवन बीमा	निष्पादन	प्राधिकरण (50% से कम नहीं)	निष्पादन	15% से कम नहीं
सार्वजनिक	61.9	""	12.4	""
निजी	56.5	""	18.8	""
कुल	61.8	""	12.5	""
गैर-जीवन बीमा			निष्पादन	10% से कम नहीं
सार्वजनिक	39.3	""	11.5	""
निजी	41.8	""	14.9	""
कुल	39.6	""	11.8	""

नहीं प्रदान करता बल्कि बीमा देश के लिए जनशक्ति और भौतिक संसाधनों को पर्याप्त रूप से शक्तिशाली बनाता है, यदि व्यक्ति को पर्याप्त आधारभूत संरचना का लाभ मिले तो जनसंख्या, शिक्षित, स्वास्थ्य और कुशल होगी तथा भौतिक संसाधनों की क्षति नहीं होगी और इसका उपयोग शत प्रतिशत होगा। बीमा के विकास से संसाधनों की पर्याप्त कुशलता के साथ-साथ कृषि उद्योग, व्यापार, यातायात, एवं वित्तीय सुविधाओं का सूचारु रूप से उत्थान हो रहा है जो देश के विकास के लिए अति आवश्यक है। बीमा के माध्यम से सामान्य विकास के साथ-साथ हम सन्तुलित विकास सम्भव होता है क्योंकि प्रत्येक पिछड़े क्षेत्रों विशेष रूप से ग्रामीण क्षेत्रों का विकास ही नहीं होगा बल्कि उनकी सुरक्षा भी इसी के माध्यम से हो जायेगा। बीमा के माध्यम से देश की आधारभूत संरचना सुरक्षित रहती है, क्योंकि बीमा से आधारभूत संरचना में विनियोग से पर्याप्त पूंजी मिल जाती है जो देश की प्रगति के लिए आवश्यक है।

**बीमा कम्पनियाँ उचित रूप से सरकारी प्रतिभूतियों में विनिवेश करना चाहती हैं लेकिन आधारभूत संरचना के लिए कम ध्यान देती हैं।**

वर्तमान में सार्वजनिक एवं निजी कम्पनियाँ दीर्घकालीन प्रतिभूतियों में विनिवेश के लिए अवसरों का इंतजार कर रही है लेकिन उनके पार इतना कोष एवं सुविधायें नहीं है जिससे वे विनिवेश नहीं कर पा रही हैं। सार्वजनिक क्षेत्रों की प्राथमिकता के कारण ये जोखिम विरोधी दृष्टिकोण हैं, दूसरी ओर प्राधिकरण का प्रतिबंध है। यह स्पष्ट है कि बीमा कम्पनियाँ उचित रूप से सरकारी प्रतिभूतियों में विनिवेश करना चाहती हैं लेकिन आधारभूत संरचना के लिए कम ध्यान देती हैं। आज भी आधारभूत संरचना में सबसे अधिक योगदान सार्वजनिक कम्पनियों का है। उपर्युक्त सभी तथ्यों को ध्यान में रखे तो आधारभूत संरचना की आवश्यकता व्यक्ति, समाज, व्यापार एवं देश के विकास के लिए अति आवश्यक है इससे इनकार नहीं किया जा सकता और इससे भी इनकार नहीं किया जा सकता कि बीमा का योगदान देश के विकास के लिए बहुत ही आवश्यक है बीमा देश के विकास के लिए आधारभूत संरचना की सुविधायें ही

**सन्दर्भ ग्रन्थ सूची**

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# कटरीना हरिकेन

डॉ उमेश चन्द्र कुलश्रेष्ठ कहते हैं, बढ़ती गर्मी की वजह से जल वाष्प का बनना भी बढ़ा है जो थंडर स्टॉम बनाने में सहायक है और यह बाद में चक्रवात और हरिकेन भी बना सकता है।

**शीतोष्ण** प्रदेशीय चक्रवातों का एक प्रकार है हरिकेन। यूँ तो छोटे-मोटे हरिकेन अटलांटिक महासागर में आते ही रहते हैं परन्तु हाल ही में चर्चा का विषय बने कटरीना हरिकेन की तीव्रता बहुत अधिक रही। 23 अगस्त को उठा तूफान हरिकेन बनकर 31 अगस्त तक विभिन्न अमेरिकी शहरों और अन्य इलाकों को तबाह करता रहा। इस हरिकेन में अधिकतम 175 मील प्रति घंटा की तीव्रता की हवाएं चलीं जिससे भारी नुकसान हुआ। तकरीबन दस हज़ार जानें गईं और करीब 25-120 अरब अमेरिकी डालर की सम्पत्ति का नुकसान हुआ। कटरीना ने उत्तरी अमेरिका के पूर्वी भागों को अपनी चपेट में लिया जिनमें प्रमुख हैं - मिसिसिपी, आलाबामा तथा दक्षिणी फ्लोरिडा, आदि। कटरीना का सबसे ज्यादा बुरा असर 25 अगस्त को हुआ जब हैलान्डेल तथा एवेन्चुरा के बीच जमीन धंस गई। 27 अगस्त को कटरीना और अधिक खतरनाक होकर तीसरे दर्जे का हरिकेन बन गया। दर्जे का वर्गीकरण वायुवेग के आधार होता है जो आगे बताया गया है। 28 अगस्त को आई तीव्रता चतुर्थ दर्जे की और अधिक खौफनाक हो गई, और अगली सुबह 29 अगस्त को इसकी गति करीब 175 मील प्रति घंटा की हो चली थी जो कि पंचम दर्जे की गति से भी अधिक थी। दोपहर तक इसके केन्द्र का दबाव 902 मिलीबार रह गया और यह अब तक का चौथा भीषण हरिकेन बन चुका था जिसने उत्तरी अमेरिका के पूर्वी हिस्सों में तबाही मचा दी।

नीचे की तालिका से हम विभिन्न चार हरिकेनों की तुलना कर सकते हैं जिन्होंने इतिहास रचा है।

क्रम	हरिकेन	वर्ष	दाब
1	गिलबर्ट	1988	888 मिलीबार
2	लेबर डे	1935	892 मिलीबार
3	एलन	1980	899 मिलीबार
4	कटरीना	2005	902 मिलीबार

इस हरिकेन की वजह से सबसे ज्यादा जानें लूसियाना के ओरलीयन्स में गईं। मिसिसिपी में भी काफी नुकसान हुआ। इस तरह की प्राकृतिक आपदा से मानवीय क्षति की आपूर्ति असंभव है, साथ ही सभी तरह की व्यवस्थाओं को सूचारू रूप से चलाने में बहुत समय लग सकता है।

आइए अब बात करते हैं हरिकेन के प्रकारों की। विभिन्न प्रकार के हरिकेनों के उनके वायुवेग के आधार पर वर्गीकृत किया जाता है। ये मुख्यतः पांच प्रकार के होते हैं -

प्रथम - इनकी हवाएं 74-95 मील/घंटा चलती हैं।

द्वितीय - हवाओं की गति 96-110 मील/घंटा

तृतीय - हवाओं की गति 111-130 मील/घंटा

चतुर्थ - हवाओं की गति 131-155 मील/घंटा

पंचम - 155 मील/घंटा के ऊपर

चतुर्थ एवं पंचम दर्जे के हरिकेन बहु भीषण माने जाते हैं।

**हरिकेन होते क्या हैं?**

शीतोष्ण कटिबन्धीय चक्रवात जिनकी गति 74 मील/घंटा से अधिक होती है, हरिकेन कहलाते हैं। हरिकेन की घुमावदार हवा अपने केन्द्र के चारों ओर घूमती है। उत्तरी गोलार्ध में यह एन्टीक्लॉकवाइज़ होती है तथा दक्षिणी गोलार्ध में यह क्लॉकवाइज़ घूमती है। शीतोष्ण क्षेत्रों के समुद्रीय भाग पर अधिक तापमान व आर्द्रता की

**शीतोष्ण कटिबन्धीय चक्रवात जिनकी गति 74 मील/घंटा से अधिक होती है, हरिकेन कहलाते हैं। हरिकेन की घुमावदार हवा अपने केन्द्र के चारों ओर घूमती है।**



पिछले 9 सालों में बहुत अधिक हरीकेन देखे गये हैं। अतः जलवायु तथा मौसम वैज्ञानिक इस तरह के परिवर्तन को ग्लोबल वार्मिंग से जोड़कर देख रहे हैं।

वजह से कन्वक्शन उत्पन्न होता है। शीतोष्ण समुद्रीय क्षेत्रों में इस तरह कम दाब की स्थिति उत्पन्न हो जाती है जिसकी वजह से तूफान आते हैं जिनकी गति 39-73 मी/घं हो सकती है। अधिक समय तक यदि सतह का दाब कम रहना जारी रहता है तो यही तूफान चक्रीय आकार लेने लगते हैं और चक्रवात में बदल जाते हैं, जिसे साइक्लोन भी कहते हैं। सामान्यतः हरीकेन बनने का समय जून से लेकर सितम्बर तक होता है। एक हरीकेन में एक आंख होती है जो बीचोंबीच 20-50 किमी दायरे में होती है और इसको केन्द्र माना जाता है। इसके आसपास बादलों का झुंड रहता है, जो भारी वर्षा करता जाता है और अधिक तबाही मचाता है। हरीकेन करीब 2-3 सप्ताह तक सक्रिय रहते हैं।

## हरीकेन, टाईफून तथा ट्रॉपिकल चक्रवात क्या हैं?

हरीकेन तथा टाईफून दोनों ही ट्रॉपिकल चक्रवातों के नाम हैं जो क्षेत्रीय आधार पर अलग-अलग हैं। जैसा कि पहले वर्णन किया जा चुका है कि शीतोष्ण प्रदेश जो कि विषुवत रेखा के दोनों ओर लगभग 30° उत्तरी एवं दक्षिणी अक्षांश वाला क्षेत्र है, चक्रवातों को जन्म देता रहता है। ऐसा इसलिए होता है कि शीतोष्ण क्षेत्रों में अधिक गर्मी होती है जो कम दबाव की स्थिति पैदा करती है जिसे भरने के लिए टंडी तथा आद्र हवाएं आती हैं। जब ये हवाएं अधिक तेज होती हैं (39-73 मी/घं) तो इन्हें तूफान कहा जाता है। यदि ये हवाएं 74 मील/घं या इससे ऊपर बहने लगती हैं तो इन्हें हरीकेन, टाईफून या ट्रॉपिकल साइक्लोन कहते हैं -

- |                   |   |
|-------------------|---|
| हरीकेन            | - उत्तरी अटलांटिक महासागर, उत्तरपूर्वी प्रशांत महासागर या दक्षिणी प्रशांत महासागर से उठने वाले तूफान को |
| टाईफून            | - उत्तर पश्चिमी प्रशांत महासागर से उठने वाले तूफान को   |
| ट्रॉपिकल साइक्लोन | - हिन्दी महासागर या दक्षिण पश्चिमी प्रशांत महासागर से उठने वाले तूफान को                                |

## क्या हरीकेन का सम्बंध मौसम के बदलाव से है?

देखा यह गया है कि वर्ष 1970-1994 तक अटलांटिक महासागर में हरीकेन की सक्रियता ज्यादा अधिक नहीं थी। परन्तु पिछले 9 सालों

में बहुत अधिक हरीकेन देखे गये हैं। अतः जलवायु तथा मौसम वैज्ञानिक इस तरह के परिवर्तन को ग्लोबल वार्मिंग से जोड़कर देख रहे हैं। ग्लोबल वार्मिंग की समस्या इस तरह के वातावरण को तैयार करती है जिससे हरीकेन सक्रिय होते हैं जैसे कि तापमान को थोड़ा बढ़ावा देना। यह सच हो सकता है क्योंकि जल की गर्माहट हरीकेन पैदा करने के लिए एक प्रमुख घटक है। पिछले दस सालों में औसतन 1.25 इंच समुद्रीय सतह बढ़ी है। बढ़ती गर्मी की वजह से जल वाष्प का बनना भी बढ़ा है जो थंडर स्टॉम बनाने में सहायक है और यह बाद में चक्रवात और हरीकेन भी बना सकता है। जलवाष्प के रूप में जो उष्मा निकलती है वह वर्षा होने पर ठण्डी हो जाती है जोकि हरीकेन को सक्रिय होने के लिए इंधन का काम करती है। इस धारणा पर वैज्ञानिकों ने कार्य करना शुरू कर दिया है। यदि यह सही पाया जाता है तो हमें निश्चित ही ग्लोबल वार्मिंग की समस्या को कम करना होगा।

लेखक भारतीय रसायनिक प्रौद्योगिक संस्थान, हैदराबाद के विश्लेषण अनुभाग से।

# Report Card: General

## GROSS PREMIUM UNDERWRITTEN FOR AND UP TO THE MONTH OF FEBRUARY 2008

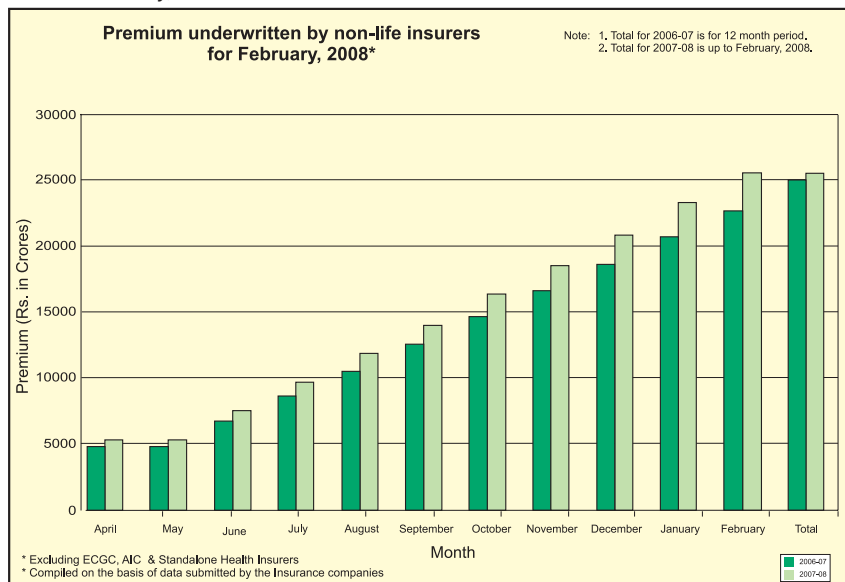
(Rs.in Crores)

INSURER	FEBRUARY		APRIL - FEBRUARY		GROWTH OVER THE CORRESPONDING PERIOD OF PREVIOUS YEAR
	2007-08	2006-07	2007-08	2006-07	
Royal Sundaram	61.54	48.52	627.74	542.66	15.68
Tata-AIG	67.99	50.68	740.27	686.96	7.76
Reliance General	136.10	91.33	1809.74	803.59	125.21
IFFCO-Tokio	100.82	86.34	1028.29	1066.18	-3.55
ICICI-Iombard	239.78	201.78	3142.89	2803.34	12.11
Bajaj Allianz	225.06	147.18	2150.52	1621.44	32.63
HDFC General	15.87	13.96	201.85	170.17	18.61
Cholamandalam	43.86	24.07	479.38	282.71	69.56
Future Generali*	2.93	0.00	8.37	0.00	
Universal Somp**	0.48	0.00	0.48	0.00	
New India	398.21	381.41	4760.52	4482.57	6.20
National	344.93	319.76	3640.99	3428.21	6.21
United India	290.94	259.03	3367.33	3160.81	6.53
Oriental	287.46	291.20	3511.04	3596.21	-2.37
PRIVATE TOTAL	894.43	663.85	10189.51	7977.05	27.74
PUBLIC TOTAL	1321.54	1251.40	15279.88	14667.80	4.17
GRAND TOTAL	2215.98	1915.25	25469.39	22644.84	12.47
<b>SPECIALISED INSTITUTIONS</b>					
<b>Credit Insurance</b>					
ECGC	59.46	52.73	590.41	545.51	8.23
<b>Health Insurance</b>					
Star Health & Allied Insurance	4.99	0.98	162.23	17.84	809.21
Apollo DKV*	0.33	0.00	0.94	0.00	
Health Total	5.32	0.98	163.17	17.84	814.47
<b>Agriculture Insurance</b>					
AIC	66.67	30.29	766.83	502.83	52.50

Note: Compiled on the basis of data submitted by the Insurance companies

\* Commenced operations in November, 2007.

\*\* Commenced operations in February, 2008.



14 - 19 Apr 2008  
Venue: Pune

**Creative Thinking & Decision Making**  
By *NIA, Pune.*

15 Apr 2008  
Venue: New Delhi

**Medical Technology Conference**  
By *Confederation of Indian Industry (CII)*

15 - 16 Apr 2008  
Venue: Hanoi, Vietnam

**2<sup>nd</sup> Life Summit in Asia**  
By *Asia Insurance Review, Singapore*

16 - 17 Apr 2008  
Venue: New Delhi

**Conference on Operationalising Public Private Partnerships for Disaster Management**  
By *National Disaster Management Authority, Govt. of India*

21 - 23 Apr 2008  
Venue: Pune

**Management of Motor Insurance**  
By *NIA, Pune*

28 - 29 Apr 2008  
Venue: Bahrain

**2<sup>nd</sup> Middle East Conference on Bancassurance & Alternative Distribution Channels**  
By *Asia Insurance Review, Singapore*

28 - 29 Apr 2008  
Venue: Singapore

**Asia Insurance Summit**  
By *Informa Finance, Singapore*

7 - 9 May 2008  
Venue: Singapore

**2<sup>nd</sup> Asian Insurance CFO Summit**  
By *Asia Insurance Review, Singapore*

12 - 14 May 2008  
Venue: Aqaba, Jordan

**International Conference on Insurance and Marine Transportation**  
By *Jordan Insurance Federation*

22 - 23 May 2008  
Venue: Singapore

**Conference on Terrorism and Political Risk in Asia**  
By *Asia Insurance Review, Singapore*

2 - 4 Jun 2008  
Venue: Dubai, UAE

**2<sup>nd</sup> Mena CEO Insurance Summit**  
By *Asia Insurance Review, Singapore*

# view point

Going forward, product differentiation will almost inevitably lead to greater sophistication and variety of underlying investment instruments.

**Mr Clement Cheung**

*Commissioner of Insurance, Hong Kong*

We have taken cognizance of new instruments available in the market and allowed insurance companies to invest in these. At the same time, we have also built in more prudential requirements such as exposure norms for unit linked insurance products.

**Mr CS Rao**

*Chairman, Insurance Regulatory & Development Authority, India*

Micro insurance is a relatively new phenomenon, but it is attracting increasing interest worldwide from commercial insurance companies.

**Mr Kleem Abbas**

*First Micro Insurance Academy, Pakistan (FMIA)'s Chief Executive Officer*

As the funds grow, it is important that trustees have the skills to manage the growth. We will be looking to see whether trustees have had the appropriate advice in place when implementing such initiatives. We won't be accepting a fly by the seat approach.

**Mr Stephen Glenfield**

*Australian Prudential Regulation Authority (Apra)'s General Manager*

As the prevalence of smoking in Japan is relatively high in men, but low in women; the development of lung cancer in non-smoking Japanese women may be significantly impacted by passive smoking.

**Dr Norie Kurahashi**

*National Cancer Center, Tokyo*

The increase in wealth and life expectancy will lead individuals to demand a range of wealth protection and health insurance; as well as property and casualty coverage.

**Mr Heng Swee Keat**

*Managing Director, Monetary Authority of Singapore*