

# Journal

## Pricing of the Product



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A portrait of C.S. Rao, a middle-aged man with grey hair and glasses, wearing a light blue striped shirt. He is seated and looking towards the camera. The background is a plain, light-colored wall.

## *From the Publisher*

The demand for a product, as economists tell us, is normally price elastic. As a corollary, it is generally the price that determines its success. In a service like insurance, however, there are several factors that should be taken into account while pricing a product; and when these ingredients are themselves undergoing a constant change, to price a product properly becomes a daunting task.

First and foremost; in pricing, insurers are guided by the basic components of covering the total cost of claims likely to be paid - the concept of natural premium in life insurance; and pure premium in non-life insurance. But it must be ensured that the data that provides the information to the insurers in arriving at the natural or the pure premium is reliable and up-to-date. In life insurance, mortality which forms the basis for arriving at the natural premium has to be near identical for all the players, for obvious reasons. This would place a lot of importance on the other factors that go into deciding the premium viz. management of expenses and investment income. In a highly sensitive and volatile interest rate scenario, managing the investments profitably is once again a huge task and needs to

be handled carefully. While the statute may provide for limits on total expenditure, insurers would do well not in just managing the expenses within limits, but by adopting measures to control the expenses to the largest extent possible.

In the non-life arena, while the insurers have to be prudent in the areas of investments and expenditure as mentioned above, they have to be doubly careful with regard to the inputs that go into deciding their pure premium. This has never been really challenged hitherto, in the light of the tariff regime. But with de-tariffing just in the offing, it is going to be a challenging task. Insurers should avoid any adventurous trends in this regard. Instead, they should be guided by the data and experience that is available. This is a test for the underwriting skills of the Indian insurers. I am confident that the insurance industry is mature and the transition would be smooth. Underwriting will be the focus of the next issue of the Journal.

*C.S. Rao*

C.S. Rao



## *The Challenges of Pricing a Product*

The most important factor for the success of a product in the long run is the price at which it can be obtained. While this is a universal truth, it applies in particular to developing economies. The low penetration levels of insurance; and the sense of compulsion that is attached to purchase of insurance makes the problem all the more intriguing in arriving at the right price. In any case, insurers should be guided by the basic inputs in pricing the product.

In a tariff-driven market, the leverage for pricing a product is to a great extent curtailed; and as such, no major decisions as regards pricing a product had to be taken by the Indian insurers in the non-life arena. But in view of the fact that de-tariffing is round the corner, the insurers are going to be challenged in pricing the products appropriately. Logically speaking, the prices are going to be dictated by the market forces. But is it just that? Only time will tell.

In order for the prices to follow a logical sequence, the importance of data needs no emphasis. Although it is an accepted fact that the Indian insurance industry is not very rich in this domain, insurers should make maximum use of data that is available. In the absence of this, it is likely to lead to a scenario where the premiums charged are not commensurate with the realities of the situation. This could prove harmful to the industry over a period of time. It sums up the need for statistics and data - and an updated one, at that. In the life insurance domain also, insurers should lose no opportunity to ensure that the mortality and the morbidity base that is adopted is as objective as is possible.

Pricing the products in insurance is the focus of this issue of the **Journal**. Considering the crucial juncture that the Indian insurance industry is presently placed in, with de-tariffing on the anvil, the emphasis is on the dynamics of operation; and we have various articles that pin-point this aspect. Mr. Anurag Rastogi, in his article 'The Non-Life Pricing Juggernaut' writes that the times ahead would provide a huge learning for the insurers. In the next article, Mr. P.A. Balasubramanian discusses in detail, the various aspects that go into pricing a life insurance product. The tariff market meant that the insurers had to operate within the purview of specified limitations; the de-tariffing of the market would bring out the freedom of the insurers to fix the prices for the risk. This is brought out succinctly by Mr. R.C. Guria in the article 'Rating the Risks Right'.

Mr. G.V. Rao talks about the stance that the insurers should adopt in the de-tariffed regime. Ms. Yagnapriya Bharath emphasizes the importance of adopting the right prices; and the possible pitfalls in its absence. Health insurance, in general, and a viable product for the poor, in particular, has always remained very topical in the Indian insurance domain. We have a two-part Research Paper by Mr. Debasis Bagchi that discusses the point threadbare.

The decisions with regard to accepting a risk; and the price at which it has to be accepted are of humongous importance for the success of an insurer. It is the underwriter that provides this strength to the insurer. 'The importance of underwriting' forms the focus of the next issue of the **Journal**.

U. Jawaharlal

# Report Card: LIFE

## Premiums Rise 177.44% over July, 2005

### Individual premium:

The life insurance industry underwrote Individual Single Premium of Rs.838514.44 lakh during the first four months ended July, 2006 of which the private insurers garnered Rs.66824.55 lakh and LIC garnered Rs.771689.89 lakh. The corresponding figures for the previous year were Rs.186877.99 lakh for the industry; with private insurers underwriting Rs.21288.87 lakh and LIC Rs.165588.12 lakh. The Individual Non-Single Premium underwritten during April-July, 2006 was Rs.757693.98 lakh of which the private insurers underwrote Rs.298681.21 lakh and LIC Rs.459012.77 lakh. The corresponding figures for the previous year were Rs.367640.10 lakh, Rs.115532.07 lakh and Rs.252108.03 lakh respectively.

### Group premium:

The industry underwrote Group Single Premium of Rs.187131.99 lakh of which the private insurers underwrote Rs.15085.48 lakh and LIC Rs.172046.51 lakh; the lives covered being 2774152, 305564 and 2468588 respectively. The corresponding figures for the previous year were Rs.86463.12 lakh with private insurers underwriting Rs.7187.19 lakh and LIC Rs.79275.93 lakh; and the lives covered being 1756014, 241087 and 1514927 respectively. The Group Non-Single Premium underwritten during April-July, 2006 was Rs.26340.43 lakh which was underwritten entirely by the

private insurers, covering 1263974 lives. The corresponding numbers for the previous year were Rs.11285.86 lakh and covering 592477 lives.

### Segment-wise segregation:

A further segregation of the premium underwritten during the period indicates that Life, Annuity, Pension and Health contributed Rs.1028253.04 lakh (56.86%), Rs.51530.25 lakh (2.85%), Rs.728161.24 lakh (40.27%) and Rs.424.18 lakh (0.02%) respectively. In respect of LIC, the break up of life, annuity and pension categories was Rs.661114.42 lakh (47.13%), Rs.43553.08 lakh (3.10%) and Rs.698081.67 lakh (49.77%) respectively. In case of the private insurers, Rs.367138.62 lakh (90.51%), Rs.7977.17 lakh (1.97%), Rs.30079.57 lakh (7.42%) and Rs.424.18 lakh (0.10%) respectively was underwritten in the four segments.

### Unit linked and conventional premium:

Analysis of the statistics in terms of linked and non-linked premium indicates that 37.88% of the business was underwritten in the non-linked category, and 62.12% in the linked category, i.e., Rs.684925.61 lakh and Rs.1123443.10 lakh respectively. In case of LIC, the linked and non-linked premium was 54.57% and 45.43% respectively; as

against which for the private insurers taken together, this stood at 88.26% and 11.74% respectively. During the corresponding period of the previous year, linked and non-linked premium indicates that 60.03% of the business was underwritten in the non-linked category, and 39.97% in the linked category, i.e., Rs.391025.39 lakh and Rs.260367.39 lakh respectively. In case of LIC, the linked and non-linked premium was 29.51% and 70.49% respectively; as against which for the private insurers taken together, this stood at 73.63% and 26.37% respectively.

Note: (i) LIC has advised of certain erroneous classification of linked and non-linked business in the earlier submission for the two months May and June, 2006. The data given above has been modified based on the revised figures given by LIC.

		May, 2006	June, 2006
(ii)	Linked	50.69	63.47
	Non-linked	49.31	36.53
		May, 2006	June, 2006
(iii)	Linked	61.06	68.78
	Non-linked	38.94	31.22

(ii) The business data of LIC for May and June, 2006 are revised as under:

(iii) The business data of the industry for May and June, 2006 are revised as under:

## First Year Premium Underwritten by Life Insurers for the Period Ended July, 2006

Sl No.	Insurer	Premium u/w (Rs. in Lakhs)		No. of Policies / Schemes			No. of lives covered under Group		
		July, 06	Up to July, 06	July, 06	Up to July, 06	Up to July, 05	July, 06	Up to July, 06	Up to July, 05
1.	<b>Boji Allianz</b>	6,442.17	36,253.92	12,307.14	3,117	14,182	12,076	201	0
	Individual Single Premium	14,245.42	46,232.08	14,214.93	85,247	273,641	91,184	74,832	0
	Individual Non-Single Premium	52.45	173.41	0.00	1	1	0	0	0
	Group Single Premium	292.09	734.36	743.92	22	61	59	781	60,632
2.	<b>ING Vysya</b>	99.65	1,269.20	2.38	84	855	349	95	763
	Individual Single Premium	2,661.32	13,065.99	3,120.57	12,570	59,819	19,413	1,824	477
	Individual Non-Single Premium	47.75	203.41	273.96	0	0	0	0	6,395
	Group Single Premium	35.00	226.75	93.12	6	20	23	0	0
3.	<b>Reliance Life</b>	946.60	5,158.69	1,787.87	1,607	8,027	3,000	385	7,880
	Individual Single Premium	4,034.63	12,335.59	826.25	22,011	65,971	11,999	9,999	56,548
	Individual Non-Single Premium	137.91	714.09	46.05	1	9	0	0	0
	Group Single Premium	105.13	255.15	217.78	6	45	32	0	30,213
4.	<b>SBI Life</b>	2,681.64	7,400.62	1,222.11	4,164	10,633	1,779	11,459	77,049
	Individual Single Premium	10,333.70	23,323.51	2,814.32	38,411	93,380	40,552	86,471	34,740
	Individual Non-Single Premium	1,593.57	5,309.55	4,784.99	0	2	2	0	281,268
	Group Single Premium	500.28	4,734.01	745.34	38	138	445	0	98,919
5.	<b>Tata AIG</b>	38.91	209.07	107.59	0	0	0	22,201	46,518
	Individual Single Premium	4,085.08	14,734.90	10,104.39	31,058	112,822	82,471	27,440	83,911
	Individual Non-Single Premium	493.98	1,544.61	450.44	2	3	0	0	99,098
	Group Single Premium	187.81	635.60	783.92	9	45	106	0	203,039



<b>6. HDFC Standard</b>	Individual Single Premium	918.45	4,243.08	3,277	12,109	15,228	48,819	92,292	36,835
	Individual Non-Single Premium	8,089.21	27,330.23	20,713	72,939	59,074	192,922	1,064	8,030
	Group Single Premium	1,319.76	2,507.81	8	38	38	7		
	Group Non-Single Premium	306.96	1,433.87	0	3	12			
<b>7. ICICI Prudential</b>	Individual Single Premium	1,857.33	8,308.11	2,813	13,287	1,347			
	Individual Non-Single Premium	22,643.83	90,956.95	108,886	400,894	155,376			
	Group Single Premium	1,380.30	4,052.16	9	74	38			
	Group Non-Single Premium	2,917.58	12,448.71	21	128	47			
<b>8. Birla Sunlife</b>	Individual Single Premium	349.00	1,024.21	869	3,565	14,296			
	Individual Non-Single Premium	6,133.58	17,447.44	20,139	56,851	31,884			
	Group Single Premium	94.08	368.74	0	0	0			
	Group Non-Single Premium	473.66	2,783.81	5	20	15			
<b>9. Aviva</b>	Individual Single Premium	222.56	909.09	219	622	653			
	Individual Non-Single Premium	5,196.25	18,228.25	22,030	71,880	26,283			
	Group Single Premium	25.97	82.02	0	1	0			
	Group Non-Single Premium	86.05	1,037.78	3	26	3			
<b>10. Kotak Mahindra Old Mutual</b>	Individual Single Premium	325.78	1,383.15	368	1,568	598			
	Individual Non-Single Premium	2,684.50	8,279.30	7,443	25,295	17,284			
	Group Single Premium	45.27	129.68	0	1	0			
	Group Non-Single Premium	85.43	1,189.70	5	37	11			
<b>11. Max New York</b>	Individual Single Premium	4.72	21.47	13	54	73			
	Individual Non-Single Premium	5,066.01	20,275.90	39,836	146,374	86,344			
	Group Single Premium	0.00	0.00	0	0	0			
	Group Non-Single Premium	15.52	126.84	5	21	26			
<b>12. Met Life</b>	Individual Single Premium	38.44	157.98	80	300	283			
	Individual Non-Single Premium	1,762.00	5,389.74	7,478	22,492	20,230			
	Group Single Premium	0.00	0.00	0	0	0			
	Group Non-Single Premium	277.83	640.09	22	96	58			
<b>13. Sahara Life*</b>	Individual Single Premium	114.19	473.42	288	1,202	0			
	Individual Non-Single Premium	36.00	129.69	1,537	3,689	8,848			
	Group Single Premium	0.00	0.00	0	0	3			
	Group Non-Single Premium	93.67	93.76	1	2	0			
<b>14. Shriram Life</b>	Individual Single Premium	12.54	12.54	28	28	0			
	Individual Non-Single Premium	356.23	951.64	5,503	15,764	8,848			
	Group Single Premium	0.00	0.00	0	0	0			
	Group Non-Single Premium	0.00	0.00	0	0	0			
<b>Private Total</b>	Individual Single Premium	14,051.98	66,824.55	16,927	66,432	49,682			
	Individual Non-Single Premium	87,327.77	298,681.21	422,862	1,421,811	650,892			
	Group Single Premium	5,191.04	15,085.48	21	129	81			
	Group Non-Single Premium	5,377.02	26,340.43	143	642	887			
<b>15. LIC</b>	Individual Single Premium	99,163.31	771,689.89	273,043	1,644,527	488,605			
	Individual Non-Single Premium	174,655.69	459,012.77	1,326,540	4,176,708	4,997,613			
	Group Single Premium	56,173.13	172,046.51	1,678	4,840	4,075			
	Group Non-Single Premium	0.00	0.00	0	0	0			
<b>Grand Total</b>	Individual Single Premium	107,215.29	838,514.44	289,970	1,710,959	538,287			
	Individual Non-Single Premium	261,983.46	757,693.98	1,749,402	5,598,519	5,648,505			
	Group Single Premium	61,364.17	187,131.99	1,699	4,969	4,156			
	Group Non-Single Premium	5,377.02	26,340.43	143	642	887			

Note: Cumulative premium upto the month is net of cancellation which may occur during the free look period.  
 \* As advised by the Authority, the insurer has revised the premium nos. for the period April, 2006 to June, 2006 as the nos. earlier furnished were only first premium nos. As such, upto July, 2005 nos. are not comparable as these pertain to first premium nos.

# Underwriting - Insurers' Lifeline

'A company can choose between adopting different styles of underwriting methods, depending on their corporate philosophy and strategy. However, the function of underwriting itself cannot be treated less importantly' observes U. Jawaharlal.

Insurance business is all about accepting risks that have been put at its disposal. Accordingly, it would make absolute business sense to assume as many risks as are available, in order that an insurer emerges successful in a competitive scenario. But would it really be possible for the insurer to do that? While insurance companies can adopt varying styles of business philosophy, no insurer would totally do away with underwriting a risk before it is accepted. It is a known fact that the process of underwriting itself has undergone a radical change over the years, but nonetheless, its importance has not waned.

In order for insurance business to emerge successful in the long run, it is absolutely essential that equitability among the policyholders is accomplished. It is the 'selection and classification' role of the underwriters that enables insurers achieve the above vital function. A failure on this horizon is sure to result into an adverse selection for the insurers; and in the long run, a

collapse of the system itself. The function of underwriting has progressively assumed a new dimension in all classes of insurance business, to be in tune with the developments occurring in the associated areas.

In life insurance, rapid changes have been occurring in the underwriting styles of insurers so that they keep pace with the improving mortality - thanks to modern methods of disease intervention; and development of medical technology. Universally, several killer diseases that used to be an underwriter's nightmare have been eradicated. On the other hand, various new diseases that affect an underwriter's decision are emerging, owing to the changing lifestyles. It is for the underwriter to keep in tune with these changes so that in the end, the underwriting decisions are made judiciously.

The challenge in the non-life arena is going to be much more severe. It has been established, by and large, that the

underwriting skills in the Indian insurance industry are quite good. But it has been a tariff market predominantly; and with the de-tariffing of the market just round the corner, the challenges are going to be much more demanding. The underwriters would have to gear up themselves to the task of accomplishing a perfect balance between business interests and prudent judgment. They have to guard themselves against the evil of anti-selection; and still emerge successful - a task easier said than done. Further, emphasis would be on achieving success in each of the classes rather than resorting to cross-subsidization between different classes.

With the de-tariffing of the non-life market that is going to be introduced from January 2007, we thought it pertinent to focus on the underwriting aspects in the next issue of the **Journal**; apart from focusing on modern underwriting techniques in the life insurance class. We invite valuable contributions in this area.







## ORDER

IRDA/SURV/016/Aug-06

23rd August, 2006

**Re :Special dispensation to Insurers under Section 64 UM (2)  
of the Insurance Act, 1938 in view of flash floods in Surat, Gujarat**

*I*n exercise of the powers under Section 64 UM (2) of the Insurance Act, 1938, the Authority hereby raises the limit of losses required to be surveyed by a licensed surveyor and loss assessor for settlement of claims, from Rs.20,000/- to Rs.50,000/- for the recent flash floods in Surat, Gujarat alone for a period of two months from the date of this order, as a special case.

The Insurers may utilize the services of in-house surveyors for assessing losses upto Rs.50,000/-. This special dispensation is given to insurers to ensure expeditious disposal of claims and for mitigating hardships to policyholders affected by the flash floods.

**(C. S. Rao)**  
Chairman

## ORDER

IRDA/ADM/ORD/013/JUNE-06

30th June, 2006

**Re :Constitution of Committee of Surveyors & Loss Assessors  
in terms of Regulation 11 of the Insurance Surveyors and  
Loss Assessors (Licensing, Professional requirements and Code of Conduct) Regulations, 2000.**

*T*he Committee of Surveyors & Loss Assessors constituted vide Order Ref. No.IRDA/ADM/ORD/25/Aug-05 dated 01-08-05, in terms of Regulation 11 of the Insurance Surveyors and Loss Assessors (Licensing, Professional requirements and Code of Conduct) Regulations, 2000 hereby stands dissolved with immediate effect. A fresh Committee of Surveyors and Loss Assessors is hereby constituted with immediate effect in terms of Regulation 11 of the Insurance Surveyors and Loss Assessors. This committee shall consist of the following members :

1. Shri M.M.Siddiqui, Consultant & Special Officer, Intermediaries Dept., IRDA, Hyderabad.

2. Shri Neeraj Kumar, DGM of National Insurance Company Ltd.
3. Shri Saumil Mehta, Surveyor and Loss Assessor, Mumbai.
4. Shri Moinuddin Mohammed, Surveyor and Loss Assessor, Hyderabad.
5. Shri N.Sundararajan, ED & CS in Ashok Leyland Ltd., Chennai

The tenure of the Committee will be for a period of three years from the date of this order and it will exercise the functions referred to in Sub Regulation 12 of the Regulations.

**(C. S. Rao)**  
Chairman

# The Non-Life Pricing Juggernaut

- Challenges for Insurers

Anurag Rastogi writes that while the earlier tryst of non-life insurers with de-tariffing was scary, the one in the offing now promises to be a fantastic period of learning for everybody, amidst fears and hopes.

Much has been talked and written about pricing in non-life insurance industry. The IRDA's roadmap to detariffing in January 2007 has further intensified the discussion on the topic. The industry is on tenterhooks and is trying to grapple with the issue. Nobody, as yet, really knows how the industry will respond to detariffing. The only large scale experience of Indian market about detariffing is 1994 when marine cargo was detariffed. That experience is scary. But most people feel that the experience this time around is not likely to be as scary as that. Amidst hopes and fears, it is a fantastic period of learning for everybody. In this write up, I have tried to peep a little into the problems of actuarial pricing in a deregulated regime and have made an attempt to discuss the practical issues in implementing a pricing mechanism.

The actuarial literature is full of different pricing methodologies and the actuarial issues involved in pricing. However, as much as we may talk about these methodologies and the actuarial inputs in such pricing, nothing, I believe, is likely to succeed unless we have quality data and an unflinching conviction in data discipline. A good part of this write up is therefore devoted to data and the problems associated with it before pricing can begin.

## DATA

The first requirement for any insurance company to be able to implement a good pricing strategy is DATA - Data, which is large, relevant, pure, and credible; and covers the necessary data elements

essential for a meaningful pricing exercise. This is easier said than done. What data elements are relevant for a pricing exercise is the most important issue to be decided beforehand. Whatever data we decide to capture today will accumulate to a usable quantity only after 3-4 years. This stage, therefore, requires a very thoughtful consideration, possibly brainstorming, to make sure that even future data requirements are envisioned now itself. Data needs to be captured at two stages, claims stage and exposure stage.

**What data elements are relevant for a pricing exercise is the most important issue to be decided beforehand. Whatever data we decide to capture today will accumulate to a usable quantity only after 3-4 years.**

□ **EXPOSURE STAGE:** The exposure data needs to be captured at the underwriting stage and throughout the exposure period of each policy. For example, the following data, inter-alia, needs to be captured for each policy

- The dates on cover, i.e. the inception and expiry dates
- All exposure measure details. This will be sum insured in most of the property insurance but may be different for other classes like liability, health etc.

- All rating factor details. Not only the current rating factor details, but all possible rating factors which could be used in future should be captured to build up the database. For example, in motor insurance, driver age is not a rating factor today. But if we want to use it as a rating factor, we will need to capture the driver's age for all the policies for sufficient number of years before we are able to use it as a rating factor.
- Details of premiums charged. If the policy is a package policy, this should be available section wise. If the policy covers a bouquet of perils, where addition/deletion of perils is possible, it will be a good idea to capture the premium details peril-wise so that a peril-wise analysis may be possible whenever required. This may sound to be a tad too demanding, but in the ultimate analysis, it's all a matter of granularity we want in our analysis and pricing at a later date when this will come to be very handy. The absence of this may prejudice the chances of a detailed pricing exercise.

The exposure data requirement mentioned above is the bare minimum required for pricing. In actual scenario, an insurer will require data on a host of other factors for its own analysis and operations like details of underwriting office, policy number, sales intermediary, commission rate, fresh/renewal business, co-insurance, reinsurance, subject matter covered, policy issue date, premium collection, cover note, hypothecation/HPA status and the like.



❑ **CLAIMS STAGE:** Capturing claims data accurately is the backbone of a successful future pricing exercise. After all, pricing begins with estimating future claims frequency and severity for a portfolio of homogeneous risks. As an indication, a minimum of following data will need to be captured:

- Date of claim event
- Date of reporting/claim registration
- Dates and amounts of payments
- Estimates of amounts outstanding
- Policy number involved
- Details of all rating factors relevant to the claim
- Type of claim (e.g. Own damage or Third party in motor claims)
- Type of peril (e.g. fire, impact, flood in a claim under fire insurance)

Again, the fields of data mentioned above are the bare minimum required in pricing and the insurer in real life will require many more details for various purposes of its operations.

Once a decision about what data needs to be captured is arrived at, this needs to be followed up by a firm commitment at all levels to ensure that the relevant data is captured at the proposal stage and then entered correctly in the company's computer system. This again, as earlier said, is easier said than done. Even, with the best possible intentions and excellently drawn out plans, the quality of data captured may leave much to be desired. This may happen due to one or more of the following reasons:

❑ Due to lack of appreciation of the importance of various fields of information required in the proposal form, pressures of huge targets and a general policyholder apathy to insurance; the proposal forms may not be filled up completely and only the fields absolutely essential for premium computation and policy generation in the computer system may be captured. Alternatively, the fields may be filled up by the producer with some dummy information for the sake of proposal acceptance. First problem can be easily handled by having an IT system which

will not move ahead until all the required information has been keyed in. But the second problem, which is rampant in the industry, is much more difficult to handle and requires a certain level of commitment by the company management not to compromise on the data quality and then training the frontline marketing staff, producers and other sales intermediaries.

❑ Even when the proposal form captures all the relevant fields, if the data entry staff does not understand the importance of information being captured, it may result in spurious data being entered for many important fields (e.g. 9999). This again is a matter of company commitment, staff training and instilling a sense of responsibility and appreciation for the work that data entry staff is doing.

**Due to lack of appreciation of the importance of various fields of information required in the proposal form, pressures of huge targets and a general policyholder apathy to insurance; the proposal forms may not be filled up completely and only the fields absolutely essential for premium computation and policy generation in the computer system may be captured.**

❑ The third reason for poor data quality relates to IT system. The IT system should have validations for the verifiable accuracy of the data being fed. For example, in actual data we come across several instances when date of registration/purchase of vehicle is later than the proposal date, or the date of birth of person being proposed for insurance is later than the date of proposal (indicating the person is yet to be born!). These mistakes often happen due to simple typographical errors and can be avoided by building proper validations in the IT system. Another issue is the text entries for certain fields where different data entry operators may enter the data according to their perception/understanding which makes the statistical analysis of the data

impossible. For example; the occupation column in a health insurance proposal may contain entries like Sales trainee, Sales executive, Sales Team leader, Marketing executive and so forth. If these occupation descriptions are entered as they are, no statistical analysis of the data is possible involving occupation of the policyholders. Ideally, for all such fields for which statistical analysis of the data may need to be done at any point of time, data should be captured in the IT system into one of the predefined categories. For instance, in the health insurance proposal form example discussed above, occupation should be chosen by the data entry operator from one of the pre-defined drop-down list of occupations, say 'marketing' for all the occupation descriptions cited above.

### **IT Systems, data warehousing and data-mining**

Handling huge quantity of data and its manipulation will be impossible without a robust IT system in place before the data capture may begin. Until not very long ago, the general feeling was that a good front office production system which captures the relevant data and also has inbuilt analytical tools, is sufficient for most data analysis purposes. Perhaps that may even be true for new companies in their formative years when data size is small and the users are limited. However, with the passage of time and the data size as well as the increasing number of users, a single production-cum-analytical software system is bound to come under severe strain, thereby reducing the speed of data entry, access and analysis. There comes the need for data warehousing and separate analytical software. The data is extracted from the production system, cleaned and housed in a data warehouse. Now this data in the warehouse can be used for any analysis or manipulation using appropriate data mining software or a more specific purpose - pricing, reserving or modeling software.

### Pricing:

To begin with, any insurance pricing exercise is expected to give a price that will be able to cover the cost of all likely claims, more popularly known as "**Pure Premium**". Pure premium does not include any allowance for claim adjustment/settlement expenses and the insurer's administrative expenses. It is simply the sum total of all expected claim payouts on a particular portfolio of business that is going to be written and for which the price is being worked out now. Here lies the biggest catch! We are talking about estimating future claims cost on a portfolio of risks yet to be written! Of course, we could have done it by following the algorithm given below:

- Look at the past claims data
- Pick up a homogeneous portfolio of risks,
- Fit a suitable distribution to claim frequency and claims severity
- And estimate the likely claims frequency<sup>1</sup> and average claims severity<sup>2</sup> for future.

Alas, if it were so simple! Let's see what could go wrong.

Extrapolating for the future on the basis of what happened in the past hinges on a very big assumption, i.e. past experience will repeat in future. This may not happen exactly as we would like it to happen. The following factors could materially alter the future claims experience.

1. The expected inflation in future may not be the same as the past inflation. In such a case the expected future claims cost are likely to be more than what our data will predict.
2. There may be an underlying trend, intertwined with inflationary trend in the claims frequency and/or claims severity. For instance, the claims frequency may have an increasing trend in some pattern, which needs to be identified and factored in the expected claims frequency for future or else we would have estimated a

wrong frequency and severity for future expected claims.

3. Business mix might have changed over the period. This may materially affect the frequency and severity projections. Even though the claims analysis might have been carried out for each homogeneous group of risks separately, the data quantity and credibility issue would force some heterogeneity in the data. For instance, a portfolio of all two wheeler risks may appear to be reasonably homogeneous. However, looking more granularly, we find it contains disparate risk groups like scooters and motor cycles. Going deeper, one may classify different groups on the basis of engine capacity, geographical zones, and owner/driver age and so on. These different

**A change in claims administration process is also likely to bring about a significant change in both the claims frequency as well as claims severity.**

risk groups may have different claims characteristics. In case of a change in business mix amongst these different risk groups, the claims frequency and severity may duck the projected figures and may be substantially different.

4. During the period under review, the policy terms/conditions might have undergone change, which may alter the future expected frequency and severity. For example, introduction of a compulsory deductible w.e.f. July 2002 in all private car policies would have significantly altered the average claim severity pre & post July 2002 and might have had an impact on the frequency as well.

5. A change in claims administration process is also likely to bring about a significant change in both the claims frequency as well as claims severity. Take for example, the health insurance claims pre and post TPA (Third Party Administrator) regime. Prior to introduction of TPAs in the Indian market, all health claims used to be settled on reimbursement basis. Post TPA introduction, most of health claims are settled on cashless basis. This surely will affect the claims frequency and severity of health claims.

6. Regulatory and legislative changes affecting insurance may also change the frequency and/or severity of certain classes of insurance. As an example, consider that the non-life industry's wish of restricting the personal injury/death liability of insurers in motor third party to a defined amount, say Rs.7.5 lacs, is granted by the Indian Parliament by amending the Motor Vehicle Act, 1988. This will drastically change the average claims severity for Motor Third party portfolio.

These are just some of the factors which may unsettle the claims projection and need to be factored for estimating future claims frequency and severity.

### IBNR Issues

When we talked about claims, it meant claims incurred during the past period under review. This is different from claims paid and includes claims reserve strain during the period under review. The reserve strain would be the difference between the closing claims reserve and the opening claims reserve, both reserves including the IBNR. Unfortunately, IBNR has not received its due in the Indian non-life market and still many people in the industry do not take it seriously. IBNR has two components

- Incurred but not yet reported (IBNYR).
- Incurred but not enough reported (IBNER), a technical term for under-provisioning.



Traditionally IBNR was being calculated by the Public sector insurance companies prior to 2001 as

- 10.5% of reserves for Motor and Engineering insurance, and
- 5.5% of reserves for other lines of business

Since 2002, insurers profess to be calculating IBNR using actuarial principles. A study done by me and Mr. H. Ansari, the then Chair Professor at National Insurance Academy in 2003 indicated IBNR of as high as 38% of claims reserves in Motor Third Party claims for the period before 2001. Today, when the reserve for Motor third Party claims at the end of March 2006 is estimated to be in the range of Rs.15000 crores (may be even more) for the industry as a whole, the importance of IBNR can be gauged only from the simple calculation that a difference of (-) 10% in IBNR calculation means an under-provisioning to the tune of Rs.1500 crores. This effectively means artificially inflating the profitability of the industry by Rs.1500 crores, in turn meaning an artificially inflated dividend payout to the owners and inflated tax payment to the Government. On the pricing front, since IBNR is an integral component of claims cost, this means under-estimating the past claims cost and thus under-projecting the future claims cost. This will result in under-pricing the Motor third party portfolio. And, please remember, we are talking here about Motor Third party IBNR only. If the impact of under-provisioning for IBNR is calculated for the entire non-life business, it could be huge and can have far reaching consequence for the non-life pricing and profitability.

Hence, in order to estimate the ultimate cost of claims on the policies written in the past, estimation of correct IBNR is a very important step. There are several standard methods of calculating IBNR, all of which may give slightly differing IBNR depending on the data quality. Each method has its own merits and demerits. In practice, insurers calculate IBNR using different methods and then use their judgement to arrive at a judicious and prudent figure.

**Segmentation:**

We talked about homogeneous portfolio of risks. A homogeneous portfolio basically means a group of risks having similar and pre-defined risk or claims characteristics. The more the segmentation, the more the accuracy of future estimation and the better is the pricing which reflects the correct risk exposure of each risk group. But there are trade offs between granularity and simplicity of pricing structure. Second issue is that of data volumes. Even with huge data volumes, too much of segmentation will reduce data volume for each segment. This gives rise to issues about credibility of the data for its suitability for future projections.

There are two ways of identifying homogeneous portfolios. One is based on gut feeling on the basis of prior experience. This method involves too

**On the pricing front, since IBNR is an integral component of claims cost, this means under-estimating the past claims cost and thus under-projecting the future claims cost.**

much of subjectivity and can lead to spurious results. Homogeneous groups of risks can be created using statistical methods like Cluster analysis, which group the claims data into homogeneous clusters according to predefined criterion. Prior experience of underwriters and claims managers can be used here to fine-tune the segments. A well structured segment analysis and differential pricing will be key to focussed marketing effort to retain and attract profitable segments of policyholders and maintain growth with profitability.

**Relative Weightage of Rating factors in the Price:**

Once the ultimate cost of claims has been estimated, the next task is to find out the relative weightage of various

rating factors used for pricing a product. In fact, an earlier task could be to ascertain the various factors which have a significant impact on claims and could be used as rating factors and then establish their relative weightage in the total price for the product. This is usually done by applying Generalized Linear Modelling techniques. When the rate depends on several rating factors, the final rate is not simply a multiplication of independent rates for each factor, because different rating factors may be correlated to each other. We look at a simple example to understand what even simplest of the Generalized Linear Modelling techniques can do to pricing.

Given below is a One Way Claim frequency table for male and female drivers.

**Claims by sex of driver**

	No. of vehicles	Claim Freq	Relative freq
Males	1100	0.39	1.46
Females	1100	0.15	0.54
Combined	2200	0.27	1.00

**Note:** Relative frequency has been obtained by dividing frequency of each class by combined frequency.

This table indicates that if the rates are calculated on the basis of combined experience, male drivers' premium should be loaded by 46% and female drivers should be given a discount of 46%. Alternatively, we can say that male drivers should be charged 1.46/0.54 times i.e. 2.69 times the premium of female drivers.

Now we look at another One Way Claims frequency table for two geographical zones

**Claims by zone**

	No. of vehicles	Claim Freq	Relative Freq
Zone A	1100	0.37	1.39
Zone B	1100	0.16	0.61
Combined	2200	0.27	1.00

Now this table indicates that the premium of Zone 'A' drivers should be 1.39/0.61 times, i.e. 2.28 times the premium of Zone 'B' drivers. Now if we combine the two rating factors of driver sex and zone, this suggests that male drivers in Zone 'A' should pay 2.69 X 2.28 times, i.e. 6.12 times the premium of female drivers in Zone B.

According to a two way table analysis, the male drivers in Zone A should pay only 2.67 times the premium of female drivers in Zone B, which is the correct way of charging relative premiums from the two groups. In the real life scenario, there will be several rating factors. Generalized Linear Modelling helps in establishing the significance of various rating factors in pricing and then finds the relative weightage of each in the overall price of the risk by carrying out multiple regression analysis.

**Office Premium:**

Till now we have talked only about pure premium or risk premium which is just sufficient to cover the cost of claims and does not include any allowance for expenses, profit, reinsurance and the like. Office premium on the other hand includes loading for

- Claim settlement expenses
- Commission and other procurement expenses
- Administrative expenses
- Reinsurance
- Profit
- Other contingencies

This office premium then needs to be discounted by the expected investment return. There are several ways of treating the expenses. The simplest way would be to apply a single percentage loading to take care of all expenses. The more detailed and accurate technique would demand breaking each kind of expense into fixed, semi-fixed and variable components. Given below is a sample formula to calculate office premium:

$$GP = \frac{CFXCAX(1+h)(1+i)^{-6}+VE}{1 - c - f - v - r - p}$$

GP=Gross Premium

CF=Expected Claims Frequency

Now let us look at a two way table

**Two Way table of claims by zone and driver sex**

	No. of vehicles			Claim Freq			Freq relative to females in Zone B	
	Male	Female	All	Male	Female	All	Male	Female
Zone A	1000	100	1100	0.40	0.10	0.37	2.67	0.67
Zone B	100	1000	1100	0.30	0.15	0.16	2.00	1.00
Total	1100	1100	2200	0.39	0.15	0.27		

- CA =Expected average claim cost
- c =Commission %
- f =Fixed expenses, % of GP
- v =Other variable expenses, % of GP
- VE =Other policy variable expenses
- h =Claims handling expenses
- p =Profit & contingencies, % of GP
- r =Reinsurance premium
- i =Monthly Investment income rate

**Regular portfolio analysis, segment analysis, channel analysis, competitor analysis, profit testing and suitable and timely management actions will keep the company on the winning track by focusing their marketing effort on the profitable pockets of policyholders and using differential pricing as a powerful pricing strategy.**

This is one of the simplest sample formulae and does not have sum insured as exposure and does not use any rating factors. These may be incorporated according to need.

**Post Pricing**

Pricing is not a one time exercise. Fine-tuning of initially arrived rates will have to continue on an ongoing basis incorporating the latest experience. Regular portfolio analysis, segment analysis, channel analysis, competitor analysis, profit testing and suitable and timely management actions will keep the company on the winning track by focusing their marketing effort on the profitable pockets of policyholders and using differential pricing as a powerful

pricing strategy. Of course this has to be backed up by continuous effort to improve data quality and capture of newer fields of data according to emerging needs. Post detariffing, insurers will have two choices. One, the easy one is to gun for volumes and the other, a relatively difficult one is to go for profitability and maintain a certain discipline in terms of price, underwriting and data quality. There are examples in the industry to illustrate where during the period of growth the company's profitability declined and other companies showed profit during a period of decline in business volumes. It's a call each company's management will have to take, and now, as to which way they would like to go post price-deregulation.

**Reference:**

1. Study material of Institute of Actuaries, London.

<sup>1</sup> Claims frequency here is defined to mean Number of claims per policy exposed during the period under consideration.

<sup>2</sup> Average claims severity means Amount of claims incurred divided by number of claims during the period in consideration.

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# Life Insurance Product Pricing

## - Priorities for Insurers

The expected investment rate of return is an important parameter in determining the price of the product writes P.A. Balasubramanian.

"Since insurance is a risk taking activity, the supervisory authority requires insurers to evaluate and manage the risks that they underwrite, in particular through reinsurance, and to have the tools to establish an adequate level of premiums".

(IAIS Insurance Core Principle - 19)

### 1. Introduction:

1.1 A life insurance company (Insurer / Company) has to design its products to suit the needs of the insuring public. Depending on the needs, the product design will vary. In designing a product several factors need considerations like profitability, marketability, competitiveness, financial requirements, sensitivity of the product, extent of cross subsidies, administrative systems, service standards, policyholders' reasonable expectations, level of risk, compliance with regulations and so on.

1.2 Through an insurance contract, a life insurer undertakes an obligation to pay the amount insured on the happening of certain contingencies over a period of time on consideration of insurance premium received from the insured as specified in the contract. In order to honour its obligations it is necessary that the insurance premium is charged adequately. Pricing falls in the realm of actuarial science. It is the responsibility of an

actuary to determine premium rate appropriate to an insurance contract, which is viable on a long term basis.

1.3 This article is intended to describe the considerations that go into the determination of premium rates under a life insurance contract which combines both protection and savings element. It is meant for general understanding of the

**Pricing falls in the realm of actuarial science. It is the responsibility of an actuary to determine premium rate appropriate to an insurance contract, which is viable on a long term basis.**

readers and therefore no technical details are covered.

### 2. Pricing Assumptions:

2.1 Pricing involves making assumptions in order to assess the eventual costs of liabilities (under insurance contracts) of a life insurer. The actuary draws on several principles in setting assumptions for pricing insurance contract, having regard to the management of risk and the return on capital. The assumptions themselves give rise to risks which need to be managed.

2.2 The assumptions broadly relate to the following elements:

1. Demographic assumptions
2. Investment return
3. Expenses and commission
4. Inflation of expenses
5. Withdrawals
6. Bonus (for Participating Policy Contracts)
7. Profit and other contingency margins

The considerations involved in making various assumptions are covered in the following sections.

### 3. Demographic assumptions

3.1 Generally, this heading covers:

- Mortality rates
- Morbidity rates (accident, disability, critical illness rates)

3.2 The values assigned to these rates reflect the expected future experience of the lives who will take out the contract being priced. These rates would be derived by analyzing a life insurer's own experience for the type of contract concerned or similar contract. If the company has insufficient data to produce reliable results or no data as is the case for a new life insurance company, published industry tables would be used instead. In the absence of the industry experience one would have recourse to rates of reinsurers. The rates vary according to the age and gender of the insured. Further, differentials

could arise on account of occupation, geographical location, habits (eg: smoking) and race.

3.3 Rate differentials would be significant depending on the type of contract for example, between an endowment assurance and a term assurance contract and between an assurance contract and annuity / pension contract.

3.4 Standard of selection and underwriting of lives proposed for insurance is an important factor in setting the adjustment to standard table of rates of mortality (based on the above factors) to be used for pricing insurance contracts.

3.5 In respect of pension and annuity contracts, future improvement in mortality rates needs to be allowed for in the pricing owing to its significant financial impact on the liabilities.

#### 4. Investment return

4.1 An insurer has to set up reserves for every contract of insurance in order to meet the liabilities. Such reserves need to be invested in a prudential manner. The expected investment rate of return is an important parameter in determining the price of the product. In deciding the investment return, aspects like investment guarantees in the product design, the intended investment mix for the assets underlying the policy reserves, current returns on the investments, reinvestment of investment proceeds are considered.

4.2 The investments returns will be affected by taxation applicable to the insurance funds and adjustment to gross return is to be made in deciding the investment return to be assumed for pricing.

#### 5. Expenses and Commission

5.1 The level of expenses should reflect the expenses to be incurred in acquiring the business, processing expenses and subsequently administering the business to be written under the product. This requires an analysis of the company's experience for the type of business written. This considers separately the marginal administrative costs associated with each policy contract and contribution to fixed overheads of the company. Usually, the expenses analyzed fall into categories like expenses related to premium (eg: commission), the amount of insurance (sum assured) and per contract. Insurance business

**In deciding the investment return, aspects like investment guarantees in the product design, the intended investment mix for the assets underlying the policy reserves, current returns on the investments, reinvestment of investment proceeds are considered.**

entails high initial costs for acquisition and a lower level of expenses for servicing the contracts and expenses at the time of settlement of claim payment either on death or maturity or on surrender. The analysis of expense will help in estimating the different components as above.

5.2 A new insurance company with no experience data or with insufficient experience data (in the initial years of transacting business) will have to look to industry data or source it through Re-insurer.

5.3 In dealing with expense provision in pricing 'per contract' expenses is an area of risk as this needs to be incorporated in the premium pricing appropriately (usually as related to the sum assured under a contract or partly as a fixed policy fee and partly sum assured related)

#### 6. Inflation of expenses

6.1 The expenses of management of insurer particularly the administrative expenses comprising salary and salary related expenses and establishment expenses are subject to escalation, a major component of which is inflationary increases. The current rates of inflation of both earnings and prices, expected future rate of inflation (based on economic conditions expected) and the actual experience of life insurance company or industry will need to be taken into account in setting this parameter. This rate should be consistent with the rate of interest assumed for pricing.

#### 7. Withdrawals

7.1 Withdrawal rates in the context of an insurer refer to discontinuation of payment of premiums (policy lapses) or surrender of a policy contract. Withdrawal rates vary by product types, distribution channel, economic environment and the surrender terms (generous or conservative). Whether to allow for withdrawal rates and at what levels depends on its financial impact. It is important that withdrawal rates reflect the expected future experience rather than past experience. In this area too, company's experience or in its absence, industry data or reinsurance data need to be looked into.





## 8. Bonus (for Participating Policy Contracts)

8.1 In respect of conventional With Profits (participating) contract, a bonus loading is required to be provided in the pricing. The intended reversionary bonus rate would be considered in setting the bonus loading. This loading will usually be increased to allow for some terminal bonus to emerge. This loading is set consistent with the rate of investment return assumed in the pricing.

## 9. Profit and other contingency margins.

9.1 The considerations with regard to the parameters discussed in the previous sections will result in deriving estimates for the expected values for these parameters. There is a risk that future experience could turn out to be adverse and this eventuality has to be allowed for in the pricing. This is done by adding margins to the various parameters. The level of margins is to be set by the actuary making his own judgment based on past experience.

9.2 The shareholders of a company invest capital in the insurance business expecting a reasonable rate of return on the investment made. The rate of return expected will be higher from a risky investment than from a safe investment. Investing in the life insurance company is riskier than investing in an ideal risk free asset. Therefore the investor will expect a 'risk premium' over a risk free rate of return. The actuary will need to take into account what the shareholders consider as the reasonable risk premium; and therefore set appropriate risk discount rate equal to risk free rate

plus risk premium in the calculations, leading to determining premium rates for a contract of insurance. The shareholder of a life insurance company in the long run gets the profits emerging from the business transacted which is basically from the products that are sold.

9.3 There are certain features which make product design riskier; namely lack of historical data, high guarantees, policyholder options, overhead costs and untested market. Though it is difficult to assess these risks, particularly how they affect the risk discount rates, the level of statistical risk could be assessed using techniques familiar

**Though it is difficult to assess these risks, particularly how they affect the risk discount rates, the level of statistical risk could be assessed using techniques familiar to actuaries like sensitivity analysis and use of stochastic models.**

to actuaries like sensitivity analysis and use of stochastic models.

## 10. Consistency:

10.1 Certain of the assumptions are inter-related and it is important that assumptions form a consistent set.

## 11. Rider benefits:

11.1 Rider benefits such as cover for accidental death / disability, critical illness and term cover (like premium waiver benefit under minor life policy) are priced on marginal costing basis as they are add-ons to the basic cover under a policy contract which results in low cost for such covers and meets the need of cover for such risks in a cost efficient

manner and therefore serves best the interest of policyholders.

## 12. Certification:

12.1 The actuary has the freedom to determine the product pricing especially in the core area of setting the assumptions subject to conforming to regulatory requirements and guidance notes of the professional body as may be applicable. He / She is required to certify that in his/her opinion **"the premium rates, advantages, terms and conditions of the product..... are workable and sound, the assumptions are reasonable and premium rates are fair"**.

## 13. Review of premium rates

13.1 On every valuation date besides determining the value of liabilities, he/she should satisfy himself/herself and report that the premium rates for different insurance products being sold by the insurer continue to be adequate. Where significant changes happen in actual experience relating to say, rate of return on assets, mortality / morbidity rates or per policy expenses such that viability of a product becomes doubtful, the product especially non-participating type needs to be re-priced or withdrawn from the market. Usually, it is not the practice to re-price a participating product as changes in experience will tend to get reflected in the bonus rate for such product to be declared from time to time.

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# Rating the Risks Right

- Perspective, Principle and Process

'The root of the success and survival of insurance industry lies in its skill and capability to rate the risks right' avers R.C. Guria. He further says that freedom to fix price for the risk gives the real strength of the foundation and autonomy of the industry.

Rating is the core part of underwriting. Insurance product pricing i.e rating is based on certain perspectives, principles and processes. As the existing Tariff covers about 70% of general insurance products, the Indian insurers need to be concerned much about these perspectives, processes and principles much. But now the time has come to look into all these aspects very carefully in view of ensuing de-tariff regime w.e.f January, 2007. This article provides a general introduction to these fundamental aspects of insurance pricing.

Major weakness of India's non-life insurance industry is its tariff regime, which dates back to the 19th century and is still dominant today. While the tariff system has been followed on the grounds of price protection with cross-subsidy, it has also been seriously blamed for market distortions with wrong pricing method. As price mechanism is overtaken by tariffication, the insurers engage themselves in non-price forms of competition such as product differentiation, increase in channels of distribution, branding, etc which cannot benefit much the customers and the economy as a whole. Motor TP risks are heavily under-priced and so also in case of Mediclaim insurance, which have been swallowing the surplus generated by Fire & Engineering Portfolios resulting into cross-subsidization across business lines. In view of the Motor Vehicles Act, 1938 we can neither refuse Motor TPL cover for any automobile; nor penalize Fire insurance policyholders for the 200/250% loss ratio

from Motor TP insurance. So at this critical situation we have no other alternative but to rate the risk as per its operating cost without any cross-subsidy. As we know, rating for Fire insurance today contributing 50/60% of the profit of non-life insurance companies, is much higher than what is warranted by the risks of fire. Claim payment for Group Mediclaim Insurance is about 140/180% of premiums collected. This is happening only because of cross subsidy, which is the strongest inefficiency or weakness of the industry in today's business world. Principally,

**If proper rating method is followed by Indian insurers, fire insurance premium will get reduced substantially effecting greater market penetration; and higher productivity and efficiency.**

rating will be made on risk process and cost of particular risk but not on subsidy from other funds. If proper rating method is followed by Indian insurers, fire insurance premium will get reduced substantially effecting greater market penetration; and higher productivity and efficiency.

The root of the success and survival of insurance industry lies in its skill and capability to rate the risks right. Freedom to fix price for the risk gives the real strength of the foundation and autonomy

of the industry. In the tariff free regime, Indian insurance companies will be put to real test of their ability and capacity for autonomy. It will definitely bring real opportunity as well new challenges for them to work with global standard; and compete with global giants unlike before. It needs reorientation of our age-old process and techniques of underwriting and rating. It is essential that all underwriters develop and maintain an attitude to identify, analyze, evaluate each and every risk separately; and price the risk according to cost of risks determined mathematically and statistically with the principle of law of large numbers and process of loss forecasting; based on analysis of probability and severity of loss for the risk. With the skill and ability to work autonomy in rating, the Indian insurers will be able to meet the expectations of a sophisticated, globalized and rapidly changing market place. Therefore, we welcome this move for the solid foundation of the industry aiming at contributing more to the society. Before we discuss about the principles and process of pricing it is very important to brief about the experience of other countries, which had implemented deregulation long back.

## **2. Price Mechanism in other countries:**

Despite India having a more developed financial market, Indian insurance industry has remained far behind many more developed and developing countries in respect of autonomy and deregulation. USA, European Union, Japan, Hong Kong, Taiwan, Egypt, Philippines have been enjoying benefits of deregulation and de-tariffing since



long in the form of--- i) Price mechanism, ii) Alignment of price with cost of risks, iii) Reduction in cost and price in the competitive environment, iv) Improvement in quality of services, v) Improvement in productivity, vi) Innovation in products and services according to the needs of the customers, vii) Elimination of cross-subsidy, viii) Practicing merit rating or experienced rating. All these have resulted into solid base of price mechanism, greater market thrust and deeper penetration. Because of earlier deregulation, our neighbour China's insurance industry is much more developed with higher asset quality and better performance of companies. As per a S&P report, the Indian insurance market is in a disadvantageous position in comparison with the Chinese market in its attempts to attract investors, although China has been lagging behind India in financial sector reforms, particularly in the banking sector. Significantly, insurance companies in China are free to fix price for almost all products. Motor insurance had been de-tariffed in 2003, and rates have been stabilized by the end of 2005. India, on the other hand is now in the process of preparing for autonomy in rating the risks as per IRDA roadmap for a de-tariff regime w.e. f January 2007. Indian insurers are apparently not getting sufficient confidence to work in the de-tariff market after having been exposed to the protected and regulated market for over three decades.

### 3. Objectives of pricing:

Insurance rating is to meet three objectives-i) Regulatory Objectives, ii) Business Objectives and Social Objectives.

#### 3.1 Regulatory Objectives

##### 3.1.a. Rating Adequately:

The regulatory requirement of pricing arises from the purpose of insurance regulation, which is to protect the interests of the policyholders and the shareholders. This means that the rates must be adequate enough to meet all future losses and expenses in time and to pay a fair return on the capital

employed by the shareholders for this risk taking business. If the rates are not adequate, an insurer may become insolvent causing total loss to the policyholders' fund as well as the shareholders' fund; and cause total loss of public faith and confidence in insurance industry. However, in insurance business, rate adequacy measurement is really complicated because of the simple reason that insurer does not know the actual costs at the time of selling the policy. Price is estimated on loss forecasting process based on statistical methods. The premium is collected in advance in view of law of large numbers (projected); and expected claim costs and other expenses. If the insurer fails to achieve the targeted number or volume of business and if the actual claim costs, especially catastrophic losses, are more than the statistically projected or forecasted

Because of earlier deregulation, our neighbour China's insurance industry is much more developed with higher asset quality and better performance of companies.

loss, price collected may not be sufficient to pay all claims and expenses during the policy period. As a result, policyholders, shareholders, third-party claimants and other beneficiaries may be financially harmed. This is the major concern for the regulatory authority.

##### 3.1.b. No Excessive Rate

Again the regulatory authority is also to ensure that the rates are not excessive. The rates should not be more than actual value of protection or cost of risk assumed in order to ensure affordability of the insurance product for the larger section of the

society. Exorbitant rates are opposed to public interest. If it is more than expected cost of risks (arrived after application of law of large numbers) plus minimum profit, insurance products will go beyond the reach of the majority of the society, which will be also opposed to the objectives of the IRDA. Needless to mention, even after the expiry of half a decade since constitution of IRDA, market penetration has remained below 15%, which is also a major concern of the Authority.

##### 3.1.c. No Discriminatory Rate:

The Authority is also to ensure that similar risks with reference to probability and severity of loss are not rated differently for different customers without any sufficient grounds. For example: Two persons of the same age, same profession, and same area should not be rated differently for same sum insured for Personal Accident Policy. Similarly two buildings of the same age, same construction, same location, and same occupancy shall not be rated differently.

#### 3.2 Business Objectives

**3.2.a** In India, insurers have been so far guided by age-old tariff for rating purpose to ensure survival, solvency and profitability without much worries and efforts in a more or less monopolistic market. But in today's open and global market, insurance business must meet the following objectives to ensure survival and success;

- **Simplicity:** The rating system should be simple enough to understand and apply in a particular class of business. With an exhaustive Internal Guide by Nominated Underwriters, Tariff rating system can be made simple for the line underwriters for small and simple risks. The Internal Guide Tariff to be prepared by the nominated underwriters will be adhered to by the line underwriters as Tariff. For large and new line of

business the company must have sound Risk Management/ Inspection Policy and Underwriting Policy so that line manager can estimate/quote premium for immediate feedback to the prospective customer on his specific query without waiting long for the advice of the nominated underwriters. With exhaustive Internal Guide Rate Book, line underwriting will be as simple and stable in de-tariff regime as it is today. Here the nominated underwriters have major roles to play.

- **Stability (with product, price, terms & conditions):** Insurers always try to make the rates stable over short periods so that customers get confidence in the operations of the insurance company. Frequent changes in rates, terms and conditions may lead to customers' dissatisfaction and irritation resulting into loss of credibility of the insurance company. This may further need regulator's intervention or control over these aspects. To ensure stability of rates and customers' confidence the insurers must comply with the IRDA GUIDELINES ON FILE AND USE" REQUIRMENTS FOR GENERAL INSURANCE INDUSTRY. (Refer to draft Circular dt.9.08.06)
- **Responsiveness:** The rates should be responsive to changing loss exposures, current economic conditions and also to solvency margins. There should not be any rate-cutting at the cost of shareholders' fund or other policyholders' fund. For example, if inflation causes increase in medical expenses reimbursement or payment in more automobile repair claims, the corresponding Medclaim insurance premium or Motor OD premium need to be enhanced.
- **Encouragement of loss control measures:** The insurer's rating

policy should encourage loss-control activities that may reduce both loss-frequency and severity. With proper risk inspection and risk analysis, the insurer may find out the weakness of loss prevention measures and guide the insured accordingly to improve the arrangements so that frequency and severity can be reduced; and accordingly fire rates can be also reduced. In this regard Hazop Study, Fault Tree Analysis or Dow Index Analysis; and regular risk identification analysis deserve special mention.

**3.3 Social Objectives:**

**Availability of Insurance to the larger section of the society:** Because of the unreasonable prices, certain sections of the society find it difficult to obtain

**The underwriting policy of the company must specify the principles and methods of rating - Basic Rates and Fair Premium for each type of business to be underwritten as per the company's underwriting philosophy, policy and objectives as well as Regulatory objectives.**

coverage easily at a reasonable price. As we know, the capacity of insurers is limited and their endeavor will be to see that their capacity is being utilized on some profitable accounts for maximization of the shareholders' wealth and income. With this objective of maximization of shareholders' wealth with only profitable accounts of insurance, insurance penetration will be affected and the social responsibility of the industry will not be served. Availability of insurance is also affected by insurance cycle. When operating surplus is generated, the market becomes soft immediately. Again when insurers suffer heavy losses especially catastrophic ones, prices are hiked and many products go beyond the reach of the common people. So, to ensure

availability of insurance products for larger section of the society as per their affordability, the insurers must have ability for proper loss forecasting; and stable, simple and transparent pricing system. Insurance business cannot be run in today's global market only with business objectives regardless of social objectives and regulatory objectives.

**4. Basic Principles of Pricing:**

- **Alignment** of price with cost of risks (Discussed hereinafter in Fair Rating)
- **Classification** of risks based on homogeneity to apply class rate.
- **Law of Large Numbers**
- **Forward looking** into expected claim costs; administrative & procurement costs; and expected investment income.

These principles are being discussed hereinafter along with the methods.

**5. Methods of Rating:** The common methods of determination of basic rate or pure premium, which constitute the major part of fair premium are the following :

- Judgment Rating / Individual Rating
- Class Rating
- Merit Rating

The underwriting policy of the company must specify the principles and methods of rating - Basic Rates and Fair Premium for each type of business to be underwritten as per the company's underwriting philosophy, policy and objectives as well as Regulatory objectives. Precisely, fair premium is the pure premium as calculated by any of the following method plus Overhead of estimated Administrative Costs and Acquisition costs reduced by expected return on investment.

**5.1 Judgment Rating:** Judgment Rating implies that each exposure is individually analyzed, evaluated and rated on the basis of the underwriter's judgment. This method is generally used by the underwriters when the loss exposures are so diverse and do



not correspond with any class data available for class rate; or credible loss statistics are not available. Judgment Rating is widely used in Marine Insurance especially for import/ export consignments of different clients from different places in ocean-going vessels of different capacities, class and managements, covering ports of different countries in different weather conditions with cargoes of different nature being shipped to different countries under different terms and conditions. So due to the widely varied factors of rating having no specific past loss experience statistical data, the insurers mostly use judgment rating for import/ export marine insurance.

**5.2 Class Rating:** The most of the rates today used are class rates determined either on Pure Premium Method or Loss Ratio Method. Class Rating means that risks with similar characteristics of exposure are placed on the same underwriting class and charged the same rate. The rate that implies the average loss experience for the entire class is based on the assumption that future accidental loss will arise with same set of probability and severity. Tariff Rate or company's Internal Guide Rate fall under Class Rating. Class rate is simple to apply, but difficult to calculate. However the following aspects are taken into considerations for class Rating.

- Risk grouping/ classification
- Homogeneous Group in respect of the following aspects
  - Nature of occupancy (Mfg, Trading, etc)
  - Properties of materials (flammability, reactivity, toxicity, flash point etc.)
  - Properties of products (as above)
  - Nature & height of constructions

- Process hazard (reaction, operation, boiling point, flash point, ignition point etc.)
- Plant / process-(types, maintenance etc.)
- Protection system & appliances
  - Credible Data Bank for proper Statistical Analysis and technical justification.
  - Probability Distribution of Loss for the particular class of risk
  - Law of Large numbers
  - Reinsurance rate

**5.3 Merit Rating** depends on the retroactive claim experience of the specific business applicant. As we have discussed above, class rates and underwriting standards are based not only on class data but

**If the insured's loss experience is better than average for the particular class of clients, the class rate is further reduced. If the loss experience is worse than the class average, the rate is increased.**

also on the individual characteristics of the particular business applicant. The line underwriters need to modify the class rate and even schedule rating for the particular buyer to consider the underwriter's analysis and evaluation of further additional characteristics for merit rating. There are different types of merit rating:

- Schedule Rating
- Experience Rating
- Retrospective Rating.

**5.4 Schedule Rating** depends on underwriter's judicious decision to modify the class rate in view of his evaluation of additional characteristics of the business proposal of a particular nature. The

additional characteristics include physical hazards, moral hazards, existence of safety programme, improved technology, management control, compliance of corporate governance; and Govt. regulations etc of the particular business in a specified class. Under this Rating Method, each exposure is individually rated or class rate is modified in view of desirable or undesirable physical features such as:

- Construction
- Occupation
- Operation Method
- Protection or safety measures
- Exposures
- House keeping & Maintenance
- Loss Prevention or control measures
- Management outlook and attitude for Loss prevention / control measures

Class Rate and associated underwriting standard may vary across the underwriters according to their claim experience and objective probability of risk (operation of law of large numbers).

#### **5.5 Experience Rating:**

It is another type of merit rating where class rate or scheduled rate is further adjusted upward or downward based on the past loss experience of the particular client for reasonable period (generally 3 years). If the insured's loss experience is better than average for the particular class of clients, the class rate is further reduced. If the loss experience is worse than the class average, the rate is increased. In determining the quantum of the rate change, the actual loss experience is modified by a credibility factor. Experience Rating is generally restricted to large customers paying large amount of premium for different classes of business for reasonable long period. This type

of rating may be applied to Workmen's Compensation Insurance, Liability Insurance or Group Medclaim Insurance safely as it is being followed in other countries, which have been in deregulation for a pretty long time.

**5.6 Retrospective Rating:** Under this method, the insured's loss experience during the current period is taken into account for determination of actual premium to be charged for that period. Here, a provisional premium is paid at the beginning of the policy period and the end of the period a final premium is computed, considering the actual loss experience during the period. Retrospective Rating is widely used in USA for W.C. Policy, General Liability Policy, Auto Liability Policy, Property damage and Burglary policy for large firms.

**5.7 Some Essential Considerations of Class Rating**

**5.7a) Homogeneity of Group:** Homogeneity of buyers is one of the fundamental considerations of the classification of risks. To make the law of large numbers to be effective and ensure cost-based pricing, the homogeneity of the class must be established with respect to nature of property, frequency and severity of loss faced by the homogeneous group. The main purpose of an insurance classification system is to categorize risks that possess similar features and probability of loss in the same class. Suppose that in a large group of scooter insurance, each policyholder has the probability of 0.20 for suffering loss of Rs.5000 and probability of 0.80 for no loss. Since the policyholders are in a homogeneous group, they have the same Loss Distribution. In this homogeneous group we can adopt fair Rating Method with the probability analysis supported by law of large numbers theory which is the foundation of insurance

mechanism. Since the policy indemnifies the full loss under policy cover, the expected claim cost of each customer equals the expected loss of the customer, which may be equal to Rs1000 ( $0.20 \times 5000 + 0 \times 5000$ ). The actual claim cost may vary from the expected claim cost. But with the operation of law of large numbers, the insurer estimates that the distribution of average losses will be centering around the expected value of Rs1000/-.

**5.7b) Statistical Analysis for Estimated Claim Costs:**

To arrive at fair premium depends on Statistical Analysis consisting of Measure of Central Tendency, Dispersion, Analysis of Probability Distribution and Variance

The main purpose of an insurance classification system is to categorize risks that possess similar features and probability of loss in the same class.

Analysis. Central value comprising Mean, Median and Mode gives an idea of the mass. Mean is the best of all these methods of measure of Central Tendency. It is also not sufficient to get an absolute idea about the expected claim cost for the risks to be accepted. Mean gives simply average. It cannot show whether the observations are close to each other or far apart. A measure of dispersion/ variability amongst observations in a set of loss events is therefore essential to measure the reliability or effectiveness of loss data and for necessary adjustment in the value of central tendency to arrive at fair expected value or amount of

expected claim costs. The application of probability and statistical analysis are more important in insurance industry than in any other industry. Insurance management is impossible without application of various statistical analyses. Probability Distribution is characterized by two important measures - Central Tendency and Dispersion. Probability Distribution Analysis is the fundamental basis for estimating loss frequency and severity of the target group of risks to be assumed. A Probability Distribution identifies all the possible outcomes for a random variable and the probability of all outcomes. The expected value (claim) is derived by multiplying each outcome by the probability occurrence and summing the product results. To illustrate the use probability distribution, let us take the following table of Motor OD Claims for a branch for 10 years for 100 policies with Motor OD premium of Rs100000/- per year from said 100 policies as given in the table.

For Probability distribution we are to list possible outcomes & probabilities of random variables i.e. uncertain outcomes. Underwriter's decision depends mainly on analysis of probability distribution of loss that may arise with various magnitudes (severity) many times (probability). Expected value of Probability Distribution is Expected Loss with maximum probability. The Incurred Claim of Rs.45000 (45%) occurred in 5yrs out of 10 yrs. The expected value of Motor OD Claim is 45%. Thus a distribution with a higher expected value will tend to have a higher outcome on average.

**5.8 Probability Distribution & Variance**

Variance of a probability distribution provides information



Year	Policy No.	Premium Amt.	Claim Amt.	Claim No.	Total Claims	Loss Amt.	Loss Exp.	Loss Ratio	Expected Value
2000	1000	10000	5000	10	10	50000	10000	0.5	10000
2001	1000	10000	8000	15	15	80000	10000	0.8	10000
2002	1000	10000	12000	20	20	120000	10000	1.2	10000
2003	1000	10000	10000	18	18	100000	10000	1.0	10000
2004	1000	10000	7000	12	12	70000	10000	0.7	10000
2005	1000	10000	9000	14	14	90000	10000	0.9	10000
2006	1000	10000	11000	16	16	110000	10000	1.1	10000
2007	1000	10000	13000	18	18	130000	10000	1.3	10000
2008	1000	10000	15000	20	20	150000	10000	1.5	10000
2009	1000	10000	17000	22	22	170000	10000	1.7	10000
2010	1000	10000	19000	24	24	190000	10000	1.9	10000
2011	1000	10000	21000	26	26	210000	10000	2.1	10000
2012	1000	10000	23000	28	28	230000	10000	2.3	10000
2013	1000	10000	25000	30	30	250000	10000	2.5	10000
2014	1000	10000	27000	32	32	270000	10000	2.7	10000
2015	1000	10000	29000	34	34	290000	10000	2.9	10000
2016	1000	10000	31000	36	36	310000	10000	3.1	10000
2017	1000	10000	33000	38	38	330000	10000	3.3	10000
2018	1000	10000	35000	40	40	350000	10000	3.5	10000
2019	1000	10000	37000	42	42	370000	10000	3.7	10000
2020	1000	10000	39000	44	44	390000	10000	3.9	10000
2021	1000	10000	41000	46	46	410000	10000	4.1	10000
2022	1000	10000	43000	48	48	430000	10000	4.3	10000
2023	1000	10000	45000	50	50	450000	10000	4.5	10000
2024	1000	10000	47000	52	52	470000	10000	4.7	10000
2025	1000	10000	49000	54	54	490000	10000	4.9	10000
2026	1000	10000	51000	56	56	510000	10000	5.1	10000
2027	1000	10000	53000	58	58	530000	10000	5.3	10000
2028	1000	10000	55000	60	60	550000	10000	5.5	10000
2029	1000	10000	57000	62	62	570000	10000	5.7	10000
2030	1000	10000	59000	64	64	590000	10000	5.9	10000
2031	1000	10000	61000	66	66	610000	10000	6.1	10000
2032	1000	10000	63000	68	68	630000	10000	6.3	10000
2033	1000	10000	65000	70	70	650000	10000	6.5	10000
2034	1000	10000	67000	72	72	670000	10000	6.7	10000
2035	1000	10000	69000	74	74	690000	10000	6.9	10000
2036	1000	10000	71000	76	76	710000	10000	7.1	10000
2037	1000	10000	73000	78	78	730000	10000	7.3	10000
2038	1000	10000	75000	80	80	750000	10000	7.5	10000
2039	1000	10000	77000	82	82	770000	10000	7.7	10000
2040	1000	10000	79000	84	84	790000	10000	7.9	10000
2041	1000	10000	81000	86	86	810000	10000	8.1	10000
2042	1000	10000	83000	88	88	830000	10000	8.3	10000
2043	1000	10000	85000	90	90	850000	10000	8.5	10000
2044	1000	10000	87000	92	92	870000	10000	8.7	10000
2045	1000	10000	89000	94	94	890000	10000	8.9	10000
2046	1000	10000	91000	96	96	910000	10000	9.1	10000
2047	1000	10000	93000	98	98	930000	10000	9.3	10000
2048	1000	10000	95000	100	100	950000	10000	9.5	10000
2049	1000	10000	97000	102	102	970000	10000	9.7	10000
2050	1000	10000	99000	104	104	990000	10000	9.9	10000

about likelihood and magnitude by which a particular outcome will differ from the Expected Value. Variance measures the probable variation in outcomes around the expected value. If a distribution of loss has low variance, the actual outcome is likely to be close to the Expected Value. The Distribution with high Variance indicates that actual outcome will be far from the Distribution. It also indicates that outcomes are difficult to be predicted for risk analysis and underwriting. Conveniently Variance Analysis is worked out with square root of variances known as Standard Deviation

**6. Pricing & Deductible:**

A deductible, which is voluntarily accepted by an insured to bear the first part of the amount of any claim at a figure higher than the standard excess impacts the rating of the product sold to the particular client. In a package or mega policy, as we know, deductibles are arranged separately for material damage insurance or at a combined figure with the associated business interruption insurance in each case with or without an aggregate limit. The use of deductibles is on the rise nowadays because of mainly two factors -i) capacity of the insured to bear loss (self insurance, and ii) Saving of insurance cost. So if the price of product is not competitive and commensurate with the nature of risk, insurer may opt for higher deductible and increase his capacity of self-insurance. While deciding discount on deductible, the insurer must depend on the size of the deductible and the

insured's past loss experience apart from the basis being selected only on the application of the insured.

**7. Pricing and Warranties**

As price of a product depends on its quality and specification, the price of a promise in an insurance contract depends on the nature and number of

**A deductible, which is voluntarily accepted by an insured to bear the first part of the amount of any claim at a figure higher than the standard excess impacts the rating of the product sold to the particular client.**

conditions/warranties and exclusions. For example: In the existing Fire policy, there are thirteen exclusions and fifteen conditions. If any of these conditions or exclusions is removed, price can be reduced accordingly, provided the insurer has got some past loss experience and fair idea of loss forecasting for such type of product. Now a question arises as to whether an insurer can charge premium nine times the normal premium for cover for a particular class of risk without any of the nine standard exclusions applicable for standard product for that class of risk. Answer should be no for the reason that it is neither prudent nor permissible under regulatory norms, as such pricing of a specially customized product for a particular client on his offer may not be supported by technical

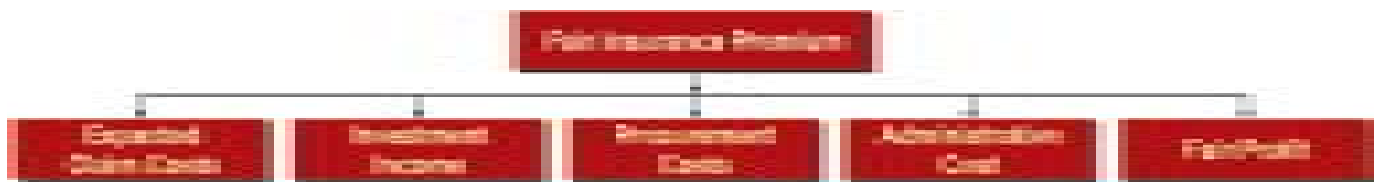
analysis of appropriate statistical data of past loss; and loss forecasting of the specially designed product different from the standard product based on past experience and filed with IRDA under the requirements of "File and Use".

**8. Pricing and IRDA Requirements**

- Design and rating of products must be on sound and prudent underwriting basis.
- All literature relating to the product should be in simple language for easy understanding by the public.
- The insurance product should comply with the requirements of the IRDA (Protection of Policyholders' Interests) Regulations 2002.
- Insurers should use similar wordings for describing the same cover.
- The pricing of products should be based on support of appropriate data and technical justification.
- Margins built into rates shall be consistent with the experience of the insurer in respect of commission, expenses of management, contingencies and profit; and
- Insurer should confirm that it has taken necessary steps to ensure that competition will not lead to unprincipled rate cutting and other improper methods.

**9. Certain More Considerations for Pricing:**

The underwriting policy must specify the guidelines as to how the risks are to be identified, analyzed and evaluated for application of proper guide rates by the line underwriters for the small and simple risks to be underwritten by them to maintain uniformity and standard in implantation of underwriting policy and its control all over the country. The said



policy must also prescribe the basis, ways and means of scheduled rating or merit rating as the case may be.

**Risk Inspection & Risk Identification by Line Underwriters:**

This has to be ensured while applying internal guide rates for the small and simple risks as they are doing now while applying tariff. In this regard the underwriters may look into the following aspects especially over and above the guidelines prescribed in the underwriting policy of the company for arriving at merit rating or experienced rating as mentioned above.

1. Risk Inspection Report
2. Risk Analysis & Loss Control Measures
3. Risk Classification
4. FEA Arrangements Review
5. Security Measures Review
6. Class of construction (1, 11, Open, Other)
7. Statement of House Keeping & Hazards
8. Class of construction (1, 11, Open, Other)
9. Process Control (manual, electric, electronic)
10. Market Trend & Expected Claim Costs
11. Special Characteristics of particular risks
12. Loss Experience as per Data bank of the client
13. Reference to Guide Rates
14. Provisions for good features Discount or loading for bad risks as inspection report

**Fair premium** must cover five basic elements - i)Expected Claim costs, ii) Administrative costs, iii) Procurement costs, iv) Fair profit and v) Adjustment of Investment income. A fundamental principle of insurance pricing is that premium on risks assumed is adequate enough to a) fund their i) expected claim cost, ii) Administrative Costs, iii) Acquisition Costs; and b) provide an expected return on capital obtained to carry out the risk taking business.

Administrative and acquisition costs can be determined without much difficulty Precisely, in the competitive market, the premium amount will be just sufficient to meet the total expected of the particular risks and provide fair return on the capital of the owners of the insurance company. Needless to mention, total costs are subject to adjustment of return on investment of policyholders' fund. It implies that fair premium is based on net costs i.e. total costs minus expected return on investment and to pay proper return to the shareholders for their risks of providing fund i.e. capital to deal with risk taking business. Thus prudent

**Needless to mention, total costs are subject to adjustment of return on investment of policyholders' fund.**

underwriting, pricing the risks correctly, ensuring access to capital and being prepared for future catastrophic losses are the fundamental considerations of rating and underwriting. Rating the risks aims at providing a long-term security to the policyholders for the risks transferred by them by maintaining solvency and protection to the shareholders' fund. It will not be out of place to mention that many insurance and reinsurance giants have become bankrupt during last two decades due to bad underwriting and catastrophic losses. There are many cases of bankruptcies arising out of bad underwriting and inadequacy of capital. The major determinants of fair insurance premium as indicated above are shown in the following Table.

**Discounted Expected Claim Costs:** In a perfect competition market, price is governed by price mechanism of demand and supply of insurance services. If the premium is more than fair premium based on above risk costs reduced by investment income, an insurance company will not be able to retain even the existing market. For prudent pricing, expected claim cost need to be discounted in order to consider expected investment income in rating the risks right. The rating rests not only on the risk costs, but also on the insurer's ability to earn maximum investment income.

**10. Conclusion:**

Efficiency and efficacy of insurance rating depend not only on quantitative factors as discussed above, but also qualitative factors such as quality underwriting with appropriate terms and conditions, quality of risk management including appropriate risk transfer policy, professionalism in brokers' service, proper and prompt claim settlement, proper data management and MIS system, avoidance of cross-subsidy etc. To ensure proper rate making, the underwriters must give due emphasis to both quantitative aspects as well as qualitative aspects. Once insurance rates are freed, fire insurance premiums will be the first to fall to realistic levels. Group insurance policies and Motor TP Policies will no longer be sold below cost and general insurance industry will see greater penetration and acceptance in the society.



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# Pricing Insurance Products

## - Post Detariffed Scenario

'The insurers need to demonstrate to their consumers that in a post-detariffed scenario, they are much easier and much less expensive, to do business with' avers G V Rao. He further adds that unless they become more 'market-sensitive', the switch over to market pricing for insurers is going to be financially painful.

This article seeks to analyze the several imponderables confronting the insurers in determining their rating structures in a detariffed scenario. To compound their growing problems, there is not a single sign, as yet, of their taking their consumers into confidence on the benefits the latter would derive due to the operation of a free market in pricing insurance products.

The strongly rooted mindset of insurers of a strong 'provider's mentality' has to change to that of a 'professionally service-oriented mentality'. If the current mindset does not change, and soon enough; the operational problems confronting them could get more complicated. They also need to demonstrate to their consumers that in a post-detariffed scenario, they are much easier and much less expensive, to do business with. Unless they become more 'market-sensitive', the switch over to market pricing for insurers, in my view, is going to be financially painful.

In fact, in a detariffed scenario, it would be the consumers that would dictate the pace of the market developments; and not the insurers, as the latter seem to believe in. Aided by brokers, and the tough negotiating skills that Indian consumers are known for, and a Regulator that is expected to side with

consumer interests; the game plan of insurers has to be much more professional and thorough than what the present indications seem to suggest. Cutting internal costs, a dramatic improvement in professional expertise and a change in the basic mindset towards consumers are the minimum changes the insurers should urgently implement.

**Cutting internal costs, a dramatic improvement in professional expertise and a change in the basic mindset towards consumers are the minimum changes the insurers should urgently implement.**

### Pricing products - A tricky affair?

Pricing of non-life insurance products by insurers, based on their retrospective claims experience, and the unfolding competitive market expectations of the future; is the biggest challenge they need to confront from January 2007. Not having had any practical experience of working on rate-fixation in a free market, where pricing mechanisms are self-prescribed, insurers will be working on a tricky terrain, and with a mindset rooted to the past that has inbred corporate

practices not conducive to analysis of risk factors, enterprise, fair play and customer-orientation.

At best, the insurers could rely on their retrospective claims experience to rate the prospective risk factors in a homogenized risk category. They would, in my opinion, still financially lose unless they succeed in bringing down their internal costs of doing business that is now at over 35 percent. Price competition must take into account the competencies of the consumers to negotiate better deals for themselves. They are no longer 'captive' to the insurers.

### Pricing risk exposures not easy:

Many insurers perhaps believe that fixing rates is just a mechanical operation of offering rates to the consumers to recoup the expected claims' costs and the fixed internal costs, with a small margin of profit to them. While internal management and distribution costs are more or less fixed; the claims costs can vary in determining the risk premium to be charged. The frequency and severity of losses due to natural perils, in particular, would strain the actuarial rating calculations, unless insurers are ready to price them on the evaluated risk exposures they accept. Do they have the territorial claims experience vs. the risk exposures to determine the rates they want?

Would the insurers' rating structures include the income on the investment returns on policyholders' funds as an ingredient of premium income in determining the pricing mechanism? What rationale will they follow in determining the schedules of book rates? Or will the competition and the market forces, as seems to be the likely case, dictate the final rates? Competition at any cost or competition in self-interests and market excellence - What would guide the motivation of insurers? There is still an element of drama and secrecy surrounding the preparation of rating schedules to be adopted by insurers. None yet knows how smart they are in 'experienced rating'. What are the other imponderables?

Would the regulator insist that these standardized rating schedules be made public to the customers for their information, as the basis for negotiation of the final price? How would insurers justify to the market that the rates that they charge are not excessive, not unfair and not discriminatory, as between one insured and another in the homogenized risk categories?

Would the regulator demand that the costs of making insurance products available that is now high at about 35 percent of the earned premium be drastically reduced within a time frame? How would he go about it? The consistent statutory breach on costs that is prejudicial to the interests of the consumers needs to be addressed by insurers. They must be seen at least as making attempts to reduce them.

### **Public unaware of future rating trends:**

As yet, there is no information available to the public of how the dismantling of the tariff regime would eventually work for the majority of consumers. Would there be a full disclosure on the rating

front? Would there be any new regulatory controls imposed on the principles to be adopted by insurers on pricing products? Would there be any MRP (maximum retail price) for each type of cover beyond which a higher rate that may be charged needs justification and approval of the regulator? The consumers surely need to know their rights and responsibilities in a detariffed scenario on the prices they are likely to be charged. They must have provisions for regulatory access against unfair and discriminatory pricing by insurers and the rules for such access need to be spelt out.

**The consistent statutory breach on costs that is prejudicial to the interests of the consumers needs to be addressed by insurers. They must be seen at least as making attempts to reduce them.**

### **The mindset of pricing products:**

Currently about 70 percent of the non-life market of about Rs 25,000 crores premium income is under statutorily controlled minimum pricing regime, called the tariff regime. The portfolios under the tariff regime that matter to the consumers include fire and engineering, forming about 25 percent of the market, which are popular with the corporate bodies, as the insurance policies are compulsory collateral securities for the loans they take from financial institutions. The larger price-controlled segment, however, is the motor portfolio that is about 42 percent of the total market that comes under personal lines insurance and growing at about 16 percent per annum.

These minimum tariff rates have virtually become the maximum rates that get charged in view of the competition among insurers to sell these products. When the non-life market was nationalized in 1973, the Govt. set up a holding company, the General Insurance Corporation (GIC), with its four wholly owned subsidiaries to have competition at the market place. This may have been interpreted by the GIC, as competition for only services offered by the insurers and not on the pricing front.

Having inherited such a strong and dictatorial monopolistic mindset on the pricing front, the four insurers, now independent of each other, find it difficult to accept the new competitive challenges (seemingly unethical) posed by the new players in the liberalized market. Having surprisingly lost a market share of about 35 percent in a span of about five years, they have begun demanding freedom for all players to price products afresh and for dismantling of the current tariffs. These steps, they argue, are the right measures keeping in view the market realities of liberalization.

The insurance market has continued to be a high cost one from the consumer perspective; over 35 percent of the earned premium is consumed as internal costs of marketing, management and distribution.

### **Will detariffing help in internal cost controls?**

Will detariffing help in changing the mindset of insurers, that the pricing format that includes not only costs of claims but significantly includes the costs of marketing, managing and distribution costs of products, need to be addressed? These latter costs have been consistently high for the last few years at over 35 percent of earned



premiums that they have inevitably cut into the profit margins of insurers. Raising uneconomic premium rates is relatively easier; but cutting internal costs to make the product cost efficient at the market is a big management challenge. What will insurers choose as the right method to play with market rates?

The new players too have high internal costs. But they seem to be bringing them down as their premium volumes grow. With no past inherited and wasteful baggage, they would be able to cut internal costs faster than the established players. They would in all probability be able to offer lowered rates to the consumers much sooner. How would the established players respond?

### **Insurance business is man management too:**

Insurance is a highly capital-intensive industry and it has only its skilled manpower, as its stock in trade. It produces reams of paper for business transactions and relies totally on the goodwill of consumers for its reputation. The productivity levels of its man power, the technology it employs for business processing and its hierarchical structure for decision making and the quality of its internal controls to keep tabs on money exchanges between the insurers and the consumers would determine the eventual pricing formats. Are the insurers conscious of measuring and cutting down present internal costs they incur? Are their business processes and supervisory costs adding value to the processes and in turn to the levels of customer satisfaction?

There are costs incurred by insurers disproportionate to the value delivered to the organization and to the consumers. Have the insurers identified such wasteful costs that need ruthless cutting? Is the present business model encouraging or

hindering the business growth and customer satisfaction? Has any internal survey been done on the costs each supervisory level is costing in terms of the benefits derived? What are the pressing management priorities in a competitive environment and how are they going about achieving them? These hard questions need to be addressed and solutions found.

### **Role of insurers in managing premium rates:**

Insurance is a business with a high degree of volatility in its results than most other businesses. The pricing mechanism depends upon several factors including the conservatism they display in providing for claims reserves; the loss control mechanisms that they

**The exercise of negotiating premium rates would necessarily include the quality of customer relationships an insurer wants to build, the quality of risk management advice he wishes to offer and the claims services he usually provides.**

expect their customers to comply with; their risk assessment models for estimating maximum probable loss in respect of each risk; the volume of profitable business the customer generates; competitive market conditions; reinsurer's pressures and conditions they impose. They can have a number of proposals to adjust rates: low claim ratios on a large policy becoming eligible for a lower renewal rate; profit sharing of marine cargo premiums after two or three years.

The exercise of negotiating premium rates would necessarily include the quality of customer relationships an insurer wants to build, the quality of risk management advice he wishes to offer and the claims services he usually provides; and, of course, the profitability

a customer generates. Relationship building thus becomes a key factor for both the insurer and the insured.

Ethical and professional conduct in mutual dealings would gain prominence at the expense of a strictly commercial deal, wherein each party has to look out for himself. Insurers need to rebuild their professional images and reputations as caring, concerned and fair providers of financial security. A free market offers excellent opportunities to build differentiated advantages of one's choice.

### **Final word:**

Pricing insurance products in a detariffed scenario, however, needs a lot more homework to be done and a consensus needs to be developed on the basic principles of how the rating schedules would be prepared. Consumers are bound to raise a huge cry if the rates are raised; insurers need to be ready with answers that the rates are not unfair, not excessive and non-discriminatory. How is this principle going to be explained to the affected consumers?

Public - the consumers; and the media are bound to get more involved in the rating aspects in a free market, with the high-profile that non-life insurance industry has achieved. Insurers need to plan the unfolding scenario on the rating aspect more carefully. The current easy perception that the competitive rating is essentially among the insurers themselves with a passive consumer bloc as an on-looker may put insurers in a situation beyond their making. Insurers need to look beyond their comfort-zone. They would be tested for their sense of fair play and honesty of purpose.

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# Ratemaking in the Wake of 'Detariffing'

- Challenging Times Ahead

Yagnapriya Bharath says 'In a situation where insurance pricing is regulated, fixing of premium rates is not a major problem. In a deregulated set up, fixing of rates or pricing could be quite a task'.

*Whereas it hath been time out of mind an usage amongst merchants, both of this realm and of foreign nations, when they make any great adventure (especially into remote parts), to give some consideration of money to other persons ( which commonly are in no small number) to have from them assurance made of their goods, merchandises, ships and things adventured, or some part thereof, at such rates and in such sort as the parties assurers and the parties assured can agree, which course of dealing is commonly called a policy of assurance; by means of which policies of assurance it cometh to pass, upon the loss or perishing of any ship, there followeth not the undoing of any man, but the loss lighteth rather easily upon many than heavily upon few, and rather upon them that adventure not than those that do adventure, whereby all merchants, especially the younger sort, are allured to adventure more willingly and more freely.'*

This preamble to an Act of Parliament passed in the United Kingdom in 1601 not only amply describes the purpose of insurance but the operation of insurance as well. While ' the loss lighteth rather easily upon many than heavily upon few' is the essential feature of insurance

itself, the '**consideration of money (premium) 'at such rates'** and 'in such sort' is essential for the operation of insurance. Insurance is based on the law of average or the law of large numbers. An insurer seeks to transact insurance safely at whatever may be a fair premium and he has to enter into sufficient transactions for the law of large numbers to operate. To determine this 'fair premium', an insurer needs to go

To charge more will be to invite competitors to cut the rate and take the business away.

through the 'ratemaking' process. '**Ratemaking**' is the process used to determine rates and premiums. A 'rate' is the price per unit of exposure (eg per cent, per mille). A 'unit of exposure' is a measure of the size of the insurer's exposure to loss. 'Premium' is determined by Rate x Exposure.

In a situation where insurance pricing is regulated, fixing of premium rates is not a major problem. In a deregulated

set up, fixing of rates or pricing could be quite a task. To charge less will mean to transact business at a loss and eventually to use up one's capital. To charge more will be to invite competitors to cut the rate and take the business away. The solvency of insurers is of paramount importance to the insured persons. If insurers consistently undercharge, there is the risk that they will prove insolvent just at the moment when an insured makes a heavy claim and seeks to benefit from the protection given by his insurance. Equally, it is not in the interest of the insured to pay a heavy premium.

While determining rates, an insurer may have several business considerations. Notwithstanding these, an insurer has to produce rates that are stable but at the same time reasonably responsive to changes in loss exposures. Insurers will, of course, have to ensure that the rates they produce are adequate. Put very simply, for the insurer it's a question of considering two factors '**Money In** (Premium & Investment Income)' and '**Money Out** (Losses or Claims, Expenses and Profit)'. However, the problem of fixing fair rates is not an easy one to solve. Except when conditions have changed materially, it is true that the wider the statistical basis from past experience, the easier it is to



arrive at the probable future claims cost. Thus insurance cannot be safely transacted in the absence of some basis of statistics or experience on which to compute a rate. Consequently, it is essential that the database an insurer depends upon is credible.

It will be worthwhile to have a look at the

#### **Principles of Ratemaking;**

- A rate is an estimate of expected value of future costs. 'Costs' would generally include incurred losses, allocated claims expenses, unallocated claims expenses (those not directly assignable to specific claims), commission and brokerage expenses and overheads.
- A rate provides for all costs associated with the transfer of risk. To maintain equity among insureds, ratemaking should provide for the costs of an individual risk transfer. When the experience of an individual risk does not provide a credible basis for estimating these costs, the aggregate experience of similar risks is to be considered.
- A rate should be reasonable (not excessive/not inadequate) and should not be unfairly discriminatory.

There are many ratemaking methodologies adopted by actuaries. Irrespective of the methodology followed, it is important that the material assumptions are documented and available for disclosure. Considerations that commonly apply for any ratemaking methodology followed are:

**Exposure Unit:** The determination of an appropriate exposure unit or premium basis is essential.

**Data:** Historical premium, exposure, loss and expense experience are necessary.

**Organisation of data:** Whether it would be on calendar year, accident year, report year or policy year basis.

**Categorisation or classification of groups:** Accuracy of ratemaking is improved when experience is subdivided based on homogeneity of risks.

**Credibility of data:** A group should be large enough to be statistically reliable.

**Determination of expected loss:** Estimated value of incurred claims and claims expenses.

**Premium and claims trends:** Prospective changes in premium and claims to be factored.

**To maintain equity among insureds, ratemaking should provide for the costs of an individual risk transfer. When the experience of an individual risk does not provide a credible basis for estimating these costs, the aggregate experience of similar risks is to be considered.**

**Impact of catastrophes:** Allowance to be made for this.

**Reinsurance:** Effects of reinsurance arrangements to be taken into account. Hence, in conditions of competition, insurers will seek to cover risks at rates which suffice to cover a margin of profit, the cost of claims arising and the cost of reasonable expenses. Where it is the desire to attract business of a particular type, inducements may be offered by the granting of discounts. On the other hand, some insurances may be 'rated up' because they present undesirable features. Currently, in India, most of the risks under tariff are property risks. With

detariffing round the corner, the 'Underwriting' teams/ departments of the non-life insurance companies must be involved in the exciting job of getting prepared to take on the challenges of working in a detariffed environment.

Companies must be deep into crystallization of their underwriting guidelines and must be either working on devising of their internal guide rates or are probably done with them. The process of ratemaking would involve a number of considerations such as marketing goals, competition, legal restrictions etc. of the company apart from ratemaking considerations per se.

'Underwriting' and 'rating' will gain tremendous importance in a detariffed scenario. These two basic functions of insurance go hand in hand. 'Underwriting' in its true form will have to begin to take shape in the companies as a result of detariffing. The underwriting process determines the base rate for the coverage. The premium calculation involves the application of a series of rating factors to the rate base. Rating factors are factors that change the base rate because the insurer has determined that the factor represents a difference in risk. Rating factors can cause the rate to increase (surcharges) or decrease ( discounts).

The three main businesses that are about to be detariffed are Fire, Motor and Engineering Insurances. For a Fire insurance, while considering what rate to charge, an underwriter will be guided by statistics of past losses for the class of risk concerned. He will then consider whether the property proposed for insurance is a good risk of its class or not. Some of the questions an underwriter might consider are: Is there

## ISSUE FOCUS

a chance of the fire originating in the insured's premises? Is there heating, lighting and drying in the premises? What are the methods used for these processes? Are the stocks combustible? If a fire breaks out, is it likely to spread quickly? What is the height of the building? Will a draught created cause the fire to burn fiercely or will the fire brigade have difficulty in fighting fire in such a building? Are hazardous processes carried out? Is there woodwork? Is there petroleum? etc The answers to these questions can increase or decrease the base rate. Reduction in rates maybe offered for good features such as for fire fighting equipment. Loading of premium may be warranted where the exposure to risk is higher. Apart from the physical risks, the quality of management of the factory would matter. Good management will deserve discounts while bad management will attract loading. Thus the process of ratemaking involves considering the whole gamut of the risk. When it comes to Motor Own Damage Insurance, premiums will have to be fixed according to the type of vehicle, the geographical area of use, the horse-power or cubic capacity of the vehicle,

the seating capacity (if it is a passenger vehicle), the value of the vehicle, the age of the vehicle etc. These are the factors that one would take into account for normal rating. Perhaps insurers may start thinking in terms of imposing special terms for factors such as a bad accident record, very young drivers who may be inexperienced or reckless, certain occupations (such as motor sports) which may involve greater risks, makes of cars that are liable to be driven

**Reduction in rates maybe offered for good features such as for fire fighting equipment. Loading of premium may be warranted where the exposure to risk is higher.**

very fast, or cars that are expensive to repair or those that may be in poor condition on account of age etc. Rating for Third Party Motor Insurance risks would depend not only on the relevant law/s in force but also the experience of the insurers.

Engineering risks involve breakdown of machinery of various types, boiler explosions, risks associated with sophisticated electronic equipment, construction risks etc. Every machinery or construction risk will have good and bad features that need to be studied before planning for discounts and loading.

In conclusion, Ratemaking, Rating and Underwriting are being discussed now more than ever before in the non-life insurance industry. There are challenging and interesting times ahead for the non-life insurance industry.

### References:

- 1) 'Insurance' by H.A.L. Cockerell
- 2) 'Statement of Principles Regarding Property and Casualty Insurance Ratemaking' ( Casualty Actuarial Society)

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# A Model for Health Insurance for the Poor in India - Part I

- Debasis Bagchi

We investigate to find out the reasons for failure of the health insurance scheme, launched by the government of India for the below poverty line poor; through a pilot survey of the poorest households. We document economic, environmental and psychological factors that are responsible for the failure. A large section of the poor would avoid treatment due to extreme poverty. Yet they are not inclined to take cover under health insurance and they reject the idea of involving reputed NGOs to help them. This psychological inertia, as we document, is due to illiteracy, ignorance and neglect of the society. Based on our findings, we propose a model which is based on two dimensional approach. The model envisages a people-centric and community based approach. It is suggested that, to start with, insurer should employ a service provider (doctor) at village level and involve the village council to help in administration of the scheme.

## Introduction

In India, health insurance for the masses is of recent origin. Experimentation has just begun in this direction since it is important to give health security to the people. India nurtures sixteen percent of the world population but is burdened with twenty one percent of global diseases while occupying two percent of the world area. India has to fight against serious health problems, in spite of making some progress in building up health infrastructure. Between 1981 and 2000, the dispensaries and hospitals have increased in units from 23555 to 43322, while the beds have increased from 569495 to 870161. The number of doctors (allopathic) has increased from 268700 to 503900, while that of nursing personnel have increased from 143887 to 737000 during the same period. Though small pox has been eradicated, AIDS and hepatitis are assuming epidemic proportions. Some communicable diseases have not shown any sign of abatement, but become more virulent. For instance, malaria mosquitoes have developed insecticides-resistant characteristics and disease like tuberculosis has been increasingly drug resistant. Hepatitis has been more widespread. There has been a significant rise in respiratory diseases due to increased pollution and number of cardiac patients is on the rise due to changes in life-style. Diabetes becomes more

conspicuous and it is estimated that India will have maximum number of diabetes patients by the year 2030. In addition, there are certain in-built constraints. Health services are highly skewed towards urban areas. Around 35% of all hospitals, 20% of all hospital beds and about 40% of all trained doctors are in rural areas. The private sector is predominant in its share of

**The government budgetary provisions for the public expenditure on healthcare system both at central and state levels in India are extremely limited.**

qualified practitioners as well as of hospitals. An estimated 85% of doctors and 65% of hospitals operate in private sector. There are severe disparities in income distribution of the population. The richest 30% of the population account for 52% and 54% of consumption expenditure in rural and urban areas respectively and poorest 30% have only about 15% share in consumption expenditure in rural as well as urban areas. [Source: S. Rao Seshadri: 'Constraints to Scaling up Health Interventions: Country Case Study: India': CMH working paper series, Paper No. WG 5:16]. On the other hand,

the health costs are increasing over time, which put a severe financial burden on the poor and coupled with loss of income, they are pushed to below poverty level of subsistence. In fact World Bank (2002) report says around 24% of people hospitalized fell below poverty line due to expenses incurred for hospitalized treatment and around 40% of the patients sold their assets or borrow money otherwise, to meet expenses for hospital treatment.

In spite of establishment of private hospitals and entry of many private insurance companies, there has been no significant improvement in healthcare delivery system for the large rural and urban poor population. The government budgetary provisions for the public expenditure on healthcare system both at central and state levels in India are extremely limited. The dysfunctions in the system are further aggravated by escalating healthcare expenses and also due to poor quality or lack of healthcare facilities available to the poor. As a result, Indian healthcare system shows a very poor performance. Financially, public health expenditure is only 4.7% of the general government expenditure and 9.6% of this expenditure is tax funded. The external resources only contribute 4.1% of the total public health expenditure. On the other hand, the public health expenditure is 15.3% of the total health expenditure and the rest 84.7% is the private health expenditure. The out-of-

pocket expenses constitute 97.3% of the total private health expenditure. (Source: Adam Wagstaff: 'Poverty and Health': CMH Working Paper Series; Paper No. WG1:5) It is, therefore, obvious that a substantial outlay will be required for up-gradation of healthcare system and this is beyond the affordable budgetary means of the government. Hence it is necessary to seek healthcare financing options from other sources. One such major source is health insurance.

### Motivation of the Research

Health insurance becomes a major choice as it enhances market efficiency and equity. In India in its basic form, the health insurance indemnifies the insured against any cost incurred for hospitalization treatment of the insured during the period covered under the policy. Several health insurance schemes are in existence in India primarily benefiting the organized sectors.

#### These are:

1. Health insurance schemes offered by the non-life insurance companies in India.
2. Captive insurance offered by the NGOs.
3. Government administered schemes for organized sector.

The major health insurance policy offered by the non-life public sector insurance companies called 'Mediclaime', features reimbursement of medical expenses (cashless in some cases) due to hospitalization and domiciliary hospitalization, with certain exclusions. The premium is based on age and sum insured.

In order to provide health security for the poor, the government has asked the public sector non-life insurance company to devise an affordable health insurance scheme for the poor. As a consequence, the public sector insurance companies launched a scheme called Universal Health Insurance Policy. The policyholder is

required to pay a premium of Rs. 365 (U.S. \$ 8), or Re.1 per day for an individual (Rs.1.5 for family of 5 and Rs.2 for a family of 7). The Government of India would contribute Rs.200 per year towards annual premium for those families who are Below Poverty Line. In case of illness the policyholder will get reimbursement up to Rs.30,000 (U.S. \$ 725) towards hospitalization. It also includes a cover for death due to accident for Rs.25,000 (U.S. \$ 550) and compensation due to loss earning at the rate of Rs.50 per day up to a maximum of 15 days.

The other two classes of insurance are only applicable to certain defined beneficiaries. For instance, in captive insurance, the members of the captive insurance funds are the beneficiaries,

**The universal health insurance for the poor (below poverty line people) has failed to attract the attention of its targeted mass and there has been a near total market failure in this regard.**

while the government employees are the only beneficiaries of the government sponsored or administered schemes.

The universal health insurance for the poor (below poverty line people) has failed to attract the attention of its targeted mass and there has been a near total market failure in this regard. There has been, as yet, no research attempt to find out the factors responsible for this failure. Research in this regard is likely to bring out reasons for failure so that corrective measures could be taken to popularize the product, which is an urgent necessity for upliftment of the poor. In the process, much needed pooling of resources could be achieved for the

beneficiaries. This research is an attempt in this direction. The paper has been organized as follows. The section-II documents previous research attempts in India in this area. The section-III discusses the methodology, while section-IV describes the data. In section-V the results emanating from the analysis are discussed, while in section-VI a model for health insurance for the poor in India based on our findings is presented along with conclusion.

### Section-II

#### Related Research

In India, a good deal of research effort is observed in health, and health policy area; but research in health insurance is scarce. This is more due to the fact that till recently, health insurance was not regarded as an effective vehicle for improving health status of the people. The research attempts in health insurance in India usually take some specific routes and are not well organised because of lack of data and disinformation due to market failure. The courses of research include investigation of the problems associated with the available health insurance policies. Some are general studies, while some studies investigate captive health insurance schemes. However, no study has yet been made to investigate, why health insurance fails to make any impact on the poor.

There are captive health insurance schemes offered and administered by some non-government organization, working for upliftment of the poor, providing financial and social-security services. Ranson (2002) investigated the impact of one such project, that is, health insurance coverage provided under Self Employed Women's Association's Medical Insurance Fund. He documented a mean reimbursement rate of 55.6%, while 11% of the claims were rejected. He found reimbursement more than halved the percentage of catastrophic hospitalization (> 10% of





annual household income) and hospitalizations, resulting in impoverishment. He also found a trade-off between maintaining scheme's financial viability and protecting members against catastrophic expenditures. He concluded that schemes, such as this, can protect poor households against uncertain risk of medical expenses and can be implemented in areas where institutional capacity is too weak to organize nationwide risk-pooling. However, the research is silent on how to motivate or induce the people to organize such schemes, within their respective community. In addition, captive insurance suffers from the drawbacks like failure to spread risk, insufficient fund to reimburse claims, absence of reinsurance, lack of pooling arrangement and no provision for reserve fund.

Some general studies are also reported, which relate to exploratory work on health insurance issues (e.g. Rangachary 2003). Krause (2000) deals with non-profit insurance schemes for the unorganized sector while Bhat & Reuben (2002), discuss some associated problems of the existing 'Mediclin Insurance Policy' offered by the non-life insurance companies. On the other hand, there has been no research on methodological applicability or introduction of universal health insurance in India, which has a clear equity consideration and very favourably skewed towards benefiting the poorest of the poor. Lack of knowledge in this field has resulted market failure of this highly subsidized health insurance for the poor. It may be difficult for India to put into place an equitable universal national health insurance scheme, because even the developed countries cannot now afford to commit equity in health care (Cutler, 2000) but it does not justify market failure. Nevertheless, health insurance for the poor could ensure sustainability of the public health system for the poor

even though universal health insurance may induce increase of medical expenditure to a certain extent. It is, therefore, necessary now to find out why a highly subsidized health insurance product for the poor has failed to make any impact and what effective steps could be taken to improve acceptability of the products.

### Section-III - Methodology

Since, there has been no secondary data available, we have to conduct primary survey to collect the data. The survey is conducted through a structured questionnaire. The survey is carried out by visits to the households, and through personal interview, discussions with the important and informed people of the locality. The rural areas are chosen from three distinct geographical areas, viz., remotely connected villages, villages with

**Captive insurance suffers from the drawbacks like failure to spread risk, insufficient fund to reimburse claims, absence of reinsurance, lack of pooling arrangement and no provision for reserve fund.**

convenient linkage to the urban areas and the rural areas, which are in the fringes of the urban areas. The sample is selected by first identifying the below poverty line households in the above three areas. We have also selected relatively well-off households in the area for our survey in order to bring out distinct differences between groups. The information on income is collected from the Census Report 2001 published by the Government of India. The Voter's List published by the Election Commission of India is used for choosing the households of the respective area and

a random sampling technique is used to select the households. The data collected are then subjected to cluster analysis and analysis of variance.

In cluster analysis, we use the following steps:

Step 1. Hierarchical clustering

Step 2. Non-hierarchical clustering (K-Means approach)

We subject the data to hierarchical clustering to find out effective number of clusters. We then use the information in K-Means approach to decide final number of clusters. The standard SPSS package is used for the cluster analysis.

### Section-IV - Data

A total of 100 households are selected from the three rural areas, subdivided as follows:

Remote village - 30 households  
Conveniently  
connected village - 35 households  
Rural area in - 35 households  
urban fringes

The data are collected through personal interviews on the basis of a structured questionnaire, consisting of 28 questions (Appendix - I). The respondents are asked to agree or disagree on the statements [1 = strongly agree, 2= agree, 3= neither agree nor disagree, 4 = disagree, 5 = strongly disagree]. Out of the total of 100 respondents, we could only use 97 respondents, since attributes of the three respondents, about their income; number of dependants etc. are incomplete.

### Section-V - Results

The Analysis of Variance - ANOVA - (Table. V) shows that 26 attributes out of 28 are significantly different across the clusters at 1% level of significance. The attributes, which are not significant, are as follows.

a) Group members will go to quacks for treatment

b) Group members want others to take initiative to enroll them in universal health insurance scheme

However, the result may be accepted with caution since the K-Means clustering algorithm minimizes within-cluster variability and so the significance value reported in the Table. V, cannot be relied upon on a hypothesis of no effect for a particular variable. However, this limitation will not affect our analysis as we further subject the data to qualitative analysis.

The cluster analysis is done in two stages. At first, hierarchical clustering process is carried out in SPSS, in order to identify the number of clusters. Subsequently, K-Means clustering is run on SPSS based on the output from hierarchical clustering.

In order to identify number of clusters, which are present in the data, we use the fusion coefficient as appeared in the agglomeration schedule (Table. I). The SPSS Package is used to construct the agglomeration schedule. From the schedule we obtain the following differences:

129.460 - 112.519 = 16.84:  
1-cluster solution

112.519 - 110.020 = 2.199:  
2-cluster solution

110.020 - 104.885 = 5.135:  
3- cluster solution

104.885 - 87.090 = 17.795:  
4-cluster solution

87.090 - 80.503 = 6.587:  
5-cluster solution

The above work-out points to a 4-cluster solution. Analysis of initial cluster centers (Table. II) and final cluster centers (Table. III) are done in respect of the attributes (questions) of the four clusters. The details of the analysis are given below. However, we present a 5-cluster quantitative analysis in the tables through I to V, so as to bring out finer points. We do not describe the cluster 5, since it is comparatively very small and

also does not impede the analysis as also its inferences.

### Cluster- I

The group, which is the largest amongst all the clusters, comprises of 74% male and 26% female and belongs to the class of poorest of the poor. The members are rural wage earners in informal sector, employed in construction work, agriculture and housekeeping etc. The female literary rate is 29% while male literary rate is 40%. In totality around 30% received primary education while around 1% received secondary education and 69% of the population is illiterate. The average age is 41 years, while average income is Rs. 968/- per month (Rs.45 = U.S.\$ 1). They have around 4 dependants per person. Around 37% of the group does not have any money to pay for medical expenses and would simply go untreated during illness. Around 31% of

practitioner while around 17% will decide on it depending on the exigency and nature of sickness. However, around 19% of the group, who are illiterate and poorest, would approach quacks for treatment and around 72% of the group do not discount the possibility of consulting them for treatment. The group finds it very difficult to bear medical expenses. Around 98% of the member would take loan to pay for their medical expenses. About 63% will sell their assets to bear catastrophic medical expenses, while 33% of the group does not discount possibility of selling their assets for bearing catastrophic medical expenses. Around 61% will definitely take help from their relations and acquaintances and around 22% may approach relatives only in case of emergency. However, they do not want private health care to supplement their needs.

All the group members want alternative sources of income to meet medical expenses. Around 78% of the group does not wish to join universal health insurance scheme. Around 22% of the group, specifically belonging to the below poverty line families (poorest of the poor), remain undecided but do not specifically favour the scheme as they are unable to pay Rs. 165/- as premium. However, even if they are able to pay the premium, the scheme does not have any credibility to them as they are unaware of such scheme and are also suspicious that the money paid as premium would be swindled. It is important to note that the illiterate people will depend on their own judgment rather than consulting some informed persons when deciding to insure themselves. The group finds the insurance companies and their agents are not customer friendly. It is also important to note that the group does not feel it inconvenient to visit urban branches of the insurance companies. Surprisingly, the group does not wish to enter into any community-based scheme of health insurance scheme. The group is however nearly equally

**It is important to note that the illiterate people will depend on their own judgment rather than consulting some informed persons when deciding to insure themselves.**

the group spends less than 20% of their income to meet medical expenses, while the rest of the group spends more than 20% of their income to meet medical expenses. None of the members of this group is covered by any health insurance scheme.

Majority of the group members (63%) will not go to the rural health center but only 20% of the group, belonging to the poorest section, would opt for rural health care through rural health centers. All the members feel that the rural health centers lack facilities. The majority will also not go to rural private practitioner but only 20% will go to the rural



divided in its willingness to health insure the poor people in their locality in the event of some remuneration given in this respect. Around 54% of the groups want others to take initiative to insure them and the rest of the group wants the government to open up branches and recruit rural agents in order to promote health insurance scheme. The group does not want NGOs to act as a provider of health insurance of its own or act as an agent of an insurance company. The group is not interested in the various benefits of the insurance policy and is also disinterested whether to get refund of some amount in case of no claim.

### Cluster-2

The important characteristic of this group is that the members are relatively disease free with low medical expenses. The group comprises of 64% male and 36% female and is by occupation, labourers in informal sector in rural and urban areas. The female literacy rate is 50% and literate females have studied up to primary level. The total group illiteracy is 27%, while 36% has studied up to primary level and balance 37% has beyond secondary level education. The average age of the group is 37 years. The average monthly income is Rs. 3477, while the average health care or medical expenses is Rs. 50 per month. The group comprises of small family with average one dependant per person. The members of the group do not have any health insurance.

The group members would not go to the nearest town for treatment but would prefer referral or renowned hospitals in major cities. Only 20% of the group would go to the rural health center for treatment. The majority of the group finds that the rural health centers are somewhat equipped while 25% of the group finds them ill equipped. Similarly, majority of the group would not go to the rural medical practitioner and only 20% of the group

would prefer to go to them. However, the group will not go to the quacks for treatment. While 40% of the group would be able to bear expenses, the rest of the group finds it difficult to meet the expenses. In this group, the members will not take loan to meet catastrophic medical expenses. They will also not take monetary help from the relative/acquaintance or sell assets. The group does not want or find private nursing care as a good alternative.

Majority of the group feels that alternate source of money is required to meet the medical expense. The group, however, does not want to join government subsidized health insurance schemes to meet hospitalization expenses. Only 20% of the group is willing to pay subsidized premium. The group is equally divided on the prospect of being covered under health insurance and the

**The group finds that the service provider's marketing channel is dysfunctional. The agents, linkages between insurer and insured in rural sector, are nonexistent or are giving poor services.**

members believe that the scheme lacks credibility. It is important to note that the group members would first consult some informed person before joining the scheme. The group finds that the service provider's marketing channel is dysfunctional. The agents, linkages between insurer and insured in rural sector, are nonexistent or are giving poor services. Even if, they join the scheme, they believe that the quality of services from the insurer would be poor. The group also finds it inconvenient to visit urban branches of the insurer or private medical service provider in urban areas. The members of the group do not want to take the responsibility or interest to work in a community based health

insurance program. Even if given some remuneration, the group will not participate to organise such a scheme. The group is evenly divided on the prospect of some important person in the locality taking initiative to enroll them in the scheme. The group does not find any merit in opening up rural branches of the insurance companies or appointment of rural agents for enrolling them in health insurance schemes. The group also discards the idea of NGOs or reputed social service organization providing them health insurance.

### Cluster-3

The group consists of only four percent of females. The female literacy rate is 100%, while the male literacy rate is 88%. The members have education ranging from primary to graduate level and are employed in informal sector in urban areas. The average age of the group is around 39 years and nearly 10% of the population has health insurance. The group has around 3 dependants per person of the population. The monthly income is around Rs. 4000 and the average medical expense per month is Rs.343/-.

An important characteristic of this group is that the member would not prefer to go to the nearest town for treatment. Similarly, they would neither go to the rural health center nor would go to the rural medical practitioner for treatment. They believe that the health centers are not well equipped and the rural medical practitioners are not well qualified. The group member's average medical expenses are 9% of his average income and members find it difficult to bear such medical expenses but they would not avoid treatment. In normal circumstances, the members would neither take loan nor would they sell their assets to meet those medical expenses. In case of catastrophic expenses, they are likely to take help from their relatives and acquaintances. They are also likely to take loan and sell their assets in such circumstances. They feel the need for an alternate

source of fund to meet medical expenses. In spite of such perceived need, they are undecided to join universal health insurance scheme by paying a subsidized premium, which would reimburse hospitalization cost incurred by them to the extent of Rs. 30,000/-. Surprisingly, the group has the ability to pay the premium and also understands the benefits of the scheme. The apparent reason for such behaviour is that the members are skeptical about the services to be rendered by the insurance companies, although they do not have any adverse experience in claim settlement.

**Cluster-4**

The group comprises of 80% male and 20% female. The group is literate with secondary and post-secondary education. The average age is approximately 43 years and the average income is Rs. 5400 per month while health expenses are averaging Rs. 290/- p.m. The occupation of the group spans a wide range, from being a government employee and teacher to a small businessman and daily labourer. However, the average dependant per member is as high as five persons. The members are able to bear the medical expenses of their own. The group is the most informed amongst all the groups. The group members do not have any health insurance.

The group members are most likely to visit nearest town for their treatment. They are however reluctant to go to the rural health centre as they find that rural health centers are ill equipped but majority of the members would go to the rural medical practitioner for treatment. They will never approach the quacks but rather depend on alternative medical treatment like homeopathy. A majority (80%) of the group expresses facing hardship to bear medical expenses. They (around 80%) would take loans to meet the expenses, but may not sell assets to meet them. However, in catastrophic cases, 40% of the group members would sell their assets for

meeting medical expenses, and 60% of the members would approach relatives for help. Around 40% would prefer private nursing treatment while around 60% of the members are not inclined towards private treatment but prefer treatment in government referral hospitals. All the members agree that they need alternative sources to pay for medical expenses. A majority (80%) would like to join health insurance schemes and is able to bear premium expenses for the purpose. However, they are skeptical about the administration or the delivery system of the health insurance and this they feel is the great hindrance for joining the scheme. Moreover, they would rather consult informed person before joining any health insurance scheme. All the members have a very poor notion on the

**None of the members is interested in community-based scheme and would prefer to stay out of the process.**

marketing agents of the insurance companies servicing the health insurance and are apprehensive that the insurance companies would give them a lot of trouble during payment of claim. The group does not find it an impediment visiting an urban branch or an urban nursing home. None of the members is interested in community-based scheme and would prefer to stay out of the process. None of the members is interested to promote a community based health insurance scheme, even if remuneration is given in exchange for the services rendered. They are, however, willing to insure if somebody known to them approaches with such a

scheme. They specifically want government to take initiative in the matter. Around 40% of the members do not want NGOs or reputed social service organizations to step into and insure them. They feel that the present health insurance scheme will be more attractive if provisions for some additional benefits exist in the policy. The members also favour a refund of a portion premium in case of no claim under the policy.

We further examine the distances between the final cluster centers (Table. IV) and these are found to be significantly different. These evidences indicate that the classification of the clusters as done in the analysis can be relied upon.

In final analysis, it is observed that the universal health insurance is a failed product ab initio, as none of the groups favours its adoption. The reasons can be traced to economic, environmental and psychological factors. The acute underdevelopment of the poorest of the poor makes them unable to bear the medical expenses and as a result they are left with no alternative but avoid treatment. Concept of insurance is incomprehensible to them and no amount of inducement, like providing subsidy can lure them to buy health insurance. This is further manifested in the observed reluctance of the people to organize themselves in a community pooling of resources even with the help of reputed social service organizations. The poor servicing and lack of market relation building activities in poor areas by the non-life insurance companies also contribute to the product's ultimate rejection.

(TO BE CONTINUED)

— ★ ★ ★ —

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**"विद्यार्थ्यांच्या हजेरासाठीची सर्व कागदपत्रे वी पाठमालीं त्यांच्या आता तीन आठवडे झाले ... ते वीचे अचूक पाठवतील अशी आशा आहे."**

**"होम, पाठमालीसच, सर्व कागदपत्रे व्यवस्थित असतील तर त्यांना ३० दिवसांच्या आत द्याव्याची वचकम द्यावली असली. तसा निवृत्त्या आहे।"**

विद्या निवृत्त्या आणि विद्यार्थ्यांचे विद्येवर (असत अस ही १), ही पाठमालीस विद्या (उद्योग)चे वचकम कागदपत्रे वीचे अचूक पाठवतील अशी आशा आहे. आता पाठमालीं तीन आठवडे झाले. आता पाठमालीं तीन आठवडे झाले.

- सर्वविध सर्व कागदपत्रे पाठमालीस विद्या (उद्योग) ३० दिवसांच्या आत द्याव्याची वीचे अचूक पाठवतील अशी आशा आहे.
- उद्योग व वचकम पाठमालीस ३० दिवसांच्या आत विद्या (उद्योग) वीचे अचूक पाठवतील अशी आशा आहे.
- उद्योग व वचकम पाठमालीस ३० दिवसांच्या आत विद्या (उद्योग) वीचे अचूक पाठवतील अशी आशा आहे.
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**SPREAD THE WORLD....**

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## प्रकाशक का संदेश

उत्पाद के लिए माँग, जैसा कि अर्थारस्त्री हमें बताते हैं, साधारणतः मूल्य की लोच है। प्रकृतिक रूप से वह मूल्य ही होता है जो इसकी सफलता निर्धारित करता है। बीमा जैसी सेवा में, उत्पाद का मूल्य निर्धारण करते समय कई घटक होते हैं जिनको गणना में लेना होता है। जबकि यह घटक स्वयं में ही सतत् परिवर्तनीय हैं, ऐसे में किसी उत्पाद का मूल्य निर्धारण कठिन कार्य हो जाता है।

सर्वप्रथम तथा पहले, मूल्य निर्धारण के लिए बीमाकर्ता का मार्गदर्शन यह तथ्य करता है कि दावे कि स्थिति में कुल लागत कितनी होगी इसका निर्धारण जीवन बीमा में प्राकृतिक प्रिमियम की अवधारणा तथा गैर जीवन बीमा में जुद्ध प्रिमियम से होता है। लेकिन इसे सुनिश्चित किया जाना चाहिये कि जो आकड़ें प्रिमियम कि गणना के लिए उपयोग में लाये जाते हैं वह विश्वस्त नवीन होने चाहिये। जीवन बीमा में प्रकृतिक प्रिमियम कि गणना का आधार मृत्यु दर होती है यह सभी व्यवसायियों के लिए एकरूप होनी चाहिये। प्रिमियम का निर्धारण करने वाले अन्य विभिन्न कारकों जैसे प्रबन्ध खर्च तथा निवो आय समें यह विभिन्न महत्वपूर्ण स्थान रखता है। बेहद अस्थिर ब्याजदर के वातावरण में निवो पोर्टफोलियो का प्रबन्ध एक बड़ा कार्य है तथा इसका संचालन सर्तकता से किया जाना चाहिये। जबकि संविधान कुल खर्च में सीमा का

प्रावधान करता है, बीमाकर्ता न केवल खर्चों को सीमा में रख सकते हैं वरन् ऐसे उपाय कर सकते हैं जिनसे खर्च को अधिकतम सीमा तक नियन्त्रित किया जा सके।

साधारण बीमा क्षेत्र में, जैसा कि उपर बताया गया है कि बीमाकर्ता को निवो तथा खर्च के क्षेत्रों में विवेकसम्मत होना चाहिये, इन्हें दुगना सर्तक होना चाहिये उन घटकों के प्रति जो जुद्ध प्रिमियम कि गणना के लिए काम करते हैं। प्राल्कमुक्त सत्ता में यह अधिक प्रतिस्पर्धा पूर्वक हो जायेगा। जबकि प्राल्कमुक्ति सामने है यह एक चुनौतिपूर्ण कार्य होगा। बीमाकर्ता को इस सम्बन्ध में जोखिम को टालना चाहिये इससे अच्छा होगा वह उन आकड़ों और अनुभव से मार्गदाति हो।

यह भारतीय बीमालेखकों के कौल की परिक्षा है। मुझे विश्वास है कि बीमा उद्योग परिपक्व है तथा अंतरण बहुत निर्विघ्न होगा। **जर्नल** के अगले अंक का केन्द्र बिन्दु बीमालेखन होगा।

सी. एस. राव

सी. एस. राव



“मैडिसन तथा संबन्धित क्षेत्रों में तकनीकी उपलब्धियों के प्रभाव के कारण मृत्यु दर तथा बीमारी फैलने की संभावना दर की बुराई कि भविष्यवाणी करना कठिन है।”

पेट्रिक एम. लाईडेक,  
महासचिव तथा प्रबन्ध निदेशक, जनेवा एसोसिएशन,

“फ्लोरेडा बीमा व्यवसायिकों को अपने ग्राहकों के हितों से संचालित होना चाहिये कमिशन से नहीं। यह विभाग ऐसे ऐजेन्टों को निरंतर सजा देता रहेगा जो कानून को तथा विश्वास को तोड़ते हैं।”

टाम गलेन्हर,  
फ्लोरेडा के मुख्य वित्त अधिकारी

“जब कंपनियाँ मजबूत निगमित प्रशासन तथा जोखिम प्रबन्ध परिपाटिया अपनाती हैं तो उन्हें विनियमन में बड़ी लोच मिलनी चाहिये।”

टैन श्री डा. जैटी अख्तर अजीज,  
गर्वनर बैंक आफ निगारा

“अच्छा विनियामक अच्छा व्यवसाय, तथा एक खुला, सूचित विनियामक वातावरण प्रस्तुत करता है सकारात्मक वातावरण (जीवन बीमा ) उद्योग को बढ़ाने के लिए।”

पैट्रिक कैनी, अध्यक्ष तथा कार्यपालक,  
अन्तर्राष्ट्रीय बीमा सोसायटी।

“मैडिकलेम क्षतिपूर्ति बीमाकर्ता एपीआरए के अनुसार साधारण बीमाकर्ताओं के पूंजी के रिजर्व कि आवश्यकता को पुरा करते हैं। हाल के वर्षों में प्रिमियम आय बीमांकक के बट्टेवाली लागत उसी प्रकार बढी है जिस प्रकार विवेक पूर्ण मानक बनाये गये हैं।”

डा. ऐन्ड्रीयू मिलर, अध्यक्ष, आस्ट्रेलिया कि मैडिकलेम क्षतिपूर्ति  
बीमाकर्ता एसोसियेशन (एमआईआईएए)

“आस्ट्रेलिया बीमाकर्ताओं द्वारा प्रिमियम सैटिंग के परिणाम स्वरूप प्रिमियम में व्यापक हानि नहीं देखी गई है, तथा बीमाकर्ता जिस प्रकार का बीमा प्रोफाल लेते हैं उससे वह अपना जोखिम बडा कर सकते हैं।”

लेकर, अध्यक्ष,  
आस्ट्रेलिया प्रूडेंशल विनियामक प्राधिकरण

# साधारण बीमा में उत्पाद विकास

- भारतीय बाजार पर एक नजर

उत्पाद जीवनचक्र इस विश्वास पर आधारित है कि अधिकांश उत्पाद सजीव वस्तुओं के समान ही अपने जीवन के विभिन्न चरणों से जुड़ते हैं। - अजीत आर बलसारे

## परिचय:

उत्पाद विकास तथा कार्यान्वयन में किसी नये या रूपांतरित उत्पाद की परिकल्पना, परिक्षण तथा प्रवर्तन की समस्त प्रक्रिया समाहित होती है। यह यात्रा शुरू होती है इस मूल प्रश्न के उत्तर के साथ कि क्या ग्राहक को उक्त उत्पाद की आवश्यकता है अथवा नहीं। ग्राहक की आवश्यकता, साथ ही प्रतियोगियों, प्रवर्तन के समस्त खर्चों तथा क्या उत्पाद कंपनी के लिये लाभदायक होगा। इन सब पर काफ़ी शोध किया जाता है।

उत्पाद को जारी करने के निर्णय के पश्चात विद्यमान व्यावसायिक व्यवहार के अनुरूप उत्पाद की उचित अभिकल्पना की जाती है तथा साथ ही विनियामक पहलुओं पर भी ध्यान दिया जाता है, विशेषतः वित्तीय उत्पादों के संबंध में। उत्पाद का बाजार के एक छोटे हिस्से में परिक्षण किया जाता है तथा आवश्यक फेरबदल किये जाते हैं। विक्रय संरचना तथा उत्पाद के लिये सेवा प्रदाताओं जैसे बिक्रेतियों, अभिकर्ताओं इत्यादि के बारे में निर्णय के पश्चात बाजार के स्वरूप यथा-शोक व्यापार या खुदरा व्यापार अथवा उत्पाद के अनुरूप बाजार के किसी अन्य स्वरूप के बारे में निर्णय लिया जाता है। तब जाकर उत्पाद बाजार में प्रवेश करता है।

## उत्पाद जीवन चक्र

उत्पाद जीवन चक्र इस विश्वास पर आधारित है कि अधिकांश उत्पाद सजीव वस्तुओं के समान ही जीवन की विभिन्न अवस्थाओं से गुजरते हैं। ये विभिन्न अवस्थाएँ अथवा चरण निम्नलिखित हैं:

**परिचय:** हमेशा शुरूआत में धीमा विकास होता है। विक्रय संबंधित प्रयास बहुत करने होते हैं। अपने ब्रांड की स्थापना के संबंध में विशेष प्रयास करने पड़ते हैं। अभी हाल ही में जनरल लाइबिलिटी पॉलिसी तथा प्रवर्तित कॉमर्शियल योजना इसके ताजा उदाहरण हैं।

**विकास:** यह एक द्रूत विकास का समय होता है। अब बाजार में विक्रय संबंधित प्रयासों में कमी आती

है। हाल ही में सभी बीमा कंपनियों द्वारा प्रवर्तित यूनिट लिंकड बीमा योजना तथा आईटी क्षेत्र के लिये प्रवर्तित ऐर्स एंड ओमिशन पॉलिसी इसके उदाहरण हैं।

**परिपक्वता:** यह वो समय है जबकि विपणन संबंधी प्रयास न्यूनतम होते हैं तथा विपणन खर्चों में कमी से हुयी बचत सामान्यतः उपभोक्ताओं तक, उत्पाद की कीमत में कमी के रूप में स्थानांतरित हो जाती है और प्रतियोगी बने रहने के लिये कीमतों में कमी आवश्यक भी होती है। सुप्रसिद्ध साधारण बीमा योजना उत्पाद

उत्पाद जीवन चक्र को निम्नलिखित चित्र द्वारा बेहतर रूप से समझा जा सकता है:

परिचय	विकास
परिपक्वता	हास
विक्रय	समय
पुनस्थापना	

भारतीय साधारण बीमा के परिपेक्ष्य में भी उत्पाद विकास उपरोक्त चरणों से होकर गुजरता है, हालांकि बहुत स्पष्ट रूप में नहीं होता है। 80 के दशक के अंत में प्रवर्तित स्वास्थ्य बीमा, 90 की दशक की शुरूआत में प्रवर्तित पॉलिसीज की पैकेजिंग (जैसे घरेलू) इत्यादि सभी उपरोक्त प्रक्रिया के उदाहरण हैं।

भारतीय साधारण बीम बाजार में उत्पाद विकास

भारत में साधारण बीमा बाजार में उत्पाद विकास की प्रक्रिया को तीन चरणों में बांटा जा सकता है।

**राष्ट्रीयकरण से पूर्व:** साधारण बीम कंपनियों के राष्ट्रीयकरण से पूर्व, कंपनियाँ लंदन अथवा यू एस बाजार का अनुसरण करती थी। यह मुख्यतः इस वजह से था कि अधिकांश कंपनियाँ ब्रिटिश या अमेरिकन कंपनियों की इकाइयाँ थी और यह तर्क संगत था कि वे अपनी मुख्य कंपनी की नीतियों का अनुसरण करें। भारतीय कंपनियाँ, जो बहुत कम संख्या में थी, विदेशी कंपनियों से प्रतिस्पर्धा करती थी और बहुत सीमित रूप में नवीनीकरण होता था।

**राष्ट्रीयकरण के पश्चात:** सन् 1972 में साधारण बीमा व्यावसाय का राष्ट्रीयकरण हो गया तथा सभी विद्यमान कंपनियाँ का चार कंपनियों में विलय हो गया। जो कि मुख्य कंपनी भारतीय साधारण बीमा निगम की सहायक थी। संपूर्ण बीमा व्यापार इस प्रमुख कंपनी के अधीन था तथा सहायक कंपनियों को अपने उत्पाद विकसित करने का अधिकार बहुत कम या नहीं ही था। साधारण बीम निगम ने टैरिफ एडवाइजरी कमेटी के सहयोग से विद्यमान उत्पादों का पुनर्समूहिकरण किया और 130 अधिक उत्पादों के साथ सामने आया। उपभोक्ता के पास कोई विकल्प

भारतीय साधारण बीमा के परिपेक्ष्य में भी उत्पाद विकास उपरोक्त चरणों से होकर गुजरता है, हालांकि बहुत स्पष्ट रूप में नहीं होता है।

जैसे ओवरसीज ट्रेवल, वर्गलरी तथा ऑल रिस्क पॉलिसीज - इसके उदाहरण हैं।

**पतन:** ये वो काल है जब विक्रय में नुकसान होता है तथा उत्पाद अपना वजूद खो देता है। उत्पाद का जीवन चक्र थोड़ा सा परिष्कृत हो सकता है - यदि परिपक्वता अवधि के दौरान 'उत्पाद नवीनीकरण' पर ध्यान दिया जाये और उत्पाद में सुधारों के द्वारा इसे बरकरार रखा जा सकता है। स्टैंडर्ड पब्लिक लाइबिलिटी तथा प्रॉडक्ट लाइबिलिटी पॉलिसीज में आज की जरूरत के मुताबिक कुछ सुधार करके, उन्हें पुनः प्रवर्तित तथा रीपैकेज किया गया तथा कॉमर्शियल जनरल लाइबिलिटी पॉलिसी के रूप में विक्रय किया गया।





नहीं था और न ही कोई सहायक कंपनियों के पास कोई विकल्प था, क्योंकि वे भी मौजूदा उत्पादों का ही विक्रय कर सकते थे।

हालांकि सरकार द्वारा साधारण बीमा निगम पर सामाजिक दायित्व डालने की वजह से साधारण बीमा निगम गैर व्यापारिक क्षेत्र जैसे मवेशी बीमा आदि बहुत से नये उत्पाद लेकर सामने आया। नौवहन संबंधी बीमा में कुछ विशेष नया नहीं था क्योंकि यह अंतर्राष्ट्रीय नीतियों पर आधारित था, परंतु अग्नि प्रशुल्क काफी सुधारों से गुजरा तथा वर्तमान शुल्क उपभोग में आसान है।

इस चरण में साधारण बीमा निगम द्वारा कुछ विशेष उत्पादों का जिफ्र करना उचित होगा। चिकित्सा मूल्यों में वृद्धि के कारण, उपभोक्ताओं द्वारा एक ऐसी पॉलिसी की जरूरत महसूस की जा रही थी जो कि उनकी चिकित्सा संबंधी जोखिम को कवर कर सके। इस प्रकृति की कुछ पॉलिसियाँ विद्यमान थीं लेकिन वे उपभोक्ताओं की जरूरत के मुकाबले नाकफी थीं।

1980 में मेडिकलेम पॉलिसी (निजी दुर्घटना सुरक्षा रहित अथवा सहित) जारी की गयी। इस पॉलिसी ने भारतीय बीमा बाजार में महत्वपूर्ण प्रभाव डाला। यह अस्पताल में भर्ती होने संबंधी एक व्यापक योजना थी, जो कि जनसाधारण की अपेक्षाओं पर काफी हद तक खरी उतरी। समय के साथ इस योजना में काफी बदलाव किये गये और आज यह साधारण बीमा क्षेत्र में सर्वाधिक चर्चित उत्पादों में से एक है।

उदारीकरण से पूर्व: उत्पाद विकास तथा नवीनीकरण की वास्तविक संभावनायें इस काल में बनीं। उत्पाद विकास को नयी उचाइयों प्रदान करने वाले दो मुख्य कारण थे। वैश्विकरण और निजी बीमा कंपनियों का आगमन।

वैश्विक चुनौतियों का मुकाबला करने तथा इस तथ्य के मद्देनजर कि - निजी बीमा कंपनियाँ उद्योग में नये विचारों को लायेगी - काफी उत्पाद विकास हुआ। निजी तथा सार्वजनिक- दोनों ही बीमा कंपनियाँ-प्रतियोगिता में बनी रहने के लिये नये-नये उत्पादों के साथ सामने आ रही थीं। उनके प्रस्तावों में कोई बड़े परिवर्तन नहीं थे परंतु उत्पादों की पैकेजिंग बेहतर थी। कुछ उत्पाद हैं:

मैराइन सेल्स टर्नओवर पॉलिसीज

ऑफिस पैकेज पॉलिसीज

एड-ऑन इन ओवरसीज मेडिकलेम पॉलिसीज

एड-ऑन इन मेडिकलेम पॉलिसीज

## हाल के वर्षों में उत्पाद विकास का प्रगति विवरण:

निजी बीमा कंपनियों के आगमन ने उत्पाद विकास तथा उत्पाद नवीनीकरण में सहयोग दिया है अथवा नहीं, यह जानने के लिये हमें कुछ प्रश्नों के उत्तर ढूँढने होंगे-

नये उत्पाद विकास के संबंध में निजी क्षेत्रों से क्या अपेक्षायें थी

निजी बीमा कंपनियों का भारत में बहुत अपेक्षाओं के साथ स्वागत किया गया। उपभोक्ता महसूस करता था कि ये कंपनियाँ बाजार में पहले से मौजूद उत्पादों में नवीनीकरण लायेगी। इनमें लचकता होगी तथा सेवा भी बेहतर होगी। ये कंपनियाँ विकसित बीमा बाजार से विशेषज्ञों को लायेगी और प्रतियोगी मूल्यों में बेहतर सुरक्षा प्रदान करेगी। प्रतियोगिता के कारण, सार्वजनिक क्षेत्र की सेवाओं के स्तर में भी सुधार होगा।

**चिकित्सा मूल्यों में वृद्धि के कारण, उपभोक्ताओं द्वारा एक ऐसी पॉलिसी की जरूरत महसूस की जा रही थी जो कि उनकी चिकित्सा संबंधी जोखिम को कवर कर सके।**

क्या ये अपेक्षाओं पर खरी उतरी, अथवा सिर्फ 'पुरानी शराब नयी बोतल में'

सेवा स्तर की हद तक ये कंपनियाँ कुछ सीमा तक अपेक्षाओं पर खरी उतरी। जहाँ तक नये उत्पाद के विकास का संबंध है, ये कुछ अधिक सफल नहीं रही, कारण हो सकता है कि ये कंपनियाँ बाजार के लिये तुलनात्मक रूप में नयी थी तथा बड़े परिवर्तनों से पूर्व 'देखो और इंतजार करो' की नीति पर चल रही थी। हाल में, सार्वजनिक क्षेत्र की कंपनियों के प्रस्तावों में तथा निजी क्षेत्र के विक्रय में बहुत थोड़ा अंतर है। ब्रांड भले ही अलग हो, उत्पाद वही पुराना है।

## विभिन्न बीमाकर्ताओं द्वारा क्या दबाव महसूस किया जा रहा है

प्रमुख दबाव था- शुल्क, जो कि भारत में उपार्जित गैर जीवन प्रीमियम के 75 प्रतिशत को नियंत्रित करता है। यह दबाव, अगले वर्ष शुल्क खत्म कर दिये जाने

पर समाप्त हो जायेगा। दूसरा बड़ा दबाव- जो कि उद्योग द्वारा महसूस किया जा रहा है, वह है- पूर्व हानि के बारे में विश्वसनीय आंकड़ों की कमी। बीमा दर तथा जोखिम सुरक्षा भी पूर्व हानि के अनुभवों पर आधारित होते हैं। इन आंकड़ों के अभाव में, मौजूदा बीमाकर्ता इस स्थिति में नहीं हैं कि वे गैर शुल्क क्षेत्र में नये उत्पाद जारी कर सकें।

## विश्व में क्या स्थिति है? विकसित बाजारों में क्या नवीनीकरण / नवप्रवर्तन हो रहा है?

अंतर्राष्ट्रीय बाजार में कोई भी उत्पाद स्थिर नहीं होता है, ये हमेशा परिवर्तित होता रहता है। उत्पाद में परिवर्तन उपभोक्ता की जरूरत के अनुसार होते हैं। उपभोक्ता की आवश्यकता को सर्वोच्चता देते हुये, उत्पाद की प्रभावोत्पादकता पर निरंतर गहन शोध होते रहते हैं। अमेरिका तथा ब्रिटेन के बाजारों की खासियत है- उच्च विशेषज्ञता। वहाँ पर उत्पाद विशेष पर इस हद तक विशेषज्ञता प्राप्त करने के लिये- की वे अपने क्षेत्र में सर्वोत्कृष्ट हो- बीमाकर्ता तथा पुनः बीमाकर्ता होते हैं। और इससे उन्हें उपभोक्ता की किसी विशेष आवश्यकता की पूर्ति हेतु, उपलब्ध उत्पादों में सर्वोत्तम प्रदान करने में सहायता मिलती है।

## विगत 3 वर्षों में, बिचौलियों ने उत्पाद विकास- संवर्धन हेतु क्या कदम उठाये हैं?

बिचौलियों अथवा दलालों से, अपनी कार्य क्षेत्र की गहरी समझ होने तथा उपभोक्ता के व्यवसाय तथा जरूरत के बारे में बेहतर जानकारी होने के कारण उत्पाद विकास प्रक्रिया में महत्वपूर्ण योगदान की अपेक्षा की जाती है। यहाँ भी, शुल्क की वजह से ही, परिणाम मिश्रित रहा है। सामान्यतः दलालों ने उत्पाद विकास हेतु ज्यादा कुछ योगदान नहीं दिया है। कुछ दलालों ने, हालांकि, कुछ क्षेत्रों में जैसे बीमा के दायित्व में एवँ विशेषता वाले क्षेत्रों में उल्लेखनीय कार्य किया है, जिनमें मौसम संबंधी बीमा, तथा अपराध बीमा (आईटी क्षेत्र हेतु) जैसे नये उत्पाद काफी प्रसिद्ध हुये हैं।

दलाल बीमाकर्ता को उपभोक्ता की आवश्यकता से अवगत कराते हैं, जो कि बीमाकर्ता को गैर-शुल्क पद्धति में एक ऐसे उत्पाद के निर्माण में सहयोग करता है जो कि उपभोक्ता विशेष की आवश्यकताओं की पूर्ति हेतु सर्वोत्तम उपयुक्त लिये हो। गैर-शुल्क पद्धति के अस्तित्व में आने के पश्चात दलालों की महत्वपूर्ण भूमिका होगी।

## भविष्य

निकट भविष्य में उत्पाद विकास की असीम संभावनायें हैं। सर्वोच्च विकल्प महत्वपूर्ण कारक होगा- अग्नि,

अभियांत्रिकी तथा मोटर बीमा का गैर शुल्कीकरण। बीमा कंपनियों के पास व्यक्तिगत उपभोक्ताओं की जरूरत की अनुकूलता अनुसार उत्पाद निर्माण की असीम संभावनायें होंगी। वे नवप्रवर्तित उत्पादों के साथ सामने आयेंगे। तथा उपभोक्ता के समक्ष विभिन्न विकल्प होंगे। बीमा कंपनियों को हालांकि विनियामक दिशा-निर्देशों का अनुपालन करना होगा। यह सही अर्थों में उत्पाद विकास होगा जबकि शुल्क का बंधन खत्म हो जायेगा तथा प्रत्येक कंपनी अपनी जोखिम सहन करने की क्षमता के अनुसार सुरक्षा कारक तय करेगी।

### संभावित 'उपभोक्ता इच्छा सूची' क्या होगी ?

बीमाकर्ताओं के लिये संभावित उपभोक्ता इच्छा सूची तैयार रखने से, गैर-शुल्कीकरण लागू होते ही, ये उन्हें उपभोक्ताओं की आवश्यकताओं की पूर्ति में मदद करेगी। कुछ विचार, जो हवाओं में गूँज रहे हैं, इस प्रकार हैं:

- स्वास्थ्य, जीवन तथा दुर्घटना सुरक्षा का एक साथ संयोजन
- परिवार के लिये चलजीवन बीमा योजना
- घरेलू उपभोक्ता हेतु प्रथम हानि योजना
- मोटर वाहनों हेतु एक बहुवर्षीय योजना
- अन्य जोखिमों जैसे- लूटपाट, यात्रा में सामान की चोरी आदि - से होने वाली धन हानि से सुरक्षा हेतु योजना

यह सूची काफी लंबी हो सकती है। बस, उद्योग को अपने कान उपभोक्ता की जरूरतों की ओर ध्यान से सुनने की आवश्यकता है।

5 से 10 वर्ष पश्चात क्या स्थिति होगी? क्या बीमा व्यवसाय पूर्ववत् व्यापार करता रहेगा अथवा इसमें कोई परिवर्तन आयेगा।

एक बात निश्चित है कि भारत वैश्विक अर्थव्यवस्था में एक महत्वपूर्ण स्थान प्राप्त कर रहा है, इस तथ्य के मद्देनजर बीमा व्यवसाय के नियम निश्चित ही परिवर्तित होंगे। विकास की उच्च दर तथा निवेश की सुरक्षा की जो जरूरत सामने आ रही है, इसमें परिणाम स्वरूप शुल्क वापसी निश्चित है। इस प्रकार बीमा व्यवसाय में आधारभूत परिवर्तन होंगे। उच्च तकनीकी सुरक्षा तथा बेहद जटिल सुरक्षा की मांग की वजह से, बीमा कंपनियों को अपने विभागों में उच्च व्यावसायिक क्षमता वाले कर्मचारियों की भर्ती करनी होगी जो कि उपभोक्ता की जोखिम आशंकाओं को समझने में सक्षम हो ताकि उन्हें अनुकूल जोखिम सुरक्षा प्रदान कर सकें। उत्पाद विशेष हेतु विभिन्न व्यावसायिक विशेषज्ञ

दिखायी देंगे जैसे जोखिम आंकलनकर्ता, सलाहकार तथा उत्पाद विशेष की विशेषज्ञ संस्थायें। आने वाले वर्षों में बीमा दलालों की अधिक सक्रिय भागीदारी देखने को मिलेगी। उन्हें सिर्फ विक्रय प्रतिनिधी ही नहीं, बल्कि एक सलाहकार के रूप में अधिक भूमिका निभानी होगी। बाजार में खुदरा उपभोक्ता तथा अधिक मूल्यवान उपभोक्ता के बीच स्पष्ट विभाजन होगा। बीमा कंपनियों को इन विभिन्न समूहों की आवश्यकतापूर्ति हेतु अलग अलग नीतियाँ बनानी होंगी और दलालों तथा किसी विशेष क्षेत्र में विशेषज्ञता रखने वाले व्यवसायियों की तरह ही विशेषज्ञ बीमा कंपनियाँ देखने को मिलेगी।

शुल्क वापसी की वजह से, प्रीमियम में लगभग 20 प्रतिशत की त्वरित गिरावट होगी तथा मुनाफा भी घटेगा। निकट भविष्य में हमें काफी 'एम एंड ए' गतिविधियाँ देखने को मिलेगी। यह समस्त परिस्थितियाँ बीमा कंपनियों को नव-प्रवर्तन हेतु बाध्य करेगी। क्योंकि उनका अस्तित्व दाव पर लगा होगा। यह तथ्य कि उन्हें नव-प्रवर्तन करना ही होगा- ऐसे कई उत्पाद सामने लायेगा।

**यह सही अर्थों में उत्पाद विकास होगा जबकि शुल्क का बंधन खत्म हो जायेगा तथा प्रत्येक कंपनी अपनी जोखिम सहन करने की क्षमता के अनुसार सुरक्षा कारक तय करेगी।**

जिनके बारे में कभी सोचा ही नहीं गया यदि बीमा व्यवसाय इस तूफान को झेलने में समर्थ में रहा, तो कुछ वर्षों पश्चात दरें स्थिर हो जायेंगी तथा तब व्यवसाय, आज कि अपेक्षा अधिक वैज्ञानिक आधार पर किया जायेगा।

गैर शुल्कीकरण से पूर्व, विनियामकों के साथ ही साथ मौजूदा बीमा कंपनियों को भी महत्वपूर्ण भूमिका निभानी है। विनियामकों को जहाँ यह सुनिश्चित करना है कि बीमाधारकों के हितों की सुरक्षा हो वही पर उसे बीमा कंपनियों को भी व्यवसाय को चलाने के लिये अपनी जरूरत के मुताबिक नीतियाँ बनाने की काफी स्वतंत्र प्रदान करनी होगी। बीमा व्यवसाय का भविष्य, विनियामकों को, काफी हद तक बाजार शक्तियों को निर्धारित करने देना चाहिये।

बीमा कंपनियों को भी नव-प्रवर्तन हेतु तैयार रहना होगा और अपने ग्राहकों के अनुकूल उत्पाद प्रवर्तन करना होगा। वर्तमान में, काफी उत्पाद ऐसे हैं जो कि बिना ग्राहकों की जरूरतों को समझे, बनाये गये हैं। अधिकांश समय, उपभोक्ता यह समझ नहीं पाता है कि वह क्या चाहता है और यह भी नहीं समझ पाता है कि उसे प्रस्तावित पॉलिसी का मतलब क्या है। उन्हें पूर्व हानियों का एक विस्तृत तथा विश्वसनीय आंकड़ा संग्रह तैयार करना होगा। उपरोक्त कदमों के अलावा बीमा कंपनियाँ निम्नलिखित कार्य कर सकती हैं:

- पॉलिसियों को सहज समय में आने वाली अंग्रेजी में लिपिबद्ध करे
- उपभोक्ता को ये जानकारी दे की उसके सामने संभावित जोखिम क्या है तथा इसके लिये कौन सी पॉलिसियाँ उपलब्ध है
- उपभोक्ता मत-संग्रह तथा बाजार अनुसंधान के द्वारा उपभोक्ता की आवश्यकता को समझने की कोशिश करे तथा उपभोक्ता की आवश्यकता के अनुकूल उत्पाद के निर्माण की कोशिश करें

### खतरा :

शुल्क की मौजूदगी के अभाव में हम समान जोखिम हेतु अलग अलग सुरक्षा, शर्तें तथा नाम देखेंगे। इस प्रकार बीमा धारक के लिये ये तय कर पाना मुश्किल हो जायेगा कि कौन सी पॉलिसी उसके लिये उपयुक्त रहेगी, सर्वाधिक अनुकूल होगी। विनियामकों को परिवर्तनों से पूर्व आधारभूत नियम तय कर देने चाहिये।

### निष्कर्ष :

उत्पाद विकास एक ऐसा क्षेत्र है, जहाँ बीमा दलाल उल्लेखनीय योगदान दे सकते हैं। उपभोक्ता के व्यवसाय की गहरी समझ रखने के कारण, अपनी महत्वपूर्ण स्थिति के चलते, उनसे उपभोक्ता की आवाज का प्रतिनिधित्व करने की अपेक्षा की जाती है। उनकी कार्य क्षेत्र की विशेषज्ञता उन्हें यह मूल्यांकन करने में सहायता करती है कि बाजार में विभिन्न बीमा कंपनियों के क्या प्रस्ताव हैं तथा उपभोक्ता के हित में जोखिम सुरक्षा तथा कीमत का सर्वोत्तम संयोजन क्या है? निष्कर्षतः यह विश्वासपूर्वक कहा जा सकता है कि बीमा उत्पादों के विकास का भविष्य उज्ज्वल दिखायी दे रहा है।

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*लेखक, इंडिया इंश्योरर रिस्क मैनेजमेंट सर्विसेज प्रा. लि. के सहायक उपाध्यक्ष हैं।*



# नये उत्पाद विकास और प्रस्तुति

- अगला पथ

जॉयदीप राँय और अभिषेक अग्रवाल के अनुसार भारतीय बीमा उद्योग में उत्पाद विकास की मुख्य बाधा शुल्क पर नियंत्रण है। हालांकि वह उम्मीद जताते हैं कि शुल्क कटौती से ऐसे उत्पाद सामने आयेंगे, जो बाजार पर अधिकाधिक कब्जा जमा सकते हैं।

यदि हम बाजार के तेजी से बदलते परिदृश्य और सूचना विकास पर विचार करें, तो हमें दिखाई देता है कि कंपनियों ने अपने कारोबार के संचालन के लिये जो बाजार चुना है, उसमें उन्हें के लिये जो बाजार चुना है उन्हें कड़ी प्रतिस्पर्धा का सामना करना पड़ रहा है। प्रतिस्पर्धा बरकरार रखने के लिये कंपनियों को चुनौतियाँ स्वीकार करने के साथ आवश्यक परिवर्तन करना अनिवार्य है। यह कदम उन्हें प्रतिस्पर्धी कंपनियों द्वारा परिवर्तन के लिये मजबूर करने से पहले उठाने चाहिये। प्रतिस्पर्धा की ओर बढ़ने का एक और मार्ग बाजार में नये उत्पाद पेश करना है। यह नये उत्पाद प्रतस्पर्धी चुनौतियों को स्वीकार करने, अपनी तकनीकी विकास या फिर पेटेंट अथवा वैधानिक / नियमन परिदृश्य में बदलाव के तहत विकसित किये जा सकते हैं।

## नये उत्पादों के विकास एवं प्रस्तुति (एनपीडीएल)

संभवतः कई कंपनियों के लिये न सिर्फ महत्वपूर्ण प्रक्रिया है, बल्कि आसान और अनिवार्य है। नये उत्पादों के विकास एवं प्रस्तुतिकरण से न केवल कंपनी द्वारा निर्धारित राजस्व एवं लाभ के लक्ष्य में वृद्धि ही होती है, बल्कि मूल्य बदलाव की प्रक्रिया में भी परोक्ष रूप से सहायता मिलती है।

एनपीडीएल को परिभाषित करते हुये कहा जा सकता है कि यह एक ऐसी प्रक्रिया है, जो बाजार में किसी उत्पाद की आवश्यकता पूर्ण करने का अवसर पहचान कर शुरू की जाती है और उत्पाद की सफल प्रस्तुति के साथ खत्म होती है।

इस बीच किसी उत्पाद संकल्पना की आवश्यकता, विकास और परीक्षण की कई गतिविधियाँ होती हैं, जो उत्पाद को पूरी तरह परिभाषित कर उसकी संरचना निर्धारित करती हैं। साथ ही यह गतिविधियाँ प्रक्रिया में लिप्त आपूर्तिकर्ताओं को स्रोत उपलब्ध कराने उत्पादन

की योजना तैयार करने और आवश्यक श्रंखला उपलब्ध काने के अलावा विपणन कार्यक्रम तैयार करने में भी महत्वपूर्ण भूमिका निभाती है। इन गतिविधियों में सभी परियोजनाओं पर नजर रखने के अलावा एनपीडीएल के सफल संचालन के लिये आवश्यक कार्य भी शामिल रहता है। एनपीडीएल अपने आप में एक बृहद् अभ्यास प्रक्रिया है, जहाँ प्रत्येक चरण पर गहन विश्लेषण किया जाता है।

यदि हम नये उत्पाद के विकास एवं प्रस्तुति के इतिहास पर नजर डालें तो दिखाई देता है कि अधिकांश

**इतिहास से स्पष्ट होता है कि नये उत्पाद विकास और प्रस्तुति कार्यक्रम सेवा उद्योग की तुलना में उपभोक्ता वस्तुओं के बाजार में अधिक आम हो चुका है।**

बाजार में, खासतौर पर ग्राहक उत्पाद से संबंधित बाजार में नये उत्पाद पेश करने की गतिविधियों में भारी वृद्धि हुई है। ग्राहकों की माँग और अत्याधुनिक तकनीकी के आधार पर कंपनियाँ प्रतिस्पर्धी बनायी रखने के लिये अधिकाधिक उत्पाद पेश कर रही हैं। एनपीडीएल को प्रभावी रूप से अमल में लाने वाली कंपनियों को अपनी प्रतिस्पर्धी कंपनियों की तुलना में अधिक लाभ मिलता है। हालांकि इसमें उत्पाद के विपणन कम से कम समय में करने और अंतर्जत संसाधनों की कमी के बावजूद उनका प्रभावी उपयोग करने जैसी चुनौतियाँ भी होती हैं। इन नये उत्पादों के

कारण राजस्व में होने वाली बढोतरी का अनुपात एनपीडीएल की सफलता का सूचक होती है।

इतिहास से स्पष्ट होता है कि नये उत्पाद विकास और प्रस्तुति कार्यक्रम सेवा उद्योग की तुलना में उपभोक्ता वस्तुओं के बाजार में अधिक आम हो चुका है। उपभोक्ता वस्तुओं के बाजार में विशिष्ट वस्तुओं के होने वाले अधिकाधिक लेन-देन र दिनोदिन बढती प्रतिस्पर्धा के मद्देनजर इस कार्यक्रम में और अधिक सुधार करना आवश्यक है। गत तीन वर्ष के दौरान सेवा बाजार में नाटकीय परिवर्तन आया है। सेवा क्षेत्र में बैंकिंग और वित्तीय क्षेत्र से संबंधित कंपनियाँ नये उत्पादों के विकास और प्रस्तुतिकरण में अग्रणीय हैं। ये कंपनियाँ लगातार अनुसंधान करने के अलावा उत्पादों का विकास करती हैं, ताकि ग्राहकों को अधिकाधिक संतुष्ट किया जा सके। इन कंपनियों तथा संस्थानों से प्रेरित होकर बीमा कंपनियाँ भी नये उत्पादों के विकास एवं उनकी प्रस्तुति के पथ पर आगे बढ़ रही हैं।

अब विचार करते हैं नये उत्पादों के विकास एवं प्रस्तुति की संपूर्ण प्रक्रिया का आमतौर पर उत्पाद विकास या तो प्रतिस्पर्धी, वैधानिक कार्य योजना अथवा ग्राहकों की अपेक्षाओं संबंधी बाजार से प्राप्त होने वाली प्रतिक्रिया के कारण शुरू किया जाता है। एक बार यह कार्य शुरू हो गया, तो कंपनियाँ नयी नयी तरकीबों की खोज में जुट जाती हैं। ताकि इस आवश्यकता की शीघ्र और प्रभावी ढंग से पूर्ति की जा सके। कंपनी अपने प्रतिस्पर्धियों से आगे बढ़ने में सफल हो जाये। नयी नयी अवास्तविक तरकीबों की खोज कर कंपनियाँ बाजार सर्वेक्षण के जरिये इस बात की जानकारी एकत्रित करती हैं कि नये उत्पाद को खरीदने वाले ग्राहकों की संख्या पर्याप्त है या नहीं, जिससे उसके उत्पादन पर आने वाली लागत के अनुसार उसका विक्रय मूल्य तय किया जा सके। अध्ययन के आधार पर अन्य विभागों के सहयोग से

उत्पाद का विकास किया जाता है। कंपनी में संपूर्ण प्रक्रिया एकीकृत हो जाने पर उस बाजार में उत्पाद को प्रायोगिक तौर पर उतारा जाता है। इससे भी कंपनी को वास्तविकता की परख करने में सहायता मिलती है। यदि प्रायोगिक तौर पर उत्पाद सफल नहीं हुआ, तो कंपनियाँ फिर नये अनुसंधान के चरण पर लौटती हैं। फिर नया उत्पाद पेश करती हैं अन्यथा प्रायोगिक तौर पर उतारे गये उत्पाद की खामियाँ दूर करने के साथ उसमें कुछ नये विशेषताएँ जोड़ कर उसे अधिकारिक तौर पर भव्य रूप से बाजार में उतारती हैं।

प्रतिस्पर्धा / बाजार की प्रतिक्रिया  
न्याया संगत ढाँचे में परिवर्तन  
नयी तरकीब की खोज और विचार मंथन  
सुविधा अध्ययन एवं बाजार सर्वेक्षण

उत्पाद निर्माण  
उत्पाद प्रस्तुति  
खामियों की पूर्ति और उत्पाद में नया सुधार  
उप बाजार में उत्पाद प्रस्तुति / वास्तविकता की जाँच  
अंतर्जन प्रमाणीकरण एवं एकत्रितकरण प्रक्रिया

एनपीडीएल का महत्वपूर्ण पहलु एक मजबूत व्यवस्था और प्रक्रिया तैयार करना है ताकि बाजार में उत्पाद प्रस्तुत किये जाने के बाद सेवाओं में किसी भी प्रकार की बाधा उत्पन्न न हो। जब तक वह उत्पाद समुचित माध्यम से ग्राहकों तक नहीं पहुँचता, तब तक दूसरे नये उत्पाद का विकास अथवा बाजार में उसकी प्रस्तुति का कोई औचित्य नहीं होता। इसी तरह किसी भी नये उत्पाद की सफल प्रस्तुति में वितरण व्यवस्था की भी भूमिका महत्वपूर्ण है। यह एक ऐसा संवेदनशील क्षेत्र है, जो किसी भी कंपनी को प्रतिस्पर्धियों से आगे ले जाने में महत्वपूर्ण भूमिका निभाता है। अपने नये उत्पाद को सफल बनाने के लिये कंपनियों को विस्तृत वितरण रणनीति बनानी होती है। कंपनियों के लिये अपने प्रतिस्पर्धियों से आगे निकलने का एक संवेदनशील क्षेत्र है। इस मामले में इंटरनेट की सुविधा भी काफी महत्वपूर्ण है।

भारतीय साधारण बीमा बाजार एक मजबूत आधार शुल्क नियंत्रण है। यह हालांकि शुद्ध नये उत्पादों के विकास में बाधक बनता है। प्रतिस्पर्धा बनायी रखने के लिये भारतीय बीमा कंपनियाँ उत्पादों के पुनर्नवीनीकरण में हमेशा व्यस्त रहती हैं। उत्पादों का पुनर्नवीनीकरण उसी उत्पाद के दायरे में नया उत्पाद विकसित करने की प्रक्रिया है, जिससे उत्पाद की भिन्नता के कारण उसका मूल्य भी बदला जा सकता है। उत्पादों का

वैविध्यीकरण की परिभाषा के तौर पर कहा जा सकता है कि वैविध्यीकरण प्रतिस्पर्धा के लाभ का वह स्रोत है जिससे ऐसी वस्तुओं को तैयार किया जाता है, जो मौलिक और अनोखेपन से परिपूर्ण हो। इस क्षेत्र में नये उत्पादों का विकास आमतौर पर काउंटर उत्पाद, बीमा पूर्व उत्पाद अथवा उत्पाद समूह के जरिये होता है। उत्पादों के वैविध्यीकरण का एक और मार्ग किसी अन्य उत्पादों के साथ उसकी बिक्री अथवा उसमें कुछ मौलिक परिवर्तन करना है।

उत्पादों के विकास की एक विशिष्ट रणनीति ग्राहकों के समक्ष उत्पादों में विविधता लाना अथवा कंपनी में ही उत्पाद प्रक्रिया का एकत्रिकरण करना है। भारतीय बीमा कंपनियों के लिये उपलब्ध पारंपरिक मार्गों में अभिकर्ता अथवा सीधी विपणन प्रक्रिया है। आई आर डी ए एवं निजी क्षेत्र के व्यावसायियों अथवा उत्पाद वितरण के नये मार्ग भी बाजार में उपलब्ध हैं। इनमें दलाल तथा कापोरेट अभिकर्ता शामिल हैं। बैंकों के लिये इसी प्रकार के एक मार्ग की पहचान की गयी है। वितरण के ये मार्ग रचनात्मक तौर पर ही एक दूसरे से

**भारतीय साधारण बीमा  
बाजार एक मजबूत आधार  
शुल्क नियंत्रण है। यह  
हालांकि शुद्ध नये उत्पादों के  
विकास में बाधक बनता है।**

भिन्न है। इन सभी वितरण मार्गों में भी वितरण के लिये कार्य करने वाले विभिन्न चैनल होते हैं। उदाहरण के तौर पर कापोरेट एजेंट संकल्पना के तले बैंक एवं मोटर कार वितरक होते हैं, जो कापोरेट एजेंट के तौर पर कार्य करते हैं। बीमा उत्पादों की बिक्री करने का उनका तरीका एक दूसरे से पूरी तरह भिन्न होता है। नये उत्पादों के विकास और प्रस्तुति प्रक्रिया का एक महत्वपूर्ण हिस्सा समुचित मार्ग का चयन करना है।

नये उत्पादों के विकास और प्रस्तुति के लिये तब और अधिक महत्वपूर्ण सिद्ध होते हैं, जब उत्पादों की प्रस्तुति किसी एक विशिष्ट वितरण मार्ग को लक्ष्य कर की जाती है।

### मामला अध्ययन

बीमा क्षेत्र में उत्पादों के विकास के कई उदाहरण उपलब्ध हैं। मिसाल के तौर पर हम देख सकते हैं कि इफको टोकियो जनरल इश्योरेंस कंपनी ने होम सुविधा नामक उत्पाद का विकास किया है।

सामान्य बीमा क्षेत्र में वर्षों से बड़े पैमाने पर एक मुश्त उत्पाद पेश किये जा रहे हैं, जिन्हें हाउस होल्डर्स पॉलिसी के नाम से जाना जाता है। इसके तहत पॉलिसी धारकों को अग्नि दुर्घटना के साथ अन्य प्रकार के नुकसान से सुरक्षा मुहैया की जाती है। जिनमें मशीनरी को पहुँचने वाले नुकसान के अलावा इलेक्ट्रॉनिक वस्तुओं को विशेष तौर पर एकमुश्त सुरक्षा दी जाती है। इसके अलावा कुछ अन्य मामलों में सशुल्क और कुछ मामलों में निःशुल्क सुविधा भी दी जाती है। इफको टोकियो ने अपने इस एकमुश्त उत्पाद को विविधता के रूप में बाजार में उतारा, जिसे होम एंड फैमिली प्रोटेक्टर पॉलिसी के नाम से जाना जाता है। इस उत्पाद को बाजार में उतारे जाने के बाद उसकी विकास प्रक्रिया शुरू की गयी जिसे होम सुविधा पॉलिसी के नाम से जाना जाता है। निम्नलिखित सूची में 2 विभिन्न उत्पादों के तहत उपलब्ध सुरक्षा का विवरण दिया गया है:

उपलब्ध सुरक्षा होम एंड फैमिली प्रोटेक्टर होम सुविधा

अग्नि दुर्घटना और अन्य  
डकैती / लूटपाट  
सभी जोखिम  
स्थायी काँच और सेनिटरी वस्तुएँ  
इलेक्ट्रॉनिक वस्तुएँ  
टेलीविजन / वीडियो  
मशीनरी का नुकसान  
व्यक्तिगत दुर्घटना  
ऋण भुगतान संरक्षण  
बैंगेज  
दायित्व  
वृद्धिगत जीवन खर्च

होम सुविधा बीमा पूर्व 4 श्रेणियों में उपलब्ध है। जिसके तहत प्रीमियम राशि 400 से 3700 रूपये तक है। साथ ही ग्राहकों के लिये सुविधा पूर्ण पद्धति के चयन का विकल्प भी उपलब्ध है। प्रत्येक खंड में बीमित राशि का लाभ अपने आप उपलब्ध होता है। बीमा प्रक्रिया भी काफी सुलभ है। जिसके तहत प्रीमियम राशि ग्राहक द्वारा चयनित श्रेणी के अनुसार अपने आप तय हो जाती है। उत्पाद की स्वाभाविकता बनाये रखने के लिये सुलभ प्रस्ताव भी तैयार किया गया है।



**उत्पाद वितरण**

एक बार उत्पाद का परीक्षण सफल हो जाता है, तो उसके समुचित वितरण के लिये प्रभावी मार्ग की पहचान करना अनिवार्य हो जाता है। जिससे बाजार में वह उत्पाद छा जाये। इफको टोकियो के पास उत्पाद के समुचित वितरण के लिये उपलब्ध मार्गों में निम्नलिखित शामिल है:

- सीधा विपणन
- अभिकर्ताओं के जरिये विपणन
- कार्पोरेट एजेंटों के जरिये विपणन

कार्य संचालन के तहत नये / छोटे अभिकर्ता और अन्य वितरक आदि अपनी पद्धति से इस उत्पाद की बिक्री कर सकते हैं। इतना ही नहीं इस उत्पाद की बिक्री इंटरनेट के जरिये भी की जा सकती है। यह उत्पाद वितरण माध्यमों के उन साझेदारों की मांग पूर्ति का सही समाधान है, जिन्हें अपना व्यवसाय शुरू करने के लिये आकर्षक ओटीसी उत्पाद की आवश्यकता होती है।

इफको टोकियो की होम सुविधा पॉलिसी ग्राहकों के समक्ष अथवा कंपनी में प्रक्रिया एकीकरण के जरिये उत्पाद में विविधता लाने का एक अलग उदाहरण है। यह एक ऐसा भी उत्पाद है, जो सीमित तकनीकी क्षमता के साथ आसानी से वितरित किया जा सकता

है और वितरण माध्यमों के बारे में पूरी जानकारी रखने के अलावा निपुणता हासिल करने में भी सहायक है।

**निष्कर्ष**

भारतीय बीमा उद्योग में उत्पाद विकास के मार्ग में मुख्य बाधा शुल्क नियंत्रण है। फिलहाल आईआरडीए के साथ ऐसे कुछ कदम उठाने पर विचार किया जा रहा है, जिनसे शुल्क निर्धारण संबंधी आवश्यक कदम उठाने के लिये समूची प्रक्रिया को परिभाषित करने के प्रयास किये जा रहे हैं। इससे बीमा उद्योग बाजार पर हावी होने वाले उत्पादों का स्वरूप पहचान सके। आज कई अनुचित उत्पाद बाजार में ग्राहकों का विश्वास तोड़ रहे हैं, जो नियामक के लिये कड़ी चुनौती है। यदि सुविश्लेषित, विविधतापूर्ण और समुचित वितरण मार्ग से बेहतर उत्पाद बाजार में पेश किये

गये, तो बाजार में अनुचित उत्पाद पैठ नहीं बिठा पायेंगे। हालांकि ये भी दावे के साथ नहीं कहा जा सकता कि बाजार में उतारे जाने वाले सभी उत्पाद बेहतर होंगे ही। यहाँ नियामक की भूमिका महत्वपूर्ण हो जाती है, जो बाजार का माहौल बिगाड़ने वाले कारकों को दूर कर सकता है।

हमारा मानना है कि बाजार में शुद्ध प्रतिस्पर्धा होनी चाहिये। आज के कड़ी स्पर्धा के बाजार में किसी भी बीमाकर्ता का अस्तित्व तभी बरकरार रह सकता है, जब वह तेजी से और बेहतर ढंग से वैविध्यपूर्ण उत्पाद बाजार में पेश करे। उत्पादों में विविधता लाने के अलावा उनका समुचित निश्चित लक्ष्य के अनुसार समुचित माध्यम से वितरण भी करना आवश्यक है। ग्राहक मात्र भुगतान किये जाने वाले प्रीमियम के बारे में ही नहीं सोचेगा बल्कि वो अपनी आवश्यकता की पूर्ति करने में उत्पाद सक्षम है अथवा नहीं इस बारे में भी सोचेगा।



**भारतीय बीमा उद्योग में  
उत्पाद विकास के मार्ग में  
मुख्य बाधा शुल्क  
नियंत्रण है।**

जॉयदीप रॉय इफको - टोकियो जनरल इंश्योरेंस लिमिटेड के व्यावसाय प्रमुख (पूर्व) जबकि अभिषेक अग्रवाल सहायक प्रबंधक हैं।

**बीमा पॉलिसियां**

**मुख्य वर्धन करने के लिये होती हैं।**

**सुविधा और सुरक्षा के लिये**

# Report Card: GENERAL

G. V. Rao

## July Growth is 22.15 percent.

### Performance in July 2006:

The non-life industry has continued to maintain its run of premium growth in July 2006. It has recorded a premium accretion of Rs.356 crore, at a growth rate of 22.15 percent. The July 2006 premium completion is reported at Rs.1963 crore. New Players have contributed about Rs.271 crore to the total accretion of Rs.356 crore, with the established players chipping in a

comparative low of Rs.85 crore. The new players have completed a premium income of Rs.682 crore, while the established players have closed at Rs.1282 crore.

### July growth propellers:

The dominant premium-earning players in the month of July are: ICICI-Lombard that spearheads the accretion table with Rs.72 crore, IFFCO-Tokio with Rs.70 crore, Bajaj-Allianz with Rs.45 crore and

Reliance with Rs.40 crore; Oriental with Rs.38 crore and New India with Rs.34 crore are the other two of the established players. About Rs.300 crore accretion of the total Rs.356 crore has come in from these six players of the total 12 players.

The growth rate of 22.15 percent in July 2006 compares well, with the growth rate recorded in July 2005, of less than 12 percent. This shows that the market buoyancy in 2006 is causing an upward

## GROSS PREMIUM UNDERWRITTEN FOR AND UP TO THE MONTH OF JULY 2006

(Rs.in lakhs)

INSURER	PREMIUM 2006-07		PREMIUM 2005-06		GROWTH OVER THE CORRESPONDING PERIOD OF PREVIOUS YEAR
	FOR THE MONTH	UP TO THE MONTH	FOR THE MONTH	UP TO THE MONTH	
Royal Sundaram	4,503.83	20,031.98	3,085.00	15,120.00	32.49
Tata-AIG	5,895.75	28,112.26	3,402.73	20,299.37	38.49
Reliance General	5,000.71	21,419.81	950.27	5,723.87	274.22
IFFCO-Tokio	12,410.23	48,861.90	5,353.73	28,871.93	69.24
ICICI-lombard	22,272.89	103,646.85	15,070.88	57,409.92	80.54
Bajaj Allianz	13,849.71	58,815.87	9,387.00	41,291.31	42.44
HDFC CHUBB	1,639.38	6,077.71	1,738.32	5,980.64	1.62
Cholamandalam	2,462.40	10,430.27	1,929.41	9,095.68	14.67
New India	36,961.00	173,028.00	33,581.00	150,414.00	15.03
National	30,378.00	126,972.00	29,885.00	123,684.00	2.66
United India	25,772.00	122,889.00	25,054.00	114,533.00	7.30
Oriental	34,954.00	138,643.00	31,170.00	124,932.00	10.97
<b>SPECIALISED INSTITUTIONS:</b>					
ECGC	5,397.99	19,108.23	4,360.14	17,796.01	7.37
Star Health & Allied Insurance*	38.67	55.49	0.00	0.00	

\* Commenced operations on 18th May, 2006



swing in the premium growth of the market. The six players, stated above, are fuelling the spectacular growth trends. Reliance and IFFCO-Tokio seem to be emerging as the most aggressive among the general insurers, in addition to ICICI-Lombard and Bajaj-Allianz.

**July market shares:**

The new players have maintained their market share, for the month of July 2006, at 35 percent and there is no let up on this number, since the beginning of this fiscal. National Insurance and United India have recorded only notional increases in premiums.

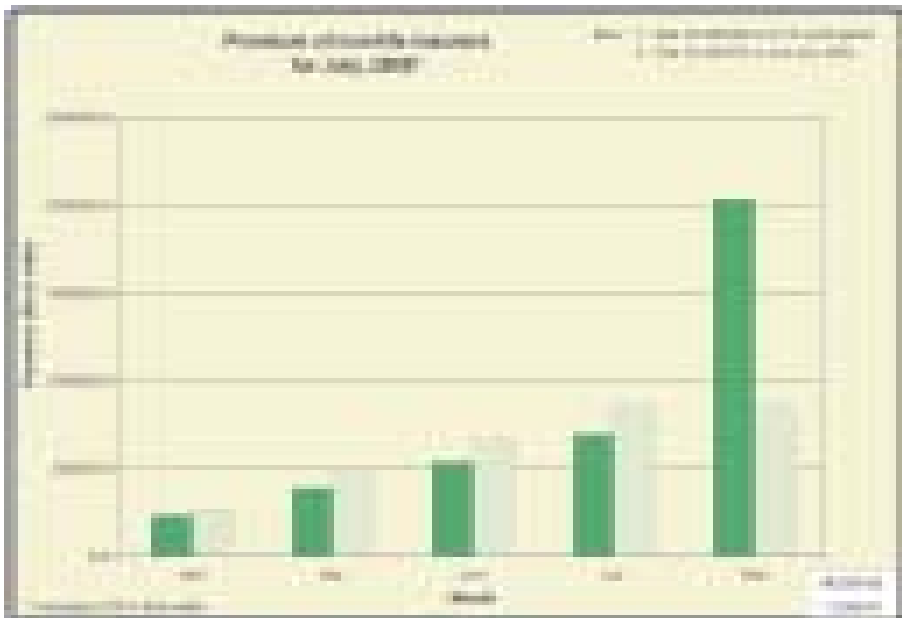
With the overall growth rate hovering around 23 percent upward till now, one is quite hopeful that the market would end with an annual growth rate of 20 percent or higher.

**Performance up to July 2006:**

The non-life industry has recorded a growth rate of 23.1 percent, as at the end of July 2006, with an accretion in premium of Rs.1614 crore. The premium recorded by all players is Rs.8587 crore. The new players have added a massive Rs.1134 crore with the established players adding Rs.480 crore.

To the total accretion of Rs.1614 crore, ICICI-Lombard has added Rs.462 crore, followed by New India with Rs.227 crore, IFFCO-Tokio with Rs.199 crore, Bajaj-Allianz with Rs.175 crore, Reliance with Rs.157 crore and Oriental with Rs.137 crore. These six players have added 83 percent of the market accretion up to July 2006.

The new players continue having a market share of 35 percent, up from 26 percent at the corresponding stage last year. ICICI-Lombard has crossed the Rs.1000 crore-premium mark by the end of July 2006, in less than a four-month period. It has kept Bajaj-Allianz, the second ranked new player at a significant distance of Rs.588 crore premium. It seems to be inching towards the premium completions of National Insurance and United India that are about Rs.1250 crore each at this stage at the end of July 2006.



**Contributing players over a two-year span:**

A look at the July 2006 and July 2004 premium performance showed that ICICI-Lombard grew by Rs.749 crore in two years. IFFCO-Tokio grew by Rs.326 crore and Bajaj-Allianz by Rs.322 crore. New India grew in these two years by Rs.327 crore and Oriental by Rs.276 crore. These figures have been shown to indicate the aggressive strategies these five insurers have pursued to develop their market shares.

**Future Prospects:**

Consumers are the ones that seem to be dictating a growing and heightened demand for insurance products: particularly in the health and motor segment, causing the market growth to boom. With natural disasters hitting all classes of the citizenry and all corners of the country, demand for insurance for flood that is tagged on with the fire insurance is growing faster. The reinsurer-imposed rates in energy and other mega risks are additional stimulants to this market growth.

Yet, the vast retail and rural sectors with a high growth potential are not yet attracting the attention of insurers. Once insurers get market-savvy on these untapped sources, premium growth would step up. But the immediate challenges before insurers are different ones.

The new challenges before the insurers are all those relating to dismantling of tariffs from next year. How would they deal with a smart, time-pressed and cost-sensitive corporate consumer base, and a particularly aggressive distribution channel? Another issue is: how are their corporate agencies, particularly, those in the banking sector going to deal with premium rating issues, in a detariffed scenario and in a more competitive environment. The question and response systems need to be in co-ordination with each other. But their main challenge remains the one outlined below.

Would the insurers tend to become easier or more difficult to deal with for their current and future customers; in the rating and claim settlement responses of insurers in a detariffed scenario? It is, as yet, unclear to many, what the major priority of insurers, given a choice, is going to be: dealing with competition or wooing and winning customers? If it is the latter, would it be on price front or on delivery of value-added and customer-perceived services? Only the unfolding future would tell the market.



*The author is retired CMD, The Oriental Insurance Company Ltd. He may be contacted at gvrao70@gmail.com*

## ASIA INSURANCE REVIEW, SINGAPORE ORGANIZED THE 1<sup>ST</sup> ASIAN LIFE INSURANCE SUMMIT AT TAJ PRESIDENT, MUMBAI BETWEEN 23<sup>RD</sup> – 25<sup>TH</sup> AUG., 2006.



Photograph shows Mr. C.S. Rao, Chairman, Insurance Regulatory and Development Authority (IRDA), delivering the key-note address. Also seen in the picture is Mr. R.R. Dash, Executive Director, Life Insurance Corporation of India.

The Chairman receiving a memento from the hands of Mr. Sivam Subramaniam, Editor-in-Chief, Asia Insurance Review.





# ASIA-PACIFIC RISK & INSURANCE ASSOCIATION (APRIA) CONFERENCE WAS HELD AT MEIJI UNIVERSITY, TOKYO BETWEEN 30<sup>TH</sup> JULY AND 2<sup>ND</sup> AUG.

Photograph shows  
Mr. K.K. Srinivasan,  
Member (Non-life)  
IRDA, delivering the  
key-note address.



Deliberations in progress at  
the conference. Seated on  
the dais are (L to R):  
Dr. Harold D. Skipper,  
Chairman Emeritus, Risk  
Management and Insurance  
Department, Georgia State  
University, Atlanta;  
Mr. Yoshihiro Kawai Secretary  
General, IAIS; Mr. Toshiyuki  
Yasui, Director, Financial  
Services Agency, Japan;  
Mr. K K Srinivasan, Member,  
IRDA; and Dr. Bill Chang,  
Commissioner, Financial  
Supervisory Commission,  
Taiwan



**MR. FRANK WISNER, FORMER US AMBASSADOR TO INDIA; AND VICE-CHAIRMAN, AIG NEW YORK VISITED INSTITUTE OF INSURANCE AND RISK MANAGEMENT, HYDERABAD ON 18<sup>TH</sup> AUG. 2006.**



Photograph shows Mr. Wisner addressing the students of IIRM. Also seen in the photograph (L to R) are: Mr. T.V. Rao, Faculty; Mr. Vepa Kamesam, Managing Director of the institute; Mr. B. Hanumantha Rao, Interim Registrar; and Mr. G.N. Bhaskar Rao, Faculty.

Mr. Sunil Mehta , Country Head & CEO, AIG Group of Companies, addressing a section of the students.





■ **18-23 Sep 2006**

Venue: Pune  
Comprehensive Technical  
Program in Life Insurance  
By NIA Pune

■ **19 Sep 2006**

Venue: Mumbai  
Third Annual Conference of Insurance Brokers  
By Insurance Brokers Association of India

■ **03-05 Oct 2006**

Venue: Pune  
Corporate Governance  
By NIA Pune

■ **09-11 Oct 2006**

Venue: Pune  
Workshop on Reinsurance  
By NIA Pune

■ **12 Oct 2006**

Venue: Mumbai  
Risk Summit 2006  
By Asia Insurance Post

■ **12-13 Oct 2006**

Venue: Hainan Island, China  
7th China Rendezvous  
By Asia Insurance Review, Singapore

■ **16-18 Oct 2006**

Venue: Pune  
Insurance Management of Energy Risk  
By NIA Pune

■ **30 Oct - 04 Nov 2006**

Venue: Pune  
Integrated Management  
Program for Line Managers  
By NIA Pune

◀ **VIEW POINT** ▶

“ The impact of technological breakthroughs in medicine (and related fields) on mortality and morbidity is notoriously difficult to predict. ”

- **Patrick M. Liedtke**, Secretary General and Managing Director,  
The Geneva Association

“ Florida's insurance professionals should be driven by their clients' best interests, not commissions. This department will continue to rigorously prosecute agents who violate the law and violate that trust. ”

- **Tom Gallagher**,  
Florida's Chief Financial Officer

“ A differentiated regulatory approach will increasingly be adopted, where companies that exhibit strong corporate governance and risk management practices will be given greater regulatory flexibility. ”

- Bank Negara Malaysia Governor Tan  
**Sri Dr Zeti Akhtar Aziz**

“ Good regulation is good business; and an open, informed regulatory environment provides a positive atmosphere for the (Life Insurance) industry to flourish. ”

- **Patrick Kenny**, President & CEO,  
International Insurance Society Inc.

“ Medical indemnity insurers are building their capital reserves in accordance with APRA's requirements of general insurers. In recent years premium income collected exceeded the actuarial undiscounted cost of claims in line with more rigorous prudential standards. ”

- **Dr Andrew Miller**, Chair,  
Medical Indemnity Industry Association of Australia (MIIAA)

“ We have seen no evidence of any substantial loss-leading in premium-setting by Australian insurers; or of insurers significantly increasing their risk profiles through the types of business they take on. ”

- **John F Laker**, Chairman,  
Australian Prudential Regulation Authority