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ALM -
Striking the Perfect Balance

बीमा विनियामक और विकास प्राधिकरण

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From the Publisher

As I prepare to demit office as Chairman by the middle of May on completion of 65 years, I look back to these years of association with the Authority as one of the most satisfying periods of my professional life spanning four decades. I could see insurance grow from a sapling into a mighty tree and secure for itself its rightful place in the financial sector. It is no longer a poor cousin of Banking or Capital Markets! It is a flourishing industry competing effectively with others and mobilizing savings of individuals and making them available for building much needed infrastructure.

Those who advocated the freeing of insurance from Government monopoly believed that the country had immense potential waiting to be tapped. The enormous growth in the premiums in the last few years, specially in the life segment has proved correct these advocates of change. An interesting lesson that we have learnt is that this growth need not be at the expense of the public sector. The insurance pie has enlarged to such an extent that each company can have its reasonable share and there is enough space for more to participate. The drive for premium is so compelling that private insurers have expanded their reach to the small and medium towns and with these places as base they are reaching out to the rural areas.

In the non-life segment, tariffs were removed in all segments last year and the insurers given the freedom to determine rates. There was apprehension that such a move would result in a collapse of the market. The prophets of doom have been proved wrong and we have a thriving non-life market with all major international reinsurers actively supporting the local insurers. The next step of giving freedom to insurers to determine the terms of contract is on the anvil and would be operationalised soon.

A major shift in the non-life market is the emphasis laid on retail business as opposed to obsession with corporate business. Within the retail segment the health insurance market has grown substantially and for the first time we have stand alone health insurance companies licensed to do business only in health related activities. This is an area that has immense potential and I have no doubt that with the combined efforts of the State and Central Governments, the insurance companies and, the Regulator; the country would see a thriving health insurance market in the years to come.

The micro insurance regulations that the Authority introduced have been appreciated not only in India but also by the community of regulators in the rest of the world. The International Association of Insurance Supervisors (IAIS) has constituted a working group on micro insurance with India as an active member to arrive at supervisory and regulatory standards for adoption by supervisors world over.

The strides made by the Indian insurers in the last few years have resulted in a revival of interest among multinational insurers. They realize that the Indian market is too large to be ignored and what we witness now is a second wave of licensing involving multinational insurers teaming up with Indian Corporates, specially Banks.

The enormous increase in the market has caused severe strain on the limited human resources available to the Regulator. Efforts are on to put in place a system of direct recruitment of staff and officers; and over a period of time, it should be possible to equip the office to meet the challenges of this expanding market.

I recognize that in this long journey of the insurance market in India, we are at the initial stages and it had been my endeavour to guide the market as also the supervisory mechanism to get the best out of the free market and avoid the pitfalls inherent in a market that is never perfect. If I have succeeded, at least in a small measure, the credit should go to the support and cooperation that I received from the Members of the Authority, the band of dedicated officers and staff of the Authority, a number of insurance professionals and the understanding shown by the insurers. I am thankful to all of them.

I would also like to place on record my deep sense of gratitude to Sri C.N.S. Shastri, who in an Honorary Capacity as Advisor, provided guidance and advice in critical areas of detariffication of the market and in developing sound supervisory practices.

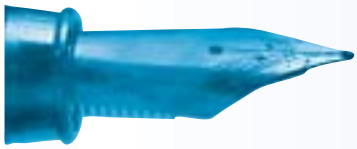
C.S. Rao

INSIDE

ISSUE FOCUS

THINKING CAP

FOLLOW THROUGH



Need for a Sound ALM
- Top Management Imperative

Asset Liability Management (ALM) is a very vital function for the top management of an insurance company. Managements are required to strike that delicate balance between risk and return; and in an industry where the liabilities can arise without notice, it is not an easy task to accomplish. While the immediate aftermath of a structured ALM planning may not be indicative of any crisis, the real effects may surface in the long run – differently for different geographic regions. If one were to look at past experiences, history would be witness to the fact that several insurers failed in keeping in place a good ALM initiative and had to pay a very precious price.

The priorities for an insurer in the area of ALM would differ not only with the actual line of business but also by the different types of products that together compile their portfolio. The sets of priorities, for example, would be vastly different for a life and a non-life insurer. Considering the type of commitments made to their policyholders, insurers should plan their investments accordingly. In the process, it is very essential that initial lure for a higher return could be very enticing but insurers should ensure not to fall prey to such ephemeral gains but should look for long term sustenance. The past experiences associated with corporate entities where investments are proposed to be made should be looked into thoroughly.

The global financial environment is changing rapidly and this could have a far-reaching effect on the entire economic scenario – like the sub-prime crisis that we have witnessed recently. It is very essential that insurers take into consideration all the possible factors that could influence their business, both in the short term as well as in the long term. A thoroughly planned, strategic ALM should be a top priority for the management of an insurance company.

'ALM for Insurers' is the focus of this issue of the **Journal.** We open the highly intricate issue with an article by Mr. Ashwin Parekh who discusses the dynamics of the inter-active forces associated with this very vital function. In the next article, Mr. Sunil Kakar talks about the importance of product alignment in designing a proper ALM. The need for insurers all over the world having in place a sustainable ALM strategy has been occupying the minds of international supervisors, in order that insurance business as a whole lives up to its reputation of keeping its promises. Mr. Arup Chatterjee of IAIS writes about the importance of ALM and the role of IAIS in ensuring sound ALM practices. In an article that describes the role of ALM in the financial services industry generally, Mr. Khusroo B. Panthaky enumerates the various risks that corporates in financial services industry have to consider. Mr. Rajesh Khandelwal opines that insurers should look beyond mere monetary returns; and talks about the role of ALM in socially responsible investments.

In the 'Thinking Cap' section that follows, we have an article by Mrs. V.S. Lakshmi who describes in detail the importance of Economic Capital in the whole process of risk management for an insurer. We have two articles in the 'Follow Through' section – one by Ms. Tina Makhija in the area of Microinsurance; and the other by Mr. Gary Bennett that talks about the role of life insurance products in the rapidly changing environment. Health Insurance continues to hog the limelight in the Indian domain for more reasons than one; and we thought it proper to focus on this area again in the next issue of the **Journal.**

Mr. C.S. Rao will be demitting office as Chairman, IRDA during the course of this month after a very eventful and successful stint. He has been a great source of inspiration and guidance for all of us at the Journal. I, in my personal capacity as the Editor of the Journal; and all the others associated with the Journal, wish him a very happy and peaceful retired life.

U. Jawaharlal

Report Card:LIFE

First Year Premium of Life Insurance Industry - 2007-08 (Unaudited)

Sl No.	Insurer	Premium u/w (Rs. in Crores)			No. of Policies / Schemes			No. of lives covered under Group Schemes		
		March, 08	2007 - 08	2006 - 07	March, 08	2007 - 08	2006 - 07	March, 08	2007 - 08	2006 - 07
1	**Bajaj Allianz**									
	Individual Single Premium	168.83	735.21	1179.12	23526	102771	173166			
	Individual Non-Single Premium	1057.50	5568.63	3027.55	625460	3641575	1905767			
	Group Single Premium	0.20	8.52	5.89	0	0	1	230	6704	3486
	Group Non-Single Premium	134.61	179.36	57.22	108	396	283	780136	1992621	844480
2	**ING Vysya**									
	Individual Single Premium	12.80	36.90	25.05	1732	4347	1847			
	Individual Non-Single Premium	139.53	658.29	418.00	64807	355722	227342			
	Group Single Premium	2.84	6.69	2.31	0	1	0	513	1312	517
	Group Non-Single Premium	0.26	2.79	22.08	5	25	44	30962	123468	82517
3	**Reliance Life**									
	Individual Single Premium	286.71	519.89	111.58	57160	111320	17999			
	Individual Non-Single Premium	299.64	1820.88	687.86	170516	962395	432684			
	Group Single Premium	157.58	387.17	120.16	48	97	58	78737	156527	73673
	Group Non-Single Premium	2.60	24.82	10.86	29	265	176	248244	592755	275237
4	**SBI Life**									
	Individual Single Premium	170.44	1210.84	567.66	25953	170852	85324			
	Individual Non-Single Premium	607.79	2531.78	1198.83	166412	754677	480065			
	Group Single Premium	38.69	246.51	278.61	1	1	5	23050	126024	149705
	Group Non-Single Premium	427.15	803.73	520.98	35	92	307	172890	1010547	1402816
5	**Tata AIG**									
	Individual Single Premium	11.42	48.29	20.66	1999	8515	2443			
	Individual Non-Single Premium	148.99	788.46	518.88	89535	488434	406265			
	Group Single Premium	6.00	62.96	56.32	1	5	7	28500	363664	309264
	Group Non-Single Premium	15.21	68.07	46.49	11	75	82	24013	219349	242357
6	**HDFC Standard**									
	Individual Single Premium	21.79	140.65	127.04	20341	249544	159660			
	Individual Non-Single Premium	368.56	2201.72	1220.85	90067	699068	363322			
	Group Single Premium	176.83	264.76	204.88	56	192	128	83361	252097	237811
	Group Non-Single Premium	19.51	72.48	71.47	10	54	37	4457	41517	64694
7	**ICICI Prudential**									
	Individual Single Premium	58.43	399.58	457.84	9789	64576	69740			
	Individual Non-Single Premium	1002.76	6643.94	3925.21	389590	2848534	1889835			
	Group Single Premium	30.69	264.73	334.50	14	155	143	96922	592400	147536
	Group Non-Single Premium	449.22	997.60	537.09	39	341	316	78233	474687	403565
8	**Birla Sunlife**									
	Individual Single Premium	8.48	32.60	43.30	33776	120388	95423			
	Individual Non-Single Premium	397.57	1708.37	699.58	155171	567923	331161			
	Group Single Premium	0.87	6.37	7.12	0	3	0	1515	8461	3996
	Group Non-Single Premium	121.98	217.67	132.72	35	145	162	12490	152294	62870
9	**Aviva**									
	Individual Single Premium	5.40	25.65	35.10	694	3751	4076			
	Individual Non-Single Premium	188.03	980.77	656.91	70179	386317	293382			
	Group Single Premium	-0.14	1.65	3.10	0	0	1	53	1091	1790
	Group Non-Single Premium	27.35	51.01	28.92	15	116	96	70469	668169	394959

10	**Kotak Mahindra Old Mutual**									
	Individual Single Premium	5.59	32.03	47.03	853	4357	5901			
	Individual Non-Single Premium	260.29	943.01	499.34	74042	309133	159101			
	Group Single Premium	6.11	29.01	14.88	2	4	10	24333	188201	88315
	Group Non-Single Premium	49.58	102.56	53.69	56	277	191	56813	459565	328767
11	**Max New York**									
	Individual Single Premium	38.75	271.76	161.59	2964	17675	8384			
	Individual Non-Single Premium	270.83	1280.79	752.84	182784	855656	544121			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	3.00	41.67	5.91	13	282	165	15411	489502	103795
12	**Met Life**									
	Individual Single Premium	2.02	20.95	13.84	256	3159	2418			
	Individual Non-Single Premium	211.66	764.94	302.67	52946	231993	116988			
	Group Single Premium	24.40	40.91	0.00	19	78	0	48687	230958	0
	Group Non-Single Premium	0.00	0.00	27.58	0	0	204	0	0	424724
13	**Sahara Life**									
	Individual Single Premium	14.63	50.89	22.53	3702	13026	6023			
	Individual Non-Single Premium	15.94	71.28	19.70	19816	96058	35636			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.00	0.00	0.94	2	8	4	100	371	103261
14	**Shriram Life**									
	Individual Single Premium	30.70	184.76	92.52	5650	33431	19879			
	Individual Non-Single Premium	21.65	124.97	87.26	12489	75698	76198			
	Group Single Premium	0.05	0.14	0.00	1	4	1	5348	14806	200
	Group Non-Single Premium	0.00	0.00	0.00	0	2	0	0	623	0
15	**Bharti Axa Life**									
	Individual Single Premium	0.91	4.18	0.01	629	1161	480			
	Individual Non-Single Premium	25.05	105.68	7.75	15717	72913	5220			
	Group Single Premium	1.49	3.25	0.00	4	4	0	8195	9012	0
	Group Non-Single Premium	0.00	0.00	0.01	0	0	3	0	0	3067
16	**Future Generali***									
	Individual Single Premium	0.00	0.00	0.00	0	0	0			
	Individual Non-Single Premium	0.28	0.41	0.00	747	800	0			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.25	2.09	0.00	2	9	0	4428	71672	0
17	**IDBI Fortis Life****									
	Individual Single Premium	7.54	7.54	0.00	1376	1376	0			
	Individual Non-Single Premium	4.36	4.36	0.00	1782	1782	0			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Private Total									
	Individual Single Premium	**844.45**	**3721.70**	**2904.87**	**190400**	**910249**	**652763**			
	Individual Non-Single Premium	**5020.43**	**26198.29**	**14023.22**	**2182060**	**12348678**	**7267087**			
	Group Single Premium	**445.62**	**1322.67**	**1027.76**	**146**	**544**	**354**	**399444**	**1951257**	**1016293**
	Group Non-Single Premium	**1250.74**	**2563.84**	**1515.98**	**360**	**2087**	**2070**	**1498646**	**6297140**	**4737109**
18	**LIC**									
	Individual Single Premium	6491.86	25048.97	20641.12	2454118	7530309	6064684			
	Individual Non-Single Premium	3689.98	23583.73	23899.29	5618511	30059686	32143891			
	Group Single Premium	3275.04	10549.50	11394.28	3119	22604	20717	8122272	26738141	14164320
	Group Non-Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Grand Total									
	Individual Single Premium	**7336.31**	**28770.68**	**23545.99**	**2644518**	**8440558**	**6717447**			
	Individual Non-Single Premium	**8710.40**	**49782.02**	**37922.51**	**7800571**	**42408364**	**39410978**			
	Group Single Premium	**3720.66**	**11872.17**	**12422.04**	**3265**	**23148**	**21071**	**8521716**	**28689398**	**15180613**
	Group Non-Single Premium	**1250.74**	**2563.84**	**1515.98**	**360**	**2087**	**2070**	**1498646**	**6297140**	**4737109**

Note: 1.Cumulative premium upto the month is net of cancellations which may occur during the free look period.
2. Compiled on the basis of data submitted by the Insurance companies
3. * Commenced operations in November, 2007.
4. ** Commenced operations in March, 2008.

Progress of Health Insurance

Working Towards a Healthier Society

'THE GROWTH BEING OBSERVED IN THE HEALTH INSURANCE CLASS SHOULD BE SUSTAINED. HOWEVER, WE SHOULD NOT GET CARRIED AWAY BY THE MERE QUANTUM OF GROWTH BUT SHOULD WORK TOWARDS ATTAINING BETTER TRANSPARENCY IN THE HEALTH INSURANCE CONTRACTS IN ORDER TO ENSURE A MORE SATISFIED HEALTH INSURANCE POLICYHOLDER' SAYS U. JAWAHARLAL.

The steady progress that Health Insurance has been making in more recent times continues to be seen; and it augurs well in a country where out-of-pocket spending for healthcare has been very huge. It is also additionally gratifying to note that it is not merely by the sales driven mode that this sector is growing but out of a voluntary participation by an increasing number of individuals. The various attempts to spread awareness among the common people seem to be bearing fruit and this is yet another significant achievement over the past few years. As a part of the continuing progress of this class, more and more policyholders should clearly understand the basic concepts of insurance; and more specifically the various clauses applicable in the health insurance contracts.

Insurance works on the basic premise of uncertainty, for which reason insurance contracts are said to be aleatory in nature. As a natural corollary of this factor, pre-existing diseases or conditions are to a great extent excluded in a health insurance policy. However, while interpreting the merits of a case, the over-riding factor should be to analyze whether there has been an intention to defraud the insurer. Mere pre-existence of a condition that the applicant never had an occasion to know should be treated more sympathetically so that the misgivings associated with the health insurance industry are sought to be removed. Very strict interpretations, particularly in letter, would tend to stifle the spirit of a contract.

There is a role for all the stakeholders in arresting moral hazard that is the bane of the health insurance sector. If we are to achieve greater participation in voluntary health insurance, all the forces have to work as a team and ensure that the evils associated with the class are fought tooth and nail. Practices like differential treatment of patients by hospitals based on their insurance status that is very often reported in the print or the visual media should be arrested sooner than later. Emphasis should be laid on educating the general masses about the evils arising from reproachable practices. Health insurance must be purchased as a major part of one's personal portfolio and tendencies of resorting to buy health insurance 'on the way to a hospital' must be curbed.

One area that has been hogging limelight recently is providing health insurance to the senior citizens at more softer terms. On the one hand, there is no denying the fact that as age advances, proneness to ill-health also goes up and accordingly the risk factor increases. But on the other, when there is a decline in the amount of earnings; there is need for availability of health insurance more easily. Insurance industry must look at this paradoxical situation more sympathetically. At the same time, people must realize that starting at an early age always gives them the advantage of reaping the fruits more easily.

We have done an issue on Health Insurance a few months ago and the response was so overwhelming that we are tempted to go for an *encore,* with the unfinished agenda. The focus of the next issue of the **Journal** will be on 'Health Insurance'.

Health Insurance

in the next issue...

Asset-Liability Management by Insurers

Topmost Priority

ASHWIN PAREKH WRITES THAT ALM IS A TOP MANAGEMENT FUNCTION OF VITAL IMPORTANCE; AND FAILURE TO ASSIGN DUE VALUE TO IT COULD LEAD TO DISASTROUS RESULTS, EVEN BANKRUPTCY OF THE INSURERS.

Financial institutions like insurance companies provide services which expose them to certain kinds of risks such as credit risk, interest risk and liquidity risk. Also, the assets and liability items have their respective characteristic in regard to rates/price and tenure. The cash flow and cash requirements arising out of anticipated or unusual liability in claims also pose additional challenge. Asset-Liability Management (ALM) is a process which helps institutions to measure and monitor these characteristics and identify mismatches which need to be managed.

The financial services industry and insurance in particular, is not new to the concept of Asset-Liability Management. We see signs of organized knowledge development in the subject in the US in order to address interest rate risk, which became a major concern in the 1970s, when rates increased sharply and became far more volatile than they were earlier. What is new to the industry, however, is the nature of exposure that firms have to two basic risks - those of liquidity and interest rate risk. Risks are now compounded by the increased complexity of product design, more stringent scrutiny from regulators and a greater availability of various investing options for the public, at large. The management of assets is increasingly becoming a challenge compared to liability as the money and investment markets are becoming more volatile and choppy.

An insurer that does not coordinate its decisions on assets and liabilities is courting disaster. Nissan Mutual Life, a company with 1.2 million policyholders sold individual annuities paying guaranteed returns of 5%-5½% without hedging these liabilities. A plunge in the government bond yields created a large gap in its earnings and on April 1997, the company was ordered to suspend its business. Two decades earlier, a mismatch between the assets and liabilities of a US mutual life insurance company, The Equitable, caused it to go under. During the early 1980s, the USD yield curve was inverted, with short-term interest rates spiking into the high teens. The Equitable sold a number of long-term guaranteed interest contracts (GICs) guaranteeing rates of around 16% for periods up to 10 years. During this period, GICs were normally for principal of USD 100MM or more. The Equitable invested the assets short-term to earn the high interest rates guaranteed on the contracts. Short-term interest rates soon came down. When The Equitable had to reinvest, it couldn't get nearly the interest rates it was paying on the GICs. The firm was crippled. Eventually, it had to demutualize and was acquired by the Axa Group.

Risks are now compounded by the increased complexity of product design, more stringent scrutiny from regulators and a greater availability of various investing options for the public, at large.

The non-life insurance sector is characterized with a yearly tenure contracts. The asset-liability management problem is largely limited to cash flow

management and liquidity management so as to service the claims efficiently. The same is being achieved through the reserving methods applied to each line of business. The penetration of typically long tail liability insurance and long term managed health insurance products in India is low. These products, especially liability products, bring in additional amount of risk for the insurers as a huge claim can arise even after many years of the coverage period.

It is life insurance, where the importance of the asset-liability management increases manifold. Life insurance contracts are normally longer term contracts of more than 10 years. Life insurers have to manage both their assets in terms of risk/return profiles of the investments and liabilities which emerge from the design and pricing of the product by the insurer and the business mix in terms of premium mode, maturity profile etc.

In the post liberalization era, the life insurance market in India has moved towards the unit linked products, although a significant portion of the new business still comes from the traditional guaranteed returns products. At the very start of operations many private players offered unit linked policies also with minimum guaranteed interest returns. Life Insurance Corporation of India has close to 225 mn policyholders and a majority of the policyholders are covered by interest guarantee on the life insurance or pension contracts.

ALM helps avoid a situation where asset values fall short of the liabilities arising out of the insurance contracts which can in extreme cases lead to bankruptcy or insolvency of the insurer. Traditionally, the scope of ALM was mostly limited to the 'asset' side and hence ALM process is about choosing the investment portfolio to match the liabilities i.e. hedging of liabilities.

Methods of ALM Generic Methods of ALM

Over time, three basic methods of ALM have been developed. Each of these methods tends to focus on different aspects of the risks.

- **Cash Flow Matching**
  Cash Flow Matching involves term wise matching of positive and negative cash flows to identify any potential points of a liquidity crisis. The positive cash flows originating from the assets at the end of each term, say quarter, are calculated and the same is done for the liabilities. In order to ensure a perfectly hedged position, the net cash flows should be zero in each term.

  The method is simple to implement, though it comes with its drawbacks. The method is unable to factor in interest rate risk as the cash flows are assumed as deterministic. Uncertainties of cash flows due to exogenous factors such as a catastrophe are difficult to factor, especially for non-life insurers. And finally, the method imposes restrictions on the exposure of the firm. For example, if a firm strongly believes in a rising yield curve, for the next few years, it might want to position its portfolio in order to gain from riding the yield curve.
- **Duration/convexity analysis or Immunization**
  A more simple, but effective way to address interest rate risk is using duration and convexity matching. The process involves structuring the company's portfolio so that impact of a change in interest rates on the value of liabilities offsets the corresponding impact on the asset values. The duration of a portfolio is the weighted average of the time periods of the portfolio's cash flows. Once the company has computed the duration of its assets and liabilities, it should make sure that the two are equal. If, for example, the durations of assets and liabilities are both 10 years, a 0.1% increase in the interest rates will decrease the value of assets and liabilities by 1%, thus providing a perfect offset. Convexity analysis, done along with duration analysis, provides a more accurate method of immunization, by taking care of changes in the value of duration due to interest rate movements.

  Immunization comes with its own drawbacks. The duration of many assets and liabilities is difficult to estimate, especially in non-life insurance. Also, the method is unable to deal with liquidity risk in a sufficient manner. While the market value of the firm's assets and liabilities might remain constant with changes in interest rates, the firm might get into a liquidity trap. Finally, duration/convexity analysis only works in the scenario that the yield curve movements are parallel. In a non-parallel movement of yield curve, the analysis breaks down.
- **Scenario Analysis**
  Scenario analysis was adopted by the National Association of Insurance Commissioners in the US in 1993, to verify that they hold sufficient reserves.

In the post liberalization era, the life insurance market in India has moved towards the unit linked products, although a significant portion of the new business still comes from the traditional guaranteed returns products.

A simple analysis might consider five scenarios, say reflecting assumptions that over the next 2 years, interest rates will rise 200 basis points, or rise 100 basis points, or are flat, or decline 100 basis points, or decline 200 basis points. The next step is to project what will happen under each one in terms of the value of assets and liabilities. An elaborate analysis might project, under each scenario, a bank's cash-flow statement and balance sheet at each time step.

While scenario analysis does address most of the concerns raised in the earlier two methods, it has its own drawbacks. It only addresses risk due to the specific scenarios considered. Also, scenario analysis is highly dependent on assumptions and output of the analysis is only as good as these assumptions.

Dynamic Financial Analysis (DFA)

While all the methods focus on different aspects of asset-liability risk, no single method is capable of comprehensively dealing with all the aspects of ALM. DFA is one of the forms of ALM that has gained acceptance in the insurance industry as it is more effective in dealing with a broader range of ALM issues. The DFA consists of five main components:

- *Initial Conditions*: Initial conditions summarize the past performance of the company being analyzed and the economy at large.
- *Scenario Generator*: The scenario generator constructs a set of plausible scenarios for general economic conditions, the firm's assets and its liabilities. The outputs of these simulations are often summarized as distributions.
- *Financial Calculator:* The financial calculator translates scenarios into financial results. The level of detail under which the calculator operates will depend on the subject under discussion.
- *Optimiser*: An optimizer uses a single summary statistic, or a pair of summary statistics in order to evaluate and select among different strategic alternatives. The single summary statistic can be a utility measure or a return on capital measure such as risk adjusted return on capital. The **bivariate** approach often involves creating a map called the efficient frontier which depicts a set of strategies that maximizes the financial reward for a given level of risk.
- *Results*: Finally, the model provides a set of results summarizing the lessons learned from the simulation. These include distributions of key measures and some indication of which choice variables most critically affect the results.

Simplicity versus Complexity

The four methods described above vary significantly in complexity. While scenario testing and cash flow matching are moderate in complexity, immunization is a rather simple procedure and DFA is a highly complex method. However, practitioners disagree about whether it is preferable to use simple or complex methods as each has its own advantages. Simple models entail lower costs and offer greater transparency. It is also easier to communicate the assumptions and the results. However, simple models can lead to incorrect conclusions due to the following drawbacks:

- New business and future additional flexible premiums are generally not modeled
- Focus is largely on interest rate risk
- Regulatory constraints are rarely considered
- Due to the complexity involved, asset-liability interactions are generally not modeled
- Diversification benefits are not taken into account.

Although the question of how complex a model to use is a matter of style and approach, costs also figure in the decision. Nowadays complex models have become more affordable because of advances in methodology and fall in computer prices.

Simple models entail lower costs and offer greater transparency. It is also easier to communicate the assumptions and the results.

Asset and Liability classes

One way in which firms tend to simplify their ALM models is by the use of a single asset and liability class instead of multiple classes, each demanding a different treatment, a different model. Thus, immaterial of the risk of an asset class, the classes are all pooled into one, the same done for the liabilities and ALM methods then applied. While the process makes identifying asset-liability risk of the balance sheet as a whole easier, it affects the pricing decisions on policies undertaken. Independent of the risk inherent in a policyholder, the premiums that get charged remain same across all customers. While an ideal situation would be to divide all assets and liabilities in all possible risk buckets, cost considerations could limit the number of buckets to a smaller number. Some ground rules for the grouping are:

- Consider segregated funds separately (when no cross subsidy is possible)
- Consider each asset class separately
- Group bonds and derivatives by maturity
- Group equities and property into a single index

More detailed ground rules can be formed on a case basis.

Participatory and Non-participatory holders

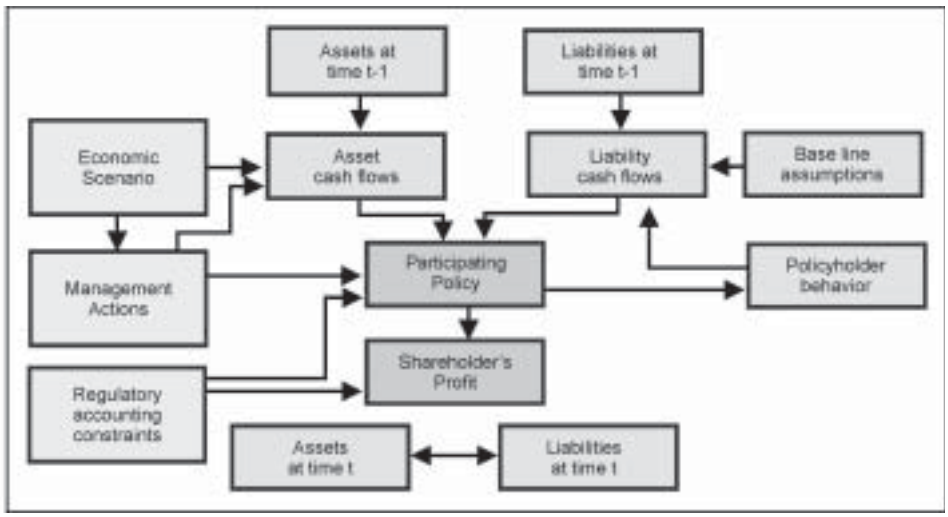
A specific example of the need of bucketing of liabilities is the differential treatment that should be meted out to participatory and non-participatory holders. Participatory holders could be considered as less risky as part of the claim risk is transferred back to the holder by linking his/her bonuses to the profit made by the company. Even among non-participatory holders, the risk profile of unit linked policies will be different from the plain vanilla type policies.

Deep Rooting ALM in Insurance Companies

Portfolio and pooling approaches used in the insurance companies for grooming the efficacy of AL management event have the following tasks.

- *Identifying key objectives*: Before implementing ALM, management needs to identify questions of greatest interest by asking questions such as what is the probability that the company will meet its earning expectations, or what parts of the business pose the greatest risk to the company. Although a single ALM analysis could address a broad range of topics, some balance has to be struck between the desire to answer a range of questions and the need to keep the model simple.
- *Selecting an appropriate methodology*: The choice of methodology depends upon the main questions being answered by the ALM users. Questions could feature
  - Company's ability to resist to stress scenarios
  - Shape of earnings with actual situation
  - Cost of guarantees embedded in life products
  - Is hedging with derivatives appropriate?
  - Need for reinsurance
  - Product pricing and design
  - Optimization of asset portfolio

The Asset Liability Interaction Dynamics



- *Assembling reliable data:* There is a need to then gather reliable data on the company's major risk exposures and asset-liability interactions. A simplified asset-liability interaction in a life insurance firm is as shown in the following figure, Risks and Value indicators have to be identified and if possible, quantified. Risk indicators include
  - Economic capital
  - Statutory solvency margin
  - Shortfalls, given a market, regulatory or contractual target
- *Implementation of the model:* An issue to be decided here is whether the company will implement the model themselves or will they outsource the implementation to a consultant. Designing and maintaining the model requires technical expertise that may be scarce in the company. Rather than dedicating scarce resources to the task, it may be preferable to have experienced outside experts perform the task.
- *Producing relevant output:* Even a straightforward ALM exercise can involve a large number of computations. Once a range of variables is computed taking into account many inter relationships, the entire exercise may be repeated thousands of times. It is important that the results of these calculations are summarized in a way that leaves the findings simple and clear.
- *Developing additional stress testing requirements for the ALM model:* Looking back at the last 6 months stock market performance and the changes in the interest rates, it is very necessary to introduce stress testing to ascertain whether the reserves set aside by the insurance company are sufficient to cover say 10-15% drop in stock prices or 50-75 bps change in interest rates.

Conclusion

The article is aimed to impress the AL managers in regard to the task ahead of them in evolving sound ALM practices which will support a higher order of management reporting and governance. The boards and the senior management of the insurance companies must be provided with quantified view of risks and mismatches to support them in conducting an effective role.

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ALM in Indian Insurance Companies

Essential Guidelines

SUNIL KAKAR ARGUES THAT STRIKING A REASONABLE BALANCE BETWEEN ASSETS AND LIABILITIES FOR AN INSURER IS A TRICKY JOB; AND REPLETE WITH TAKING INTO CONSIDERATION SEVERAL DYNAMIC FACTORS.

Asset Liability Management (ALM) can be termed as a risk management technique designed to earn an adequate return while maintaining a comfortable surplus of assets over liabilities. It takes into consideration the nature of contracts sold, risk appetite of an organization and its future goals and plans.

Another definition says that "Asset Liability Management is the on-going process of formulating, implementing, monitoring, and revising strategies related to assets and liabilities in an attempt to achieve financial objectives for a given set of risk tolerances and constraints."

Factors impacting Asset Liability Management

- **Category of Plans**
  There are primarily three categories of plans currently being sold in the Indian market viz.
  - Non-participating non linked endowment contracts
  - Participating non linked endowment contracts
  - Unit Linked Insurance Plans ("ULIPs")

Nature of contracts (or the liabilities) being sold is one of the most important defining criteria for the extent of asset liability management required. Non-participating non-linked contracts have significant investment guarantees and an insurer can have an upside/downside if the assets perform differently from the guaranteed rates. Participating contracts, as the name suggests, have an element of discretion and sharing of experience between the policyholders and insurer, and hence the investment risk is reduced but only to a limited extent. ULIPs are a class of contracts where the entire investment risk under a standard contract is passed on to the policyholders and hence the investments are made in accordance with the policyholder's chosen assets. Hence, asset liability management assumes prime importance in case of non-participating and participating non-linked contracts.

Let us take an example before highlighting some of the important issues related to asset liability management. Suppose an organization sells a simple regular premium non-participating endowment of 30 years. For a single policy assuming no death, there are certain cash flows like expenses, premiums and a benefit payout. The cash flows in such a case can take the following form.

- **Duration Mismatch**
  At an interest rate of 6%, the discounted value of these cash flows is around INR 1,540. Suppose assets backing this contract are also of the value 1,540 but all invested in a zero coupon bond of 5 years. A 1% decrease in interest rate would make the liabilities equal to INR 4,675 and the assets INR 1,615. Hence, post a decrease in interest rates of 1%; the organization is left mismatched to an extent of INR 3,060. This phenomenon is commonly referred to as duration mismatch between assets and liabilities where assets are available for five years and liabilities are of significantly longer duration. It is a very real problem in

	Year 1	Year 2	Year 3	Year 30
Premiums	+1000	+1000	+1000	+1000
Expenses	-100	-100	-100	-100
Benefit payout				80,000

insurance industry and more so in India where market for long tenure debt is very thin. The insurers in India try and employ cash flow matching or duration matching techniques to the extent possible, but still face a duration mismatch.

- **Inconsistency of Financial Measures**
  However, even if the insurers were able to achieve a duration match, it would only be fruitful if there were a consistency in measures of liability and assets. Current practice in India to value Held to Maturity ("HTM") assets on a book value basis and the liabilities are valued using a portfolio rate approach, which are broadly consistent. However, any inconsistency in the relative valuation of assets and liabilities itself can lead to a mismatch risk. A communication from the IRDA implies that insurers would soon have to use market value of assets for demonstration of solvency purposes. Let us assume the organization sells the same example contract and the policyholder has paid 15 annual insurance premiums. These premiums have been invested at the rate of 6% and then there is a sudden shock jump in interest rates to 9%. Before the shock jump, assets and liabilities are matched at a value of INR 24,640 and same duration. Now, post jump, market rates go up to 9% but the portfolio rate could be in the range of around 7.5% because of the earlier investments being made at a higher rate. In such a scenario, purely due to inconsistency of measurement, liabilities end up at INR 19,100 whereas assets fall down to INR 14,700.
- **Reinvestment Risk**
  Another implicit risk in this is a reinvestment risk where all future net money into the company (i.e. INR 900 in above example) needs to get invested at appropriate rates to cover the fixed liabilities. Given the sensitivity of the outcome to even a small change in interest rates, it is imperative for the insurers to find out ways to hedge this risk. One way is to enter into long-term interest rate swap contracts where the insurer can exchange its market variable interest rate earnings with fixed interest rate earnings. However, the market for such long-term swaps is not developed in India. IRDA should further define and promulgate rules that help insurers in effectively countering this risk.

  Given the inherent investment risks in non-participating non-linked contracts, most insurers would avoid using equity as an asset class. The commonly used asset class for such liabilities is government securities and corporate bonds. Corporate bond market in India presents its own challenges. Corporate bond market in India is very thin in terms of both duration as well as issuers. Most of the issuers of good quality corporate bonds are limited thus leading to concentration of risks.

  Additional investment return can be earned through other investment classes like real estate and equities. But such investments are usually made for participating contracts where the downside risk is limited through sharing of investment experience by changing the bonuses payable to policyholders.
- **Impact of Lapsation and Mortality**
  There are additional complications in real life operations of an insurer where rather than a single policy; there is a portfolio of policies that are subject to lapses as well as mortality. Hence, a sound ALM strategy for the business must consider the true nature of the contracts, business goals for an organization and ensuring solvency of the life insurance operations. Different investment strategies are tested along with liabilities including the new business. Stochastic simulations can be carried out and highest return with lowest probability of insolvency can be targeted

  With Indian stock markets at an all time high a few months back and the recent volatility, it seems there is a market from a section of the Indian consumers for guarantees on their ULIPs. This need is accentuated by the fact that in the Indian stock markets, the options market is limited to duration of less than a year. Even the mutual funds are explicitly prohibited by the securities market regulator SEBI to offer capital guarantees. In the wake of this, many insurers have started offering guaranteed ULIPs to consumers and have effectively filled in the market gap by becoming writers of long term naked put options. These guarantees are in various forms like a guaranteed interest rate credit or a return of premium and so on. Pricing for such guarantees involves significant model and assumptions risk. Even then, the insurer is exposed to a significant downside tail risk where in extreme event scenarios, the economy might slow down and stock markets may crash. Hence, the non-availability of appropriate hedges for these guarantees

One way is to enter into long-term interest rate swap contracts where the insurer can exchange its market variable interest rate earnings with fixed interest rate earnings.

in the market exposes the insurance companies to significant downside risks because of the inability to transfer this risk. Insurer should consider limiting such products to a percentage of portfolio to avoid getting into considerable risk of asset liability mismatch.

Hence, to summarize, ALM for an insurer should consist of and address the following issues.

- ALM is of utmost significance for non-linked contracts sold by an insurer. An insurer should try and match the nature, term and currency of the liabilities while aiming for highest investment return.
- Nature of the contract broadly implies fixed vs. variable nature of the contract. If liabilities are fixed, then a close match should be aimed for and if variable as in the case of participating contracts, then some degree of mismatch can be practiced to achieve higher returns.
- Matching by term is difficult for an insurer given the timings of cash flows are not certain as well as non-availability of a liquid long duration bond market in India. However, to insulate itself from interest rate risk, maximum possible duration matching should be aimed for.
- Consistency in measures of assets and liabilities is also a key area. Any inconsistency in measure itself might require the company to recapitalize even if assets and liabilities were closely matched.
- A long-term reinvestment risk is a real risk for an insurer where future premiums need to get invested at unknown market rates. Practical hedges through interest rate swaps might ease up the risk considerably.
- Investment guarantees are non-diversifiable risks as compared to mortality risk where having a large pool of people enhances diversification. Economic markets going bad can have a ripple down and concentrated effect on all economic guarantees simultaneously and hence such guarantees should be carefully considered especially given that suitable hedge instruments are currently unavailable in India.

If liabilities are fixed, then a close match should be aimed for and if variable as in the case of participating contracts, then some degree of mismatch can be practiced to achieve higher returns.

The author is CFO and CIO, Max New York Life Insurance Company Ltd.

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Changing Priorities in a Dynamic World

ALM for Insurers

ARUP CHATTERJEE OBSERVES THAT ASSET LIABILITY MANAGEMENT IS NOT A SIMPLE THEORY THAT CAN BE LEARNT OVERNIGHT. IT INVOLVES A COMPREHENSIVE STUDY OF SEVERAL GLOBAL FACTORS THAT ARE EVER-CHANGING; AND HAS TO BE REVIEWED FROM TIME TO TIME.

Introduction

Opportunity is risk, for without risk there are no financial rewards. The primary role of management is to evaluate opportunities in light of their attendant risks and to develop a complete risk profile, an ambitious undertaking for any organization. **Asset-liability management** (ALM) can be defined as the ongoing process of formulating, implementing, monitoring and revising strategies related to assets and liabilities to achieve an organisation's financial objectives, given the organisation's risk tolerances and other constraints. ALM is relevant to, and critical for, the sound management of the finances of any organisation that invests to meet its future cash flow needs and capital requirements[1].

But risk is a chameleon; it can look quite different when management limits its view to a specific internal application rather than expanding the view to include multiple stakeholders. Insurance companies assume the common risks of individuals, businesses, and government: fortuitous losses resulting from ill health, disability, and catastrophic events such as earthquakes, hurricanes, and conflagrations; liabilities arising from certain actions, retirement, or death. Insurance allows people, businesses, and government to take risks they cannot afford to take without it—and society is advanced. Since insurance is so instrumental to the economic fabric of our society, regulations are needed to make sure insurers are effective and efficient. Insurance is of no help to anyone if the risks insurers assume put them out of business. Globalization of insurance products and services complicates matters, leading to a world of new and different risks. In addition, more stakeholders are driving a greater emphasis on making market, credit, and operational risks more

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1 Society of Actuaries, Specialty Guide on ALM, 2003, cited in *IAIS Standard on asset-liability management* (2006) and *IAIS Issues paper on asset-liability management* (2006]

transparent, pushing for improvements in corporate governance. These newly awakened stakeholders include legislators and regulators, rating agencies, capital markets, competitors, consumer groups, customers, and insurers themselves.

Evolution of ALM

Both regulatory factors and economic factors have given rise to different ALM practices. The regulatory factors are:

- **Rate regulation:** Where tariffs exist for products, the incentive for managing investment portfolios is often diminished. This is so inasmuch as decisions affecting the pricing of products can take into account expected returns on investments. Taking out this interaction by imposing mandatory tariffs may reduce the degree of coordinated planning carried out by the industry.

  Highly competitive pricing environments can motivate insurers to undertake higher return/higher risk investment portfolios in order to make up for technical losses from under-pricing the products. Investment returns have contributed significantly to total operating results in the developed insurance markets over the last 25 years.
- **Investment regulation:** Restrictions on type, concentration, mix, and quality of investments all put further constraints on the investment strategies available to insurers. In Canada, for example, up until 1992, the *Insurance Companies Act* restricted the types of investments life insurance companies could hold by providing a detailed list of the asset classes and investment limits. After 1992, the law adopted a ***prudent portfolio*** investment regulation that allows managers to pursue a broader class of investments while employing a prudent manager's discretion. The prudent approach implies that managers must act with due diligence using experience and skills that are comparable to other managers' actions in similar situations within the industry. This new rule grants flexibility to Canadian life insurance companies in matching asset portfolios with their liabilities. The Boards of Directors of these companies are required to develop and approve written investment policies that encourage prudent behaviour. This change provides Canadian life insurers with a more modern regulatory environment and the ability to invest and operate more actively without cumbersome constraints.
- **Tax regulations:** The tax treatment of alternative investments may restrict their use. Examples are heavy taxation of foreign-issued instruments, heavy corporate taxation on investment profits, tax-free status for certain securities (i.e. public-sector bonds may be tax-exempt, as are municipal bonds in the USA). Such special treatments often give the investment manager the decision of weighing the gain from not paying taxes on interest income received from tax-free securities, versus obtaining the higher interest rate available from corporate or other taxable securities, but paying the extra taxation on capital gains.

Periods of rising investment returns heighten insurer management's awareness of the role that investment management can have in overall profitability.

The economic environment factors are:

- **Financial market depth/liquidity:** A fairly liquid market affords investors the price and quality signals needed for decisions on asset composition. Without active bond and equity trading investors are unable to determine what risks are associated with certain types of bonds. Neither is it how they react to changes in interest rates and other economic indicators. A fairly broad market provides investors with options for matching liabilities with investments of different maturities, and interest rate sensitivities.
- **Economic stability:** This stability facilitates the analysis of risks and returns in the financial markets. Volatile markets are more difficult to measure, and so to manage. Stability however is not necessary, and in fact instability has spurred countries on to realise they need to manage assets and liabilities more carefully. Yet it is desirable for developing the metrics to have stability in markets.
- **Economic booms:** Periods of rising investment returns heighten insurer management's awareness of the role that investment management can have in overall profitability. Periods of high interest rates and rising equity values can drive competitiveness with regard to investment strategies. As a result of

Methods have been developed to provide insurers with greater investment returns while ensuring a degree of liquidity and cash-flow balance.

the many ways the environmental factors affect the options available to managers for the practice of ALM, it is not surprising there are many differences in how it is practiced around the world. In spite of these factors, however, there is also simply the issue of insufficient exchange of information, education, and experience with ALM techniques.

Learning from Past Failures

Besides the environmental factors mentioned already, the growth of ALM techniques and know-how has also much to do with learning from ALM failures. In the U.S. there is quite a history of insurer failures, which have led great changes in regulatory oversight as well as industry self-management. These failures were accelerated by a highly competitive environment which created a multitude of new risks for insurers.

Heightened competition in the financial services market in the U.S. in the 1980s, in which the savings products offered by life insures were challenged by products from banks and mutual funds, drove insurer management to take bold new strategies. The methodologies which applied in the more settled environment were no longer adequate. Riskier investment portfolios, a move to more interest-sensitive products, greater guarantees on returns, all contributed to much greater risk for companies. Life insurance contracts which offered a variety of options to policyholders, such as settlements, policy loans, and surrender or renewal privileges, became more risky for companies when interest rates fluctuated. This is because the value of the options rose in many instances with the rise of interest rates. For example, policyholders guaranteed loan options at 4 percent interest were being offered 6 or greater percent return on government bonds. Thus, life insures lost as there was great financial disintermediation. As interest rates fluctuated greatly, it was only natural that some companies approached financial crises.

The leading causes of insolvencies in the U.S. during the last 15 years have been inappropriate investments in high-yield non-investment grade bonds, commercial mortgages, and real estate. However, inadequate liquidity, poor management of investment function including insufficient analysis and reporting of the investment function to top management, also contributed.

Baldwin United Life Insurance Company went bankrupt in 1983, having annual sales of 1.6 billion dollars the previous year. Two primary causes were unrealistic promises on interest rate returns on insurance and annuities to customers, mismatching assets and liabilities.

First Executive Life Company went insolvent in 1991, with 60 billion dollars in coverage in effect, and billions in liabilities. High-risk investments in high-risk bonds was largely at fault.

Mutual Benefit, the 6th largest life insurer in the U.S., had assets of $13.1 billion when it was taken over in 1991. A high concentration (37% of its investment portfolio) in real estate, contributed greatly to the demise of a company that had been in business since 1846.

A more recent lesson of inadequate ALM can be found in Japan. Nissan Mutual life, a Japanese company with 17 billion dollars of assets, sold annuities paying guaranteed interest rates of 5 percent or greater without hedging these liabilities. A drop in government bond yields created a large gap between the interest rates Nissan Mutual promised and the returns it was making on its investments. In 1997 the company was taken over by the Japanese Finance Minister, with losses of 2.5 billion dollars.

From this experience and the competitive forces, methods have been developed to provide insurers with greater investment returns while ensuring a degree of liquidity and cash-flow balance. The methods vary by line of business, as there are significant differences in how ALM is practiced for Life and Non-life.

Significance of ALM

While ALM is a well-established discipline in the insurance industry in many jurisdictions, ALM techniques are still evolving. For life business, ALM initially focused on asset-liability matching, with the primary goal of minimising interest rate risk, whereas for some types of non-life business ALM attempted to manage volatile outcomes more appropriately. Nowadays,

for most insurers, ALM has changed to focus also on value optimisation. ALM looks at all risks requiring coordination of the insurer's assets and liabilities, especially market risk (including interest rate and credit spread risk, currency risk, equity and, sometimes, real estate risk), underwriting risk and liquidity risk. Credit risk may be an integral part of managing these risks. Only those aspects of credit risk which require the coordination of the insurer's assets and liabilities are considered part of ALM.

The objective of ALM is not to eliminate risk. Rather, it is to manage risks within a framework that includes self-imposed limits. In setting limits for particular types of risk, the insurer should consider its solvency position and its risk tolerance. Limits should be set after careful consideration of corporate objectives and circumstances, and should take into account the projected outcomes of scenarios run using a range of plausible future business assumptions. Within these limits, risks can be reduced if this is cost effective, or increased, if justified by the expectation of enhanced returns and the availability of additional capital, without endangering the capacity of the insurer to meet its commitments to policyholders.

ALM also helps insurers balance competing and legitimate objectives for growth, profit, and risk. The key is to understand and forecast changes in economic value using company and market data, appropriate company and industry specific assumptions, and appropriate financial models. An insurer should be able to forecast changes in economic values over a range of plausible and adverse scenarios (using deterministic or stochastic approaches) and to evaluate the implications of such scenarios on its solvency position.

The ALM implications of new products should be considered during the design process. For example, the insurer should have reasonable assurance that sufficient assets will be available with the characteristics required for the new business. In some cases, ALM considerations may lead an insurer to conclude that a product should not be offered.

The ALM process chosen will vary from entity to entity; and reflect circumstances relevant to each insurer and external and internal constraints. External constraints include supervisory and legislative requirements, rating agency concerns, and the interests and expectations of policyholders and other stakeholders. A significant constraint is the liquidity of the assets and liabilities which may compromise the ability to price, measure and hedge exposures. In many less developed countries the lack of deep, liquid and well-functioning financial markets may also be a significant constraint. Internal constraints, such as asset allocation limits, reflect the insurer's management philosophy or professional judgement (although these may also be influenced by external constraints). In addition, the availability of skilled staff could pose internal constraints.

ALM was developed in 1970s in response to a sharp rise in the level of volatility of interesst rates. It has evolved into a set of techniques that enable the fianncial instititutions to manage a host of risks , of which interest certainity is only one. It is likely to play a growing role in the insurance industry. Several forces are at work: Consolidation in the insurance industry is creating ever-larger and more complex companies in need of the risk management tools that ALM offers. Regulators and ratings agencies are focusing increasingly on the ALM practices of the insurers they follow. And, dramatic improvements in computer technology support a trend towards more sophisticated modeling techniques.

ALM standardisation is needed. Rallying around a common ALM framework would simplify communication, speed development, reduce costs, and promote adoption. At present, however, several obstacles remain. Basic ALM terms mean different things to different practitioners. Communication between life and non-life ALM practitioners is almost non-existent. Their diversity of approaches limits the usefulness of model output to third parties such as rating agencies and regulators.

ALM standardisation is needed. Rallying around a common ALM framework would simplify communication, speed development, reduce costs, and promote adoption.

IAIS 's work on ALM

The IAIS *Insurance core principles* (ICPs)[2] that relate directly to ALM are:

ICP 18: Risk assessment and management:

2 IAIS Insurance core principles and methodology (2003)

The supervisory authority requires insurers to recognise the range of risks that they face and to assess and manage them effectively.

Essential Criteria a: The supervisory authority requires and checks that insurers have in place comprehensive risk management policies and systems capable of promptly identifying, measuring, assessing, reporting and controlling their risks.

Essential Criteria b: The risk management policies and risk control systems are appropriate to the complexity, size and nature of the insurer's business. The insurer establishes an appropriate tolerance level or risk limit for material sources of risk.

ICP 21: Investments: The supervisory authority requires insurers to comply with standards on investment activities. These standards include requirements on investment policy, asset mix, valuation diversification, asset-liability matching, and risk management.

Essential Criteria i: The supervisory authority requires that insurers have in place effective procedures for monitoring and managing their asset-liability positions to ensure that their investment activities and asset positions are appropriate to their liability and risk profiles.

The need for an appropriate application of ALM is also addressed in two other IAIS papers:

i) Standard on asset management by insurance companies (1999), paragraph 4: A key driver of the asset strategy adopted by an insurer will be its liabilities profile, and the need to ensure that it holds sufficient assets of appropriate nature, term and liquidity to enable it to meet those liabilities as they become due. Detailed analysis and management of this asset-liability relationship will therefore be a pre-requisite to the development and review of investment policies and procedures which seek to ensure that the insurer adequately manages the investment-related risks to its solvency. The analysis will involve, inter alia, the testing of the resilience of the asset portfolio to a range of market scenarios and investment conditions, and the impact on the insurer's solvency position.

ii) Guidance paper on investment risk management (2004), paragraph 8: This paper should be considered in conjunction with other principles, standards or guidance papers developed by the IAIS, in particular the *Principles on capital adequacy and solvency* (2002), the *Solvency control levels guidance paper* (2003) and the *Stress testing by insurers guidance paper* (2003). Given the particular importance of the liability structure in determining the investment policies, and the key role of asset-liability management for insurers, this paper should be considered together with any IAIS work thereon.

The IAIS Standard on asset-liability management (2006) paper describes best practices for asset-liability management (ALM) that a well managed insurer would be expected to follow and identifies 11 minimum requirements (see Box 1).

Supervisors should ensure that insurers in their jurisdiction meet these requirements. The requirements set out in this standard apply to both life and non-life business. Insurers should understand the risks they are exposed to and develop ALM policies to manage them effectively. They should apply techniques appropriate for the nature of their business, the risks they undertake and local market conditions. Every insurer should have an ALM policy, but not all ALM risks need to be assessed using complex techniques. For example, simple or short term business may call for less complex ALM techniques.

The IAIS has also developed an accompanying *Issues paper on asset-liability management* (2006). It provides additional information on asset-liability measurement, and management techniques; and contains an appendix with definitions of ALM related terms.

Every insurer should have an ALM policy, but not all ALM risks need to be assessed using complex techniques. For example, simple or short term business may call for less complex ALM techniques.

Enterprise Risk Management

Enterprise Risk Management (ERM) is an evolutionary concept and is fast becoming a part of a corporation's risk management culture. It requires a company to treat all risks as a portfolio and manage them in a holistic manner within an integrated risk management framework. Some insurers use ERM as part of their strategic decision-making framework to exploit opportunities to create value and optimise their risk/reward profile. ERM considers all sources of risk to an insurer and ALM constitutes a vital element within an ERM framework.

Minimum ALM Requirements

i. The supervisor requires that insurers have in place effective procedures for monitoring and managing their asset-liability positions to ensure that their assets and investment activities are appropriate to their liability and risk profiles and their solvency positions.

ii. ALM should be based on economic value and should consider the change in economic value that will arise from a range of plausible scenarios. Accounting and regulatory values that involve non-economic considerations and conventions may also be considered within an ALM framework, representing additional constraints on the cash flows valued.

iii. The ALM measurement tools used should be appropriate to the nature and circumstances of the insurer and the risk characteristics of the line of business.

iv. The insurer should examine all risks requiring the coordination of its assets and liabilities. The ones that are significant in terms of their potential impact on economic value should be covered by an ALM framework. These may include, in whole in or in part:
   a) Market Risk
      - interest rate risk (including variations in market credit spreads)
      - equity, real estate and other asset value risks
      - currency risk
      - related credit risk
   b) Underwriting Risk
   c) Liquidity Risk

v. The insurer should use appropriate metrics to measure exposure to market risk and related credit risk. More sophisticated models should be used for more complex portfolios of products and investments in order to model the portfolios reliably.

vi. The insurer should take into account risks posed by options embedded in new and in-force policies. It should identify ways to mitigate the impact of the options, while ensuring that policyholders are treated fairly. ALM should assess the possible effects such embedded options can have throughout the life of the insurance policies.

vii. The insurer should structure its assets so that it has sufficient cash and diversified marketable securities to meet its obligations as they fall due.

   The insurer should have a plan to deal with unexpected cash outflows, by such means as holding sufficient liquid or readily marketable assets or by having a formal credit facility.

viii. The board of directors should approve the insurer's strategic ALM policy, taking account of asset-liability relationships, the insurer's overall risk tolerance, risk and return requirements, solvency position and liquidity requirements. Senior management is responsible for implementing the ALM policy.

ix. In formulating its overall strategy, an insurer should consider the ALM strategies appropriate to the characteristics of each distinct block of business, and should also take into account the interaction between blocks.

x. The insurer should be organised so that there is a close and continuing liaison between the different areas that need to be involved with ALM. The organisational structure depends on the nature, size and complexity of the insurer, and should enable the organisation to maintain effective ALM.
   To the extent practicable, the monitoring of ALM risk and processes should be organisationally separate from the functions overseeing investments, pricing and management of in-force business.
   The mandate, roles and responsibilities of the ALM function should be clear, appropriate and well understood within the insurer.
   The supervisor should examine whether the interrelationship of functions is appropriate.

xi. The insurer should develop and implement controls and reporting procedures for its ALM policies that are appropriate for its business and the risks to which it is exposed. These should be monitored closely and reviewed regularly.

Source: *IAIS Standard on asset-liability management* (2006)

The ERM is a process that starts at the top (i.e., board of directors) and filters down through the entire organization. A strong ERM discipline creates value and may lead to improving a firm's competitive advantage and optimal capital structure besides providing the management with the ability to make better decisions and may help to eliminate surprises. It is mainly concerned with the evaluation of risk processes, risk controls and the quantification of risk exposures.

The leading rating agencies have been a driving force behind the development of ERM practices as it has become an important component of the financial strength ratings process. Insurers have started to adopt economic capital models (EC models) as part of their ERM practice. One reason for the development of such models has been the fact that rating agencies have started to incorporate a company's in-house capital models into the ratings process.

The IAIS is also presently developing a *Standard (and guidance) on enterprise risk management for capital and solvency purposes.*

Impact of Solvency II and IFRS

The profound changes in the risk management of insurance companies, brought about by the increasing complexity and variety of risks over the last two decades, have made it necessary to revise prudential regulations (Solvency II) and to adapt the international accounting standards (IFRS). The objective of the new accounting standards is to offer a better view of all companies, particularly with regard to the risks they run. IFRS and Solvency II should lead to a genuine evolution in the management of insurance companies, by empowering them with respect to their risks (identification, measurement and management).

Conclusion

The increasingly competitive and constantly changing nature of the financial services industry is beginning to drive many insurance companies to move beyond traditional profitability measures to more sophisticated value models based on cash flows and modern portfolio theory. At the same time, increased volatility in the global financial markets has spurred significant efforts to improve risk management practices.

Increased volatility in the global financial markets has spurred significant efforts to improve risk management practices.

In today's insurance market, many products have become so commoditized that profit margins have been squeezed razor thin. It seems to me that there remains a lot of profit to be earned in areas that have heretofore been considered uninsurable. But the profit will have to be *earned* by an insurer undertaking the homework necessary to study the available hedging instruments, and synthesizing those that are not yet available. Insurance firms that take asset liability management (ALM) and broader risk management seriously will withstand pressure on solvency margins much better in financial crises

ALM is a complex process. One does not simply open up the textbook and turn to the back page for the model answer. Literally hundreds of pages of information can be churned out – an important task is to determine what is useful to report to management. What indicators show management the performance of their investments and the asset-liability position?

More importantly, management needs to be provided with qualitative and informed judgement on the results. Therefore it is important to establish such measures early on in the process. Of course, the template for results and the process should always be regularly reviewed for improvement and in consideration of the changing environment. Many insurers conduct such reviews annually.

We are all, to some degree, familiar with the concepts of risk management, and even may agree with some of them. Putting them into practice is the challenge, although not as challenging as one may have first thought.

Even if you're on the right track, you'll get run over if you just sit there.
Will Rogers (1879-1935)

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ALM in the Financial Services Industry

Monitoring the Risks Effectively

KHUSHROO B. PANTHAKY NOTES THAT IN THE ALM PRACTICES THAT EVOLVED SINCE THE EARLY 1980'S, CURRENTLY COMPANIES AND ORGANIZATIONS IN THE FINANCIAL SERVICES INDUSTRY ARE INCREASINGLY USING MARKET VALUE ACCOUNTING FOR CERTAIN BUSINESS LINES.

The term, **'Asset-Liability Management (ALM'),** can be termed as a risk management technique designed to earn an adequate return while maintaining a comfortable surplus of assets beyond liabilities. It takes into consideration interest rates, earning power, and degree of willingness to take on debt and hence is also known as Surplus Management. ALM was initially initiated by financial institutions and banks and is now widely prevailing in industries too. The Society of Actuaries Task Force on ALM Principles, Canada, defines ALM as: "Asset Liability Management is the on-going process of formulating, implementing, monitoring, and revising strategies related to assets and liabilities in an attempt to achieve financial objectives for a given set of risk tolerances and constraints."

Asset Liability Management basically refers to the process by which an institution manages its balance sheet in order to allow for alternative interest rate and liquidity scenarios. Insurers, banks and other financial institutions provide services which expose them to various kinds of risks, such as credit risk, interest risk, and liquidity risk. ALM is an approach that provides institutions with protection that makes such risk acceptable. ALM models enable institutions to measure and monitor risks and provide suitable strategies for their effective management. It is therefore appropriate for institutions (banks, finance companies, leasing companies, insurance companies and others) to focus on asset liability management when they face financial risks of different types.

ALM is not just a formalization of this understanding but also a way to quantify and manage these risks. Further, even in the absence of a formal ALM program, the understanding of these concepts is of value to an institution as it provides a genuine picture of the risk/reward trade-off in which the institution is engaged. Asset Liability Management is a first step in the long-term strategic planning process.

Earlier Phase

In the 1940s and the 1950s, there was abundance of funds in banks in the form of demand and savings deposits. On account of low cost of deposits, banks had to develop mechanisms by which they could make efficient use of these funds. Hence, the focus then was mainly on ALM. But as the availability of low cost funds started to decline, liability management became the focus of bank management efforts.

Liability management essentially refers to the practice of buying money through cumulative deposits, funds and commercial paper in order to fund profitable loan opportunities. But with an increase in volatility in interest rates and with a severe recession damaging several economies, financial institutions started to concentrate more on the management of assets as well as liabilities.

Categories of Risks

Risk can be defined as the chance or the probability of loss or damage. Risks can be categorized into credit risk, capital risk, market risk, interest rate risk, and liquidity risk. These categories of financial risk require focus, since financial institutions do have complexities and rapid changes in their operating environments.

Credit risk: The risk of counter party failure in meeting the payment obligation on the specific date is known as credit risk. Credit risk management is an important challenge for financial institutions and failure on this front may lead to failure of the institution. The recent failure of many Japanese banks and failure of savings and loan associations in the 1980s in the USA are important examples, which provide lessons to others. It may be noted that the willingness to pay, which is measured by the character of the counter party, and the ability to pay, need not necessarily go together.

The other important issue is contract enforcement in countries like India. Legal reforms are very critical in order to have timely contract enforcement. Delays and loopholes in the legal system significantly affect the ability of the lender to enforce the contract. The legal system and its processes are notorious for delays showing scant regard for time and money, which are the basis of sound functioning of the market system. Over two million cases are pending in 18 High Courts alone and more than 200,000 cases are pending in the Supreme Court for admission, interim relief or final hearing. Since thousands of cases are pending in the lower courts, legal experts suggest that the average time taken by Indian courts for deciding a civil case is around 7 to 10 years. The right of the lessor to repossess the leased asset in case of default by the lessee was not very clear until the Bombay High Court ruled (and the Supreme Court upheld) that the *lessor has a right* to so repossess (in the case of Twentieth Century Finance Corporation vs. SLM Maneklal Industries Ltd.). Hence the required rate of return due to feeble contract enforcement mechanisms becomes larger in countries like India. Therefore a good portion of non-performing assets of commercial banks in India is related to deficiencies in contract enforcement mechanisms. Credit risk is also linked to market risk variables. In a highly volatile interest rate environment, loan defaults could increase, thereby affecting credit quality.

Capital risk: One of the sound aspects of the banking practice is the maintenance of adequate capital on a continuous basis. There are attempts to bring in global norms in this field in order to bring in commonality and standardization in international practices. Capital adequacy focuses on the weighted average risk of lending and to that extent, the banks are in a position to realign their portfolios between more risky and less risky assets.

Market risk: Market risk is related to the financial condition, which results from adverse movement in market prices. This will be more pronounced when financial information has to be provided on a *marked-to-market* basis, since significant fluctuations in asset holdings could adversely affect the balance sheet of banks. In the Indian context, the problem is accentuated because many financial institutions acquire bonds and hold them until maturity. When there is a significant increase in the term structure of interest rates, or violent fluctuations in the rate structure, one finds substantial erosion of the value of the securities held.

Interest rate risk: Interest risk is the change in prices of bonds that could occur as a result of changes in interest rates. It also considers change in impact on interest income due to changes in the rate of interest. In other words, price as well as reinvestment risks require focus. In so far as the terms for which interest rates were fixed on deposits differed from those for which they were fixed on assets, banks incurred interest rate risk i.e., they stood to make gains or losses with every change in the level of interest rates. As long as changes in rates were predictable both in magnitude and in timing over the business cycle, interest rate risk was not seen as too serious, but as rates of interest became more volatile, there was a felt need for explicit means of monitoring and controlling interest gaps.

Liquidity risk: This risk affects many Indian institutions. It is the potential inability to generate adequate cash to cope with a decline in deposits or increase in assets. To a large extent, it is an outcome of the mismatch in the maturity patterns of assets and liabilities. First, the proportion of central government securities with longer maturities in the Indian bond market, significantly increasing during the 1970s and 1980s, affected the banking system because longer maturity securities have greater volatility for a given change in interest rate structure. This problem gets accentuated in the context of change in the main liability structure of the banks, namely the maturity period for term deposits. For instance in 1986, nearly 50% of term deposits had a maturity period of more than 5 years and only 20%, less than 2 years for all commercial banks. But in 1992, only 17% of term deposits were more than 5 years whereas 38% were less than 2 years (Vaidyanathan, 1995).

We find that newer instruments are being floated with shorter maturities accompanied by roll over of earlier instruments with shorter maturities. In order to meet short-term liability payments, institutions have to maintain certain levels of cash at all points of time. Thus managing cash flows becomes crucial. Institutions could access low cost funding or could have assets that have sufficient short-term cash flows. Hence, banking institutions need to strike a reasonable trade off between being excessively liquid and relatively illiquid. The failures of many non-banking financial companies can be ascribed to mismatch between asset-liability maturities, since many of them have invested in real estate type of assets with short-term borrowings. Particularly in a declining real estate market, it becomes difficult for non-banking financial companies to exit and meet obligations of lenders. In such a context, liquidity becomes a much more significant variable even at the cost of forgoing some profitability.

Techniques for assessing Asset-Liability Risk

Techniques for assessing asset-liability risk came to include **Gap Analysis** and **Duration Analysis**. These facilitated techniques of managing gaps and matching duration of assets and liabilities. Both approaches worked well if assets and liabilities

comprised fixed cash flows. But cases of callable debts, home loans and mortgages which included options of prepayment and floating rates, posed problems that gap analysis could not address. Duration analysis could address these in theory, but implementing sufficiently sophisticated duration measures was problematic. Accordingly, banks and insurance companies started using **Scenario Analysis.**

Under this technique, assumptions were made on various conditions, for example:-

- Several interest rate scenarios were specified for the next 5 or 10 years. These specified conditions like declining rates, rising rates, a gradual decrease in rates followed by a sudden rise, etc. Ten or twenty scenarios could be specified in all.
- Assumptions were made about the performance of assets and liabilities under each scenario. They included prepayment rates on mortgages or surrender rates on insurance products.
- Assumptions were also made about the company's performance - the rates at which new business would be acquired for various products, demand for the product etc.
- Market conditions and economic factors like inflation rates and industrial cycles were also included.

Based upon these assumptions, the performance of the company's balance sheet could be projected under each scenario. If projected performance was poor under specific scenarios, the ALM committee would adjust assets or liabilities to address the indicated exposure. But the main shortcoming of scenario analysis was that, it was highly dependent on the choice of scenarios. It also required that many assumptions were to be made about how specific assets or liabilities will perform under specific scenarios. Gradually the firms recognized a potential for different type of risks, which was overlooked in ALM analyses.

Asset-Liability Management Approach

ALM in its most apparent sense is based on funds management. Funds management represents the core of sound bank planning and financial management. Although funding practices, techniques and norms have been revised substantially in recent years, it is not a new concept. Funds management is the process of managing the spread between interest earned and interest paid while ensuring adequate liquidity. Therefore funds management has following three components, which have been discussed briefly.

A. Liquidity Management

Liquidity represents the ability to accommodate decreases in liabilities and to fund increases in assets. An organization has adequate liquidity when it can obtain sufficient funds, either by increasing liabilities or by converting assets promptly and at a reasonable cost. Liquidity is essential in all organizations to compensate for expected and unexpected balance sheet fluctuations and to provide funds for growth. The price of liquidity is a function of market conditions and market perception of the risks, both interest rate and credit risks, reflected in the balance sheet and off-balance sheet activities in the case of a bank. If liquidity needs are not met through liquid asset holdings, a bank may be forced to restructure or acquire additional liabilities under adverse market conditions. Liquidity exposure can stem from both internally (institution-specific) and externally generated factors. Sound liquidity risk management should address both types of exposure. External liquidity risks can be geographic, systemic or instrument-specific. Internal liquidity risk relates largely to the perception of an institution in its various markets: local, regional, national or international. Determination of the adequacy of a bank's liquidity position depends upon an analysis of the following:

- Historical funding requirements
- Current liquidity position
- Anticipated future funding needs
- Sources of funds
- Present and anticipated asset quality
- Present and future earnings capacity
- Present and planned capital position

As all banks are affected by changes in the economic climate, the monitoring of economic and money market trends is key to liquidity planning. Sound financial management can minimize the negative effects of these trends while accentuating the positive ones. Management must also have an effective contingency plan that identifies minimum and maximum liquidity needs and weighs alternative courses of action designed to meet those needs. The cost of maintaining liquidity is another important prerogative. An institution that maintains a strong liquidity position may do so at the opportunity cost of generating higher earnings. The amount of liquid assets a bank should hold depends on the stability of its deposit structure and the potential for rapid expansion of its loan portfolio. If deposit accounts are composed primarily of small stable accounts, a relatively low allowance for liquidity is necessary.

Additionally, management must consider the current ratings by regulatory and rating agencies when planning liquidity needs. Once liquidity needs have been determined, management must decide how to meet them through asset management, liability management, or a combination of both.

B. Asset Management

Many banks (primarily the smaller ones) tend to have little influence over the size of their total assets. Liquid assets enable a bank to provide funds to satisfy increased demand for loans. But banks, which rely solely on asset management, concentrate on adjusting the price and availability of credit and the level of liquid assets. However, assets that are often assumed to be liquid are sometimes difficult to liquidate. For example, investment securities may be pledged against public deposits or repurchase agreements or may be heavily depreciated because of interest rate changes. Furthermore, the holding of liquid assets for liquidity purposes is less attractive because of thin profit spreads.

Asset liquidity or how "salable" the bank's assets are in terms of time and cost, are of primary importance in asset

management. To maximize profitability, management must carefully weigh the full return on liquid assets (yield plus liquidity value) against the higher return associated with less liquid assets. Income derived from higher yielding assets may be offset if a forced sale at less than book value is necessary because of adverse balance sheet fluctuations.

Seasonal, cyclical, or other factors may cause aggregate outstanding loans and deposits to move in opposite directions and result in loan demand, which exceeds available deposit funds. A bank relying strictly on asset management would restrict loan growth to that which could be supported by available deposits. The decision whether or not to use liability sources should be based on a complete analysis of seasonal, cyclical and other factors, and the costs involved. In addition to supplementing asset liquidity, liability sources of liquidity may serve as an alternative even when asset sources are available.

C. Liability Management

Liquidity needs can be met through the discretionary acquisition of funds on the basis of interest rate competition. This does not preclude the option of selling assets to meet funding needs and conceptually, the availability of asset and liability options should result in a lower liquidity maintenance cost. The alternative costs of available discretionary liabilities can be compared to the opportunity cost of selling various assets. The ability to obtain additional liabilities represents liquidity potential. The marginal cost of liquidity and the cost of incremental funds acquired are of paramount importance in evaluating liability sources of liquidity. Consideration must be given to such factors as the frequency with which the banks must regularly refinance maturing purchased liabilities, as well as an evaluation of the bank's ongoing ability to obtain funds under normal market conditions.

The obvious difficulty in estimating the latter is that until the bank goes to the market to borrow, it cannot determine with complete certainty that funds will be available and/or at a price, which will maintain a positive yield spread. Changes in money market conditions may cause a rapid deterioration in a bank's capacity to borrow at a favorable rate. In this context, liquidity represents the ability to attract funds in the market when needed, at a reasonable cost vis-à-vis asset yield. The access to discretionary funding sources for a bank is always a function of its position and reputation in the money markets.

Although the acquisition of funds at a competitive cost has enabled many banks to meet expanding customer loan demand, misuse or improper implementation of liability management can have severe consequences. Further, liability management is not free of risk. This is because concentrations in funding sources increase liquidity risk. For example, a bank relying heavily on foreign inter-bank deposits will experience funding problems if overseas markets perceive instability in U.S. banks or certain economies. Replacing foreign source funds might be difficult and costly because the domestic market may view the bank's sudden need for funds negatively. Again over-reliance on liability management may cause a tendency to minimize holdings of short-term securities, relax asset liquidity standards and result in a large concentration of short-term liabilities supporting assets of longer maturity. During times of tight money, this could cause an earnings squeeze and an illiquid condition.

Also if rate competition develops in the money market, a bank may incur high cost of funds and may elect to lower credit standards to book higher yielding loans and securities. If a bank is purchasing liabilities to support assets, which are already on its books, the higher cost of purchased funds may result in a negative yield spread.

Preoccupation with obtaining funds at the lowest possible cost, without considering maturity distribution, greatly intensifies a bank's exposure to the risk of interest rate fluctuations. That is why in cases of banks which particularly rely on wholesale funding sources, the management must constantly be aware of the composition, characteristics, and diversification of its funding sources.

Procedure for Examination of Asset Liability Management

In order to determine the efficacy of Asset Liability Management, one has to follow a comprehensive procedure of reviewing different aspects of internal control, funds management and financial ratio analysis.

Conclusion

ALM has evolved since the early 1980's. Currently companies and organizations in the financial services industry are increasingly using market value accounting for certain business lines. Techniques of ALM have also evolved. The growth of OTC derivatives markets has facilitated a variety of hedging strategies. A significant development has been securitization, which allows firms to directly address asset-liability risk by removing assets or liabilities from their balance sheets. This not only eliminates asset-liability risks but also frees up the balance sheet for new business.

ALM departments are addressing (non-trading) foreign exchange risks as well as other risks. Also, ALM has extended to non-financial organizations. Corporations have adopted techniques of ALM to address interest-rate exposures, liquidity risk and foreign exchange risk. ALM technique will go a long way in managing volume, mix, maturity, rate sensitivity, quality and liquidity of the assets and liabilities so as to earn a sufficient and acceptable return on the portfolio.

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SRI and Relevance of ALM

Insurance Companies in India

'INSURANCE COMPANIES SHOULD ADOPT CLEAR POLICIES OF SOCIALLY RESPONSIBLE INVESTMENT AND IMPLEMENT THEM IN THEIR ASSET MANAGEMENT PRACTICES' EMPHASIZES RAJESH KHANDELWAL. HE FURTHER ADDS THAT THESE COMPANIES SHOULD JOIN THE MOVEMENT OF SOCIALLY RESPONSIBLE INVESTING, WHICH IS GAINING MOMENTUM WORLDWIDE.

The capital of insurance companies is small relative to the firm's assets or liabilities, and so small percentage changes in assets or liabilities can translate into large percentage changes in capital. Hence, insurance companies increasingly focus on Asset-Liability risk. There is an apprehension among insurance companies in India that the Socially Responsible Investment (SRI) strategy may cause a mismatch between assets and liabilities. The problem they perceive is not that the value of assets might fall or that the value of liabilities might rise. It is that the capital might be depleted by narrowing of the difference between assets and liabilities and that the values of assets and liabilities might fail to move in tandem. We shall discuss about Socially Responsible Investment (SRI) in this article.

Insurance companies are big investors focused on the long-term, and therefore have a preference for companies that will deliver long-term value. Being themselves experts in risk analysis, they also take a growing interest in the way the companies they invest in manage their own risks; increasingly, they play their role as institutional investors, investigating how the boards of these companies handle risk issues, looking at the reporting methods that are implemented, and occasionally advising changes in corporate governance schemes.

For the past two decades, in western industrialized world, the movement of socially responsible investing (SRI) has kept continuously increasing, in relation with the alarming visibility of global warming and other environmental threats, but also with some pressing societal issues such as the rise of social inequalities and exclusion, child labor in overseas factories, or human rights violations.

There is an apprehension among insurance companies in India that the Socially Responsible Investment (SRI) strategy may cause a mismatch between assets and liabilities.

Insurance companies in India should start incorporating sustainability-related issues into their investment decisions. They should take a leaf out of the views expressed by Nobel peace prize winners Mr. Albert Arnold (AL) Gore Jr. and Intergovernmental panel on climate change (IPCC), on sustainability-related issues. They should become sustainability-oriented and understand that businesses which deliberately ignore the societal and environmental dimensions do so at their own peril: they may experience lawsuits, tarnished reputations, and see their possibility to operate in important markets significantly reduced. In this regard, the minds should change at a relatively fast pace. Insurance companies should adopt clear policies of socially responsible investment and implement them in their asset management practices. By choosing to integrate environmental and social criteria into their decision making process, these companies should join the movement of socially responsible investing, which is gaining momentum worldwide. Insurance

A growing number of financial analysts across the globe, although they do not represent the majority of the profession yet, now suggest that the companies that pay close attention to social and environmental risks and opportunities will be more competitive in the long run.

regulator in India should take lead role in creation of new sustainability indices like the Dow Jones Sustainability Group Indices and the FTSE4Good Indices. It can seek the assistance from rating agencies for this purpose.

Socially responsible investing (SRI) consists in the inclusion of non-financial criteria, such as environmental, social and governance considerations, into the process of investment decision-making. It thus aims at achieving non-financial results as well as a financial return. In today's society, a number of observers – and scientists alike – suggest that there is no fundamental contradiction between the promotion of social or environmental values on the one hand, and the search for financial gains on the other; on the contrary, the good performance of socially responsible indices in western industrialized world, as well as several recent studies, support the idea that values-led investing does not compromise financial gains. In 2004, a study requested by the UNEP Finance Initiative bearing on the materiality of social, environmental and corporate governance issues to equity pricing has provided strong support for the thesis that effective management of these issues will contribute to an increase in shareholder value (UNEP Finance Initiative, 2004/2). A growing number of financial analysts across the globe, although they do not represent the majority of the profession yet, now suggest that the companies that pay close attention to social and environmental risks and opportunities will be more competitive in the long run.

Three main SRI strategies are available for responsible investors: screening, shareholder activism and community investing. The practice of screening, the first SRI strategy, consists in choosing securities based on social or environmental criteria; the choice process may be negative, positive, or a combination of both. For instance, negative screening implies the exclusion of companies that manufacture harmful products such as tobacco, alcohol or weapons, or that have developed management practices considered negatively. Alternatively, positive screening implies buying shares of companies that bring a positive contribution to society, such as developing renewable energies, sustainable buildings and organic agriculture, fostering diversity in the workplace and social inclusion, or other beneficial practices. And of course, any combination of both strategies is possible. Screening is thus a selection process, whereby the investor filters the shares that he prefers to buy or to avoid.

The second option open to socially responsible investors is shareholder activism. The ownership of company shares provides investors with rights and responsibilities, and they should use their rights as corporate owners to advocate whatever cause they deem appropriate – ranging from animal protection to access for the disabled, for instance. Socially responsible investors can use three main approaches to express themselves, which represent three levels of engagement: dialogue with company management, supporting shareholder resolutions, and eventually divesting from the company. By utilizing one of these three levers, shareholders aim at raising the awareness of the management of the target company as to how the way it conducts its business affects all stakeholders, including customers, employees, the supply chain, the surrounding communities, as well as civil society and the environment.

Lastly, the third identified SRI strategy resides in community investing. For instance, financial institutions choosing this path can propose low interest rate loans to people who earn a low or moderate income, and who would otherwise be at a loss to finance affordable housing; they can develop such programs either in poor areas of the cities of rich countries, or in villages in developing countries. Small business loans can also help finance local projects, following the well-known example of the Nobel peace prize winners Mohammad Younus and Grameen Bank that has implemented a well-known and successful micro-credit system in Bangladesh. Community investing provides socially oriented investors with a concrete way to

improve people's lives, and to see tangible social results in the medium term; therefore it is a very satisfying investment strategy. Although the financial return generated by these projects is usually lower than that of "blue chips" for instance, these investments have nevertheless their place in a well-diversified portfolio; but what counts most here is that the negative return gap is largely outweighed by the benefits at the community level, which can themselves entail new opportunities for the activity of the financial institution involved.

Hence the insurance industry should not be apprehensive about negative returns gap from SRI strategy, thinking of increase in liability and asset-liability mismatch. 'Being socially responsible does not mean being charitable', as quoted by Dr. Manmohan Singh, Prime Minister of India.

Insurance companies should divest their tobacco and spirits investments, if any, not only on moral grounds, but also for good economic reasons.

Today, investments using at least one SRI strategy represent over $ 2 trillion in assets (to be compared with $ 40 billion in 1984), and account for about 11.3% of the estimated $ 19.2 trillion under professional management in the US, according to the latest Trends Report by the Social Investment Forum (Social Investment Forum, 2003). In other words, more than one out of every nine dollars under professional management in the United States – including pension funds, mutual funds, foundations, religious organizations and community development financial institutions – is involved in socially responsible investing. The SRI trend is gradually influencing mainstream investment: the number of mutual funds using one or more social criteria has grown to nearly 200 in the United States, and hundreds of financial institutions of all kinds have used their voting rights in publicly held companies to support shareholder resolutions or vote their proxies on corporate social responsibility issues.

To a certain extent, the choice of insurance companies to adopt SRI policies is a matter of consistency between risk management and financial management: is it appropriate for an insurance company to invest in tobacco firms with a view to reap high short and long term benefits, knowing that at the same time these firms manufacture products that increase public health risks and will generate heavy compensations for the victims? Insurance companies should divest their tobacco and spirits investments, if any, not only on moral grounds, but also for good economic reasons. Insurance companies help businesses to protect themselves from risks. What if the insurance companies do not extend the risk cover to tobacco and alcohol firms and businesses? This simple reality should lead the insurance companies to extend the logic of divesting from "bad" sectors, and instead, to invest in sustainable or socially responsible companies.

Besides, the choices made by the insurance industry exert an influence on corporate behavior in many other sectors, and thus this industry can act as a lever to encourage positive change in society as a whole. For all these reasons, the investment policies of the insurance sector have a great effect in designing the future of our economic system, and they condition the quality of our life and that of our children; therefore the integration of extra-financial concerns and values in the investment choices of insurance companies is of great importance.

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Risk Management within Financial Services

Economic Capital of Insurers

V.S. LAKSHMI OBSERVES THAT ECONOMIC CAPITAL IS AN INSURANCE COMPANY'S OWN MEASURE OF THE AMOUNT OF CAPITAL IT SHOULD HOLD, AS OPPOSED TO THE OPINION OF AN EXTERNAL STAKEHOLDER E.G. REGULATORY CAPITAL.

Financial markets have been quite volatile in the past few months mainly due to the US sub-prime lending crisis and its knock-on effects on the rest of the world.

The recent failure of the UK Bank 'Northern Rock' failure was attributed to the failure of its board and executive team to create a durable funding model which could withstand the exceptional set of market circumstances that occurred in summer 2007 along with lapses in the regulation.

The latest report from International Monetary Fund (IMF) warns that:

- the potential losses from the US credit crunch will reach $1 trillion and can be higher; and
- losses are spreading from sub-prime mortgage assets to other sectors, such as commercial property, consumer credit, and company debt.

The IMF report also says that there was a 'collective failure' to appreciate the risky borrowing by financial institutions. The importance of risk management cannot be over-emphasised.

When the market volatility increases, capital becomes constrained. It is imperative that the insurance companies understand the risks they are taking. Hence the increased popularity of capital models amongst the financial services industry, regulators and the rating agencies.

What are the different definitions of capital models in use?

There are many definitions of capital, including (1) Risk Based Capital (2) Economic Capital (3) Internal Capital Assessment (ICA) in the UK (4) Solvency II in Europe. There may be many forms and definitions but the underlying objective is the same i.e. 'risk management'. The different stakeholders of an insurance company, namely the policyholders, regulators, shareholders, rating agencies and the management team are trying to understand the following:

- What is the nature and level of risk the insurance company is taking?
- What is amount of capital required to support the insurance company's total risk? What is the expected return on that capital?
- What level of capital will provide adequate protection for the policyholders?
- Is the insurance company over or under capitalised?
- How can the insurance company's capital be managed efficiently within the stipulations imposed by regulatory framework, investors and rating agencies?

When the market volatility increases, capital becomes constrained. It is imperative that the insurance companies understand the risks they are taking.

It is losses from unexpected events that lead to volatility in the profits, assets and liabilities, potential insolvency and hence a capital requirement.

- What is the shareholder value creation/ deterioration from different business units?
- What are the major sources of concentration and diversification? Are there any potential opportunities to expand or diversify some parts of business?
- How do we improve our portfolio performance? Which exposures should we grow, sell and how much? What is the optimum strategy for expansion or reduction?
- How do we increase/maintain the insurance company's rating?

What is Economic Capital?

Economic capital is one of those expressions that mean different things to different people. A precise definition of economic capital is difficult to find although the term has been around for some time. One definition is 'the amount of capital a firm should hold to keep its realistic balance sheet solvent following a series of events that might be considered as unexpected, yet still reasonably likely to occur in practice'. [Source: An approach to economic capital for financial services firms by Bruce Porteous, Louise McCulloch and Pradip Tapadar]. It should be noted that economic capital is an insurance company's own measure of the amount of capital it should hold, as opposed to the opinion of an external stakeholder e.g. regulatory capital.

It is losses from unexpected events that lead to volatility in the profits, assets and liabilities, potential insolvency and hence a capital requirement. This mainly arises from (1) lower than expected returns from assets (e.g. stock market volatility, reduction in interest rates, etc.) and/or (2) as a result of having to incur more than expected losses (e.g. a very large catastrophe weather event, court-award increasing the size of claims, etc.).

Quantification of Economic Capital

Economic capital is a measure of capital requirement to sustain potential unexpected losses up to a specified confidence interval. The main drivers are: insurance risk, market risk, credit risk, liquidity risk, operational risk and group risk.

Insurance risk: Typically refers to the risk of deviation of actual experience from the expected at the time of underwriting, examples of factors that may cause include:

- frequency of claims,
- average claim size,
- size of catastrophe events,
- cost of reinstating the reinsurance,
- latent claims,
- court awards,
- policy contract disputes
- change in volume of new business
- change in the mix of business, e.g. proportion of EL and Motor business
- Competition and the impact on the adequacy of premium.

Market risk: This refers to the volatility in the value of assets as well as income from assets and includes:

- Stock market volatility
- Change in interest rates
- Change in exchange rates
- Defaults
- Mismatch in assets & liabilities; reinvestment risk.

Credit risk: Refers to the risk of recovering money owed by third parties; it includes default, partial impairment and any time delays from any of the following parties:

- Reinsurers
- Intermediaries
- Policyholders
- Banks
- Issuers of investments.

Liquidity risk: This refers to the lack of liquid financial assets to meet its obligations when they fall due. The measurement includes:

- the extent of mismatch between assets and liabilities,
- value of assets held in cash or highly liquid forms.

Operational risk: This refers to the occurrence of an incident which may lead to a difference in the business process and it includes:

- fraud
- technology – data systems, telephone lines, etc.
- reputation
- adequacy of resources and management of employees
- legal actions against the insurance company

Group risk: Risks of being a member of a group like:

- the accumulation of risks from one counterparty,
- reputation damage of one member of the group may affect all other members within the group.

The results from the internal capital assessment models for UK General Insurance Market indicate that the insurance and market risks are the main drivers of the capital requirement for general insurance companies. [Source: FSA Insurance Sector Briefing – ICAS lessons and looking ahead to Solvency II, October 2007].

Quantification of 'economic capital' involves creation of stochastic financial models. These generate thousands of simulations with different scenarios for catastrophe events, large claims, change in equity returns, etc.; this is often the most technically demanding part of the exercise. Simplistically these models enable the insurance company to simulate a large number of possible scenarios and assess the financial consequences.

All the calculations may appear very complex and difficult to calculate. Data is the key but judgment and experience are equally important inputs. Over engineered complex models could undermine its credibility and effectiveness. The companies need to strike a balance between having a sophisticated, highly accurate, risk-assessment system, and having one that is workable. It all depends on the size of business and the type of risks being taken. In some cases, accuracy may be extremely important, yielding results that may be counter-intuitive. In others, it may be better to use imperfect simple data to begin with and refine it later, rather than delay implementing a system.

What are the challenges with the quantification of economic capital?

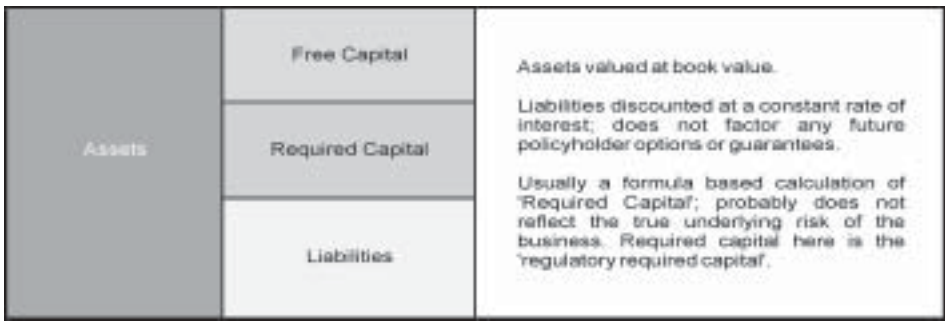
The main challenges are:

- identification of all the risks
- establishing any correlation between the risks
- data collection
- IT system
- buy-in from the senior management team
- definition of risk measure (99.5% confidence over 1-year time horizon or 95% confidence interval over 5-year time horizon)
- competition from other companies
- embedding the model to the daily operation of the business

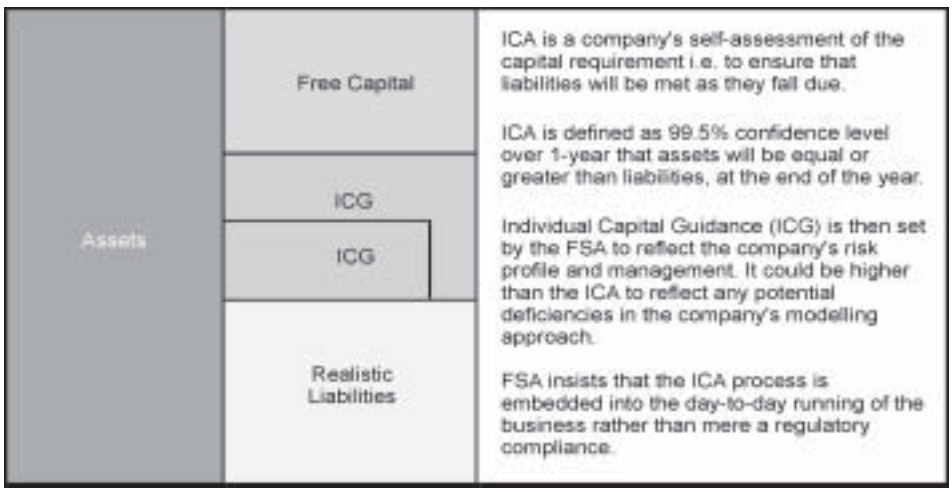
This is a dynamic process that needs to be constantly developed, amended and re-calibrated for changing market conditions.

Other measures of capital: are they different?

Traditional approach

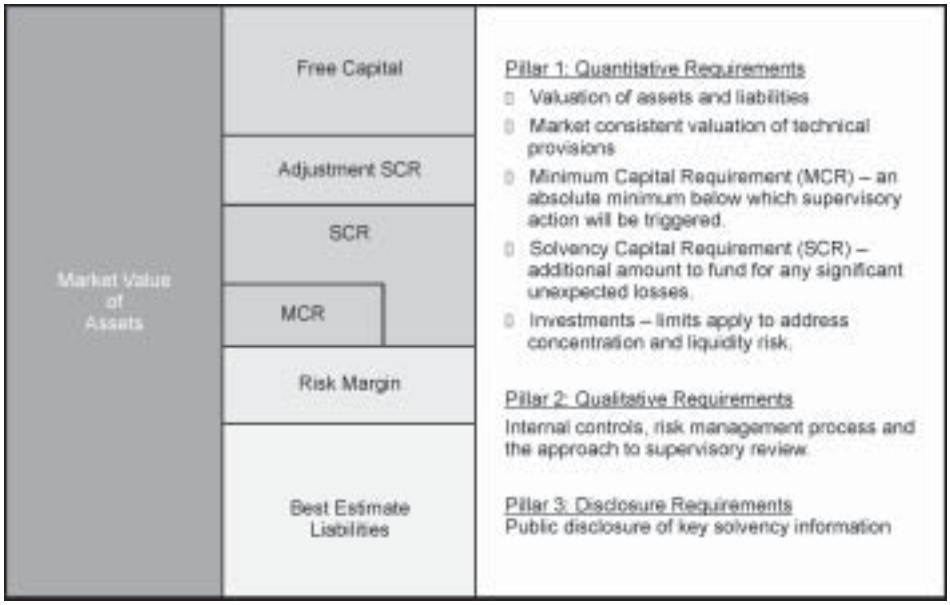


UK Internal Capital Assessment (ICA) Approach



Solvency II

Solvency II has a three-pillar similar approach to Basel II (applicable to the Banks in Europe).



There are some differences in approach between risk-based capital models, ICA, Solvency II and economic capital models but the main components are very similar.

What are the benefits?

Large companies such as Munich Re, AXA and Royal SunAlliance (RSA) have used the economic capital models for the past few years.

Munich Re stated at London Investors Day Conference on 28/06/2005: "The improvement in our economic capital position is the result of our long-standing strategy of balancing risks worldwide and across business segments. Our strength is the way we diversify risks in both reinsurance and primary insurance. In addition, we have systematically reduced the concentration of risks in our investment portfolio by cutting back our shareholdings in German financial institutions such as BHW, Allianz and Commerzbank. Internal risk models like Munich Re's explain relationships, which cannot be derived from published balanced sheets. The benefits of broad risk diversification, which are identifiable with the risk model, are gaining recognition and acceptance worldwide."

All the three insurers have gained a lot from embedding their capital models into the risk management. The economic models provided a large diversification benefit which resulted in the reduction in their capital requirements. The resultant release of capital provides opportunity for expansion, increased dividends, etc.

Risk appetite

Whilst the main use of economic capital is to guard against major disasters and satisfy regulatory requirements, it is also important to safeguard profitability. Keeping too much capital in reserves hinders growth; accurate calculations of risks and capital requirements can actually release capital. There may be diversification benefits from assessing capital at a group level because some risks may offset each other.

Economic capital models provide the full range of risks/returns results, allowing strategy to be formulated on where to use the capital. Companies, and their stakeholders, will have a better understanding of their appetite for risk, and where they are prepared to accept volatility in exchange for higher returns.

Reinsurance strategy

One of the basic functions of an insurance company is reinsurance purchase. Most insurance companies rely on their broker and reinsurers to come up with the best protection, terms and price. However this is normally done in isolation without considering other risks. An economic model will allow reinsurance strategy to be analysed as part of a company's entire corporate strategy and risk management. Insurers will be able to measure the outcomes of a large number of reinsurance strategies e.g. varying the excess, limits, aggregate deductibles, aggregate limits, etc. They will be able to measure even the ratings and probability of default of potential reinsurers.

Investment strategy

Most sophisticated insurers have considered the assets they hold in relation to their liabilities for many years. An economic capital model will allow an investment strategy to be formulated that not only considers the trade-off of risk and return of the assets themselves, but also in relation to other risks and cash flows an insurance company faces.

Maintaining ratings

Rating agencies like Standard & Poor, Moody's and AM Best use the economic capital valuation process for measuring capital adequacy. The analysis, documentation and reports provide evidence of effective risk management of the insurance company. This helps to maintain and improve ratings from the credit rating agencies.

Products, pricing and distribution strategies

Insurance companies provide the risk transfer mechanism for transferring the risk of unexpected loss from commercial enterprises and private individuals to the insurance market. The changes in the market place and the risk environment suggest that pricing will get keener; therefore it is essential to understand clearly all the risks being taken in order to price insurance contracts competitively and profitably.

Good embedded economic capital models of a company may allow an insurance company to identify potential opportunities and threats ahead of competition.

Risk is inherent in the insurance business. Economic capital enables the company to measure performance of different business units, classes of business and distribution channels on the risk-adjusted return on capital (RAROC) basis. This enables in strategic decision-making as to which parts to grow/contract. This ensures that the risk of following different strategies is taken into account when comparing returns.

By working out the return on capital for each policy and adjusting it for each risk, underwriters can calculate how much they ideally need to charge to policyholders if they need to cover their risks. If they cannot get that minimum premium, then they can walk away unless they are using it as part of a relationship management process with the policyholder or intermediary.

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Business planning, Mergers and Acquisitions

Economic capital calculations can be used to decide whether to move into a new line of business or new markets or make an acquisition that may offer good returns. This is harder to calculate because of limited information available and they tend to be judgement call based on general strategy and market knowledge. Even so, economic capital calculations underpin the decisions of large financial institutions' strategic decision-making and are becoming very popular.

Summary

Economic capital can provide a better understanding of the trade-off between risk and reward by enabling insurers to quantify the risks they face, the capital needed to support them and the real risk-adjusted returns that are being made or to be targeted.

Risk-based capital regulation is already in place in countries like UK and Switzerland. Solvency II is soon going to be operative for all insurance companies operating in Europe. They are very similar to the economic capital models which have been recognized by the banking industry already. Therefore a closer alignment of the way the insurance companies manage their business and how they are regulated can only benefit all the parties involved - insurers, policyholders and shareholders.

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Some Thoughts on **Microinsurance**

Challenge for Stakeholders

TINA MAKHIJA OPINES THAT MICRO INSURANCE THAT HAS ASSUMED PARAMOUNT IMPORTANCE IN THE INDIAN DOMAIN HAS TO BE NURTURED CAREFULLY IN ORDER TO ENSURE THAT THE BENEFITS REACH THE UNDER PRIVILEGED SECTIONS OF THE SOCIETY.

At the outset, let us look at some of the ways micro insurance has been described in order that a certain level of clarity is accomplished.

> "…the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved"
>
> *-Draft Donor Guidelines, CGAP Working Group (2003)*

> "…not a specific product or product line. It is also not limited to a specific provider type. Microinsurance is the provision of cover to a specific market segment, i.e. low-income persons."
>
> *- IAIS Issues Paper (2007)*

Micro-insurance refers to the protection of assets and lives against insurable risks of target populations such as micro-entrepreneurs, small farmers and the landless, women and low-income people through formal, semiformal and informal institutions. Such products are often bundled with micro-savings and micro-credit, thereby allocating scarce resources to micro-investments with the highest marginal rates of return. Microinsurance is the most underdeveloped part of microfinance. Yet various schemes exist that are viable, benefiting both the institutions and their clients. Such schemes have generally served two major purposes: (i) they have contributed to loan security; and (ii) they have served as instruments of resource mobilization. The greatest challenge for microinsurance lies in the combination of viability and sustainability with outreach.

Microinsurance - A Bit of History

Microinsurance is not a new invention. The "industrial insurance" sold at factory gates in American cities in the early 1900s made the Metropolitan Life Insurance Company the largest company – not just insurance company – in the world at that time. Their industrial insurance was the forerunner of today's commercial microinsurance. It was simply a response to a market demand managed in a manner that made the products appropriate for the market. The delivery channels - agents at the factory gates – were specific to this market. The premiums reflected the particular risks of the factory worker market. Coverage responded to the workers' specific needs. Premium collection – on payday as the workers exited the factories – was efficient. In short, industrial insurance was a response to a market niche that provided access to quality insurance products for low-income workers, and access to a huge market for the insurers.

From industrial workers making premium payments at the factory gates, to increased efficiency of factory management collecting premiums, or even covering their employees directly, this historical microinsurance moved into the mainstream. From here, many developed countries were able to generate substantial pools of investment funds that helped drive ever-growing economies.

Industrial insurance was a response to a market niche that provided access to quality insurance products for low-income workers, and access to a huge market for the insurers.

In developing countries, access to this market has not been easy and insurance products have remained focused on the high-end and corporate markets. Because most low-income people in developing countries are self-employed or employed in small firms, they have had little or no access to insurance products that fit their needs. The appropriate delivery channels, types of coverage, product simplicity, premiums, and premium collection methods that this market requires have not been available.

Other microinsurance mechanisms have substituted for the lack of commercial microinsurance in these markets. Mutual insurance (where a group owned insurance business is professionally managed) and community-based microinsurance (where local people manage an insurance fund) have been available for many years. Mutual products often cover a wide range of low-medium- and high-income individuals and have offered often simple and limited insurance products directly appropriate to their members. Such products and programs have been available for over two hundred years in some form.

Microinsurance initiative in India

Microinsurance, which is based on the same principles as Microfinance and development through enterprise, has become quite popular in India recently, with some of the big players in the Indian insurance space making a foray into this field.

The most inspiring one among these is the "Yeshasvini" initiative, which was pioneered by Dr. Devi Shetty, a heart surgeon, who is also the founder of "Narayana Hrudayalaya", an internationally acclaimed heart care hospital in Bangalore, India. "Yeshasvini", which was launched in 2003, insured 1.6 million in its first year, when the premium was as low as Rs.60 per annum (about $1.5). The number insured rose to 2.2 million in its second year, but dropped to 1.45 million in the third year owing to an increased premium of Rs.120 per annum (about $3). Nevertheless, Yehsasvini is a pioneering initiative in India and Dr. Devi Shetty's concern for the health of the rural poor is simply amazing. Dr. Shetty, who studied medicine in India and in the UK, was also Mother Teresa's personal doctor.

Yeshasvini's success is all the more special since it was not driven by any insurance company but was successful in mobilizing co-operative societies, with help from the Karnataka State Government's Department of Co-operation.

Yehsasvini is a pioneering initiative in India and Dr. Devi Shetty's concern for the health of the rural poor is simply amazing.

To what risks and economic stresses are low-income persons vulnerable?

Country	Priority risk
Uganda	Illness, death, disability, property loss, risk of loan
Malawi	Death, food insecurity, illness, education
Philippines	Death, old age, illness
Vietnam	Illness, natural disaster, accidents, livestock disease
Indonesia	Illness, children's education, poor harvest
Lao P.D.R.	Illness, livestock disease, death
Georgia	Illness, business losses, theft, death, retirement income
Ukraine	Illness, disability, theft
Bolivia	Illness, death, property loss (including crop loss in rural areas)

Micro insurance Delivery channels

- Partnerships between insurers and distribution agents like cooperatives and MFIs (e.g. Zurich Bolivia and BancoSol)
- Self-insuring MFIs that assume the risk of offering insurance to their clients (e.g. Spandana, India)
- Informal mutual assistance schemes (e.g. burial societies, South Africa)
- Healthcare providers offering health care schemes (e.g. Nkoranza Community Health Insurance Plan, Ghana)
- Regulated insurance companies that serve the low-income market directly (e.g. Delta Life, Bangladesh)
- Regulated insurance companies that have created microinsurance agents (e.g. Tata-AIG, Bangladesh)
- Insurance companies that target the low-income market through retailers (e.g. Seguros Azteca and Electra, Mexico)
- Community-based schemes that pool funds, carry risk and manage a relationship with a healthcare provider (L'Union Technique de la Mutualité Malienne, Mali)

- Insurance distributed through cooperatives (e.g. Yeshasvini, India)
- Mutual insurance companies created by credit union/cooperative federations (e.g. TUW SKOK, Poland; La Equidad, Colombia)

Most common types of microinsurance products

- Credit life
- Term life/Personal accident
- Savings life
- Property insurance
- Endowment life
- Health insurance
- Agriculture

If insurers are to serve customers who differ widely in terms of service costs and risks, the only viable inducement for them is an adequate margin, lest they exclude small farmers, - micro-entrepreneurs and people in remote areas.

Today we have a variety of microfinance institutions with national and local outreach. Many of them have already become corporate agents or have entered into referral arrangements with insurers. However, semiformal institutions including savings and credit cooperatives, NGOs and self-help groups which have immense potential in carrying the message of insurance as also solicit insurance business are yet to be utilized in a manner where their true potential can be harnessed to increase the insurance penetration levels. This is due to restrictions in the existing agency regulations in terms of minimum eligibility norms in order to become an agent.

Depending on the existence and vigour of such institutions, the following alternatives have emerged, for offering strategic entry points for microinsurance development:

- Adapting formal insurance arrangements to the needs of the micro-economy.
- Upgrading non-formal (comprising semiformal and informal) insurance arrangements with insurance companies.
- Linking formal and non formal insurance institutions with banks and self-help groups.
- Establishing new local institutions providing microinsurance services.

The first three strategies may be inter-connected:

- Adapting insurance companies to the requirements of the micro-economy is a first step; then
- Linking them as wholesale institutions to self-help groups as retailers; and finally,
- Upgrading self-help groups e.g. to the level of financial cooperatives or village banks.

If insurers are to serve customers who differ widely in terms of service costs and risks, the only viable inducement for them is an adequate margin, lest they exclude small farmers, - micro-entrepreneurs and people in remote areas. Only sound social insurance, which combines a social mandate with profit-making, has a chance of sustainability

Key stakeholders in the development of Microinsurance

- Potential and current policyholders
- Actual and potential delivery channels
- Risk carriers
- Industry associations, networks
- Insurance infrastructure: training, technical assistance, research, data warehousing…
- Policymakers, regulators and supervisors
- Donors and development agencies

The challenge for all of these stakeholders is to … create a culture of insurance among low-income persons!!

The author is working with the Corporate Marketing Group-Bancassurance, IFFCO-TOKIO General Insurance Co. Ltd.

Conscious Options for Protection

Life Insurance Products

GARY R. BENNETT WRITES THAT THE CHANGING SOCIAL FABRIC OF INDIA TOGETHER WITH THE GROWING INCIDENCE OF LIFESTYLE AND ENVIRONMENT RELATED DISEASES, AND THE INCREASING COST OF DISEASE MANAGEMENT MAKE FINANCIAL PROTECTION IMPERATIVE.

Evolution is inevitable! Life as it used to be in the 70's or the 80's is practically non-existent. The pace or the speed at which we live our lives today, maybe, was unimaginable a couple of years ago. Lives have changed so much and along with these changes have increased the uncertainties of life. In fact in today's time all of us love to live life in the fast lane, take risks, overcome the uncertainties and emerge victorious. This is what we call a life in the twenty first century; a life full of adrenalin rush and uncertainties. What concerns most of us is however the fact that though we know there are uncertainties on our way, we do not really make an effort to dodge them or opt for necessary protection to enabling our families and ourselves to meet our desired goals mitigating the risk factor to its minimum. How we choose to handle these uncertainties of life lies in our hands. It is in our hand how we plan to handle our protection and wealth creation needs to meet our goals at every stage of life.

Accidents, disability, death are all pitfalls that could affect anyone. Protecting oneself against the ill effects of these financially could go a long way in mitigating the harm and only conscious action could help do so.

The purchase of life insurance is one such planned decision, and conscious choice that helps us minimize the risk of either living too long or dying too early. Accidents, disability, death are all pitfalls that could affect anyone. Protecting oneself against the ill effects of these financially could go a long way in mitigating the harm - and only conscious action could help do so. Life insurance is also a tool for long term wealth creation that enables us build a corpus to meet various long term needs by inculcating a disciplined savings behavior.

Spiritualist Neale Donald Walsch says "A life lived of choice is a life of conscious action. A life lived of chance is a life of unconscious creation." What is true of the spiritual journey of life is equally real for the material and financial existence.

Life insurance has a closer link to spiritual health than would appear. It is, about valuing one's life and the lives of one's loved ones. No one, who values his or her own life and of those loved ones, would fail to protect them against uncertainties. Life insurance is a tool that helps provide succor and support by protecting one's goals for oneself and one's family during the lifetime and beyond that.

Every life is unique in its own way and so are the financial needs or requirements that come with it. Therefore it is important that products must provide solutions tailored to what the individual needs. Life insurance is not just about providing protection against the uncertainties of life; it is also about providing tools for financial planning for events one is relatively certain about and would like to plan for. As an example, for someone the goal may be to plan for buying a house, for another it could be for a child's education and for yet another, retirement planning. Separate lives, separate goals … and the need for separate insurance plans and arrangements! With lives transecting individual paths, insurance services provide customized and need based solutions.

Beyond financial protection against the uncertainties of life, life insurance products also help in long-term wealth creation. Life insurance allows for the most resourceful variations of the product design, depending on individual needs. There are products in the Indian domain presently that offer several adaptations of the protection-and-wealth creation formula to meet the needs at various life stages.

Planning for one's life is a more complex process than planning for one's dinner needs or monthly detergent supplies … or even a holiday! All too often, the needs are not felt needs - these are real, often unforeseen, and so complex that even a customer could fail to identify them fully. This makes buying life insurance products a complex decision.

Term policies are the least expensive and are suited to provide protection against loss of life or disability. Health insurance policies provide financial protection against loss arising due to disease, hospitalization and accident. There are products among health insurance plans that are the most comprehensive and cover the largest number of diseases. Also available in the market are comprehensive life as well as health protection insurance plans.

Endowment plans are the more traditional by nature and often perceived to be more transparent. Unit Linked Plans are market linked products that meet one's protection needs as well as help in long term wealth creation to meet specific needs of life, which are designed to meet the needs of growing children; and also retirement planning products to ensure that you do not compromise on the quality of life post your retirement.

While life insurance products conventionally fell into one of two broad categories of - term and cash value - products, recent years have seen more innovative variations, such as the universal life plan, which allows greater flexibility in premium payment and offers higher internal rate of return even while providing permanent insurance coverage.

These products also allow for altered payment plans at different times for the same policy. And then there are products allowing steady premium payment over the long term. And, of course, there are numerous variations and adaptations between the designs.

Products specifications vary. But the bottom-line is the need for protection. In India, the recognition of this need is relatively low - less than 25 per cent of Indians own life insurance. The findings of a very popular survey concluded: "A financially secure country cannot be built on the base of a small proportion of financially secure households."

In a more dynamic labor market and in the absence of established state-provided mechanisms of social security, households in India increasingly need to look to financial instruments to meet their asset accumulation and old-age goals.

The survey also found that 96 per cent of Indian households are financially at risk, as they cannot survive for more than 12 months on their current savings if their current income were to stop. Yet, a majority of the households are unaware of this risk and are optimistic about their future - with 54 per cent saying they were confident of their financial future! Perhaps it is this misplaced optimism that is the bigger problem.

It is such misplaced optimism that results in lack of financial planning to protect against the uncertainties of life. The changing social fabric of India - such as the break-up of the joint family system, and increasingly younger population - together with the growing incidence of lifestyle and environment related diseases, and the increasing cost of disease management make financial protection imperative.

Financial security is thus an essential element of inclusive growth. In a more dynamic labor market and in the absence of established state-provided mechanisms of social security, households in India increasingly need to look to financial instruments to meet their asset accumulation and old-age goals. Life insurance is one of the most important financial instruments for financial security. In this rapidly changing Indian economic and social environment, educating the consumers appropriately about life insurance will not only create awareness of the changing reality but also help reduce their vulnerability and above all improve the long-term financial security of the individual, the family and thereby the nation.

The author is Managing Director & Chief Executive Officer, Max New York Life Insurance Co. Ltd.

• प्रकाशक का संदेश

मैं मई के मध्य में 65 साल पुरे करने पर अध्यक्ष के कार्यालय को विराम देने के लिए तैयार हूँ। मैं इन वर्षो में अपने प्राधिकरण के साथ सम्बन्धों को पिछे मुड कर देखता हूँ। यह चार दशकों में से मेरी व्यवसायिक जिंदगी के सबसे अधिक संतुष्टि के दिन थे। मैं बीमा की वृद्धि एक अंकुरित पौधे से बड़े पेड़ के रूप में देख सका तथा इसके लिए वित्त क्षेत्र में ठीक जगह रक्षित कर सका। अब यह बैंकिग अथवा पूंजी बाज़ार का गरीब मित्र नहीं है। यह एक फलता फूलता उद्योग है जो अन्य के साथ प्रतिस्पर्धा में है व्यक्ति कि बचत को जुटा रहा है तथा इसे आवश्यक रूप से जरूरी संरचनात्मक ढाँचे को बनाने के लिए उपलब्ध करपा रहा है।

जो लोग बीमा को सरकारी एकाधिकार से स्वतन्त्र करने की वकालत करते है तथा मानते है कि देश में बडी संभाव्यता संचित होने की प्रतीक्षा कर रही है। पिछले कुछ वर्षों में प्रीमियम में अप्रत्याशित वृद्धि विशेष रूप से जीवन क्षेत्र में इन परिवर्तन की वकालत करने वालों को ठीक साबित किया है। एक अच्छा पाठ हमने सीखा है कि वृद्धि जरूरी नहीं है कि सार्वजनिक क्षेत्र के निवहिन पर हो। बीमा खंडशः इतने स्तर पर बढ़ा है कि सभी कम्पनिया एक चयोचित अंश प्राप्त कर सके तथा अधिक भागेदारों के लिए जगह हो। प्रिमियम के लिए अभियान इतना बाध्यकारी है कि निजि बीमाकर्ता निजि बीमाकर्ताओं ने अपने क्षेत्राधिकार को छोटे तथा मध्य दर्जे के नगरों तथा पहुँचाया है तथा इन स्थानों के साथ वह ग्रामीण क्षेत्र में भी पहुँचे हैं।

गैर जीवन क्षेत्र में, सभी क्षेत्रो में पिछले वर्ष प्राशुल्क मुक्ति की गई तथा बीमाकर्ताओं को दर निर्धारण की स्वतन्त्रता दी गई। यह धारणा थी की ऐसा कदम बाज़ार को गिरा देगा भविष्यवक्ता गलत साबित हुए तथा हमारे पास एक जबरदस्त गैर जीवन बाज़ार है जिसमे सभी बड़ी अन्तराष्ट्रीय पूनर्बीमा गतिविधियाँ स्थानिय बीमाकर्ताओं को समर्थन प्रदान करती है। बीमाकर्ताओं को समझौते की शर्त निर्धारित करने की स्वतन्त्रता खुलने के कगार पर है तथा जल्द ही प्रचलन में आयेगी।

निगमित व्यवसाय के प्रति दिवानापन के विपरित खुदरा व्यवसाय पर बल दिया जा रहा है यह गैर जीवन बाज़ार में बडा परिवर्तन है। खुदरा क्षेत्र में हैल्थ बीमा व्यवसाय पर्याप्त रूप से बढा है तथा पहली बार हमारे पास एकल हैल्थ तथा सम्बन्धित गतिविधियों के लिए। यह ऐसा क्षेत्र है जिसमे बहुत संभावनाए है और मुझे कोई शक नहीं है कि राज्य तथा केन्द्र सरकार के संयुक्ता प्रयत्नों से, बीमा कंपनियां तथा विनियामक, देश एक बृहत हैल्थ बीमा बाज़ार आने वाले वर्षो में देखेगा।

प्राधिकरण द्वारा प्रारंभ किये गए माइक्रो बीमा विनियमको को न केवल भारत में वरन विश्व की विनियामकों को समुदाय ने सराहना की है। इंटरनैशनल एसोसिएशन आफ इंशुरेंस सुपरवाइजर (आई ए आई एस) ने एक कार्यदल भारत को एक सक्रिय सदस्य के रूप में बनाया है। जिससे विश्व भर में सुपरवाईजरी तथा विनियामक मानकों को स्थापित किया जा सकें।

पिछले कुछ वर्षों में भारतीय बीमाकर्ताओं ने जो छलांग लगायी है वह मल्टीनैशनल बीमाकर्ताओं को रूचि को पुर्नबढ़ाता है। उन्होंने यह अनुभव किया है कि भारतीय बाज़ार काफी बड़े है जिनकी अनदेखी नहीं की जा सकती और जो हम साक्ष्य करते है वह है दूसरी पारी जिसमे मल्टीनैशनल बीमकर्ता भारतीय निगमों के साथ दल बना रहें है विशेषतः बैंको के साथ। विनियामक को सीमित मानव संसाधन उपलब्ध होने के कारण बड़े पैमाने पर बाज़ार वृद्धि ने दबाव बनाया है। ऐसे प्रयत्न किये जा रहे है कि एक प्रत्यक्ष भर्ती की प्रक्रिया स्टाफ तथा अधिकारियों के लिए की जाए तथा कुछ समयावधि में यह संभव है कि कार्यालय को बढ़ती बाज़ार से मिली चुनौतियों को पुरा किया जा सके।

मैं यह अभिज्ञान लेता हूँ कि भारत में बीमा बाज़ार की बड़ी मात्रा में इस प्रारंभिक चरण में है यह हमारा प्रयास है कि बाज़ार का मार्गदर्शन तथा पर्यवेक्षण तंत्र से भुक्त बाज़ार का बेहतर से बेहतर प्राप्त करने तथा छोटी-छोटी रुकावटों को दूर करे क्योंकी बाज़ार कभी सम्पूर्ण नहीं होता। यदि मैने सफलता प्राप्त की, छोटे रूप में ही सही तो इसका क्षेत्र मुझे प्राधिकरण के सदस्यों, प्राधिकरण के समर्पित अधिकारियों तथा कर्मचारियों, कई बीमा पेशेवर तथा बीमाकर्ताओं द्वारा दिखाई गई समझ को जाता है जिसके लिए मैं सभी का धन्यवाद देता हूँ।

मैं अपना आभार श्री सी एन एस शास्त्री के लिए भी करना चाहता हूँ जिन्होने मानद क्षमता में नाजूक स्थानों पर मार्गदर्शन किया जिसमे बाज़ार को प्राशुल्क मुका करना तथा मजबूत पर्यवेक्षण प्रणाली शामिल है।

सी. एस. राव

सी. एस. राव
अध्यक्ष

दृष्टि कोण

इस्लामिक वित्त उत्पादो विस्तृत रूप को अधिक पारदृश्य बनाने के लिए विनियामक तथा मार्गदर्शक दिशानिर्देश तैयार किये जा रहे हैं। हम इस उच्च मजबूत उद्योग के लिए अपने विनियामक ढाँचे पुर्न विचार करने के लिए प्रतिबन्ध है।

श्री टाई बुन
कार्यकारी निदेशक, मोनेटेरी एथोरिटी, सिंगपुर

विनियमन प्रणाली को ऊपर लाने के लिए वित्तिय स्थायित्व फोरम (एफ एस एफ) के कारकों की परीक्षा की जा रही जो कि अन्तराष्ट्रीय एसोसिएशन आफ बीमा सुपरवाइजरी (आई ए आई एस) के साथ काम करने से किया जा रहा है।

श्री मिचेल फ्लेमी
आईएआईस, कार्यपालक समिति के अध्यक्ष

निजी व्यवसायियों की क्षमता शहरी (भारतीय) बाजारों को लाभ उठा सके तथा आविष्कारी वितरण चैनल अधिक वृद्धि की और ले जाते हैं। ये अधिक व्यवसाय पालसी धारक को समझा कर अतिरिक्त व्यवसाय पैदा का रहे है जो शहरी बाजार का दोहन कर सकें हैं।

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

एक मजबूत जोखिम प्रबन्धन संस्कृति यह सुनिश्चित करती है कि स्टाफ हानि के मामले को देखती है जो भविष्य में होने वाली हानि को कम करने में सहायक होता है।

श्री हार्वी क्रोप
महा प्रबन्धक (सी ओ आर एस), आस्ट्रेलिया प्रूडेंशल रेगुलेटरी एथोरटी

मानव पूंजी विकास के लिए वित्तिय सेवा उद्योग को ठीक निति तथा दिशा की आवश्यकता है। उच्च प्रबन्धकों तथा विशेषज्ञों के प्रवेश पर ध्यान देने की आवश्यकता है।

डा जेटी अक्तर अजीज
बैंक निगारा, मलेशिया

प्रत्यक्ष रूप से राज्य के विधायक तथा विनियामक रिकार्ड बनाना चाहते है। हम स्थानिय, मानी हुई उपभोक्ता सुरक्षा देते है और साथ काम करते हुए हम सतत रूप से बढाते है तथा आधुनिकरण करते है बीमा विनिमयन प्रणालीका।

सुश्री सेंडी प्रेगर
एन ए आई सी अध्यक्षा तथा कंसास बीमा कमीशनर

सुनामी

डॉ.मोनिका कुलश्रेष्ठ कहती हैं, हाँलाकि 80% सुनामी, प्रशांत महासागर में ही आते हैं, लेकिन इससे बहुत से देशों के तटीय इलाकों को भी खतरा रहता है।

सुनामी एक ऐसी प्रक्रिया है जिसमें महासागर की लहरें एक श्रेणी में लगातार बहुत अधिक लम्बाई तक चलती हैं। दो लहरें मुख्यतः महासागर की सतह में आने वाले भूकम्पों द्वारा उत्पन्न होती हैं। पानी के अन्दर फटने वाले ज्वालामुखी एवं भूस्खलन द्वारा भी सुनामी की उत्पत्ति होती है। गहरे महासागर में, सुनामी लहरें लगभग 800 कि.मी./घन्टा की गति से संचरण करती हैं तथा लहरों की ऊँचाई एक फीट या उससे कम होती है। सुनामी लहरें साधारण समुद्री लहरें से अलग होती हैं। सुनामी लहरें में, दो शीर्ष लहरों के बीच की लम्बाई बहुत अधिक होती है (यह अक्सर 100 कि.मी. से अधिक होती है)। जैसे ही ये लहरें तट के पास पहुँचती है, इनकी गति धीमी हो जाती है, जिससे पानी इकट्ठा होकर, एकदम 10 मी. या उससे अधिक ऊँचाई तक पहुँजकर विनाशकारी हो जाती हैं। यह प्रभाव और भी कई गुणा बढ जाता है, जब ये लहरें किसी खाड़ी, पोताश्रय या लैगून में से होकर अंतःसथ्ल की ओर बढ़ती हैं। बड़े सुनामी में लहरों की ऊँचाई 30 मी. तक पहुँच जाती है, जबकि 3-6 मी. तक ऊँचाई वाली लहरों के सुनामी भी बहुत विनाशकारी हो सकते हैं। सुनामी तटीय हलाकों में रहने वाले लोगों के लिए एक बहुत बड़ा खतरा है। इनसे बहुत अधिक जान-माल की हानि होती है। हाँलाकि 80% सुनामी, प्रशांत महासागर में ही आते हैं, लेकिन इससे बहुत से देशों के तटीय इलाकों को भी खतरा रहता है।

प्लेट विवर्तनिक

प्लेट विवर्तनिक सिद्धांत के अनुसार, पृथ्वी एक ऐसे मॉडल पर आधारित है, जिसमें पृथ्वी स्थलमण्डल प्लेटों से बनी है, जिनकी मोटाई लगभग 70 से 250 कि.मी. तक होती है। ये प्लेटें एक रसायन स्तर पर तैरती हैं, जिसको दुर्बलता - मण्डल कहते हैं। ये प्लेटें पूरे भूपृष्ठ, जिससे महाद्वीप और समुद्री सतह दोनों ही शामिल हैं को कवर करती हैं और एक दूसरे के सापेक्ष चलती है, उससे परिसीमा का प्रकार पता चलता है। विस्तारण में प्लेटें एक दूसरे से दूर चलती हैं। सबइक्शन में दो प्लेटें एक दूसरे की तरफ चलती हैं और एक प्लेट दूसरी प्लेट के नीचे खिसक जाती है। रूपांतरण में दो प्लेटें क्षैतिज गति से एक दूसरे के ऊपर से निकल जाती हैं। गहरे महासागर में पाई जाने वाली खाईयाँ, सबइक्शन कटिबन्ध कहलाते हैं। ज्वालामुखी पर्वत या द्वीप श्रृंखलाएँ सबइक्शन कटिबन्ध से जुड़ी होती हैं। प्रशांत महासागर के किनारों के आस-पास जिन्हे कभी-कभी आग का गोला भी कहा जाता है।

भूकम्प और सुनामी

भूकम्प ज्वालामुखी फटने के कारण भी आ सकता है, लेकिन अधिकतर भूकम्प भ्रंश कटिबन्ध में प्लेट परिसीमा की गतिविधियों से ही उत्पन्न होते हैं। सबसे खतरनाक भूकम्प, सबइक्शन कटिबन्ध में ही आते हैं, जिसमें एक महासागरीय प्लेट, दूसरी महाद्वीपीय प्लेट के नीचे खिसक जाती है या किसी नयी महासागरीय प्लेट के नीचे खिसक जाती है। सभी भूकम्प, सुनामी उत्पन्न नहीं करते है। सुनामी उत्पन्न होने के लिए, भ्रंश जहाँ पर भूकम्प आता है, पानी के अन्दर या महासागर के आस-पास होना चाहिए। क्योंकि यह भूकम्प ही समुद्री लहरों के सुनामी में परिवर्तित करने में मददगार होता है। सबइक्शन कटिबन्ध में आने वाले भूकम्प और उनके द्वारा उत्पन्न होने वाले सुनामी सबसे अधिक तबाही मचानेवाले होते हैं।

सुनामी भूकम्प

2 सितंबर, 1992 को तटीय निकारागुआ के निवासियों द्वारा भूकम्प के भूटके महसूस किये गये (परिमाण 7.2)। भूकम्प के लगभग 20 से 70 मिनट के बाद, सुनामी तटीय निकारागुआ से जा टकराया, जिसकी लहरें लगभग 4 मीं ऊँजाई की थी, जिससे बहुत भारी जान-माल की तबाही हुई। यह सुनामी भूकम्प की वजह से आया। सूनामी भूकम्प को जल्दी से पहचानने का एक ही तरीका है और वह तरीका है भूकम्पीय गतिविधियों का ठीक प्रकार से अनुमान लगाना। दो और ऐसे ही तबाही मचाने वाले और विनाशकारी सुनामी भूकम्प हाल ही में जावा, इन्डोनेशिया (जून 2, 1994) और पेरू (फरवरी 21, 1996) में आये। खुले महासागर में सुनामी की लहरें कुछ से.मी. तक ही ऊँची होती है, लेकिन उथले पानी में लहरों की ऊँचाई बढ़ जाती है। गहरे से गहरे पानी में भी, सुनामी लहर की ऊर्जा, ऊपरी सतह से लेकर निचली सतह तक जाती है। जैसे ही सुनामी तटीय इलाकों पर धावा बोलता है, लहरों की ऊर्जा बहुत छोटी जगह में दब जाती है और लहरों की ऊँचाई के रूप में उभरती है। जिससे वह तबाह करनेवाली विनाशकारी लहरों में परिवर्तित हो जाती है।

सुनामी की गति

जहाँ पर महासागर की गहराई 6000 मी.

होती है, सुनामी की लहरों की गति लगभग 800 कि.मी / घन्टा होती है। ये प्रशांत महासागर के एक किनारे से दूसरे किनारे तक की दूरी, एक दिन से भी कम समय में तय कर लेती हैं। इनकी इतनी अधिक गति की वजह से सुनामी की लहरों के बारे में पता लगाया जा सकता है। वैज्ञानिक इस बात का पता लगा सकते हैं कि सुनामी अलग-अलग जगहों पर कब पहुँचेगा।

तटीय इलाकों के आस-पास के लक्षण बता सकते हैं कि सुनामी कितना बड़ा और प्रभावकारी हो सकता है। समुद्र के पानी के नीचे के लक्षण और किनारे की ढलान, आदि सुनामी के तट पर हमले को प्रभावित करते हैं। जब सुनामी तट पर पहुँचता है और तटीय इलाकों में घुस जाता है, पानी का स्तर कई मीटर तक ऊँचा हो जाता है।

पिछले सुनामी के इतिहास को देखते हुए, वैज्ञानिक यह बता सकते हैं कि सुनामी उत्पन्न होने की सबसे ज्यादा सम्भावना कहाँ पर है। पिछले सुनामी की ऊँचाई का परिणाम यह बताने में मददगार होता है कि भविष्य में आने वाला सुनामी कितना प्रभावशाली हो सकता है और कितना पानी कुछ मुख्य तटीय इलाकों में भर सकता है।

सुनामी संक्षेप में

- सुनामी जो तटीय इलाकों से टकराते हैं, अधिकतर भूकम्प के कारण आते हैं।
- कुछ सुनामी बड़े हो सकते हैं। तटीय इलाकों में इनकी ऊँचाई, 10 मी. या उससे अधिक हो सकती है।
- सभी निचले तटीय इलाके सुनामी से प्रभावित हो सकते है।
- सुनामी की गति एक व्यक्ति के दौड़ने से ज्यादा होती है।
- कभी-कभी सुनमी की शुरूआत में समुद्र के किनारे का पानी कम होने लगता है और समुद्र की सतह दिखायी देने लगती है।
- सुनामी किसी भी समय दिन या रात में हो सकता है।
- सुनामी छोटे द्वीपों को चारों ओर से ढक सकते हैं और उन तटों पर भी खतरनाक हो सकते हैं, जो सुनामी के स्रोत का सामना नहीं कर रहे हैं।
- सुनामी महासागर से नदियों तक पहुँच जाते हैं।
- कुछ सुनामी की ताकत बहुत ज्यादा होती है। हजारों किलो की बड़ी चट्टानें, नाव आदि सुनामी की लहरों द्वारा, कई सौ मीटर अन्दर तक पहुंच जाते हैं। भवनों तथा जान-माल की भारी हानि होती है।
- सुनामी लहरों की एक लम्बी श्रेणी है जो हर 10 मि. से 60 मि. के अन्दर पर आती है। अकसर पहली लहर सबसे बड़ी नहीं होती है। सुनामी का खतरा पहली लहर आने के बाद कई घन्टों तक बना रहता है। सुनामी लहरों की श्रेणी टूटती या मुड़ती नहीं है। इसलिए कुछ घन्टों तक यह नहीं समझना चाहिए कि सुनामी का खतरा टल गया है, और न ही सुनामी के डर से समुद्र के किनारे, समुद्र लहरों का आनन्द लेना छोड़ना चहिए।

कुछ एतिहासिक सुनामी की सारणी इस प्रकार है

नाम	वर्ष	परिमाण
(Pacificwide)		
Alentian Tsunami	1 अप्रैल, 1946	8.6
Kamchatka Tsunami	4 नवम्बर, 1952	9.0
Alentian Tsunami	9 मार्च, 1957	8.3
Chilean Tsunami	22 मई, 1960	9.5
Alaska Tsunami	28 मार्च, 1964	9.3
(Regional / Local)		
Nikaragua	2 सितम्बर, 1992	7.6
Flores, Indonesia	12 दिसम्बर, 1992	7.7
Japan (Okushiri)	12 जुलाई, 1993	7.7
Indonesia (Java)	2 जून, 1994	7.8
Mexico - Manzarillo	9 अक्टूबर, 1995	8.0
Andreanov	10 जून, 1996	7.9
Peru Northern	21 फरवरी, 1996	7.8
Papua, New Guinea	17 जुलाई, 1998	7.0
Vanuatu	26 नवम्बर, 1999	7.4
Turkey	17 अगस्त, 1999	7.6
Sea of Marmara (Indonesia) (Sulawesi Island)	3 मई, 2000	7.3
Peru - Southern	23 जून, 2001	8.4
Vanuata	2 जनवरी, 2002	7.5
Rat Island	17 नवम्बर, 2003	7.7
Adentian Island (Japan, Honshu)	31 अक्टूबर, 2003	7.0
Tokachi-Oki Earthquake Hokkaido, Japan	25 सितम्बर, 2003	8.3
Honshu, Japan	05 सितम्बर, 2004	7.2
Northern Sumatra	26 दिसम्बर, 2004	9.0

उच्चारण की सुविधा हेतु अंग्रेजी का ही प्रयोग किया गया है।

लेखक विश्लेषण अनुभाग, भारतीय रसायनिक प्रौद्योगिकी संस्थान, हैदराबाद

काम करें जहां कहीं मार्केटिंग सोच ही सही

राधेश्याम शर्मा कहते हैं,प्रतिस्पर्धात्मक परिवेश में संस्था के अस्तित्व एवं अग्रिम रहने का एकमात्र आधार विपणन ही है।

आधुनिक औद्योगिक एवं व्यावसायिक जगत में ''विपणन या मार्केटिंग'' काफी सुनने व पढ़ने को मिलता है। जन सामान्य विपणन को सेवा / उत्पाद का विक्रय मानता है जबकि यह उत्पाद / सेवा की बिक्री एवं विक्रयोपरान्त की समस्त प्रक्रिया है। व्यापक अर्थ में यह सोच एवं कार्यशैली है जो ग्राहककेन्द्रित है। इसमें ग्राहक हित और सिर्फ ग्राहकहित है। इसके दायरे में अभिवन (Innovation), सृजन (Creation), पहल (Initiation) प्रेरणा (Motivation) दीर्घकालिक सम्बन्ध, सुखाभास (Feel Good) तथा अपनापन आदि की भरपूरता है। वर्तमान में यह सोच सभी संस्थाओं के लिये अनिवार्य है। इस सिस्टम में व्यवहार जिसे 'वैपणनिक व्यवहार' कहते हैं; सुस्थापित हो गया है। इस व्यवहार में पेशेवर ज्ञान तथा पेशेवर व्यवहार शामिल है। पेशेवर ज्ञान अपने कार्य तथा इसे प्रभावित करने वाले समस्त पहलुओं की अच्छी जानकारी है। पेशेवर व्यवहार सौम्य, संयमित, रुचिकर, तार्किक, ग्राहक को महत्व प्रदायक व्यवहार आदि-2 शामिल है।

विपणन के अन्तर्गत समस्त कर्मी चाहे वे ऑफिस में हो या फील्ड में विपणनकर्ता कहे जाते है.। संस्था प्रमुख से चपरासी सभी विपणन के अंग हैं। इनके कार्य में अन्तर भले ही हो किन्तु मन्तव्य सिर्फ व्यवसाय वृद्धि एवं इसका संरक्षण तथा ग्राहक हित होता है। कहा भी गया है - "Marketing is too important to be left with marketing department". विपणन प्रक्रिया में ग्राहक से फीडबैक, इसका विश्लेषण कर, उत्पाद / सेवा का सृजन, ग्राहक समूह व क्षेत्र की पहचान, समूह में उत्पाद की सूचना एवं विशेषताओं के प्रति जागरूक बनाना, प्रयोग / उपयोग की जानकारियां देना, खरीदने हेतु प्रेरित करना, ग्राहक की सुनिधा एवं आवश्यकता के दृष्टिगत उत्पाद में संशोधन करना तथा विक्रयोपरान्त सेवा प्रदान करना है। विपणन अवधारणा का पूर्णतया पालन कर संस्थायें ग्राहक की शिकायतों को न्यूनतम तदनुसार शुन्य कर सकती हैं। विपणन संस्था को मजबूत बनाता है तथा इसे आत्मसात कर एवं प्रयोग से संस्था की छवि, ग्राहक आधार (Customer Base) तथा ग्राहक सन्तुष्टि में अपेक्षा से भी अधिक वृद्धि हो सकती है। यह ग्राहकों को संस्था के प्रति आकर्षित एवं बनाये रखता है। प्रतिस्पर्धात्मक परिवेश में संस्था के अस्तित्व एवं अग्रिम रहने का एकमात्र आधार विपणन ही है। सही कहा गया है कि "Marketing is nothing but winning over the opponent".

जीवन बीमा व्यवसाय में विपणन का महत्व और भी अधिक है क्योंकि जीवन बीमा उत्पाद अमूर्त, दीर्घ अवधि तथा वायदापरक होते हैं। जीवन बीमा उत्पाद की आवश्यकता प्रत्यक्षतः महसूस नहीं की जाती है। यही कारण है कि जीवन बीमा व्यवसाय में ग्राहक को महत्व दिलाता शालीन एवं निपुण व्यवहार की अनिवार्यता होती है। कहा भी गया है कि ''बीमा आग्रह की विषय वस्तु है।'' जीवन बीमा व्यवसाय के मार्केटिंग की यह रीढ़ है।

जैसा कि पहले कहा जा चुका है प्रत्येक बीमाकार्मी (अभिकर्ता तथा तृतीय श्रेणी के कर्मजारी भी) मार्केटिंग का अंग है। जीननबीमा में यह उत्पाद सृजन से पूर्व, सथा तथा बाद के सभी कार्यकलापों में सम्पादित किया जा सकता है। किया जा भी रहा है। बस आवश्यकता इस बात की है कि इसे सभी अपनायें एवं पूर्णतया अपनायें। आखिर मार्केटिंग सोच क्या है? इस पर विचार करें:-

- शाखा में आय प्रत्येक पॉलिसीधारक का कार्य यथासंभत किया जाना चाहिये।

पेशेवर ज्ञान अपने कार्य तथा इसे प्रभावित करने वाले समस्त पहलुओं की अच्छी जानकारी है। पेशेवर व्यवहार सौम्य, संयमित, रुचिकर, तार्किक, ग्राहक को महत्व प्रदायक व्यवहार आदि-2 शामिल है।

- यदि कार्य के सम्पादन में देरी हो तो संतोषजनक आश्वासन दिया जाये।
- कार्यालय परिसर (बाह्य एवं भीतर) स्वच्छ एवं आकर्षक होना चाहिये।
- कार्यालय के अन्दर हवा, प्रकाश तथा उचित तापक्रम होना चाहिये।
- कार्यालय में बैठने व जलपान की पर्याप्त व्यवस्था हो।
- शिकायतों का निपटारा तीव्रता से होना चाहिये।
- पॉलिसीधारक को कार्य की प्रकृति के अनुसार सही सीट पर भेजा जाये।
- कार्य की सिगंल विन्डो अबधारण का विस्तार एवं क्रियान्वयन सुनिश्चित किया जाए।
- कार्यों का आवंटन तर्कसम्मत एवं विवेकसम्मत पर्यापत किया जाये।
- कार्यपद्धति व सेवा / उत्पाद में अभिनवता, प्रेरण, सृजन आदि को सुनिश्चित किया जाए।
- आधुनिकतम तकनीव एवं कार्यपद्धति को अपनाया जाये ताकि कार्य तीव्र, तत्क्षण, सिंगल विन्डो तथा त्रृटिरहित सम्पन्न हो सके।

कार्य पद्धति एवं कार्य व्यवहार वातावरण को अधिकतम प्रभावी बनाने हेतु -

- अनुपस्थित कर्मचारी के दैनिक कार्य (की प्रकृति) को करने के लिये अन्य कर्मचारी मिल-जुलकर प्रयास करें।
- कार्यालयीन कर्मचारियों के व्यवहार में अनुशासन व शिष्टता स्पष्टतया दृष्टिगोचर हो।
- पूछताछ एवं स्वागत काउण्टर की व्यवस्था होनी चाहिये। स्वागत के लिये मुस्कान भरी दृष्टि ही काफी है। बाकी रहा कामकाज का अच्छा तरीका।
- अभिकर्ताओं की ग्राहकों के कार्य निष्पादन की लम्बीलिस्ट को सहर्ष स्वीकार किया जाये

प्रत्येक कर्मचारी को आवंटित कार्य के प्रति स्पष्टतया एवं सुनिश्चित रूप से जवाबदेह बनाया जाये।

तथा उन्हें इस हेतु प्रेरित भी किया जाये। पॉलिसीधारकों की शाखा में भीड़ डंगित करती है कि कार्यपद्धति एवं सोच में कहीं न कहीं कमी अवश्य है।

- टालमटोल, अपना काम दूसरों पर थोपना, कार्यस्थल से गायब रहना तथा ग्राहकों को परेशान करने की अन्य प्रवृत्तियों पर अंकुश लगाया जाये।
- प्रत्येक कर्मचारी को आवंटित कार्य के प्रति स्पष्टतया एवं सुनिश्चित रूप से जवाबदेह बनाया जाये।
- उचित बीमाउत्पाद का विक्रय किया जाए। बीमाधारक के अनुकुल रहने के लिए इसमें यथासम्भव प्रावधान हों व प्रभावी भी किये जायें।
- संस्थाकर्मियों के मध्य सहयोग, समझ एवं सामंजस्य विकसित किया जाए। एक दुसरे के प्रति समानुभूति (Empathy) रखें।
- संस्थाकर्मियों की कार्यक्षमता एवं उत्पादकता को बढ़ाने के व्यापक प्रयास किये जाएं।
- प्रत्येक संस्थाकर्मी का ख्याल रखा जाये एवं उसे पहचान / महत्व मिले। वास्तव में विपणन लोगों के जीवन स्तर को सुधारने एवं बढ़ाने का उपाय है।
- इसी अवधारण के कुशल प्रयोग से ग्राहक (आन्तरिक एवं बाह्य दोनों ही) द्वारा पारिश्रमिक / उत्पाद / सेवा प्राप्त करने हेतु अदा किये गये मूल्य / श्रम से अधिकतम प्रतिफल / उत्पाद उपयोगिता / वैल्युएवल सर्विस मिले। सही ही कहा गया है - "Marketing is the creation and delivery of valuable services, returns and products" किसी विद्वान ने सही कहा है कि यदि व्यक्ति में कार्य करने की इच्छा शक्ति है तो कार्य को सम्पादित करने हेतु उचित तरीका निकल आता है। क्योंकि ऐसी स्थिति में विवेक जागृत होता है। इसके विपरीत विवेक सुप्त हो जाता है। कार्य करने में अवांक्षनीय बाधायें आ जाती है।
- संस्थाकर्मियों / बीमाकर्मियों को उत्कृष्ट कार्य करने हेतु विभिन्न प्रोत्साहन एवं प्रायास किये जायें।

किसी विद्वान ने सही कहा है कि "When intelligence and skill work together expect a miracle".

उत्कृष्ट कार्य पद्धति के चार आधार।
मितव्ययिता, शुद्धता, तीव्रता एवं शिष्टाचार।।

लेखक स प्र अधि., भा.जी.बी. निगम, शाखा खुर्जा (कोड सं 277)

क्षतिपूर्ति तथा संरक्षण बीमा - कुछ रुचिपूर्वक तथ्य

नन्दिता बेनर्जी कहती हैं कि जहाजरानी, परिवहन तथा हाइवे मंत्रालय के अन्तर्गत जहाजरानी विभाग में भारतीय जहाजरानी अधिनियम 1908 के अन्तर्गत टुटफूट को हटाने के सम्बन्ध में नियम बनाये हैं।

जहाजरानी के स्वामियों तथा प्रचालन कर्ताओं के लिए व्यवसाय में बढते सदा दी बढते दायित्वों की चुनौतियों को पुरा करने के लिए क्लब नियमों को नियमित रूप से पुर्न निरिक्षित किया जाता है। क्लब तेल प्रदुषण के दायित्व को छोड कर सभी पर अपने सदस्यों के लिए असीमित दायित्व प्रदान करते हैं।

क्लब जहाजरानी के स्वामियों की सहायता करते है सभी प्रकार दी आपतकालिन आवश्यकताओं के लिए जिसमे तुरन्त आपात से विधि तथा दावे भुगतान के लिए विशेषज्ञों की सुविधाएं देना शामिल है। अपनी सेवा के एक भाग के रूप में उनके सभी स्थानिय बन्दगाहों पर प्रतिनिधि होते है और किसी दुर्घटना की स्थिति में जहाजरानी सदस्य का मास्टर उनसे सीधे सम्पर्क कर सकता है। क्लब प्रतिनिधि को पी व आई मामलों में जानकारी रखते हो तथा उनका सम्पर्क प्राधिकार प्राप्त संस्थाओं तथा विशेष सर्वेयर से जो उस क्षेत्र के हो से सम्पर्क होना चाहिये। यदि स्थिति आवश्यक हो जिसमे आपातकाल शामिल है, क्लब प्रतिनिधि को क्लब का गारंटी पत्र जहाजरानी के अवरोधन की धमकी मिलने के समय किया जाना चाहिये।

पी व आई क्लब द्वारा दी गई गारंटी अन्तराष्ट्रीय रुप से प्रायं सर्वत्र अच्छी सुरक्षा के रुप में स्वीकार की जाती है। अपने जहाजों के लिए बहुमूल्य देरी दोने के कारणों के लिए यह सेवा बहुत उपयोगी है विशेष रुप से ऐसी परिस्थितियों में जब दावाकर्ता जहाज को रोक लेता है जिसके विरुध दावा किया जाता है वह इसलिए की उसे सुरक्षा मिल सके।

पी व आई क्लब कार्गो दयित्व है - क्लब द्वारा कार्गो देयता उपलब्ध करवाना क्लब का महत्वपूर्ण भाग है। साधारणत यह आवरण इस आधार पर दिया जाता है कि जहाज के स्वामी कार्गो के स्वामी से बातचीत करेगे इस शर्तो के सम्बन्ध में जो हेग - अथवा हेग विसबाई - नियम के प्रावधानो में दिये गये है जो की 1968 का प्रोटोकाल है साथ ही हैम्बर्ग नियम 1978 जब बीमित कार्गो दावों को आगे बढाते है जहाज के स्वामियों के साथ क्षतिपूर्ति के बाद कम डिलिवरी के कारण, माल को हुए नुकसान अथवा हानि के लिए माल ढोने वाला बिल आफ लोडिग को सहयति प्रदान करता है। जहाज के स्वामी ऐसे दावों का निपटान करने के बाद बीमाकर्ता से आपूति पी व आई क्लब से कर सकते है।

दावों को तुरन्त अधिसुचित पी व आई क्लब को किया जाना चाहिये। आमतौर पर क्लब के विरूध दावे जहाज स्वामी द्वारा तृतीय पक्ष को समझैता राशि प्रदान करने के बाद किये जाते हैं। यह भुगतान के लिए भुगतान का प्रारुप बनाता है। दावे प्रत्यक्ष क्रिया के अन्तर्गत भी किये जाते है जो की क्लब के विरुध होते है। बीमा पत्र में वास्तविक अथवा जब्त करने की धमकी में क्लब एक गारंटी पत्र बन्दगाह सरकार के लिए सीध कार्यवाही के लिए जारी करता है।

पी व आई क्लब क्या है?

क्लब जहाजरानी के स्वामियो तथा चार्टर की एसोसिएशन है। इसके स्वामी तथा नियत्रक जहाजरानी के स्वामी अथवा चार्टर ''सदस्य'' है। वे गैरलाभ के पारस्परिक सहयोग पर प्रचालन करते हैं। सदस्य एकलव्यकि की होने से निपटने के लिए स्त्रोत एकत्र करते हैं। अतः सदस्य स्वयं-बीमित है तथा जहाजरानी बीमाकर्ता तथा बीमाधारक दोनों हो सकते हैं।

पी व आई क्लब कैसे कार्य करते है?

प्रत्येक सदस्य हानि (यदि कोई हो) के लिए फंड बनाये रखने के लिए सहयोग देता है सदस्य के लिए प्रारंभिक अंशदान जहाज के भर जोकि क्लब के साथ बीमा के लिए किया जाता है।

मुख्य सिद्धांत यह है कि अंशदान या (माँग) जो वर्ष में सदस्य द्वारा भुगतान की जाती है वह पर्याप्त होनी चाहिये दावों से निपटने के लिए पूर्नबीमा तथा प्रशासनिक खर्च जो क्लब के प्रत्येक वर्ष होते हैं।

पी व आई क्लब कैसे विकसित हुआ?

ये 19 वी शताब्दी से विकसित होने प्रारंभ हुए जिससे जहाजरानी के स्वामी को उस जोखिम के विरुद्ध सुरक्षा मिल सके जो मैरिन बीमा में आवरित नहीं होगा। यह जोखिम देयता रखते है जो अपने क्षेत्र में विस्तृत है।

ऐतिहासिक रूप से, जहाज स्वामी को आवरण की आवश्यकता होती है मैटिरियल हानि के लिए जो दूसरे जहाज के टकराव के कारण पैदा होती है क्योंकि साधारण रूप से यह टकराव के खण्ड में मानक हल कवर में शामिल नहीं होता।

उन्हें व्यक्तिगत क्षति / जीवन की हानि से सम्बन्धित देयता के लिए भी आवरण की आवश्यकता होती है। तथा अचल लक्ष्य जैसे बंदरगाह की दिवारें घाट, पंक्ति इत्याति तथा सम्बन्धित दावे।

कौन कौन से मुख्य पी व आई क्लब है?

पी व आई क्लब तथा उनसे सम्बन्ध पी व आई क्लब का अन्तराष्ट्रिय गृप बनाते हैं। विश्व का 90% भार इन्ही क्लबों द्वारा संचलित होता है। यह क्लब विभिन्न स्थानों पर तथा देशों जैसे लंडन, बरमुडा, स्कान्डनिविया, लक्सम्बर्ग, अमेरिका तथा जापान में स्थित है।

अन्दराष्ट्रिय ग्रुप के क्लब अपने बडे जोखिम को पूल करते है तथा एक निश्चित राशी से अधिक के राशी के दावों का भुगतान करते हैं। ये पूर्नबीमा को लागत पर लेते हैं। उसकी तुलना में जहाँ कही अधिक व्यवसायिक पुनर्बीमा बाज़ार में उपलब्ध है।

कुछ मुख्य क्लब इस प्रकार है

- दी अमेरिकन औनर म्यूच्युवल पी व आई एसोसिएशन
- एशोरेंस फार एंजिन गर्ड, नार्वे
- जापान शीप औनर्स म्यूच्युवल पी व आई एसोसिएशन, टोकियो
- दी ब्रिटिनिका स्टीमशीप इंशूरेंस एसोसिएशन लि., यू.के
- दी लंडन स्टीमशिप औनर्स म्यूच्युवल इंशुरेंस एसोसिएशन, लंडन
- स्वीगिस एंजफटीग एशोरेंस फोटिग, गोटिम्बर्ग (स्वीडिश क्लब)

सबसे पुराना पी व आई क्लब आज भी ब्रिटेनिका स्टीम शीप इंशोरेंस एसोसिएशन, लंडन में है जो 1855 में प्रोटेवरान क्लब के रूप में प्रारंभ हुआ था क्लब की पालसी पारमरिक रूप से 20 फरवरी को शुरु होती है जिसके ऐतिहासिक कारण है परंपरागत रूप से 20 फरवरी वह दिनांक है जब बाल्टिक सागर बलि से मुक्त हुआ था तथा जो जहाज इससे फंसे ये उन्होने व्यवसायिक कार्य प्रारंभ किया था।

क्या पी व आई सदस्यता अनिवार्य है?

नहीं, अभी तक वैद्यानिक रूप से पी व आई क्लब की सदस्यता अनिवार्य नहीं है और यह ऐच्छिक आधार पर होती है।

चालू रूझान

जबकि वातावरण के मामले मुख्य ग्लोबल मामले बन गए है तेल के प्रदुषण को साथ करवाने की लागत तथा टुट फूट हटाने की कार्यवाही ने सभी स्तरों पर महत्वपूर्ण चिंता दिखाई है।

बढने रूप से विशेषतः यू एस ए में अन्तराष्ट्रीय समुहों पी व आई क्लब की सदस्यना बन्दरगाह पर पैदा होने की पहली शर्त ऐसे जोखिम सदस्यों को दिये जाने वाले आवरण को दिखाते हैं।

क्या कोई भारतीय पी व आई क्लब है?

नहीं, वास्तव में भारतीय जहाजों को पी व आई आवरण किसी स्थापित पी व आई क्लब से लेना होता है जो विदेश में आधारित है। उदाहारणतः हमारा राष्ट्रीय जहाजरानी, शिपिग कोर्पोरेशन आफ इंडिया लि. ने अपने बेडे का आवरण निम्न लिखित अन्तराष्ट्रीय पी व आई ग्रुप से लिया है।

- दी स्टीमशीप म्यूच्वल अंडरराइटिंग एसोसिएशन लि., लंडन
- एशोरेंस फार एंजिन गर्ड, नार्वे
- दी ब्रिटिनिका स्टीमशीप इंशूरेंस एसोसिएशन लि., यू.के
- नार्थ आफ इंग्लेंड पी व आई एसोसिएशन लि., यू.के
- दी लंडन स्टीमशिप औनर्स म्यूच्युवल इंशुरेंस एसोसिएशन, लंडन

भारत में वर्तमान रूझान क्या है?

विश्व व्यापी परिदृश्य के अनुसार दी भारत में भी कई सार्थक परिवर्तन अनुभव किये गए है। जहाजरानी, परिवहन तथा हाइवे मंत्रालय के अन्तर्गत जहाजरानी विभाग में भारतीय जहाजरानी अधिनियम 1908 के अन्तर्गत टुटफूट को हटाने के सम्बन्ध में नियम बनाये हैं।

ड्राफ्ट नियमों के अनुसार सभी बन्दरगाद स्वामी किसी जहाज को बन्दरगाह में प्रवेश करने से पहले यह सुनिश्चित करेगे की जहाज टुटफूट हटाने के तथा तेल प्रदूषण जोखिम से पी व आई क्लब द्वारा आवरित हो। ऐसे प्रावधानो को पूरा न करने वाले जहाजों को बन्दरगाह में प्रवेश से निषेद्ध किया जाए।

जहाजरानी में यह मामला अभी वाद विवाद में है बीमा तथा पी व आई क्लब सर्कल में भी।

लेखक नेशनल इंशुरेंस कं के प्रधान कार्यालय में मैरिन विभाग में ए.ओ. है।

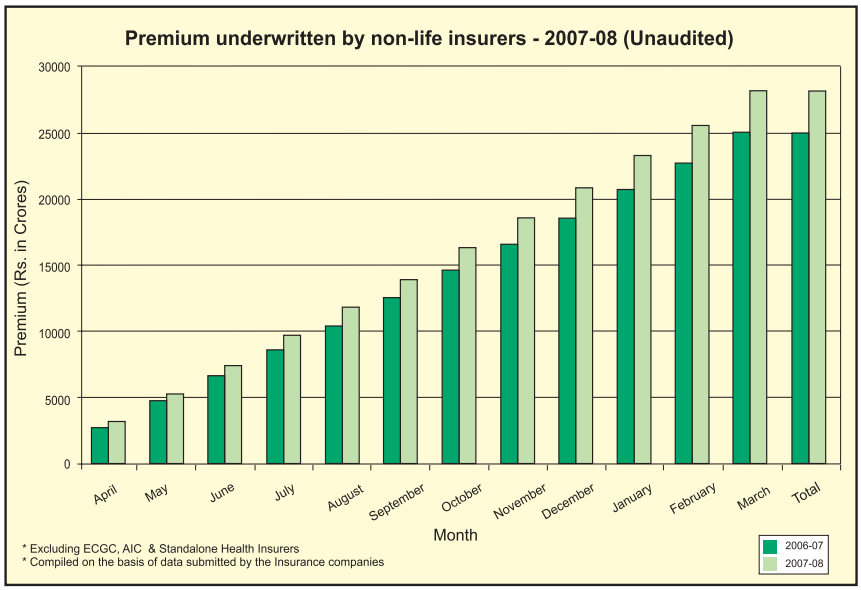
Report Card: General

GROSS PREMIUM UNDERWRITTEN BY NON LIFE INDUSTRY - 2007-08 (UNAUDITED)

(Rs.in Crores)

INSURER	MARCH		APRIL - MARCH		GROWTH OVER THE CORRESPONDING PERIOD OF PREVIOUS YEAR
	2007-08	2006-07	2007-08	2006-07	
Royal Sundaram	67.42	56.63	695.16	600.58	15.75
Tata-AIG	73.12	54.61	813.39	741.56	9.69
Reliance General	136.68	108.72	1946.42	912.31	113.35
IFFCO-Tokio	207.53	80.05	1235.83	1150.32	7.43
ICICI-lombard	201.81	200.11	3344.69	3003.45	11.36
Bajaj Allianz	253.82	181.90	2404.34	1803.34	33.33
HDFC ERGO General	14.73	19.99	216.58	190.16	13.89
Cholamandalam	84.29	34.74	563.67	314.59	79.17
Future Generali*	2.25	0.00	10.64	0.00	
Universal Sompo**	0.00	0.00	0.48	0.00	
New India	511.99	534.06	5274.14	5017.19	5.12
National	389.81	386.21	4030.80	3814.42	5.67
United India	371.61	346.22	3738.94	3498.77	6.86
Oriental	348.87	349.00	3855.61	3928.66	-1.86
PRIVATE TOTAL	1041.65	736.74	11231.19	8716.31	28.85
PUBLIC TOTAL	1622.28	1615.49	16899.49	16259.04	3.94
GRAND TOTAL	2663.92	2352.23	28130.68	24975.35	12.63
SPECIALISED INSTITUTIONS					
Credit Insurance					
ECGC	78.98	72.53	669.39	618.05	8.31
Health Insurance					
Star Health & Allied Insurance	10.80	5.72	173.03	22.51	668.70
Apollo DKV*	2.04	0.00	2.98	0.00	
Health Total	12.84	5.72	176.02	22.51	681.94
Agriculture Insurance					
AIC	52.70	61.84	828.66	564.67	46.75

Note: Compiled on the basis of data submitted by the Insurance companies
** Commenced operations in November, 2007.*
*** Commenced operations in February, 2008.*



General Insurance Council – India (GIC-I), Mumbai and the German Insurance Association (GDV) have entered into a Memorandum of Co-operation (MoC) with the key objectives of promoting a co-operative relationship and mutual understanding between the two organisations; and to exchange views and information on matters and activities of common interest.

Mr. K.N. Bhandari, Secretary General, GIC-I, signing the MoC. Others seen in the picture are (L to R): Dr. Jorg Freiherr Von Fiirstenwerth, Member of Board & CEO, GDV; Mr. Hoenen, Member of Board, GDV. Seen in the background is Mr. M. Ramadoss, CMD, Oriental Insurance Co. Ltd. and EC member of GIC-I.

Mr. K.N. Bhandari and Dr. Jorg Freiherr Von Fiirstenwerth displaying the signed MoCs. Others seen in the picture are (L to R): Mr. Yogesh Lohiya, CMD, GIC of India; and Mr. Hoenen.

"It's three weeks since I sent all the documents for the claim... I hope they send the money soon."

"Yes, they will. When all the papers are in order, they have to settle within 30 days. It's the rule!"

The Insurance Regulatory and Development Authority (IRDA), the supervisory body of insurance companies in India, protects the interests of policyholders. Here are some of the regulations laid down by IRDA:

- A claim has to be paid or disputed by the insurance company, giving relevant reasons within 30 days of receiving all relevant documents.
- The insurer shall furnish the prospect, a copy of the proposal form, free of charge, within 30 days of the acceptance of a proposal.
- Proposals shall be processed and communicated within 15 days of receipt by the insurer.
- In case of delay in settlement of claim after submission of all necessary documents, the insurance company will be liable to pay a stipulated amount of interest.
- A life insurance policyholder is entitled to a "Free Look Period" of 15 days (from the date of receipt of policy) to cancel the policy.
- An insurance company shall respond within 10 days of receipt of any communication from its policy holders.

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Basheerbagh, Hyderabad 500 004.
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5 - 6 May 2008 Venue: New Delhi	**Making Health Insurance Work for the Poor** By *USAID-INDIA and GTZ*
7 - 9 May 2008 Venue: Singapore	**2nd Asian Insurance CFO Summit** By *Asia Insurance Review, Singapore*
12 - 14 May 2008 Venue: Aqaba, Jordan	**International Conference on Insurance and Marine Transportation** By *Jordan Insurance Federation*
22 - 23 May 2008 Venue: Singapore	**Conference on Terrorism and Political Risk in Asia** By *Asia Insurance Review, Singapore*
2 - 4 Jun 2008 Venue: Dubai, UAE	**2nd Mena CEO Insurance Summit** By *Asia Insurance Review, Singapore*
11 Jun 2008 Venue: Mumbai	**Risk Summit 2008** By *Asia Insurance Post, India*
12 - 13 Jun 2008 Venue: Seoul, Korea	**Asia Pacific Life Insurance Congress** By *Asia Pacific Financial Services Association*
22 - 24 Jun 2008 Venue: Seoul, Korea	**LOMA/LIMRA Strategic Issues Conference** By *LOMA*
30 Jun - 1 Jul 2008 Venue: Ho Chi Minh Vietnam	**7th Asia Conference on Catastrophe Insurance** By Asia Insurance Review, Singapore

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view point

Regulations and guidance are currently being prepared to make more transparent the regulatory treatment across a whole range of Islamic finance products. We are also committed to continue reviewing our regulatory framework as new structures emerge in this highly dynamic industry.

Mr Tai Boon Leong
Executive Director, Monetary Authority of Singapore

The International Association of Insurance Supervisors (IAIS) is pleased to be working closely with the Financial Stability Forum (FSF) in examining measures to enhance the resilience of the financial system.

Mr Michel Flamée
Chair of the IAIS Executive Committee

The ability of the private players to cash in on the urban (Indian) markets and innovative distribution channels drove them to higher growth. They are also able to get more business by convincing a policy holder to go for an additional one, exploiting the unsaturated urban markets.

Mr C S Rao
Chairman, Insurance Regulatory & Development Authority, India

An embedded risk management culture ensures staff are on the lookout for loss events which helps contribute to the prevention and reduction of potential future losses.

Mr Harvey Cropp
General Manager (CORS), Australian Prudential Regulation Authority

The financial services industry needs to identify the appropriate strategic direction for human capital development. Attention needs to be given to the entry level, to the specialists and to the senior management levels.

Dr Zeti Akhtar Aziz
Bank Negara Malaysia

State legislators and regulators want to set the record straight. We provide local, proven consumer protection. And, by working together, we have continued to improve, enhance and modernize the state-based system of insurance regulation.

Ms Sandy Praeger
NAIC President and Kansas Insurance Commissioner