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Journal

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Reserving for a Rainy Day...

बीमा विनियामक और विकास प्राधिकरण

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From the Publisher

The ability to discharge its liabilities in a timely manner is an essential prerequisite for successful conduct of any business. In insurance business, this aspect assumes greater importance as it is all about making promises for the payment of the assured sum upon the happening of the event. Failure to meet the commitments would shatter the very foundation of an insurer's reputation. Universally, regulators and administrators take a very close look at the solvency of an insurer to ensure that the faith reposed by the public in them is well placed.

To accomplish this, insurers have to make proper reserving on a regular basis. There have been several examples of the failure of insurers to honour their commitments and their eventual collapse, globally. It has been observed that in most of such failures, an improper or an insufficient reserving or their imprudent deployment had been the cause for failure. Solvency of an insurance company assumes significance to provide comfort to the insured. The Regulator, therefore, mandates the level of solvency to be maintained by insurers, depending on the class of business. Prudence demands that these threshold levels of solvency are always maintained, if not exceeded, by the insurers.

In a dynamic world where estimation of the probable claims in a given period of time is a huge task, the wisdom of the actuary plays a vital role. While reserving for the claims, the various aspects that affect claim payments at a macro level - the global economic scenario, the global warming which directly influences the natural catastrophes etc. must be taken into consideration. Life insurers must take into account the developments taking place in the fields of medical technology and disease pattern in order to ensure that the claims probability is realistically factored into the premiums chargeable.

'Reserving and Solvency of Insurers' is the focus of this issue of the Journal. To ensure that insurance occupies a place of prime importance in the domain of finance, it is essential that it is thoroughly understood. The opening up of the market to private insurers has created a new impetus to academic studies in the field of insurance. 'Insurance Education and Awareness' will be the focus of the next issue of the Journal.

C.S. Rao

C.S. Rao



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Reserving and Solvency - The Twin Engines of Financial Soundness

To remain solvent at all times is a fundamental requirement for any corporate entity. The norms relating to solvency are continuously being reviewed globally to ensure that the businesses are being run on sound lines; and in tune with the requirements. Several corporate debacles world over (which include some of the large business houses) have put the emphasis on the need for a close supervision in this regard; and never have the supervisory guidelines been so meticulously implemented. Closer home, the revised norms for maintenance of solvency in the banking industry in the previous decade sent several banks scurrying for cover. The importance of solvency or capital adequacy lies in the fact that it emphasizes on ensuring a level of confidence to the shareholders in general, and policyholders in particular in the case of insurance companies that the contractual obligations would be met as and when they fall due.

The protection of the interests of policyholders and other stakeholders forms the crux of prudential regulation and supervision; and as such, it has also to look at the continuing ability of insurance companies to meet their obligations. It emphasizes the fact that the supervisor has a strong interest in the continuing solvency of insurers. Particularly in the case of insurance companies, the challenges in this respect are unique as the very fundamental nature of business is replete with the twin risks of underwriting and marketing. In order to be in business, insurers have necessarily to make a lot of assumptions as regards the frequency and severity of claims. Good business practices demand that these assumptions are based on experience and that insurers aim at best estimates aligning as close to reality as possible - not an easy task at all. There is need for adopting the most reliable methods and wherever necessary, providing margins for adverse deviation.

Corporate Governance has a key role to play in the domain of reserving and maintenance of adequate solvency. The financial integrity of a company is judged by the clear lines of responsibility and reporting that it adopts; and thus demonstrating its financial well-being and solvency. 'Reserving and Solvency' forms the focus of this issue of the **Journal**. There are in-depth articles by experienced actuaries that talk about the priorities for the Indian insurance companies and the way forward. To start with, Mr. K.P. Sarma takes a look at the importance of risk based capital and the various methods adopted in some of the best insurance markets in his article 'Risk Based Capital in General Insurance'. The failure of insurers in some of the overseas markets is directly related to the improper and inadequate reserving made by them. The importance of proper reserving in general insurance is lucidly explained by Mr. N. Lakshmanan in the next article.

Life insurance contracts are long term in nature and insurers have to make provision for future reserves on a continuous basis so that the obligations are met. Mr. G.L.N. Sarma discusses the role of supervision in the domains of reserving and solvency for life insurers; and also looks at possibilities ahead. Finally, Dr. R. Kannan, in his article 'Insurer Solvency - International Developments', narrates how the solvency requirements in different markets have evolved in tune with the progressive requirements. Risk Management for Insurers continues to be a hotly debated topic and we have Mr. Melwyn D'Souza highlighting the risk management role of a life insurer which in his words should be developed as a best practice, in his article in the Follow Through section. Further, in addition to the monthly statistics; this month's issue is embellished with the year-end, class-wise business statistics of insurers.

For insurance to make a rapid development, it is essential that the advantages are well-understood by the populace. This necessitates a sustained growth in insurance education and the awareness levels. The next issue of the **Journal** would be focusing on 'Insurance Education and Awareness'.

U. Jawaharlal



Report Card:LIFE

First Year Premium of Life Insurers for the Period Ended April, 2007

Sl No.	Insurer	Premium u/w (Rs. in Crores)			No. of Policies / Schemes			No. of lives covered under Group		
		Apr, 07	Up to Apr, 07	Up to Apr, 06	Apr, 07	Up to Apr, 07	Up to Apr, 06	Apr, 07	Up to Apr, 07	Up to Apr, 06
1	Bajaj Allianz									
	Individual Single Premium	7.84	7.84	76.38	2841	2841	2820			
	Individual Non-Single Premium	115.07	115.07	68.38	94862	94862	42098			
	Group Single Premium	0.62	0.62	0.33	0	0	0	528	528	169
	Group Non-Single Premium	0.71	0.71	0.91	19	19	6	78735	78735	45369
2	ING Vysya									
	Individual Single Premium	1.66	1.66	6.04	105	105	331			
	Individual Non-Single Premium	19.96	19.96	31.86	13586	13586	13612			
	Group Single Premium	0.00	0.00	0.70	0	0	0	0	0	143
	Group Non-Single Premium	0.13	0.13	0.41	0	0	5	8721	8721	2565
3	Reliance Life									
	Individual Single Premium	2.73	2.73	13.80	819	819	1927			
	Individual Non-Single Premium	28.11	28.11	21.70	25081	25081	10903			
	Group Single Premium	1.07	1.07	0.35	4	4	3	5379	5379	509
	Group Non-Single Premium	1.36	1.36	1.04	25	25	25	29601	29601	28163
4	SBI Life									
	Individual Single Premium	26.44	26.44	6.31	3707	3707	824			
	Individual Non-Single Premium	51.88	51.88	19.10	18660	18660	8119			
	Group Single Premium	9.27	9.27	7.23	0	0	0	5659	5659	4885
	Group Non-Single Premium	2.73	2.73	2.22	1	1	30	15973	15973	40923
5	Tata AIG									
	Individual Single Premium	1.63	1.63	0.43	247	247	0			
	Individual Non-Single Premium	39.27	39.27	32.90	32661	32661	26531			
	Group Single Premium	5.06	5.06	2.74	0	0	0	33522	33522	10203
	Group Non-Single Premium	1.96	1.96	1.04	5	5	22	17203	17203	23907
6	HDFC Standard									
	Individual Single Premium	5.42	5.42	7.07	2080	2080	2080			
	Individual Non-Single Premium	56.92	56.92	44.27	22685	22685	12037			
	Group Single Premium	1.61	1.61	3.27	4	4	8	13947	13947	22957
	Group Non-Single Premium	6.65	6.65	6.40	3	3	2	10679	10679	638
7	ICICI Prudential									
	Individual Single Premium	20.86	20.86	21.59	3371	3371	3746			
	Individual Non-Single Premium	169.22	169.22	99.07	116113	116113	73334			
	Group Single Premium	37.65	37.65	4.09	21	21	23	2886	2886	19879
	Group Non-Single Premium	43.70	43.70	22.31	75	75	41	40774	40774	26300
8	Birla Sunlife									
	Individual Single Premium	1.47	1.47	1.43	2042	2042	388			
	Individual Non-Single Premium	23.94	23.94	21.28	11695	11695	7510			
	Group Single Premium	0.24	0.24	0.98	1	1	0	197	197	568
	Group Non-Single Premium	2.80	2.80	5.06	4	4	1	5944	5944	10

9	Aviva									
	Individual Single Premium	1.85	1.85	0.86	219	219	80			
	Individual Non-Single Premium	33.68	33.68	25.29	11450	11450	10574			
	Group Single Premium	0.32	0.32	0.20	0	0	0	92	92	146
	Group Non-Single Premium	2.75	2.75	6.25	1	1	8	28616	28616	28432
10	Kotak Mahindra Old Mutual									
	Individual Single Premium	1.09	1.09	2.33	122	122	377			
	Individual Non-Single Premium	22.15	22.15	13.05	7041	7041	3695			
	Group Single Premium	0.77	0.77	0.20	0	0	0	6205	6205	1032
	Group Non-Single Premium	2.33	2.33	9.52	24	24	19	48379	48379	9822
11	Max New York									
	Individual Single Premium	11.95	11.95	0.04	793	793	7			
	Individual Non-Single Premium	56.58	56.58	41.36	41115	41115	31064			
	Group Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Group Non-Single Premium	0.52	0.52	1.00	70	70	11	29497	29497	5205
12	Met Life									
	Individual Single Premium	0.48	0.48	0.19	97	97	43			
	Individual Non-Single Premium	17.66	17.66	6.26	3973	3973	3156			
	Group Single Premium	0.85	0.85	0.00	7	7	0	29765	29765	0
	Group Non-Single Premium	0.00	0.00	2.56	0	0	28	0	0	87937
13	Sahara Life									
	Individual Single Premium	0.54	0.54	0.53	157	157	145			
	Individual Non-Single Premium	1.22	1.22	0.07	2004	2004	349			
	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
14	Shriram Life									
	Individual Single Premium	1.40	1.40	0.00	318	318	0			
	Individual Non-Single Premium	3.14	3.14	0.76	1930	1930	1404			
	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
15	Bharti Axa Life									
	Individual Single Premium	0.00	0.00		0	0				
	Individual Non-Single Premium	0.72	0.72		777	777				
	Group Single Premium	0.00	0.00		0	0		0	0	
	Group Non-Single Premium	0.00	0.00		0	0		0	0	
	Private Total									
	Individual Single Premium	85.34	85.34	137.02	16918	16918	12768			
	Individual Non-Single Premium	639.53	639.53	425.35	403633	403633	244386			
	Group Single Premium	57.45	57.45	20.09	37	37	34	98180	98180	60491
	Group Non-Single Premium	65.64	65.64	58.73	227	227	198	314122	314122	299271
16	LIC									
	Individual Single Premium	493.56	493.56	572.39	145327	145327	99555			
	Individual Non-Single Premium	1250.29	1250.29	424.54	1443678	1443678	540333			
	Group Single Premium	390.47	390.47	358.31	679	679	790	179722	179722	521622
	Group Non-Single Premium	0.00	0.00	0.00	0	0	0	0	0	0
	Grand Total									
	Individual Single Premium	578.90	578.90	709.41	162245	162245	112323			
	Individual Non-Single Premium	1889.82	1889.82	849.89	1847311	1847311	784719			
	Group Single Premium	447.92	447.92	378.40	716	716	824	277902	277902	582113
	Group Non-Single Premium	65.64	65.64	58.73	227	227	198	314122	314122	299271

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.



FIRST YEAR PREMIUM OF LIFE INSURERS FOR THE YEAR ENDED MARCH 2007 (Provisional & Unaudited)

INDIVIDUAL SINGLE PREMIUM (INCLUDING RURAL & SOCIAL)

(Rs.in Crore)

Sl. No.	PARTICULARS	PREMIUM		POLICIES		SUM ASSURED	
		Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007
1	Non linked* Life						
	with profit	242.34	291.20	31601	26200	367.53	386.87
	without profit	1259.47	784.28	470784	485730	4489.36	3987.38
2	General Annuity						
	with profit	0.40	0.00	10	0	0.78	0.00
	without profit	1.44	12.55	145	642	0.00	0.68
3	Pension						
	with profit	62.13	159.57	11567	10178	1.46	2.52
	without profit	125.90	2.26	3532	100	1.82	1.95
4	Health						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0.00	0.00
A.	Sub total	1691.68	1249.85	517639	522850	4860.95	4379.40
1	Linked* Life						
	with profit	0.05	0.00	5	1	0.05	0.00
	without profit	2950.91	4342.15	339740	764066	3625.06	7062.59
2	General Annuity						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	0.63	1.20	0	0	0.00	0.00
3	Pension						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	6355.33	17952.47	1839374	5430530	5.17	3.63
4	Health						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0.00	0.00
B.	Sub total	9306.93	22295.83	2179119	6194597	3630.28	7066.22
C.	Total (A+B)	10998.61	23545.68	2696758	6717447	8491.23	11445.61
	Riders:						
	Non linked						
1	Health#	0.03	0.04	21	32	0.33	0.57
2	Accident##	0.18	0.06	1755	1050	12.47	7.07
3	Term	0.03	0.01	135	33	0.82	0.25
4	Others	0.00	0.00	0	0	0.00	0.00
D.	Sub total	0.24	0.10	1911	1115	13.63	7.90
	Linked						
1	Health#	0.04	0.04	59	89	0.78	1.04
2	Accident##	0.09	0.16	357	13043	8.10	84.56
3	Term	0.00	0.00	4	8	0.05	0.12
4	Others	0.00	0.00	0	0	0.00	0.00
E.	Sub total	0.14	0.20	420	13140	8.92	85.72
F.	Total (D+E)	0.38	0.31	2331	14255	22.55	93.62
G.	**Grand Total (C+F)	10998.99	23545.99	2696758	6717447	8513.77	11539.23

* Excluding rider figures.

** for policies Grand Total is C.

All riders related to critical illness benefit, hospitalisation benefit and medical treatment.

Disability related riders.

The premium is actual amount received and not annualised premium.

Compiled on the basis of data submitted by the Insurance companies.

FIRST YEAR PREMIUM OF LIFE INSURERS FOR THE YEAR ENDED MARCH 2007 (Provisional & Unaudited)

INDIVIDUAL NON - SINGLE PREMIUM (INCLUDING RURAL & SOCIAL)

(Rs.in Crore)

Sl. No.	PARTICULARS	PREMIUM		POLICIES		SUM ASSURED	
		Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007
1	Non linked* Life						
	with profit	12819.57	16484.03	28409713	21169366	266239.86	201760.82
	without profit	702.42	1930.10	2087776	1048344	41343.05	24442.02
2	General Annuity						
	with profit	0.86	0.23	845	242	15.54	4.13
	without profit	0.00	0.00	0	0	0.00	0.00
3	Pension						
	with profit	70.87	48.61	52458	25323	294.28	187.93
	without profit	8.84	21.23	3649	6337	0.00	0.00
4	Health						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	7.37	27.88	34020	169703	1166.45	7604.73
A.	Sub total	13609.93	18512.07	30588461	22419315	309059.18	233999.62
1	Linked* Life						
	with profit	0.97	0.18	330	87	6.71	1.96
	without profit	5676.56	16627.45	1950273	15704231	48030.97	215674.25
2	General Annuity						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	117.74	0.00	72527	0	224.42	0.00
3	Pension						
	with profit	0.22	0.09	49	8	0.00	0.00
	without profit	452.80	2737.74	132032	1287337	51.32	1694.83
4	Health						
	with profit	0.00	0.00	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0.00	0.00
B.	Sub total	6248.28	19365.45	2155211	16991663	48313.43	217371.03
C.	Total (A+B)	19858.22	37877.53	32743672	39410978	357372.60	451370.66
	Riders:						
	Non linked						
1	Health#	5.28	3.77	31807	20553	406.32	287.96
2	Accident##	9.31	6.79	417513	419127	8631.99	6969.34
3	Term	1.37	0.53	24272	8884	221.00	95.09
4	Others	5.53	17.65	10185	4814	434.84	2466.35
D.	Sub total	21.49	28.73	483777	453378	9694.15	9818.74
	Linked						
1	Health#	3.53	5.33	15119	18806	945.28	601.54
2	Accident##	3.78	7.96	87687	192737	1530.88	10907.00
3	Term	0.87	1.70	8999	20881	189.19	585.88
4	Others	1.16	1.27	22886	22573	25.09	1095.28
E.	Sub total	9.34	16.25	134691	254997	2690.43	13189.70
F.	Total (D+E)	30.83	44.99	618468	708375	12384.58	23008.44
G.	**Grand Total (C+F)	19889.04	37922.51	32743672	39410978	369757.18	474379.10

* Excluding rider figures.

** for policies Grand Total is C.

All riders related to critical illness benefit, hospitalisation benefit and medical treatment.

Disability related riders.

The premium is actual amount received and not annualised premium.

Compiled on the basis of data submitted by the Insurance companies.

FIRST YEAR PREMIUM OF LIFE INSURERS FOR THE YEAR ENDED MARCH 2007 (Provisional & Unaudited)

GROUP SINGLE PREMIUM (INCLUDING RURAL & SOCIAL)

(Rs.in Crore)

SI. No.	PARTICULARS	PREMIUM		NO. OF SCHEMES		LIVES COVERED		SUM ASSURED	
		Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007
1	Non linked*								
a)	Life								
	Group Gratuity Schemes								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	1581.90	2473.23	2167	2287	766005	926223	3364.70	4086.88
b)	Group Savings Linked Schemes								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	58.25	30.89	1835	1022	502607	281244	4644.91	2163.39
c)	EDLI								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	5.47	5.69	1213	1047	718411	923126	3122.57	2585.38
d)	Others								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	574.51	6477.96	13051	16296	10220727	12708409	47257.92	258470.93
2	General Annuity								
	with profit	672.02	1039.19	5	9	3826	3525	0.00	0.00
	without profit	735.13	883.32	22	61	7974	11275	0.00	0.00
3	Pension								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	678.70	1173.17	113	239	59599	101111	0.00	0.00
4	Health								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
A.	Sub total	4305.99	12083.45	18406	20961	12279149	14954913	58390.11	267306.58
1	Linked*								
a)	Life								
	Group Gratuity Schemes								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	86.85	233.14	24	88	45962	200027	4.60	629.76
b)	Group Savings Linked Schemes								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
c)	EDLI								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
d)	Others								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	3.63	15.62	1	4	352	13225	0.04	1.32
2	General Annuity								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
3	Pension								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	8.66	89.15	3	18	3936	12448	0.00	0.00
4	Health								
	with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
B.	Sub total	99.14	337.90	28	110	50250	225700	4.63	631.09
C.	Total (A+B)	4405.13	12421.35	18434	21071	12329399	15180613	58394.74	267937.67
1	Riders:								
	Non linked								
1	Health##	0.37	0.40	25	19	18228	9237	344.21	0.00
2	Accident##	0.75	0.28	21	39	37362	23415	1994.04	0.00
3	Term	0.00	0.00	0	0	0	0	0.00	0.00
4	Others	0.00	0.00	0	0	0	0	0.00	0.00
D.	Sub total	1.11	0.68	46	58	55590	32652	2338.25	0.00
	Linked								
1	Health##	0.00	0.00	0	0	0	0	0.00	0.00
2	Accident##	0.00	0.00	0	0	0	0	0.00	0.00
3	Term	0.00	0.00	0	0	0	0	0.00	0.00
4	Others	0.00	0.00	0	0	0	0	0.00	0.00
E.	Sub total	0.00	0.00	0	0	0	0	0.00	0.00
F.	Total (D+E)	1.11	0.68	46	58	55590	32652	2338.25	0.00
G.	**Grand Total (C+F)	4406.24	12422.04	18434	21071	12329399	15180613	60732.99	267937.67

* Excluding rider figures.

** for no.of schemes & lives covered Grand Total is C.

All riders related to critical illness benefit, hospitalisation benefit and medical treatment.

Disability related riders.

The premium is actual amount received and not annualised premium.

Compiled on the basis of data submitted by the Insurance companies

FIRST YEAR PREMIUM OF LIFE INSURERS FOR THE YEAR ENDED MARCH 2007 (Provisional & Unaudited)

GROUP NEW BUSINESS — NON - SINGLE PREMIUM (INCLUDING RURAL & SOCIAL) (Rs.in Crore)

Sl. No.	PARTICULARS	PREMIUM		NO. OF SCHEMES		LIVES COVERED		SUM ASSURED	
		Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007	Mar 2006	Mar 2007
1	Non linked* Life								
a)	Group Gratuity Schemes with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	126.60	247.96	56	59	58456	95517	370.57	346.49
b)	Group Savings Linked Schemes with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.14	44.34	6	0	7543	446142	153.10	7221.68
c)	EDLI with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	5.22	5.79	272	282	402135	420048	3330.62	3599.31
d)	Others with profit	0.66	0.00	29	0	35994	0	408.24	0.00
	without profit	63.36	314.68	2539	1195	2075517	3348604	32364.88	61621.13
2	General Annuity with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
3	Pension with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.75	5.97	1	4	885	79	2.18	0.00
4	Health with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
A.	Sub total	196.73	618.74	2903	1540	2580530	4310390	36629.60	72788.61
1	Linked* Life								
a)	Group Gratuity Schemes with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	222.17	473.52	253	369	257452	361554	705.32	2122.81
b)	Group Savings Linked Schemes with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
c)	EDLI with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
d)	Others with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	4.24	11.39	13	14	249	167	1.79	1.97
2	General Annuity with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	15.59	38.26	11	12	906	2547	15.59	38.26
3	Pension with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	164.32	372.35	73	135	12549	62451	0.00	0.00
4	Health with profit	0.00	0.00	0	0	0	0	0.00	0.00
	without profit	0.00	0.00	0	0	0	0	0.00	0.00
B.	Sub total	406.32	895.52	350	530	271156	426719	722.69	2163.04
C.	Total (A+B)	603.05	1514.26	3253	2070	2851686	4737109	37352.29	74951.65
	Riders:								
1	Non linked Health##	0.15	0.34	7	21	1496	14141	124.08	601.01
2	Accident##	0.46	0.67	52	34	60348	46185	1807.32	1936.96
3	Term	0.00	0.00	1	1	153	114	5.03	8.03
4	Others	0.01	0.01	1	5	32	3987	20.67	216.56
D.	Sub total	0.63	1.02	61	61	62029	64427	1957.10	2762.55
1	Linked Health##	0.00	0.00	0	0	0	0	0.00	0.00
2	Accident##	0.00	0.70	0	47	0	48838	0.00	1635.54
3	Term	0.00	0.00	0	0	0	0	0.00	0.00
4	Others	0.00	0.00	0	0	0	0	0.00	0.00
E.	Sub total	0.00	0.70	0	47	0	48838	0.00	1635.54
F.	Total (D+E)	0.63	1.72	61	108	62029	113265	1957.10	4398.10
G.	**Grand Total (C+F)	603.68	1515.98	3253	2070	2851686	4737109	39309.39	79349.75

* Excluding rider figures.

** for no.of schemes & lives covered Grand Total is C.

All riders related to critical illness benefit, hospitalisation benefit and medical treatment.

Disability related riders.

The premium is actual amount received and not annualised premium.

Compiled on the basis of data submitted by the Insurance companies.



Spreading Insurance Education ...

'THE FORMAL CHANNELS OF EDUCATION MAY NOT BE SUFFICIENT IF WE WERE TO ACHIEVE BETTER AWARENESS LEVELS IN INSURANCE' AVERS U. JAWAHARLAL. HE FURTHER ADDS THAT FOR A SUSTAINED GROWTH TO BE ACCOMPLISHED, A MORE DYNAMIC FORM OF SPREADING THE MESSAGE IS THE NEED OF THE HOUR.

For any concept to be successful, it is very essential that it is well understood. Rather than driving someone to do a thing forcibly, it would make better sense to inculcate in him or her, the awareness of its importance. Education is synonymous with awareness; and irrespective of the subject or field, it is a universal truth. Here, it should be understood that education would not necessarily mean formal education. It would not be out of place to quote here the renowned American writer and futurist Alvin Toffler who said "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn". In a nutshell, it sums up the need to be on the trail of education continuously.

One area in which we could not really achieve education in the real sense is insurance. Perhaps, this fact would explain the low penetration levels of insurance although the trend has been significantly improving over the last few years. While one associates the level of economic development of a nation with the penetration levels of insurance, India stands out conspicuously by not being anywhere close to the top twenty economies of the world (in the matter of insurance penetration). While there are several reasons attributed to this phenomenon, it would not need great intelligence to understand that lack of awareness towards the benefits of insurance and a general apathy towards it are the main reasons for such a poor growth.

In most evolving markets (like India), insurance is resorted to by compulsion - either by being mandatory or because of other factors like having to oblige someone for purchasing insurance, like in life insurance. Such forces will not sustain the tempo of business growth. Further, the attrition rates would tend to be very high when insurance is not bought voluntarily. This once again stems from the fact that the benefits are not very well understood and emphasizes the need for promoting insurance education at a very early stage - perhaps at the high school or collegiate level, when the minds are still impressionable. In the Indian scenario, until recently, excepting the few professional examinations conducted by an insurance institute promoted by the major public sector insurers (also limited exclusively to the employees of insurance companies);

education in insurance was unheard of. It is only in the recent years that some universities have introduced courses in insurance and the results are there for everyone to see. Besides, the privatization of the insurance industry has also played its part in spreading the awareness and the consequent growth in business.

However, in a country that still has a very vast illiterate population, formal education may not be the only alternative in spreading insurance awareness. The knowledge has to be disseminated in a form that the illiterate folk understand and appreciate. If need be, unconventional methods of educating the rural/illiterate folk in a manner that they understand have to be resorted to. It has often been said that one major factor for the poor growth of insurance is the affordability of masses. While the point is well-taken to a certain extent, the more overwhelming reason is that no worthwhile attempt has been made to drive home the advantages of insurance. It is gratifying to note that the trends are changing - the best of business growth are being reported from the so-called backward areas - both in the levels of education and economic growth; thereby proving that there is a dire need to explain to the masses in a medium that they understand.

If an overall development of insurance is to be accomplished, all the stakeholders must contribute their best towards spreading insurance awareness; and only then can we hope to achieve global standards. 'Insurance Education and Awareness' will be the focus of the next issue of the **Journal**.



Making the Nation Insurance Literate

in the next issue...

CIRCULAR

21 May 2007

Ref: 012/IRDA/NOT/BRO/MAY-07

**Re: Insertion of word `Insurance Broker/Brokers/ Broking`
in the Name of Company Applying for a Broker License**

The Authority has decided that all Broking Companies should have the word `Insurance Broker` / `Insurance Brokers` / `Insurance Broking` in the name of the Insurance Broking Company to reflect its line of activity and to enable the public to differentiate IRDA licensed insurance brokers from other non licensed insurance related entities such as consultants, risk managers etc.

Accordingly, all new applicant companies making application

for insurance broker license are advised to insert the word Insurance Broker/Brokers/Broking in their company name without which the application will not be considered.

(Suresh Mathur)
Joint Director

NOTICE

21 May 2007

Re: Constitution of Committee on Health Insurance for Senior Citizens

Issues relating to health insurance for Senior Citizens of the country need a special focus, as they are more vulnerable, due to which they also fall in a higher risk category. Concerns have also been voiced by Senior Citizens across the country on matters relating to policy issuance and claims servicing of health insurance policies. The IRDA has received representations relating to entry barriers for the aged, refusal of renewals, imposition of harsh terms without justification, sharp increase in premium rates, delays in claims service, etc.

Health insurance for Senior Citizens requires a careful study by all stakeholders involved - the Regulator, the Government, the insurance industry, the medical service provider, the TPAs, etc. In the backdrop of the concerns voiced by the Senior Citizens and in order to study issues involved as well as make recommendations thereon, the IRDA has decided to constitute a Committee on Health Insurance for Senior Citizens. The Committee comprises of

Sri K.S.Sastry	- Chairman, I.A & A S (Retd.) & former Chairman, National Housing Bank
Sri V.Hariharan	- Former President, M/s Sundaram Fasteners
Sri A.N.Sood	- President, Delhi Federation of Association of Senior Citizens
Sri K.N.Bandari	- Secretary General, General Insurance Council of India & former CMD of The New India Assurance Co Ltd
Sri B.D.Banerjee	- Former CMD of The Oriental Insurance Co Ltd and former Insurance Ombudsman, Mumbai

Sri C.Chandrasekhar	- Chief Marketing Officer, M/s Apollo DKV Insurance Co Ltd
Sri Nimish R.Parekh	- CEO, M/s Parkh Health Management (Pvt.) Ltd

as Members.

The terms of reference for the Committee is given below:-

1. Suggest commercially viable health insurance schemes for the senior citizens taking care to see that they do not spiral into a high cost healthcare system.
2. Identify the problems in extending health insurance to senior citizens without age limit and at affordable cost and suggest possible solutions.
3. Examine the pros and cons of separate health insurance schemes for the senior citizens considering the profitability and claim ratios of different segments of health insurance.
4. Examine the issues connected with "portability" of health insurance by the senior citizens from one scheme to another and from one insurer to another and suggest the manner and conditions in which such portability is achieved.
5. Examine the feasibility of offering a menu of options to the senior citizens in terms of the type of diseases (including "pre-existing diseases") to be covered, the proportion of expenses to be paid, and the quantum of "deductible".
6. Suggest streamlining of procedures such that medical treatment is on "cashless" basis and is rendered promptly.
7. Suggest ways to incorporating alternative systems of medicine into the health insurance system.
8. Suggest possible incentives to the senior citizens for adopting healthier life styles.

9. Examine the feasibility of incorporating the concept of "family doctor" into the health insurance schemes for the senior citizens.
10. Examine the feasibility of integrating travel insurance such as "Overseas Medclaim" policy into the health insurance schemes of senior citizens.
11. Any other relevant issue.

Members of the public and other stakeholders involved, who wish to offer their advice/views may send their communication

to Shri R.Srinivasan, Officer on Special Duty, whose e-mail ID. is given below:

R.Srinivasan, OSD to the Committee : rsrinivasan@irda.gov.in

Tel: 040-23240034

(P.C.JAMES)

Convener of the Committee

NOTICE

23 May 2007

Ref: 014/ IRDA/NOT/BRO/MAY-07

Documentation & Procedural requirements for obtaining Broker License

A . Submission of Completed Application.

1. Submission of relevant information as required in the FORM A format available on the IRDA website [www.irdaindia.org].
2. The declaration forming part of the application format should be signed by two directors.

B . Documents / Requirements.

1. Remittance of requisite fee as per category of insurance broker applied by demand draft payable at Hyderabad , as prescribed under Schedule II of IRDA (Insurance Brokers) Regulations, 2002.
2. Printed copy of Memorandum and Articles of Association issued by Registrar of Companies. The main objects of the Memorandum and Articles of Association should be as per regulation 9(2) (H) of the IRDA's (Insurance Brokers) Regulations, 2002.
3. Steps should be undertaken by the applicant to ensure compliance of the training requirements as specified in regulation 9 (2) (F). Training requirement as specified under section 9 (2) (F) of the IRDA (Insurance Brokers) Regulations, 2002 is a requirement to be complied with before any application could be considered for grant of license.
4. One Principal Officer has to be there in a broking company fulfilling the requirements as per Regulation 9.
5. Information on whether any person associated with the applicant company in his capacity as Directors/shareholder/promoter/key management personnel or employees is holding any insurance agency or insurance surveyor's license. If yes, the complete details thereof. As per the regulations, no agent or surveyor can work as a broker. The applicant should take steps to cancel the agencies and submit documentary proof of the same to the Authority.

6. Detailed CV of all the directors highlighting their past and present activities.

7. Detailed CV's and attested copies of testimonials of the educational qualifications of the principal officer and key management personnel.

8. Principal Officer to submit an affidavit, duly notarized certifying to the effect that that the applicant (directors, principal officer, key management personnel and employees of the company) are not suffering from any of the disqualifications specified under sub-section 42 D of the Insurance Act, 1938.

9. List of all shareholders (current as well as proposed) of the applicant company.

10. Photocopy of the asset register of the firm, duly certified by CA.

11. List of employees who will be responsible for soliciting and procuring insurance business along-with their qualifications.

12. Details of statutory auditors and Principal Bankers along with the Bank Account Number of applicant.

13. If shareholder is firm/firms, confirm whether it/they is/are Non-Banking Finance Companies. If yes, submit a No Objection Certificate from Reserve Bank of India regarding their promoting and investing in Applicant Company. If not, submit a certificate to that effect from the statutory auditors.

14. If shareholder is firm/firms, furnish the Board Resolution passed by it/them in promoting and investing in Applicant Company.

15. If shareholder is firm/firms, submit the audited annual report, balance sheet for the last three years along with certified copies of income tax returns.

16. In case of individual promoters, submit certified copies of income tax returns along with copies of balance sheet filed duly certified by the auditors for the last 3 years along with net worth certificates certified by CA.
17. Balance sheet of the applicant company
18. Explain in detail the existing activities undertaken by the applicant company.
19. Clarification on how the applicant company proposes to deal with its existing customers/ business/liabilities once it enters the field of insurance broking.
20. The company must have the words `Insurance Broker` or `Insurance Broking` in its name so as to reflect its line of activity i.e. insurance broking.
21. Details of infrastructure along with supporting evidence thereof like ownership/lease agreement papers with regard to office space/ equipment/ trained man power, etc. for the registered office and the future planning for opening branch offices at various locations in the country and the estimated time frame with photographs of premises.
22. Projections of administrative expenses, salaries and wages and other expenses, draw the revenue account, the profit and loss account and the balance sheet for the projected 3 years.
23. Organization chart giving a complete picture of the

company's activities like IT, underwriting, risk assessment, claims settlement, marketing, accounts, back office etc.

24. List of experienced personnel inducted from general and life insurance background with good knowledge and experience of working in the areas of risk assessment, underwriting and claims management etc. Submit detailed CV, copies of educational qualifications along with their appointment/ joining letters of the people, so selected, to the Authority.
25. Bring on record any other information which is relevant to the nature of services rendered by the applicant for the growth and promotion of insurance business.

C. Personal Presentation

The applicant after fulfilling the given requirements is required to appear before the Authority for a presentation of business plans in connection with the application.

The above list of documents/requirements is indicative only and not exhaustive. The additional documents will be advised based on the category of license applied, pattern of shareholding, any other compliance matter required as per IRDA (Insurance Brokers) Regulations, 2002 and views of the Authority.

(M.M. SIDDIQUI)
Consultant & Special Officer

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<http://www.irda.gov.in>**

Risk Based Capital in General Insurance

PRIORITIES FOR INDIA

‘IN ORDER TO ACHIEVE A HIGH LEVEL OF CONFIDENCE ON CAPITAL ADEQUACY; A NUMBER OF ASPECTS SUCH AS CHARGING ENOUGH PREMIUMS, RETAINING ADEQUATE RESERVES, INVESTING PRUDENTLY AND MANAGING RISK ACCUMULATIONS ARE ALL IMPORTANT’ ASSERTS
K P SARMA.

excess of available assets valued on a defined basis over the value of liabilities determined on a defined basis is called solvency margin or surplus. Both assets valuation and liabilities valuation could be subject to many imponderables relating to the future and involve assumptions about future experience.

Solvency margin should be always positive (and at a prescribed level) so as to ensure liabilities are met at all times. The timing of asset proceeds and liability outgo is thus important.

From the brief discussion above it may be seen that capital adequacy is at best a probabilistic notion and hence relative to different degrees of confidence considered as desirable.

In order to achieve a high level of confidence on capital adequacy; a number of aspects such as charging enough premiums, retaining adequate reserves, investing prudently and managing risk accumulations are all important.

generally are not in such a position and so regulators tend to take the view that insolvency of insurers is not a diversifiable risk.

- Certain risks may be quantifiable with a reasonable degree of accuracy while certain other risks may be nearly unquantifiable.
- Uncertainty of claim costs, the uncertainty varying by line of business, future levels of expenses, credit rating of debtors and reinsurers; admissible value of assets depending on asset mix, performance, correlation with economic factors and admissibility rules; inflation in claim amounts depending on nature of claim and non renewals are all examples of risks in general insurance. There are also some long term risks such as delay in recognizing a trend in, say, claim frequency. Exposure to catastrophe (CAT) losses, both natural and manmade, is another important risk.
- There are also other types of risk which are not too obvious. Correlations between market conditions and experience of insurers are known but are perhaps not so much a part of any

Capital and Solvency margin

In this article, capital will be used to mean not only legal capital but also retained reserves plus or minus any valuation margins. The reasons for holding capital would thus be in this context:

- Claims paying ability
- Maintain dividends
- Potential to invest in organic or acquisitive growth and
- If need be support other risks

Claims paying ability depends on overall amount of available assets in relation to overall amount of liabilities. Often, the

Risks in General Insurance

- While shareholders can diversify their risks in many ways, policy holders

Solvency margin should be always positive (and at a prescribed level) so as to ensure liabilities are met at all times. The timing of asset proceeds and liability outgo is thus important.

analysis or rating and reserving. Problems of growth have more often than not been an important cause associated with insolvencies. Management efficiency and resilience to adverse trends is a risk difficult to quantify. Ownership pattern and organizational structures, sometimes cause problems and add to risks in operations.

- Sometimes, lack of or inadequate preventive or follow up action in the mitigation of risk also increases risk. Examples of possible actions are appropriate reinsurance (type of treaty, retention levels and other features), matching of assets and liabilities and avoiding undue concentrations in exposures and assets.

Solvency Margin Formula

- IRDA's relevant regulations prescribe required solvency margin (RSM) at 20% of the net premiums or 30% of net incurred claims whichever is higher. The reduction for reinsurance is subject to a maximum which varies from 0.5 to 0.9 depending on class of business. This formula is similar to the provisions applicable under European Union legislation during early 1990s and is in fact drawn from the same. However, the European Union legislation used a three year average net incurred claims basis whereas IRDA's regulations do not provide for such averaging. Besides the statutory provision, IRDA requires maintenance of the solvency margin at 150% of the level defined in the regulations as a market practice while granting licence.
- This formula implies a uniform risk profile across all companies and does not consider the risks to which individual companies are exposed. To that extent, it may be felt that the provisions need a re-look. Risk Based Capital is an approach which aims to establish each company's requirement of capital based on risk profile of each individual company from time to time.

Risk Based Capital (RBC)

History of RBC: The early 1960s saw RBC concept emerge in the banking industry. In response to the 1990 Dingell report "Failed promises", which criticized the U.S. system of insurance regulation, the National Association of Insurance Commissioners (NAIC) started a drafting process for RBC and in December 1993 RBC was formally adopted by the NAIC.

RBC formula

The US formula determines an amount for each insurer as Authorised Capital Level (ACL). The regulation also lays down action levels which vary by the ratio of company's actual free capital relative to its ACL. For example, below 70% ratio a company must be totally controlled by regulators and if ratio is between 100% and 150%, regulators will perform an examination of the company and issue a corrective order.

RBC formula comprises:

- asset risk
- credit risk
- underwriting loss and loss adjustment expenses reserve risk (viewed on a ten year time horizon)
- underwriting premium risk and
- off balance sheet risk (including high growth)

Risk charges (based on industry experience) are calculated for the above components, R1 to R5.

Total RBC charge after adjustment for covariance (since adverse deviations in various components are not likely to occur simultaneously) is

$R0 + (R12+ R22+ R32+ R42+ R52)$

R0 to R5 are described in table below:

- R0- insurance affiliates: US p/c insurers, common stock, preferred stock, bonds
 - off balance sheet risk: non-controlled assets (1%), guarantees for affiliates (1%)
- R1- fixed income risk: bonds excluding R0 (various %s),
 - bond size adjustment
 - mortgages and collateral loans (5%)
 - cash and short term investments(0.3%)
 - asset concentration adjustment
- R2- equity risk: non affiliated stock (various %s), affiliated life insurers and affiliated alien insurers (50%), all other affiliates (22.5%),
 - real estate (10%)
 - other invested assets (20%)
 - aggregate write-ins (5%)
 - asset concentration adjustment
- R3- 50% of credit risk
 - reinsurance recoverables penalty (10%)
 - interest, dividends and real estate (5%)
 - income due and accrued (1%)
- R4- underwriting reserve risk: adjusted for claims made, loss sensitive contracts and for concentration
 - off balance sheet risk (reserve growth)

Problems of growth have more often than not been an important cause associated with insolvencies. Management efficiency and resilience to adverse trends is a risk difficult to quantify.



- 50% of credit risk (see R3)
- R5- underwriting premium risk: adjusted for claims made, loss sensitive contracts and for concentration
- off balance sheet risk (premium growth)

The square root rule is simply a practical device for reducing the overall risk charge and could be appropriate where there is a weak positive correlation between different risk factors. The covariance adjustment may be roughly 40% of the RBC before covariance, for a typical insurer.

Criticism on RBC

Criticisms of US system:

- Actions laid down in the regulations against different action levels are rigid.
- Policyholders may have to pay additional premium to service additional capital
- Many risks are not incorporated in system
 - Adverse movements in market values of investments above normal volatility
 - Matching by nature, term and currency of assets with liabilities
 - Accumulations of risk from natural catastrophes or combination of economic conditions
 - Losses due to derivatives
 - Calculation of risk factors is arbitrary
 - No consistent conceptual framework for calculation of risk charges
 - Factors for R4 and R5 derived from past industry experience may not be suitable for future; distribution of adverse results by line of business (LOB) will be different.
 - Effectiveness of company specific adjustments to reserve risk factor

is questionable.

- Factors use a fixed interest rate of 5%.
- Management risk is an important concept missing in the formula
- LOB classification does not necessarily pick up all appropriate distinctions between classes of business in terms of risk.
- Security rating of reinsurers not considered. Also, no distinction by class.
- Formula discourages conservative reserving.
- Formula penalizes high/ adequate premium rates. Also differences in premium adequacy at different points of insurance cycle not picked by formula.
- Credit risk charges do not recognize that risk depends on annual throughput.

RBC formula focuses on need for capital to satisfy criteria that set a sufficiently high level of probability of a company's continued solvency over a relatively short time-frame.

Developments since 1990s

The NAIC's 1991 analysis showed that the total RBC for the industry is comprised of reserve risk (44%) premium risk (23%), asset risk (23%) and credit risk (10%).

The analysis by action levels showed that companies with total surplus as percentage of authorized control level (ACL) being 200% or less number only

4.3%. In other words 95.7% were at a comfortable level.

Insurance industry, and actuaries and other professionals throughout the world have been constantly in search of more refined and effective controls for improving the risk based measurement of capital. These efforts are centred around measurement and quantification. The following are some of the methods connected with such measurement:

- Statistical / curve fitting methods which can use the approaches of: theoretical probability distribution functions, maximum loss, regression analysis or empirical studies.
- Frequency and severity analysis including extreme value theory and stochastic methods. Distributions that are often used for frequency include Poisson, Negative Binomial and Binomial. Lognormal, Weibull or Gamma are common for severity distributions.
- Statistical Bayesian approach includes dynamic systems models, influence diagrams, Bayesian belief networks and Bayesian causal models, process maps and neural networks.
- Expert systems such as Fuzzy logic and Delphi method
- Practical approaches such as stress testing and scenario analysis, dynamic financial analysis and market view.

Level of confidence to be aimed at for projection of risk of insolvency and the time period for projection is a point for

Insurance industry, and actuaries and other professionals throughout the world have been constantly in search of more refined and effective controls for improving the risk based measurement of capital.

debate. For example, one might prefer a 97.5% chance of not becoming insolvent in a 5 year period to a 99.5% chance of not becoming insolvent in one year.

There are some practical aspects which cannot be overlooked in any of the theoretical approaches listed above.

- The available information could be incomplete, as might any subsequent investigation show.
- The number of losses may be too low for a theoretical probability distribution to be fitted.
- There may be certain types of losses that may not have occurred till date of investigation but could occur in future.
- There could be problems of classification of loss by cause of loss.

Most analyses would depend on a system of risk classification in order to place risks within coherent risk groups. For this purpose, one might look at the cause rather than the consequence. Whatever approach is adopted, it is necessary to avoid omission of any risk and double counting. The loss database would include information for each event such as date of loss, date reported, development of loss amount, cause of loss and remarks on consequences and follow up actions taken.

The Financial Services Authority (FSA) of UK uses a probability assessment matrix broken down by category and sub category with an assigned risk rating of high, medium or low. Such risk indicators could have the following advantages:

- Can be used for all risks including those where no past losses are reported
- Can be used to judge systems and controls
- Can be used to change estimates of qualitative or subjective assessments depending on outcomes and review.
- Can help create awareness and consciousness of risk intensity and risk severity among all concerned.

Examples of risk indicators: Number of claims, customer complaints, staff turnover, number of system failures, number of manual operations and unrecognized accounts.

Stress testing is generally designed to find the threshold value for a risk factor to give a negative surplus over a chosen time period. The significance of the assumptions that lead to such outcome is judged with reference to expected values. Scenario analysis is an evaluation of the company's financial position to determine the impact of certain unfavourable scenarios.

Bayesian networks are used when cause of loss is an important element but the understanding of losses is yet to be established by normal statistical methods. The initial assessment of prior and conditional probabilities is revised as the experience of risks and the relationships of causes and effects emerges and is analysed over a period of time. Such analysis can not only help analyse past data but also be used to analyse potential losses.

UK system

Prudential supervision (PRU) is aimed at consumer protection and maintaining confidence in the financial system. Many of the requirements relating to prudential regulation are based on EU directives. Since 31 December 2004, UK insurers have been subject to a new broader risk based approach to prudential regulation. The regime covers capital, and also the systems and controls needed to measure

and manage risk. The FSA's source book has following chapters:

1. Application and general requirements
2. Capital
3. Credit risk
4. Market risk
5. Liquidity risk
6. Operational risk
7. Insurance risk for insurers
8. Group risk
9. Insurance and mortgage mediation activity and mortgage lending and administration

The concept of PRU requires insurers to carry out a self-assessment of the capital and surplus required; and the adequacy of the financial resources considering various uncertainties. Such assessment has to be based on reasonable assumptions and supported by stress tests and scenario analysis. Companies have to demonstrate to the FSA that they hold enough capital and have followed FSA's guidance on:

- self assessment of financial resources
- risk based systems and controls requirements
- stress testing and
- scenario analysis

The above process is known as "Individual Capital Assessment (ICA)". Companies have also to explain how financial engineering is used and for what purposes.

The FCA reviews the ICA calculations and issues Individual Capital Guidance (ICG)

Stress testing is generally designed to find the threshold value for a risk factor to give a negative surplus over a chosen time period. The significance of the assumptions that lead to such outcome is judged with reference to expected values.

to companies. Such guidance indicates the level of capital that the FSA believes should be maintained. The FSA expects companies to discuss with them as to the change in strategy required to maintain the capital at the level suggested under the ICG.

The FSA aims to use the reviews of the ICAs to study:

- how data is used in deriving the ICA
- how senior management and technical expertise are used by companies
- how ICA calculations are used for day to day management and risk management strategy
- how insurers are managing their businesses in a softening underwriting environment

Credit risk: Companies are required to limit their counterparty exposure and specific market risk. A firm must notify changes in the nature or quality of reinsurance and when exposure has exceeded 100% of its capital resources (Reinsurance exposure limit). Insurers are expected to restrict the gross earned premiums paid, in any year, to one reinsurer or group of closely related reinsurers to the higher of 20% of the firm's projected gross earned premiums for that financial year or £4m (Reinsurance premium limit). If the limits are breached a plan as to how the exposure will be managed has to be submitted.

Minimum Capital Requirement (MCR) is the greater of:

General Insurance Capital Requirement (GICR), which is the greater of Premiums amount, Claims amount and Brought forward amount and **Base Capital Resources Requirement (Minimum Guarantee Fund- MGF)**

GICR: The Premiums amount is 18% of the first 50 mn of Euros and 16% of the excess over 50 mn Euros of premium. The Claims amount is 26% of the first 35mn Euros of three year average incurred claims and 23% of any excess over 35mn Euros. Both amounts are reduced for reinsurance but up to a maximum of 50%. There are also

certain other adjustments for some classes of business. The brought forward amount is the GICR multiplied by the ratio of outstanding claims at end of year to outstanding claims at beginning of year if the ratio is less than 1.

Base Capital resources requirement (BCRR) is 2 mn for certain classes and 3 mn for other classes. The fixed amounts are revised upwards every year from Sep 2005 based on European index of consumer prices. Guarantee fund is the higher of one-third of GICR or BCRR. If the guarantee fund is breached, company has to notify the FSA and submit a plan for restoration within 14 days.

Enhanced Capital requirement (ECR):

ECR is designed to make a company hold more capital and the calculation considers its individual features. It is the total of asset-related capital requirement and insurance-related values less equalization reserves. The asset related component is the product of admissible asset values multiplied by relevant asset factors published by FSA. The insurance-related values are similarly relevant factors published by FSA multiplied by the technical reserves, unearned premiums and additional unexpired risk reserves.

There are detailed rules for valuation of assets and liabilities. Solvency is assessed on undiscounted reserves subject to certain exceptions. Claim settlement costs are to be included in technical reserves. There are also detailed rules for preparation of published accounts.

Desirable features in a RBC

- Desirable features of RBC:
 - comprehensive [quantifiable, reflect

differences between companies, etc.]

- coherent conceptual framework [statistical models]
- understandable and easy to calculate
- robust [minor changes in data not lead to significant RBC changes]
- based on regulatory returns
- commanding general support
- unlikely to cause too much undesirable behavioral change
- reflecting public priorities [greater attention for personal lines?]

It may be seen some features conflict with others.

Desirable components:

Asset risk, premium risk, reserve risk, credit risk, growth risk, CAT risk, expense risk, mismatch risk.

Sub division of classes has to reflect the specific risk features of claim severity and frequency of the main risk groups. Insurance products of companies have to be classified based on such sub-division.

Risk charges have to be based on past statistical analysis for most risks which are measurable but based on judgment for others.

Data basis for risk charges: industry experience for reasonably adequate periods - say 3 to 5 years for personal lines where large volumes of data are available and claim trends emerge over such short periods but 7 to 10 years for most commercial lines where claim frequency is low and any trends emerge only over such long periods.

Testing: Before any RBC system is

ECR is designed to make a company hold more capital and the calculation considers its individual features. It is the total of asset-related capital requirement and insurance-related values less equalization reserves.

introduced the proposed formula and system has to be tested for results and industry wide acceptability by factors such as company size, growth rate, long/short tail classes, product range, geographical region, reliance on reinsurance, asset portfolio.

In order to move towards a RBC based approach, that is considering risk profile of individual companies instead of the "one size fits all" approach, the regulators have to carry out a great deal of research and engage the professionals and industry in discussion.

Suggestions on Indian RBC

- In order to move towards a RBC based approach, that is considering risk profile of individual companies instead of the "one size fits all" approach, the regulators have to carry out a great deal of research and engage the professionals and industry in discussion. However, a few steps may be initiated as an interim measure. The following are some suggestions for such steps.
- The current practice of insisting that every company may hold 150% of the statutorily defined RSM may be withdrawn and companies may be advised to hold the following levels of the RSM for each class:

The classes of business may have to be redefined in line with international classification but since this would need longer time for preparation, the above is suggested. Higher percentage is suggested for high growth. This may be viewed keeping in mind the increased risk and also the following:

A recent AM Best survey showed that one of the major causes of insurance company failure was excessive growth.

Major expansion often leads to problems, particularly when it is unplanned.

- Currently there are no defined action

levels as in US RBC system or under the UK system of the FSA. It is suggested that where a company's actual solvency is in excess of the statutory RSM but below the computation as defined above, the company may be required to produce a plan of restoration to the suggested level and discuss with regulators. Where the actual solvency is above the computation, no action is required unless the Appointed Actuary has discomfort on one or more aspects of solvency.

- With the current regulations on assets in force, no extra risk charge may be considered for solvency purpose. However, as and when there is a relaxation on the pattern of investments charges for solvency purpose as envisaged under Table II of Form K of the regulations for life companies may be considered.

Acknowledgment

To various actuarial journals and other technical papers.

Class of business	RSM % if growth rate in class is less than 100%	RSM % if growth rate in class is 100% or more
Fire: household	125	150
Fire: Commercial and Industrial	150	175
Marine Cargo	125	150
Marine Hull	175	200
Motor (other than third party liability only)	125	150
Motor Third party	200	225
Engineering	125	150
Aviation	175	200
Liability	175	200
Rural Insurance	150	175
Health	125	150
Others	150	175

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Reserving in General Insurance

THE INDIAN LANDSCAPE

N.LAKSHMANAN WRITES THAT IN GENERAL INSURANCE, A CLAIM IS GENERATED BY A COMPOUND PROCESS COMPRISING TWO RANDOM VARIABLES - THE PROBABILITY OF CLAIM AND THE AMOUNT PAYABLE. HE FURTHER ADDS THAT THE PROCESS IS OFTEN FURTHER COMPLICATED BY DELAYS IN NOTIFICATION OF THE CLAIM AND IN SETTLEMENT THEREAFTER.

Introduction

The financial condition of an insurance company cannot be adequately assessed without sound loss reserve estimates, sufficient

to meet any liabilities which remain outstanding at any point in time. A loss reserve is a provision for an insurer's liability for claims. Loss reserving is the term used to describe the actuarial process of estimating the amount of an insurance company's liabilities for loss and loss adjustment expenses. The estimation process involves not only complex technical tasks but considerable judgement as well. It is important for the actuary to learn about the organization and understand the data before embarking on the task of estimating loss reserve which has a significant impact on the financial strength and stability of the company.

In general insurance, a claim is generated by a compound process comprising two random variables - the probability of claim and the amount payable. This process is often further complicated by delays in notification of the claim and in settlement thereafter. Changes in the relative mix of the underlying risk factors in a portfolio will give rise to disturbances in the trend of claim frequency and claim amounts; and care is needed when interpreting results and particularly when

extrapolating from historic data as the insurance company's operations are frequently changing.

Importance of proper reserving - HIH example

The importance of proper reserving cannot be over-emphasized. The collapse of the HIH Insurance Ltd in Australia in the recent past serves a chilling reminder of the importance of reserving in a general insurer's books of account.

To quote an extract from the report issued by Hon Justice Owen on behalf of the Royal Commission looking into the collapse of HIH Insurance Ltd Australia :

"Where did the money go? Some of it was wasted by extravagance, largesse, paying too much for businesses acquired, and questionable transactions. There were some trading losses. But in the main the money was never there. The deficiency of several billion dollars has arisen because claims arising from insured events in previous years were far greater than the company had provided for. Past claims on policies that had not been properly priced had to be met out of present income. This was a spiral that could not continue indefinitely. In the language of the industry, the failure to provide adequately for future claims is called 'under reserving' or 'under provisioning'. This, in my view, is the primary reason for HIH failing-and not only failing but doing so in such an egregious way."

The importance of proper reserving cannot be over-emphasized. The collapse of the HIH Insurance Ltd in Australia in the recent past serves a chilling reminder of the importance of reserving in a general insurer's books of account.

Technical reserves

Technical reserves can be divided into six categories:

Unearned Premium Reserves (UPR)

This reserve is the proportion of premiums received which relate to the period of cover still outstanding. This is to take account of liabilities for continued cover until the next renewal date. If it is assumed that the risk is uniform over the duration of the policy, this liability can be met by reserving a pro rata proportion of the balance of the premium after deducting initial expenses. This method is called time apportionment or time on risk basis or 1/365 method. Here, profit margins, claim handling costs and expenses of servicing the business are also attributed to the correct period of exposure.

In the circumstances of high inflation, changes in experience and widely fluctuating claims ratio; the expected claims liability under the unexpired risks can differ significantly from the UPR provision. If the UPR is regarded as inadequate, an additional reserve is necessary. This extra reserve called as Additional Unexpired Risk Reserve (AURR) and is arrived at by estimating the total liability in respect of unexpired risks and deducting any amounts already set aside by way of UPR.

Unexpired Risk Reserve (URR)

The approach to the estimation of the "future claims" reserve through the UPR assumes adequacy of premium rates. URR is estimated by multiplying the ratio of the claims incurred in the year to the premiums earned in the same year in the past experience, with the unearned premiums in deriving the future claims cost and then allowing for inflation and changes in experience in the various risk groups and their relative proportion of the total premium.

Settlement delays result in a large part of the total liability remaining outstanding for considerable lengths of

If it is assumed that the risk is uniform over the duration of the policy, this liability can be met by reserving a pro rata proportion of the balance of the premium after deducting initial expenses.

time. These outstanding liabilities can only be estimated. Certain claims settlement expenses may be included in the estimates of incurred claims liability. The balance of the claims handling expenses together with other expenses of servicing the policies during the unexpired risk period must then be estimated with suitable allowance for inflation and added to the reserve for the future claims. Finally a prudent fluctuation margin is added which represents the degree of uncertainty in the elements of the estimation procedure.

Where an URR is held, it will alter the emergence of surplus between accounting periods as compared with the reserves held for UPR only. To hold an URR will defer the emergence of any profit and will anticipate a loss when business has been put on the books at unprofitable rates of premium.

Outstanding Claims Reserve (OCR)

This is the outstanding liability for claims which have already been reported and not settled. In the past, the commonly used method to estimate OCR consisted in obtaining individual case estimates in respect of all outstanding claims at an accounting date on the basis of assumptions covering

- the seriousness of the claim
- the time likely to be taken to complete settlements
- the rate of inflation on claims costs between the accounting date and settlements and
- judicial trends in claims settlements.

Apart from errors intrinsic to this method which may in some classes (eg. Liability) be considerable, there is the problem that in some classes where there are large numbers of claims or where the time lag to settlement is significant causing the accumulation of a large number of outstanding cases, the method may be impracticable owing to the sheer volume of estimations involved. Hence, other methods with a statistical basis are adopted.

Chain Ladder Method (CL)

The basic data comprises the distributions over time of the amounts paid in the settlement of various claims cohorts i.e. claims incurred in a particular year of origin. Several factors distort the distribution of payments over time and these should be separated in order to determine the true underlying trends in settlement. The main factors are

- Inflation
- Speed of settlement due to changes in company policy
- Type of portfolio: Different classes of business and different risk groups within the same class of business. A change in the underwriting policy and in the mix of risk factors within a portfolio will alter the time taken to settle claims and amounts paid at different durations.
- Size of portfolio: The smaller the portfolio, the more pronounced will be the statistical fluctuations inherent in the observed data. If a

portfolio is rapidly changing in size, the run-off pattern may be severely distorted.

- Court settlements in liability claims.

Of the above factors, direct allowance can be made for the effects of inflation by adopting inflation adjusted triangulation method while the treatment of other factors depends on adequate disaggregating of the data into homogeneous groups.

CL method is based on the fact that the distribution of delays between the incident giving rise to a claim and the payments made in respect of that claim remain relatively stable over time. Grossing-up factor is the ratio at a specified time of the estimated ultimate liability of a cohort of claims to the total payments already made at that time. If this ratio is constant for successive cohorts of claims, it can be used to estimate the ultimate liabilities and hence by subtraction of payments made, the outstanding claims reserve.

Average Cost Per Claim Method (ACPC)

This method is based on projecting separately the number of claims handled (i.e. the number of claims settled plus the number outstanding at the end after excluding the number of zero claims) in each development period for each year of origin and the average cost per claim handled at the corresponding period. The number of claims handled can be estimated using chain ladder method. The average cost per claim is projected forward using an inflation adjusted chain-ladder approach. By combining these estimated numbers with the averages, estimated claims outstanding can be obtained.

Bourhuetter - Ferguson (BF) Method

This method estimates ultimate loss by adding together actual reported loss with expected future incurred development which relies on expected losses and selected loss development

factors. The expected losses are obtained by multiplying earned premium by the expected loss ratio which can be estimated by reviewing historical results or industry results for the line of business. This method is useful for a new line of business with little historical information or a volatile line of business that is subject to very large occasional losses. This produces a blend of stability and responsiveness in the loss reserve estimate.

Evaluation of Ultimate Loss estimates

Each method will result in a different set of ultimate losses and an associated reserve estimate. The actuary must decide on either a best estimate reserve or a range of possible reserve estimates, quantifying the uncertainty in the process. Of course, for financial statement purposes, a point estimate of loss reserve requirements is necessary for the balance sheet.

While a substantial amount of judgement is involved in the selection and application of each reserving method, the selection of a final reserve estimate is based on the actuary's experience, knowledge of the portfolio and company's practices and judgement after subjecting the set of estimated ultimate losses for a number of practical tests for reasonability.

Monitoring Results

The projections of expected development in the next year has to be monitored against the actual loss statistics for various parameters such as paid losses, case reserves, IBNR

counts etc. to have confidence and understanding of the relevance of the projection method adopted.

Incurred But Not Reported (IBNR) Reserves

A number of incidents will have occurred prior to the year end but will not then have been notified to the company. The IBNR Reserve is the estimated liability for these unknown claims. In practice, the provision for future development on known claims is called as IBNER (Incurred But Not Enough Reserved) and the provision for reopened claims after they have been closed, are also included in the IBNR reserve which may be calculated as the product of Expected number of late reported claims and Average cost per claim.

The average cost of an IBNR claim often differs from that of currently reported claims so that it is advisable to develop the ratio of average cost of an IBNR claim to average cost of reported claims, for different classes of business on the basis of historical data.

Alternatively, IBNR including IBNER, can be found out by projecting cumulative paid claims data for each accident year by CL method to arrive at the total ultimate liability and deducting the total outstanding claims.

Catastrophe Reserves

As a matter of prudence, these have to be set up out of taxed income so that a company has also to consider its operating position and the effect of provision upon the presentation of its results. This reserve would in the long run be expected

The number of claims handled can be estimated using chain ladder method. The average cost per claim is projected forward using an inflation adjusted chain-ladder approach.

to equate to the accumulated catastrophe loadings in premiums less any claims and expenses.

Claims Equalisation Reserves

This is to smooth out the effects of year to year fluctuations in the incidence of larger claims, such as the unusual floods in Mumbai in 2005 and in Surat in 2006. The provision can be based on past experience of the frequency of claims above a specified amount, deriving the probability density function of this risk and using it in combination with the mean size of "large" claim amount to assess the range of fluctuation. This is not a reserve which has to meet an inevitable liability.

Experience of reserving in Indian general insurance companies

The general insurance loss reserves can generally be categorized into two distinct groups:

- Long tailed - D&O, Professional Liability, Workers' Compensation, Third Party Motor Insurance, General Liability and Product Liability .
- Short tailed - Property lines, Personal Lines

With asset insurance still being the largest component of general insurance premium, most of the insurance coverages issued in India are short tailed. The Regulator, IRDA in May 2005 instructed all general insurers to follow the Chain Ladder method of estimation where sufficient data is available. Besides, standard reporting formats have also been devised to analyse current year's transactions and to build up cumulative data for both amounts and number of claims settled to be used for

Leading companies world over are recognizing that improving the quality of loss reserve estimates can add value beyond improving the balance sheet to gain a market edge and credibility of public disclosures.

reserving purposes later on scientific basis (forms A, B1, B2 for all classes of business). TAC is collecting all relevant information for each class of business from all insurers so that the consolidated industry data can be used for reserving purposes for those classes where availability of data is insufficient.

Future outlook of reserving in India

With the Liability lines of business gradually increasing, there is an immediate need for companies to develop reserving methodologies keeping in mind the long tailed nature of the business. Further, there is an immediate need to capture data in a systematic manner to enable actuaries to base their assumptions on data. Further monitoring should be carried out by the companies for the following:

- Court verdicts on claims dispute
- Cost of litigations
- Costs of medical care
- Inflation rates
- Cost of auto repairs

Conclusion

The need for prudent reserving practices cannot be over-emphasised. Although the

exercise is to estimate, there is paramount need for:

- Using top quality data
- Best practices available
- Applying judgment well thought through

If needed, companies in India could use experiences of their counterparts abroad in USA, UK etc. or some of the other developing countries to design their estimation methods.

Leading companies world over are recognizing that improving the quality of loss reserve estimates can add value beyond improving the balance sheet to gain a market edge and credibility of public disclosures. Quantifying the uncertainty inherent in the insurance process is an important aspect of capital allocation to support a particular product and its pricing. Consequently, leading companies are considering the reserving as a core business function.

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Solvency Margin in Life Insurance

WHY AN INSURER NEEDS TO MAINTAIN IT

G.L.N. SARMA WRITES THAT WHILE THE CURRENT APPROACH TO SOLVENCY MEASUREMENT IS A GOOD STARTING POINT FOR INDIA, IT IS PERHAPS TIME FOR US TO HAVE A RE-LOOK AT THIS AND EXPLORE POSSIBILITIES OF EVOLVING A MORE APPROPRIATE METHOD.

A life insurance product, including pensions, is typically a long term product with the term being well above five years. The insurer often promises lump sum, or a regular stream of payment in the event of death, survival to periodical intervals, disability or illnesses. Some of these products also carry investment guarantees. All of these benefits are provided by collecting money, known as premium, from policyholders as a lump sum or at regular intervals.

Prudence requires that, once a policy is sold, the insurer sets aside a sum as reserves against future liabilities towards the policyholders. In estimating this reserve, the insurer makes assumptions into the future for parameters such as mortality, morbidity, expense, interest rate etc. These assumptions are based on the insurer's best estimate expectations, which is based on their own portfolio or industry or similar other experience.

Sub-regulation (b) of Regulation 5 of IRDA Regulations (Assets, Liabilities and Solvency Margin of Insurers), 2000 specifies that the best estimate assumption shall be adjusted by an appropriate Margin for Adverse Deviation (MAD), the level of MAD being dependent on the degree of confidence in the expected level.

The purpose of MAD is to build a buffer for mis-estimation of the best estimate or adverse fluctuations around the best estimate. However, MAD does not cover for volatility and catastrophe risks. Regulators thus insist on insurers setting aside separate excess assets, known as required Solvency Margin, to protect the policyholders' financial interests should such situations arise.

Section 64VA of the Insurance Act 1938 states "every insurer shall, at all times, on or after the commencement of the Insurance Regulatory and Development Authority (IRDA) Act, 1999, maintain an excess of the value of his assets over the amount of his liabilities of not less than the amount arrived at as follows (hereinafter referred to in this section as the "required solvency margin"):

Required solvency Margin is calculated as
(Mathematical Reserves before Reinsurance) * K1 * First Factor
Plus
(Sum at risk before Reinsurance) * K2 * Second Factor

Where
K1 = MAX (0.85, Mathematical reserves after Reinsurance/Mathematical reserves before reinsurance)

K2 = MAX (0.50, Sum at risk after reinsurance/Sum at risk before reinsurance)

First and Second Factors are defined in IRDA Regulations (Assets, Liabilities and Solvency Margin of Insurers), 2000.

Available Solvency Margin (ASM) is excess of total assets over liabilities. Solvency ratio of insurer is defined as the ratio of

Prudence requires that, once a policy is sold, the insurer sets aside a sum as reserves against future liabilities towards the policyholders.

As with many things in life, what is simple need not necessarily be the best. This deficiency holds good for the current approach to solvency.

ASM over RSM. IRDA advises insurers to maintain solvency ratio of at least 1.50.

Issues with the existing method

The existing method is based on the factors related to mathematical reserves and sum at risk, specified for different lines of business. This method has been in vogue in the UK for several years and has simplicity as its main advantage. As per the method, the required solvency margin is easy to compute and makes it easy for the regulator to monitor solvency of the insurers. This method served its purpose very well when computing power was limited.

As with many things in life, what is simple need not necessarily be the best. This deficiency holds good for the current approach to solvency. It does not recognize the size of portfolio, type of business, operational risk, risk management practices such as reinsurance, underwriting, asset & liability management etc. For example, the K1 factor is the same in a traditional product irrespective of the level of investment guarantee. Further, in a unit linked product it is debatable whether we need a K1 factor when the investment risk is passed on to the policyholder. Considering the above deficiencies and supported by growing computing power, developed markets are moving towards a more sophisticated regime of solvency measurement.

Risk Based Capital framework

Different regulatory regimes have

adopted or in the process of adopting a Risk Based Capital (RBC) framework. Broadly, the new framework determines the realistic solvency requirements based on the risks the individual company exposed to. I have explained the Canadian approach in this article briefly. Canadian requirements are evolving over time based on their experience. Several countries have adopted different approaches in this area.

In Canada, the required capital for life insurance business is the sum of:

- o **Asset default risk**
Risk of loss resulting from on-balance sheet asset default and from contingencies in respect of off-balance sheet exposure and related loss of income; and the loss of market value of equities and related reduction of income
- o **Mortality/Morbidity risk**
Risk that assumptions about mortality, morbidity and lapse will be wrong.

The gross mortality component for life insurance (both individual and group)

is the sum of the components for volatility risk and catastrophe risk.

Volatility Component

The capital required for volatility risk is:

$$\text{Square root of } (\Sigma S^2) + \text{Square root of } (\Sigma S^2)$$

Basic Death AD&D

where the sums are taken over all sets of basic death and AD&D products respectively, and S is the volatility component for the set of products.

Catastrophe Component

The capital required for catastrophe risk is: ΣK

All Products

where the book of business is partitioned into the same sets as in the volatility component, and K is the capital requirement for catastrophe risk for the portfolio.

Morbidity risk for accident and sickness insurance relates to risks arising from volatility in claims experience, and from events that would lead to increased claims. To compute the morbidity component, a factor is applied to the measure of exposure to risk. The resulting values are added to arrive at the morbidity risk component requirement. The factors used in deriving the risk component vary with the guaranteed term remaining in the exposure measure. Two kinds of measures of exposure - annual earned premium (for new claims

Factors for Morbidity Risk (Net claims risk)

Percentage of annual premiums		Length of premium guarantee remaining
Individually underwritten	other	
12%	12%	<=1 year
20%	25%	>1 and <=5
30%	40%	>5



OSFI believes that each institution should establish a target capital level that provides a cushion above minimum requirements to cope with volatility in markets and economic conditions, innovations in the industry, consolidation trends and international developments.

Duration of disability			Length of benefit period remaining
<=2 years	>2 and <=5 years	>5	
4%	3%	2%	<=1 year
6%	4.5%	3%	>1 and <=2
8%	6%	4%	>2 or lifetime

risk) and disability income reserves relating to claims of prior years (continuing claims risk).

o Interest margin pricing risk

Risk of interest margin losses with respect to investment and pricing decisions on in-force business other than asset default and changes in interest rate environment. Policy liability is considered as the measure of exposure.

Factor	Type of business
0.005	Qualifying participating business, non-participating with adjustable premiums or adjustable interest credits
0.010	Other business

Factor	Guaranteed period remaining on premium rates or credited interest	Product
0.01	<5 years	Life and health
0.02	>=5 and <10	
0.03	>=10	
0.015	<5 years	Endowment
0.03	>=5 and <10	
0.05	>=10	

o Changes in interest rate environment risk

Risk of loss resulting from changes in the interest rate environment other than asset default and interest margin pricing risks. Policy liability is considered as the measure of exposure.

o Segregated fund risk

Risk of loss arising from guarantees embedded in segregated funds

Available Capital consisting of Tier 1 and Tier 2 capital and their treatment is prescribed by the *Office of the Superintendent of Financial Institutions Canada (OSFI)*.

The solvency assessment process is called Minimum Continuing Capital and Surplus requirements (MCCSR).

The minimum MCCSR ratio for life insurers is 120%. The MCCSR ratio compares capital available to capital required as calculated by applying factors for specified risks. The ratio is set at 120% rather than 100% because the calculation does not explicitly address other risks, e.g., systems, data, strategic, management, fraud, legal and other operational and business risks, nor risks not explicitly addressed by the actuary when determining policy liabilities.

OSFI believes that each institution should establish a target capital level that provides a cushion above minimum requirements to cope with volatility in markets and economic conditions, innovations

in the industry, consolidation trends and international developments. An adequate target capital level provides additional capacity to absorb unexpected losses beyond those covered by the minimum MCCSR and to address capital needs through ongoing market access. OSFI expects each institution to establish a target total MCCSR ratio, and maintain ongoing capital, at no less than the supervisory target of 150%. However, the Superintendent may, on a case-by-case basis, establish in consultation with an institution an alternative supervisory target ratio based upon an individual institution's risk profile. OSFI will consider any unusual conditions in the market environment when evaluating companies' performance against their target capital levels.

MCCSR is a static measure at a given date. Most factors in MCCSR are meant to be appropriate for industry average risks. This may fail to capture the unique circumstances of specific companies. Risk-based capital requirements were seen as retrospective in nature. OSFI introduced Dynamic Capital Adequacy Testing (DCAT) requirement to understand how the company position changes over time and to provide an early warning of future potential difficulties

Conclusion

The current approach to solvency measurement is a good starting point for India. However, it is perhaps time for us to have a re-look at this and explore possibilities of evolving a more appropriate method. A risk based capital approach requires significant amount of thinking and testing before it can be rolled out. We could develop a road map for gradual implementation of RBC in India considering the practical difficulties.

The author is Appointed Actuary, Bharti AXA Life Insurance Company Ltd.

Insurer Solvency

INTERNATIONAL DEVELOPMENTS

R. KANNAN WRITES THAT DUE TO THE VERY NATURE OF INSURANCE BUSINESS, IT IS IMPOSSIBLE TO GUARANTEE SOLVENCY WITH CERTAINTY. HE FURTHER ADDS THAT IN ORDER TO COME TO A PRACTICABLE DEFINITION, IT IS NECESSARY TO MAKE CLEAR UNDER WHICH CIRCUMSTANCES THE APPROPRIATENESS OF THE ASSETS TO COVER CLAIMS IS TO BE CONSIDERED.

In addition to this, the firewall between various financial institutions is getting blurred. This is resulting into consolidation (mergers and acquisitions) and integration (of markets for banking, insurance, investment services), which also resulted in increased uncertainty. This poses serious challenges to the policy makers and the regulators as they have multi-pronged objectives, viz., protecting policyholders' interests and meeting their reasonable expectations etc. In the process of meeting the multi-pronged objectives, regulators have an additional responsibility to ensure that excessive regulation and steps to enhance transparency in the operations do not hamper market innovation. In turn, it should lead the investors and the policyholders to take timely and adequate decisions. In the insurance sector the key benchmark continues to be *solvency*. In order to protect the policyholders and to ensure the stability of the financial markets, it is required that insurance companies should hold a certain amount of additional assets over and above estimated liabilities as a buffer.

The concept of solvency is old. According to Webster's Ninth New Collegiate Dictionary, it originated in 1727 as "the

quality or state of being solvent". But the latter concept, emerged 100 years earlier (1630) and was defined as "ability to pay all legal debts". In the later period, the term solvency encompassed the buffer, which should be in place to protect the policyholders. This gave rise to several questions, such as:

- How large should it be?
- For what time horizon should it be calculated?
- What kind of assets could be included in the buffer?

The solvency margin is a buffer in a company's assets covering its liabilities. For the supervisor, it is important that the policyholders are protected; but it is also important for him to ensure the stability on the financial market. In view of this, the definition of the *solvency margin* (SM) given by Pentikannen (1952) continues to be considered the benchmark for a long time. If we put some restrictions on the assets, e.g., that they should be of good quality, we have by this definition what could be called the *available solvency margin* (ASM). Note that in this definition there is no discussion on either the time horizon or the relative size of the buffer.

According to the Oxford Dictionary, the definition of solvency is "having enough money to meet all pecuniary liabilities." In an insurance context, this definition gives rise to two concepts of solvency. They are the two extremes of a range of possibilities; i.e., at one end the liabilities are those paid on an immediate liquidation of the company (break-up or run-off approach. At the other end a company could be regarded as solvent if

Advancement in IT, globalization and regulation are the major driving factors influencing the financial sector all around the world. In particular, insurance sector is experiencing tough competition and is expected to intensify in the future ahead.

In order to protect the policyholders and to ensure the stability of the financial markets, it is required that insurance companies should hold a certain amount of additional assets over and above estimated liabilities as a buffer.

it pays all its debts as they mature (*going-concern* approach). This means that a company is solvent when its solvency margin is positive. The so-called *ruin problem* would thus be the probability that the solvency margin of a company at any time in the future would become negative. There are other ways of looking at solvency.

- From the point of view of the management of the company, the continuation of the function and existence of the company must be secured.
- From the point of view of the supervising authority, the benefits of the claimants and policyholders must be secured.

Definition 2 is narrow, as it does not demand continuity of the company but allows it to be wound up; it could be considered as a basis of the legal system. The supervisory authorities and the legal security measures shall be restricted to the minimum, i.e., to secure the insured benefits only, but otherwise each company shall have freedom to develop its function as desired by itself. “As stated by Pentikannen, the latter case indicates the maintenance of the insurer’s ability to meet his obligations for a short period, say, one year. In the former case, the objective is to guarantee the continued existence of the insurer. This is a more complex situation than the latter, and it includes this later case as well.

If we take definition 2 as the basis of the legal system, then the company’s existence can be left to management.

This could be done by means of adequate reserves, loadings of premiums, and reinsurance. In the new environment, as proposed by the European Union; the second pillar with supervisory measures will build a bridge between these two approaches.

The International Association of Insurance Supervisors (IAIS) defined solvency as follows: “An insurance company is solvent if it is able to fulfill its obligations under all contracts under all reasonably foreseeable circumstances” (IAIS 2002). The definition was later slightly changed to “the ability of an insurer to meet its obligations (liabilities) under all contracts at any time” (IAIS, 2003a). In the definition it is also stated:

Due to the very nature of insurance business, it is impossible to guarantee solvency with certainty. In order to come to a practical definition, it is necessary to make clear under which circumstances the appropriateness of the assets to cover claims is to be considered, e.g., is only written business (run-off basis, break-up basis) to be considered, or its future new business (going-concern basis) also to be considered. In addition, questions regarding the volume and the nature of an insurance company’s business, which time horizon is to be adopted, and what is an acceptable degree of probability of becoming insolvent should also be considered.

One of the principal concerns underlying the regulation of both life and general insurance companies is the protection of policyholders. Life insurers are custodians

and managers of substantial investments by individuals; and general insurance policyholders need to be confident that their insurer will be able to meet its promised liabilities in the event that claims ever have to be made under a policy. Regulatory authorities therefore seek to ensure that insurers’ finances are in sound condition and are being properly managed. One of the most important tools at their disposal for this purpose is the solvency requirement imposed on insurers. The insurance directives set out minimum standards which insurers must comply with as regards the adequacy of their finances. In particular, they impose common standards for the determination of the minimum required solvency margin for an insurer and set out the types of assets which can count towards that margin.

The key principle upon which the solvency I directives is based is that every insurer operating in the EC must maintain an adequate applicable solvency margin in respect of its business at all times which is at least equal to the requirement set out in the applicable insurance directive. Failure to maintain the required solvency margin is likely to have significant repercussions for the insurer as it is likely to cast doubts over its financial security and its ability to meet its obligations to policyholders. Basic objectives of Solvency I are as follows:

- To update the thresholds contained in the initial version of the insurance directives to take account of indexation and to update amounts that have been devalued since the insurance directives were brought into force originally;
- To provide a mechanism to ensure that solvency limits are reviewed annually by reference to the European Index of Consumer Prices; and
- To empower regulators in Member States to intervene at a sufficiently early stage where doubts are raised about an insurer’s solvency (rather than

The supervisory authorities and the legal security measures shall be restricted to the minimum, i.e., to secure the insured benefits only, but otherwise each company shall have freedom to develop its function as desired by itself.

waiting for a specific breach of the solvency limits to have occurred and to empower them to reduce the credit given to reinsurances in certain circumstances.

It should be noted that, in common with the insurance directives, the solvency I directives operate to set out minimum standards for solvency margins. Accordingly, there is nothing to prevent individual Member States from establishing more stringent rules in respect of insurers that are subject to the jurisdiction of their regulatory bodies.

The starting point for determining the actual solvency margin for both general insurer and life insurer is determining the value of its excess assets after deducting all of its liabilities, all valued in accordance with the applicable asset / liabilities valuation regulations. Excess assets generally comprise the paid up share capital (including non-cumulative preference share capital) of the insurer and the accounting reserves (including the net amount of the retained profit and loss account brought forward) that do not correspond to its underwriting liabilities.

In the case of a mutual insurer, the effective initial fund plus a portion of the members' account can be included, subject to the insurer's consultative documents providing that:

- Payments to the members shall only be made where the solvency margin will not fall as a result, or, where payments are to be made on the dissolution of the insurer, after all its other debts have been paid;
- The regulatory authorities have the right to object to payments being made out of capital; and
- The regulatory authorities have the right to object to changes to the consultative documents.

The available solvency margin calculated as set out above must be reduced by the amount (if any) of an insurer's own shares.

For non-life companies, the insurance directives are amended by the Solvency I directives and provide that the required solvency margin is to be determined on the basis of one of two alternative calculations.

A regulatory authority will only agree to allow future profits to be included in this way if the insurer submits an actuarial report that supports the emergence of future profits and may not include any profits that have already been taken into account in an allowance for other forms of hidden reserves. Under the solvency I directives, the limits to which these reserves may be counted have been tightened: the amount allowed may be up to 50% of future profits but may not exceed 25% of the lower of (a) the available solvency margin and (b) the required solvency margin.

It should be noted, however, that the Solvency I directives also provide that this practice will no longer be permitted after 31 December 2009. The basis for this change is that it is envisaged in the longer term that such reserves should be recognized explicitly as part of an insurer's economic reserves. This is part of the wider move in the EC to move insurers away from the current ways in which insurers would account for these items and to move to 'fair value' accounting treatment of insurers' assets. This will, in turn, have the effect of removing the understatement of the value of economic reserves that arises as a result of the requirement to value assets using prudent basis.

For non-life companies, the insurance directives are amended by the Solvency I directives and provide that the required solvency margin is to be determined on the basis of one of two alternative calculations. The first is a premium

calculation and is based on the value of the higher of the insurer's aggregate gross written premium and gross earned premium in respect of its entire general business for the financial year in question. The figure is then adjusted to take account of net reinsurance premiums received and items such as taxation. The required margin is 18% of this adjusted premium up to EUR 50 million and 16% thereafter. A further adjustment is then made to take account of reinsurance recoveries, which is achieved by multiplying the figure by net claims and dividing by gross claims, each over the past three years. The maximum reduction that can be allowed for this reinsurance adjustment is 50%.

The second calculation is based on claims and is derived from the average claims experience in the previous three financial years. If the figures have been distorted by unusual events because the insurer has a concentrated exposure in certain classes of business (namely storms, hail, frost or credit default) an average of the claims experience is taken over the preceding seven years. The required margin is taken as 26% of the first EUR 35 million of adjusted claims amount and 23% thereafter. This figure is then adjusted for reinsurance, again up to a maximum of 50%.

Adjustments are made to these figures in the event that the insurer writes liability classes of insurance; the amount of the aggregate premium or claims taken at the outset must be increased by 50% in both calculations, although the insurer may

The Solvency I directives provide the regulatory authorities in Member States with certain powers to intervene where the regulator considers that the rights of policyholders are threatened because the financial position of an insurer is deteriorating.

Solvency II

Although Solvency I directives went some way to modernizing the prudential supervision of insurers, the amendments were essentially limited to updating rules that had remained substantially unchanged since the insurance directives were first implemented. In addition, variations in the way that Member States have implemented the insurance directives and differences in accounting methodologies have led to significant differences in the prudential supervision regimes that have developed across the EC.

At the beginning of 2000, the EC initiated a review of these requirements with a view to considering whether a fundamental change in the prudential supervision of insurers was required in order for the regulation to match more closely the risks of insures. The commission tabled a report, known as 'Solvency II' project. Rather than developing the prudential supervision process by simply building further on the existing rules, the outcome of Solvency II is likely to introduce more far-reaching changes. These are likely to include a move to a more risk-based approach to regulation which will encourage insurers to improve the measurement and monitoring of risks as they occur. It is prescriptive or complex and allows sufficient flexibility in order to allow the insurance market to develop, for example, through further involvement with the derivatives market and more efficient use of alternative risk transfer (ART) structures.

According to a KMPG study, the following are key areas for consideration under Solvency II:

- identification of the key risks to the financial position of an insurance company, viz., underwriting risk, asset risk, credit risk and operation risk;
- assessment of how these risks interact and overlap with each other and

apply to use statistical methods to allocate this over the past three years when the reinsurance adjustment is made. It should also be noted that the Member State responsible for the regulation of the insurer may decrease the credit given for reinsurance in the event that the nature and quality of the reinsurance contracts have changed significantly since the last financial year or where there is no risk or an insignificant risk transfer under the reinsurance contracts. An insurer must ensure that its available solvency does not fall below the level of what is referred to as its 'minimum guarantee fund' (the "MGF").

In both cases the starting point for the calculation of the MGF is taken as one-third of the required solvency margin calculated for that insurer. For general insurers, this is EUR 3 million for insurers who write liability, credit and surety classes of business. For life insurers, the minimum guarantee is EUR 3 million. In both cases, individual Member States may reduce the amount in respect of a mutual insurer. Unless very small volumes of business are written by an insurer, it is generally accepted that available solvency will be far in excess of the minimum amount.

The Solvency I directives provide the regulatory authorities in Member States with certain powers to intervene where the regulator considers that the rights of policyholders are threatened because the financial position of an insurer is deteriorating. In particular, they have the power to oblige an insurance undertaking

to maintain a higher margin of solvency in order to protect against further deterioration in its financial position in the near future. This higher margin will be related to the financial recovery plan that the insurer is obliged to submit.

The regulatory authorities in Member States also have the power to reduce the value of the various elements available to the insurer for the purposes of meeting the solvency margin where there has been a significant reduction in their value; and reduce the credit given to reinsurances where the quality of the capital backing the reinsurance deteriorates or if there is a limited amount of risk transfer. If an insurer has been required to issue a financial recovery plan, the Solvency I directives provide that the regulator shall not certify that the insurer has sufficient solvency margin for any purpose (for example setting up a new branch) if they consider that policyholders' rights are threatened.

Where an insurer holds a "participation" in another insurer (broadly, a holding of 20% or more in the voting rights or equity) an adjustment is made to the solvency margin calculation of such insurer to ensure that there is no double counting of assets required to support the companies' respective solvency margins. Broadly, the value of the insurer's participation in the subsidiary insurer is restricted to its share of the subsidiary insurer's net surplus assets (i.e. the amount by which the subsidiary insurer's net assets exceed its own notional required margin of solvency).

modeling how these are to be managed by the insurer and regulators on a consistent basis with a view to using the models for decision-making purposes;

- requirements for insurers to disclose information to enable the regulators to assess the strength of an insurer’s technical provisions in more details, such as the methodologies, assumptions applied in determining claims, sensitivity analysis and details of the development of the claims run-off;
- introduction of a more consistent approach to asset valuation across Member States, again applying a more risk-based approach to account for volatility and resilience;
- integration and harmonization of the approach to the treatment of reinsurance in the solvency calculation;
- assessment and incorporation of advanced risk reduction techniques, such as ART, into the prudential supervision regime; and

In the last few years, many countries have moved from mandated solvency margin regime to risk-based capital where various risks are measured and capital is provided according to various risks.

- consideration of the application of a ‘three pillar’ approach to the supervision of insurance undertakings analogous to the approach taken by the Basel Committee for banking. This might be structured as follows:
 - o Pillar 1: Financial Resources - to include a risk based approach to minimum capital requirements and the valuation of assets and liabilities, including assessment of liabilities at a group level.
 - o Pillar 2: Supervisory Review - assessment of the strength and effectiveness of risk management systems and internal controls.
 - o Pillar 3: Market Discipline - Obligations for insurers to make disclosures to allow policyholders to assess key information about the financial strength of insurers.

In the last few years, many countries have moved from mandated solvency margin regime to risk-based capital where various risks are measured and capital is provided according to various risks. The following table gives the international practice in this area.

Table 1 - Solvency margin international practice

Australia	The ideas are similar to those behind Solvency II. Liability valuation, risk categories, a factor-based prescribed method, and internal models
Canada	A factor-based system. Risk categories, the minimum capital test, dynamic capital adequacy testing, and minimum continuing, capital and surplus requirements on ratings.
Denmark	Fair valuation and a traffic light test system.
Finland	A risk theoretical transition model and equalization reserve.
Netherlands	Fair valuation and minimum solvency and continuity analysis.
Singapore	Valuation of assets and liabilities, risk categories, and two requirements in a risk-based system.
Sweden	Valuation of assets and liabilities, risk categories, and a simple model.
Switzerland	Valuation of assets and liabilities, risk categories, standard model, scenario tests determining the target capital, and internal model.
UK	A twin peaks’ approach under pillar I, individual capital adequacy standards under pillar II.
U.S	Risk-based capital model, correlation structure, and different intervention levels.

Under the risk-based capital regime the following risks are to be duly recognized.

Current risks

- Risk of insufficient tariffs: Miscalculation, if it was made deliberately, could be classified as a management risk.
- Deviation risk: Risk factors changing subsequently claims frequency and extent, mortality, morbidity, price and wage levels, cancellation probability, legislation, and falling interest rates.
- Evaluation risk: The risk that the technical provisions are insufficient
- Reinsurance risk: The risk of nonpayment by the reinsurer and poor quality of reinsurance.
- Operation expenses risk: The risk that the amount for operating expenses is insufficient.
- Major losses risk (only non-life): The risk due to the size and number of major losses.
- Accumulation or catastrophe risk: Risks due to single events, e.g. earthquakes, storms, etc.

Special risks

- Growth risk: Excessive growth, uncoordinated growth
- Liquidation risk: The risk that the

existing funds are insufficient to meet the liabilities.

Investment Risks

- Depreciation risk: Investments losing their value due to credit, non-payment, and market risks.
- Liquidity risk: Risks due to investments not being able to be liquidated at the right time and in a proper manner.
- Matching risk: The risk that the assets are poorly matched to the liabilities.
- Interest rate risk: Risk of changing interest rates, including reinvestment risk.
- Evaluation risk: The risk that an investment has been evaluated at too high a value.
- Participation risk: Risk due to the undertakings holding shares in other weak undertakings.
- Risks related to the use of derivative financial instruments: Specific market, credit, and liquidity risks..

Non-technical risk

- Management risk: Incompetence or criminal intentions of the management. Untrained staff of the undertaking is also a risk
- Risk in connection with guarantees in favor of third parties: Risk that

economic capital of the undertaking is strained.

- Risk of the loss of receivables due from insurance intermediaries: Risk that external third parties do not meet their obligations.
- General business risks: Risk of change in general legal conditions, e.g., tax laws and regulations.

Risk-based supervision is the order of the day. This particular mechanism gives enough comfort to the Regulator and also to the policyholders so that companies which are taking huge risks have sufficient capital to meet any unforeseen contingencies. Concurrent with risk-based supervision, risk-based capital is the method which is followed to measure the solvency of insurance companies. In this context, various risks as listed above are to be given due recognition, if we have to move towards a healthy insurance sector and thereby contributing to a healthy and robust financial sector.

Concurrent with risk-based supervision, risk-based capital is the method which is followed to measure the solvency of insurance companies.

The author is Member (Actuary), Insurance Regulatory and Development Authority. The views expressed in the article are strictly personal.

Risk Management for Insurers

GETTING STARTED

'RISK MANAGEMENT AS A DISCIPLINE RELIES ON MANAGING RISKS LOGICALLY AND CONSISTENTLY SO AS TO LIVE WITH THE RISK PRUDENTLY AND EFFECTIVELY' EMPHASIZES MELVYN D'SOUZA.

From the time the life insurance industry in India opened up in 2000, the number of private players has continued to increase. The size of each of the life insurers has also grown substantially as shown by new business premium, number of policies, number of employees, etc. As the players grow in size, the complexity of their operations simultaneously increases. To manage the risk in these businesses as well as help achieve desired financial results, having a risk management function is something each insurer may strive to develop as a

best practice. Setting up a risk management function, from an enterprise wide perspective, will give an insurer a competitive advantage and perhaps even strategic advantage.

Of course, insurance companies make money by managing risks such as mortality risk. However, quite often management of different types of risks may not be considered holistically. Certain types of risks like market risk and credit risk may be well addressed but other types of risks, for example, those that may be mitigated through disaster planning or information technology security planning may be neglected.

Risk management as a discipline relies on managing risks in a logical and consistent approach so as to live with the risk prudently and effectively. The aim of risk management is not to eliminate risk but rather understand it and reduce the risks in a specific field to a level acceptable to the company. Techniques to manage risk may be considered as belonging to one of four major categories: risk retention; risk mitigation; risk elimination; or risk transfer. Retaining the risk involves accepting a loss when it occurs. All risks that are not avoided nor transferred are retained by default. Mitigating or reducing risk will also reduce

the severity of any loss but cost can be a factor in reducing risk to an acceptable level. Eliminating or avoiding risk means losing out on any potential gains or profits possibly obtained from accepting the risk. Finally, transferring risk to another party, perhaps through a contract, can allow for ways to manage the risk in a financially sound manner.

Traditional risk management practices, like purchasing insurance to cover losses, remain the foundation of any risk management function. But specialties like asset-liability management, cash flow testing, dynamic capital adequacy testing, and capital models are all sophisticated approaches that may be used together to analyse and manage the company's total risk exposure in a holistic manner. Using all these tools as part of an overall corporate risk management strategy and monitoring the systems that help achieve the organizations risk management objectives can allow for the effective management of risk across a company's spectrum of involvement.

Classifying risks from an insurer's perspective and developing a risk management framework can be beneficial and is a necessary first step. Three main areas of risk exposure, typical for Indian life insurers are listed below but other areas such as international operations; and mergers and acquisitions will bring their own risks in due course as the industry continues to develop.

- financial risks that include capital management, and asset liability management;
- operational risks that include human resources risks, business partner risks, data integrity risks and technology risks; and

Certain types of risks like market risk and credit risk may be well addressed but other types of risks, for example, those that may be mitigated through disaster planning or information technology security planning may be neglected.

- market place risk that include reputational risks, regulatory risk, tax risks and product strategy risks.

The next step is measuring or assessing each of the risk exposures through both quantitative and qualitative methods. Then analysing the total risk exposure can provide insights into the company's operations. For example, the risks when combined, may compound risk exposures and so the total amount of capital appropriate for the insurer may need to be increased. Alternatively, there may be risk offsets that may allow for reduced capital. Developing a risk management strategy through the different risk management techniques on a per area of exposure basis as well as on a per risk exposure basis using materiality as a guideline is the next step in the sequence. The final step is building and maintaining risk monitoring and control systems. Obtaining reports through these systems, gaining insights from the reports and notifying senior management for necessary action ensure that the risk management program will be successful.

Forming a Risk Review Committee at the management level and perhaps subsequently at the board level, when a company's risk function is stabilized, can be useful ways to share insights on risk and mitigation strategies, ensuring risk management is given the attention it deserves. Having a formal committee charter, mentioning the participants, who would include senior management such as the CEO, CFO, COO, Appointed Actuary, Head of Investments and Head of Risk Management is beneficial. The meeting frequency, which should be at least quarterly, would be helpful in focusing and directing the work of the risk management function.

While the above approach is relatively straightforward, it requires dedicated effort and often specialized resources, in terms of both people and technology. Viewing the risk exposures in a framework and measuring and managing these risks holistically in a disciplined manner is time consuming. But it is likely the way of the

future. Some major financial institutions have pushed forward on the risk management front and significant steps are being taken to make risk management a core business discipline, embedding concepts, tools and techniques in front-line business processes. These insurers have clear cumulative risk tolerances, they have a comprehensive risk metric that they can apply across all their risks, and they use risk adjusted returns in strategic decision making.

Other insurers take a more ad hoc approach to risk management. Under this approach, insurers may hold management brainstorming sessions and define their key risks. Then they decide on actions to mitigate or manage these risks performing quarterly updates of actions to address these risks. As a support to this process, quarterly or annual risk review questionnaires may be issued and analysed. Investment departments may manage asset-liability risks in a silo and actuarial departments may manage capital adequacy similarly. While there may be a plethora of risk policies in place, actual monitoring of adherence to the policies and reporting of exceptions in a comprehensive manner may not be as complete as necessary, resulting perhaps in lesser likelihood of gaining synergies that overall risk management promises.

Outlined below are some areas where risk management can play a greater role than the typical focus that risk management has had in the past. Organizations and designations that they offer to those who have passed experience and educational qualifications are also provided as a lead to gathering additional information in these areas.

Business Continuity Planning

Risk management and business continuity are often seen as overlapping areas. However, risk management can create inputs for Business Continuity Planning (BCP) and can help with controls for the noted risks. BCP operates from the assumption that disaster will occur at some point. The September 11, 2001 terrorist attacks in the USA, along with the subsequent hurricanes of 2005 were events that highlighted the need for sound BCPs in North America. In India, the Mumbai train blasts and rain deluges also showcased the need for a robust BCP. Having a BCP and a Disaster Recovery Plan (DRP), which are tested annually through walkthroughs or scenario-based tests, can ensure the company is well prepared for any eventualities that arise. A good crisis management program, with a well trained team, and documented practices will almost always beat an ad hoc approach in a calamity. In the recent past, the threat of bird flu has been increasing and so being prepared for pandemics through thorough planning is also becoming increasingly important. Employees who have gained specialized designations like Certified Disaster Recover Planners (CDRP) from the Disaster Recovery Institute (DRI), for example, are well equipped to develop such plans.

Project management planning

Effective execution is gaining greater recognition as a means of achieving value. Operational excellence as well as project excellence can occur through effective execution. Since operations often start as projects, ensuring that the risks in the projects are minimized can be a sound

Having a BCP and a Disaster Recovery Plan (DRP), which are tested annually through walkthroughs or scenario-based tests, can ensure the company is well prepared for any eventualities that arise.

Risk Management is a function whose time has come to help the organization manage all its risks in a holistic manner.

start in ensuring successful project completion and subsequent smooth operations. Often organizations look to Project Management Offices (PMO) to ensure their projects benefit from a critical mass of experienced project managers. They assign Project Management Professionals (PMP), who have met experience and educational requirements and are certified by the Project Management Institute (PMI) to run projects. These individuals, skilled in managing projects, are trained to build mitigation plans for risks identified and selected to be mitigated. Oftentimes, such PMOs will have project databases with histories of business requirements, system specifications, project plans and project risks and this last element of project risk is often portable between projects.

Systems Security

In many organizations, risks associated with information technology, especially in systems security, for application and operating systems, and for networks and databases are significant. Today's business environment is highly networked and information, after people, is often a company's most valuable asset. Thus, managing the risks associated with all aspects of information technology, including systems security; is crucial. Certified Information Security Manager (CISM) is a designation from the Information Systems Audit and Control Association and individuals who have obtained this designation are well qualified to manage a company's information security program. Certified Information System Security Professional (CISSP) is a vendor-neutral designation

offered by the International Information Systems Security Certification Consortium (ISC)2 that ensures its practitioners can maintain secure systems. COBIT (Control Objectives for Information and Related Technology) is a set of best practices for information technology management and is a model that is growing in use for developing IT governance and control in companies.

Operational processes

The COSO framework (Committee of Sponsoring Organization of the Treadway Commission) can be useful in looking at operational processes, especially if Sarbanes-Oxley requirements are also implemented on this framework. In this manner, all processes are reviewed through flowcharts; and control evaluation matrices accompanied by testing of processes and documenting of issues in issue logs. Such reviews allow for control deficiencies to be detected and addressed, while simultaneously allowing for streamlining of processes with removal of redundant or non-value added activities. The overall control environment benefits and residual risk is reduced.

Fraud

Fraud throughout the world is a growing business. Every organization should have a Fraud Officer and a fraud policy that outlines roles and responsibilities as well as reporting and investigation procedures. Incidents of both internal fraud by employees and external fraud by suppliers or customers needs to be tracked once detected. Fraud types can then be broken into categories like forgery, misappropriation, etc and controls can be

strengthened in these areas. Certified Fraud Examiners (CFE) from the Association of Certified Fraud Examiners are specialists in detecting and helping prevent fraud.

Asset-Liability Management

The objective of Asset-Liability management (ALM) is to measure and manage the insurer's investment and liability risks to meet solvency, marketing, and profitability targets. Appropriate and integrated pricing; investment and policy contract design; and customer satisfaction strategies also need to be developed to meet ALM objectives. In terms of ALM risk exposures, asset risk involves the risk of loss in investments - whether bonds, stocks, real estate, etc. A source of asset risk involves default rates from debt issuers larger than expectations in ALM and pricing models. Credit risk can also arise from defaults on accounts receivable from distributors, etc.

Conclusion

In all companies, there are various individuals supported by functions that are entrusted with stewardship responsibilities. Compliance as a function, whether regulatory or sales, is one such development. Internal Audit has a longer history in the role of detecting weaknesses in control and addressing such weaknesses. Risk Management is a function whose time has come to help the organization manage all its risks in a holistic manner. The benefits will be significant and will include: improving the stability and quality of earnings; identifying natural synergies and opportunities for risk arbitrage; as well as reassuring stakeholders such as customers, investors, and regulators. As the insurance industry grows in India, risk management is certain to become a core business discipline.

The author is Vice President, Internal Audit and Risk Management, Birla Sun Life Insurance. The views expressed in the article are those of the author, and do not reflect the position of BSLI.





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“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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प्रकाशक का संदेश

व्यवसाय के सफलतापूर्ण संचालन का एक आवश्यक अहार्ता अपने दायित्वों का समय से निर्वहन करना भी है। बीमा व्यवसाय में यह पक्ष बहुत महत्व रखता है क्योंकि यह मात्र किसी घटना के घटित होने पर भुगतान करने का वादा है। इस वायदे के असफल हो जाने पर बीमाकर्ता की साख बिखर जायेगी। सर्वव्यापक रूप से, विनियामक तथा प्रशासक बीमाकर्ता की शोधन क्षमता पर निकटता रखते हैं। जिससे आम जनता द्वारा उन पर दिखाया गया विश्वास अपनी जगह पर रहें।

इसे पूरा करने के लिये बीमाकर्ता को नियमित रूप से निश्चित आरक्षित बनानी होगी। ऐसे कई उदाहरण हैं भूमंडल में जहाँ बीमाकर्ता असफल हो गये अपने वचन को पूरा करने में तथा कुल मिलाकर मुँह के बल गिर गये, यह देखा गया है कि ऐसी असफलताओं में अपर्याप्त तथा अपूर्ण आरक्षित अपना विवेक पूर्ण फैलाव इस असफलता का कारण होता है। किसी कंपनी की शोधन क्षमता बीमाकर्ता को सुविधायुक्त रखने के लिये महत्वपूर्ण होती है। इस लिये विनियामक ऐसे निर्धारण बाध्यता रखता है जिस शोधन क्षमता को बीमाकर्ता को बनाये रखना होता है। जो व्यवसाय के वर्ग पर आधारित होती है। विवेक यह माँग रखता है कि शोधन क्षमता रे यह स्तर सदा बनाये रखे जायें यदि इन्हें बीमाकर्ता द्वारा आगे न बढ़ाया जाये तब भी।

एक गणयात्मक विश्व में जहाँ किसी दावे की समान्यता किसी दिये गये समय में बड़ा कार्य है, बीमांकक का विवेक एक महत्वपूर्ण भूमिका निभाता है। जबकि दावों के लिये आरक्षण विभिन्न कारक जो दावा भुगतान को समिष्ट स्तर पर प्रभावित करते हैं - भूमंडलिय आर्थिक संरचना, भूमंडलिय गर्म होने पर प्रत्यक्ष रूप से प्राकृतिक महाविपदा को प्रभावित करती है इत्यादि इसे विचार में लिया ही जाना चाहिये।

जीवन बीमाकर्ता को आवश्यक रूप से मेडिकल प्रौद्योगिकी तथा रोग के पैटर्न में होने वाले विकास का हिसाब में लेना चाहिये। जिससे यह सुनिश्चित किया जा सके कि लिये गये प्रीमियम पर दावा सामाव्यत अनुपातिक ही है। आरक्षित तथा बीमाकर्ता की शोधन क्षमता जर्नल के इस अंक के केन्द्र बिन्दु में है। यह सुनिश्चित करने के लिये की वित्त के इस परिक्षेत्र में बीमा एक महत्वपूर्ण स्थान रखता है। यह आवश्यक है कि इसे भली प्रकार समझा जाये। बाजार के निजी बीमाकर्ताओं के लिये खोलने के लिये अध्ययन के लिये नयी निविष्टियाँ बीमा के क्षेत्र में खुली है बीमा शिक्षा तथा जागृति जर्नल के अगले अंक के केन्द्र बिन्दु में होगा।

श्री. एस. राव

श्री. एस. राव
अध्यक्ष



// दृष्टि कोण //

बीमा विस्तार की दर १० प्रतिशत से कम होने के कारण मध्य पूर्व तथा उत्तर अफ्रीका (मीना) क्षेत्र को वैधानिक पृष्ठभूमि में सुधार करना होगा, विनियामक संगठन तथा प्रक्रियाएँ इनको पूरा करने की प्रकृति, कार्यशीलता तथा प्रशिक्षण तथा बाजार निर्देशित आधार ही बाजार को गति प्रदान कर सकता है इस क्षेत्र में कई जगहों पर कोई भी बीमा विधि नहीं है।

श्री पीटर वायन्सन

उपाध्यक्ष, बोझ एलिन हैमिल्टन

मोटर पुल के बनाये जाने के बाद यह मोटर बीमा के लिये वृद्धि संचालक का काम करेगा जिससे तृतीय पक्ष जोखिम के मामलों का संबोधन हुआ है। सार्वजनिक तथा निजी क्षेत्र के व्यवसाय करने वालों के मध्य बराबरी की स्थिति पैदा हुई है।

श्री सी एस राव

अध्यक्ष, आईआरडीए

ऐसे जोखिम जिनका अनुमान नहीं लगाया जा सकता इन्हें छोड़ कर एशिया अगले 20 वर्ष तक भारत और चीन के द्विद्विजन द्वारा शक्तिशाली रहेगा। चीन की कहानी जग जाहिर है और भारत की आगे बढ़ रही है।

श्री गोय चोक टोग

वरिष्ठ मंत्री, सिंगापुर सरकार

छोटे व्यवसाय के स्वामियों को यह समझना चाहिये कि वे कितना बड़ा व्यवसाय जोखिम झेलते हैं, और उन्हें किस प्रकार सही बीमा आवरण से सुरक्षा लेनी चाहिये।

श्री वालटर बैल

एनएआईसी के अल्पबीमा के बीमा विभाग के अध्यक्ष

तरलता वित्तीय संस्थाओं की योग्यता अपने वचनों को निभाने के लिये जब उन्हें निभाने का समय आये। यह नाजुक है कि व्यक्तिगत जमाकर्ता के प्रचालन को सतत् रखा जाये तथा पूरी वित्त प्रणाली के लिये भी।

श्री जॉन एफ लेकट

अध्यक्ष आस्ट्रेलिया प्रूडेंशियल रेगुलेटरी प्राधिकरण (एपीआरए) के अध्यक्ष

येके का वित्तीय क्षेत्र मजबूत संस्कृति तथा खुलेपन और अविष्कार के कारण कम सामने आया है - लेकिन विश्व की नई स्टेज के लिये हमें अपनी गति को बढ़ाना होगा और उसे नये स्तर तक ले जाना होगा।

लॉर्ड लेविन

अध्यक्ष लॉयड्स ऑफ लंदन

बीमाकर्ता द्वारा जोखिम प्रबंधन

प्राशुल्क मुक्त सत्ता में परिवर्तन

जगदीश भटकल के मत में बीमाउद्योग जोखिम की गुणवत्ता के संबंध में अधिक वैज्ञानिक दृष्टिकोण का हो गया है। वह आगे बताते हैं कि बीमाकर्ता सदैव यह कोशिश करता है कि परस्पर रूप से बीमाकृत की व्यवसाय गतिविधियों पर ध्यान दिया जाए।

निभाता है, मूल्यांकन निर्धारण करने में जोखिम के तथा उसके प्रबंधन के लिए कुटनीतियों का विकास करता है। जिससे जोखिम के ऋणात्मक प्रभाव कम हो जाते हैं और कुछ तथा एक के बाद एक होने वाले विशेष जोखिमों को स्वीकार किया जाता है।

तकनीकी उन्नति की गतिशीलता में सतत् प्रगति तथा प्रोटोटाइप विकास की और बढ़ते हैं जिसमें कई बिना आजमाएँ तथा / अथवा प्रयोगात्मक ढंग होते हैं। सभी मिलकर जोखिम कारक तथा वित्तीय फैलाव को बढ़ा देते हैं कई गुणा तक। यह कारक जोर देते हैं नयी सामग्री के विकास, नाजुक पथ योजना ढाँचा, बड़ी तथा तेज सशीनें, नाजुक तथा विद्युतीय यंत्र सिविल तथा ढाँचा तकनीकों का विकास नये रसायनिक प्रक्रियाओं का बनना तथा ऐसे ही कई

बीमा उद्योग अधिक वैज्ञानिक हो गया है जोखिमों की गुणवत्ता के समाधान के लिये जो उसे दी जाती है। एक बीमाकर्ता सदैव एक कोशिश करता है व्यवसाय की गतिविधियों को जानने के लिये जो बीमाकर्ता द्वारा पारम्परिक रूप से की जा रही है।

बीमा कंपनियाँ उपलब्ध करवाती हैं वित्तीय सुरक्षा फर्मों को शुद्ध परिणाम स्वरूप होने वाली हानियों के विरुद्ध तथा मूल्य जोड़ती है लाभ के रूप में जिससे जोखिम में सुधार होता है। यह हानि को कम करने में महत्वपूर्ण भूमिका निभाता है। इसी समय में बीमाकर्ता बन जाता है। गतिशील अपने विवरण को बाँटने के लिये जिसका संबंध वित्त तथा जोखिम प्रबंधन से होता है जो जोखिम को अच्छी प्रकार से समझने में लाभ प्रदान करता है।

छोड़े गये अवधि में जोखिम का मूल्यांकन करने के प्रयासों को उन्नत करने के लिये बीमाकर्ता निम्नलिखित या अधिक अतिरिक्त मूल्य प्रस्तावित करता है जोकि जोखिम प्रबंधन प्रोत्साहन का एक भाग होता है।

- जोखिम की गुणवत्ता का मूल्यांकन
- सुरक्षा की लेखा परीक्षा
- जोखिम तथा परिचालन (एम ए जेड ओ पी) को जानना, वृक्ष का विश्लेषण (गलत)
- विद्युत परिचालन की लेखा परीक्षा
- तड़ित झंझा से सुरक्षा की आवश्यकता

एक बीमाकर्ता सदैव एक कोशिश करता है व्यवसाय की गतिविधियों को जानने के लिये जो बीमाकर्ता द्वारा पारम्परिक रूप से की जा रही है।

वर्तमान उद्योग परिदृश्य में, बाजार की प्रभावशीलता परिवर्तनीय है तथा जोखिम बढ़ रहे हैं तथा अधिक फैलाव लिए हुए हैं। प्रभावशाली जोखिम प्रबंधन सुरक्षा जोखिम की श्रेणी को बेहतर कर सकता है जिससे व्यवसाय की क्षमता में विकास होता है। एक बीमा कंपनी के लिए जोखिम वह राशि होती है जो लगी होती है हानि की स्थिति में। बीमाकर्ता के दृष्टिकोण से जोखिम को ठीक प्रकार से समझना तथा मूल्यांकन उसे स्वीकार करते समय बहुत ही नाजुक है। जोखिम प्रबंधन एक महत्वपूर्ण भूमिका

- जोखिम युक्त क्षेत्रों का वर्गीकरण
- ले आउट का पुर्नावलोकन
- वातावरण के जोखिम का विश्लेषण
- जान की सुरक्षा का विश्लेषण

बीमाकर्ता द्वारा बीमा प्रीमियम की दरों का निर्धारण उस जोखिम के स्तर से होता है जो वह लेता है। उदाहरण के लिये अग्नि प्रीमियम दर जो प्राशुल्क मुक्ति से पहले की है जो हाइटेड प्रणाली बड़ा ही अकेला ले ले। प्राशुल्क मुक्त सत्ता में अतिरिक्त बड़ा दिया जा रहा है जो विशेष सुरक्षा प्रणाली जैसे एफ एम 200 / इंटरजोन प्रणाली के लिये धुआँ / गर्मी की पहचान करने की प्रणाली, अच्वई प्रबंध परिपाटी आदि।

दूसरी तरफ अतिरिक्त प्रीमियम लगाया जाता है यदि जोखिम स्वीकार्य से दूर हो जैसे बुरी हाउसकीपिंग, घटिया बनावट, गैर मानक विद्युत फीटिंग्स इत्यादि।

बीमाकर्ता जोखिम का निरीक्षण करते हैं उन बातों की चर्चा करते हैं जो प्रीमियम को बचाने के काम आता है तथा रिपोर्ट जमा करने के लिये साथ ही जोखिम को सुधारने की सलाह के साथ। यह अभ्यास बीमाकर्ता को उत्साहित करता है। यह निर्णय लेने

जोखिम प्रबंध में जोखिम की जानकारी महत्वपूर्ण है जो विश्लेषण के लिए आने वाली कठिनाई के लिए आधार का काम करता है जबकि समस्या की जड़ का ज्ञान हो।

के लिये की अतिरिक्त सुरक्षा प्रदान की जाये इसलिये जोखिम सुधार के लिये योगदान हानि रोकथाम तथा जोखिम कम करने का अभ्यास किया जाता है।

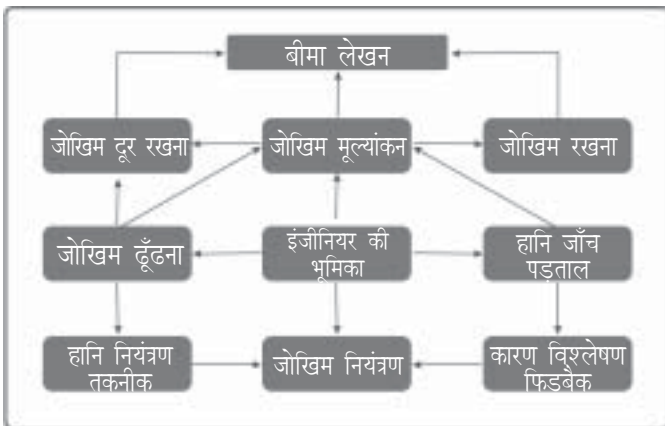
जोखिम प्रबंधन की प्रक्रिया बीमा का दृष्टिकोण बनाती है जो एक तर्क युक्त बताता है जो नीचे तथा उपरोक्त मानचित्र में दिया गया है।

जोखिम की जानकारी

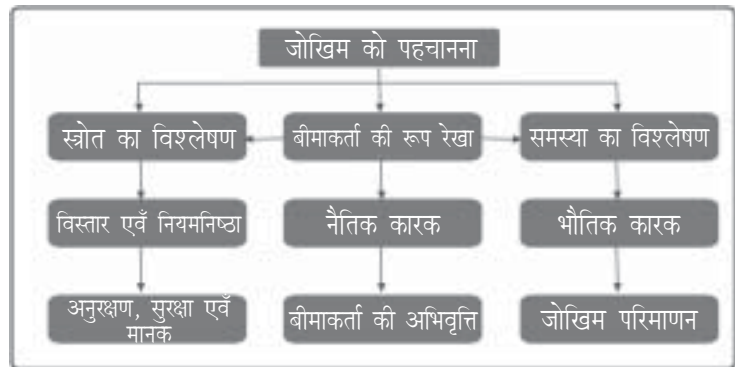
वृहत रूप से यह उद्योग की जानकारी से संबंध रखता है क्षेत्र / बाजार इसकी गतिविधियों को, इसके उत्पादों को, विधि, सामाजिक तथा आर्थिक वातावरण जिसमें इसका परिचालन होता है तथा अन्य भौतिकी प्रकृति गतिविधियाँ इससे जुड़े जोखिम हैं जो कंपनी के परिचालन से जुड़े होते हैं।

उपयुक्त जाँच सूची का विकास जिससे इन जोखिमों को जोखिम प्रबंधन प्रक्रिया के रूप में चिन्हित किया जा सके (जैसा की चित्र 2 में दिया गया है)।

जोखिम प्रबंध में जोखिम की जानकारी महत्वपूर्ण है जो विश्लेषण के लिए आने वाली कठिनाई के लिए आधार का काम करता है जबकि समस्या की जड़ का ज्ञान हो। घटनाएँ जो श्रोत से जोड़ी जाती है अथवा ऐसी घटनाएँ जो समस्याओं में बदल जाती है उनका निरीक्षण किया जा सकता है, उदाहरणतः किसी छोटे इस्पात कारखाने में बड़ा विस्फोट इकाई की व्यवसाय सतता पर प्रभाव डाल सकता है, भागीदार प्रोजेक्ट पर धन लगाने से हाथ खींच सकते हैं। किसी कैमिकल फर्म के लिए विद्युत तड़ित एसिलेटर का न होना एक बड़ा सामग्री क्षति पहुँचा सकता है। बाढ़ द्वारा पंप स्टेशन



चित्र 1



चित्र 2

को अथवा सिंचाई परियोजना को हानि क्योंकि यह लाभ निचले इलाकों में था इसके कारण परियोजना की समय सीमा में देरी हो सकती है अथवा निरीक्षण को न होने के कारण जंग लगने को जानने में निष्फलता प्राप्त हो सकती है। छोटे जहाज, पाईप अथवा साथ देने वाली संरचना तथा उनकी शर्तों में निष्फलता के कारण परिणामस्वरूप अग्नि, विस्फोट, भाप के बादल जो सब कुछ प्लांट को समाप्त कर सकते हैं तथा अन्य हानि भी कर सकते हैं।

जोखिम को जानने की प्रक्रिया यह बताती है कि जोखिम के कारकों को खोजा जाए तथा भावी हानि को मुल्यांकित किया जाए जो हो सकता है। यह विस्तृत रूप से अधोलिखित क्षेत्रों से तुलना किया जा सकता है।

रखरखाव प्रक्रिया - रखरखाव प्रक्रिया को जानना तथा उसकी प्रकृति को समझना, उनकी विनियामक तथा कार्यकुशलता की तकनीकी को जो कार्य करती है। कई मशीन संचालक यह मानते हैं कि एक दृष्टिगत निरीक्षण तथा एक लूबरिकेंट सर्विस में वह सभी हैं जिसकी एक मशीन की आवश्यकता होती है और वह भी वार्षिक आधार पर। वह एनडीटी की आवश्यकता को छोड़ देते हैं। गैर खराब करने योग्य जाँचें, जैसे वायब्रेशन विश्लेषण, अल्ट्रा सोनिक परीक्षा, एडी-करंट परीक्षण, चुम्बकीय प्रैक्टिस अथवा अफ्रा रेड मुल्यांकन जो कि इलेक्ट्रिकल एप्रेटस के लिए किया जाता है तथा उसी तरह के प्रशिक्षण। अच्छे रखरखाव की कमी तथा प्रक्रियाबद्ध न करना सिविल तथा ढाँचागत प्रोपर्टी के मामले में यह पुरा होने से पहले की गति को रोकता है। ईमानदारी की हानि तथा ढाँचागत उत्तीर्ण न होना।

नैतिक कारक - अर्थ यह है कि लोगों द्वारा ठीक प्रकार से साक्षात्कार की जाए तथा प्लांट की देखभाल की जाए, कोई भी इस जोखिम के गुणात्मक चिन्ह

ठीक प्रकार के जोखिम नियंत्रण उपायों तथा जोखिम की पहचान की अनुपस्थिति में कुछ कंपनियाँ प्रचलन तथा व्यवसाय सतता में समस्याओं का सामना कर सकती है।

प्राप्त कर सकता है। उदाहरणतः एक निगमित जो आर्थिक संख्या में समय उत्पादन के लिए तथा रखरखाव सुविधा के लिए लगाता है। रखरखाव के कार्यक्रम वित्तीय रूप से संचालित होते हैं उन्हें भावी उच्च जोखिम के रूप में देखा जाना चाहिए। दूसरी तरफ यह कठिन नहीं है कि एक दर्शन मशीन की टूट फूट के लिए उसकी सेवा से पहले ही चलाया जाए। मनोवृत्ति यह मानती है कि ग्राहक बीमा दावों पर निर्भर करके जिससे रखरखाव की लागत को तथा उत्पादन को निकाला जा सके।

भौतिक कारक - यहाँ पर निश्चित रूप से संवेदन युक्त दृश्य चिन्ह जिसकी देखभाल ठीक से न की गई हो जो कार्य वातावरण पर नियंत्रण रखती है जिससे क्षति से बचा जा सकता है। एक स्वच्छ, संक्षिप्त तथा दुविधा मुक्त कार्य वातावरण न केवल व्यवसाय कि शान बढ़ाता है वरन आर्थिक महत्वपूर्ण है हानि को दूर करने की एक संस्कृति का विकास करना।

ठीक प्रकार के जोखिम नियंत्रण उपायों तथा जोखिम की पहचान की अनुपस्थिति में कुछ कंपनियाँ प्रचलन तथा व्यवसाय सतता में समस्याओं का सामना कर सकती है। उदाहरण वैकल्पिक विद्युत श्रोत का उपलब्ध न होना जैसे यूपीएस अथवा डीजल जनरेटर इत्यादि और यदि वितरण फीडर अथवा पैनल निष्क्रिय हो जाए, अग्नि के कारण बैंक का व्यवसाय प्रभावित होगा सूचना प्रौद्योगिकी तथा समान प्रतिष्ठानों

के लिए। किसी संगठन की व्यवसाय रुकावट को झेलने की शक्ति इस बात पर निर्भर करती है जो संगठन उपलब्ध करवाता है।

कैमिकल तथा अन्य प्रकार के प्रक्रियाबद्ध करने के उद्योग में प्लांट की जटिलता सतत तकनीक के विकास पर निर्भर करती है जो गैर तथा उच्च नियंत्रण प्रणाली इत्यादि में होती है और यह तेजी से प्रचलित हो रहे हैं। इसके परिणामस्वरूप डिजाईन में गलती तथा मूल को जानने एक ऐसा कार्य जो परिणामस्वरूप हुआ है व्यक्तिगत आधार पर। खतरनाक तथा प्रचालनयुक्त स्टीज एक पद्धति है इस कृत्रिम अनुभव के लिए। यह एक आदर्श परीक्षा पद्धति है जो मदद करती है अनुमान योग्य, जानने योग्य घटना की जो उसको सोचते हैं उसकी कल्पना तथा उसे प्रत्यक्ष में उत्पादन अथवा प्रचलन में लाते हैं। बीमाकर्ता ने ऐसे और इसी प्रकार के मॉडलों को चुना है अपनी जोखिम को पहचानने की तकनीक के अंतर्गत।

जोखिम का मूल्यांकन

एक बार जोखिम का ज्ञान हो जाने पर फिर आवश्यक रूप से उसका मूल्यांकन क्षमता के अनुसार विकल्प के घटने अथवा अन्य शब्दों में जोखिम की मात्रा (देखें चित्र ३) के अनुसार होता है। यह विशिष्टताएँ आसानी से या तो गणना योग्य होती है खोए हुए भवन मूल्य के लिए अथवा जिसके जानना समभव ही न हो अथवा किसी न घटित होने वाले घटना के



विकल्प की संभावना। जोखिम मूल्यांकन में घटित होने की दर हानि के वितरण को जानना। जबकि सांख्यिकी सूचना उपलब्ध नहीं है इस तरह की पूर्व में घटित सभी घटनाओं के लिए।

यहाँ कुछ मॉडल हैं जो हानि पृथक्करण को ठीक जोखिम मूल्यांकन कहते हैं जो मदद करता है बीमालेखक को उस निर्णय को लागु करने के लिए जो कि जोखिम से संबोधित सामग्री सूचना तथा यह जानने की वास्तविक शर्तों को देखता है जो औसत से अच्छी या बुरी होती है। जबकि वह कुछ अधिक अथवा औसत खतरे होते हैं प्रबंधन तथा नियंत्रण जो कि प्लांट या यंत्र के लिए होता है वह औसत से भी बुरा होता है। यह मदद करेगा जिससे निर्माण, बचाव, तथा दी गई संपत्ति में रहने वालों के कारण हानि की संभावना जो आसपास के कारण होती है। यह सहायता करेगा बीमालेखक के लिए जिससे हानि के विकास का अनुमान लगाया जा सके, पिछली हानि इतिहास तथा जोखिम के लिए रखे गए अनुमान के लिए भी।

जोखिम परिहार तथा जोखिम प्रतिधारण

एक बार जोखिम को जान लेने तथा उसका मूल्यांकन करने के बाद जोखिम प्रबंधन की सभी तकनीकों तो जोखिम बर्ताव कहा जाता है। बीमाकर्ता द्वारा जोखिम

जोखिम प्रतिधारण पूल तकनीक रूप से जोखिम प्रतिधारण एक समूह के लिए करता है, लेकिन इसका प्रभाव संपूर्ण समूह पर होता है जो समूह के एकांगी सदस्यों तक पहुँचाता है।

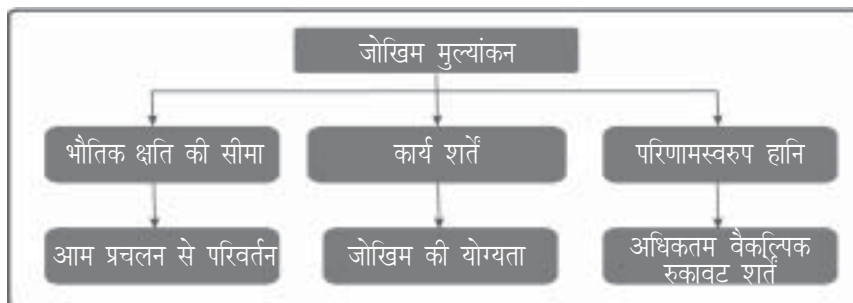
बर्ताव के लिए अपनायी जाने वाली कुछ जोखिम तकनीकी का विवरण अधोलिखित है:

- जोखिम परिहार तथा जोखिम प्रतिधारण
- जोखिम स्थानांतरण
- जोखिम का सुधारना तथा उसे कम करना
- अधिक जोखिम पुनरीक्षण

जोखिम परिहार एक गैर कार्य संपादन गतिविधि है जो अपने साथ जोखिम रखती है। एक पैट्रोकेमिकल कॉम्प्लेक्स नियंत्रण कक्ष को विस्फोट प्रमाण बनाकर जोखिम को कम किया जा सकता है, एक पैट्रोकेमिकल गोदाम को बाढ़ के खतरे से मुक्त किया जा सकता है इसे ऊँची जगह स्थानांतरित करते हुए। बीमाकर्ता के लिए सभी का उत्तर जोखिम परिहार है लेकिन जोखिम को परिहार करने का अर्थ भावी मुनाफे को खोना भी है जोखिम से दूर रहने के लिए किसी व्यवसाय में शामिल न होना जिससे हानि हो

सकती है यह लाभ अर्जन की संभावना को भी समाप्त कर सकता है।

जोखिम प्रतिधारण में शामिल है हानि को स्वीकार करना। सभी जोखिम जो कि दूर नहीं रखे जा सकते और जो स्थानांतरित नहीं किये जा सकते व्यतिक्रम के लिए। इसमें ऐसे जोखिम शामिल हैं जो महाविपदा जिनको बीमा आवरण प्रदान नहीं किया जा सकता है, प्रीमियम देना जिसके लिए संभव नहीं है। युद्ध एक उदाहरण है क्योंकि अधिकांश संपत्ति तथा जोखिम युद्ध के विरुद्ध बीमित नहीं होते हैं इसलिए युद्ध के कारण हानि को बीमित ही संभालता है। बीमा प्रतिधारण एक व्यवहार्य कार्यनीति है सभी छोटे जोखिमों के लिए जो अवशोषण कर सकता है और जहाँ बीमा करवाने की लागत दिनों दिन कुल हानि से अधिक होती जाती है। बीमाधारक द्वारा जोखिम उठाना स्वयं बीमा है। उदाहरण एक बड़ी तथा वित्तीय रूप से मजबूत फर्म एक स्वयं बीमा निधि बना सकती है जिससे समय समय पर भुगतान किया जा सकता है। जोखिम प्रतिधारण पूल तकनीक रूप से जोखिम प्रतिधारण एक समूह के लिए करता है, लेकिन इसका प्रभाव संपूर्ण समूह पर होता है जो समूह के एकांगी सदस्यों तक पहुँचाता है। यह पारंपरिक बीमा से अलग है, इसमें कोई प्रीमियम हस्तांतरित नहीं होता है जो कि समूह सदस्यों के लिए सामने होता है, लेकिन हानि सदस्यों के लिए समूह में सुनिश्चित है।



चित्र 3

जोखिम कम करना एक महत्वपूर्ण कार्य है। जोखिम प्रबंधन के लिए जिसके लिए ऐसी पद्धति चाहिए जो हानि की पृथक्करण को कम कर सके

जोखिम स्थानांतरण से अर्थ है एक अन्य दल जो जोखिम को स्वीकार करे जो परंपरा से संविदा या हैजिंग के द्वारा होता है जो संविदा द्वारा प्रयोग होता है। जोखिम स्थानांतरण लागू होता है जब वह गतिविधि जो जोखिम पैदा करती है वह भी स्थानांतरित हो जाती है अन्य समय में यह संविदा भाषा एक ऐसे जोखिम के लिए होता है जो जोखिम को बिना भुगतान के एक बीमा शुल्क के लिए स्थानांतरित करता है। दायित्व निर्माण अथवा अन्य संविदा अधिकांश रूप इस प्रकार स्थानांतरित होते हैं। जोखिम स्थानांतरण के अन्य उदाहरण एक खतरे को सह संविदा परिचालन में निर्माण उद्योग से बाहर देना।

जोखिम समुन्नत करना तथा कम करना ठीक प्रकार की तकनीकी का प्रयोग करते हुए तथा संस्तुति करना:

जोखिम कम करना एक महत्वपूर्ण कार्य है। जोखिम प्रबंधन के लिए जिसके लिए ऐसी पद्धति चाहिए जो हानि की पृथक्करण को कम कर सके (देखें चित्र 4) उदाहरण में शामिल है। सिपकलर प्रणाली जिसका डिजाईन अग्नि को कम करने के लिए अग्नि से होने वाली हानि को कम करने के लिए बनाया गया है। यह ढंग बड़ी हानि जल के द्वारा क्षति तथा इसलिए यह सुविधाजनक नहीं है। एफएम 200 अथवा इनजेन अग्नि अवरुद्ध प्रणाली जोखिम को कम कर सकती है, लेकिन इसकी लागत एक निति के अनुसार ही पुरी की जा सकती है।

पहला कदम जोखिम कम करने की योजना बनाना हो ऐसे जोखिमों के लिए जिनको सुरक्षा दी जानी है। इस जोखिम को कम करने का उद्देश्य यह विवरण देना है कि कैसे विशेष जोखिम को संचालित

किया जाता है कब कहा तथा किसके द्वारा तथा कैसे इसे सम्बोधित परिलक्षणों के लिए प्रयोग किया जाएगा यदि यह एक दायित्व बन जाए। जोखिम प्रबंधन का हानि निवारण क्षेत्र की प्रक्रिया का लक्ष्य अथवा हानि जो निश्चित है उसे कम करना। यह निष्कर्ष है कि यदि बीमाकर्ता इन सलाहों को लागू करे तब जोखिम यांत्रिक के क्षेत्र में बीमाकर्ता की आँख तथा कानों में जोखिम प्रबंध कार्यक्रम हानि नियंत्रण के लिए प्रयासरत हैं। तथा एक आकस्मिक जोखिम ग्राहक के हानि नियंत्रण कार्यक्रम को देंगे।

सलाहों को लागू करना

हानि रोकने के उपाय दो दृष्टिकोणों से होते हैं प्रचालन प्रबंधन की दृष्टि से तथा भौतिक जोखिम को ठीक करने की पूँजी खर्च की दृष्टि से। हानि को कम करने तथा रोकने के लिए कुछ उदाहरण दिए गए हैं।

प्लांट प्रचालन / रखरखाव विभाग

प्लांट मशीन, अग्नि रोधक जानकारी प्रणाली का रखरखाव कार्यक्रम

आंतरिक सुरक्षा लेखा परीक्षा, कमेटी की बैठक तथा प्रतिफल का अनुपालन

विधुत अर्थिंग पुनर्चर्चा प्रणाली

पाइपलाइंस को बाँधना तथा जोड़ना ज्वलनशील तरल पदार्थ तथा उपस्कर के लिए

स्टॉक को कम करना, भंडारन ऊँचाई कम करना

ड्रेन की रुकावट को हटाना, हाउस कीपिंग पर पुनर्विचार, पिछले स्टॉक पर नियंत्रण

ताले के खोलने तथा बंद करने की वॉल्स

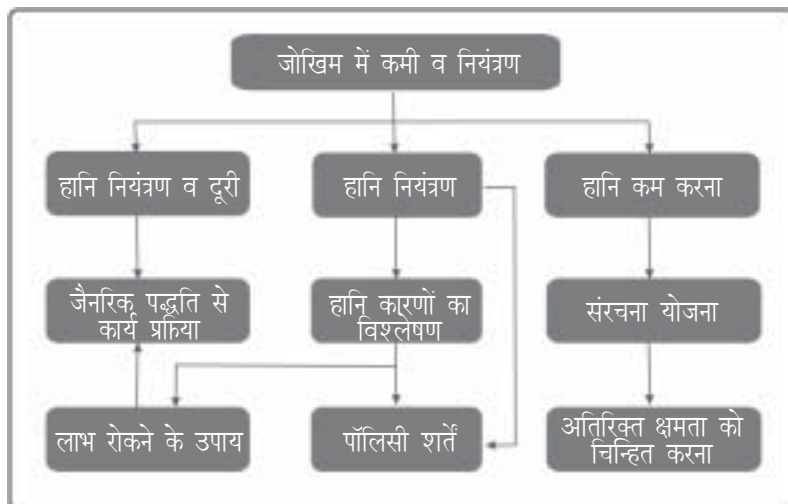
आपातकालिन संगठन को स्थापित करना

घटना तथा दुर्घटना सूचना प्रणाली

भौतिक जोखिम सुधार:

हाइड्रेंट प्रणाली की पुनरिक्षा तथा उसमें कोई परिवर्तन

यदि कोई हो



चित्र 4

नए अथवा अतिरिक्त संप्रिकलर प्रणाली का प्रावधान
धुआँ अथवा अग्नि को जानने की प्रणाली तथा गैस
रिसाव को ढुँढने की प्रणाली
इलेक्ट्रीकल लेखा परीक्षा क्षेत्र वर्गीकरण के अनुसार
बिजली की फिटिंग अग्निरोधक लगाना
एफएम 200 इनजैन अथवा कार्बन डाईऑक्साइड
को स्थापित करना

अग्नि वाले तरल कमरे में अक्जास्ट वेंटिलेशन
लगाना

ढाँचे के लिए अग्नि रोधक जहाँ ऊँचे अग्नि पकड़े
वाले कैमिकल प्रयोग होते हैं

छत की रिपेयर जैसे नयी छत को आवरण देना
ढाँचे के लिए अग्नि आपातकालिन संगठन
घटना तथा दुर्घटना रिपोर्ट प्रणाली

भौतिक जोखिम समुन्नत

हाइड्रेंट प्रणाली का पुनर्विलोकन तथा परिवर्तन के
लिए सलाह

नए अथवा अतिरिक्त संप्रिकलर प्रणाली का प्रावधान
धुआँ अथवा गर्मी खोज प्रणाली तथा गैस रिसाव
पहचान प्रणाली

बिजली की लेखा परीक्षा लपट रहित बिजली फिटिंग्स
को लगाना सुनिश्चित करना वर्गीकरण के अनुसार
एफएम 200 या कार्बन डाईऑक्साइड इनजैन को
लगाना

लपट तरल कमरे के लिए निकास योजना

ढाँचे के लिए अग्निरोधक जहाँ अति ज्वलनशील
कैमिकल प्रयोग किए जाते हैं

छत को ठीक करना, जैसे की नया आवरण लगाया
गया है

आपातकाल के लिए मोमजामे का आवरण तथा
गरम पानी ड्रेन की आवश्यकता
बाढ़ शिल्ड अथवा बाढ़ दरवाजे का प्रावधान
केबल को धरती में डालने का प्रावधान

जोखिम का समय समय पर पुनर्विलोकन साथ दो प्रबंध कार्यक्रम

जोखिम एक सापेक्षिक उपाय है तथा बीमा के
दृष्टिकोण से यह महत्वपूर्ण है कि जोखिम की
गणना की जाए तथा उसके परिणाम संभावना के
साथ तालमेल प्रणाली में हो।

उच्च संभाव्यता तथा उच्च परिणाम के सबसे बेकार
संभावना है। इस मामले में कुल जोखिम मुल्य उच्च
होगा, क्योंकि इसमें उच्च क्षमता घटनाओं के लिए
है बड़े परिणामों के साथ। इन दिशानिर्देश के लिए
व्यवसाय से बाहर होना होगा।

कम परिणाम तथा उच्च संभाव्यता एक चौथाई
कटक है क्योंकि इसमें अनुत्तीर्ण होने की सीमा

जगह पर होगी। यहाँ हानि का कम भाग होगा जो
साधारण कम अपेक्षा है। यहाँ छोटी रखरखाव कम
से कम व्यवसाय के दुविधा से खेद होगा। स्तर से
कम बीमाकर्ता सभी खर्चों को समाश्रित करेंगे
उससे कम राशि को खर्च माने लिया जाएगा
जिसका भुगतान बीमाकर्ता करना प्रारंभ करेगा।

कम परिणाम तथा कम संभाव्यता एक वस्तुपरक
संभाव्यता जोखिम आधारित सतत सुधार की है।
मुल्यांकन के दृष्टिकोण से कंपनियाँ अथवा प्लांट
इस दिशा में होते हैं तथा उनके बड़े विपदा दुर्घटना
का अनुभव करने से है।

उच्च परिणाम कम संभाव्यता यह क्षेत्र बेहतर होगा
बीमा लेखन के दृष्टिकोण से विशेषतः जबकि लागत
कंपनी के अधिकतम कम करने से हो।

नया कर्मी जो कि संभावित अधिकतम हानि (पीएमएल)
जो कि संभावित बड़ी दुर्घटनाओं के मुल्य से
संबंधित है अथवा उनका निष्फल होना जिसके
लिए बड़े पैमाने पर मरम्मत अथवा पुनः स्थापन
मुल्य लागु होगा। बीमाकर्ता यह मानता है कि

अनुमान पर जोखिम जो कि
विवेकशील जोखिम प्रबंध अभ्यास
का महत्वपूर्ण भाग है, लागत समझ
बीमा मूल्य की महत्वपूर्ण कड़ी
है। बीमाकर्ता को आवश्यक रूप
से उच्च प्रीमियम अधिक धन अपने
हाथ से रखनी होगी जिसे जब
पीएमएल उपस्थित हो बीमाकर्ता
वित्त रूप से सुदृढ़ होना चाहिए।

परिणाम	उच्च परिणाम कम संभाव्यता	उच्च परिणाम उच्च संभाव्यता
	कम परिणाम कम संभाव्यता	कम परिणाम उच्च संभाव्यता

संभाव्यता

कम परिणाम तथा कम संभाव्यता एक वस्तुपरक संभाव्यता जोखिम
आधारित सतत सुधार की है। मुल्यांकन के दृष्टिकोण से कंपनियाँ अथवा
प्लांट इस दिशा में होते हैं तथा उनके बड़े विपदा दुर्घटना का अनुभव
करने से है।

लेखक राष्ट्रीय प्रबन्धक, जोखिम, आईसी आईसी आई,
लम्बार्ड

Report Card: General

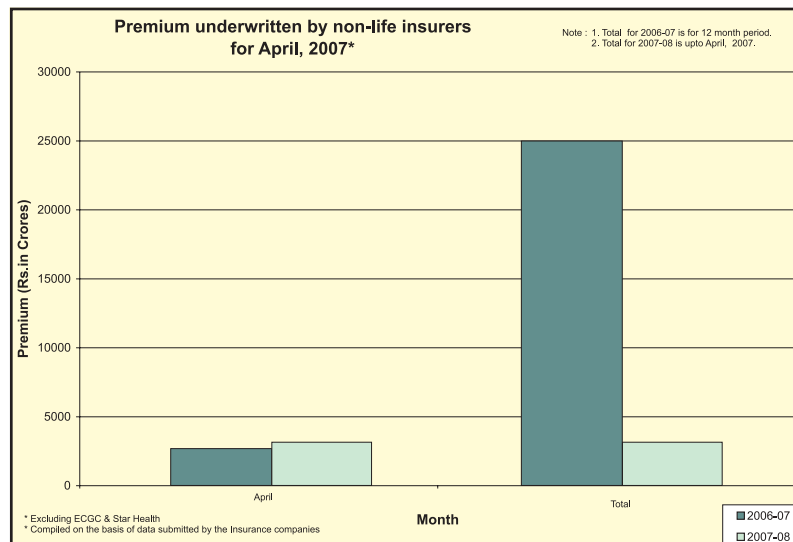
GROSS PREMIUM UNDERWRITTEN FOR AND UP TO THE MONTH OF APRIL, 2007

(Rs.in Crores)

INSURER	PREMIUM 2007-08	PREMIUM 2006-07	GROWTH OVER THE CORRESPONDING PERIOD OF PREVIOUS YEAR
	APRIL 2007	APRIL 2006	
Royal Sundaram	72.92	65.07	12.05
Tata-AIG	112.06	108.27	3.50
Reliance General	221.16	70.27	214.75
IFFCO-Tokio	107.24	121.43	-11.68
ICICI-Iombard	448.65	330.51	35.75
Bajaj Allianz	215.34	182.64	17.90
HDFC CHUBB	21.89	15.90	37.72
Cholamandalam	72.96	32.27	126.09
New India	650.82	601.48	8.20
National	395.89	365.14	8.42
United India	407.51	397.17	2.60
Oriental	413.50	413.40	0.02
PRIVATE TOTAL	1272.22	926.35	37.34
PUBLIC TOTAL	1867.72	1777.19	5.09
GRAND TOTAL	3139.94	2703.54	16.14
SPECIALISED INSTITUTIONS			
ECGC	37.77	41.31	-8.56
Star Health & Allied Insurance*	33.99	0.00	

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

* Commenced its operations in May 2006



GROSS PREMIUM UNDERWRITTEN BY NON-LIFE INSURERS WITHIN INDIA (SEGMENT WISE):

Sl. No.	Insurer	Fire	Marine	Marine Cargo	Marine Hull	Engineering	Motor
1	Royal Sundaram <i>Previous year</i>	102.47 92.39	18.32 18.30	17.73 17.72	0.59 0.58	37.73 28.07	303.39 233.09
2	TATA-AIG <i>Previous year</i>	130.25 119.00	71.31 49.11	71.31 49.11	0.00 0.00	26.29 21.71	288.09 259.34
3	Reliance <i>Previous year</i>	146.15 46.68	24.92 20.75	16.45 10.18	8.47 10.57	93.68 23.73	454.99 26.51
4	IFFCO Tokio <i>Previous year</i>	294.76 226.43	129.96 46.24	52.24 36.11	77.73 10.13	90.91 65.82	448.90 379.69
5	ICICI Lombard <i>Previous year</i>	403.05 311.87	155.25 85.71	56.23 42.14	99.02 43.57	177.54 85.98	1,143.34 458.80
6	Bajaj Allianz <i>Previous year</i>	383.67 360.79	72.99 55.73	60.43 41.42	12.56 14.31	154.77 99.88	843.87 536.61
7	HDFC Chubb <i>Previous year</i>	7.65 5.82	2.37 1.72	2.37 1.72	0.00 0.00	5.98 3.52	132.36 158.03
8	Cholamandalam <i>Previous year</i>	80.54 73.07	26.56 17.00	25.66 16.67	0.90 0.33	23.72 20.71	97.16 52.35
9	New India <i>Previous year</i>	909.98 839.63	321.03 299.78	158.72 149.34	162.31 150.45	210.31 144.70	2,034.73 2,174.50
10	National <i>Previous year</i>	491.21 482.01	196.97 172.29	120.29 126.84	76.68 45.45	134.95 109.11	1,980.16 1,853.29
11	United India <i>Previous year</i>	674.77 645.48	264.35 203.96	135.31 125.01	129.05 78.95	203.96 184.96	1,219.18 1,138.16
12	Oriental <i>Previous year</i>	538.50 546.89	349.78 325.12	168.76 166.92	181.02 158.20	214.27 187.01	1,732.26 1,495.36
	Grand Total <i>Previous year</i>	4,163.00 3,750.06	1,633.81 1,295.71	885.49 783.17	748.32 512.54	1,374.09 975.22	10,678.43 8,765.75
	SPECIALISED INSTITUTIONS						
13	ECGC * <i>Previous year</i>						
14	Star Health & Allied Insurance** <i>Previous year</i>						

Note: In case of public sector insurance companies, the segment wise data submitted may vary from the flash Nos filed with the Authority. As such, the industry totals may vary from the flash figures published for the month of March, 2007.

*Pertains to Credit Insurance.

** Pertains to Health Insurance.

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

YEAR ENDED MARCH, 2007 (PROVISIONAL & UNAUDITED)

(Rs.in Crores)

Motor OD	Motor TP	Health	Aviation	Liability	Personal Accident	All Others	Grand Total
261.46	41.93	97.45	0.00	8.45	25.08	7.14	600.03
209.78	23.31	50.59	0.00	6.73	24.47	5.71	459.35
262.21	25.88	45.35	0.25	73.47	79.40	27.15	741.56
239.56	19.78	30.62	0.02	57.61	58.48	16.50	612.39
408.60	46.39	67.69	7.23	10.03	16.47	91.07	912.23
26.19	0.32	8.61	7.00	4.95	5.98	18.12	162.33
348.63	100.27	71.89	4.74	12.70	17.44	79.03	1,150.32
318.73	60.96	51.97	0.73	10.09	16.65	98.51	896.11
956.73	186.60	735.85	32.07	84.02	113.74	158.59	3,003.45
404.05	54.75	274.46	16.60	60.90	76.25	221.43	1,592.00
668.39	175.48	158.26	7.94	29.73	24.31	129.07	1,804.60
357.76	178.85	97.69	4.75	23.59	15.50	90.02	1,284.57
123.83	8.53	10.18	0.00	4.76	7.69	19.17	190.16
149.85	8.18	4.55	0.00	2.81	11.77	17.56	205.77
80.53	16.63	38.60	0.40	14.70	7.63	25.27	314.59
47.86	4.49	21.11	0.94	13.08	12.57	11.37	222.21
1,233.71	801.02	765.29	115.27	60.65	79.39	518.07	5,014.71
1,394.35	780.16	669.28	116.85	64.34	95.78	386.63	4,791.50
1,310.14	670.03	333.12	84.49	36.42	55.24	498.30	3,810.88
1,289.60	563.69	294.25	71.26	35.68	66.87	438.91	3,523.67
767.30	451.88	434.64	45.36	67.79	95.31	504.59	3,509.95
703.26	434.90	359.26	37.07	59.14	98.98	427.76	3,154.78
1,158.88	573.39	440.53	119.54	61.61	85.69	398.35	3,940.53
981.27	514.10	359.72	149.65	58.17	97.05	308.16	3,527.13
7,580.41	3,098.02	3,198.83	417.29	464.32	607.42	2,455.81	24,993.01
6,122.26	2,643.49	2,222.09	404.86	397.06	580.35	2,040.68	20,431.80
						618.05	618.05
						578.46	578.46
		11.05			11.38		22.42
		0.00			0.00		0.00

GENERAL INSURANCE COUNCIL OF INDIA (GIC-I), MUMBAI AND THE ASSOCIATION OF BRITISH INSURERS (ABI) UNITED KINGDOM HAVE ENTERED INTO A MEMORANDUM OF CO-OPERATION (MoC) WITH THE FOLLOWING KEY OBJECTIVES:-

1. TO PROMOTE A CO-OPERATIVE RELATIONSHIP AND MUTUAL UNDERSTANDING BETWEEN THE TWO ORGANISATIONS;
2. TO EXCHANGE VIEWS AND INFORMATION ON MATTERS AND ACTIVITIES OF COMMON INTEREST.

ON BEHALF OF GIC-I MR. K. N. BHANDARI, SECRETARY GENERAL SIGNED THE MoC, WHILE ABI WAS REPRESENTED BY MS. SUSAN YAVARI, SENIOR INTERNATIONAL ADVISOR, ABI.

MR. BHANDARI STATED THAT THIS WAS THE SECOND MoC SIGNED BY GIC-I, THE FIRST ONE HAVING BEEN SIGNED WITH GENERAL INSURANCE ASSOCIATION OF JAPAN. HE SAID HE LOOKED FORWARD TO ENTERING INTO SIMILAR CO-OPERATION AGREEMENTS WITH GENERAL INSURANCE COUNCILS OF OTHER COUNTRIES ALSO.

MS. SUSAN YAVARI STATED THAT ABI WAS VERY HAPPY TO HAVE SIGNED THIS MoC WITH GIC-I. ON BEHALF OF ABI, SHE ASSURED ALL CO-OPERATION TO GIC-I. MS. YAVARI ALSO STATED THAT ABI HAD SIMILAR EXISTING MoC WITH INSURERS' COUNCILS OF OTHER COUNTRIES.



A PHOTOGRAPH TAKEN ON THE OCCASION - SHOWING MR. K.N. BHANDARI AND MS. SUSAN YAVARI WITH THE SIGNED MEMORANDA OF CO-OPERATION.

17 - 19 June 2007 Venue: Amman, Jordan	MENA CEO Insurance Summit By <i>Asia Insurance Review, Singapore</i>
18 - 23 June 2007 Venue: Pune	General Management Programme for Engineers By <i>NIA Pune</i>
24 - 26 June 2007 Venue: Cebu, Philippines	2007 Strategic Issues Conference By <i>Loma and Limra International</i>
25 - 30 June 2007 Venue: Pune	Investment Appreciation Programme By <i>NIA Pune</i>
27 - 29 June 2007 Venue: Hong Kong	1st IFRIMA International Risk Management Summit By <i>Asia Insurance Review, Singapore</i>
02 - 03 July 2007 Venue: Beijing, China	6th Conference on Catastrophe Insurance in Asia By <i>Asia Insurance Review, Singapore</i>
05 - 07 July 2007 Venue: Pune	Management of Executive Stress By <i>NIA Pune</i>
16 - 18 July 2007 Venue: Pune	Workshop on Distribution Channel Management By <i>NIA Pune</i>
25 - 26 July 2007 Venue: Manila, Philippines	1st Asian Conference on Micro Insurance By <i>Asia Insurance Review, Singapore</i>
23 - 28 July 2007 Venue: Pune	Management of Motor Insurance OD & Third Party By <i>NIA Pune</i>

// view point //

With an insurance penetration rate of below 10%, the Middle East and North Africa (Mena) region should improve legal frameworks, regulatory bodies and processes, nature of competition, skills and training, and market-led initiatives to grow the industry. Until recently almost all Mena countries had outdated insurance laws and regulations while some in the region had no insurance law at all.

Mr. Peter Vayanos
Vice President, Booz Allen Hamilton

The formation of a motor pool would act as a growth driver for motor insurance by addressing the concerns on third party risks. A level-playing field was being created in the segment between public and private players.

Mr. C.S. Rao
Chairman, Insurance Regulatory and Development Authority, India.

Barring this unpredictable risk (avian flu pandemic), Asia will continue to surge over the next 20 years, powered by the twin engines of China and India. The story of China is well-known and that of India becoming increasingly so.

Mr. Goh Chok Tong
Senior Minister, Government of Singapore.

Small business owners need to understand the array of business risks they face, as well as how to protect themselves with the right insurance coverage.

Mr. Walter Bell
NAIC President and Commissioner of the Alabama Department of Insurance

Liquidity - the ability of a financial institution to meet its obligations as they fall due - is critical to the continued operation of an individual deposit-taking institution and to the stability of the financial system as a whole.

Mr. John F Laker
Chairman, Australian Prudential Regulatory Authority (APRA)

The UK financial sector is underpinned by a strong culture of openness and innovation - but to compete on the new world stage, we need to step up our pace and take it to a new level.

Lord Levene
Chairman of Lloyd's, London.