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Risk Management in Banking & Insurance Sector

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As a matter of fact Risk Management in its most restricted form embraces little more than the formulation and administration of insurance programmes for dealing with pure risks. Then the only thing that can distinguish a firm's 'insurance manager' from a 'risk manager' is that whereas both may be responsible for executing the insurance programmes decided by the top management, including the buying of insurance and the handling of claims, a risk manager would be responsible for identifying and analysing risks and advising management on appropriate insurance programmes.

The term Risk Management is closely associated with the term *"Risk and Uncertainty"*. Benjamin Franklin observed that 'in this world nothing can be said to be certain, except death and taxes'. Yet there is some uncertainty about even these two phenomena: no one can be sure when he will die, and tax rules and rates are frequently changed. As a matter of fact, the whole of life is surrounded by uncertainty . No individual, firm, organization, or society can know all that the future holds in store. However much one plans, life is full of surprises, sometimes pleasant, at other times unpleasant, sometimes of minor importance, on other occasions, catastrophic. Some unexpected events are the result of one's own actions, perhaps due to a failure to exercise care, or through tackling things for which one is ill-equipped. Other experiences may be due to the actions of other individuals, groups, or society as a whole; and sometimes nature is the culprit.

The truth remains that many times uncertainties are within the control of the individual, could be any person, a firm or a society as well and it is that turning point where I am going to discuss about Risk Management. Risk could be of the following types:

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1. Production risk.
2. Marketing & distribution risk.
3. Financial risk.
4. Personnel risk.
5. Environmental risk.

Before going ahead, we should discuss the distinction between Risk and Uncertainty. There is no single, universally accepted definition of the word 'Risk' and this means that it is used to describe many different situations. With reference to Insurance Industry, it is frequently used in reference to an insured object or to the perils like fire, storm or collision to which that object is exposed, or to a hazard or set of hazardous conditions which may bring about a loss, it is the last usage which gets nearest to an acceptable definition of risk: 'a phenomenon closely associated with uncertain events'. Uncertain events can further be divided into two broad categories–

- a priori grounds or;
- through the statistical analysis of a series of similar events that have occurred in the past whereas the remainder do not lend themselves to such measurement because they are unique events. Prof. Frank Knight called the first group 'risks', whereas the latter he described as the 'true uncertainties', in his book 'Risk, uncertainty and profit', 1921.

CLASSIFICATION OF RISKS

Risks can further be differentiated as – **PURE VERSUS SPECULATIVE RISKS,** where Pure Risks are those where the occurrence of the event results at best in no change in the situation of the individual or organization exposed to the risk though more likely causes a loss with no possibility of a gain. Whereas the Speculative Risk may bring either a profit or a loss.

DYNAMIC VERSUS STATIC RISKS

Here 'Dynamic risks' arise from the changes that take place in every society, that is economic, social, technological, environmental and political changes. 'Static Risks' are those that would exist in absence of such changes. Of course Speculative Risks are closely related to Dynamic Risks.

FUNDAMENTAL VERSUS PARTICULAR RISKS :

Fundamental risks are those, which affect the whole society or a major part thereof, arising out of some political system or natural catastrophes such as earthquakes or floods. They are both impersonal in cause and effect.

Particular risks on the other hand affect mainly the individual or firm and arise from factors over which he may exert some control. The risks can further be classified on the basis of *society* as a whole.

Prof. Hedges in his article ' Proper limits in liability insurance - a problem in decision-making under uncertainty' 1961, suggested a classification according to the potential loss severity for the individual or firm exposed to loss, as follows:

CLASS- I Those losses, which do not disturb a firm's basic finances;

CLASS- II Those losses, which would necessitate raising additional finance by borrowing or a share issue;

CLA SS- III Larger losses which might bankrupt the firm.

WAYS OF HANDLING RISK

Particularly speaking, the first and foremost is the Avoidance, then Risk Reduction. Risk Retention, Combination, Transfer, Hedging and Research are other options. To be more honest - Avoidance is perhaps the most drastic way of handling risks. Whereas Risk Reduction is in general known as Loss Prevention, since it reduces either the probability of loss producing events occurring or potential size of losses that occur.

Risk Retention is the easiest and probably the cheapest way of dealing with relatively small losses, which are to be borne by their own resources when they occur.

The Combination takes advantage of the law of large numbers, which is nothing but a basic concept of Insurance. Even Insurance Companies are able to reduce the risk of their aggregate loses varying substantially from the aggregate loss expected for any one year.

In Transfer, risks may be transferred in two ways - a firm may transfer the activity, which creates the risks - for example, a civil engineering contractor may sub-contract particular hazardous jobs. Alternatively, contractual arrangements may be made to transfer responsibility for any loss attributable to the occurrence of specified uncertain event from one party of the contract to the other party.

Hedging is the procedure where foreign exchange regulations of India permit importers to enter into forward purchase of specific foreign currencies for specified periods.

Research is designed to improve the information on which decisions are taken to help in reducing the risk.

THE SCOPE AND OBJECTIVES OF RISK MANAGEMEMT :

The fact remains that loss will have the same financial impact whether it is due to the operation of a pure or a speculative risk. Moreover, there is no clear-cut separation between the two types of risk; it was for such reasons Dr. Robert Rennie argued that :

"The corporate risk manager should become the staff specialist in analysing, measuring and distributing all business risks in such a way as to achieve the firm's risk-reduction objectives. The risk manager's estimate of risk should be an integral part of the input of information which top management uses to make its decisions relative to innovation and expansion."

As a matter of fact Risk Management in its most restricted form embraces little more than the formulation and administration of insurance programmes for dealing with pure risks. Then the only thing that can distinguish a firm's 'insurance manager' from a 'risk manager' is that whereas both may be responsible for executing the insurance programmes decided by the top management, including the buying of insurance and the handling of claims, a risk manager would be responsible for identifying and analysing risks and advising management on appropriate insurance programmes.The compromise solution offered by Prof. Haller ('New dimensions of risk; consequences for Management', Geneva Papers on Risks and Insurance, No. 7, January 1978) says :

"The risk management co-ordinator will assume particular responsibility for transfer of information and for training but in no case for security as a whole. This attaches, and will continue to attach, to managers of all kinds."

RISK ANALYSIS

Whatever an individual's attitude towards risks may be, if he is to maximise his welfare the first step must be to identify and evaluate the risks to which he is or may become exposed.

RISK IDENTIFICATION

One approach would be to list :

(a) All those events which may bring about a deterioration in one's present welfare in regard to

  (i) Physical and mental well-being;

  (ii) Current income;

  (iii) The value of one's assets.

(b) Any other events that may frustrate the fulfillment of future welfare plans.

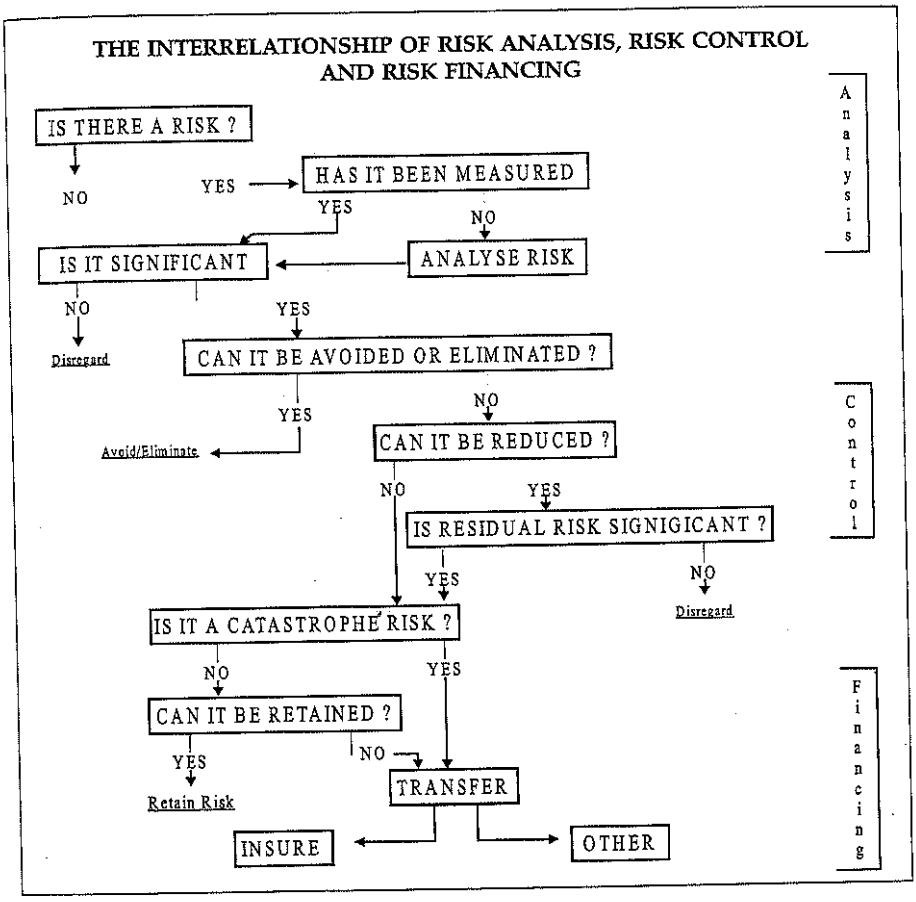
RISK EVALUATION :

Risk evaluation involves two elements:

(a) The probabilities of loss-producing events occurring; and

(b) The potential losses.

RISK HANDLING : The whole range of risk handling options available to firms is also available to individuals. Most people have some choice in the occupations they follow and all are free to choose their leisure activities, so that it is usually possible to avoid particularly hazardous activities if so desired. Similarly, steps can be taken to reduce risk to property and person.



PERSONAL RISKS :

The risks of unemployment, accident, sickness and death uniquely affect individuals and the occurrence may seriously disturb future expenditure plans. An observable feature of life is that over most people's life times income flows rarely match expenditure needs.

RISK MANAGEMENT PROCESSES AND ADMINISTRATION:

The job of risk management can be divided into 3 basic elements :

- ✓ Risk analysis
- ✓ Risk control
- ✓ Risk financing

RISK ANALYSIS - the first step in the process is to analyse the risks to which an organization may be exposed. Risk analysis itself has two prime elements - the identification of risk and its evaluation. Risk evaluation can also be divided into two parts -

(a) The probability of a loss occurring, and

(b) Its severity.

RISK CONTROL - covers all those measures aimed at avoiding, eliminating or reducing the chances of loss-producing events occurring, or limiting the severity of the losses that do happen. Through systematic programme we can analyse the risk and it can be controlled. The sketch given here below shows the interrelationship of risk analysis, risk control and risk financing :

RISK FINANCING

Here one is concerned with the manner in which the remaining risks, after the risk control measures have been implemented, are to be financed. Essentially, an organisation can finance its risk costs in three ways :-

- losses may be charged as they occur to current operating costs or
- 'ex ante' provision may be made for losses, either through the purchase of insurance or by building up a contingency fund to which losses can be charged; or
- when losses occur they may be financed by loans which are repaid over the next few months or years.

THE WHOLE RISK MANAGEMENT PROCESS

Risk management may be expressed in the truth: 'prevention is better than cure', or, 'it is better never to have suffered a loss than to so suffer and to collect a claim under an insurance policy.' The reason for this fundamental truth of risk management is that nothing can ever repair or put right the effects of a casualty. In fact, at the extreme, the enterprise might fail entirely notwithstanding that it has the finest risk-financing programme it could devise. There is ample evidence, for example, a significant proportion of firms never fully recover from the effects of a major fire and some have to be wound up within a short time even if fully insured. The main reason is that in a competitive industry, it is almost impossible to recapture one's former share of the market after a prolonged interruption of business. Every risk management programme must proceed according to the following logical sequence of events if it is to stand any chance of success :

- all exposures to risk must be identified;
- all exposures need to be evaluated according to (a) cause, and (b) effect, the aim being to quantify probabilities and severities;
- the possibility of avoiding or eliminating any of the risks should be investigated, and if feasible the appropriate steps should be taken;

- in the case of other risks, risk reduction measures need to be explored and implemented;
- the residual risks need to be evaluated so that decisions can be taken about the best methods of financing them; and finally
- the results of the whole programme need to be monitored and regularly reviewed in the light of changing conditions.

THE ROLE OF A RISK MANAGER :

He should be honest. Broadly speaking, every risk manager is charged with tasks of administering his organisation's risk management programme, but precisely what role risk managers play and where they are placed in the management structure varies from organisation to organisation.

A risk manager's responsibilities are limited to dealing with the pure risks (or even only part thereof) to which his organisation is exposed, or extend to some of the speculative risk too, his role is likely to be both advisory and executive. He should not remain as a one man show. Proper communication and co-operation with colleagues throughout the organization are essential ingredients of any risk manager's job whatever may be the precise terms of his duties.

Mr. M.W.G. Clark has said in his Book 'Organizational Relationships, co-ordinating risk handling activities', in Handbook of Risk Management :

"The risk manager also needs to appreciate the limitations of his own knowledge. It is impossible for any man to acquire all of the knowledge and skill brought together in an organization. Therefore, the risk manager must learn from whom he can acquire the technical information and advice he will require to identify and evaluate risks, and to formulate his own risk-handling advice to management".

RISK AND INSURANCE MANUALS :

As a study group of the Association of Insurance and Risk Managers in Industry and Commerce (AIRMIC) discovered, there is no standard formula for the preparation of risk and insurance manuals. (*Insurance Procedural Manuals*, 1974). Indeed, as the object of the manual is to set out to explain why and how things are done, the format needs to be tailored to individual needs. However, basically a manual should include sections on :

(a) **Corporate risk philosophy:** a statement of its aims and policy regarding the handling of risks:

(b) Responsibilities for the handling of risks, distinguishing physical and financial control of risks:

(c) The preparation of contingency plans for dealing with major loss-producing incidents:

(d) The organisation's insurance policy and procedures covering:

(i) attitudes to the purchase of insurance protection,

(ii) Risks that should not be insured,

(iii) Brief details of insurance coverage,

(iv) Claims notification and handling procedures,

(v) The information to be supplied to the risk management department,

(vi) The employment of and relationships with brokers.

RISK IDENTIFICATION

PERCEPTION OF RISK :

Before considering the various techniques that may be employed in this risk perception identification process, three points must be made :

FIRSTLY - No single method, whether it be desk research or on-the spot inspection, is likely to reveal all of the risks to which an organisation is exposed, so several techniques must be employed.

SECONDLY- Because of budget constraints and the fact that increasing effort is likely to yield diminishing returns, a risk manager must select those methods which in his situation promise the best results.

THIRDLY - Risk identification must be an on-going process: organisations are dynamic not static beings, and even the most stable and conservative organisation exists in a changing world.

ORGANISATION CHARTS:

Organization charts can be a useful starting point in which they may reveal various facts about -

- The nature and extent of the organization's activities;
- Inter-relationships and inter-dependencies between various parts of the organization;
- The breakdown of the organization into individual profit and cost centres;
- The people with the authority to participate in making and implementing risk handling decisions, and those who may be able to help in providing technical and other information which the risk manager may require;
- Any organizational weaknesses, which may exacerbate risk situations.

ACCOUNTING RECORDS:

The records maintained primarily for accounting purposes are not only another source of qualitative information, but also provide, for example :

- Some of the data required for the valuation of buildings, plant, stock and other assets;
- Data for quantifying inter-dependencies between different parts of an organization, and its dependency upon particular suppliers and customers;
- Details of an organisation's financing arrangements and its financial position;
- Past expenditure on handling risks and the costs of losses that have occurred.

OTHER RECORDS:

Organizations keep many other records that can reveal facts about exposure to risk, for example -

- Leases specify who is responsible for repairing damaged property;
- Construction contracts and sub-contracts assign responsibilities for damage or injury to persons arising out of the contract work;
- Purchasing and sales conditions may deal with questions of liability for damage or injury caused by defective products;
- After-sales servicing records may point to potentially dangerous defects in products.

FLOW CHARTS:

Flow charts show the flows of materials, parts, and products from suppliers, through the various production stages and on to customers. By pinpointing potential bottlenecks, they reveal the vulnerability of the business to risk, particularly when such diagrams are then translated into layout drawings where potential hazards can be plotted against bottleneck exposures.

INPUT-OUTPUT ANALYSIS:

Input-output analysis is a technique developed by economists for tracing the flow of goods and services through an economy, and can equally well be used for identifying (a) the contribution which different parts of an organization make to total earnings and (b) any interdependencies amongst those parts. Thus, like flow charts, input-output analysis can help to reveal the exposure of an organization to risks of disruption of its business. The analysis is based on the simple logic that the output of one party becomes the input of another, and that both can be displayed in a single diagram.

VARIOUS METHODS OF ANALYSIS:

There are several techniques for carrying out the second stage of the risk identification process of exposure analysis, such as (1) Check Lists (2) Threat Analysis (3) 'Event' Analysis (4) Hazard and Operability Studies (5) The Dow Index (6) Fault Tree Analysis.

The most important and presently in use is -

SAFETY AUDITS :

A system that brings together the various techniques relating to both the perception of risk and the identification of operative causes and perils is the safety audit. It has been defined as 'a critical examination of an industrial operation in its entirety to identify potential hazards and levels of risk' (Safety audits - A guide for the chemical industry, Chemical Industries Association, London 1973). In the guide, the various elements of a safety audit are set out in a fuller description of such an audit which described it as a study :

"Subjecting each area of a company's activity to a systematic critical examination with the object of minimising loss. Every component of the total system is included, e.g., management policy, attitudes, training, features of the process and of the design, layout and construction of the plant, operating procedures, emergency plans, personnel protection standards, accident records, etc. An audit - as in the field of accountancy - serves to disclose the strengths and weaknesses, and the main areas of vulnerability or risk, and is carried out by appropriately qualified personnel, including safety professionals. A formal report and action plan is subsequently prepared and monitored."

The first stage of an audit is to acquire a thorough knowledge of -

- the organization, its activities, and so forth;
- all regulations relating to the safety of its operations and products .

  Use may be made of available organisation and flow charts, as described above, to provide the background information for (a), supplemented by discussions with management, on-the-spot inspections, and the analysis of records. For example, when assessing the fire and explosion risks, checks will need to be made on such general matters as :

- The fire resistance of buildings ;
- Flammability of materials;
- Housekeeping standards;
- Sources of ignition;
- Fire alarm and extinguishing systems;
- Security and security patrols;
- Fire training of employees;
- The proximity of the local fire brigade;
- Water sources;
- Means of escape.

The final stage of a safety audit is the preparation of a report providing:

- An analysis of the risks to which the organisation is exposed

- Recommendations for improving safety, listed in order of priority, and contingency planning too.

Thus, a safety audit goes beyond the identification of risks to include risk evaluation and handling.

From my view point, in this changing scenario, the insurance surveyors and loss adjusters can play a vital role in the risk management assignment of the insured. If the engineers, CA and other experts of various fields combine together not as loss adjusters only but as an advisor to the insured as well to the insurers to identify the risk wherefrom a peril has originated and advise them how to reduce/avoid the same and how to improve the risk then only full purpose of insurance can be served.

I am thankful to Mr. N. Rangachari, the Chairperson of IRDA who has taken initiative in the filtration of the existing surveyors and has now taken a lead for the upliftment of the surveyor community which will not only minimise the loss factor but will be a great boon to the Nation as a whole. We must understand what we really mean by loss - Whether it is adequately insured or inadequately insured - loss is a loss, and ultimately it is a National Loss. Therefore, in this changing scenario and years to come the risk management will be a question before us and it is hoped from the surveyors' community that they should understand the real meaning of it and to identify the risk and draw ways and means how to reduce it.

In this changing scenario, the importance of the role of banks has become very much vital for 2 basic reasons :

1. India being a country of villages, the existing banks are having their penetration at the remotest area and so the infrastructure is available with them.
2. Villagers and residents of rural area are well acquainted to them since quite frequently they are availing various types of loans for fertilizer, seeds, cattle & bulls and such other categories. Therefore, if General Insurance business is to be explored goods / products are to be sold from the same counter.

TABLE - 'A'

	FIG. IN CRORES
TOTAL URBAN POPULATION	21.58
LESS : 40.12% (8.66 Below poverty Line)	12.92
LESS 50%	6.46
RURAL POPULATION	62.88
LESS 39.16% (24.62) BELOW POVERTY LINE	38.26
LESS 70%	11.48
A + B	17.94
LESS 2.4 CRORES COVERED BY GOVT. SCHEMES	15.54
PER CAPITA PREMIUM AT RS. 400/- P.A.	Rs. 6216.00

TABLE 'B'
INSURANCE DATA FOR SOME DEVELOPED COUNTRIES
INSURANCE DENSITY (PREMIUM PER CAPITA)

COUNTRY	NON LIFE BUSINESS (USD)		LIFE BUSINESS (USD)	
	1995	1996	1995	1996
USA	1366.6	1381	1005.6	1079
CANADA	703.2	709	552.1	501
GERMANY	1136.1	1097	763.1	762
UK	615.5	677	1078.7	1433
FRANCE	833.9	790	1434.5	1559
ITALY	425.0	471	249.4	294
NETHERLANDS	1068.9	1060	1214.3	1268
SWITZERLAND	1613.2	1557	2894.0	3106
JAPAN	1012.5	896	4075.8	3236
SOUTH KOREA	295.5	335	1042.1	1037
AUSTRALIA	690.6	794	814.3	1011
CHINA	4.2	5	1.9	3
INDIA	1.9	2	4.5	5

TABLE 'C'
SHARE OF WORLD MARKET (%)

COUNTRY	(1996) TOTAL	COUNTRY	(1996) TOTAL
USA	31.01	ITALY	2.09
JAPAN	24.67	CANADA	1.72
GERMANY	7.23	AUSTRALIA	1.57
UK	6.51	SWITZERLAND	1.57
FRANCE	6.50	NETHERLANDS	1.72
SOUTH KOREA	2.97	CHINA	0.46
		INDIA	0.31

The data above clearly indicates that 62.88 crores of the total population are living in rural areas where 39.16 % are below the poverty line. From another, it can well be seen that in India our density of insurance premium per capita for General Insurance is only for 2 USD and from the next Table, it is evident that India is sharing the insurance market of the world by 0.31% of the total insurance Premium.

These figures clearly suggest that urban area has been catered if not fully than adequately, though the rural area is still lying untapped, therefore, whatever, we have discussed by now, i.e., all the methodology required for Risk Management is to be reviewed, because the RISKS, the PERILS and the HAZARDS in a village are altogether different than what are important for an industrialized corporate House based in an urban area.

Unfortunately, by now, we are of course having policies for villagers for Cattle Insurance, Poultry Farm Insurance, Hut Insurance and so on but the truth remains that if there is a petty claim of a cattle and this cattle is insured, since it is Bank financed, the poor client has to run from pillar to post and nobody gives cognizance to that villager. Therefore, Risk Managers are requested to evaluate the risk for the rural areas while sitting in the rural area itself (by now policies are being designed for the rural areas while sitting in a Metro) while as this will not be proper and is not going to serve any fruitful purpose. For example, for a small disease costing Rs. 5,000/- a villager is bound to pledge his property to the capitalist before going to the urban area for treatment. It clearly indicates that for a villager a loss of one cattle or one Bull or loss to his farm because of untimely rain or drought, is a catastrophe for him. Their requirements are very little, expectations are too small and their capacity of retaining the loss is very very small, Therefore, new definitions and formulae are to be made very cautiously keeping in mind that plenty of premium is lying in the Indian villages. What is actually required is that the product is sold from the same Bank counter in the most remote places and the service is rendered at his door step.