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N Theoretical Framework and Knowledge Based Approach: Of Risk Management in Banking Sector: Some Experiences

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ABSTRACT: Risk Management is the application of proactive strategy to plan, lead, organize, and control the wide variety of risks that are rushed into the fabric of an organization's daily and long-term functioning .It is a process that is continuous in nature and a helpful tool in decision making process. According to the Higher Education Funding Council for England (HEFCE), Risk Management is not just used for ensuring the reduction of the probability of bad happenings but it also covers the increase in likeliness of occurring good things. Objective of risk management is to reduce different risks related to a pre-selected domain to an acceptable. It may refer to numerous types of threats caused by environment, technology, humans, organizations and politics.. The paper describes the different steps in the risk management process, methods and provides some examples for risk. Also examined the different techniques adopted by banking industry for risk management. Finally it can be concluded that the banks should take risk more consciously, anticipates adverse changes and hedges accordingly, it becomes a source of competitive advantage, and efficient management of the banking industry.

Keywords: Risk Management, Banking Sector, Credit risk, Market risk, Operating Risk, Credit Risk Management, Deposit Exposure, Operational Efficiency.

I. INTRODUCTION

Risk is unavoidable and present in every human situation. It is present in daily lives, public and private sector organizations. Depending on the context (insurance, stakeholder, technical causes), there are many accepted definitions of risk in use. The common concept in all definitions is uncertainty of outcomes. Where they differ is in how they characterize outcomes. Some describe risk as having only adverse consequences, while others are neutral.

The phrase "the expression of the likelihood and impact of an event" implies that, as a minimum, some form of quantitative or qualitative analysis is required for making decisions concerning major risks or threats to the achievement of an organization's objectives. For each risk, two calculations are required: its likelihood or probability; and the extent of the impact or consequences.

Finally, it is recognized that for some organizations, risk management is applied to issues, predetermined to result in adverse or unwanted consequences. For these organizations, the definition of risk which refers to risk as "a function of the probability (chance, likelihood) of an adverse or unwanted event, and the severity or magnitude of the consequences of that event" will be more relevant to their particular public decision-making contexts.

Why risk management needed?

Risk Analysis and Risk Management has got much importance in the Indian Economy during this liberalization period. The foremost among the challenges faced by the banking sector today is the challenge of understanding and managing the risk. The very nature of the banking business is having the threat of risk imbibed in it. Banks' main role is intermediation between those having resources and those requiring resources. For management of risk at corporate level, various risks like credit risk, market risk or operational risk have to be converted into one composite measure. Therefore, it is necessary that measurement of operational risk should be in tandem with other measurements of credit and market risk so that the requisite composite estimate can be worked out. So, regarding to international banking rule (Basel Committee Accords) and RBI guidelines the investigation of risk analysis and risk management in banking sector is being most important.

II. OBJECTIVES THE STUDY

1. To identify the risks faced by the banking industry.
2. To trace out the process and system of risk management.
3. To examine the techniques adopted by banking industry for risk management.

Risk Management. The entire human society's history is marked by the exposure to risks of all kinds and the efforts undergone by humans to deal with the risks. From ancient time, at the emergence of species, the human practiced risk management in order to survive. The practice of survival instincts lead to the avoidance of risks threatening to extinct the human kind. The very existence of human kind today is the proof of the success of applying risk management strategies by our ancestors. Risks are uncertainties. In the banking universe, there are a large number of risks. As the goal of any privately own company, the main goal of bank's management is to maximize the shareholders' value. Bankruptcies in the financial sector are costly, not only for the equity and debt holders of banks' but often also for taxpayers. In order to avoid that the banks are constantly under pressure and have to assume high risks and at the same time manage the risks in order to avoid, or at least minimize losses. Necessarily will, be tolerated. Risk management as we understand it today has been conceptualized in the early 1950s. There was a transition period when the development from the insurance management to organizational risk management was paralleled by the evolution of the academic discipline of risk management. Without any doubts the academic discipline produced valuable approaches, methodologies and models that further supported the development of risk management in the real business world.

The Nobel award winner, Harry Markowitz, was the first financial theorist to explicitly include risk in the portfolio and diversification discussion. He linked terms such as return and utility with the concept of risk. Risk management can be regarded as an active, strategic, and integrated process that encompasses both the measurement and the mitigation of risk, with the ultimate goal of maximizing the value of a bank, while minimizing the risk of bankruptcy.

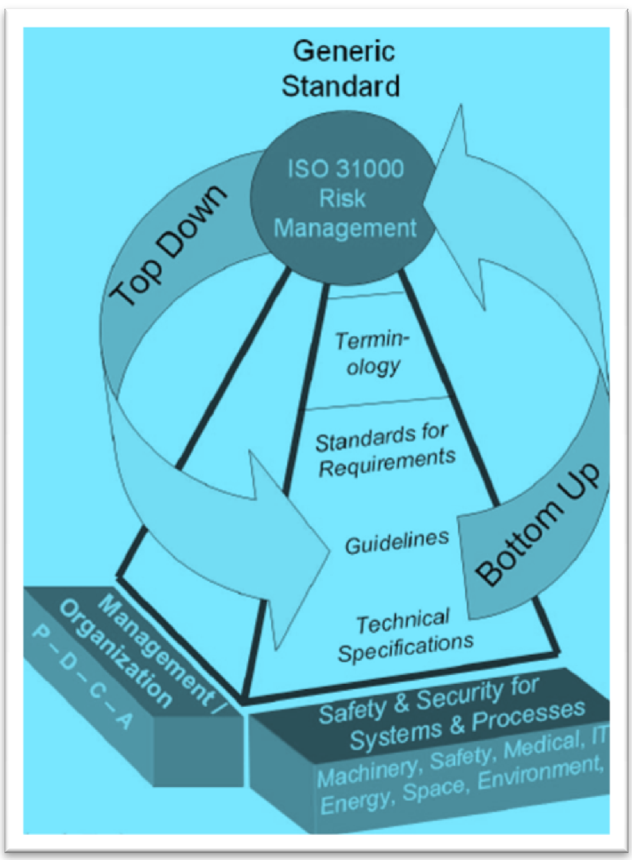

Fig. 1. Approach of the planned generic standard on risk management.

Risk management is often performed by an organizational unit, ideally an independent staff function reporting directly to the board of directors, making risk management a board responsibility and task. The board has to set strategic targets and ensure, via strict controls, that the delegated goals are actually achieved within the centrally mandated guidelines. Running a risk-management function in a centralized manner is advantageous because it allows for an independent, integrated view of all types of risk, so that only the net positions need to be managed and specialized staff can achieve better pricing in the capital markets. Management has to develop strategic goals for the various risk areas (risk strategy) that are proportionate with the ultimate objective to maximize company value. The goal of risk management should be to identify any uneconomic risk taking,

Types of Risks in Banking. In view of growing complexity of banks, business and the dynamic operating environment, risk management has become very significant, especially in the financial sector. Risk at the apex level may be visualized as the probability of a banks, financial health being impaired due to one or more contingent factors. While the parameters indicating the banks, health may vary from net interest margin to market value of equity, the factor which can cause the important are also numerous. For instance, these could be default in repayment of loans by borrowers, change in value of assets or disruption of operation due to reason like technological failure. While the first two factors may be classified as credit risk and market risk, generally banks have all risks excluding the credit risk and market risk as operational risk.

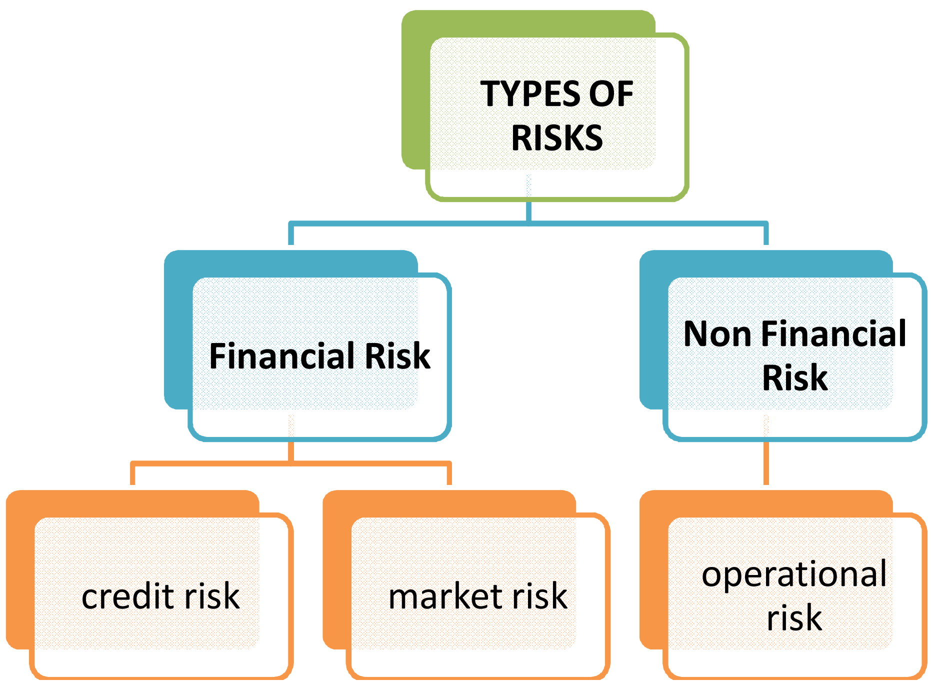

Fig. 2. Various Types of Risks.

(i) Financial Risk

Financial risk arises from any business transaction undertaken by a bank, which is exposed to potential loss. This risk can be further classified into Credit risk and Market risk.

1. Credit Risk. Credit Risk is the potential that a bank borrower/counter party fails to meet the obligations on agreed terms. There is always scope for the borrower to default from his commitments for one or the other reason resulting in crystallization of credit risk to the bank. These losses could take the form outright default or alternatively, losses from changes in portfolio value arising from actual or perceived deterioration in credit quality that is short of default. Credit risk is inherent to the business of lending funds to the operations linked closely to market risk variables.

The objective of credit risk management is to minimize the risk and maximize bank's risk adjusted rate of return by assuming and maintaining credit exposure within the acceptable parameters. The management of credit risk includes 1.Measurement through credit rating/ scoring 2. Quantification through estimate of expected loan losses 3. Pricing on a scientific basis 4.Controlling through effective Loan Review Mechanism and Portfolio Management.

2. Market Risk. Market Risk may be defined as the possibility of loss to bank caused by the changes in the market variables. It is the risk that the value of on-/off-balance sheet positions will be adversely affected by movements in equity and interest rate markets, currency exchange rates and commodity prices. Market risk is the risk to the bank's earnings and capital due to changes in the market level of interest rates or prices of securities, foreign exchange and equities, as well as the volatilities, of those prices.

(ii) Non-Financial Risk

Non- financial risk refers to those risks that may affect a bank's business growth, marketability of its product and services, likely failure of its strategies aimed at business growth etc. These risks may arise on account of management failures, competition, non- availability of suitable products/services, external factors etc. In these risk operational and strategic risk have a great need of consideration.

1. Operational risk. Operation risk has been defined by the Basel Committee on Banking Supervision as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition is based on the underlying causes of operational risk. It seeks to identify the causes of a loss event and at the broadest level includes the breakdown by four causes: people, processes, systems and external factors. Operational risk may materialize directly, e.g. in electronic fund transfer (transfer of funds to the wrong person) or could result indirectly as a credit or market loss. Since there is a close linkage of operational risk with other types of risks, it is very important for banks to first have a clear understanding of the concept of operational risk before designing the appropriate operational risk measurement and management framework. Different types of operational risk in Banking Sector .

The Basic Committee has identified the following types of operational risk events as having the potential to result in substantial losses for banks:

• Internal fraud. For example, intentional misreporting of positions, employee theft, and insider trading on an employee's own account.

• External fraud. For example, robbery, forgery, cheque kiting, and damage from computer hacking.

• Employment practices and workplace safety. For example, workers compensation claims, violation of employee health and safety rules, organized labour activities, discrimination
Claims , and general liability.

• Clients, products and business practices.

Other Risks Considered but not Modeled

Beyond the basic four financial risks, viz., credit, interest rate, foreign exchange and liquidity risk, banks have a host of other concerns as was indicated above. Some of these, like operating risk, and/or system failure, are a natural outgrowth of their business and banks employ standard risk avoidance techniques to mitigate them. Standard business judgment is used in this area to measure the costs and benefits of both risk reduction expenditures and system design, as well as operational redundancy. While generally referred to as risk management, this activity is substantially different from the management of financial risk addressed here. Yet, there are still other risks, somewhat more amorphous, but no less important. In this latter category are legal, regulatory, suitability, reputational and environmental risk. In each of these risk areas, substantial time and resources are devoted to protecting the firm's franchise value from erosion.

In a bank, there are various ways to conduct risk management. Figure3. Provides an overview of the options that banks have when approaching a risk. The bank can decide to eliminate certain risks that are not consistent with its desired financial characteristics or, as often encountered in practice, the risks are not essential to the financial asset created. In order to eliminate specific risks the bank can use as a strategy portfolio diversification or, in addition to this, can decide to buy insurance in the form of options or actuarial insurance, for example, for event risks. The banks can create certain business policies, such as process control, due diligence procedures, in order to reduce the chances of certain losses and even eliminate certain risks If the bank does not want to avoid some risk, it can decide to transfer it to other market participants. The decision to transfer the risk to other market participants is made on the basis of whether or not the bank has a competitive advantage in a specific segment and whether or not it can achieve the fair market value for it. The alternative to transferring risks is to keep the risks, to absorb (manage) them. Some risks must or should be absorbed at the bank level, because they are to complex, or cannot be traded or hedged easily or they are a business necessity.

The instruments that banks can use in order to manage the risks can be:

(i). Diversification is a technique that mixes a wide variety of investments within a portfolio. It is the spreading out of investments to reduce risks. Diversification, typically, reduces the frequency of both worst-case and best-case outcomes, which generally reduces the bank's probability of failure.

(ii) Hedge is a position established in one market in an attempt to offset exposure to price fluctuations in some opposite position in another market with the goal of minimizing one's exposure to unwanted risk. There are many specific financial vehicles to accomplish this, including insurance policies, forward contracts, swaps, options, many types of over-the-counter and derivative products, and perhaps most popularly, futures contracts.

(iii) Internal insurance: The bank is supposed to have superior risk pooling skills for some risks, that is, it is cheaper for the bank to hold a pool of risks internally than to buy external insurance.

(iv) Holding capital: For all other risks that cannot be diversified away or insured internally and which the bank decides to absorb, it has to make sure that it holds a sufficient amount of capital in order to ensure that its probability of default is kept at a sufficiently low level.

Areas Where Further Work Will Improve the Methodology

The banking industry is clearly evolving to a higher level of risk management techniques and approaches than had been in place in the past. Yet, as this review indicates, there is significant room for improvement. Before the areas of potential value added are enumerated, however, it is worthwhile to reiterate an earlier point. The risk management techniques reviewed here are not the average, but the techniques used by firms at the higher end of the market. The risk management approaches at smaller institutions, as well as larger but relatively less sophisticated ones, are less precise and significantly less analytic. In some cases they would need substantial upgrading to reach the level of those reported here. Accordingly, our review should be viewed as a glimpse at best practice, not average practices.

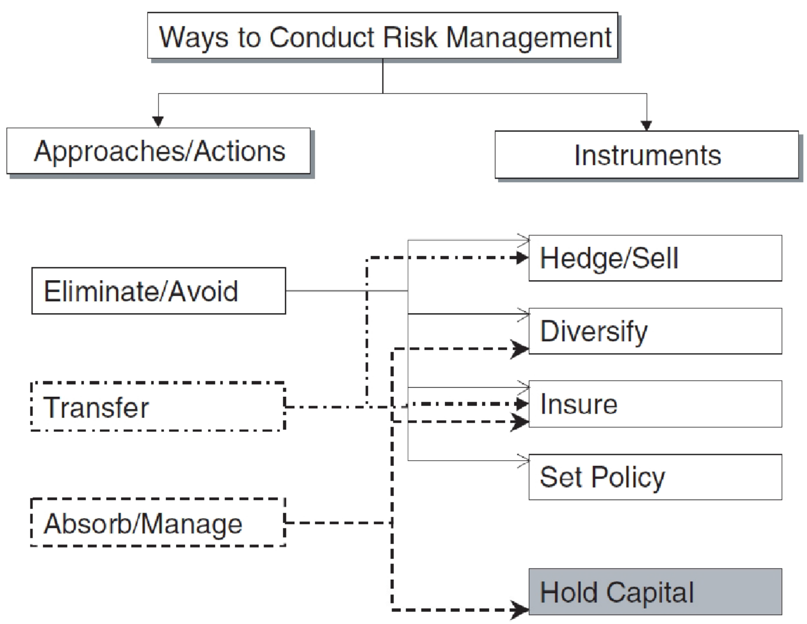

Fig. 3. Strategies for risk management.

CONCLUSIONS

The essence of risk management is not avoiding or eliminating risk but deciding which risks to exploit, which ones to let pass through to investors and which ones to avoid or hedge. Risk management prevents an organization from suffering unacceptable loss that can cause failure or can materially damage its competitive position. Risk management should be a continuous and developing process which runs throughout the organization's strategy and the implementation of that strategy.

It should address as many of the risks surrounding the organization's activities past, present and in particular, future, as possible. It cannot be developed a one-size-fit-all risk management process for all the organizations. In the case of a bank, functions of risk management should actually be bank specific dictated by the size and quality of balance sheet, complexity of functions, technical/ professional manpower and the status of Management Information System in place in that bank. Balancing risk and return is not an easy task as risk is subjective and not quantifiable, whereas return is objective and measurable.

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