



Risk in doing business: Identification, Quantification and Mitigation

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I. What Is Risk :- The term risk usually refers to "The probability of loss of a valuable resource because of uncertainty". We gamble on possibility of earning in order to gain possible positive outcome. Risk can also be considered "The chance that an outcome other than 'expected outcome' will occur." There are two crucial elements while defining risk :-

- **Indeterminacy** – We not know with certainty which outcome will result
- **Adversity** – One or more outcomes out of all expected outcomes are undesirable.

Normally to understand concept of **risk with reference to commercial practices** following criteria help us:-

- **Regularity and consistency in profits** – Greater the variance greater the risk.
- **Default in paying dues** – Greater the possibility of non fulfillment of commitment greater the risk
- **Risk associated with locations** – Greater the unstable political place or violent society greater is the risk
- **Investment in Assets** – Greater the investment in asset lesser is the risk
- **Economic Stability** – More the economic stability persist lesser will be the risk
- **Inflationary Trends** – Moderate inflation provide us less risk environment
- **Industrial Growth and volatility** – Industries with moderate growth are normally considered less risk as compared to industry with high growth rate and volatile nature.

In commercial practices concept of risk is very crucial and plays a very important role while decision making of finance managers. To emphasize RISK we have to first identify – then measure – then incorporate in decisions and finally mitigate through managing it. To conclude risk is real world concept and very objective mostly risks persists in every commercial decision making whether they are perceived or not [whether accounted for or not]. Most of the times risks are not imagined at initial stage of decision making but they appear at later stage. At that point of time managers usually consider them account for them and finally adjust their decisions accordingly. Managers usually try to find out monetary impact of these uncertainties [through statistical /mathematical techniques or otherwise]. And finally this monetary impact is incorporated in the decision making. At times it is quiet difficult to perceive these uncertainties and at times people encounter these risk

at a very later stage of decision making – such that they can't be incorporated. This is due to the fact that innumerable sources of risk prevail in commercial environment. There are instances that a small hint of uncertainty changes the whole long term and short term strategy of the business.

Different type of risks which exist in commercial environment :

1. **Business Risk :- This risk is specific to venture to be undertaken.** This risk arises in commercial decisions due to dealing with particular industry [like Steel, Pharma, IT etc.] or in a particular economic system [like India, China, Africa, Iraq, Middle East etc.]. Few sources of business risk are as follows :-
 - a. **Project Specific Risk** – an individual project may have higher or lower cash flows than expected either because of involvement of estimation or because of factors specific to the project.
 - b. **Competition Risk** – Project analysis might have considered the reaction of the competitors, the actual reaction of the competitors may be different from those expected.
 - c. **Industry Specific Risk** – The risk that earnings and cash flow of a specific industry will get affected. This risk exist due to following factors –
 - i. **Legal Risk** – Effect of changing laws and regulations pertaining to the industry
 - ii. **Technological Risk** – Effect of changing technology on the industry.
 - iii. **Commodity Risk** – risk of change in input factors used for production
 - d. **International Risk** – Firm face international risk when it take on projects outside it's domestic markets. In such cases, the earnings and cash flow might be different from expected owing to exchange rate movement or political/ economic changes in the market segment
 - e. **Market Risk** – Those factors that affect all companies and all projects but in varying degrees. Example – GST, Customs etc.
2. **Financial Risk** - This risk arises when companies resort to financial leverage or use debt financing. The more the company resort to debt more it's earnings will be vulnerable. A slight change in PBDIT will cause a comparatively greater variance in PAT. Here it is to be emphasized that an objective of maximizing E.P.S. usually is not the same as maximizing market price per share.
3. **Liquidity Risk** – Occurs when assets are not readily convertible into money in secondary market.
4. **Interest Rate Risk** – This risk is caused by variability in return resulting from changes in level of interest rates.
5. **Market Rate Risk** –Fluctuation in securities (Shares, Bonds etc.) due to security market volatility.
6. **Inflation** – inflation causes reduction in purchasing power. Hence risk posed by inflation is purchasing power risk.

This risk analysis is not specific to any industry and is general but banking is an industry which assume some more peculiar type of risks. Some of them are as follows :-

- **Operational Risks**

Banks have to conduct massive operations in order to be profitable. Economies of scale work in the favor of larger banks. Hence, maintaining consistent internal processes on such a large scale is an extremely difficult task.

Operational risk occurs as the result of a failed business processes in the bank's day to day activities. Examples of operational risk would include payments credited to the wrong account or executing an incorrect order while dealing in the markets. None of the departments in a bank are immune from operational risks. Operational risks arise mainly because of hiring the wrong people or alternatively they could also occur if there is a breakdown of the information technology systems. A lapse in the internal processes being followed could also lead to catastrophic errors. For instance, Barings Bank ended up bankrupt because of its failure to implement appropriate internal controls. One trader was able to bet so much in the derivatives market that the equity of Barings Bank was wiped out and the bank simply ceased to exist.

- **Moral Hazard**

The recent bailout of banks by many countries has created another kind of risk called the moral hazard. This risk is not faced by the bank or its shareholders. Instead, this risk is faced by the taxpayers of the country in which banks operate. Banks have become accustomed to taking excessive risk. If their risk pays off, they get to keep the returns. However, if their risk backfires, then the losses are borne by taxpayers in the form of bailouts. This too big to fail model has caused banks to become reckless in their pursuit of profit. Although central banks are using audits to ensure that safe business practices are followed, banks nowadays indulge in risky business the moment they are not under regulatory oversight.

- **Reputational Risk**

Reputation is an extremely important intangible asset in the banking business. Banks like JP Morgan bank, Chase bank, Citibank, Bank of America etc have all been in the business for hundreds of years and have stellar reputations. These reputations enable them to generate more business more profitably. Customers like their money to be deposited at places which they believe follow safe and sound business practices. Hence, if there is any news in the media which projects a given bank in a negative light, such news negatively impacts the banks business. For instance Citibank was recently viewed as manipulating the Forex rates via conducting false trades with its own trading partners. When regulators found out about Citibank's predatory tactics, they levied huge fines on the bank. Apart from the fines Citibank also lost reputation as a bank that follows fair trade practices when the customers found out that they tend to resort to market manipulation. Many prospective customers may have shifted their business away from Citibank as a result of this discovery causing monetary loss as a result of reputation loss.

Banks can save their reputation by ensuring that they never participate in any unfair or manipulative business practices. Also, banks need to continuously ensure that their public relations efforts project them as a friendly and honest bank.

- **Systemic Risk**

Systemic risk arises because of the fact that the financial system is one intricate and connected network. Hence, the failure of one bank has the possibility to cause the failure of many other banks as well. This is because banks are counterparties to each other in a lot of transactions. Hence, if one bank fails, the credit risk event for the other banks becomes a reality.

They have to write off certain assets as a result of the failure of their counterparty. This writing off often leads to the bankruptcy of other banks and an unstoppable domino seems to take over. Systemic risk is an extremely bad scenario to be in. For instance when the subprime crisis happened in 2008, it seemed like the entire global financial system would collapse.

The very nature of banking system therefore makes them prone to systemic risks. Systemic risks do not affect an individual bank rather they affect the entire system. Hence, there is very little that an individual bank can do to protect itself in the event that such a risk materializes.

II. How Risk is Quantified :- There are various statistical and mathematical techniques are used by the managers simply from calculation of variance ,Standard deviation and regression equation to development of risk measurement models like CRAR models in banks or ECL model under Ind As. *Expected credit losses* represent a probability-weighted provision for impairment losses which a company recognizes on its financial assets carried at amortized cost or at fair value through other comprehensive income (FVOCI) under IFRS 9.

$$\text{Where ECL} = \text{EAD} * \text{PD} * \text{LGD}$$

Exposure at default (EAD)

Exposure at default equals the value of the financial asset which is exposed to credit risk. It equals the amount at risk at the time when default would occur minus the value of any collateral which can be used by the company in the event of default.

EAD does not necessarily equal the carrying amount of the financial asset. For example, in case of a lease receivable, EAD would equal the net investment in lease at the future date on which default would occur.

Probability of default (PD)

Probability of default (PD) is the likelihood of a the counter-party to a financial asset defaulting over a given time period. This input varies with the time period involved. For example, the probability of default of an entity over a 12-month period would be higher than the probability of default over a 6-month period.

Loss given default (LGD)

Loss given default is the percentage of the amount at risk that would be lost if default is certain. It equals 1 minus the recovery rate.

III How risk is Manageed/Mitigated :- After Quantification the finally we have to manage or mitigate the risk involved in the decisions. One of the way of managing is to provide for the risk involved in the decisions and another way is to mänge it by diversification.

*Diversifiable Vs Non Diversifiable Risks :- when we think about managing risk the first thing that come into our mind is to manage it by diversification. The facts that returns (Outcomes) do not move in perfect tandem means that risk can be reduced through diversification. But the fact that there is some positive correlation between all businesses (Economy as a whole) means that, in practice risk can never be reduced to 'ZERO'. The factors that give rise to non diversifiable risk are changes in the tax rate, war and other calamities, changes in inflation rate, changes in economic policy, industrial recession, changes in industrial oil prices etc. **Normally the Risks that reduces due to diversification is the risk specific to the company or industry. Diversifiable risks are also called unsystematic risk or specific risk***