CHAPTER 1: Introduction

1.1. Preliminary Words

1.1.1. Concept of Risk

1.1.2. Concept of Value

1.2. The Relevance of the Study

1.3. Related Pioneering Research

1.4. Statement of the Problem

1.5. Research Objective

1.6. Presentation of the Thesis

Chapter 1: Introduction

1.1 Preliminary Words:

The topic of this dissertation is 'Impact of Risk on Corporate Valuation in Indian Context'. Before going through the analysis of risk-value relationship the proper understanding of the concepts of risk and value is required. For the purpose, a brief account of risk and value has been provided herewith.

1.1.1 Concept of Risk:

The word risk originated from the French word "risque" as of 1621 and the spelling as risk has been used since 1655. As per the Oxford English dictionary, "the possibility of loss or, injury, or other adverse or unwanted circumstances; a chance or situation involving such a possibility is called risk". The word risk is defined in many ways. The definition of risk by Frank Knight is the most famous one. In the year 1921, he wrote a foundation book of the probability where he first quantifies the risk. Contemporary research was done by Kolmogorov (1933), Mises (1928), and Keynes (1921) provide knowledge of risk. But from that period a debate on subjective versus objective explanation of probability had been going on. According to objective explanation, probabilities are real which can discover through logic or measure them with the help of statistical analyses. According to the subjective view, probabilities are not intrinsic in nature rather it is human beliefs. People specify them to explain their own uncertainty. The philosophy of subjective explanation of the probability was found in the work of Hume (1748), Ramsey (1931), Finetti (1937), and Savage (1954) Finetti (1970) Knight (1974). Keynes and Ramsey provide objective views of probability. According to the above work, subjective probability means opinions that reflect un-measurable uncertainty and objective probability means measurable uncertainty. Knight used the

term “risk” first (his own terminology) to designate the measurable uncertainty and the term “uncertainty” for un-measurable uncertainty. The famous definition of risk was generated from these concepts. Risk is related to objective probabilities and uncertainty relates to subjective probability. Generally speaking, risk and uncertainty are often used as identical, but when Knight first conceptualized the difference between risk and uncertainty, academics and professionals started to use them differently. The risk and uncertainty are two different dimensions that were shown by Levainen (2013) and Hintikka (1999). If the variation which arises from a variable is unknown and its probability distributions are also unknown then it is called uncertainty. The risk will be definable when the first condition is unknown but the second condition is known. Tom Gilb defined risk as an abstract concept expressing the possibility of unwanted outcomes. So risk means a state when the probabilities of occurrence of different future outcomes are adverse to us. When the probability is attributable to some future uncertain events for their prediction, it is called risk. Risk is a dynamic concept that changes from year to year and from organization to organization and we want to forecast it for our decision making purpose. The risk of any event is measured from the likelihood of the occurrence of that event. The lower probability of the actual outcome generates a higher risk associated with the event. So the risk is understood as a threat of loss, damage or any other adverse outcome that destroys ours deserve objective. But according to recent work of Hintikka *et al.* (2014), Rouhento (2007), Crouhy *et al.* (2006), Hintikka (1999), the concept has been modified and more recent definitions’ of risk also consider the possibility of favorable outcomes related to the future uncertain event. Kahkonen et al. (2014), define risk as “a possibility of unfavorable or favorable impact and in mathematical terms, risk can be expressed as a function of probability and impact”. Crouhy *et al.* (2006), define the risk in the financial context as “the volatility of returns

leading to unexpected losses”. ISO 31000, 2009 creates a new definition of risk as to the “effect of uncertainty on objectives”, and an effect is a positive or negative deviation from what is expected”. This definition changes the concepts of risk from the possibility of an adverse outcome to the possibility of deviation with the positive or negative outcome that may happen that we expect to achieve. Therefore according to Knight (1921) there was a clear difference between risk and uncertainty and risk. In Risk, the possibility of the future outcome can be predicted whereas in uncertainty future outcome cannot be predicted. The risk can be estimated and quantified whereas uncertainty cannot be measured or quantified. Risk is controllable and could be managed while uncertainty is uncontrollable. There was no unique definition of risk. According to Hester & Harrison(1998), Jones (2001), Tansey (1999) and Williams & Narendran (1999), the concept of risk varies depending on the sector using it as well as to different components of risk and personal judgment in determining the degree and its components. From the above discussion, it is clear that the ‘risk’ is generally measured by the possible outcome of a company. Now, this outcome may arise from company-specific, industry-specific and macro specific factors of a firm. The company-specific factors generate company risk, industry-specific factors generate industry risk and macro specific factors generate the market risk of a firm. Many research works on risk mainly focus on portfolio risk considering credit risk and market risk of an investment, and with lower attention to the company's internal risk. Although these risks are very important for the business organization but the matter is neglected to date. The real understanding of risk will be much easier, being well explored and understood if we do consider the internal risk of a firm. There are a variety of risks in the firm such as operational risk, financial risk, liquidity risk, solvency risk, internal risks, systematic risk, market risk, country risk, political risk, foreign exchange risk, etc. which seriously threaten organization value and

profitability. If the internal risk is not properly managed it can disrupt or even destroy its business value completely. But among this variety of total risk, some risk is the market risk or in the form of uncertainty and non-quantifiable. Moreover controlling the total risk is out of firm capacity. However, company-specific risk and industry-specific risk is considered here as the same is controllable to some extent with efficient management. But, the macroeconomic factor relating to market uncertainty, cannot be consistently measurable or available in the quantitative term. Therefore it has not been considered here. So the overall risk for corporate valuation is the function of operating risk; financial risk and industry nature of the firm.

1.1.2. Concept of Value:

The word 'value' carries different meanings to different individual and as also the term is ambiguous. The said ambiguity was first noted by Adam Smith who first said 'value' means usefulness or value-in-use in one sénse and purchasing power of an object on another hand. But in our discussion accounting and finance concepts that are purchasing power concepts are taken. According to our business perspective value means the monetary worth of an asset, liability, goods, and services. According to economical concepts value means the worth of all benefits or rights arising to the owner. Adam Smith and David Ricardo describe value as a sum of resources and labor used to build it. Presently the new economist like Willam Jevons speaks that the utility of goods and services determines its value. Whatever the definition of 'value' is but the basic thing is that value helps to fulfill one desire. The valuation is a process through which we determine the value of some object. A detailed discussion on risk and value has been carried in the second chapter.

Now the question is how value is related to risk. Whether the risk is negatively related to value or it has a positive effect on the value. In general view, one person may think that the higher the risk attached with the object the lower will be the value of the object or the lower the risk attached with the object the higher will be the value of such an object. But the answer is not so easy always.If that is the case then why the firm takes the risk? To find this answer the empirical study was done so that the risk-value relationship can be explored clearly. If the said thing is explored by each firm it will give more attention to the internal risk factors to sustain for a long time in the market. In the present work, internal risk factors are taken into consideration instead of the total risk of a firm. A number of research works have already been done on different determinant factors for finding out the relationship between return and risk, company performance and internal factors. Such works are mainly done for the evaluation of firm performance on the basis of the return of a business organization. So everyone wants to find out the determinants of return by which return can easily be estimated beforehand. But in today's dynamic and complex business environment of India, only return is not the ultimate for a prospective investor, rather preservation and creation of the investment value is far more important over return. According to past empirical research, the risk has an impact on the return of a firm and it is a well-known proverb that high-risk yields high return and low-risk yield low return. But the question is whether the same concept is valid in case of the value of a firm as well. In other words, whether operating risk, financial risk, and combined risk have any effect on the value of the Indian firm. There are a number of different literature on capital structure theory, among them in 1958 the renowned MM theory said that capital structure (as a measure of internal financial risk) or financial leverage has no effect on the value of a firm where the capital market is perfect. But later Modigliani and

Miller (1963) “demonstrate that when corporate tax laws allow the deductibility of interest payments, the market value of a firm is the function of financial leverage”. Their assumption of an ideal economic environment was no tax, no inflation, and no transaction costs. This theory was later criticized that no company actually does its business in an inflation-free, tax-free, and transactional costs free environment. According to the work of Bhattacharya and Shikthivel (2004), Kurian (2000), Bhattacharya and Mitra (1990), Adabar (2018) Indian economy is a growing economy and as per Pandey (2003), Bhatnagar (2003), Sharma and Mahendru (2009) work its capital markets is weak form of market efficiency. So according to capital structure theory, leverage as a proxy of risks may have some impact on the value of a firm. Not only that, according to different literature Khedkar (2015), etc. a growth firm ROE also can be affected by operational leverage which may indirectly influence the value of the company.

1.2 **The Relevance of the Study**:

The portfolio managers have been concentrating on the systematic risk of a firm too much. On the contrary, they did not put adequate attention on the internal risk of a corporate. But the internal risk is one of the important parts of the risk assessment process of the portfolio. The manager of a company is interested in ‘value at risk, of a company. As the company invests money in a different project with varying risk classes with borrowing funds from the investors, so it is the responsibility of management to manage the internal risk attached to it so that the company did not suffer. Though analysis of capital structure risk as an internal financial risk is one of the renowned and common in our finance research field, little empirical research presents on how firm-specific internal risks are related to the value of a corporate in our developing country.

The said field is interesting in recent times as in the Indian economy the recent failure of some renowned company with a high debt burden destroyed its firm value completely. So the question arises whether the managers were unable to manage the internal risks of a firm which ultimately affects the value of the company. In this context, this study makes an attempt to establish the relationship between the internal risk and the value of the company.

1.3. Related Pioneering Research:

The financial theory is predicated on the concept that the goal of a business organization is to maximize the market value of the business and thus firms configure their balance sheets and operating activity to achieve this goal. David Durand and Lutz (1952) introduced the concept of shareholder wealth maximization. The wealth maximization goal is based on discounting while putting forth is a macro-economic theory of interest introduced by Alfred Marshall in 1930. Keynes used the discounting factor in 1936 in his concept of the marginal efficiency of capital. The shareholders' wealth maximization goal, thus, reflects the magnitude, timing, and risk associated with the cash flows expected to be received in the future by shareholders. The shape of capital structure and operational activity generate the internal risk of a firm. The portfolio theory showed that the relevant risk is the systematic risk as investors are able to diversify away from the unsystematic portion of the risk. But the investor did not always invest money in a portfolio rather they like to invest directly in some company's security. Then unsystematic risk will play a significant decision-making item besides the systematic risk of the firm. Besides this, several researchers in their study of systematic risk have decomposed beta providing insight into the financial, economic and operational factors

affecting beta. According to different literature unsystematic risk also have some effect on the beta of a firm. Hamada (1972) and Rubenstein (1973) have bifurcated beta into operating risk and financial risk. Mandelker and Rhee (1984) provided an alternative decomposition. The objective for the Mandelker and Rhee alternative decomposition were to explicitly introduce two types of risk, operating and financial, to avert various econometric problems (caused by a nonlinear, multiplicative effect of financial structure on risk as measured by the financially un-levered common stock beta) and to avoid the assumption that corporate debt is risk-free.

Mandelker and Rhee's classification is created upon the assumption that the business organization faces uncertainty as quantity demanded to fluctuate unpredictably. In their work, the Mandelker and Rhee decomposition will be extended to assess the relationship of the firm's product demand elasticity with the firm's systematic risk. This extension is particularly relevant as it provides insight into how the firm's product market (operational activity) affects the relevant risk measure. The extension presented in that paper is consistent with the suggestion by Lindeberg and Ross (1981) that our understanding can be enhanced by studying the linkage between product markets and financial markets. Hite (1977), Alberts and Hite (1983), Conine (1982) have also studied the linkage of the product and financial markets, however, in different settings and from a different point of view.

1.4. **The Statement of the Problem:**

In the present dynamic business environments, the understanding and study of risks are one of the important tasks for taking the right strategic decision to any discussion of the value of a particular business or enterprise. Most of the financial management shows systematic risk (ß) from the perspective of a portfolio of a firm. The risk factor

depending on the operating and financial characteristics of the firm is mostly ignored. Previously the internal risk was ignored during any financial decision-making process. But recently unsystematic risk plays an important role in the failure of some reputed company. Moreover, according to MM theory, in 1963 firms with interest tax shield effects have got a positive impact on firm value. So the present study was felt necessary. This work offers an empirical approach to the relationship of firm value with the internal risks factor of a corporate. The Indian capital market follows a weak-form of market efficiency, Sharma and Mahendru (2009), Mallikarjunappa & Dsouza (2013), Belgaumi (1995), Mallikarjunappa (2004), Iqbal and Mallikarjunappa (2007, 2008a, 2008b, 2010, 2011) and Bowman (1979). So leverage cum internal financial risk may have some impact on the value of a firm.

1.5. **Research Objectives:**

Based on the statement of the problem, the objective of the study has been developed. As it was noted that the internal risk of the company may not have been duly considered during the process of risk assessment, this study makes that a point. Thus the research objective of this study is to find out whether different components of internal risks are the determinant factor of the value of the firm in the Indian context. For this purpose, different valuation ratios were considered as a proxy of firm value. The operating risk and financial risk have been considered as a proxy of the internal risk of a firm. Therefore the endeavor of this study is to find out how different components of internal risks are related to the value of a company. In other words, the primary objective of this dissertation is to examine the impact of internal risk of the company on corporate valuation. To achieve the primary objective, two secondary objectives would also be set

and achieved. (i) To examine the impact of operating risk on the value of the firm. (ii) To examine the impact of financial risk on the value of the firm.

1.6. Presentation of the Thesis:

The present study has been planned to be presented in seven chapters. The first chapter entitled **Introduction** deals with a contemplation of the work undertaken and the objectives. The second chapter entitled **Value and Risk** incorporates a basic understanding of value, risk, and relationships. **Review of literature** covered in chapter three gives an overview of the work done sofar by different researchers in the present context. The fourth chapter deals with **Research Methodology** to include every procedural aspect of the work performed. The **Results and Analysis** of the work presented in the fifth chapter each and every aspect of which has been discussed keeping parity with the objective, significance, and scope of the work. The sixth chapter relates to the chapter on the **Interpretation and Recommendation** of the study. The seventh chapter **Summarizes** and **Concludes** with precision, rationality and contemporary pertinence. All the publications referred to in this work have been cited under **References**.

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