CHAPTER II

REVIEW OF LITERATURE

Introduction

Several studies have been undertaken by the academicians to measure the relationship between risk and return [Yeming Chang and Edward Thomas (1989), Edward H. Bowman (1984), Fiegnbaum and Thomas (1986)]. The research and consulting firms like Ernst & Young, Deloitte, and Economic Intelligence Unit have done a series of risk management survey across the globe. On the other side, researchers have given various risk management framework to be implemented in the organizations. It is evident that a very few studies have been made on the risk management practices in the Indian context. A reference to those studies will be relevant in the context of shaping the present study and to find the gaps in the existing studies.

Edward H. Bowman (1984) has used content analysis to explore corporate strategy and elements of risk and return. The author found a negative correlation of risk and return between companies within risk. The troubled firms tend to take more risks. Content analysis of annual reports can be of real usefulness for understanding some issues of corporate strategy and can serve as a primary or supplementary source of information.

Fiegnbaum and Thomas (1986) examined the dynamic behaviour of the risk-return relationship. The risk-return paradox is dependent upon the time. It was also evident that the negative association finding was dependent upon the choice of a market or accounting based risk measure. The authors also found that risk-return paradox is not present when a market based risk measure was used.
Boodman (1987) in his article stressed that senior managers must be concerned about the preservation of corporate assets. It is necessary that the manager should have the authority to review and monitor all activities involving the corporations and identify those of sizeable risk. The risks should be identified and once these hazards have been identified, the likelihood and magnitude of the risk must be evaluated. Once a risk is identified and evaluated, a decision must be made regarding its treatment. The author has also pointed out that management of risk is a responsibility to be shared by all personnel at all levels of corporation.

Davis (1989) survey revealed that 45% of the companies used forward, 14% used futures, and 9% of the respondents used swaps, options to manage foreign exchange risk management. On the question of the goals of risk management, the Davis survey reported that 22% of the firms surveyed did not manage foreign exchange risk, 34% were concerned with eliminating risk selectively and 7% were concerned with eliminating all foreign exchange risk.

Yegmin Chang and Howard Thomas (1989) in their study examined the underlying structure of corporate risk and used this structure to analyse and test the different risk-reductions. The study examines the impact of diversification strategy on risk and return in diversified firms. They found that the firm size is associated with better risk and return profiles. It also shows that the risk-return characteristics and the market power of markets which the business units of a diversified firm serve would appear to be the dominating influence on the firm’s risk-return profile. The findings related to U shaped curvilinear relationship between risk and return suggests a higher level of returns, and managers will also take more risky action, reflecting the gambling attitude.
Collier et.al. (1990) from their survey found that only a very small percentage of US firms continued to hedge translation exposure.

Kent D Miller and Philip Bromiley (1990) in their research work cited various measures of corporate risk. The factor analysis used by the researchers reduced the nine measures to three factors namely income stream risk, stock returns risk and strategic risk. Income stream risk is the measure of risk most relevant to general managements. Stock returns capture risk is from the perspective of stockholders. Strategic risk has risk implications for multiple external stakeholder groups. The authors have also attempted to examine how the performance influenced these types of risk and vice versa. The researchers found that income stream risk has a significant negative influence on performance. The influence of strategic risk on performance varies across industries and performance levels. They also found that stock return risk does not influence performance. The influence of performance on income streams varies across different performance levels.

Davis et.al. (1991) used case studies to examine foreign exchange risk management in twenty-three large UK and US multinational companies. The firms were found to be highly risk averse with respect to transaction risk, with translation risk lower in their risk aversion priorities.

Jesswein et.al. (1995) focused on the use of derivatives by US Corporations. They found that the use of risk management was not significantly related to the size of the company. On further analysis, they found that the usage is significantly related to the company’s degree of international involvement.
Gifford Fong and Oldrich A-Vasicek (1997) have discussed a framework for risk analysis which includes three dimensions for measuring risk. Their main objective was to describe the methods appropriate for quantifying the risk of complex investments that are subject to a variety of risk sources. The authors discussed about value at risk, sensitivity analysis and stress testing in detail. VAR gives us a summary of risk numbers, but it does not specify the source or direction of the risk. The combination of using VAR and stress testing gives a better picture of quantifying the risk. The three tests discussed by the authors have an ability to evaluate complex return outcomes. They represent comprehensive risk measurements necessary for portfolios with complex structures and inter relationships.

James Lam (1997) commented that implementing and managing a comprehensive risk management program is extraordinarily complex. Adopting an integrated approach embraces the totality of the study. The result emerging from the key initiative is the emergence of Chief Risk Officer, who is the key for managing and monitoring risk. The change in the role of risk management has paved way to two camps 1) Offensive Risk Management 2) Defensive Risk Management. The CRO is responsible for establishing a companywide program that addresses a firm’s total risk horizon. CRO should work with a team, comprising line management, treasury, audit, public relations, human resources and risk management professionals. The primary objective should be to identify business risks and design strategies for controlling risks.
Robert M. Bieber (1997) in his article has commented that it is important for risk managers to establish and maintain communication channels within their companies. Risk Managers rely on a combination of formal and informal communication methods. Annual Risk Management Reports or monthly claims are included in formal efforts and informal communication method includes brief telephone conversations. Along with these methods, Risk Managers use team based approaches. Team based problem solving approach helps Risk Managers to build their relationships with operating units, meet mutual cost reduction objectives and enhance the performance of their external service providers. It will help to reduce the company’s total cost of risk and enhance the effectiveness of the overall risk management programme.

Grapperhaus Roberta (1997) in his article shared the perspectives and experiences of managers. Northwest Airlines learned that management must constantly look at each specific risk to set if and how it can be reduced. Taking a logical approach like education, aggressive cost management, creativity and periodic review of each specific risk add up to a sound risk management program. He has added that Canada Post Corporation’s successful risk management philosophy is senior management taking responsibility for setting organization’s risk policy and integrating it with strategic operating and financial levels. The author has also quoted the example of Med Risk, a medical management company. Med Risk believes that every company should know what its risks are, what the risk drivers are and what influences per unit cost.

Gordon M. Bordnar and Richard C. Marston (1998) have presented the third series of surveys on financial risk management practices and derivatives used by non-financial corporations. The use of derivatives is much higher among large firms than small firms.
Most of the firms used derivatives to manage foreign exchange risk, interest rate risk and commodity risk. Only thirty-four percentage of the companies used derivatives to manage equity risk. A large percentage of firms reported that FASB’s new rule governing derivatives activity will not have any effect on their derivative use of risk management strategies.

Feldman Paul (1998) in his article highlighted globalization, consolidation and technology the three major areas of concern for risk managers. Along with these, the other concerns are understanding the way foreign businesses are conducted and the local culture; international shipping exposures; the consolidation of financial and performance measures; and having loss control plans for each country. The majority of risk managers use internet for information gathering purposes.

Berry Andrew, Philips (1998) presents Enterprise Risk Management (ERM) as the consistent application of techniques to manage the uncertainties surrounding the achievement of an organization’s objective. It demands consistency in the assessment of risk. ERM can be viewed as a defensive measure or offensive tool. Defensive measures help to reduce uncertainties or prevent unwelcome outcomes. An offensive tool focuses on maximizing the shareholder value. Implementing an ERM approach is a two part process: the first step is to decide who to involve and the second is selecting the appropriate method.

Jablonski (1998) has observed that simulation is a powerful tool risk management. Through simulations the companies can observe the effects of the entire distribution of accidental losses arising from an
exposure and their probabilities. Simulations can be used as an aid to plan development. The outcomes of a risk management plan can be observed via simulations and adjustments made to a plan to improve efficiency with respect to the Risk Manager’s goals.

It is very interesting to note from Bodnar and Gebhardt (1998) that the larger the size of a firm, the more likely it is to use derivative instruments in hedging its exchange rate risk exposure. Over 50% of the respondents used forward, 20% used currency option and 10 % of the respondents used swaps to manage foreign exchange risk.

Kent.D Miller (1998) in his article highlighted that the various risks faced by the corporations must be assessed and managed from an integrated perspective. The author has introduced a multivariate approach to assess the economic exposure. He has also addressed the implications of multivariate modeling for corporate risk management.

Gerald D. Gay and Jouahn Nam (1998) have analyzed the under-investment problem as a determinant of corporate hedging policy. The authors found a positive relation between a firm’s derivatives use and its growth opportunities. The derivatives use is greater by firms with enhanced investment opportunities. Firms whose investment expenditures are positively correlated with internal cash flows tend to have smaller derivative positions. The firm’s hedge ratio is inversely related to the correlation between its cash flow and investment expenditures. The firm’s derivative use is driven in part by the need to avoid possible under-investment problem. The results shows that firms can and do use derivatives as one strategy to maximize shareholders’ value.
Bhagwan Chowdhry and Jonathan (1999) have highlighted that corporations will engage in operational hedging, only when both exchange rate uncertainty and demand uncertainty are present. For commodity based firms, which face price uncertainty, operational hedging is less important. For firms with plants in both domestic and foreign locations, the foreign currency cash flow generally will not be independent of the exchange rate in such case; optimal financial hedging policy cannot be implemented with forward contract. The authors have shown that optimal financial hedging policy can be implemented using foreign currency call, put and forward contracts.

Fiona D. Patterson, Kevin Neaily and David Kewley (1999) have described the application and the use of risk management methodology in projects within the automotive industry. The Risk Management Methodology given in their paper provides the ability to effectively identify and manage the amount of deviations from the project plan, thereby reducing the overall quantity of resource required through a decrease in the development and manufacturing time for product and processes.

Petersen.M and S. Thiagarajan (2000) have attempted to measure the effect of the hedging program used by two gold mining firms in USA on firm’s fundamental accounting and market value measures. One firm aggressively hedged its gold price using derivatives, whereas the other used no derivatives. Exposures of the two firms’ equity to gold price were surprisingly similar. The firm which doesn’t use derivatives has used operation accounting choices to limit their risk exposure. The authors have found that the Homestake Mining has eliminated a portion of their risk exposure through operating decisions. The authors have highlighted the diversity of risk management objective, a firm may
pursue. The authors have concluded that firms which do not use derivatives are hedging through alternative means.

**Carter, D., C. Pantzalis and B. Simkins** (2001) investigated the impact of firm wide risk management practices on the foreign exchange exposures of US multinational corporations. The firms’ use of currency derivatives particularly forward contracts is associated with reduced level of foreign exchange exposure. Finally, they concluded MNC hedging in a coordinated manner (combined use of operational hedge and financial hedge) could significantly reduce exposure to currency risk.

**Carole Hicks** (2002) in his article throws light on the changes that happened in the public sector, in terms of managing and viewing risk. The perspective of viewing risk from risk minimization has changed to risk optimization. Thus risk is not a defence against corporate failure, but also an opportunity to generate shareholders’ wealth. The risk management framework should be such that it is aligned with the overall strategy and objectives, embedded throughout the organization and refined on a regular basis. The research report from United Kingdom National Audit Office shows that 40% of the department in the public sector quoted that all staff have responsibility for identifying and managing risk.

**Stephen Ward** (2003) in his article has proposed a framework for identifying the nature of risk management development. The author has come with six dimensions of Risk Management Development, with dimension label as What, When, Why, How, Where and Who. In each dimension, a range of possible approaches was depicted. To choose the directions to develop RM practices, it is desirable to identify the nature of current practice.
**Nain Amirta** (2004) has demonstrated a firm’s need to hedge depends on the extent of hedging in its industry. The hypothesis, incentive to hedge is higher, when the extent of hedging in the industry is high, was tested using data on foreign currency derivatives usage. The author found that prices are less responsive to foreign exchange related cost stocks in industries where currency hedging is widespread. A firm is more likely to engage in foreign currency risk management, if many competitors are doing so. The market penalizes unhedged firms with lower value, if many competitors are using hedging strategy.

**Yadav and Jain** (2004) study on risk management practices with regard to international operations in public sector companies is perhaps, the first one in Indian context. The study elicited responses from practitioners on political risk, exchange risk and interest rate risk respectively. Exchange risk management was done by internal teams as well as with the help of institutional consultants. As regards to the popularity of derivatives instruments to cover foreign exchange risk the study found the most popular was forwards followed by swaps, options and future.

**Kallman.J and Marie** (2004) presented a new risk management model. The new model has five steps: program development; risk analysis; solution analysis; decision process, and system administration. Each step has three sub stages. The new paradigm contributes several improvements over existing risk management model.

**Richard B.Corbett** (2004) in his article has argued that the recent high profile scams and scandals have resulted in the improvement of corporate governance, specifically financial reporting. In improved
financial reporting the threats to people, property and profits should be disclosed. Risk Management is associated with maintenance of value of these resources within the entity. So there is a close connection between risk management and value of the entity. The author has also pointed the various myths of enterprise risk management. Some of the myths discussed are the focus of good risk management is the identification and treatment of these risks. It must be integrated into the culture of the organization with an effective policy and a programme led by most senior management. The author has also given a risk management framework.

**Pramborg (2005)** compared the hedging practices of Swedish and Korean non-financial firms. They found that the hedging strategies between the firms differed. The firms which used derivatives in Swedish firm were significantly higher than the Korean firms. The objective of Korean firm to manage risk was minimizing fluctuations in cash flows, whereas Swedish firms aimed to minimize fluctuations in earnings.

**Allen and Touran (2005)** discussed the procedure for performing risk analysis in transits project. The risk analysis process involves six basic steps which includes validation of base conditions, risk identification and quantification, assessment, risk mitigation, implementation and monitoring. Risk can be expressed in terms of likelihood and their impact of occurrence. Documentation of risks and their potential impact is an important part of risk assessment.

**Kapil Sharma, Vibhav Trivedi and Gaurav Chandak (2005)** in their article have demonstrated how suitably designed risk management programmes afford developing countries access to appropriate instruments and opportunity to hedge themselves against losses from unanticipated commodity price. The authors have examined several risk...
management instruments. The authors have quoted real examples about the usage of derivatives by firms to manage risks and the various problems faced by the firm in using derivatives.

Ranga Swamy (2005) in his article discussed about the concept of risk. The main objective of risk management is to protect the property, earnings and personnel of the organisation against the losses and legal liabilities that may be incurred due to various risks. He has quoted various sources of business risk. The risk manager has to pinpoint the risk sensitive area. As a head, he has to coordinate with all functional managers to make judicious use of the combined resources of the organization and outside services to safeguard the objective of the organization.

Toms, S. Salama, A. Nguyen, D.T. (2005) in their study attempted to test the association between markets based measures of equity and operating, financial leverage. The results show that operating leverage is an important element in the determination of systematic risk. The role of operating leverage in the theoretical and empirical analysis has important implications for risk management. They also found a linear relationship between operating cost and stock market beta. Operating costs have the bigger impact on systematic risk.

Deloitte (2005) conducted corporate risk management survey in South Africa and identified the following risks such as credit risk, market risk, liquidity risk, operational risk and outsourcing risk. Sensitivity analysis was used to measure credit and market rise on a monthly basis. Foreign exchange risk was identified as the important risk in market risk. The majority of participated firms were in the preliminary stage of operational risk management. They found that majority of the firms in all industrial sectors attempt to manage credit risk, market, liquidity, operational, strategic/business and reputational risk.
Everett Gibbs and Jim Delaoch (2006) emphasized the need for effective integration of risk management with strategy setting. Management should never set strategy without evaluating risk. They have also argued Enterprise wide risk management programme focuses on integrating risk management with strategy setting. They discussed COSO’s four alternative risk responses. The authors cited the examples of various organizations’ risk management approach.

Michael Papaioannou (2006) reviewed the traditional types of exchange rate risk faced by firms. The author has outlined the main advantages and disadvantages of various exchange risk management strategies. A set of widely accepted best practices in managing currency risk and main hedging instruments in OTC and exchange-traded markets was also highlighted by the author.

David Axson and Greg Hackett (2006) in their article urged the financial executives to become the eye of their corporations and to take lead in risk management and decision making to ensure their companies’ long term survival. A new management model is needed to alert senior management to impending risks. The finance department has a big role in identifying trends and determining the materiality and Probability of potential occurrences that can threaten a company’s survival. The authors pointed out a four step-system for long term survival.

Marc Epstein and Adriana Rejc Buhovac (2006), have given various risk classification schemes and a risk management payoff model. The extensive set of metrics discussed can be used to evaluate the payoffs of specific risk management initiatives as well as to assess the potential risks involved in decisions related to operations, process
and capital projects. Identification of corporate risk can enable senior managers to consider those risks more effectively in their decision-making and manage them more successfully for improved corporate performance.

Manesh (2006) looks at the provisions of clause (49) and suggests ways and means of coping with it. The revised clause 49 has suitably pushed forward the original intent of protecting the interests of investors through enhanced government practices and disclosures. The clause has enhanced the responsibilities of board. The board is also required to review the company’s risk management framework. The task at hand is to first identify all the risks applicable to a company. The company would also need to put in place the structural elements of a risk policy (building a risk register and framework to track progress on risk mitigation and review the risks on a continuous basis).

Bartram (2006) has investigated the motions and practice of non-financial firms with regard to using financial options in their risk management activities. 15 to 20% percent of all use options to manage foreign exchange and interest rate risk. The empirical evidence suggests that the motive behind using derivatives is to reduce financial exposures at the firm level. Options and portfolio of options are very flexible hedging instruments that allow hedging various payoffs patterns, including linear and non-linear exposures. The differences in the accounting treatment of derivatives as well as liquidity effects have to be considered in determining the choice of derivative instruments.

Jan Bena (2006) in his article has examined the choice of tools for managing a firm’s operational risks. He has expressed that corporate risk management is valuable as it reduces the costs of raising external
financing, increases a firm’s debt capacity, lessens underinvestment and improves welfare. The author has found that using insurance contract is the best way to manage operational risks. The insurance contract is superior as it facilitates the outside financing relationship but leads to inefficient excessive continuation of use without coverage limits. He also added that in case of non-availability of insurance contracts, the firm uses financial assets or resorts to holding cash reserves.

**Oversight systems** reports on risk management (2006) conducted a survey in America. Fifty eight of the executives reported that their company has an enterprise risk management approach and philosophy. CEO is placing greater emphasis on the management of all types of risk on a holistic basis. Only thirty-five percent of the financial executives reported that their company has formally trained executives and line managers to assess the probability of various types of risks. Executives see a need for a better risk management because companies are getting burned on a regular basis. The management of all risk across the enterprise, according to the survey, is vested with CFO (44%), CEO (20%) and CRO (8%).

**KPMG’s Singapore Risk Management Survey** (2006) measured risk management practices among business organizations in Singapore. Risk Management is becoming an important focus for Singapore organizations. Financial and Operational risks followed by regulatory compliance topped the list of risks faced by the organizations. Forty six percent of respondents have a formulated risk management policy. Most of the respondents use questionnaires/self-assessment checklist to measure risk. The companies (92%) had set out the roles and responsibilities of the risk management function in their organization. The top benefits realized from good risk management
practices are: increased awareness of/ compliance with regulatory requirements, improved communication with stakeholders, reduced financial losses and improves resource allocation.

Ernst and Young (2006), from their survey found that respondents believed that the overall level of risks they face have increased significantly. The CEO, CFO and the board had the ultimate accountability and responsibility for managing risk. The successful risk management rests on clear ownership, understanding throughout the organization and internal communication. The major risks included in the companies’ formal assessment were operational risk, compliance and regulations risk, strategic risk and financial reporting risk. Most of the companies align their risk management strategy with corporate objectives. Nearly sixty six percent of companies in Asia communicate their approach to risk management to investors through annual reports. And the rest communicates through investor presentations, one-to-one briefings. Only a few communicate through a section on corporate governance on website.

James W. De Lam (2007) has highlighted sixty percent of senior executives “lack high confidence” about their company’s risk management practices in identifying and managing all potentially significant business risks. The traditional risk management approaches do not adequately identify evaluates and manages risks. These approaches limit the focus to manage physical and financial assets. The authors have introduced a new approach to risk management in ERM. Enterprise Risk Management aligns strategy, people, process, technology and knowledge. It directs the management’s attention to the uncertainties around the enterprises’ entire asset portfolio. Properly implemented ERM helps organizations to pursue greater strategic growth opportunities.
Ghaleb Y. Abbas et al. (2007), in their article highlighted on the profile of risk in large Jordanian Manufacturing industries, their probabilities and impacts and the overall level of riskiness or significance. It has been found that the external risk have higher probabilities and scores than the internal ones. Companies with larger sizes, variety of products, good management systems, strong financial potentials, markets outside Jordan were found to have lower risk scores. The authors suggested such type of companies should provide a benchmark for developing countries, which have high-risk scores in adopting systematic risk management techniques necessary to reduce the risk levels in the industries.

The study by Danijela Milos Spric (2007) claims that the corporate decision to hedge is related to company’s investment expenditure to asset ratio. It is interesting to note that there is a negative relation between the decisions to hedge and the share of the company owned by the management. Their findings related to managerial utility hypothesis and decisions to hedge were contradictory to other previous researches.

Ernst & Young (2007) in their survey found that for many companies risk assessment has formed the basis to identify control challenges in business and operational areas that are critical to meet strategic objectives. A detailed assessment of risk across the organization is a critical step. It leads the way for a coordinated approach to risk management.

Protiviti Hong Kong Co Limited (2007) conducted a study with the senior executives of 500 largest listed companies in Hong Kong. The study was conducted to identify the nature of the risk, appetite for risk and concerns with regard to risk of senior executive, and know about the
corporations’ risk management capabilities. The overall level of risk has been increasing for many companies. Seventy percent of the executives reported that their organizations have changed risk management capabilities. For identifying and prioritizing risk, most of the companies use self-assessment and internal audit, while others rely on key risk indicators, incident reporting and loss measurement. The survey indicates the overall responsibility for managing risk is vested with CEO. CEO plays a significant role in framing risk management policy, reporting and executing. The benefits of risk management includes improvement in process performance, better information, effective resource allocation, more robust business planning and increased market capitalization of an organization.

According to Industry Risk Report (2007) Pepsi Co. has an integrated risk management framework to identify and assess risk across the organization. General Motor Corporation uses a risk management control systems to monitor foreign exchange, interest rate, commodity, equity price risks and related hedge positions. Exxon Mobile Corporation believes risk management is a responsibility of every member of senior management with a focus on hazard risk management, safety and operational excellence.

Economist Intelligence Unit (2007) conducted survey in Asia, Australia, North America and Western Europe. In their study almost all companies reported operational and reputational risks as the most threatening ones. More traditional, quantifiable risks, such as financing risk, credit risk and foreign exchange risk were seen as the least threatening. Companies adopt hedging strategies to protect against risk such as credit defaults or swings in currency exchange rates. They also found that lack of time and resources are the greatest barriers to the effective management of risk.
Andrey Y. Rogachev, in his article (2008) Enterprise Risk Management in a Pharmaceutical Company has attempted to analyse the integrated approach used by the company as foundation of risk management within a company. It was also noted that for companies, the creation of risk management services is a forced action, which is only due to the demands of government and other regulatory authorities. Risk management should be integrated into the organisation culture, accepted and approved of by the directors and conveyed to every employee. The author has made a point that the professional risk manager can properly implement risk management procedures and integrate them into enterprise risk management system.

Danijela Milos Spric (2008) presented extensive literature survey for the rationales for corporate risk management. From literature survey, the authors revealed the two classes of rationales for corporate decision to hedge- maximization of shareholder value or maximization of managers’ private utility. Through hedging firms can reduce cash flow volatility, thereby leading to a lower variance of the firm’s value. The authors finally argued that there is no single accepted framework which can used to guide empirical hedging strategies, and there is no consensus to what extent hedging is the most important in explaining risk management as a corporate risk policy.

Danijela Milos Spric (2008) presented the corporate risk management practices in the large Slovenian non-financial companies. The survey revealed that companies use some form of interest rate, foreign exchange or commodity price, risk management instruments to manage risks. Forward, swap and structured derivatives are the most important derivative instruments in risk management strategy. Interest rate risk in the Slovenian companies hedges most frequently by
matching maturity of assets and liabilities. The primary goal of hedging is managing the volatility of cash flows followed by accounting earning volatility as well as managing balance sheet and ratios. The companies quoted the reason of high costs of financial risk management instruments for not using derivatives.

**Sathya Swaroop Debasish** (2008) in his study covered 18 categories of industries, with responses from 501 Indian enterprises. 53% of the respondents reported that they are using derivatives to manage foreign exchange risk. The study finds wide usage of derivative products for risk management and the prime reason of hedging is reduction in volatility of cash flows. Majority of the respondents used forward contract to manage foreign exchange risk.

**Dr. Gabriel Khan** (2008) addressed that management of risks has become more and more an important issue. To manage risks, it is necessary to quantify them. Quantification of risk helps to improve business. He has also classified the risk into credit, market, liquidity and operational risks. The author has discussed the various methods in evaluating these risks.

**Carneiro and Sherris** (2008) attempted to analyze the interest rate risk hedge demand by Australian Companies. It was measured through the ratio of principal notional amount of interest rate derivatives to interest rate bearing liabilities. Australian corporations reporting accounting standards made it possible for the authors to properly identify and quantify interest rate risk exposure. The extent of a company hedge depends on current floating to fixed interest rate mix. The authors found significant relations of interest rate risk hedge to company size, floating interest rate debt ratio, annual log returns and company interest type.
Kapitsinas and Spyrisdon (2008) have presented the evidence on the use of derivatives contracts in the risk management process of the Greek non-financial firms. Out of 110 non-financial firms, 62 firms responded to the survey. The major source of concern for derivatives users is the accounting treatment of the contracts and the disclosure requirements. The respondents indicated that they use sophisticated methods of risk assessment like VAR, stress testing, sensitivity analysis etc. Forty seven percentage of the respondents used Value at Risk for risk assessment followed by stress testing. Eighty five percent of the respondents used forward contracts to manage their foreign exchange risk. The firms have a documented corporate policy with respect to the use of derivatives. The authors found a positive relation between firm size and derivatives use. It is also interesting to note that most firms developed an internal risk management department to which they appeal for the evaluation of their derivatives position, as well as the evaluation of the effectiveness of risk management.

Rafael F. Schiozer and Richard Saito (2009) presented evidence on derivatives usage by seventy four Brazilian non-financial firms. They use derivatives for risk management purpose than speculation. Most of the companies use derivatives to manage Foreign Exchange risk, followed by interest rate and commodity risk. The main concerns for Brazilian managers about derivatives were linked to taxation and accounting issues rather than financial and economic aspects.

Ashbaugh Skaife, Collins, Kinney and Lafond (2009) investigated whether firms that disclosed internal control deficiencies exhibit higher systematic, idiosyncratic risk and higher cost of equity relative to firms with effective internal controls. The authors found both systematic and idiosyncratic risks are positively and significantly related to
Internal control deficiencies revelation, So it is understood that firms with ineffective internal control exhibit greater systematic and idiosyncratic risk relative to firm with effective internal control problem. The author in the final cross sectional analysis again found a positive relationship between the cost of equity and ICD disclosure. They have concluded that firms with ineffective internal control present greater information risk to the investor.

Batram.S, Brown and Fehle.F (2009) presented international evidence on the use of financial derivatives of forty-eight countries’ non-financial firms. Fifty nine percent of the firms use derivatives. The most commonly used instrument is forward to manage currency risk. Firm specific risk factors are very important in determining risk management policy across countries. The size of local derivative market is an important factor in determining derivatives usage.

Tomas Mantecon (2009) in his article has discussed the different alternatives like joint venture approach, contingent payment and threshold investment for ameliorating cross border acquisition risk. The article seeks to determine the relative value of these methods of risk mitigation by an empirical analysis. His key results showed that domestic acquisitions are more profitable than cross border deal. He also found that joint ventures create value for acquirers, but other methods failed to produce benefit for buyers. Joint venture appears to be a valuable mechanism for reducing risk in cross border acquisition.

Mihir Dash and Archica Chopra (2009) have analyzed the risk faced by fifteen information technology companies operated in India. The major risks were found to be the financial risks, including forex risks, liquidity risk, leverage risk and interest rate risk. The risks are all dependent on geographical concentration, service and vertical
concentration. The least important risks identified by them are strategic risks, operational risks and hazard risks. Most of the IT companies do not take an integrated or holistic approach for risk management. The risk management function are identified continuously, monitored and manages effectively in order to protect the company’s business.

**Shefali Thapliyal** (2009) has discussed the surveys conducted on Indian companies by Deloitte and KPMG. From Deloitte’s survey, he argued that Indian companies lag far behind their global peers. KPMG indicated that risk management practices in Indian companies lack oversight practices at the board level and needs significant improvement. From Professor Gupta’s survey, he argued that a companywide approach to risk management is missing in India.

**Ramamurthy** (2009) during his interview with Fast Track conveyed three points for sound risk management. Risk oversight should not be with the audit committee. Those charged with oversight responsibility should interact with management at the operating levels and get information from varied sources.

**Global Risk Management Survey** (2009) conducted by Aon analytics identified top ten risks faced by the organizations. Most of the companies reported establishing policies on risk oversight and management. Ninety percent of the companies have board level involvement in their current approach to risk management. The top risk in Asia Pacific region includes foreign exchange rate fluctuation, business interruption, commodity price risk and reputation risk. The most frequent method for assessing risk is closely split between senior management intuition, experience and business unit quantitative analysis. It was also found that the external drivers to strengthen risk
management are economic volatility and increased focus from regulators. Only twenty five percent of respondents reported that they have a Chief Risk Officer to manage risk.

Andrew Woods (2010) has pointed out that today’s treasurer has a strategic role with board level accountability and the responsibility to manage enterprise risks. The treasurer should thoroughly understand the enterprise risks. The larger the organization, the greater the challenge for the treasurer. In these increased volatile market conditions focusing on areas of key treasury management best practices and using technology will help in improved decision making. The risk management policy should be formulated, reviewed and updated constantly. Performance benchmarking or budget rate benchmark will help the treasurer to effectively manage risk and monitor the performance of the company’s hedging policy.

Research Gap

It is evident from the review of literature, that there are very few studies in India about Risk Management practices. Several authors have examined the dynamic relationship between risk and return. The research consulting firms have found that the overall level of risks faced by the organisations have increased significantly. Only one study has identified the intensity of risk faced by Jordanian manufacturing companies. Most of the authors have emphasized only the theoretical grounds on various aspects like senior management taking responsibility for setting risk policy, communication risk policy, and integration of risk management into the culture of the organisation, clear ownership and responsibility of managing risk. On the other hand, the benefits of managing the risk like achieving the organizational objectives, optimal resource allocation, fast
decision making have also been theoretically argued by several authors. But what is the real practice in the organisation is not clearly highlighted by any of the academicians in Indian context, especially in Tamil Nadu. So from the available literature, there is a research gap in the above mentioned areas.