IMPACT OF DIVERSIFICATION STRATEGY ON CAPITAL STRUCTURE, SYSTEMATIC RISK AND CORPORATE PERFORMANCE IN INDIAN CONTEXT

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- By-

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CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in this thesis entitled **IMPACT OF DIVERSIFICATION STRATEGY ON CAPITAL STRUCTURE, SYSTEMATIC RISK AND CORPORATE PERFORMANCE IN INDIAN CONTEXT** in partial fulfillment of the requirement for the award of the Degree of Doctor of Philosophy and Submitted in the L.M. Thapar School of Management, Thapar University, Patiala is an authentic record of my own work carried out during the period from June 2010 to July 2014 under the supervision of Dr. Rudra Rameshwar, Assistant Professor, L.M. Thapar School of Management, Thapar University, Patiala and Dr. Vinay Nangia, Professor, Department of Management Studies, Indian Institute of Technology Roorkee, Roorkee, India.

The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other Institute.

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This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

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ABSTRACT

This study investigates the impact of diversification strategy on capital structure and corporate performance of corporate sector in India. It also computes the relationship between corporate capital structure and corporate performance with systematic risk. The researcher explores important and statistically significant effects through the study such as effect of diversification strategy on corporate performance and corporate value creation using cross sectional data. The data for the present study is taken from well known academic data house known as Prowess of CMIE (Centre for Monitoring Indian Economy). The sample for study is a set of all the companies which diversified during the year 2006-2011 and are listed at BSE (Bombay Stock Exchange) as well as NSE (National stock exchange) of India.

In line of identification of the study variables, the dependent variables of the study are capital structure (Leverage), systematic risk and corporate performance through structured models know as the Leverage (LEV) Model, Market Risk (β) Model and Corporate Performance Model.

The dependent variables of the study such as corporate capital structure is measured by popular corporate leverage ratio like, debt equity ratio or total debt to total assets (TDTA) some of the other ratios are total debt to total assets (TDTA), long-term debt to total assets (LTDTA) and short-term debt to total assets (STDTA) are used as proxies for capital structure. Further the systematic risk of the companies is measured by calculating the covariance of market movement with respect to that of the stock movement [Cov (Ri, Rm)/Var (Rm)]. The corporate financial performance is price earnings (PE) Ratio measured by market price of common stock / earnings per share, return on assets, (ROA) measured by

profit after tax / total assets, and return on equity and (ROE) measured by profit after tax / no. of shares outstanding.

However, the independent variables are classified as Diversification Index (DI), Corporate Size (SIZ), Profitability (PROF) and Asset Tangibility (AT). The extent of diversification can be measured using various index found in the literature like Herfindahl Index (HI), Entropy Index (EI) etc. calculated using corporate revenues. Based on the results of regression analysis (OLS) using E-views 7 software, it has been found that diversification strategy have a significant and negative impact on all corporate capital structure, also supported by Kakani (2000).

Corporate size, has a positive and significant impact on leverage, which is consistent with a past study of Antonkik (2006), Banker (2011), Barton (1988) and clearly indicates that corporate size is an important determinant of corporate capital structure. Corporate capital structure has positive and significant impact on corporate value creation, through elaborated product diversification strategy which is measured by popular financial measurement indicator.

It can be concluded, from the study that the trend towards increasing degrees of corporate diversification could prove to be quite valuable to the strategists who are attempting to improve the corporate performance through effective management of the diversity, experienced in a multi business corporate. Moreover, future studies could employ different measures of product and geographical diversification, according to the degree of relatedness of product segments, to check the effect of said variables on capital structure decisions.

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ABBREVIATIONS

S No.	Abbreviation	Interpretation
1	AT	Asset Tangibility
2	BETA	Systematic Risk
3	CP	Corporate Performance
4	CS	Capital Structure
5	DI	Diversification Index
6	GROW	Corporate Growth
7	LTDTA	Long-Term Debt to Total Assets
8	PROF	Corporate Profitability
9	ROA	Return on Assets
10	ROE	Return on Equity
11	SIZ	Corporate Size
12	STDTA	Short-Term Debt to Total Assets
13	TDTA	Total Debt to Total Assets
14	TDTE	Total Debt to Total Equity

Chapter 1

Introduction

1.1 Back ground

Corporate diversification strategy is defined as a practice under which a corporate enters a new industry or market which is different (may be similar one) from its core business. It can also be seen through, the variations between businesses, within the company. The degree of diversity is primarily determined by two factors namely the degree of difference in various dimensions of product produced and the number of dimensions in variation like customer type technology used etc, Keney (2010)

Out of several reasons for the corporate to diversify the primary reason is reducing risk of relying on only one or few sources of income. Some other possible reason to diversify is avoiding cyclical or seasonal fluctuations by producing goods or services with different demand cycles, achieving higher growth rate and countering a competitor by invading the competitor's core industry or market.

A number of studies have hypothesized that diversification improves profitability through economies of scope by pre empting the product space. All though the views on the phenomenon is very mixed, one possible explanation by famous work of Scott (1982) which demonstrated three effect of diversification. The first one is that it may generate multi market economies thereby increasing corporates' profit. It may also increase the number of contacts between corporates, thus increasing chance of collusion. In addition, it can also facilitate the transfer of resources into more profitable markets thereby overcoming the problem of entry barrier and that of reducing profits.

When a corporate chooses to diversify, it faces a decision as to how related the new business is to the existing businesses of the corporation. Strategic actions are aimed at creating value for the organization. Therefore, it is important to look at the value creation rationale of diversification. Diversification create value when economies of scope exist among the multiple businesses in the organization, and exploiting these scope economies can be done more efficiently by the corporate rather than by shareholders on their own. The general discussion on value creation in diversification sets the stage for the next important pasture for the instructor – outlining the key elements of economies of scope. The strategy of diversification is indeed not rare. The inimitability of a corporate diversification strategy depends upon the economy of scope that is the focal point of the strategy. Core competencies and multipoint competition are obvious examples of costly-to-duplicate economies of scope, while tax advantages and risk reduction are typically less costly-to-duplicate economies of scope. In general, economies of scope based upon tangible resources are usually relatively easy to duplicate. In other words, if Procter and Gamble acquired Gillette to exploit economies of scope based upon shared sales force, Colgate-Palmolive can do the same.

Scope economies based on intangible resources particularly those based on tacit collective knowledge are much more difficult to imitate. The realization of capital allocation economies of scope require sophisticated information processing capabilities. Similarly, multipoint competition requires considerable coordination skills. Finally, to exploit market power, the corporate first of all must have market power advantage. In short, inimitability is not the same across the board; rather it depends upon the resources involved.

Instead of leveraging scope economies across businesses, a corporate may decide to grow and develop each of its businesses separately. It can replicate the success in one business to

another, rather than look across businesses to leverage common activities. Strategic alliances are another substitute for growth through diversification. Instead of looking to share activities across two of its own businesses in the area of R&D or marketing, the corporate can enter into a marketing partnership with another corporate. By looking at diversification from the perspective of rarity and limitability, it can be said that corporate diversification strategy must have the goal of helping the corporate obtain a sustainable competitive advantage. This not makes a case for careful deliberation from the corporations point-of-view, it also reveals that the VRIO framework is applicable in a variety of strategic situations.

1.2 Importance of terminology - Diversification

Montgomery (1994), had outlined important points on several reasons that why corporates might want to diversify. There may be various perspectives / views to it, but some of the most important ones are the market power view, the resource view, and the agency view. The first two views are both consistent with profit maximization, but only the latter embraces the use of resources. The third is of managerial nature and neither profit nor efficiency maximization.

The conventional school of thought, which is resource based view, suggests that bigger the company the more resources it controls, hence it should perform above average in an industry. Also it may be deduced that bundled resources and capabilities that are aggregated over time also underpin a company's competitive advantages (Barney, 1991; Grant 1990). On the other hand some researchers have a viewpoint that diversified corporate are not as efficient as they view that it's difficult to bust competency in various diversified product range (Hill, 1985). Corporate which are widening the scope to other businesses mostly do so for competitive advantage reasons. Montgomery (1994) explains three possible sources for appropriateness of the market power view. The first one being cross-subsidization, i.e. a corporate utilizing the

excess profit from one business to enter in another, and hence give this new venture an advantage. Second reason is mutual forbearance; companies can meet on another market to compete less severely, Montgomery (1994). Reciprocal buying is the third reason under which large and diverse corporates can also buy reciprocally in other markets to steal competition from smaller competitors.

Landstrum (2005) highlights the anti-competitive actions often associated with motives for diversification. The diversified companies are able to exploit, extend, or defend their power by strategies and tactics, which help them in achieving the competitive advantage and thus an edge over their competitors. Earlier, Montgomery (1994) had similarly revealed that the market power view suggests a positive relationship between diversification and corporate performance. It is more the power itself that makes the company perform better.

Montgomery (1994) had very categorically pointed out the agency view as the second most important view and in his seminal research concluded that the owners of the companies and the managers of the company who are running the show are two different entities and due to this there interest are also different. The assets of a corporate appear to be more in the hands of the managers when there is no significant ownership stakes, and these managers seem to pursue value-reducing activities to strengthen their own interest. Although the companies have started with a concept of ESOP (Employee stock option schemes) where the performance appraisal of managers are linked with market performance of the corporate but still the problem of agency cost persists. Other than this there exist a number of motives behind diversification from an agency perspective. That will mostly not benefit the principal. The reason for this is the separation between the owner and the manager, where the manager does not own any significant equity. This is also consistent with Sambharya (2000) motive for diversification that it may

reflect top managements aspirations and goals. Some other prominent reasons for managers to diversify the company were discussed in the study. The first and the foremost reason is that managers diversify in order to create their own empire or ownership, Montgomery.

Second is managerial entrenchment, according to which the managers will diversify into markets or products in a way that increases the demand for their skills and abilities. Next important aspect is risk reduction i.e. managers try to reduce their employment risk by diversifying into different markets and products and thereby make the organization less dependent on a single market. The basis of portfolio theory that states that a corporate should not put all egg in one basket, Amit & Livnat, (1988) which is one of the most common reason why a corporate diversify.

Possibly another reason to diversify as thought by managers is the free cash flow theory. The reason for this is that in the beginning of the corporate life cycle there are lot of profitable opportunities for reinvestments, however, when the corporate becomes mature these opportunities become more scarce and hence the cash flow from earlier innovations are being used for opportunistic diversification.

The resource view is also another important view on diversification, which acknowledges the corporate-specific resources, a theory developed by Penrose (1959) who discussed the growth of the corporate. According to him, growth stems from the heterogeneous resources, a corporate possesses rather than from market and industry-specific factors. When a corporate had unutilized resources which could be profitably employed, it also has an incentive to expand Penrose, (1959). Furthermore, diversification is driven by the need to use these excess resources. In order to grow, the corporate needs to specialize and the profits or resources from the successful growth will be underused and eventually used to grow by diversification. This process

is called the vicious cycle, which states that specialization provokes diversification. However, unless the unused resources cannot be effectively sold in the market the diversification will never take place in the desired fashion which brings value addition to the company, Teece, (1980).

Over estimation of the transferability of specific resources and over estimation of the value of very general resources in creating a competitive advantage in the market are the two main miscalculations when the corporate are diversifying on the basis of excess resources.

Corporates are different and therefore different optimal levels of diversification for profit maximization. Montgomery and Wernerfelt (1991) stated that corporates with less specific resources have more to gain from diversification, where as with the increase in the level of specific resources the corporate will be profitable if it remains concentrated.

During the 1990's corporates have divested parts of their business and, hence, the concept of "return to the core" has been developed Montgomery, (1994). However, diversification still is an ongoing process in most industries, and is therefore interesting to examine the relationship between diversification and performance, specifically in a country like India which liberalized merely 20 years ago and in which the multinationals have eventually started taking interest as a potential high risk- return market.

Rajan, Servaes and Zingales (2000) had also contributed to the literature with a model on diversification. According to them if the level of resources and opportunities are similar, funds will be transferred to the divisions with highest efficiency. However, if the level of diversity between divisions increases the funds will be taken from the division with good efficiency and be transferred to divisions with poor efficiency, leading to poorer overall efficiency. This theory of resource view suggests that diversification should yield greater profits. However, this is only

true to a certain extent since transaction costs will eventually raise corporate governance costs and thereby reduces profits, Hill (1988).

Zahavi and Lavie (2013), showed how intra-industry product diversity affects firm performance by analyzing the implications of expanding a firm's product line within its core business. The study also concluded that increase in product diversity initially undermine performance because of negative transfer effects but then improve it due to economies of scope. Further, it was theorized that this U-shaped effect of product diversity becomes more pronounced as the firm increases the intensity of its technology investment, yet is likely to be attenuated by the firm's accumulated experience with intra-industry diversification. Data on 156 U.S. based software firms operating from 1990 to 2001 furnish support for these conjectures.

Xie and O'niel (2014) used learning theory to show how knowledge domains affect product extension decisions and how these product decisions change as firm's age. Faced with the choice of new product-markets, a firm might decide to introduce a similar product, by leveraging existing firm knowledge, or to experiment with a less familiar product, which requires new knowledge. Using data on new drug introductions in the US generic pharmaceutical industry, the analyses showed clear support for heterogeneous product-market entry patterns across knowledge domains as the firm ages.

Nath et. al (2010) using resource-based view (RBV) of the firm as a theoretical backdrop found out the relative impact of a firm's functional capabilities (namely, marketing and operations) and diversification strategies (product/service and international diversification) on financial performance. It was also hypothesized that this linkage depends on the firm's relative efficiency to integrate its resource–capabilities–performance triad. Using archival data of 102 UK based logistics companies, the study found marketing capability is the key determinant for

superior financial performance. This study highlights that a market-driven firm is likely to have better business performance than a firm focusing solely on operational capabilities. Also, firms are better off when they focus on a narrow portfolio of products/services for the clients and concentrate on a diverse geographical market.

Martin and Sayrak (2003) said that the study of diversification at the corporate level can be grouped into one of two bodies of literature: cross-sectional studies of the link between corporate diversification and firm value (i.e., the diversification discount) and longitudinal studies of patterns in corporate diversification through time. The prevailing wisdom among financial economists throughout much of the last decade has been that diversified firms sell at a discount and that the level of corporate diversification has been trending downward. However, recent research questions both these tenets and a number of studies now suggest that the diversification discount is neither due to diversification at all, or may be a result of improper measurement techniques.

Lien and Klein (2013) evaluated the survivor principle in the context of corporate diversification, testing if survivor-based measures of inter industry relatedness are good predictors of firms' decisions to exit particular lines of business, controlling for other firm and industry characteristics that affect firms' portfolio choices. It was found strong, robust evidence that survivor based relatedness is an important determinant of exit. This empirical regularity is consistent with an efficiency rationale for firm-level diversification, though alternative explanations based on firms' desire for legitimacy by imitation and attempts to temper multimarket competition cannot be ruled out.

Kim et al (2013) propounded a new approach to account for the relationship between diversification and innovation by integrating insights concerning strategic fit. The researcher argued that the type of diversification strategy, leads to greater innovation output when the appropriate technological search strategy is employed. Using a longitudinal study of the patenting activity of 258 manufacturing firms, it was found that strategic fit is important for innovation output. More specifically, a related diversification strategy leads to greater innovation when firms use a narrow technological search strategy. In contrast, an unrelated diversification strategy leads to greater innovation when a broader technological search strategy is used. Implications for future research are discussed

The financial view is also a very significant motive which is based on the fundamentals in portfolio theory, that one should not put all eggs in one basket. Meaning, simply that any corporate cannot simply invest all its capital on one type of project or product or market because even if it assumes that its technology or efficiency in producing a particular product is best in the market, according to Michel Potter there are several other forces which can sometimes create disturbance and thus lead to heavy losses. In such situation if cash flows from individual operations in a corporate are not perfectly correlated the risk can be reduced by diversification Amit & Livnat (1988). This assumption is however criticized by many authors who say that a corporate should not diversify if no operational synergies are to be expected.

In the synergetic view several researchers believe synergy occurs when the sum of all businesses together equals more than the sum separately, Hitt et al., (2001). Amit and Livnat (1988) argued that diversification into related businesses may lead to the synergic effect and thus augments that the market power of the diversified company which in turn may help the company enhance its long-term strategic position.

Montgomery (1994) confirmed that synergies are of great importance when corporates diversify. Another characteristic of synergy considering media conglomerates is that they have the financing resources, which smaller corporate do not have. This type of phenomenon can very practically seen with Indian conglomerates like Tata Sons, Reliance, Bharti etc., whose overall cost of capital and specifically debt capital is comparatively much cheaper than its other counterparts. This in turn leads to cross-promotion, the media conglomerates can develop promotional projects which the smaller competitors cannot match.

According to the famous work emphasized by Ansoff (1957) and related histories reveals many different reasons for diversification. Companies diversify to compensate for technological obsolescence, distribute risk, utilize excess productive capacity, re-invest earnings, to obtain top management etc. In deciding whether to diversify, management is expected to carefully analyze its future growth prospects. It should think of market penetration, market development, and product development as parts of its over-all product strategy. A quantity of studies have hypothesized that diversification strategy may improve profitability and success, all the way through financial system or economies of extent and/or in the course of the anticipating of product space. The greater part of research work on the said topic is concentrated in countries like USA, UK, Europe and Australia but there are numerous nations which have not trapped the attention of and importance of researchers for a sustainable business. For that reason, nations which were unexposed in precedent literature, like India are taken up for upcoming research.

Prior to liberalization, Indian business were competing among themselves and a very few players were in the game. They were basically in a position of monopoly and had higher fixed product rates and were of poor quality. Due to the prevalent business norms of our country, they

could neither invest into business outside our country neither any foreign investor was given permission to do so. But the scene greatly changed after 1991.

In June 1991, India was in an economic crisis of exceptional severity triggered by the rise in oil prices after the Gulf war, Ahluwalia, (1994). Foreign exchange reserves had plummeted to $1.2 billion, barely sufficient to pay for two weeks imports. Imports were subjected to tight control. Industrial production was falling and inflation was rising. International confidence had evaporated and international banks were shying away from fresh exposure.

Due to rising pressure of corporate world and international business community was the time when Indian government underwent an economic revolution that aimed at deregulating the economy and shifting from a path of relatively protected inward looking industrialization to a new phase based on greater competition in the domestic markets, openness to trade and investment, and fuller integration with the global economy. During the same time a radical restructuring of various policies affecting the economy was required and reforms at micro, macro and structural level were required to uplift the economy of India from the darkness of license raj to the light of globalization. Crisis management and dealing with the balance of payments were also some of the prime agenda which were on the cards at that time. Also to restore India's international credibility by meeting its scheduled external debt liabilities and through maintaining a more realistic exchange rate consistent with market obligations were of the utmost importance.

A control on accelerating inflation was also required to achieve macro-economic stabilization. It was also realized that macro-economic stabilization would provide a sound foundation for medium and long-term structural economic reforms and accelerate the rate of economic growth in a sustained manner. This was only possible if the control over the market is

removed and Indian products and services were allowed to trade in the free floating global market or trading blocs. During the same time Indian business were liberalized to invest in the global markets and vice versa investors from international markets were encouraged to invest in Indian markets. Initially Indian markets were not much prepared as far as technology efficiency and quality of the products they used to manufacture but gradually with the incoming of world class companies and their manufacturing systems they also improved many fold.

Although, capital account was also a reason to worry, but was still manageable due to investment in productive capital made at that time which was expected to generate a cash flow in the coming time ahead. The reforms primarily focused on reducing the grave problem of fiscal and even more difficult revenue deficits. The only reason was that our policies after independence have always remind such that we had never Managed area of revenue deficits From 1950 to 1980 the national budget was usually characterized by revenue surpluses but the situation changed after 1980 when the expenses were much above the budget, thus worsening the position.

The revenue deficits are clear cut symptoms of misuse of government budget caused by excessive employment in the government sectors, uneconomical pricing of goods and services by public sector enterprises, a growing interest burden, mounting subsidies, and rising defence expenditures which happened during 1985-1990.

The governments of India, both at the central and state government levels, gradually also realized that their main function as a government was making and implementing policies, rather than doing business. Very soon the government started disinvestment into the PSUs, not just to give it a momentum of accountability but also to fill its financial deficits and plummeting public debt.

The 1991 reforms were not unilateral. Unlike other countries reforms they were very carefully planned and design as per our necessity and requirements which could be extended over time. The major structural economic reforms carried out since 1991 have been primarily in the areas of Trade and Industrial Policy, Infrastructural Sector Policies, Divestment/Privatization Policies, the Financial Sector, and in Policies for attracting foreign direct investment.

The thrust of the reforms in all areas was to open India's markets to international competition, remove exchange rate controls, and encourage private investment and participation in industry and, in the finance markets, to liberalize access to foreign capital and to ensure that foreign investment is not penalized merely for being foreign.

On a careful observation it can be seen that in the vital areas of macro-economic policy including fiscal policy monetary policy and exchange rate policy, there was an overlap between macroeconomic stabilization policies and structural reforms. The long-term growth inducing roles of all macroeconomic policies can be considered under structural reforms. The importance of studying the reforms of 1991 is that after these reforms, foreign corporates entered into Indian corporate sector arena through the route of foreign direct investment. The Indian corporate sector faced stiff competition from foreign counterparts but at the same time learned foreign business practices. This change opened lot of business opportunities for Indian corporate sectors. The Indian corporate sector diversified into various related and unrelated fields. Thus, giving a need to conduct research on the said subject.

1.3 Association, Challenges and Issues related to Diversification on Capital Structure

Diversification strategies are used to make bigger corporates' operations larger by adding up markets, products, services or stages of profit to the on hand business. The rationale of

diversification is to permit the companionship to enter lines of business that are dissimilar from existing operations. Diversification is a form of growth strategy, but cannot be a guaranteed route to success Montgomery (1994). Probable growth also increases earnings, but only in strenuous industries. However, substituting growth rates of the trader corporates themselves do not have an effect on fallout much, signifying that own-growth rates possibly will certainly be sensible alternatives for demand growth.

Generally, growth strategies occupy an extensive supplement in performance objectives such as sales and/or market share, away from past stages of performance. Many corporates follow one or different types of growth strategies. One of the main reasons is the outlook held by many investors as well as corporate is that 'bigger is better'. Growth in sales is over and over again used as a gauge of performance. Still if profits stay behind, constant or turn down, an increase in sales satisfies several people. The statement is frequently completed that if sales increase, profits will ultimately go after.

These are some of the main reasons in the last five decades the strategy researchers have studied corporate diversification decisions, and several relationships have been examined consequently. Investigation and research have connected diversification strategy to a variety of outcomes together, but not limited to, corporate economic performance, capital structure and corporate restructuring. In adding together, strategy research has included business and manager characteristics as determinants of diversification strategy. On one hand the diversification literature, studies the differential effects of related vs. unrelated diversification strategy and the corporate performance had proved to be an admired research area. Nevertheless, a few strategy relationships have acknowledged adequate intellectual attention to validate a quantitative

integration of research results. The relationship between diversification strategy and corporate performance is one such strategy connection for which amalgamation of results is defensible and potentially helpful of dissimilar business groups. The effect, in fact conveys that geographic diversification permits business groups to make use of their core competencies and distinguishing group ability crossways units in diverse international markets Hoskisson and Hitt, (1990). Worldwide revelation might have also provided a wider pedestal of markets for obtaining returns from modernization and offer new market opportunities Wan, (1998).

The standard work of Modigliani and Miller, (1958) has provoked many readers and policy makers to recognize the capital structure decisions of the corporate. An in depth literatures review discussed theories, interpretations such as static buy and sell off, group cost and empirically tested these theories to be acquainted with aspects influencing capital structure decisions of the corporate. However, these findings demonstrate that corporate capital structure is prejudiced by numerous corporate linked characteristics such as non debt tax shield, profitability, size and tangibility, Titman and Wessels, (1988); Haris and Raviv, (1991). Global market diversification and product diversification are well thought-out two significant magnitudes for business growth Qian, (1994). These diversification strategies assist business to improve their financial corporate performance, Ernest and Lee, (1999). In fact diversification strategy has been revealed to be an imperative element of capital structure measured the impact of diversification on the monetary option of the corporate subsequent to scheming intended for additional most important elements of capital structure Burgman, (1996). Chen, (1997) from his findings suggested that the costs of corporate diversification dominate the benefits of corporate diversification and highlight the importance of diversification strategy in affecting the market valuation of R&D innovation. Investigate the majority of different strategies are restricted to

developed nations, while of behind there is rising attention in assessment of developing countries like India.

The current study examines and shows the integrated relationship of diversification strategy (DS), capital structure (CS) and corporate performance (FP) for sustainable business while also considering the systematic risk of the company which is expected to change on being diversified. Previous studies in the same line reveal that diversification strategy may affect corporate capital structure by three basic ways: co-insurance effect, transaction cost explanation, and agency cost analysis. The co-insurance effect has a positive influence on corporate debt capacity, due to the reduction in the volatility of corporate revenues and profits. This effect is expected to be more intense in corporates that develop unrelated diversification strategies. Corporates that follow unrelated diversification can issue more debt and benefit from the fiscal advantages related to debt financing.

Another potential linkage between corporate debt and diversification can be established according to transaction cost economics. This theoretical approach to corporate finance examines corporate financial decisions in terms of the specificity degree of corporate assets. Research shows that when asset specificity is high, equity is the preferred financial instrument, because of the limited re deploy ability of these assets and therefore their low value as collateral in the event of corporate liquidation. By contrast, when corporate assets are not specific, debt is the preferred financing tool. On the other hand, corporates diversify their activity in response to the presence of an excess of unutilized assets (Penrose, 1959).

Related diversification would be obvious choice only for those companies which have an excess of highly specific assets, because these assets can only be transferred across similar

business. The adoption of an unrelated diversification strategy indicates the presence of an excess of non-specific assets in the corporate Chatterjee and Wernerfelt, (1991). Explanation by transaction cost suggests that corporates following related diversification strategies are suggested to equity as source of finance where as likely to be mainly equity-financed, while corporates that follow unrelated diversification may prefer debt financing. Whereas, agency theory is interested in mitigating the conflicts arising from the divergence of interests between shareholders and managers.

The agency theory presents, debt financing as a governance device useful in reducing the conflicts of interest between shareholders and managers. Debt reduces the agency costs of free cash flow and prevents managers from adopting value-decreasing decisions in the corporate. Consequently, debt reduces the risk of managers adopting unrelated diversification strategies that do not create value from a shareholder viewpoint.

Diversified corporates may be more profitable because they are able to deploy their assets more efficiently. Thus, empirical studies in the industrial organizational literature attempt to compare the profitability of diversified and undiversified corporates. On the contrary Gort (1962) and Maikham (1973) empirically found the profitability of diversified corporates to be similar to that of undiversified corporates.

Rumelt (1974) also in his research emphasized the benefits from diversification into related businesses. Rumelt (1974, 1982), Christensen, Kurt, and Montgomery (1981), and very significantly, Palepu (1985) showed that corporates, that have diversified into related businesses are usually more profitable, utilizing various accounting measures of profitability because of the obvious reason of utilization of core competency. Bettis (1981) and Amit and Livnat (1988)

emphasized the importance of the risk-return trade-off in assessing the performance of corporates that have diversified into related businesses.

Performance and characteristics of corporates that have diversified into related businesses are compared with those that have diversified into unrelated businesses. Several studies generally find that corporates choose their diversification strategy according to some desired trade off between profitability and risk. Most corporates that diversify into related areas are characterized by higher profits and greater operating risk. On the other hand, corporates that diversify into unrelated areas of business are characterized by lower operating risk, offset by lower profitability.

The finance literature addresses the motives for unrelated diversification when there are no synergies to be gained. On the other hand some other studies in this literature reflect that under financial market assumptions, there are no economic motive for unrelated diversification. Alternatively, the reduced risk may benefit managers through the additional diversification of their personal portfolio. Each of these motives may have different effects on the capital structure and the systematic risk of a corporate.

Barton and Gordon (1988) in a very significant work have defined that undiversified and related strategy corporates (i.e. corporates pursuing related diversification) have lower debt levels, while those pursuing unrelated diversification have higher debt levels. Kochhar and Hitt (1998), who showed that related diversification, are commonly associated with equity financing, and unrelated diversification with debt financing thus supported the above view. They also found that diversification via acquisition is often associated with public financing, while internal development is usually funded through private financing. Interestingly, Alonso (2003), using a

sample of 480 Spanish manufacturing corporates, did not find support for the effect of corporate diversification on debt levels.

Jahera (1996) reported that asset type, corporate diversification, and availability of tax shields are the strongest determinants of corporate leverage. Several other researchers also on similar lines found that the more profitable the corporate, the lower the debt ratio, and that asset tangibility affect total and long-term debt decisions differently. Therefore, it seems a natural progression to study the moderating effect of the environment on the relation between diversification and debt financing level.

Another study indicates two major effects on systematic risk, which operate in opposite directions and usually offset each otter. It is seen that diversification particularly into unrelated businesses—reduces operating risk and, hence, systematic risk. At the same time, such diversification is associated with increase in leverage, which tends to increase systematic risk. Further it was also found that these two effects are of similar magnitude and, therefore, conclude that diversified corporates trade off operating risk for financial risk. Clearly, a large body of work has studied the determinants of capital structure, with most researchers finding a significant link between diversification strategy and debt financing. The next section looks into the relatively less investigated relationship between diversification and systematic risk.

1.4 Diversification on Systematic Risk - Pros and Cons

Systematic risk is yet another parameter which requires a lot of attention as far as diversification, capital structure and corporate performance is concerned. As the company becomes over levered its risk profile changes, which directly impacts its profitability. All said

and done various researchers have very distinctly commented that it is very difficult to gauge exact amount of risk which is associated with a company.

Many researchers and economists interested to study the risk return pattern of diversified corporates, including Montgomery and Singh (1984) tried to examine relationship between diversification strategy and systematic risk beta (taken as a proxy for market risk). For Rumelt's six diversification categories they found that betas for unrelated diversifiers are significantly higher than those of other corporates. Thus emphasizing the fact that diversification strategy not only increased the return but also significantly reduced the systematic risk of the corporate. On the similar lines Bettis and Mahajan (1985) suggested that diversified corporates have significantly able to reduce their systematic risk and increase returns. The author also very strongly confirmed that there is still some level of correlation between related diversification and corporate performance but the unrelated corporate performance bears a negative correlation with diversification.

Another study indicates two major effects on systematic risk, which operate in opposite directions and usually offset each other. It is seen that diversification particularly into unrelated businesses reduces operating risk and, hence, systematic risk. At the same time, such diversification is associated with increase in leverage, which tends to increase systematic risk. It was categorically pointed that the two effects are of similar magnitude and, therefore, conclude that diversified corporates trade off operating risk for financial risk.

Early studies in this literature (Levy and Samat, 1970) very evidently reflect that under financial market assumptions, there are no economic motives for unrelated diversification. Tsai (1994) in his research tried to derive a relationship between construction corporates financial performance/risk and there diversification strategies. The research suggests that for

maximization of corporates in construction business a single business strategy is a good choice. For risk aversive manager dominant vertical strategy is the strategy recommended by major group of researchers studying the subject.

Daud, Salamudin and Ahmad (2009) examined relationship between diversification effect on performance using multiple measures of performance namely accounting and market measurements. The evidence produces some interesting findings with respect to risk factors and effect on corporate performance while other factors are consistent with previous findings. In particular, corporates that adopt the focused strategy perform better than those with diversified strategy. Different measures of performance used in the study produced varying results after controlling for risk, corporate size and economic condition, using the inflation rate as a proxy. Interestingly, Thompson (1984) in his study linked the impact of strategic diversification on a market-based measure of corporate. These results do not match with the earlier results. His studies further suggested that the companies do not bank on risk reduction as a general motive for diversifying merger. In fact they do not support the positive association between systematic risk and conglomerate status found in many US studies.

Lubatkin and Rogers (1989) in their study too, confirmed that the corporates that are diversified in a constrained manner demonstrated significantly lower levels of systematic risk and significantly higher levels of shareholder returns than corporates employing other strategies. The findings accentuate the popular, though weakly supported, belief that controlled diversity is associated with the highest performance. Raphael and Livnat (1988), in their cross-sectional path analysis also confirmed that corporates trade off the reduction in operating risk due to diversification with increased financial leverage, and thus the systematic risk remains the same. Their study uses theoretical considerations to empirically examine the effects of various

diversification strategies on the capital structure of corporates and on the systematic risk. The study also documents that corporates reduce their operating risk by diversification and increase financial leverage to take advantage of tax benefits. Chatterjee and Lubatkin (1994) on the other hand proved that the relationship between corporate diversification and both forms of stock return risk generates a U-shaped graph. Thus, the author recommended that an important way for corporations to minimize risk is to diversify into similar businesses rather than into identical or very different businesses.

1.5 Diversification on Corporate performance – a Prospective Dimension

Large multi business corporates have been observed to develop and exploit corporate level distinctive competencies and enhance their performance. The corporate level distinctive competencies / performance relationships were found to vary by type of diversification strategy but not by type of corporate structure. Additionally, only a small relationship was found to exist between diversification strategy and corporate structure. The specific relationships between corporate level distinctive competencies and performance and their normative implications are explored and are discussed further.

Montogomery (1982, 1994) while assessing the relationship between diversification had defined diversification and confirmed that measuring its associated returns is anything but straight forward. Research in the management field and a fair proportion of the work in industrial organization has searched for relationships between a corporates total amount of diversification and its overall profitability. In contrast, work in the agency-theoretic tradition has focused almost exclusively on mergers and acquisitions—changes at the margin, rather than evaluation of a corporates diversification as a whole.

Each of these approaches has its merits and drawbacks. Diversification has been included in a number of standard industrial organization studies which examine the relationship between corporate performances.

Wan (2009) suggested that diversification is a strategic choice of a corporate to improve performance. However, there are opposing views in studies examining diversification and performance relationship. The first view favours focused corporates while the other favours diversified corporates. Amit and Livnat (1988), suggest that both of these strategies are pursued based on two motives which are synergistic and financial motives. If corporates have synergistic motive, they may pursue focused strategy but if they have financial motive, then the diversified strategy would be adopted and is more advisable. Nevertheless, pursuing these strategies to increase performance would not assure obtaining the expected result as debate over which strategy is most suitable remains ongoing.

1.6 Some approaches in support of Un-diversified and Diversified Corporates

Un-diversified corporates - Focused strategy is defined as business activities within corporates respective resources but products or services offered may differ from currently served (Johnson, Scholes and Whittington, 2008). This is a strong recommendation which is proposed by all the researchers who belong to this school of thought, where corporates should concentrate on their core business in order to perform better. They concluded that focused strategy is expected to enhance performance as business operation is relatively close to the existing business. This argument is supported by empirical evidence from developed countries. They suggest that focused corporates perform better than diversified corporates because they are more efficient in

converting underutilized resources to achieve maximum performance. Another reason is associated with market power whereby focused corporates could use predatory pricing to deter and eliminate competitors from their respective industries (Montgomery, 1994).

Montgomery (1994) supports this view by showing superior performance of focused corporate opposite to diversified corporate. Better advantage of focused corporates could be the key factor that led United States' corporates to diversify around their core business in 1980's as seen in the pattern of profitability premiums also supported by empirical tests conducted by (Rumelt, 1982). It seems that focused strategy was the appropriate diversification strategy to be implemented at that time. Similarly, Tsai (1994), working on the similar lines, tried to derive a relationship between construction corporates financial performance/risk and there diversification strategies. The research suggests that for maximization of corporates in construction business a single business strategy is a good choice.

However, Johnson et al., (2008) suggested some other possible causes could impact performance of focused corporates. The first cause could be time and cost related, making it difficult to determine the effect of synergy on corporates. While the second cause could be unwillingness of managers to share resources as each business division has respective performance measurement to achieve and sharing of resources complicates such measurement.

Diversified corporates - The second stream of evidence indicates that diversified strategy could be used to enhance corporate performance, among them (Geringer et al., 2000; Gourlay and Seaton, (2004). Diversified strategy seems to dominate corporate action from the middle of twentieth century till date in US as shown by Rumelt (1982). However, this behaviour of US corporates changed due to new control and policy introduced by the government in the early

1980's resulting in widespread sale of non-core asset. Diversified strategy is identified if corporates have operations in more than one industry. Bettis and Mahajan (1985) from their research also suggested that diversified corporates have significantly able to reduce their systematic risk and increase returns. The author had also very strongly confirmed that there is still some level of correlation between related diversification and corporate performance but the unrelated corporate performance bears a negative correlation with diversification.

Agency cost, cash flow and transaction cost are the three most important reasons that have been mentioned by Amit and Livnat (1988) on why corporates pursue diversified strategy. As mentioned above, agency cost arises from conflict of interest between managers and owners of corporates. Nevertheless, Aggarwal and Samwick (2003) argue that managers could not get involved in an industry that is totally different from existing operations without the owners' permission. The second reason is associated with surplus funds available to corporates. Extra money means corporates are not tied to debt obligations; therefore, they could diversify their business with the expectation of improving performance (Hitt, Hitt and Hoskisson, 1992). Finally, the third and possibly the most important reason as mentioned by several researchers, linked to transaction cost where certain assets could not be rented or sold; hence, diversified strategy becomes an option to efficient use of those assets (Amit and Livnat, 1988).

Kim (1989) advocates that corporates in developing countries would be better off by adopting diversified strategy due to the presence of the commodity sectors. Most empirical studies relating to diversification and performance were done using manufacturing sector data particularly in developed countries. Therefore, result obtained in developed countries may not be applicable to developing countries. In addition, presence of market imperfections in developing countries could benefit diversified corporates.

Leontiades M. (1979) have theoretically emphasized that unrelated product diversification leads to success and have discarded some of the old theories and concept in the area. The researchers concluded that conglomerate corporates are not inherently superior or inferior to horizontally or vertically structured corporate. Furthermore, Geringer et al., (2000) who studied Japanese corporates suggest that every country has their own uniqueness which could explain variation in the result obtained. Lee et al., (2003) found similar finding when they performed a comparative study between Korean and United States of America (US) markets during the period 1992 to 1996. Diversification creates positive results for Korean corporates and vice versa for US corporates. This finding seems to be the reason why corporates in emerging markets pursue diversified strategy. It is possible that differences in executing diversification strategy brought about contrasting outcome between Korea and US.

1.7 Other Factors Affecting Performance

Contrasting evidence thus far may be due to different variables being used in respective studies. There are various studies which have examined variables that may explain corporate performance. However, these studies offered mixed results, in a way that most of the researchers concluded from their studies that diversification strategy can lead the company's profitability to a new paradigm and thus every company should try to diversify based on the specificity of the corporate. On the contrary there are some very strong objection to such a research in which some researchers claim that the research conducted by them proves a very week or negative relationship between diversification and market performance of the corporate. The justification offered by them is that a company can gain expertise in manufacturing of only one type of product in such situation if the company starts making more than one product than the core competency of that company tends to lose.

There are even some researchers which claim that if a company follows related diversification strategy than there are chances of profit where as those companies whose line of product are unrelated shows a negative response as far as profitability or market value is concerned. One major problem is the existence of market imperfections brought about by economical, political and operating environments in each country (Lee. 2003). Kracaw, Lewellen & Woo (1992) support those findings in which they mentioned that inflation variable also influences performance. Apart from inflation, leverage also significantly influence performance.

However, literature has two sets of findings with regard to diversification and leverage relationship. Even though researchers are divided on the effect of leverage, they have reached a consensus pertaining to influence of corporate size on performance. Their evidence exhibits that large corporates can utilize their resources efficiently and minimize downside risk, leading to improved corporate performance. Besides that, risk is another important variable that attract little attention in the study pertaining to diversification issue. Risk needs to be controlled because the theory states that high risk is associated with high return. Kim et al., (1993) used variance of return on assets as a proxy for risk to control the risk profile of corporates and capture effects on corporate performance.

A quantity of studies have hypothesized that diversification strategy may improve profitability and success, all the way through financial system or economies of extent and/or in the course of the anticipating of product space. The empirical evidence is, however found, very mixed. Based on the categorization of literature review, it can be seen that the involvement of research work in the same area for the duration has been constantly escalating all through the present time, especially from 2006 to 2012. The exposure of integration of DS, CS and FP across promising economies has attempted positive in recent years because the focus of researchers has

also shifted towards emerging economies to get sustainable advantage. The greater part of research work of integration of DS, CP and FP concentrated in countries like USA, India and Australia but there are numerous nations which have not trapped the attention of researchers for learning the variables – DS, CS and FP mechanism, role and importance for sustainable business. For that reason, nations which were unexposed in precedent literature are supposed as well and be incorporated for upcoming research. In addition, the sample data and sample countries, considered for the future studies, ought to be changed to perceive any disparity in the outcome.

The data can be inspected for integration and its mechanism using new suitable statistical techniques like multivariate analysis, univariate analysis, path analysis, co-integration test, panel co-integration test, panel unit roots tests assuming cross-sectional independence and dependence etc. with the usual tools and techniques for better understanding of DS, CS and FP. Thus, further conclude that able-bodied diversified corporates have strong performance through this integrated mechanism for successful and sustainable business. Moreover, future studies could also take up different measures of integration of such variables in a better way.

1.8 Research problems

Research questions engage the conversion of social and environmental difficulty into the required objectives for any empirical investigation. The research problems leads to some intricate research questions like what are the relationship between the three variables in question i.e. diversification strategy, capital structure and financial corporate performance and how they can be related to achieve a sustainable business growth through appropriate planning and its effective execution. Another possible question which strikes the cord is about the relationship between corporate Capital structure and some important corporate variables like profitability,

size, and growth. This is important in terms that with the increase in the debt or in other words we can say the change in the capital structure of the corporate the risk profile of the company will change and this will further affect the corporates profitability and other financial and growth parameters. The third and the most important aspect being the relationship between corporate diversification strategy and corporate market performance of listed corporates in both the stock exchanges i.e. BSE and NSE. This is also important because from the various studies which have been undergone during the research period there are many incidence of studies which claim that diversification does not impact the corporate performance. Aleson and Manuel (2002), Chakrabarti, Singh and Mahmood (2002) while some other studies specifies a U- shape relationship between corporate diversification and corporate performance Yaghoubi, Abidin and Yaeghoobi, Lins, Servaes (2002)

1.9 Research objectives

The study will be carried on with the objectives which connect and find relationship between diversification strategy and corporate performance. Particularly to assess the existing scenario of diversification strategy, capital structure and corporate performance using sample of 44 non-financial corporates listed in BSE and NSE during the six year period, 2006 – 2011. The next objective looks into the impact of diversification strategy on Capital structure of a corporate and to determine the effect of corporate profitability, size, growth opportunities on listed corporates in both the stock exchange – BSE and NSE. And finally the last objective is to study the impact of diversification strategy on financial performance of a corporate and to determine the effect of capital structure on listed corporates market performance combined with other variables such as corporate size and growth opportunities in any one of the stock exchange – BSE or NSE. Taking the research on to a new paradigm another objective is added i.e. to

examine how successful focused corporates go about their business to maximize long-term profit, sustainability and produce effective competitive strategy.

1.10 Structure of study

Chapter 1: Introduction

The current chapter forms the platform for the study and gives exhaustive discussion about the variables being talked about in the research namely Diversification Strategy, Capital Structure, Systematic Risk and Corporate Performance. Initializing with the research problems, the research objective of the research is stated. Some description about the research methodology and scope of the study is also detailed.

Chapter 2: Literature Review

This chapter defines the basic concept of the three broad topics in question and also try to find out the various studies attempted by the researchers on the similar topic in past . The first part discusses in detail about the diversification strategy and its effects in various parameters as reported by various economists and researchers. Further the review discusses the changes in capital structure i.e. the debt equity ratio of the company and its impact on various performance indicators. In the third part discusses the impact of diversification strategy on systematic risk or market risk beta (considered as proxy for market risk). In the end corporate performance corporate performance parameters is discussed in detail and in all a review of about 185 papers are reported in this section. The chapter ends with the description about the hypothesis and empirical model i.e. model 1, the leverage model, model 2, the market risk model and model 3 the corporate performance model, which forms the gist of the research.

Chapter 3: Research Design

This chapter starts with the introduction of the data and elaboration of the research design i.e. the description of the entire research plan including what will be the research sample? Justification to select such a sample. What are the various data analysis methods and tests used in the study and with complete justification? This is followed by the description of various accounting variables which have been used categorically to support the hypothesis (both dependent as well as independent variables separately for the two models suggested in the study).

Chapter 4: Empirical Models and Results of Research

The chapter on empirical results of research defines the characteristics of research samples along with the in depth analysis and interpretation of the descriptive statistics used in the study. Both the models generated through regression analysis i.e. model 1, the leverage model, model 2, the market risk model and model 3 the corporate performance model is connected with the hypothesis and finally linked to the objectives of the study thus leading to successful achievement of appropriate solution to the research questions.

Chapter 5: Conclusion, Recommendation and Limitation

In the final chapter named as conclusion recommendation and limitation, the detail essence of the whole work is presented and a conclusion has been drawn to justify my work as far as the research design is concerned. Suitable suggestions in the form of recommendation have also been offered to corporate sector as well as Indian government as far as my study is concerned. As every study has some limitations associated with it this chapter listed the limitations and further scope of improvement of this study in this section. Also the further scope of this study and future work is discussed.

Chapter 2

Literature Review

2.0 Introduction

The industrial organization literature has been guided by different researchers and they have given a conceptual and important frame work which examines the possible relationship among the variables.

A few of the relationship are outlined as follows:

1. Structure of corporate in which a company operates
2. The conduct of company within that corporate
3. The level of economic performance both of the individual companies and of these related corporate.

2.1 Introduction and Review on Diversification Strategy Concept

Whether diversification benefits a corporation and its shareholders, has been the subject of discussion by renowned economist and had been an area of considerable research. Diversification strategy specifies directions in which a company's product-market should change Ansoff, (1957). Usually there are several objectives indicating different and sometimes conflicting directions. There are several cases of diversifications which have followed this path and in a majority of cases, however; there are valid reasons why a company follows these basic unifying characteristics as it goes through a process of growth and change. Consequently, diversification objectives should be supplemented by a statement of long-range product market objectives.

Theory and evidence suggest that corporates diversify when they have valuable and difficult to emulate resources that are valuable across industries, or are complementary to resources in other industries, and where these gains cannot be realized by contracting among independent corporates. Some of the other reason for the corporates to diversify is when they have effective internal resource-allocation mechanisms, particularly when background institutions and external capital markets are undeveloped. Theoretical arguments suggest that diversification has both value-enhancing and value-reducing effects. Several school of thought, very strongly believe that product diversification have a very positive impact on the corporate profitability in terms of less incentive to forego positive net present value projects, greater debt capacity and lower taxes and economies of scope.

Whereas the second school of thought is of a very strong opinion that product diversification leads to loss of the unique selling preposition of the company thus leading to heavy financial losses. Another set of researchers feel that there is no significant impact of implementing diversification strategy on the financial performance of the corporate. So as researcher, the subject needs to be re demystified and the views of various researchers about the subject in question must again be reconsidered. The literature on complementarities is thinner than the literature on substitutability. There is growing interest among economists in organizational complementarities (Hitt, 2002 and James, Klein 2008), but these ideas have not been widely applied as far as the questions of corporate scope. Just as organizational practices, governance, and ownership tend to cluster in particular combinations industry activities may tend to cluster, in ways that cannot be managed effectively across independent corporates. So in this particular section, categorical reviews, theoretical arguments and empirical evidence regarding the effects of diversification is presented.

The term "*diversification strategy*" was coined by Ansoff (1957) in his famous study "*A model for diversification*" which explained different type of expansion strategies to be followed by a company. His study was a theoretical model explaining both qualitative and quantitative aspect of diversification. In the qualitative part, which narrowed a wide field of diversification opportunities, the company had, the study emphasized to select a few which are consistent with the company's diversification objectives and long-range policy. In the second part, the researcher tried to lay down a quantitative procedure for evaluating the relative profit potential of the selected alternatives**.** In another article by the same author, Ansoff (1972) in his study tried to relate diversification to the over-all growth perspectives of management, establish reasons which may lead a company to prefer diversification to other growth alternatives, and trace a relationship between over-all growth objectives and special diversification objectives. This again provides us with a partly qualitative, partly quantitative method for selecting diversification strategies which are best suited to long-term growth of a company. Further qualitative criteria can be used to reduce the total number of possible strategies to the most promising few ones, and then apply a return on investment measure to narrow the choice of plans still further.

Jacquemin and Berry (1979) in their research developed an entropy measure of corporate diversification. The measure was also additive in its application at different levels of product or industry aggregation. Preliminary empirical results relating the growth of large corporations to the pattern of diversification confirmed the advantage of the entropy measure and suggested a wide range of analytic applications.

Dawid and Reimann (2011) established that an increase in the average degree of product diversification in an industry increases the incentive for a producer to reduce the time to market for innovations at the expense of product quality. Dawley (2003) also categorically suggested

that corporates which enter into related diversification recover faster during the post bankruptcy times as compared to the companies entering into unrelated diversification. The researchers also tried to establish a relationship between effect of diversification type and organizational size on probability of recovery and recovery times for corporates emerging from bankruptcy protection. It was found that a bankrupt corporate will return to a level of performance at par with the equal level of performance as other corporates.

Rosario, Enrique and Diego (2009) in their research had also analyzed diversification as one of the most interesting growth strategies for tourism corporates. The success of diversification also depends upon the type of business towards which the enterprise decides to diversify and the degree of relationship that this new business has with the organization's original field of activity.

Rumelt (1982) had also strongly expressed the association between diversification strategy and profitability. Empirical tests conducted, verified this prediction and permit the discrimination between the effects of industry and diversification strategy on profitability.

Sambharya (2000) investigated the content, convergent, discriminant, one-dimensional, and predictive validity by comparing 54 Fortune 500 companies on Rumelt's classification, entropy, Berry-Herfindahl index, and broad and mean narrow spectrum diversification measures. Results indicate only mild support for convergence, discriminate and predictive validity, and no evidence of one dimensionality amongst these measures.

Following the similar lines of research Stephan (2002) studied the relationship between product diversification geographical diversification and technological diversification. On the study based on correlation of the three variables the researcher concluded that companies looking

at the positive impact of unrelated diversification had moved to different products gradually. But this change he said had happened over a period of time.

Stern and Henderson (2004) examined that business diversification, which occurred when corporates extend existing product lines or expand into new ones, affects organizational survival. It was confirmed that the relationship between within business diversity and survival is contingent on the amount of environmental change wrought by a corporate competitors as they simultaneously diversify their own product portfolios and innovate technologically.

Tsai (1994), in his research tried to derive a relationship between construction corporate financial performance/risk and there diversification strategies. The research suggests that for profit maximization of corporates in construction business a single business strategy is a good choice. For risk aversive managers dominant vertical strategy will be right option.

Wagner and Deller (1993) expressed an alternative approach for measuring diversity based on the technical coefficients matrix of an input-output model of 50 US states. Empirical results suggested that higher levels of diversification within the theoretical construct of input-output relationship are associated with higher levels of stability.

Similarly, Zhou (2011) from in his research concluded that sharing common inputs across business lines can potentially generate synergy that justifies related diversification. The researcher added that pursuit of such synergy through diversification is, however, fundamentally driven by the indivisibility of inputs between corporates. The results show that a corporate is more likely to diversify into a new business and its existing business lines can potentially share more inputs with the new business. However, the corporations are less likely to diversify into any new business when its existing business lines are complex. Importantly, the corporations likelihood of diversifying into a new business decreases more with the complexity in the

company's existing business lines if they share more inputs with the new business. These results suggest that increasing coordination costs counterbalance the potential synergistic benefits associated with related diversification.

Montgomery (1982) also conducted a study on related and unrelated diversification strategies and from his study he concluded that unrelated portfolio corporates were less successful performers than related linked corporates. Again on comparing the two theories Montgomery (1994) revealed that both the resource and agency views are considerably promising in explaining the impact of diversification on corporate performance. Agency arguments helped to explain why corporates may exceed the efficient level of diversification. However, he said that it was extremely difficult to identify the efficient level of diversification for a given corporate, and agency arguments did not resolve this question. The resource view helps explain the direction of diversified expansion. In another research which explored the relationship among diversification, market structure, and corporate performance by Montgomery (1985). The author's views are in contrast with the traditional market power theory that emphasizes the general rather than the specific market power of diversified corporates.

Interestingly, Thompson (1984) in his study linked the impact of strategic diversification on a market-based measure of corporate. The results of his study did not match with the earlier results. His studies suggested that the companies do not bank on risk reduction as a general motive for diversifying merger. In fact they do not support the positive association between systematic risk and conglomerate status found in many US studies.

Chatterjee and Wernerfelt (1991) through their study revealed some more insights about diversification process and concluded that corporates diversify in a part to utilize productive resources which are surplus to current operations. In particular, it is suggested that except

physical resources, most knowledge-based resources, and external financial resources are associated with more related diversification, while internal financial resources are associated with more than related diversification.

Holcombe (2009) from his research concluded that corporates do not differentiate their products to make them different from those of their rivals; they differentiate them to make them better. By doing so, product differentiation produces continually better products, as viewed by the people who buy and consume them and in this way product differentiation is the engine of economic progress.

Kahloul and Hallara (2010) in their empirical tests followed two stages; at first stage they calculated the diversity evolution of a sample of largest French groups. In the next they studied the nature of the relationship linking the diversification level to the corporate's risk and performance. A longitudinal study enabled us to confirm the movement of corporate refocusing from both Herfindahl and Entropy indices. Minondo (2011) from his research emphasized on the fact that those products in which a country has comparative advantage may play a very important role on countries' exports diversification level. These results indicate that export diversification might not be an automatic outcome of the process of development.

Guo and Cao (2012) in there paper re-evaluates the effect of diversification on corporate performance by examining corporates with different degrees of diversification. The researchers worked on corporates with different diversifying degrees and found that diversified corporates operate on a premium. Corporates choose the extent of their operations and decide whether to operate in a single industry or diversifying into multiple industries. A companys diversification decision is likely to be a response of two interacting effects, one is the agent problem and the

other is the economies of scale. The authors also found the evidence that the diversification premium gets smaller if a corporate engages in more than three industries.

Purkayastha (2013) provided empirical evidence that the effect of diversified business groups on the performance of affiliated firms is dependent on the industry to which the firm belongs and the type of diversification strategy followed by the group.

Neffke and Henning (2013) from their study revealed that firms are far more likely to diversify into industries that have ties to the firms' core activities in terms of skill-relatedness measure than into industries without such ties or into industries that are linked by value chain linkages or by classification-based relatedness.

Oh et.al. (2013) confirmed using a panel data set of 68 large European retailers from 19 countries for the period between 1997 and 2010 that intra-regional diversification has a horizontal S-curve relationship and interregional diversification has an S-curve relationship with firm performance. Moreover, the results show that unrelated product diversification has a negative moderating effect on the relationship between inter-regional diversification and firm performance.

Chung (2013) examined how MNE divestment decisions differ according to real options vs. risk diversification perspectives. Empirical results give consistent support to the real options perspective. It was found that large MNEs with greater diversification are less likely to divest their subsidiaries during times of economic crisis. The negative effect of joint ownership control is however manifested in both crisis-stricken and non-crisis country subsidiaries as well as in their interaction effect.

Nayyar (1992) in their research thrusts on the fact that diversification strategy is one of the most important factors determining the profitability of the corporate and it is such an area that needs re-examination. The research suggested that unrelated diversified companies are also sometimes profitable.

Robins(1989) examined the content validity of the two most widely used continuous measures of related diversification, the related component of the entropy index and the concentric index and raises fundamental questions about their validity as indicators of portfolio relatedness. The research related component of entropy and the concentric index are sensitive to features of corporate portfolio composition that may not be directly linked to portfolio relatedness.

Rosario, Enrique and Diego (2009) focusing on diversification as one of its key decisions the researcher suggested that this new business has very significant relationship with the organizations original field of activity.

Teece (1980) argues that multiproduct corporates can capture economies of scale better when the production of two or more products depends upon the same proprietary know-how base and when a specialized indivisible asset is a common input into the production of two or more products. The result was that multi product is comparatively an efficient mode of organization.

In another study conducted by Wagner, Deller (1993) the researcher attempted an alternative approach to measure diversity based on the technical coefficients matrix of an input-output model is outlined and computed for the 50 US states. Empirical results suggest that higher levels of diversification within the theoretical construct of input-output are associated with higher levels of stability.

Kranenburg, Hagedoorn and Pennings (2004) also empirically proved that the publishing companies diversify into related activities and businesses and that, in particular, are confronted with the decision of how to deploy their resources for competitive advantage. They can diversify based on relatedness of businesses or activities to increase their performance or they can achieve the same result through international geographic diversification.

Kumar (2009) examined the relationship between growth along the product and international dimension in the short run. It was concluded that while the presence of intangible resources and economies of scope may create opportunities for a corporate to expand along both dimensions. The effect of short run constraints may lead to a trade-off and a negative association between the two dimensions.

Kumar, Gaur and Pattnaik (2012) on the other hand explored the fact that a high product diversification has an adverse effect on the international expansion of emerging market business groups, and that international orientation and group resources positively moderate this relationship. This is due to the fact that diversified business groups derive several benefits in an institutional context where external markets lack efficient mechanisms to support market-based exchange. Business groups fill institutional voids and replace the external markets through their internal capital, product and labour markets.

Wan, Hoskisson and Yiu (2011) discussed the historical development of corporate diversification research, employing the resource-based theory perspective and related concepts, highlighting important insights of the concept up to date. The study suggests that research on corporate diversification using the resource-based theory perspective could be further enriched by integration with theoretical insights culled from the organizational economics, new institutional economics, and industrial organization economics literatures.

Chen (2011) in his study explored the impact of corporate diversification on the long-term stock returns of R&D increase announcements. It was found that focused corporates experience significantly greater long-run stock returns of R&D increases announcement than diversified corporates. A significant negative association between the long-term stock performance of R&D increases announcement and the degree of corporate diversification.

Wiersema and Bowen (2008) developed a theoretical framework to understand how industry globalization, foreign competition, and corporate product diversification may influence a corporates choice of its degree and scope of international diversification. Yoshikawa and Phan (2005) in their study investigated the relationships between ownership and board structure with the diversification strategy of large Japanese corporates. The results reflected that corporate nominee directors are associated with lower levels of product diversification of their investee corporates. The model suggested in the research that Japanese corporations holding equity in other corporates are just as interested in efficiency, from the standpoint of strategic diversification, in the use of resources as other financially driven investors.

Researchers like Polbennikov, Desclee, and Jay (2010), worked on the risk return performance of diversified corporates. The research through their study confirmed that managers should seek effective strategies that operate at different view horizons and trading frequencies. This horizon diversification can help reduce the correlations among strategies in two ways. First, when strategies frequently change their exposures relative to each other, they are less likely to be negatively affected by the same market event. Second, the view formation process is intrinsically different at different time scales, because short-horizon views are typically based on different variables and analysis than long-horizon views.

Anderson, Stowe and Xing (2011), with the objective of investigating whether corporate diversification reduces the risk of the diversifying it was suggested that average corporate diversification does not lowers corporate risk. Although some diversifying corporates experience lower risk following diversification, but many other diversifying corporates show an increase in risk. It can thus be concluded, that on an average, corporate diversification neither leads to a reduction in total risk nor results in a decrease in systematic or corporate-specific risk. The research suggests that the degree of corporate diversification is not related to the probability of a corporate showing risk reduction subsequent to diversification, where as risky corporates get better results using diversification strategy.

Beattie (1980) also suggested that diversification strategy adopted by the companies is an effective risk aversive technique. Baysinger and Hoskisson (1989), in their research suggested the need to examine the implications of different types of corporate diversification strategy on the management of corporate-strategic-business-unit relations in large multiproduct corporations. Choice of diversification strategy systematically affects large multiproduct corporates is the thrust of the research done by the authors.

Banker, Wattal and Plehn-Dujowich. (2011), in their research examined the decision of a corporate to invest in R&D versus acquisitions in the context of corporate diversification. It is further suggested that the number of markets that a corporate operates in (or diversification) is likely to be a key factor in determining its innovation strategy. Less diversified corporates, which focus on a narrow product line, mainly invest in R&D, whereas more diversified companies, which offer a broad product range, mainly follow a strategy of investing in acquisitions.

Pandya and Rao (1998) also proved that diversified corporates perform better than undiversified corporates on risk and return dimensions, in the low and average performance

classes. Their results indicated that among the best performing class of corporates, undiversified corporates have higher returns, but these returns are accompanied by high variance. They concluded that a dominant undiversified corporate may perform better than a highly diversified corporate in terms of return but its riskiness will be much greater.

Dawley (2003) categorically suggested that corporates which enter into related diversification recover faster during the post bankruptcy times as compared to the companies entering into unrelated diversification. The researchers also tried to establish a relationship between effect of diversification type and organizational size on probability of recovery and recovery times for corporates emerging from bankruptcy protection. It was found that a bankrupt corporates following diversification would return to a level of performance at par with the equal level of performance as other corporates.

Leontiades (1979) have theoretically emphasized that unrelated product diversification leads to success and have discarded some of the old theories and concept in the area. The researchers concluded that conglomerate corporations are not inherently superior or inferior to horizontally or vertically structured corporate.

There is a second school of thought which suggests a reverse relationship from the various studies conducted by them, to explore the effect of diversification strategy on various corporate parameters. According to them there is a negative impact of corporate diversification on corporate indicator specially its financial performance. The possible justification for their conclusion is that a corporate cannot develop its environment to become expertise in more than one fields, and if it does so it loses its unique preposition leading to profitability reduction. The following are some studied which belongs to this school of thought.

Chakrabarti, Singh and Mahmood (2002) in their research indicated that diversification negatively impacts performance in more developed institutional environments while improving performance only in the least developed environments. Even in the least developed institutional environments, diversification offers limited benefits when an economy-wide shock strikes.

Hoskisson, Hitt., Johnson and Moesel (1993) indicated from their research a strong convergent, discriminate and criterion related validity for the entropy measure of diversification. In contrast to the neoclassical framework, where product differentiation imposes a cost on the economy in exchange for more product variety, in reality product differentiation lowers costs, creates better products for consumers, and generates economic progress.

Fan and Lang (2000), developed an inter industry and intersegment measures of vertical relatedness based on the commodity flow information. The empirical evidence found no correlation between the relatedness and corporate performance. The researchers also tried to compare the valuation effects of relatedness between corporates diversifying into broad industry segments and corporates narrowly diversifying into fewer segments. It was found that vertical relatedness is associated with the negative valuation effect when corporates operate in large numbers of industry segments. It was finally concluded that relatedness affects value when corporates pursue wide diversification strategies.

Farjoun (1998) also worked on the similar lines and the results were consistent with the argument that the combination of the physical and skill bases, affects corporate performance in two ways. First it extends the range of potential benefits provided by each base alone, and second it reinforces those benefits when the two bases agree. Related diversification that builds on both physical and skill relatedness allows corporates to benefit from sharing and transferring skill and physical resources, and to take advantage of activities and routines in which these resources

interact. Furthermore, for corporates which are completely unrelated on one of the bases, relatedness on the other base may in fact be associated with decreased performance.

Giachetti (2012) studied the effect of service diversification on corporate financial performance and demonstrated a consistent inverse U-shaped relationship between diversification and corporate performance, with the slope positive at low and moderate levels of service diversification but negative at high levels of service diversification.

Amburgey and Miner (1992), examined the impact of product diversification on merger activities. In spite of researchers using multivariate point process model which can examine dynamic relationship, no significant relationship between the variables was found among the variables.

Bauer, Schwingenschlogl and Vetschera (2003) studied the impact of a diversification and a core-competence oriented strategy using an agent-based simulation model. The aim of the research was twofold: first, the analysis on whether agent-based models are a viable tool for analyzing questions related to corporate strategy. The author emphasized on the fact that standard results from the strategy literature can indeed be reproduced and refined by using this type of models. Second, the agent-based model allows us to formulate more precise hypotheses and more precisely delineate the scope of situations in which standard results from the strategy literature apply. For the problem of diversification analyzed in their study, the results from the agent-based simulation lead to the conclusion that in addition to environmental dynamics, overall market size is also an important factor, which was not considered in the previous literature.

Berry Stolzle, Liebenberg, Ruhland and Sommer (2012) in their research expressed variations in line-of-business diversification in the insurance industry. They further suggested that the extent of diversification is not driven by risk pooling considerations; insurers operating

in more volatile business lines do not diversify more. These results are however, consistent with the internal capital market hypothesis, which predicts that opaque insurers that face higher cost of raising external capital diversify more than transparent insurers; and it was found that support for the strategic growth view that insurers diversify to circumvent barriers to business growth.

Bordean and Borza (2012), investigated the degree to which corporate diversification is exercised in the Romanian economy through an empirical analysis of the listed companies the study tested the amount of diversification on the different forms of corporate diversification using a common measure of diversification employed by strategy scholars, the Specialization index.

Capon (1988) by working on the set of manufacturing companies, empirically verified that since different skill set is required for different set of product markets, companies which concentrate in single market have more chances of being profitable.

Earlier, Christensen and Montgomery (1981) had tried to re-study Rumelt's work. The result of the study indicates that performance differences could be identified for some of Rumelt's categories using specialization ratio, related ratio and vertical Ratio. The researchers also stressed that the performance of a corporate is more a function of the type of market it operates into, rather than any other function.

To conclude we can say that business diversification, occurs when corporates extend existing product lines or expand into new ones, affects organizational survival. The relationship between within business diversity and survival is contingent on the amount of environmental change wrought by a corporates competitor as they simultaneously diversify their own product portfolios and innovate technologically.

Both theory and evidence suggest that corporates diversify when they have valuable and difficult to emulate resources that are valuable across industries, or are complementary to resources in other industries, and where these gains cannot be realized by contracting among independent corporates.

On the contrary there are some researchers which have a very strong opinion that product diversification leads to loss of the unique selling preposition of the company thus leading to heavy financial losses.

2.2 Capital Structure

Starting with the work of Modigliani and Miller (1958), many researchers have tried to understand capital structure decisions and its impact on profitability, risk profile and overall share holder value. Empirical evidence show that corporate capital structure is influenced by several corporate-related characteristics including size, profitability, future growth options, the amount of tangible assets and non-debt tax-shields (Titman and Wessels 1988; Haris and Raviv 1991). Barton and Gordon (1976) had also suggested the usefulness of the corporate strategy perspective in various perspectives in understanding capital structure. Haris and Raviv (1991) also suggested that the effect of strategic variables on capital structure is a relatively unexplored area from various angles of research.

Alonso (2003) tried to investigate the effect of diversification strategy on corporate capital structure using a panel data analysis for a sample of 480 Spanish manufacturing corporates during the period. The researcher finds a non significant relationship between corporate leverage and the degree of corporate diversification.

A recent study by Abor (2008) compared the capital structure of publically listed companies, large unlisted companies and small and medium enterprises. Moreover, in this study

the regression results are highlighted and indicated that company size, age, asset structure, profitability, risk and managerial ownership are important in influencing the capital structure decision of Ghanian companies. The result of this study are contrary to the trade of theory Modgilani and Miller (1963) and seem to support packing order hypothesis Myers (1984) and Myers and Majluf (1984) shows that both long term and short term debts have inverse relation with company profitability. Company growth was found to have a positive relation with long term debt for the unlisted company and short term debt ratio for small and medium corporates.

Balakrishnan and Fox (1993) in there research showed the importance of specialized assets and other unique characteristics of a corporate in explaining the variance in capital structure across corporates. Evidence from the study of 295 mining and manufacturing corporates strongly suggests that unique corporate specific assets and skills are by far the most important determinants of capital structure. The results show that corporate-specific effects contribute most to the variance in leverage, suggesting a strong link between strategy and capital structure.

Barton and Gordon (1988) suggested a managerial choice perspective to explain the capital structure choice at the corporate level of analysis. They emphasized that profit and debt levels are negatively correlated and therefore suggested that pure economic factors are not the sole mechanism for establishing capital structure. The result is consistent with the behavioural proposition that management of corporates desires flexibility and freedom from excessive restrictions of debt whenever possible. Profitability provides the ability to avoid debt by using self-generated funds to finance the business.

Belkaoui and Bannister (1994) had discussed that the U- form of structure is associated with a general increase in the long-term debt-to-equity ratio for all corporates, a result that

supports a free-cash-flow argument for the use of debt in restructuring to reduce the opportunism of management. At the divisional level, diversification strategies influence capital structure strategies. These results complement and add to the strategic-group paradigm. It is further suggested that the companies should form their strategic group based on a corporates heterogeneous capabilities and resources.

Lundstrum (2005) examined the relationship between managerial share ownership and the corporates change in leverage around a security issuance. It was found that entrenched managers are not more likely to issue equity, however they do affect lower leverage by choosing debt issuances which are smaller and equity issuances that are larger than those chosen by managers that are not entrenched. The magnitude of the decline in leverage that occurs from before the issuance to after the issuance is positively related to managerial share ownership. In addition, this relationship is confined to only the "entrenchment" range of managerial share ownership. The market reacts negatively to an issuance announcement when managerial share ownership is high.

Chen and Ho (2000) found from the research that the level of diversification is positively related to corporate size and negatively related to the equity ownership of outside block holders. The authors further suggested value loss from diversification of those corporates with low managerial ownership, suggesting that agency problem leads to loss through diversification.

Low and Chen (2004) also emphasized that product diversification is positively related to financial leverage, indicating that such diversification allows corporates to reduce their risks, thereby enabling corporates to carry higher debt levels. The findings for the effect of product diversification on capital structure generally indicate that corporates that diversify across product lines have higher debt ratios than non-diversified corporates.

Ahmad and Abbas (2011) identified the determinants of capital structure of banks in Pakistan by using corporate level determinants of capital structure. Using panel data fixed approach model, the researchers showed that out of seven variables three (profitability, size, non-debt tax shields) are statistically significantly related to leverage, and four are (growth, tax, tangibility of assets, payout) are statistically insignificantly related with leverage.

Akbarpour (2011) also investigated the relationship between financial structure and accounting measurement for evaluating performance (ROA, ROE) in listed corporates of Tehran exchange in 2005-2010. Results indicated that there is definitely a significant relationship between financial structure and ROA, and on the contrary there isn't such a significant relationship between financial structure and ROE.

Arcas & Bachiller (2008) researched with an objective analyzing whether there are differences in performance between already private corporates and recently privatized corporates in the European Union, as well as to determine whether ownership (state-owned versus private) and regulation affect capital structure. Focusing on economic reasons that justify privatizations, the researchers analyzed that there are differences between recently privatized state-owned enterprises (SOEs) and private corporates in their profitability, leverage and efficiency. The researchers also tried to analyze the determinants of the capital structure of these corporates and concluded that privatized corporates are not less efficient than corporates with private ownership.

Baral (2004) examined the determinants of capital structure like company size, business risk, growth rate, earning rate, dividend payout, debt service capacity, and degree of operating leverage-of the companies listed to Nepal Stock Exchange Ltd. Multiple regression model has been used to assess the influence of defined explanatory variables on capital structure. In the preliminary analysis, manufacturing companies, commercial banks, insurance companies, and

finance companies were included. The study revealed that size, growth rate and earning rate are statistically significant determinants of capital structure of the listed companies.

Chaganti and Damanpour (1991) in their study have focused on the role of institutional owners and had evaluated relationships between outside institutional shareholdings, on the one hand, and a corporates capital structure and performance, on the other. They also verified whether the size of stockholdings by corporate executives, family owners, and insider-institutions modify those relationships. The researchers found that family and inside Institutional owners' share holdings moderate the relationship between outside institutional shareholdings and capital structure. Likewise, corporate executives' shareholdings supplement the relationship between outside institutional shareholdings and corporates' performance. These findings suggest that internal and external coalitions interact with each other to influence the corporates conduct.

Connors and Gao (1973) on the similar lines investigated the impact of environmental performance on the capital structure of corporates. Poor environmental performance may decrease debt capacity through an increase in the overall risk of the company, or through higher contingent environmental liabilities. A significant inverse relationship between leverage and levels of chemicals emissions, were found, suggesting that better environmental performance is associated with higher levels of leverage. An investigation on whether environmental disclosure is associated with higher leverage was also carried out. Environmental disclosure may reduce the existence of asymmetric information between management and creditors and allow better risk assessment by stakeholders. However, the results do not provide evidence to support the claim and also those companies that rely on equity financing are more likely to release voluntary environmental reports.

Cuong and Canh (2012) investigated whether there is an optimal leverage at which point corporate is able to maximize its value. An advanced panel threshold regression model is applied to test the panel threshold effect of capital structure on corporate value among 92 Vietnam's seafood processing enterprises from 2005 to 2010. In this study, the researchers used ROE as surrogate for corporate value and debt ratio (DA) as surrogate for capital structure and as the threshold variable. The empirical results strongly indicate that two-threshold effect exists between debt ratio and corporate value. Besides, the coefficient is positive when debt ratio is less than 59.27%, which implies that debt financing can improve corporate value. The coefficient is negative and presents a decreasing trend when the debt ratio is between 59.27% and 94.60% or above 94.60%, implying that, in that regime, a further increase in debt financing, deteriorates corporate value.

Eldomiaty and Ismail (2009) in their research examined the dynamic relationships between changes in corporates capital structure and their effects on corporate market value under three different levels of systematic risk; high, medium, and low. As far as the determinants of capital structure, a comprehensive number of factors that relatively cover the basics of trade off theory, pecking order theory and free cash flow theory. The properties of partial adjustment model was used to examine the signalling effects of the relevant determinants of capital structure, where the desired (or target) level of market value is adjusted according to both of the changes in actual market values and changes in corporates capital structure. The results among others indicate that total debt ratio has a negative signalling effect for the high systematic risk corporates only and the results of the sensitivity analysis show that there estimates are robust and in particular, the estimate of the target debt ratios (which is the focal points in the signalling

hypothesis) is fragile indicating that the debt signalling effect is not credible in Egypt as an example to a transitional market.

Kahle and Shastri (2005) in their research analyzed the relation between the capital structure of a corporate and the tax benefits realized from the exercise of stock options. Theory suggests that corporates with tax benefits from the exercise of stock options should carry less debt since tax benefits are a non-debt Tax shield. It was found that both long and short term debt ratios are negatively related to the size of tax benefits from option exercise. Moreover, one year changes in long-term leverage are negatively related to changes in the number of options exercised. Such a relation does not exist for changes in short –term leverage. Finally it was also confirmed that corporates with option-related tax benefits tend to issue equity, with the net amount of equity issued an increasing function of these tax benefits.

Liargovas and Skandalis (2010) also examined the impact of key determinants of corporates performance. It distinguishes between financial and non financial drivers of corporate performance. Three measures are used in order to evaluate corporate performance return on sales or profit margin, return on assets and return on equity. Results show that leverage, export activity, location, size and effective management significantly affect corporate performance in Greece. Further, it is revealed that profitable corporates in Greece are large, young, exporting corporates with a competitive management team, which have an optimal debt-equity ratio and use their liquidity to finance their investments.

Dawid and O'brien (2006) being motivated by recent empirical observations made in industries such as the automobile industry, the research employs an agent-based industry simulation model to examine the strategic relationship between product diversification strategies and some aspects of the product innovation strategy of a single producer. In particular, it is

established that an increase in the average degree of product diversification in an industry increases the incentive for a producer to reduce the time to market for innovations at the expense of product quality. However, if all corporates adapt their strategies according to these incentives, this results in a severe loss of average corporate profits in the industry and also to a reduction in consumer surplus.

Onaolapo and Kajola, (2010) examined the impact of capital structure on corporates financial performance using sample of thirty non- financial corporates listed on the Nigerian Stock Exchange using panel data for the selected corporates are generated and analyzed using ordinary least squares (OLS) as a method of estimation. The result showed that a corporates capital structure surrogated by debt ratio, DR has a significantly negative impact on the corporates financial measures (Return on Asset (ROA) and Return on Equity (ROE)). The study findings, indicate consistency with prior empirical studies and provide evidence in support of agency cost theory.

Pathak, Ranajee and Pradhan (2012) through their research have revealed that the significance of corporate governance has increased in the recent past due to factors like increase in corporate scandals. Such scandals tend to increase the risk of the stakeholders to a great extent. While stakeholders have the capability to influence the forbearance and performance of an organization, such impact varies with the industry. The study makes an endeavour to find the impact of promoter holding, institutional holding and individual holding on corporate performance by analyzing several diverse industries. Seven industries are considered in the Indian context for the purpose of this study, taking ROA as a major performance indicator. The results show positively significant effect of some stakeholders, while negative for the others, substantiating the need for more research in the area.

Ramachandran and Nageswara Rao (2010) provide empirical evidence on the relationship between industry pricing and capital structure. The researchers analyzed growth in corporate sales and profitability post an industry downturn under different financial structures. This methodology helps mitigate the endogenous nature of capital structure and corporate performance, since it is assumed that the downturn was not anticipated by industry participants. Also, inclusion of lagged values of debt ratio ensures that spurious relation between contemporaneous values of debt ratio and corporate performance is not obtained. It was thus confirmed that corporates which are over-levered compared to the industry median, experience lower sales growth and profitability vis-à-vis a benchmark corporate which assumes industry median characteristics. This lends support to the hypothesis that external financing induces financial fragility that leads to reduction in marketing spending at the time of distress.

Scott (1995), in his study talks about corporate profitability, growth, and innovation is quite directly focused on innovation; the model looks for explanations of the innovative activity of corporates. The authors also explore innovation as well technology and its evolution play the central role. Their research developed important new information about the evolution of industry.

Ting (2012) very strongly recommended that the corporate should pursue both maximum return rate on capital and maximum return rate on equity simultaneously. Maximum return rate on capital is the primary goal for corporates because maximum return rate on capital guarantees efficiency. Therefore, maximum profit, maximum market value of the corporate, maximum value of equity and maximum return rate on equity are inappropriate to be the primary goal. Since gross profit is independent of capital structure, capital structure just distributes return on capital into equity and debt (i.e., maximum return rate on equity determines capital structure). The maximum return rate on equity is the secondary goal that the corporate pursues. Leverage

makes the return rate on equity be higher than interest rate. Leverage explains the puzzle of equity premium.

Prahalathan (2011) from his study confirmed that capital structure/leverage level of the corporate is determined by several factors. Proper capital structure leads the corporate to achieve the better performance and ensures the sustainability in its operation. Even though there are several factors contribute to the institutional performance, determinants of the capital structure play an important role. Therefore the researchers found it necessary to identify which factors contribute to the corporates' capital structure composition in its operation. Hence the study was undertaken with the objective of finding out the relationship between capital structure determinants and leverage level of the listed companies in Sri Lanka. Findings showed that the direction of the explanatory variables such as, tangibility, profitability, corporate size and non-debt tax shields with total debt largely consistent with the explanations of trade-off theory and prove past empirical findings valid.

Chkir and Cosset (2001) from their research concluded that profitability and operating risk are negatively related to the debt ratio of MNCs. They have also found that the companies which are less diversified have a less leveraged, thus bearing a lower risk.

Neale, Drakey and Clark (2010) also in their study concluded that systematic risk increased for some types of corporates, but decreased for others, as barriers were lowered. This finding is consistent with the idea that the reduction of regulation may increase systematic risk, but that the effects of deregulation on risk may be mitigated by anticipated effects of diversification. Overall, it was found that the systematic risk of financial corporates converged and increased in the past few years as corporates expanded into non-traditional businesses. In

addition, it was also found that the act reduced systematic risk for some corporates, specifically those that diversified their product lines with insurance products.

Ngah-Kiing, Das and Das (2009) found that corporates pursuing unrelated product diversification take on less debt financing in stable environments, but more debt financing in dynamic environments. Using longitudinal structural equation modeling, the researchers found a reciprocal relationship between a corporate product diversification strategy and its debt financing level. Also, that significant effect was found for unrelated diversification on debt financing level under varying environmental conditions. And the same were found that could not find any interactive effects for related diversification strategy on debt financing level, regardless of environmental conditions. Perhaps related-diversified Singapore corporates are able to raise equity capital more inexpensively than debt, and so prefer equity financing over debt financing.

Prasetyo (2011) by using samples of 225 public companies in Indonesia concluded that managers can make use of capital structure, as a tool to deal with the turbulent in systematic risk. Deeper analysis in this study also indicated that is a negative relationship between financial leverage and capital intensity among three categories of Rumelt's study. Specifically, if managers structure the selection of debt and capital intensity it would synergies with the strategic goal of long run control of systematic risk.

Deesomsak, Paudyal and Pescetto (2004) investigated the determinants of capital structure of corporates operating in the Asia Pacific region, in four countries with different legal, financial and institutional environments, namely Thailand, Malaysia, Singapore and Australia. The results suggest that the capital structure decision of corporates is influenced by the environment in which they operate, as well as corporate-specific factors identified in the extant

literature. The researchers also found a deep and diverse impact of financial crisis of 1997 on corporate capital structure decision across the region.

Demsetz (1985) on the other hand, empirically denied the relationship between ownership concentration and corporate financial ratios. The findings of the research argue that the structure of corporate ownership varies systematically in ways that are consistent with value maximization.

Denis, Denis and Sarin (1999) have discussed two important view points based on agency theory and management theory. As many other theories had suggested that there is a fundamental conflict of interest exists between managers and shareholders. The second theory connects diversification to the equity ownership and suggests that there is no conflict between managers and shareholders' interests. The study had empirically tested the relation between equity ownership structure and diversification strategies and review the existing evidence on this relation.

Rajan and Zingales (1995) in their research tried to find out factors that impact the choice of capital structure. The researchers found that factors identified by previous studies about the corporate leverage in the United States, are similarly correlated in other countries as well. However, a deeper examination of the U.S. and foreign evidence suggests that the theoretical underpinnings of the observed correlations are still largely unresolved.

Singh and Jo-Ann (2002) in their research summarized that diversification across product lines are at best unrelated to debt usage; it may be negatively related to debt usage in some instances.

Ajay and Madhumathi (2012) investigated different frameworks including an important variable called diversification and used diversification strategies (geographic and product) which

have been adopted by the manufacturing corporates in India. They have identified critical influence levels on corporate leverage ratio after controlling for other determinants of capital structure since 2004-2010. According to the study, multinational and domestic corporates differs significantly from each other with respect to parameters called - leverage, tangibility, non-debt tax shield, age, size and agency cost. The study also reveals that domestic corporates have higher debt in their capital structure as compared to multinational corporations.

Apostu (2010) studied the effect of corporate diversification strategies on corporate capital structure using a panel data analysis for a sample of 232 European corporates during the period 2004-2007. Theoretical and empirical studies suggest that corporate leverage is positively related to diversification across product lines but negatively related to geographic diversification.

Guo, defined the degree of diversification discount that is explained by the coinsurance effect. Further it is also suggested that a large diversification discount was also found for both the full sample and the subsample of all-equity corporates even after the coinsurance effect is controlled for. The research also improves their model specification by using the interactive term of leverage and corporate risk to capture the coinsurance effect. The results indicate that the coinsurance effect has limited power in explaining the diversification advantage of a corporate.

Gahlon and Stover *(*1979) in their research employed a model, which incorporates variables measuring the effects of these motivations on a return-adjusted beta, to compare the performance of conglomerates. The results confirmed that the effects on adjusted beta of the diversification efforts of conglomerate managements were at least partially negated by the greater risk inherent in their use of increased debt capacity. Simultaneously, that as conglomerates increased their internal and external diversification, their degree of financial leverage increased. Their return-adjusted beta exhibited no change after 1968. In addition, with

respect to the market's evaluation of the conglomerates' performance relative to that of non conglomerates, the significant diversification was not the external form which is implied when conglomerate market price performance is compared with that of mutual funds.

Kocher and Hitt (1998) examined the relationship between corporate strategy and capital structure, specifically the diversification and financing strategies of a corporate. The results show that equity financing is preferred for related diversification and unrelated diversification is associated with debt financing. Additionally, corporates diversifying through acquisitions are more likely to use public sources of financing and those emphasizing internal development of new businesses depend primarily on private sources of financing. Using simultaneous equation estimation, it was found that there is a reciprocal relationship between a corporates financial strategy and its corporate diversification strategy. Mode and nature of diversification are also reciprocally interrelated. The results of the study show that equity financing is preferred for related diversification and unrelated diversification is associated with debt financing.

Prasad, Bruton and Merikas (1997) in their research utilized two different methods of analysis to confirm the linkage between capital structure and strategic posture of the corporate. The researchers specifically found that managers were found to structure the selection of debt and capital intensity in a means consistent with the strategic goal of long-run control of systematic risk.

Roccaa, Roccaa, Geraceb and Smark (2009) analyzed the financing strategies of multi business corporates, suggesting the relevance of sorting the diversification phenomena into its related and unrelated components. The researchers concluded that degree of product diversification and the direction of diversification (related or unrelated) translate into different corporate financial behaviours. In meticulous, the two types of diversification- related or

unrelated, had opposite effects on debt. Specifically, a related diversification strategy, which is associated with lower debt ratios, has a negative influence on leverage. By contrast, unrelated diversity, which is associated with higher debt usage, has a positive effect on debt. According to the coinsurance effect and the transaction-cost hypothesis, unrelated-diversified corporates have a higher debt capacity and can assume more debt as a source of finance. Moreover, the capital-structure decisions of unrelated-diversified corporates seem to be strictly aimed at reaching their target optimal debt levels—a behaviour that is consistent with the trade-off hypothesis. On the other hand, related-diversified corporates adjust more slowly towards their target capital structure.

The concept of capital structure which was propounded by Modigliani and Miller (1958) had been a very important corporate variable which in various ways impact the profitability, risk profile and overall share holder value of a company. Specifically, it has been observed that those corporates which diversify across product lines have higher debt ratios than non-diversified corporates. Researchers have found negative relation of profitability, positive relation of growth and payout with the leverage are in consistent with the pecking order theory. The positive relation of size and tax with leverage are in line with the trade-off theory.

Thus it can be concluded that effects of both product and international diversification on capital structure choices have been explained mostly through the co-insurance effect, the transaction cost theory and the agency cost theory. The co-insurance effect suggests that corporates can reduce risk by diversifying their activity and, in turn, the reduced risk can increase the debt capacity of the corporate. According to the transaction costs theory, the type of diversification adopted by a corporate depends on the nature of the unutilized resources that lead corporates to diversify. Since the type of assets employed by a corporate influence the financial

decisions it is possible to establish a relationship between capital structure and the diversification strategy of a corporate, through the transaction costs theory. The agency costs theory predicts that debt will be used to reduce the ability of a manager to realize detrimental diversification strategies. In addition to the common theories for product and geographic diversification, the relationship between geographic diversification and leverage can be explained by the existence of risks unique to internationalization and the use of debt as hedging instrument.

2.3 Systematic Risk

Systematic risk is defined as the volatility of a particular stock to the market. It can be further as defined and measured by the degree to which returns of a given stock tends diversification strategy to sinusoidal i.e. move up or down with respect to the dynamic market conditions. This sinusoidal creates a tendency of the stock which is reflected in its beta coefficient. Thus, theoretically the most appropriate and relevant measure of any stocks risk is beta (β).

Davis (2005) highlighted that systematic risk estimation is important, as there is considerable debate over the extent to which corporate debt reveals to a non zero systematic risk. But at present a very few researchers have a little evidence is found on estimation of systematic risk as cost of debt finance will depend upon its risk characteristic capital structure.

Many researchers including Montgomery and Singh (1984) tried to examine relationship between diversification strategy and systematic risk beta for six diversification categories. It was found that betas for unrelated diversifiers are significantly higher than those of other corporates. Thus, emphasizing the fact that diversification strategy not only increased the return but also significantly reduces the systematic risk of the corporate.

Bettis and Mahajan (1985) suggested that diversified corporates have significantly able to reduce their systematic risk and increase returns. The authors had also very strongly confirmed that there is still some level of correlation between related diversification and corporate performance but the unrelated corporate performance bears a negative correlation with diversification.

Lubatkin and Rogers (1989) in their study too, confirmed that the corporates that are diversified in a constrained manner demonstrated significantly lower levels of systematic risk and significantly higher levels of shareholder returns than corporates employing other strategies. The findings underscore the popular, though weakly supported, belief that controlled diversity is associated with the highest performance.

Amit and Livnat (1988), in his cross-sectional path analysis also confirmed that corporates trade off the reduction in operating risk due to diversification with increased financial leverage, and thus the systematic risk remains the same. Their study uses theoretical considerations to empirically examine the effects of various diversification strategies on the capital structure of corporates and on the systematic risk. It documents that corporates reduce their operating risk by diversification and increase financial leverage to take advantage of tax benefits.

Chatterjee and Lubatkin (1994) proved that the relationship between corporate diversification and both forms of stock return and risk generates a U-shaped graph. Thus, the author recommended that an important way for corporations to minimize risk is to diversify into similar businesses rather than into identical or very different businesses.

Chavas (2011) looked into the role of expected profit, the risk premium, and the value of information associated with learning. By integrating these three rationales for diversification his

analysis provided new insights on diversification and specialization choices in economics. It can be concluded from the study that learning can have opposite effects and provide incentives for specialization.

Daud, Salamudin and Ahmad (2009) also examined relationship between diversification effect on performance using multiple measures of performance namely accounting and market measurements. The research produces some interesting findings with regard to risk factors and effect on corporates performance while other factors are consistent with previous findings. In particular, corporates that adopt the focused strategy perform better than those with diversified strategy. Different measures of performance used in the study produced varying results after controlling for risk, corporate size and economic condition, using the inflation rate as a proxy.

Interestingly, Thompson (1984) linked the impact of strategic diversification on a market-based measure of corporate. The results of the study did not match with the earlier results. The study further suggested that the companies do not bank on risk reduction as a general motive for diversifying merger. In fact, this study does not support the positive association between systematic risk and conglomerate status found in many US studies.

Barton and Gordon (1988) through their study emphasized that profit and debt levels are negatively correlated and therefore suggested that pure economic factors are not the sole mechanism for establishing capital structure. The result is consistent with the behavioural proposition that management of corporates desires flexibility and freedom from excessive restrictions of debt whenever possible. Profitability provides the ability to avoid debt by using self-generated funds to finance the business.

Bowman (1979) provided theoretical biases for empirical research into the relationship between risk and financial variables. Theoretical relationship between systematic risk, the

corporate leverage and accounting beta was investigated. The researcher observed and categorically commented that systematic risk is not a function of earning variability, growth size or dividend policy.

Gahlon and Stover (1979) employed a model, which incorporates variables measuring the effects of these motivations on a return-adjusted beta, to compare the performance of conglomerates with a control sample of non conglomerates before and after the major external expansion period of 1967 and 1968. The results confirmed the hypothesis that the effects on adjusted beta of the diversification efforts of conglomerate managements were at least partially negated by the greater risk inherent in their use of increased debt capacity. At the same time studies suggest that those conglomerates which increased their internal and external diversification, their degree of financial leverage increased and their return-adjusted beta exhibited no change practically.

Prasad, Bruton and Merikas (1997) in their research utilized two different methods of analysis to confirm the linkage between capital structure and strategic posture of the corporate. The author specifically found that managers were found to structure the selection of debt and capital intensity in a means consistent with the strategic goal of long-run control of systematic risk

After going through the extensive literature above it can be easily estimated that there are different views of various researchers on the risk associated with diversified corporates and the return associated with them. The present study is an attempt to establish a relationship between the risk-return relationships of those corporates which have followed diversification strategy because as the company diversifies, there appears to be a change in the risk profile of the corporate and thus the expected change in the returns of the company. This is particularly

important because the change in corporate returns brings about change in the market returns of the company and thus increases / decreases the share holder value of the corporate.

2.3.1 Issues related to estimation of systematic risk

It is clearly seen that estimation of systematic risk depends upon critical and numerous factors which are equally important and related to the context. Nonetheless beta estimates using the individual market model will be an appropriate measure only if the stocks are actively traded due to this phenomenon the active trading in market supports the beta coefficient to explain the risk associated with a particular stock in the exchange. Generally, most of the times in practice not all securities are traded in same interval.

2.3.2 Problems related to calculation of systematic risk

Systematic risk is a macroeconomic or aggregate risk that is assumed, cannot be avoided through diversification. Per standard models of financial markets, investors who are exposed to these risks require compensation because there is no simple insurance scheme whereby exposure to these risks can be averaged out. There are additional data issues that require scrutiny in the measurement of systematic risk through beta which is the nearest proxy for the market risk. Distortions in the collection of publicly available data can hinder the measurement of aggregate risk exposures because of the temptation to disguise the problematic nature of policies in place. Moreover, even when intentions of measuring the true value are good, pre-existing policies can make the assessment of risk using historical data more challenging by partially mitigating risks in ways that are not sustainable in the future.

Thus it can be concluded that though systematic risk is quiet an important parameter which is expected to be affected by the impact of diversification strategy which will influence

the capital structure and the risk profile of the corporate. But in light of various researchers like Hansen (2012), it is challenging and very difficult to gauge the correct measure of systematic risk that the company bears. In view of these circumstances, although being an important parameter; it is proved to be a redundant variable.

2.4 Corporate Performance

Among the various researchers and academicians who take interest in the diversification strategy as a significant tool, used by a company for expansion the "*Diversification and corporate performance*" study have a lot of value. Their research in the subject area had lead to confirm that companies that diversify within the scope of their resources and capabilities, experience extra ordinary returns in terms of profitability and increase in shareholder value.

Aleson and Escuer (2002) examined the impact of product diversification on corporate performance. The results indicate that there is a positive correlation between levels of product diversification have and the corporate performance. The researchers also found that effects of related and unrelated product diversification on a corporate performance are similar to each other, but the said effects are superior with respect to the other product diversification strategies.

Chakrabarti, Singh and Mahmood (2002) from their results indicated that diversification negatively impacts performance in more developed institutional environments while improving performance only in the least developed environments. Even in the least developed institutional environments, diversification offers limited benefits when an economy-wide shock strikes.

Keates (1990) from their study tried to derive relation between diversification and multiple performance dimensions. The results suggest that appropriate criteria of performance measurement depend upon the strategy persuaded.

Kiker, Banning (1988) deduced the relationship of product-market diversification and corporate performance is studied in this empirical study. The results suggest that diversification and corporate performance have little or relationship.

Lloyd and Jahera (1994) from their empirical results, using Tobin's Q to capture performance effects and Rumelt's related ratio as the diversification measure revealed no significant findings to relate diversification and performance. They also emphasized that in case the sample, construct of very large corporates, at least for such large corporates whose stock is likely held in well-diversified portfolios; corporate-diversification strategies are unlikely to yield superior performance.

Palepu (1985) in their study examined corporate diversification and economic performance and failed to find any significant relationship between them. The researchers found that corporates with predominantly related diversification show significantly better profit growth than corporates with predominantly unrelated diversification.

Data, et. al. (1991) also used theoretical model/framework to review the existing empirical research on diversification and corporate performance and found that there is a considerable amount of diversity found in the research done by other researchers in this area. This leaves a lot of scope for further study specially the contingency based perspective.

Delios and Beamish (1999) tested the research model with data on the corporate performance of 399 Japanese manufacturing corporates. The researchers very categorically confirmed that performance was not related to the extent of product diversification; although investment levels in rent-generating, proprietary assets were related to the extent of product diversification.

Eastaugh (2011) tested diversification and operating ratio and modelled them in a two-stage least squares (TSLS) framework as being jointly dependent of a hospital management system. The researchers found Institutional diversification yielded to better financial position in terms of operating profits. The impact of external government planning and hospital competition was also measured. Management's attitude concerning risk and reward was also considered and found an important component in the study.

Hitt and Ireland (1986) through their research confirmed that the corporate level distinctive competencies/performance relationships were found to vary by type of diversification strategy but not by type of corporate structure. The study also tried to explore a specific relationship between corporate level distinctive competencies and performance and their normative implications. The study concluded that only a small relationship was found to exist between diversification strategy and corporate structure.

Choi and Russell (2005) researched some construction corporates and suggested that a corporates business composition and the sales volume of each business segment changes considerably on the basis of corporate business strategy. These changes are represented as a single index named "*corporate entropy*". The performance differences between construction and non construction corporates, as well as focused and diversified corporates, were compared through a longitudinal data analysis technique within a hierarchical linear modeling framework. The research findings indicate that the entropy changed constantly for both construction and non construction corporates. In addition, the levels of corporates' long-term profitability also depend upon the highly competitive and mature construction sector.

Fairfield, Ramnath, and Yohnt (2005) were of an opinion that profitability and growth of all corporates revert to a common benchmark at the same rate. However, a large body of academic research suggests that there are systematic inter industry differences (e.g., industry barriers to entry) that differentially affect corporate performance based on industry membership. The researchers evaluated the relative forecast accuracy of mean reverting models at the industry and economy wide levels and found that industry-specific models are generally more accurate in predicting corporate growth but not profitability.

Ferris, Senb and Thu (2010) examined the nature of industrial and global diversification for a sample of more than 12000 corporates across 35 emerging and developed countries during the period 1991–2006. Consistent with previous studies, the researchers found that industrial diversification, either alone or combined with global diversification, results in a reduction of corporate excess value. Global diversification alone, however, does not exert a significant impact on excess value. In an analysis of the decision to diversify, it was found that corporates in civil law countries or less developed nations are more likely to diversify, suggesting the greater utility of internal capital markets in economies where it is difficult to raise external capital. It was also observed that high leverage, larger size, lower levels of growth, R&D, free cash flow, profitability and Tobin's q encourage corporates to diversify industrially. Higher values of tobin's q, corporate size, R&D expenditures, free cash flow and liquidity, but reduced growth rates and profitability are associated with global diversification.

Gedajlovic, Shapiro and Buduru (2003) estimated the impact of equity ownership by financial institutions on corporate performance in Japan for a period of 1986–1991. It was found that while ownership by financial institutions is associated with unprofitable diversification, such ownership is, on balance, positively associated with corporate profitability.

Karpik and Riahi Belkaoui (1994) with an objective of investigating whether the corporates organizational structure change, affect its market value and systematic risk. The study attempted to provide evidence on whether divisionalization is a wealth increasing corporate decision. Specifically, to the extent that reorganizing the corporate operations promotes internal efficiency and profitability, announcing the implementation of the M-form structure should result in abnormal returns on the affected corporate stock and reduction in its systematic risk. The second objective of this study is to examine whether the market reaction to the announced implementation of the M-form structure is contingent to the corporates existing diversification (related, Unrelated, or vertical).

Loncan and Nique (2010) also analyzed the relationship between degree of internationalization, as measured by foreign sales over total sales, and accounting and market performance for five Brazilian emerging multinational corporates. Results indicated that a higher degree of internationalization of sales is associated to positive returns in terms of ROA and Tobin's q. Moreover, the corporates competing in more added-value sectors exhibited the highest marginal returns over foreign sales.

Lunsford and Laforge (1992) conformed from their research that product diversification is an important issue in marketing management and has been the topic of business researchers for over several decades. Extending previous marketing research on product diversification by Varadarajan (1986) the product diversification strategies of 300 corporates were analyzed. Nine hypotheses were tested concerning the association of product diversification direction method and stage of corporate development. The findings indicate the relationship between product diversification and corporate profitability is contingent upon the method used to add new products and the stage of a corporate life when product diversification is attempted. It is further

added that the focus of marketing management should change as a corporate develops from a small entrepreneurial start up to a large mature corporation.

Nguyen, Ann Seror, Timothy and Devinney (1990) conducted a study of interrelationships between corporate diversification, market power, and performance, supported the hypotheses that highly diversified corporates will have lower market shares in the irrespective markets than less diversified corporates and that the strategy of diversification does not contribute to corporate profitability. They re-examined these results with attention to the special characteristics of the open Canadian economy in a sample of Canadian manufacturing corporates. The authors reported evidence in support of the hypothesis that diversification in technologically related activities results in economies of scope and greater corporate performance.

Lins, Servaes (2002), the researchers found that diversified corporates trade at a discount of approximately 7 % compared to single segment corporates. Diversified corporates are less profitable than single segment corporate, but lower profitability only explains part of the discount. The discount is more severe when management control rights substantially exceed their cash flow rights. The result is not valid where capital markets are imperfect.

Liow (2010) explored the key financial performance characteristics of successful listed real estate companies in an international context over 2000–2006. They postulated that financial success is measured using two different measures, i.e. the Sharpe ratio and Jensen's alpha. They considered three main determinants of corporate value for real estate companies to be growth, profitability and leverage, and investigate a total of 11 different company specific characteristics as potential indicators of superior performance. The researcher also found that successful real estate companies are generally of larger size and command attractive market valuation relative to

their underlying book value. They are usually profitable and are more likely to take advantage of positive financial leverage effects, contributing to higher sustainable growth rates as well as profitable growth in the longer term. In addition, the financial variables that influence successful performance are largely similar for all countries and regions, but they differ in degree and in some cases the influence works in the opposite direction. This indicates a potential gain in portfolio diversification across the global real estate markets. The results provide practical insights to global investors and fund managers in including successful real estate companies in their investment portfolios.

Yaghoubi, Abidin and Yaeghoobi (2002) in their study discussed the theoretical issues on diversification, corporate performance and the relationship between these two. Questioning whether different levels of diversification lead to different levels of corporate performance or not? The study looks for the effect of economic situation on the diversification-performance relationship. The outcomes show inconsistency among the results of different years of the study. For some years the relationship between diversification and performance were significant and for some years it is not. On the other hand the result of the research shows higher economic performance among the corporates which follow lower levels of diversification (i.e. Single and Dominant levels of diversification), this is different from the result of some earlier researchers like Rumelt (1974) and Bettis (1981) which concluded that related level of diversification leads corporates to be more profitable in comparison with corporates pursuing single and dominant levels of diversification.

Ravichandran, Liu, Han and Hasan (2009) very critically commented that examining the performance effects of diversification is incomplete without taking into consideration the corporate information technology (IT) spending. The results indicated that while IT spending

interacts with related diversification to have a positive effect on corporate performance, similar interactions with unrelated diversification do not have any effects on corporate performance.

Rawley (2010) empirically identified that the effects of coordination and organizational rigidity costs on business unit and corporate productivity. The findings suggested that coordination costs, in general, and organizational rigidity costs, in particular, limit the scope of the corporate.

Roccaa, Roccaa, Geraceb and Smark (2009) analyzed the financing strategies of multi business corporates, suggesting the relevance of sorting the diversification phenomena into its related and unrelated components. The researchers concluded that degree of product specialization/diversification and the direction of diversification (related or unrelated) translate into different corporate financial behaviour. Rumelt (1982) from his study concluded that prior work has shown an association between diversification strategy and profitability. Empirical tests verify this prediction between the effects of industry and diversification strategy on profitability.

Tallman and Li (1996) in their study showed a consistent quadratic relationship between product diversification and MNE performance for a sample of large American industrial multinational enterprises (MNEs), it showed a consistent quadratic relationship between product diversification and MNE performance but minimal performance differences across different measures of international diversity. The study also concluded that overall cost of capital also expects direct link between debt ratios and R&D investments.

Zhang (2011) from the study found a positive relationship between the listed textile corporates' unrelated diversification and their corporate value. Furthermore, the results indicate that group affiliation has complicated impacts on the diversification-performance relationship of the listed corporates. Although group-affiliated corporates are more successful in pursuing

unrelated diversification when at late stages of the institutional transition, as in China at present, the dominant influence of institutional environments on the diversification-performance link of corporates still works and motivates business groups to evolve organizationally.

Antoncic (2006), by testing the normative model, confirmed that single business and diversified business make some direct difference on profitability of a corporate and claimed that there are certain factors like corporate entrepreneurship strategy and some more elements which significantly affects corporate performance.

Burgers, Padgett, Bourdeau and Sun (2009) in their research, have tested and verified that low profitability corporates who increase diversity and high profitability corporates which reduce diversity both achieve higher sales growth than their opposites. The results for changes in profitability subsequent to changes in diversity showed no clear pattern.

Gary (2005) suggested that successful diversification strategies require managerial policies that maintain organization slack. In the absence of such policies, related diversification can negatively impact corporate performance even when substantial synergy opportunities exist. Further, it was proved that related diversification can negatively impact corporate performance even when substantial synergy opportunities exist. The analysis also demonstrates, contrary to existing theory, that diversification strategies based on a very high degree of relatedness can lead to lower performance than less related strategies in some circumstances. Counter-intuitively, extracting potential synergies may require additional investment in shared resources.

Gort, Grabowski and Mcguckin (1985) suggested that preservation of organizational capital is the principal factor motivating corporate diversification decisions. The role of managerial attributes, of absolute advantages of some corporates, and of opportunities created by

research and development, had more modest explanatory power in explaining the growth of a corporate.

Marinelli (2011) also by working on the similar direction deduced a relationship between diversification and corporate performance and found the relation is not casual but relatedness among business units and degree of efficiency of Indian capital market. It was found that some diversified corporates create shareholder value. It was further observed that higher performance is associated with an unrelated portfolio of business segment.

Napier and Smith (1987) compared the three variables across three diversification groups (high, medium, low), based on Rumelt's (1974) classification (single product, vertically integrated, dominant, related, unrelated, and conglomerate). The researcher could not find any significant relationship between diversification and corporate performance.

Palich, Cardinal and Miller (2000) by performing various empirical tests concluded that a moderate levels of diversification yield higher levels of performance than either limited or extensive diversification. Thus they supported the curvilinear model which says that performance increases as corporates shift from single-business strategies to related diversification, but performance decreases as corporates change from related diversification to unrelated diversification. The results also indicate major effects from variation in diversification and performance operationalization. Pandey A. and Varma A. (2009) have highlighted issues involved in the measurement scale of the efficiency of Indian Index Futures Market using VAR-VECM approach and touched some concepts of possible gains from international and national diversification followed by existence of lead-lag interrelationships among stock exchanges.

Ramanujam and Vardarajan (1989) evaluated and discussed earlier works done by various author in this direction. The authors are very much positive about the scope of further

research in the area. They found that basic robustness of Rumelt's findings is still intact. Although it's necessary to temper his assertion of an absolute performance advantage for related diversification and of the performance penalty associated with the unrelated diversification. This suggests that management of diversity rather than its type is more important factor.

Arora, Rathinam and Khan (2010) highlighted that impact of the global financial crisis primarily occur through the money market channel. However, emerging economies (India), crisis spread initially through the export channel. Some countries including Germany were highly exposed to the systematic risk, whereas other were affected by liquidity shortage in Japan and unexpected withdrawal of short -term capital flows in India.

Ramaswamy and Li (2004) addressed the questions such as changes in diversification posture and the accompanying changes in performance and changes in governance mechanisms in organizational strategy. Results show that external constituents collectively have more influence on unrelated diversification than CEOs and boards. Secondly, institutional investors tend to discourage unrelated diversification, but banks are quite supportive of such moves, and in addition to that corporate governance constituents other than foreign directors do not have a statistically significant influence on unrelated diversification strategies.

Kakani (2001) had under taken the study on 'Have diversified groups failed to generate value in developing countries too? and Financial Performance and the Diversification Strategy of Indian Business Groups'; established that product diversification of business corporate and related firms was negatively correlated to share holder value formation for the duration of all the time while growth, profitability, profit margins and the share holders' value was positively correlated to international diversification of the business groups.

Research indicates that a higher degree of international diversification /internationalization of sales is associated to positive returns in terms of ROA and Tobin's q. moreover; the corporates competing in more added-value sectors exhibited the highest marginal returns over foreign sales. On the other hand findings indicate the relationship between product diversification and corporate profitability is contingent upon the method used to add new products and the stage of a corporate life when product diversification is attempted. It is further added that the focus of marketing management should change from a small entrepreneurial start up to a large mature corporation. Large companies, are usually profitable and are more likely to take advantage of positive financial leverage effects, contributing to higher sustainable growth rates as well as profitable growth in the longer term. In addition, the financial variables that influence successful performance are largely similar for all countries and regions, but they differ in degree and in some cases the influence works in the opposite direction. This indicates a potential gain in portfolio diversification across the global real estate markets. The results provide practical insights to global investors and fund managers in including successful real estate companies in their investment portfolios.

Dhamija (2010) reviewed and added role of corporate governance in Indian mutual fund industry, wherein discussed also broad factors responsible fund governance, expansion of asset size, diversification benefits and market share incremental policies. This study is valuable to asset management companies, fund managers, regulators etc. Diversification strategy could be advantageous in financial and non-financial companies ever.

Ajay and Madhumathi (2012), stated that behaviour of Indian companies with respect to parameters like leverage, tangibility, non-debt tax shield, age, size and agency cost is significantly different from its global counterparts, as far as diversification strategy is concerned.

The study also reveals that Indian companies have higher debt as a part of their capital structure as compared to multinational corporations.

2.5 Conclusion of Literature Review

From the extensive review of literature it can be concluded that, the finer-grained studies largely support the notion that relatedness improves the performance of industrially diversified corporations. While there is also considerable evidence that high levels of (unrelated) industrial diversification underperform both single segment firms and related diversifiers, it remains unclear whether related industrial diversification yields superior performance compared to single segment firms. The diversification literature had failed to examine the possibility of such an inverted-U-shaped model of the industrial diversification performance relationship and instead focused on linear models while measuring diversification with simple continuous variables.

A brief summary and important work done by famous researchers in the current field of study using main variables are being presented in following table:

Table I: Summary of Important Work Done by Famous Researchers in the current Field of Study using main variables

S.No.	Author(s), year and country of study	Title of study	Journal / Conference / Book	Methodology/tools adopted for data analysis	Findings and conclusions
1	Ajay R. and Madhumathi R., 2012, India	Impact of diversification strategy on the capital structure decisions of manufacturing corporates in India	International proceedings of economics development and research	Panel Data Regression	• Research suggested that multinational and domestic corporates differs significantly from each other with respect to leverage, tangibility, non-debt tax shield, age, size and agency cost. • Geographic diversifications have greater impact on capital structure.
2	Ansoff H.I., 1957, USA	A model for diversification	Management Science, USA	Mathematical Explanation	• A theoretical model explaining both qualitative and quantitative aspect of diversification. • The researcher emphasized on the selection of diversification opportunities which are consistent with the company's objectives and long-range policy. • Followed by a quantitative procedure for evaluating the relative profit potential of selected alternatives**.**
3	Ansoff H.I., 1972, USA	"Strategies for diversification"	Harvard Business Review, USA	Not Defined	• This manuscript, establish reasons which may lead a company to prefer diversification to other growth alternatives, and trace a relationship between over-all growth objectives and special diversification objectives.
4	Chkir I.E. and Cosset J.C., 2001, USA	Diversification strategy and capital structure of multinational corporations	Journal of Multinational Financial Management, United Kingdom	Regression	• Research concludes that profitability and operating risk are negatively related to the debt ratio of MNCs.
5	Christensen H.K. and Montgomery C.A., 1981, USA	Corporate economic performance: diversification strategy versus market structure	Strategic Management Journal, USA	Regression	• Results indicate that performance differences could be demonstrated for some of Rumelt's categories, but, across the range of categories, a hypothesis of performance differences was rejected.
6	Hoskisson R. E., Hitt M.A., Johnson R.A. and Moesel D.D., 1993, USA	Construct validity of an objective categorical measure of diversification strategy	Strategic Management Journal, USA	Regression	• Results indicate strong convergent criterion related validity for the entropy measure of diversification.
7	Montgomery C.A and Singh H., 1984, USA	Diversification strategy and systematic risk	Strategic Management Journal, USA	Market model Analysis of Variance	• The relationship between diversification strategy and systematic risk beta values were examined for six diversification categories and it was found that betas for unrelated diversifiers are significantly higher than those of other corporates.

8	Montgomery C.A., 1982, USA	The measurement of corporate Diversification some new empirical evidence	Academy of Management Journal, USA	Comparison	• The study concludes that unrelated portfolio corporates were less successful performers than related linked corporates.
9	Montgomery C.A., 1985, USA	Product-market diversification and market power	The Academy of Management Journal, USA	Regression	• Relationships among diversification, market structure, and corporate performance. The author's views are contrasted with the traditional market power theory that emphasizes the general rather than the specific market power of diversified corporates.
10	Rumelt R.P., 1979, USA	Evaluation of strategy : theory and model	UCLA Anderson school Journal, Loss Angeles, USA	Not Applicable	• A paper with thrust to evaluate different diversification strategies by using various theories and test.
11	Ngah-Kiing Lim E., Das S.S. and Das A., 2009, Singapore	Diversification strategy, capital structure, and the Asian financial crisis (1997–1998): evidence from Singapore corporates"	Strategic Management Journal, USA	Structural Equation Model, Regression	• Corporates pursuing unrelated product diversification take on less debt financing in stable environments, but more debt financing in dynamic environments. Using SEM a reciprocal relationship between a corporate's product diversification strategy and its debt financing level was found.
12	Prasetyo A.H., 2011, Indonesia	Systematic risk and capital structure in emerging Indonesian market	International Conference on Econ., Business and Management, Malaysia	Market Model of Return	• Using samples of 225 public companies in Indonesia the paper shows how manager used capital structure to deal with the turbulent in systematic risk.
13	Ramanujam V. and Vardarajan P., 1989, USA	Research on corporate diversification – a synthesis	Strategic Management Journal, USA	Not Defined	• Researchers had discussed works done by various authors in this direction. The authors are positive about the scope of further research in the area.
14	Raphael A. and Livnat J. 1988,USA	Diversification, capital structure, and systematic risk: an empirical investigation	Journal of Accounting, Auditing & Finance, California, USA	Path Analysis	• A cross-sectional path analysis was employed to show that corporates trade off the reduction in operating risk due to diversification with increased financial leverage, and same systematic risk remains
15	Ravichandran T, Liu Y., Han S, and Hasan I., 2009, USA	Diversification & corporate performance: exploring the moderating effects of IT spending	Journal of Management Information System, JSTOR, USA	Regression Model	• Examining the performance effects of diversification is incomplete without taking into consideration the corporate information technology (IT) spending, which interacts with related diversification to have a positive effect on corporate performance, similar interactions with unrelated diversification do not have any effects on corporate performance.

Due to the strategic management approach, corporate strategies despite being based on various sets of management guidelines identifying the appropriate scale and scope of the firm, all converge in dealing with conflicting demands of synergies and responsiveness with respect to allocating resources. Successful corporate strategies are the result of organizational capabilities or competencies that allow firms to exploit potential synergies that large size or diversity can offer. On one hand, the synergy of interrelated businesses within a diversified firm brings in the benefit of economies of scope which arise from sharing both common tangible inputs such as markets, distribution systems, product and process technologies, or manufacturing facilities (Ansoff, 1965; Rumelt, 1974; Teece, 1980), and intangible assets such as brand names and know-how, managerial capabilities and routines and repertoires (Bettis, 1986; Grant, 1988). The more interrelated the businesses of a firm, the greater the potential for organizational synergy (Rumelt, 1974).

Firms are assumed to have different innovative capabilities that lead them to pursue different types of product diversifications . A firm with a diversified portfolio of products may be better positioned to determine the general applicability of new ideas than a firm with a narrower portfolio of products, because it can capture internal knowledge spillages.

Chapter 3

Research Design and Data Collection

3.1 Research Questions

Research questions engage the research conversion of "difficulty" into the requirement for investigation. The research problems defined above leads to the following research questions:

1. What are the relationship between Diversification Strategy, Capital Structure, Systematic risk, Corporate Performance of corporates listed in both the stock exchanges i.e. BSE and NSE and validation for sustainable business through competitive advantage.
2. What is the impact of Diversification Strategy on Capital Structure using relationship between Capital Structure and Diversification Index, corporate profitability, size and growth of companies listed in both the stock exchanges i.e. BSE and NSE.
3. What is the impact of Diversification Strategy on Systematic risk using relationship between Systematic risk and Diversification Index, leverage, size and growth of companies listed in both the stock exchanges i.e. BSE and NSE?
4. What is the impact of Diversification Strategy on Corporate Performance using relationship between Corporate Performance and Diversification Index, leverage, size and growth of companies listed in both the stock exchanges i.e. BSE and NSE?

3.2 Objectives of the study

Following are the objectives and linked hypotheses of this study:

- To study the impact of diversification strategy on capital structure of listed companies in BSE and NSE during the study year period.
- To study the impact of diversification strategy on systematic risk of listed companies in BSE and NSE during the study year period.

- To study the impact of diversification strategy on corporate performance of listed companies in BSE and NSE during the study year period.
- To examine the behavior of diversification strategy, capital structure, systematic risk and corporate performance of listed companies and their importance to achieve sustainability with competitive advantage.

3.3 Hypothesis liked with Empirical Model

H_1: There is no significant difference in diversification index which is expected to have a strong effect on capital structure.

H_2: There is no significant difference in corporate profitability, which has a strong correlation with corporate capital structure.

H_3: There is no significant difference in growth opportunities which decreases corporate leverage.

H_4: There is a significant difference in corporate size which is expected to have a strong effect on capital structure.

H_5: There is no significant difference in asset tangibility which has a strong correlation with corporate capital structure.

H_6: There is no significant difference in diversification index which is expected to have no effect on systematic risk.

H_7: There is no significant difference in corporate profitability which is expected to have strong effect on systematic risk.

H_8: There is no significant difference in the growth opportunities which decreases corporate systematic risk.

H_9: There is no significant difference in the corporate size which is expected to have a week effect on corporate systematic risk.

H_{10}: There is no significant difference in diversification index which is expected to have a strong effect on corporate performance.

H_{11}:There is no significant difference in capital structure which effect corporate performance.

H_{12}: There is no significant difference in the growth opportunities which increases corporate performance.

H_{13}: There is no significant difference in corporate size which is expected to have a strong effect on corporate performance.

Discussion of hypothesis in support of prior work done

H1: There is no significant difference in diversification index which is expected to have a strong effect on capital structure.

Low and Chen (2004) from their study, emphasized that product diversification is positively related to financial leverage, indicating that such diversification allows corporates to reduce their risks, thereby enabling corporates to carry higher debt levels. The findings for the effect of product diversification on capital structure generally indicate that corporates that diversify across product lines have higher debt ratios than non-diversified corporate. Lim et. Al. (2009) also used agency theory to predict the influence of related and unrelated product diversification on a corporate level of debt financing and established a link between diversification and capital structure is moderated by the environment in which corporates operate.

H2: There is no significant difference in corporate profitability, which has a strong correlation with corporate capital structure.

The capital structure of a corporate is expected to reduce the cost of capital of a corporate and is this expected to positively impact its profitability ROA, ROE, etc. Even though there are many studies which have shown that there is a positive relation between leverage and corporate performance, Mojtaba Akbarpour et al (2011). Ahmad and Abbas (2011) identified the determinants of capital structure of banks in Pakistan by using corporates level determinants of capital structure. Using panel data fixed approach model, the researchers showed that out of seven variables three (profitability, size, non-debt tax shields) are statistically significantly related to leverage. Initially, Chikir, Arcas and Bachiller (2008) have also reported that profitability is higher for less leveraged corporates in all zones except for the British countries.

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H3: There is no significant difference in growth opportunities which decreases corporate leverage.

The literature review suggests that Growth opportunities decrease corporate leverage. Panda (2011) in their work have linked capital structure with corporate performance. The research drawn from the capital structure literature to carve out the variables, i.e., tangible assets (AT), profitability, size, volatility, growth opportunities, etc. Research clearly indicates that venture capitalist very undoubtedly watch corporate leverage and corporate growth before further funding the corporate. However, Barton and Gordon (1988) in there empirical study found that the capital structure is not directly influenced by the managing generation, but indirectly through the realized growth rate of the company. Bowman (1979) et. al. (2004) have

also proved relationship of corporate growth and capital structure. The study proposes that growth opportunities decreases corporate leverage.

H4: There is a significant difference in corporate size which is expected to have a strong effect on capital structure.

Many researchers like Gonzalez and Gonzalez (2012) have established that financing decisions varies among small, medium-sized and large corporate using pecking order theory. It was further concluded that in small corporate, the negative influence of profitability and the positive influence of investment opportunities and of intangible assets on corporate debt predicted by the pecking order theory is heightened. Muzir (2011) suggested that the effect of corporate size on financial performance and sustainability may differ according to the way how size expansion is being financed.

H5: There is no significant difference in asset tangibility which has a strong correlation with corporate capital structure.

Asset Tangibility is also one of the major determinants of corporates performance. Many researchers such as Mackie- Mason (1990) concluded that a corporate with high fraction of plant and equipment (tangible assets) in the asset base opted for higher leverage and were proved to be more profitable than their counterparts. Campello (2006) in their research claims that when asset tangibility is high managers have heightened incentives to deliver on investors claims since liquidation/reorganization becomes a more credible threat. It is also observed that the component of investment that is explained by external financing is associated with superior (inferior) corporate product market performance, capital market valuation, and accounting returns when asset tangibility turns out to be high (low) after the corporate raises financing.

H6: There is no significant difference in diversification index which is expected to have no effect on systematic risk.

Many researchers including Montgomery and Singh (1984) found that betas for unrelated diversifiers are significantly higher than those of other corporates. Thus, emphasizing the fact that diversification strategy not only increased the return but also significantly reduces the systematic risk of the corporate. Bettis and Mahajan (1985) suggested that diversified corporates have significantly able to reduce their systematic risk, beta and increase returns, ROA. The author had also very strongly confirmed that there is still some level of correlation between related diversification and corporate performance but the unrelated corporate performance bears a negative correlation with diversification.

H7: There is no significant difference in corporate profitability which is expected to have strong effect on systematic risk.

Gahlon and Stover (1979) employed a model, which utilizes variables measuring the effects of these motivations on a return-adjusted beta, to compare the performance of conglomerates with a control sample of non conglomerates before and after the major external expansion period of 1967 and 1968. The results of the study confirmed that the effects on adjusted beta of the diversification efforts of conglomerate managements were at least partially negated by the greater risk inherent in their use of increased debt capacity.

H8: There is no significant difference in the growth opportunities which decreases corporate systematic risk.

Bowman (1979) and other researcher provided theoretical biases for empirical research into the relationship between risk and financial variables. In a theoretical relationship between systematic risk, corporate leverage and accounting beta, the researcher observed and categorically commented that systematic risk is not a function of earning variability, growth etc. Thopmson, later (1984) also emphasized that, there remain other possible managerial motives besides risk reduction including growth and other objectives which might be advanced by diversification.

H9: There is no significant difference in the corporate size which is expected to have a week effect on corporate systematic risk.

Again Bowman, (1979) in a theoretical relationship between systematic risk and the corporates leverage and accounting beta. The researcher observed and categorically commented that systematic risk is not a function of earning variability and size of publically traded companies.

H10: There is no significant difference in diversification index which is expected to have a strong effect on corporate performance.

Diversification strategy is a very important tool used by companies these days to divide their risk by developing a range of products using the concept of asset specificity. Rumelt (1982) has shown an association between diversification strategy and profitability. Tallman and Li (1996), showed a consistent quadratic relationship between product diversification and MNE performance. Thompson (1984) linked the impact of strategic diversification on a market-based measure of corporate. Stephan (2002) studied the relationship between product diversification and concluded that companies looking at the positive impact of unrelated diversification had

moved to different product gradually. But this change has happened over a period of time. Aleson and Escuer (2002) examined the impact of product diversification on corporate performance. The results indicate that there is a positive correlation between levels of product diversification has and the corporate performance Zhang (2011) from the study also, found a positive relationship between the listed textile corporates' unrelated diversification and their corporate value.

H11: There is no significant difference in capital structure which effect corporate performance.

Ramachandran and Rao (2010) provided empirical evidence on the relationship between industry pricing and capital structure. The researchers analyzed growth in corporate sales and profitability post an industry downturn under different financial structures. This methodology helps mitigate the endogenous nature of capital structure and corporate performance, since it is assumed that the downturn was not anticipated by industry participants. Also, inclusion of lagged values of debt ratio ensures that spurious relation between contemporaneous values of debt ratio and corporate performance is not obtained. It was thus confirmed that corporates which are over-levered compared to the industry median, experience lower sales growth and profitability vis-à-vis a benchmark corporate which assumes industry median characteristics. This lends support to the hypothesis that external financing induces financial fragility that leads to reduction in marketing spending at the time of distress.

H12: There is no significant difference in the growth opportunities which increases corporate performance.

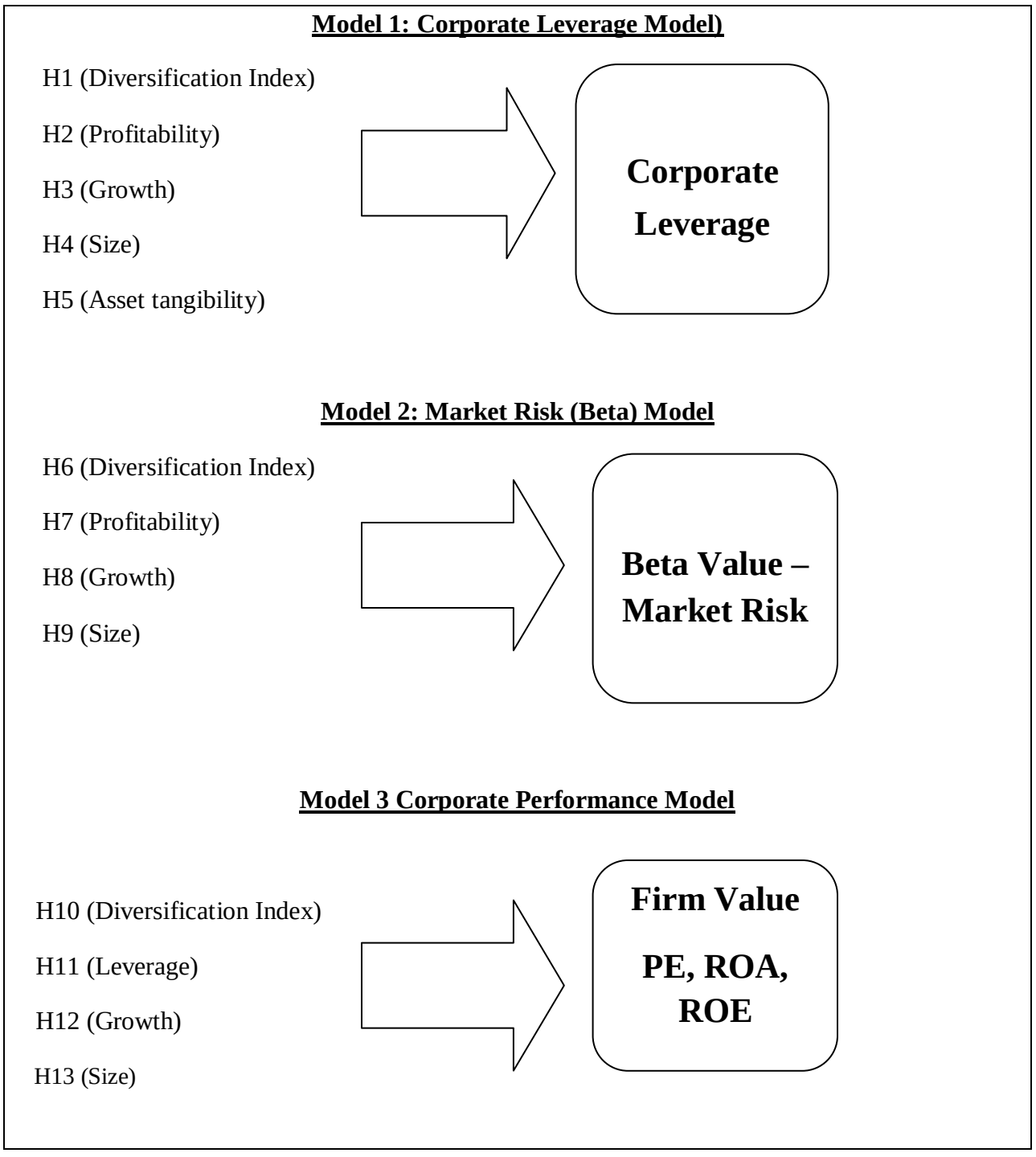
The literature survey considers growth as one of the most important parameter for corporate performance. Recent studies by Maggina (2012) provides evidence drawn from publicly traded companies in Greece on the predictability of assets growth with respect to corporate performance and indicate that assets growth is predictable at an 85.7% rate in large companies. Greveh (2008) in their research on the general insurance industry shows that corporate grow more when they when performance goals are satisfied.

H13: There is no significant difference in corporate size which is expected to have a strong effect on corporate performance.

The size of a corporate is considered to be an important determinant of corporate's profitability as larger corporate can enjoy economies of scale and these can favourably impact the profitability, Penrose (1959). Larger corporate according to Shepherd (1989) may also be able to leverage their market power, thus having effect on profitability. A positive relationship between corporate size and its performance is expected in the study. Not only the above mentioned studies, but also studies conducted by various researchers like Antonkik (2006), Banker (2011), Barton (1988), Baysinger, et al. (1989), Bowman B.G. (1979), Chakrabarti, et al (2002), has proved a strong relationship between corporate size and profitability.

The following figure shows how various independent variables are connected with the dependent variables in the form of three different models i.e. Corporate Leverage Model, Market Risk (Beta) Model and Corporate Performance Model.

Fig I: Pictorial representation of the dependent and independent variables



The regression models are further presented in the equation form in the following equations:

Model 1: Corporate Leverage (LEV) Model:

$$y_i^L = \Psi_0 + \Psi_1 DI_i + \Psi_2 PROF_i + \Psi_3 GROW_i + \Psi_4 SIZ_i + \Psi_5 AT_i + u_i \text{.....(i)}$$

Model 2: Market Risk (β) Model:

$$y_i^\beta = \Psi_0 + \Psi_1 DI_i + \Psi_2 PROF_i + \Psi_3 GROW_i + \Psi_4 SIZ_i + u_i \text{.....(ii)}$$

Model 3: Corporate Performance (CP) Model:

$$y_i^P = \Psi_0 + \Psi_1 DI_i + \Psi_2 LEV_i + \Psi_3 GROW_i + \Psi_4 SIZ_i + u_i \text{.....(iii)}$$

where:

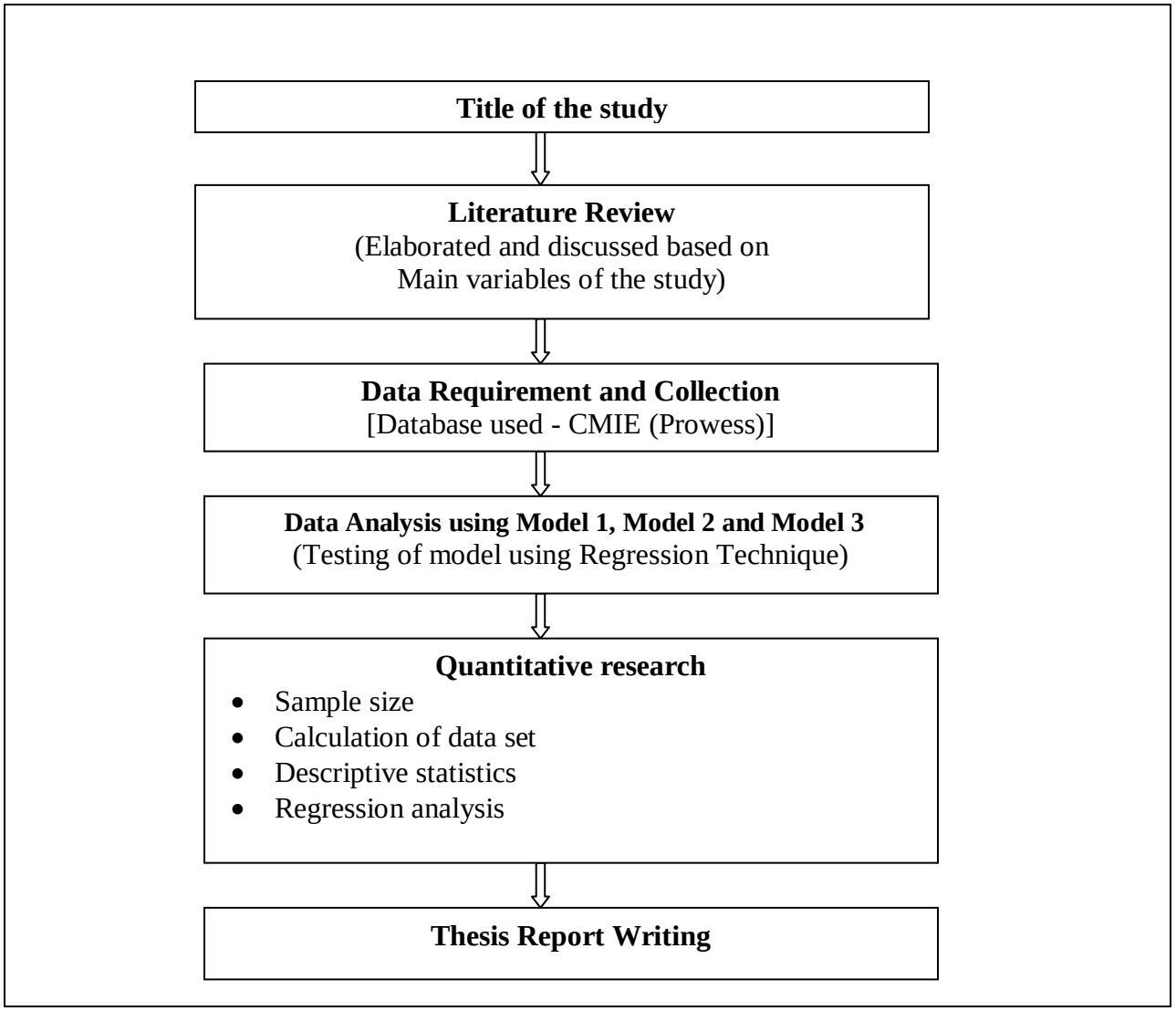
DI	: Diversification Index
PROF	: Corporate Profitability
GROW	: Corporate Growth
SIZ	: Corporate Size
LEV	: Corporate Capital Structure
BETA	: Market Risk
PERFORMANCE	: Corporate Performance

3.4 Research Design

A research design is a systematic plan to study a scientific problem. In this problem also by obeying the rules of scientific and management research we tried to do an exhaustive research by reading as many as three hundred research papers on the research area. The next step was doing the gap analysis of the present and past studies so that scope of new work could be retrieved. This led to defining the objectives and linked hypothesis which was the most critical job of this project. The dependent and independent variables are defined and data was collected from CMIE

(Centre for monitoring Indian Economy) data base Prowess. The data analysis was done using three models gauging the impact of diversification on capital structure, systematic risk and firm performance known as corporate leverage model, market risk model and corporate performance model. This was followed by correlation analysis and regression analysis using descriptive statistics and regression analysis. In the end implication of the study and its commercial used is registered in the report.

Fig. II: Research Design and Process



3.5 Data collection

The data for the present study is taken from well known academic data house known as Prowess of CMIE (Centre for Monitoring Indian Economy). Other than this, secondary data from various Deliberations and Proceedings of various conferences and seminars, articles from reputed business magazines and other relevant working papers may also be used. Other than this several websites such as moneycontrol.com etc were also consulted for fulfilling the shortage in the data set.

The sample for study is a set of all the companies which diversified during the year 2006-2011 and are listed at BSE (Bombay Stock Exchange) as well as NSE (National stock exchange) of India will be taken. A total of 44 companies were finalized for the final analysis. We excluded firms that activate in the financial service industry because the debt-like liabilities of financial firms are not strictly comparable to the debt issued by non-financial firms (Rajan and Zingales 1995).Our analysis used multivariate methods to examine the relationship between corporate diversification strategies, capital structure and other variables.

The next chapter deals with the results of the regression analysis which is connected with the objectives of the study and the hypothesis.

Chapter 4

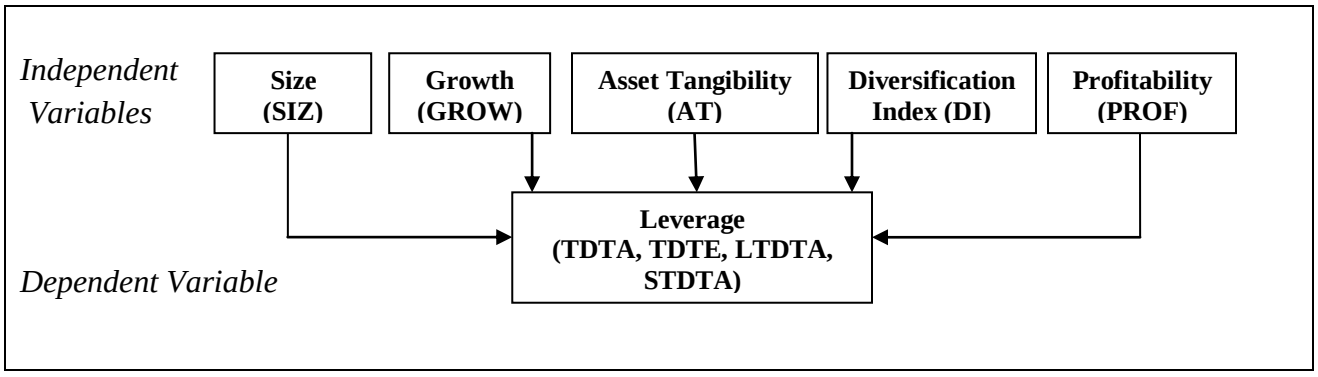
Empirical Analysis and Data Interpretation

The present study tries to derive relationship and impact of significant economic variable, like diversification strategy on capital structure, systematic risk and corporate performance. This has been achieved using three models namely, leverage model, market risk model and corporate performance model.

4.1 Model 1: The Leverage Model

The Dependent Variable for this model is Capital Structure (Leverage) which is alternatively measured by Total Debt to Total Assets (TDTA), Total Debt to Total Equity (TDTE), Long Term Debt to Total Assets (LTDTA), and Short-Term Debt to Total Assets (STDTA).The Independent Variables on the other hand are **Diversification**, Corporate Profitability, Corporate Growth, Corporate Size, and Corporate Asset Tangibility. The interrelationship between the variables can be seen from the following figure:

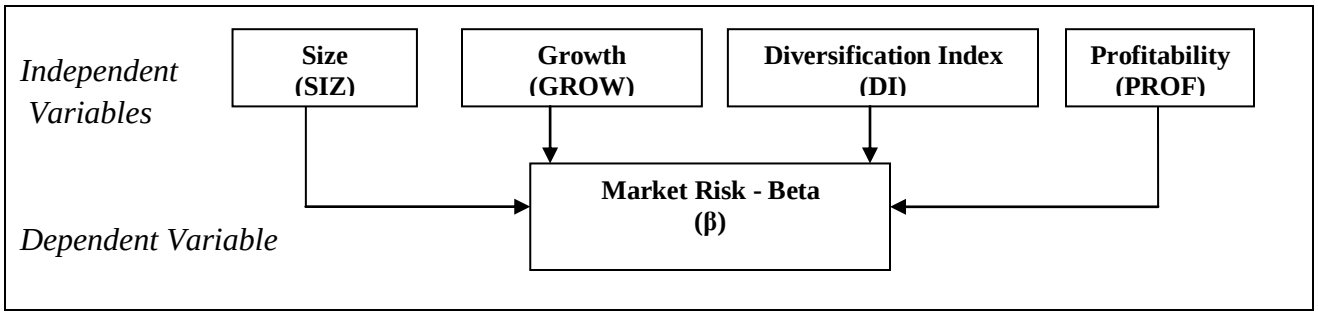
Fig III: Model Layout– Relationship b/w other variables and Leverage



4.2 Model 2: The Market Risk (Beta) Model

The Dependent Variable of this model is Market Risk and the value is alternatively given by Systematic Risk i.e. Beta (β).The Independent Variables remains as Diversification Index, Corporate Profitability, Corporate Growth, and Corporate Size. The interrelationship between the variables can be seen from the following figure:

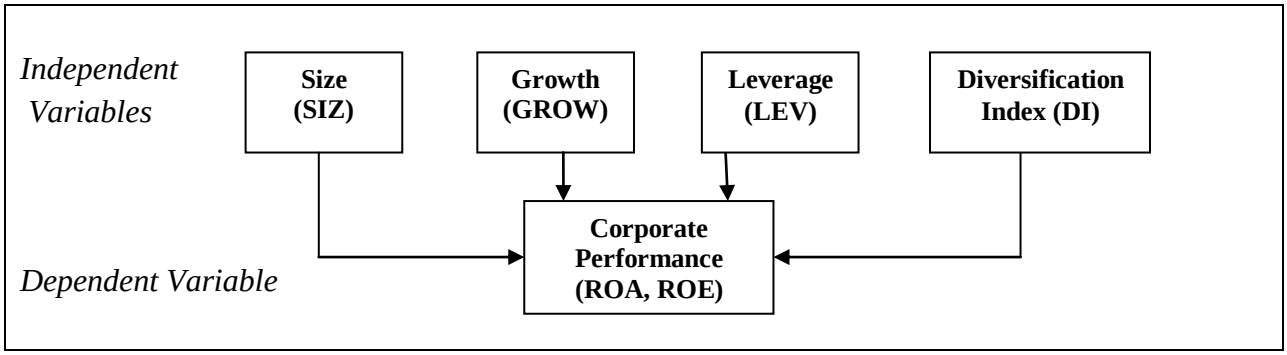
Fig IV: Model Layout– Relationship b/w other variables and Market Risk (β)



4.3 Model 3: Corporate Performance Model

The Dependent Variable for Corporate Performance Model is corporate performance value which is alternatively measured by ROA, and ROE. The independent Variables being Diversification Index, Corporate Leverage, Corporate Growth and Corporate Size.

Fig V: Model Layout– Relationship b/w other variables and Firm performance



4.4 Computational procedures for Variables

The computational procedures for dependent and independent variables are given below:

Diversification (measured by (1- Herfindahl Index)): HI = $\sum_{i=1}^{N} S_i^2$, Where, S_i^2 is the market share of corporate *i* in the market, and *N* is the number of corporates.

Total Debt to Total Assets (TDTA)

Total Debt to Total Equity (TDTE)

Long-Term Debt to Total Assets (LTDTA)

Short-Term Debt to Total Assets (STDTA)

BETA (Market Risk = Systematic Risk)**:** Cov (R_i, R_m) / Var(R_m) where, R_i is the daily return on security *i* and R_m is the daily return on stock weighted market index.

ROA (Return on Assets)**:** Profit after Tax / Total Assets

ROE (Return on Equity)**:** Profit after Tax / No. of shares outstanding

PROF (Profitability)**:** EBIT + Depreciation / Total Assets

GROWTH (Growth: Total Assets – Book Value of Equity + Market Value of Equity / Total Assets)

SIZE (Size): ln (Sales)

AT (Asset Tangibility): Fixed Tangible Assets / Total Assets

4.5 Empirical Results of the Research

The present chapter shows the characteristics of research sample and measures concepts of the research. Researcher had used descriptive statistics to explore the features of explanatory variables, as well the relationship between each variables in three models. Moreover, three models are showing relationship using regression analysis to explore the different relationships between diversification (index) strategy, the capital structure, systematic risk and corporate performance of listed companies in Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) related to Indian market.

4.5.1 Characteristics of Research Samples

In the present research, research samples included 44 listed companies in BSE and NSE. In these 44 samples, there were 09 companies in manufacturing sector; 01 company in construction sector; 01 company in industry automation sector; 01 company in refractories/intermediates; 01 company in automobile sector; 01 company in cement/agri-business sector; 01 company in ceramic tiles sector; 01 company in ceramics/granite sector; 02 companies in chemicals and fertilizers sector; 01 company in construction sector; 01 company in consumer electronics; 01 company in edible oils and solvent extraction sector; 01company in electrometallurgical products sector; 01 company in floriculture business sector; 01 company in food sector; 01 company in media sector ; 01 company in pharmaceuticals sector; 02 companies in power generation and supply sector; 02 companies in printing, stationery and packaging sector; 01 company in real estates and shipping sector; 01 company in refrigeration and air-conditioning sector; 01 company in shipping and automation sector; 03 companies in steel sector; 02 companies in tea and coffee sector; 01 company in technology and IP sector; 01 company in telecom sector; 04 companies in textile sector.

4.6 Descriptive Statistics

Table - III: Summary Statistics of the Explanatory Variables

Variable	Mean	Median	Max	Min	Std. Dev.	Skewn-ess	Kurtosis	Jarque-Bera	Probability
TDTA	0.343219	0.347265	0.973287	0.000000	0.253662	0.241994	2.209136	1.576134	0.454723
TDTE	1.633333	0.821667	13.30000	0.000000	2.251705	3.339218	17.42332	463.1616	0.000000
LTDTA	0.123854	0.069056	0.546465	0.000000	0.151209	1.321684	3.704366	13.71979	0.001049
STDTA	0.110261	0.082050	0.677634	0.000000	0.136562	2.300080	9.241360	110.2128	0.000000
ROA	0.038918	0.031306	0.250701	-0.104371	0.054786	1.204407	7.220634	43.29626	0.000000
ROE	6.349550	4.269676	27.73751	-17.87324	8.678127	0.469993	3.982321	3.388965	0.183694
PROF	0.126409	0.113080	0.326047	-0.002955	0.068861	1.134508	4.181954	12.00000	0.002479
GROW	0.707698	0.932807	0.998976	0.000000	0.417700	-1.089168	2.266936	9.684633	0.007889
SIZ	3.519169	3.506115	4.903039	1.311999	0.762009	-0.343705	3.265629	0.995667	0.607846
AT	0.343643	0.285030	0.985000	0.000000	0.296139	0.535894	2.076375	3.669990	0.159614
DI	0.48598	0.50993	0.94688	0.00188	0.22886	-0.36911	2.54805	1.37360	0.50318
BETA	0.007482	0.002754	0.050519	-0.013220	0.012273	1.780870	5.942212	39.12812	0.000000

Note: TDTA = total debt to total assets; TDTE = total debt to total equity; LTDTA = long-term debt to total assets; STDTA = short-term debt to total assets; ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; PROF = ebit + depreciation / total assets; GROWTH = total assets = book value of equity + market value of equity / total assets; SIZE = ln(sales); AT = fixed tangible assets / total assets; DI = 1-Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$; Beta (Systematic Risk) = Cov (R_i, R_m)/Var (R_m)

The Table III above reported summary statistics for the variables used in the study. The total debt to total assets (TDTA) for the sample as a whole is 34.32%, minimum is 0.0%, maximum is 97.32% and standard deviation of TDTA is 25.36%. This ratio was lower than the average TDTA ratio of East Asia companies (54%) and nearly equaled to the average TDTA ratio of Latin America companies (45%) Dilip Ratha, et al, (2003). The average TDTA ratio of few international companies is slightly higher than other few companies in Indian Stock Exchange – BSE and NSE. On comparing it to the international counterparts as done in research work by Zingales and Rajan (1995) it can be seen that capital structure ratio measured by TDTA is 34% as compared to different countries like France (26%), Germany (20%), Italy (28%) and United Kingdom (21%) and Unites States (31%).

The average value of ratio total debt to total equity (TDTE) is about 163.33%, minimum is 0.0%, maximum is 1330.00% and standard deviation of TDTE is 225.17%. On comparison to the international data given in the Zingales and Rajan (1995), other companies have a lower TDTA ratio as compared to companies of G7 nation TDTE i.e., 163% versus France (220%), Germany (257%), Japan (201%) and United States (194%).

The average long-term debt to total assets (LTDTA) is 12.38%, minimum is 0.00%, maximum is 54.64% and standard deviation is 15.12%. This ratio was higher than the average LTDTA ratio of International companies. The average short-term debt to total assets (STDTA) is about 11.02%, minimum is 0.00%, maximum is 67.76% and standard deviation of STDTA is 13.65%. The average STDTA of other companies was lower than the average STDTA ratio of international companies.

Table IV: Comparison of Capital Structure Ratios of G7 countries

	LTDTA	LTDTA (Calculated)	STDTA	STDTA (Calculated)
Canada	37.2	12.38	23	11.02
France	25		43	
Germany	42		30	
Italy	24		43	
Japan	25		42	
United Kingdom	18		40	
United States	33		33	

Source: Global Vantage Data base, Zingales and Rajan (1995)

If we compare the same ratio with that of G7 countries data shown in Table IV referred by Zingales and Rajan (1995), LTDTA ratio of other companies LTDTA was relatively low 12.38% versus Canada (37.2%), France (25%), Germany (42%), Italy (24%), Japan (25%), United Kingdom (18%) and United States (33%). In term of STDTA (11.02%), the STDTA of international companies was non-similar and higher than countries like Canada (23%), France (43%), Germany (30%), Italy (43%), Japan (42%), United Kingdom (40%) and United States (33%).

From the descriptive data of leverage ratios it can be concluded that diversified companies in Indian Stock Exchange rely on short-term debt than long-term debt as the key source of fund for their business operations. Since, stock markets, bond markets and mutual funds markets were undeveloped; commercial bank systems played a necessary and important role in providing lending to these corporate.

The average of ROA is 3.89, minimum is -0.10, maximum is 0.25 and standard deviation is 0.05. This market performance measure is lower than the average ROA of Jordanian

companies on Amman Stock Exchange according to Zeitun and Tian (2007). Similarly, the average of ROE is 6.34, minimum is -17.87, maximum is 27.73 and standard deviation is 8.67 and the market performance measure was higher than the average of ROE of Jordanian companies listed in Amman Stock Exchange.

Table - V: Correlation Matrix of the Explanatory Variables for MODEL -1

	PROF	AT	GROW	SIZ	DI
PROF	1				
AT	0.105339	1			
GROW	0.048190	0.264776	1		
SIZ	-0.032907	0.118719	0.283645	1	
DI	0.035860	-0.231837	0.069300	0.434351	1

Note: PROF = ebit + depreciation / total assets; GROWTH = total assets – book value of equity + market value of equity / total assets; SIZE = ln(sales); AT = fixed tangible assets / total assets; DI = 1-Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$

The correlation matrix for the variables is indicated in Table –V in order to investigate the correlation between the explanatory variables for model 1. The results show that there was a positive relationship between growth and profitability, growth and asset tangibility, except size, which was negative, while size had a negative relationship with profitability and asset tangibility. This implied that companies with high growth opportunities had higher profitability ratio, but companies with smaller size in sales had higher profitability for the period 2008. It also implied that small corporates have high growth opportunity which was consistent with Myers (1977). This result was similar to the result of Zeitun and Tian (2007) research.

Table - VI: Correlation Matrix of the Explanatory Variables for MODEL -2

	PROF	GROW	SIZ	DI
PROF	1			
GROW	0.048190	1		
SIZ	-0.032907	0.283645	1	
DI	0.03586	0.069300	0.434351	1

Note: PROF = Ebit + depreciation / total assets; GROWTH = total assets – book value of equity + market value of equity / total assets; SIZE = ln(sales); DI = 1-Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$. Beta (Systematic Risk) = Cov (R_i, R_m)/Var (R_m)

The correlation matrix for the variables is outlined in Table – VI in order to examine the correlation between the explanatory variables for model 2. Corporate size has a strong and positive relationship with corporate growth i.e. 0.434351 and market risk i.e. 0.114058. It clearly indicates that as the corporate diversifies its size increases which increase its risk bearing capacity. This is opposite to the co-insurance effect which suggests that corporates can reduce risk by diversifying their activity and, in turn, the reduced risk can increase the debt capacity of the corporate. It can also be inferred from the table that corporate size and corporate growth have a very strong and a positive correlation with each other i.e. 0.283645. Corporate growth and profitability also share a positive relationship, (table value 0.048190).

These facts, clearly shows that as the corporate diversifies its risk increases along with the corporate size. This helps the corporate to increase its profitability and increase corporate growth sustainably.

Table - VII: Correlation Matrix of the Explanatory Variables for MODEL -3

	TDTA	TDTE	LTDTA	STDTA	GROW	SIZ	DI
TDTA	1						
TDTE	0.404417	1					
LTDTA	0.601115	0.242646	1				
STDTA	0.643910	-0.011491	0.136829	1			
GROW	0.019039	-0.086554	0.161482	-0.134348	1		
SIZ	0.036245	-0.108538	0.120342	-0.038451	0.283645	1	
DI	-0.169796	0.199176	-0.128000	-0.359896	0.069300	0.434351	1

Note: TDTA = total debt to total assets; TDTE = total debt to total equity; LTDTA = long-term debt to total assets; STDTA = short-term debt to total assets; GROWTH = total assets – book value of equity + market value of equity / total assets; SIZE = ln(sales); TA = fixed tangible assets / total assets; DI = 1-Herfindahl Index, HI =$\sum_{i=1}^{N} S_i^2$

The correlation matrix for the variables is outlined in Table – VII in order to examine the correlation between the explanatory variables for model 3. The results showed that there was a positive relationship between growth and TDTA, growth and LTDTA, while TDTE and STDTA has a negative relationship with growth.

Corporate size has a positive relationship with all leverage ratios. Corporate size is seen to have a positive relation with TDTA and LTDTA whereas a negative relation was observed with TDTE and STDTA. This shows that large multinational companies like to have long term debt for their companies in order to increase their profitability through financial gearing. Diversification is expected to have a positive correlation with size declaring that an increase in diversity of the company, the firm size increases. Diversification is also seen to have a positive relationship with firm growth.

4.7 Regression Analysis

4.7.1 Model 1: The Leverage Model

Table-VIII: Estimate Results for Model 1

	TDTA	TDTE	LTDTA	STDTA
Constant	0.296854	3.748588	0.09256	0.096013
PROF	-0.618205	-10.30990	-0.637925	0.124036
t-Statistics	-1.334290	-2.194516	-2.018739	0.482609
Prob.	0.1901	0.0344	0.0506	0.6321
GROWTH	-0.088646	-0.472797	0.023393	-0.090207
t-Statistics	-1.091721	-0.574239	0.422397	-2.002721
Prob.	0.2818	0.5692	0.6751	0.0524
SIZE	-0.002545	-0.911402	0.016906	0.018715
t-Statistics	-0.052023	-1.837410	0.506701	0.689680
Prob.	0.9588	0.0740	0.6153	0.4946
AT	0.566336	2.153454	0.177666	0.223055
t-Statistics	4.831195	1.811685	2.222174	3.430236
Prob.	0.0000	0.0779	0.0323	0.0015
DI	-0.003261	-4.094728	0.051796	0.164830
t-Statistics	-0.020128	-2.492420	0.468722	1.833990
Prob.	0.9840	0.0172	0.6419	0.0745
No. Observations	**44**	**44**	**44**	**44**
R-squared	0.412896	0.233926	0.231421	0.376693
Adjusted R - squared	0.335645	0.133126	0.130293	0.294679
S.E. of regression	0.206755	2.096473	0.141014	0.114690
Sum squared residual	1.624408	167.0176	0.755631	0.499843
Log likelihood	10.14571	-91.77931	26.98333	3607503
F-statistic	5.344890	2.320708	2.288384	4.593026
Prob (F-statistic)	0.000814	0.061984	0.065097	0.002248
Mean dependent var	0.343219	1.633333	0.123854	0.110261
Akaike info criterion	-0.188442	4.444514	-0.953788	-1.367047
Schwarz criterion	0.054857	4.687813	-0.710489	-1.123748
Hannan-Quinn criterion	-0.098215	4.534741	-0.863561	-1.276820
Durbin-Watson stat	1.805992	2.216316	2.505560	2.056888

***** p value < 0.05 significance level

Note: TDTA = total debt to total assets; TDTE = total debt to total equity; LTDTA = long-term debt to total assets; STDTA = short-term debt to total assets; PROF = ebit + depreciation / total assets; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); TA = fixed tangible assets / total assets; DI = 1-Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$

According to Table–VIII, the positive square root of R^2, namely R, is the coefficient of multiple correlations between all independent variables with the dependent variable. Furthermore,

for independent (exogenous) variable in which arbitrary external conditions and in achieving a more realistic model behavior, then R^2 will be reduced to the coefficient of simple determination, namely r^2, and r is a bivariate (simple) coefficient of correlation with $-1 \leq r \leq +1$. The adjusted R-squared value which is never larger than R^2, can decrease as independent variables are added and, for poorly fitting models, it may be negative. However, t-statistic will be used to test the adjusted effect of an independent variable on the corresponding dependent (endogenous) variable. Note that the t-statistic presented in the output can also be used to test the one-sided hypothesis.

Finally, the log likelihood (LL) function is maximized with respect to other variable used in OLS regression. Hence, the GLS estimate is also the maximum likelihood estimate where, STDTA, LTDTA and TDTA are positive and TDTE is negative. The Akaike Information Criterion (AIC) is used in model selection for non nested alternatives, with smaller values of AIC preferred. The Schwarz Criterion (SC) is an alternative to the AIC and imposes a larger penalty for an additional coefficient. Two models are considered as non nested models if and only if the set of independent variables of the first model is not the subset or upper set of the other model. The Durbin-Watson (DW) statistic = 2.51 in case of LTDTA, which indicates that this model is better than the other variables. The Hannan-Quinn Criterion (HQC) is preferred in case of TDTE out of TDTA, LTDTA and STDTA in a statistical sense, under the assumption that they are non-nested models, since they have the same independent variable.

Hypothesis liked with Empirical Model

H1: There is no significant difference in diversification index which is expected to have a strong effect on capital structure.

From the regression results in Table–VIII, the coefficient of diversification index variable was negatively and positively significantly related to TDTA, TDTE and LTDTA, STDTA respectively. The types of assets by a corporate helps to control their financial decisions, however it

is promising to set up a relationship between capital structure and the diversification strategy of a corporate through dealings. Results also show that the financial leverage of multinational corporate decreases with their diversification level. Besides, international companies like MNCs with a top level of international and product diversification countenance inferior stages of default risk. Corporate following both types of diversification have upper level of profitability and productivity than the multinational companies pursuing a single diversification strategy.

Thus, it is concluded that the two types of diversification complement one another is generating debt utility, although individually they may be negatively related to corporate leverage. Therefore, based on the statistical result and inference, Hypothesis–1 is accepted where the diversification index has a strong effect on capital structure.

Hypothesis–2: There is no significant difference in corporate profitability, which has a strong correlation with corporate capital structure.

Four capital structure variables were used, TDTA, TDTE, LTDTA and STDTA. From the regression results in Table–VIII, the coefficient of profitability variable was negatively related to TDTA, TDTE and LTDTA and significantly related to STDTA. This result was contrary to the predictions of trade-off theory but consistent with the pecking order theory. According to this theory, companies prioritized their sources of financing (from internal financing to equity) according to the law of least effort or of least resistance, preferring to raise equity as a financing means of last resort. Hence, internal funds were used first and when that was depleted, debt was preferred and when it was not sensible to issue any more debt, equity was issued. Jensen (1986) predicted that if the market of corporate control was effective, the relationship between profitability and leverage was positive. If it was ineffective, however, mangers of profitable firms prefer to avoid the disciplinary role or debt, which would lead to a negative correlation between profitability and debt. Finally, the result indicated that corporate control of multinational firms was ineffective and the profitability was negatively correlated with leverage. If in the short run, dividends and

investments were fixed and if debt financing was the dominant mode of external financing, then changed in profitability would be negatively correlated with changes in leverage. Therefore, based on the statistical result and inference, rejection of Hypothesis–2 is valid as the firm profitability has a positive correlation with firm capital structure.

Hypothesis–3: There is no significant difference in growth opportunities which decreases corporate leverage.

Hypothesis–3 predicts that growth opportunities decrease firm leverage. From the regression results in Table–VIII, the coefficient of growth opportunities was negatively and insignificantly related to TDTA, TDTE and STDTA. However, growth opportunities was positively and significantly correlation with LTDTA, while the coefficient of growth opportunities was found to be positively related to LTDTA, but statistically insignificant. These findings were contradictory with the research done by Myers (1977) and predicted that International firms with expected growth opportunities would maintain low short-term debt levels, but the growth opportunities also put pressure on retained earnings and pushed multinational firms into borrowing long-term debt. According to the result above, Hypothesis–3 is accepted that growth opportunities decrease corporate leverage.

H4: There is a significant difference in corporate size which is expected to have a strong effect on capital structure.

From *hypothesis 4*, the corporate size is expected to have a strong effect on a capital structure. From the regression results in Table VIII, corporate size was found to have a positive and significant effect on the leverage measures LTDTA and STDTA, but was not significantly related to TDTA and TDTE leverage measures. An explanation for the positive effect of size on leverage was provided by Rajan and Zingales (1995) that larger corporate were more diversified and had a lower probability of being in financial distress or safeguard against the expected costs of bankruptcy.

Lower expected bankruptcy costs enabled them to take on more leverage. Size might be a proxy for the (inverse) probability of default. If so, it should not be strongly positively related with leverage in countries, where costs of financial distress were low. The results indicated that the cost of financial distress of these companies were low as compared to companies with higher sizes of sales would use more debt to finance their operations. Therefore, based on the result, hypothesis 4 is accepted: the corporate size is expected to have a strong effect on capital structure.

H5: There is no significant difference in asset tangibility which has a strong correlation with corporate capital structure.

Hypothesis–5 predicted that asset tangibility is expected to be positively related to corporate leverage. From the regression results in Table–VIII, the coefficient of assets tangibility was positive and significantly related to variables. This result showed that if corporate tangible assets were large, the ratio of short-term debt to total assets would be lower. However, the asset tangibility had positive and significant impact on all variables – TDTA, TDTE, LTDTA and STDTA. This findings was consistent with Rajan and Zingales (1995), Margaritis and Psillaki (2007). They argued that if a large fraction of a firm's assets are tangible, then assets should serve as collateral, diminishing the risk of the lender suffering the agency costs of debt (like risk shifting). They should also retain more value in liquidation. Therefore, the greater the proportion of tangible assets on the balance sheet (fixed assets divided by total assets), the more willing should lenders be to supply loans, and leverage should be higher. So, the result of regression model showed that multinational companies had high ratio of fixed assets to total assets would use more long-term debt as a main source of financing. Therefore, based on the result, Hypothesis–5 is accepted: asset tangibility is expected to be positively related to corporate leverage.

4.7.2 Model 2: Market Risk (Beta) Model

Table-IX: Estimate Results for Model 2

	Beta
Constant	-0.000582
PROF	0.006002
t-Statistics	0.217857
Prob.	0.8287
GROWTH	0.002483
t-Statistics	0.524223
Prob.	0.6031
SIZE	-0.000372
t-Statistics	-0.129397
Prob.	0.8977
DI	0.014113
t-Statistics	1.534064
Prob.	0.1331
No. Observations	**44**
R-squared	0.075718
Adjusted R-squared	-0.019080
S.E. of regression	0.012390
Sum squared residual	0.005987
Log likelihood	133.4202
F-statistic	0.798727
Prob (F-statistic)	0.533368
Mean dependent var	0.007482
S.D. dependent var	0.012273
Akaike info criterion	-5.837282
Schwarz criterion	-5.634533
Hannan-Quinn criterion	-5.762093
Durbin-Watson stat	1.816341

***** p value < 0.05 significance level

Note: ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); DI =1- Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$; Beta (Systematic Risk) = Cov (R_i, R_m)/Var (R_m)

H6: There is no significant difference in diversification index which is expected to have no effect on systematic risk.

Here, Table–IX depicts the relationship between systematic risk beta and other variables. This clearly states that as the corporate diversifies i.e. the corporate following the product

diversification strategy tends to increase their systematic risk while increasing their profits marginally. The effects on adjusted beta of the diversification strategy of conglomerate corporate are partially negated by the greater risk inherent in their use of increased debt. This leads to a conclusion that there exist a positive relationship between diversification index and systematic risk, thus accepting hypothesis–6 that there is a positive relationship between systematic risk and diversification index.

H7: There is no significant difference in corporate profitability which is expected to have strong effect on systematic risk.

Similarly for *hypothesis 7 (H7)*, Table IX, which describes the relationship between systematic risk of a company measured by beta, and profitability under different measures of capital structure. As the risk of the corporate increases the profitability is expected to rise. The regression value as seen in the table is 0.006002. Thus it can be seen that profitability bears a positive but not a very strong relationship with systematic risk. Thus it can be concluded that on the biases of the table value observed the above hypothesis is accepted.

H8: There is no significant difference in the growth opportunities which decreases corporate systematic risk.

The Table–IX describes the relationship between systematic risk beta and corporate growth in different measures of capital structure. There is a very week or negligible relationship between systematic risk of the firm measured by beta and growth opportunities of corporate. An important thing to be observed here is that the values of the table are positive, which means that there is a positive relationship between systematic risk and growth of a corporate, i.e. on increase in systematic risk the growth opportunities of the firm increases. Thus, rejecting hypothesis–8 that the growth opportunity decreases with corporate systematic risk.

H9: There is no significant difference in the corporate size which is expected to have a week effect on corporate systematic risk.

For *hypothesis 9 (H_9)*, the Tables IX mentioned above depicts the relationship between systematic risk beta and corporate size. The negative i.e. -0.000372 , but statistically insignificant relationship between size and systematic risk indicates that as the size of the corporate increases the systematic risk of the corporate keep on reducing because the risk bearing capacity of the corporate increases. Thus it can be concluded that size of the corporate has no significant relationship with the systematic risk, thus accepting the hypothesis.

4.7.3 Model 3: Corporate Performance Model

Table-X: Estimate Results for Model 3 using TDTA

	ROA	ROE
Constant	0.035016	-8.230700
TDTA	0.022209	0.059071
t-Statistics	0.638459	0.011543
Prob.	0.5269	0.9908
GROWTH	0.004896	4.719147
t-Statistics	0.226816	1.486177
Prob.	0.8218	0.1453
SIZE	0.002434	3.030139
t-Statistics	0.184415	1.560504
Prob.	0.8546	0.1267
DI	-0.032410	1.145462
t-Statistics	-0.756234	0.181679
Prob.	0.4541	0.8568
No. Observations	**44**	**44**
R-squared	0.032605	0.165552
Adjusted R-squared	-0.066615	0.079968
S.E. of regression	0.056581	8.323913
Sum squared residual	0.124856	2702.213
Log likelihood	66.59199	-153.0213
F-statistic	0.328609	1.934373
Prob (F-statistic)	0.857050	0.124007
Mean dependent var	0.038918	6.349550
S.D. dependent var	0.054786	8.678127
Akaike info criterion	-2.799636	7.182787
Schwarz criterion	-2.596887	7.385535

Hannan-Quinn criterion	-2.724447	7.257976
Durbin-Watson stat	1.895151	1.878327

***** p value < 0.05 significance level

Note: ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; TDTA = total debt to total assets; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); DI =1- Herfindahl Index, HI = $\sum_{i=1}^{N} \mathcal{S}_i^2$

Table-XI: Estimate Results for Model 3 using TDTE

	ROA	ROE
Constant	0.043773	-7.118281
TDTE	-0.000705	-0.402337
t-Statistics	-0.174830	-0.685560
Prob.	0.8621	0.4970
GROWTH	0.004680	4.625705
t-Statistics	0.215568	1.464149
Prob.	0.8304	0.1512
SIZE	0.002973	2.762996
t-Statistics	0.221148	1.412407
Prob.	0.8261	0.1658
DI	-0.035959	2.320931
t-Statistics	-0.821051	0.364127
Prob.	0.4166	0.7177
No. Observations	**44**	**44**
R-squared	0.023259	0.175486
Adjusted R-squared	-0.076920	0.090920
S.E. of regression	0.056854	8.274220
Sum squared residual	0.126062	2670.046
Log likelihood	66.38048	-152.7578
F-statistic	0.232174	2.075142
Prob (F-statistic)	0.918606	0.102679
Mean dependent var	0.038918	6.349550
S.D. dependent var	0.054786	8.678127
Akaike info criterion	-2.790022	7.170811
Schwarz criterion	-2.587273	7.373560
Hannan-Quinn criterion	-2.714833	7.246000
Durbin-Watson stat	1.892159	1.855918

***** p value < 0.05 significance level

Note: ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; TDTE = total debt to total equity; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); DI =1- Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$

Table-XII: Estimate Results for Model 3 using LTDTA

	ROA	ROE
Constant	0.044981	-7.997202
LTDTA	-0.086104	-5.931887
t-Statistics	-1.488905	-0.685863
Prob.	0.1446	0.4969
GROWTH	0.008769	4.989481
t-Statistics	0.412294	1.568574
Prob.	0.6824	0.1248
SIZE	0.006478	3.241748
t-Statistics	0.499315	1.670765
Prob.	0.6204	0.1028
DI	0.050209	-0.292472
t-Statistics	1.200802	-0.046771
Prob.	0.2371	0.9629
No. Observations	**44**	**44**
R-squared	0.075068	0.175494
Adjusted R-squared	-0.019796	0.090930
S.E. of regression	0.055325	8.274176
Sum squared residual	0.119375	2670.018
Log likelihood	67.57952	-152.7576
F-statistic	0.791319	2.075267
Prob (F-statistic)	0.537959	0.102662
Mean dependent var	0.038918	6.349550
S.D. dependent var	0.054786	8.678127
Akaike info criterion	-2.844523	7.170800
Schwarz criterion	-2.641775	7.373549
Hannan-Quinn criterion	-2.769334	7.245990
Durbin-Watson stat	1.921164	1.842297

***** p value < 0.05 significance level

Note: ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; LTDTA = long-term debt to total assets; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); DI = 1-Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$

Table-XIII: Estimate Results for Model 3 using STDTA

	ROA	ROE
Constant	0.032153	-6.398553
STDTA	0.064745	-12.10529
t-Statistics	0.939158	-1.208468
Prob.	0.3534	0.2341
GROWTH	0.008223	4.087123
t-Statistics	0.377969	1.292962
Prob.	0.7075	0.2036
SIZE	0.001181	3.456244
t-Statistics	0.089137	1.795749
Prob.	0.9294	0.0803
DI	-0.021294	-2.001551
t-Statistics	-0.469610	-0.303795
Prob.	0.6412	0.7629
No. Observations	**44**	**44**
R-squared	0.04112	0.195668
Adjusted R-squared	-0.053928	0.113173
S.E. of regression	0.056244	8.172323
Sum squared residual	0.123371	2604.688
Log likelihood	66.85525	-152.2126
F-statistic	0.449935	2.371865
Prob (F-statistic)	0.771782	0.068965
Mean dependent var	0.038918	6.349550
S.D. dependent var	0.054786	8.678127
Akaike info criterion	-2.811602	7.146028
Schwarz criterion	-2.608853	7.348777
Hannan-Quinn criterion	-2.736413	7.221217
Durbin-Watson stat	1.832902	1.779733

***** p value < 0.05 significance level

Note: ROA = profit after tax / total assets; ROE = profit after tax / no. of shares outstanding; STDTA = short-term debt to total assets; GROWTH = total assets – book value of equity + mark value of equity / total assets; SIZE = ln(sales); DI =1- Herfindahl Index, HI = $\sum_{i=1}^{N} S_i^2$

H10: There is no significant difference in diversification index which is expected to have a strong effect on corporate performance.

This hypothesis predicted that diversification index which has strong effect on corporate performance. From the combined results in Table– XI to XIII, the coefficient of TDTE; LTDTA and STDTA were significantly and negatively related to corporate performance measure i.e. ROE but

have a strong and positive relationship with ROA. This result showed that diversification index has positive relation of corporate performance due to integrated opportunities for import intensive business groups with upcoming growth policies. Internationally, it is also largely observed in the empirical literatures, that corporate with larger base of international exposure have better performance than the ones with lesser exposure. It is often pointed out that these markets suffer from a scarcity of well-trained manpower. However, fact remains constant in India a country which has one of the largest pools of the skilled and unemployed manpower. Hence, it is clear that it is better to look at the performance of the corporate as a whole rather than look at affiliate-level performance for small business groups, which might reveal distorted results. Therefore, Hypothesis–10 is accepted: diversification index which has strong effect on corporate performance.

H11: There is no significant difference in capital structure which effect corporate performance.

Hypothesis 12 predicted that a corporate capital structure which effect corporate performance. From the regression results in Table– XI to XIII, as expected the coefficient of TDTE; LTDTA and STDTA were significantly and negatively related to the performance measures like ROA and ROE; ROA and ROE; ROE respectively . For example, the LDTA was significantly and negatively related to ROA and ROE. This result showed that higher long-term debt lead to lower ROA and ROE.

Moreover, it might present support for the proposition that due to outfit divergence, companies over-leveraged themselves, thus affecting their performance negatively. Here, present study results were consistent with the findings of other previous studies conducted by Moyer and Krishnan (1997), Zeitun and Tian (2007). The negative and significant coefficient of LTDTA did not support Ravids's and Brick (1985) disagreement that long-term debt increased a corporate value, which could be due to the low ratio of long-term debt in the capital structure of International companies. According to the results, Hypothesis 11 is accepted wherein a corporate capital structure; which effect its corporate performance.

H12: There is no significant difference in the growth opportunities which increases corporate performance.

From *hypothesis 12*, growth opportunities increase corporate performance. From the regression results from Table– XI to XIII, growth was found to have a positive and significant effect on the corporate performance measure ROA and ROE. The high growth rates were associated with the lower cost of capital and high corporate value, ROA and ROE. This finding was not consistent with Myers (1977), but supports the pecking order theory that high growth corporate had a greater need for funds and therefore could be expected to borrow more. According to the results, hypothesis 12 is accepted that growth opportunities which increases corporate performance.

H13: There is no significant difference in corporate size which is expected to have a strong effect on corporate performance.

According to *hypothesis 13*, predicted that a corporate size is expected to have a strong effect on a corporate performance. From the regression results from Table– XI to XIII, the coefficient of corporate size was significantly and positively related with ROA and ROE for corporate performance model using TDTA, TDTE, LTDTA and STDTA. The significance of corporate size indicated that large corporate had larger market value compared to smaller corporate. This result was consistent with previous findings of Zeitun and Tian (2007). However, the coefficient of corporate size was significantly and positively related with ROA and ROE for model corporate performance using all variables – TDTA, TDTE, LDTA and STDTA. The significant effect of corporate size on corporate market value was consistent with previous studies of many researchers. Based on the regression results, Hypothesis 13 is accepted, where corporate size is expected to have a strong effect on a corporate performance.

From the result of regression analysis it can be summarized that the financial leverage of multinational corporate increase with the increase in their diversification level. Comparing this to the result of some of the important studies it can be said that corporate following both types of diversification have upper level of profitability and productivity than the international companies pursuing a single diversification strategy. On the other hand this study results into a positive relationship of corporate profitability with corporate leverage. Similarly, the coefficient of growth opportunities was negatively and insignificantly related to TDTA, TDTE and STDTA. However, growth opportunities was positively and insignificantly correlation with LTDTA.

The study also discusses the impact of diversification strategy on systematic risk beta. Regression results confirm that the relationship between capital structure measured by TDTA, beta and diversification index value is 0.014558 which clearly states that as the corporate diversifies i.e. the corporate following the product diversification strategy tends to increase their systematic risk while increasing their profits marginally. But as far as other ratios like TDTA, TDTE and STDTA are concern more or less it can be deduced from the observations that there is no significant relationship between systematic risk beta and capital structure. The table values, as observed in case of corporate profitability clearly reflect a significant value indicating that with the increase in the risk of the corporate increases the profitability is expected to rise. On the similar lines, a positive relationship is observed between systematic risk and growth of a corporate, i.e. on increase in systematic risk the growth opportunities of the firm increases. Where as Corporate size has no significant relationship with the systematic risk, Beta.

Again the regression result showed that diversification index has positive relation with corporate performance due to integrated opportunities for import intensive business groups with upcoming growth policies. To summarize, the firm profitability was a significant determinant of firm capital structure. The regression results also showed that growth opportunities had significant impact only on International firm total debt to total equity. Further, hypothesis results can be seen as given below:

Hypotheses Results

Hypothesis	Variables Relationship	Hypothesis Status
H_1	+ve & strong	A
H_2	-ve	NA
H_3	-ve	A
H_4	+ve and strong	A
H_5	+ve	A
H_6	+ve	A
H_7	+ve	A
H_8	+ve and weak	NA
H_9	-ve and weak	A
H_{10}	+ve	A
H_{11}	-ve	A
H_{12}	+ve	A
H_{13}	+ve	A

* A- Accepted
** NA- Non-accepted

The corporate capital structure was observed as a significant determinant of corporate performance. The corporate leverage is observed to have a positive and significant effect on corporate value ROA and ROE. Furthermore, corporate size also has a positive impact on corporate value. This finding was further support the argument that bankruptcy costs increased with size, as well as economies of scale in transactions costs associated with short-term debt that were available to smaller corporate.

The significance of corporate size indicated that large corporate had larger market value compared to smaller corporate. This result was consistent with previous findings of Zeitun and Tian (2007). However, the coefficient of corporate size was significantly and positively related with ROA and ROE for model corporate performance using all variables – TDTA, TDTE, LDTA and STDTA.

Chapter 5

Conclusion, Limitation and Recommendations

5.1 Introduction

In this study different companies have been incorporated, listed in both the stock exchanges i.e. BSE & NSE. Finally, the results are compared to the theoretical ground work as well as the past research studies in the same area of research.

5.1.1 Study Conclusion

Present chapter particularly deals with the discussion of the results of research. This further helps to present the main conclusions and recommendations based on the interpreted results outlined in previous chapters. This exhaustive and empirical study examines the "Impact of Diversification Strategy on Capital Structure, Systematic Risk and Corporate Performance in Indian context " combined with other variables such as growth, size, AT, profitability.

There is no single study formulated and discussed in India that investigates the impact of diversification strategy on capital structure, systematic risk and corporate performance. The study also tries to fill the gap in the field of research by investigating the combined relationship and effect of corporate performance on capital structure as well as effect of capital structure on corporate performance. By taking listed corporates from BSE as well as NSE stock exchanges, similar concept of investigation also testifies the effect of systematic risk. Nevertheless this study employs different measure of diversification strategy, systematic risk and capital structure. thus in case of measures of capital structure and corporate performance such as STDA, LTDA, STDTA, TDTE in order to investigate the effect of debt structure on corporate performance. Investigating the effect of diversification strategy on capital structure, systematic risk and corporate performance using market measures can be valuable as it provides an evidence whether the stock market is efficient or not.

Number of authors has suggested the utility and analysis of corporate diversification strategy in light of corporate capital structure, systematic risk and financial corporate performance. Following this line of research, the relationship between capital structure and corporate diversification strategy was studied for a sample of 44 Indian corporate during the period 2006-2011.

Using multiple linear regressions as a tool for analysis, it can be concluded that diversification strategy have a statistically strong and positive relationship with corporate leverage. Similarly corporate performance and increase in asset tangibility reflects a strong and positive relationship with corporate capital structure. Growth opportunities on the other hand have a weak relationship with leverage and it was also found that it tends to decrease firm leverage. Hence, it can be confirmed from the discussion that companies opting for product diversification strategies proved to be more profitable and hence also increase their tangible assets.

Systematic risk and diversification strategy also have a positive relationship but again share a statistically weak or negligible relationship with corporate growth. Although diversification reduces the corporate operating risk, the systematic risk is basically unchanged because the corporate increases its financial leverage to take advantage of larger tax deductions of interest expense. Since there is minimal effect of systematic risk due to diversification, the corporate cost of capital remains indifferent.

According to the analysis Systematic risk was theoretically expected to have a positive relationship with capital structure but was reported to have no relationship. Moreover a positive but statistically week relationship exists between systematic risk and other parameters like corporate profitability and corporate size. On the contrary corporate growth is found to have a negative relationship with systematic risk. Although diversification reduces the operating risk, the systematic risk is basically unchanged because the corporate increases its financial leverage to take advantage of larger tax deductions of interest expense. Since there is minimal effect of systematic risk due to diversification, the cost of capital remains indifferent. Similarly, beta is a very close proxy to capture the systematic risk of the corporate, but many researchers believe that there are many anomalies in

measuring the systematic risk of the corporate. Due to this researchers like Hansen (2013) feel that there are important conceptual challenges that go along with the use of explicit dynamic economic models for measuring confront risk and uncertainty.

The study found a significant relationship between capital structure and other two variables, corporate profitability and corporate size. This clearly reflects that by increasing the debt finance to a certain range there will be a positive impact on the profitability as well, as the assets of the company will also grow. This will directly impact the shareholder value and the stock price of that particular corporate.

Diversification strategy as well as leverage is found to have a positive relationship with corporate performance and that corporate capital structures have a significant impact on corporate value creation.

Corporate performance is seen to have a positive relation with both corporate growth and corporate size. This implies that diversified corporate improves there financial performance due to enhanced competitiveness and leads to greater corporate growth and increased corporate size. The results of the study could be further improved by using better performance ratios like Tobin's Q etc., which are popular and widely accepted measures of gauging corporate performance.

In the light of all the above justifications and limitations it can be concluded that the trend towards increasing degrees of corporate diversification could prove to be quite valuable to the strategists who are attempting to improve his corporate performance through effective management of the diversity, experienced in a multi business corporate. Moreover, future studies could employ different measures of product and geographical diversification, according to the degree of relatedness of product segments, to check the effect of said variables on capital structure decisions.

5.1.2 Achieving Competitive advantage through Diversification Strategy

A quantity of studies have hypothesized that diversification strategy may improve profitability and success, all the way through financial system or economies of extent and/or in the course of the anticipating of product space. The empirical evidence is, however found, very mixed

due to companies functioning in different micro as well as macro economies. Not only this, the conditions of demand of certain products and sectors as well as the type of operational as well as logistics followed by the companies in an economy also impacts the performance. Moreover most of the studies are measuring firm performance through accounting variables, which are not the sole parameters. There are several parameters of firm growth and development like use of latest technology, operational efficiency, customer satisfaction other than market share and increase in the share price of the firm, which have not been touched in the study.

In addition to the existing business framework i.e. the economic environment of the firm, there are several parameters which affect the phenomenon of diversification, represented in the outer triangle of competitive advantage model. Some of these are technology, firm responsiveness, use of Information technology capital intensity and above all social acceptability. These are general, technical as well as societal aspects other than the economic ones which may lead to the company's growth to a next level or vice versa. The second factor is Technology. It was found that use latest equipment, machinery can help the company to produce quality products even if the company is not expert or is starting a new line of business. So this will always affect the size of the firm, tangible assets, growth and at the end profitability of the firm. Similarly another component such as information technology also impacts the principle components in the similar way as concluded by the research of Banker et. al.(2011).

. Firm Responsiveness is yet another important parameter affecting the diversification Phenomena. This factor impacts the product diversification decision and other such decisions by the management of the firm. More significantly it refers to the seriousness paid to certain issues like extent of involvement of technology in terms of operations, IT as well as whether the firm should be capital intensive or not. And all these factors directly affect the performance of the company and significantly impact the profitability, Hitt et al. (1994).

The term Capital Intensity Jose et. al (1987) refers to the amount of fixed or real capital present with respect to other factors of production, especially labour and estimated by the capital/labour ratio. The use of tools and machinery makes labour more effective, thereby, rising capital intensity and enhances the productivity of labour. The last but the most important component affecting any business decision is social acceptability, in terms of both investors as well as common man.

5.2 Limitations of the study

Every study had certain limitations like non availability of data, choice of appropriate dependent variables and other such problems, this study also faced several problems. There are several data base available commercially which provide corporate data but in this study the data set was taken up from CMIE (Centre for Monitoring Indian Economy), prowess database is considered for the study is from the year 2006-2011.

5.2.1 Data Set

This data set comprised of those manufacturing companies which were listed both in NSE and BSE and diversified during the study period. Due to this the data set comprised of only 44 non financial firms. This is the biggest limitation of the study, as the sample size for the empirical studies should be larger. Another limitation is that collecting data for the product diversification strategy involves a certain degree of subjectivity due to the inconsistency in the way corporate report sales for business segments. Some other limitations of the study are discussed in the following sections.

5.2.2 Corporate performance and Tobin's q

Corporate financial performance is a very important parameter in gauging a corporate activity. But there are various angles by which the academician's, researchers and policy makers look into it. Increment in corporate assets used to be the most important parameter to assess corporate performance, the concept changed to share price maximization concept and other such parameters. There are several parameters of corporate growth and development like use of latest

technology, operational efficiency, customer satisfaction other than market share and increase in the share price of the corporate, which have not been touched in the study.

Based on the categorization of literature review, it can be seen that the involvement of research work in the same area for the duration has been constantly escalating all through the present time, especially from 2006 to 2012. The exposure of integration of DS, CS and FP across promising economies has attempted positive in recent years because the focus of researchers has also shifted towards emerging economies to get sustainable advantage As far as the prevalent trend, till date most of the research community accepts ROA, ROE, Tobin's Q and PE ratio to be the most reliable measures of corporate performance. After reviewing about 200 research papers on diversification, capital structure and corporate performance ROA, ROE and PE ratio are considered as the close measures of corporate performance. Tobin's Q is a very important variable which is taken up as an important variable in various studies

5.2.3 Systematic Risk

It is of course difficult, if not impossible, to measure a systemic risk, that is, at the same time practically relevant and completely justified by a general equilibrium model. In fact, the gap between theoretical models and the practical needs of regulators has been so wide that inappropriate measures such as institution-level Value-at-Risk (VaR) have persisted in assessing risks of the financial system as a whole. Many aspects of systemic risk are not unique to financial institutions or markets. The failure of a nonfinancial corporate, such as an automobile manufacturer, will affect the firm's suppliers and dealerships, as well as the local economies where manufacturing plants and other operations are located. By the same token, a default by an air-line company on its debt obligations might cause investors to shun the debt of other airline companies if investors believe that the default reflected an industry-wide problem, such as rising fuel prices. Still, over the past decade, some very large corporates have failed; including Enron, WorldCom, and several major airlines, yet none caused significant problems beyond its immediate share-holders, employees, suppliers, and customers.

The failure of a nonfinancial corporate would rarely threaten the solvency of a competitor, let alone significantly affect the economy more broadly. Instead, the failure of a large corporate could increase the market shares and profitability of the remaining corporate in an industry, as well as provide opportunities for smaller corporate to enter previously inaccessible markets.

5.2.4 Methods to compute Diversification Index

The present research used Herfindhal Index to calculate the extent of firm diversification. There are several other methods to calculate corporate diversification like Entropy Index, Utton's Index, concentric Index, Pelepu 2-digit and 3 digit DI & Montogomery 2 digit and 3 digit DI. The basis for using Herfindhal Index is that it its one of the most important index considered by the researchers who have worked in this domain. Not only this, researches in various parts of the world have used this methods for calculating diversification, as seen from the publishes papers by them in the top international journals of the area. Still, some reviewers of this work have suggested this method to be old/ archaic. This is a limitation of the study which leaves a scope of improvement in further endeavours in the line of study.

5.3 Implication to the industry

A number of studies have concluded that diversification strategy may improve profitability and success, all the way through financial system or economies of scope. This study was conducted with an intention to understand whether corporate product diversification helps in reducing the systematic risk of the firm or not. While doing so, if the corporate performance of the company is enhanced it would prove to be a win / win situation.

This study found a significant relationship between capital structure and other two variables, corporate profitability and corporate size. This clearly reflects that by increasing the debt finance to a certain range there will be a positive impact on the profitability as well as the assets of the company will grow. This will directly impact the shareholder value and the stock price of that

particular corporate. Corporate performance is seen to have a positive relation with both corporate growth and corporate size. This implies that diversified corporate improves there financial performance due to enhanced competitiveness and leads to greater corporate growth and increased corporate size.

Thus by following corporate diversification strategy corporate would be able to achieve competitive advantage and achieve the desired sustainable growth.

5.4 Future Work and Scope

Even though researchers have acknowledged some useful results, there are some important dimensions into which this study could be further extended. Future research could also obtain corporate descriptions in larger way. Use of important ratios reflecting the financial corporate performance like Tobin's Q, and proxy index like Entropy Index (EI), Uttons Index (UI) etc to measure diversification index could be used to draw more meaningful and comprehensive results. Due to elusive nature of research, there is difficulty in pursuing such lines of research specifically in its implementation. Most of the studies discussing the effect of diversification strategy on performance and other variables have concluded on confirmatory analysis. Very few studies have dealt with the implementation perspective. On this issue, this research area has received criticism globally. Therefore, the researchers suggest that if this weakness is addressed aptly, this research could be a breakthrough for Indian companies for achieving sustainable growth.

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- Manrai R, Rameshwar R. and Nangia V, (2014) 'Does diversification strategy influence sustainable growth of firms in emerging economies? – An Asian business viewpoint', accepted at National Seminar on Management Perspective to combat Recession, at SVIET, Ramnagar, Banur, Patiala (Punjab) India.
- Manrai R, Rameshwar R. and Nangia V, (2014) 'Can diversification strategy combat recession? - A study from Indian corporate', presented at National seminar at GLA University, Mathura (Uttar Pradesh) India.

Appendix A: Data

[Source: CMIE - Prowess and Balance Sheet]

	Sector	PROF (%)	ROE	ROA	PE	TDTA	TDTE	LTDTA	STDTA	GROW	SIZ	AT	DI	BETA
3M India Ltd.	Manufacturing	0.23891	0	0	31.2	0	0.00333	0	0	0	3.86387	0	0.783381	0
A B B Ltd.	Manufacturing	0.13341	0	0	79.6983	0	0	0	0	0.99147	4.74692	0	0.749472	0
Aditya Birla Nuvo Ltd.	Telecom	0.08905	26.0558	0.03109	39.75	0.38075	0.775	0.12267	0.12769	0.98656	4.63857	0.31851	0.809802	0.050519
Alok Industries Ltd.	Manufacturing	0.11399	6.43718	0.02693	6.72333	0.69793	3.34167	0.43187	0.06501	0.99898	4.46698	0.38892	0.676544	-0.00016
Ambalal Sarabhai Enterprises Ltd.	Pharmaceuticals	0.06906	0	-0.0155	-9.945	0.11737	0.55167	0.00014	0.01962	0	2.90721	0.18672	0.475337	0.002372
Apar Industries Ltd.	Power	0.0942	17.2821	0.03927	12.9533	0.09563	0.56333	0.0062	0.04729	0.98426	4.29693	0.09684	0.535402	0.011145
B A S F India Ltd.	leather mfg.	0.18056	21.7089	0.09686	8.595	0.01299	0.02167	0	0.00898	0.94942	4.10264	0.4544	0.650321	0.029034
Bengal Tea & Fabrics Ltd.	Textile	0.13936	5.13085	0.03152	42.37	0.47991	1.58	0.29942	0.14255	0.87605	3.12693	0.80401	0.290193	0.002904
Best & Crompton Engg. Ltd.	Manufacturing	0.08548	0	0	3.258	0.23065	0.41333	0.0099	0.03487	0	2.76553	0.05761	0.475859	0.000729
Blue Bird (India) Ltd.	Printing & Stationery	-0.003	-17.873	-0.1044	12.8367	0.68274	1.89167	0.0994	0.50982	0	3.38093	0.08668	0.529493	0.001334
Bombay Burmah Trdg. Corpn. Ltd.	Tea and cofee	0.10274	12.8729	0.03928	12.4867	0.63679	3.16667	0.54647	0.08803	0.91929	3.40517	0.24881	0.729222	0.034644
Clariant Chemicals (India) Ltd.	chemical manufacturing	0.20095	27.7375	0.1072	7.14833	0.0191	0.03667	0.00032	0.01053	0.92041	3.97689	0.46402	0.490865	0.038424
D C M Shriram Consolidated Ltd.	cement and the agri-businesses	0.11938	9.78883	0.04799	8.84	0.45789	1.72333	0.19025	0.15265	0.99449	4.50104	0.56156	0.824689	-0.00032
D C W Ltd.	chemical manufacturing	0.1081	1.70369	0.03559	70.04	0.32042	0.98	0.17557	0.02003	0.9927	3.96127	0.81093	0.631351	0.00117
Dalmia Bharat Enterprises Ltd.	Refractories / Intermediates	0.12699	0	0.1047	15.795	0.48198	13.3	0	9.9E-05	0	3.12892	0.00335	0.94688	0.028322
Decolight Ceramics Ltd.	ceramics/ granite	0.12086	2.64174	0.04117	13.9167	0.35445	0.86833	0.18166	0.15798	0	2.88766	0.45712	0.061888	0.013524
Euro Ceramics Ltd.	ceramic tiles	0.10888	5.19956	0.023	-18.708	0.63096	2.53	0.38678	0.172	0	3.34041	0.4997	0.298194	0.00861
Fertilisers & Chemicals, Travancore Ltd.	chemicals and fertilizers	0.10194	0.36994	0.01237	47.89	0.4661	3.30333	0.034	0.32464	0.99181	4.23086	0.985	0.291865	0.002845
Financial Technologies (India) Ltd.	Technology IP	0.25015	0	0	13.825	0	0.52167	0	0	0.99716	3.29191	0	0.55235	0.01657
Forbes & Co. Ltd.	Shipping and	0.04908	-3.5802	-0.0174	2.79333	0.30527	0.91	0.1293	0.07607	0.91326	3.491	0.30349	0.529003	0.004836

	automation													
Gem Spinners India Ltd.	Textile	0.05247	-0.4347	-0.0236	8.20667	0.54985	4.27333	0.16539	0.213	0.80187	2.95843	0.86956	0.469221	0.000408
Gillanders Arbuthnot & Co. Ltd.	Tea and cofee	0.11522	13.2654	0.0425	0.66	0.34008	0.96667	0.14904	0.11555	0.94068	3.63356	0.39135	0.719523	0.005639
Halonix Ltd.	Automobile	0.13718	4.8215	0.05692	7.852	0.40585	1.11833	0.01481	0.31028	0.9323	3.56376	0.69567	0.48454	0.004668
Hinduja Ventures Ltd.	Media	0.30942	0	0	6.34667	0.08088	0.12167	0.03983	0.03259	0.99464	2.12668	0	0.53729	-0.00066
Impex Ferro Tech Ltd.	Electrometallurgical products secto	0.07979	1.84257	0.02433	22.2883	0.37817	1.54	0.10785	0.16193	0.99203	3.50452	0.17113	0.441912	0.000554
Jaiprakash Associates Ltd.	Construction	0.10001	13.1626	0.04341	8.355	0.50582	2.08833	0.20079	0.03967	0.99766	4.78261	0.27952	0.579647	0.010692
K L R F Ltd.	Food	0.12771	3.71785	0.0142	76.6767	0.65457	3.26833	0.30428	0.22402	0.88911	3.15269	0.77448	0.596298	-0.00104
K S K Energy Ventures Ltd.	Power Generation And Supply	0.07958	2.42968	0.04647	11.234	0.28494	0.55667	0.06225	0.09517	0	2.6662	0.01356	0.36119	0
Kamdhenu Ispat Ltd.	Steels	0.11217	3.40554	0.05198	60.8383	0.20562	0.51833	0.08117	0.11795	0	3.50771	0.15851	0.190164	0.000219
Karuturi Global Ltd.	floriculture business	0.06547	4.8864	0.05921	-2.556	0.36688	0.76833	0.04131	0.0251	0.92765	2.52846	0.01007	0.18776	0.001892
Murli Industries Ltd.	Edible Oils & Solvent Extraction	0.1117	24.7149	0.02941	-1.2433	0.6724	3.93667	0	0.00015	0.94859	3.76367	0.48656	0.703606	0.010758
N K Industries Ltd.	Manufacturing	0.32605	8.19204	0.2507	6.73833	0.97329	0	0.05624	0.67763	0.70392	3.09192	0.82415	0.06789	0.004381
Nitco Ltd.	Construction	0.08008	9.1955	0.03545	10.3017	0.27359	0.58833	0.11902	0.12359	0.97878	3.72208	0.2666	0.00188	0.002131
Nitin Spinners Ltd.	spinning manufacturing	0.08553	0.0739	0.00537	22.5367	0.65892	2.90333	0.50127	0.15454	0.99405	3.3197	0.64198	0.01523	0.000391
Oricon Enterprises Ltd.	Real estates and shipping	0.0759	6.88885	0.03063	6.44333	0.15192	0.22833	0.07586	0.00414	0.93332	2.77876	0.13169	0.382709	0.026316
Orient Press Ltd.	printing and pkg	0.25098	18.1701	0.14536	-0.97	0.62574	0.39167	0.01909	0.12657	0.78426	3.09243	0.80532	0.47894	0.008076
R S W M Ltd.	Textiles	0.12805	11.992	0.01981	4.00667	0.69173	3.86333	0.38399	0.14944	0.99031	4.13333	0.74294	0.241034	0.008907
S N S Textiles Ltd.	Textiles	0.04009	0	0	10.624	0	4.61833	0	0	0.88328	1.312	0	0.2156	0.002663
Siemens Ltd.	Industry Automation	0.13297	0	0	11.73	0	0	0	0	0.99871	4.90304	0	0.710207	0.000854
Standard Industries Ltd.	chemicals	0.18688	3.20747	0.10532	41.325	0.01031	0.01667	0	0.00201	0.95699	2.28654	0.29054	0.410018	0.003057
Technocraft	Steels	0.11809	9.01665	0.0518	13.9025	0.17602	0.28833	0.03814	0.09594	0	3.55413	0.30313	0.684033	0.003918
V-Guard Industries	Cons Elec.	0.21827	13.3935	0.11725	16.0283	0.25929	0.64333	0.07969	0.17317	0	3.51896	0.20106	0.40536	0.000171
Visa Steel Ltd.	Steels	0.05557	1.63848	0.01166	21.56	0.42978	2.54	0.39074	0.02923	0.99509	3.90708	0.26604	0.612716	0.001952
Voltas Ltd.	RAC	0.14263	10.3243	0.09459	0	0.03503	0.14667	0.00484	0.02194	0.97959	4.52358	0.06875	0.554313	-0.01322