Diversification strategy was often desired by most Indian firms to procure industrial licenses and various governmental permissions. However, with the gradual liberalisations and opening up of the economy for global competition, the Indian firms are designing their growth and expansion plan based on their core business skills and available newer opportunities. Efforts are on at firm level to improve the competitiveness by upgrading technology, improving quality and adopting measures for reducing costs. The diversification decisions were now governed essentially by an organisation's core competencies and synergy with existing business. The trend is already on its way. At present, every day some news comes out from corporate boards on their new plans of diversification. What types of strategic benefits that firm diversifications are being realised is the focus of this study. Studies of this type naturally help the business executives to evaluate their strategic plans and policy makers to design appropriate policy initiatives for proper growth of Industry in India.

VII.1. WHY FIRMS DIVERSIFY?

The changing environmental conditions of business necessitates the business organisations to adopt themselves to the newer environment in order to survive and grow. The decision is concerned with the choice between the alternatives of
diversification versus growth of current business. Companies diversify to attain acceptable risk/return performance by utilising distinctive strengths or resources and maximize synergies available from sharing resources with other business units and to maintain acceptable cash flows from the strategic business units. The other reasons for diversification are reduction of competition, improvement of sales, capitalization of technological exploitation in production, development of products and to respond to the regulatory and tax policy measures of the government.

Prahalad and Gary's (1986) maiden study on core competencies holds that many organisations generally have a set of unique skills which lend them competitive advantage and they should align their business to those skills. Core competencies are, however, not to be confused with the line of business. Core competencies represent accumulated knowledge and skills within an organization which are peculiar and fundamental to it and cannot easily be replicated. These will provide sustainable competitive advantage to the organisation and should form the cornerstone of its long term strategy for growth and diversification. Focusing on core competencies would help an organisation to visualize its strategy and build upon select existing businesses, diverting few and diversifying into newer businesses that could capitalize on core competencies to gain competitive edge.

How far the diversification strategy adopted by Indian Industry is really profitable in the light of the above expectations? In addition to profits, how far they are able to achieve other strategic benefits contemplated for business expansion are the issues examined in the present study.
VII. 2. THE PROBLEM

To provide an empirical evidence on the performance of diversified Indian corporate enterprises an attempt is made in the present study. (a) to examine the patterns of diversification that the enterprises have been adopting and (b) evaluating the performance of these enterprises against the strategic motives behind such diversification strategy. Though the pattern of diversification is changing in the wake of current liberalisation measures, the present study has focused on evaluating the past performance of already well diversified companies against select accounting based and market based measures to validate the justification behind their expansion adopted by the top Indian corporate since mid 80’s and 90’s.

The performance of a diversified firm is generally measured against the motives behind such diversification plan. The three popular strategic motives which are widely considered for measurement are (i) profitability, (ii) growth, and (iii) risk reduction. George Paul (1986), Donald Le Craw (1984), Dubofsky and Varadarajan (1987), Betty and Hall (1982) and Montgomery (1979) have examined the performance of diversified firms in terms of profitability, growth, size and leverage measures.

VII.3. REVIEW OF LITERATURE

Studies conducted by Rumelt (1974), Wrigley (1970) helped in identifying measures for classification of firms as diversified, undiversified, related diversified and unrelated diversified. The performance of the diversified

Generally firms are classified based on their expansion strategy. Firms which expand into the fields related to their core businesses are categorized as related diversified. Others, which enter into newer fields are called as unrelated diversified. Jacquemine and Berry (1979), Robert J.M Grant (1986), Stephen Rhoades have measured the degree of diversification through Specialization Ratio(SR) and Related Ratio(RR) Specialisation Ratio is the ratio of firms sales in its major activity as a proportion of its total sales. Related Ratio is proportion of a firm’s total sales which are related to one another.

Jacquemine and Berry (1979) have constructed an ‘entropy’ measure of diversification which is nothing but the weighted average of a firm’s share in different product lines. Rumelt (1974), Wrigley (1970) have classified the firms as those pursuing single business when the Specialization Ratio is more than 95 per cent. Dominant Firm is one when its Specialization Ratio is more than 70 per cent but less than 95 per cent. Diversified business is one for which we also consider the relatedness classification. Related business is that which has a Specialization Ratio less than 70 per cent and a Relatedness Ratio is more than 70.
percent The unrelated business firms are those which record both the Relatedness Ratio and Specialization Ratio less than 70 per cent.

Rumelt (1974) has categorised the firms almost similar to Wrigley's (1970) categorization. But, he added few more new categories to the former classification viz., Dominant Constrained groups with specialization ratio ranging between 95 to 70 per cent and majority of other businesses are related to at least one another. Dominant linked category is that where Specialisation Ratio lies between 95 to 70 per cent, but majority of other businesses are related to at least one another. Next category is the Dominant Unrelated with Specialization Ratio ranging from 95 to 70 per cent and majority of other businesses are unrelated. In related constrained category the Specialization Ratio is less than 70 per cent and businesses are related to one another. Last category is Related linked category where is Specialisation Ratio is less than 70 per cent and Relatedness Ratio is more than 70 per cent and majority of businesses are related to at least one another.

The performance of diversified companies have been examined with the accounting based measures, while there is an agreement on various profitability measures in terms of ROA, ROI, and ROE. Similar agreement could be seen in case of growth measures. Some of the important studies in this group include Le Craw J. Donald (1984), Bettis and Hall (1982), Varadarajan and Ramanujam (1987) and Rhoades A. Stephensen (1972).
Few studies have evaluated the performance of a firm from the point of view of how investors look at it. Generally the equity stockholders expect that a diversified firm should generate superior equity returns with quicker growth in their intrinsic value. Michale and Shaked (1984) using stockholders’ returns found that an “unrelated diversification leads to improved performance over related diversification”, while using accounting Return On Equity, Donald (1985) found that conglomerates outperform the other strategy types.

Portfolio evaluation method was used to find out the performance related to the stock market by Jobson and Korkie (1981), Alexander and Francis (1986), Sharpe (1986), Treynor (1985) and Jensen’s (1988) Alpha studies carried out by Lecraw (1984), Jacquemie and Berry (1979) found positive association between firm profitability and diversification and the role of industry structure variables.

**VII.4. OBJECTIVES OF THE STUDY**

This study is primarily intended to examine the relative benefits enjoyed by adopting a diversification strategy by a corporate enterprise. Since the motives of diversification are naturally the profit maximization and risk reduction besides the expansion and growth in the operations of the firm, the study intended to evaluate the performance in all the above said dimensions in those companies which have adopted such diversification strategy. The present study is principally intended:
(i) to classify the sample units into Related Diversifiers (RD), Unrelated Diversifiers (URD) and Undiversifiers (UND) on the basis of methodology suggested by Wrigley (1970) and Rumelt (1974).

(ii) to evaluate the operating performance of select units in terms of value addition, capital output ratio, productivity trends and input utilisation pattern.

(iii) to examine the financial performance of classified units in terms of identification of determinants of investments and profitability.

(iv) to analyse the strategic gains in terms of growth, profitability and risk reduction in diversified units compared to the undiversified firms.

(v) to make out academic conclusions on firms adopting different diversification strategies in India

VII.5. SCOPE AND IMPORTANCE OF THE STUDY

Corporate diversification strategy is of recent origin in India. This subject is not well researched in India and the above referred studies are presenting only the classification of diversifiers into related and unrelated activities without focusing on their financial performance. Therefore, this study is a modest attempt on classifying the companies under different diversification strategies and examining overall trends in their operating and financial performance in order to identify the specific advantages if any, due to firm diversification in India

The studies of this type brings out the relative success of different strategies being followed by Indian corporate enterprises. Studies based on the corporate
data belonging to post-liberalisation period clearly disclose the pattern and movement of Indian industry and their success in the restructured industrial environment. Therefore, this study is expected to provide necessary insights to policy makers and corporate dealers. The scope of this study is limited to the performance of firm in two dimensions, namely accounting based and market based. While accounting based performance relates to the profitability, growth, size and risk, the market based performance is evaluated by taking different return measures suggested by Sharpe(1966), Treynor(1965) and Jensen(1968).

VII.6. METHODOLOGY AND SAMPLE

This study is primarily intended at examining the impact of different strategies of diversification on corporate financial performance across the related and unrelated diversifiers as well as those who have not adopted any diversification strategy at all. A random sample of companies are drawn from the Bombay Stock Exchange Official Directory, giving due consideration to the industry class, age of the company, familiarity of the scrip in the stock market and availability of data on various accounting based measures and market related variables for twenty six years. The sample is spread over different categories of industries like synthetic fibers, jute textiles, electric power, cement, mining, textiles, cotton spinning and weaving, sugar, engineering and chemical based industries. While 65 companies of the selected sample are belonging to the undiversified group, 37 are related diversifiers and 48 are unrelated diversifiers.
VII.7. SOURCES OF DATA

For examining the performance of diversified companies, this study has primarily used the secondary data from the "Bombay Stock Exchange Official Directory", Annual Reports and Press Reports of the firms. Besides these, information was also tapped from journals, magazines, daily business news papers. The period of study was confined to 1970-71 to 1995-96. The data required for measuring the market based performance using the changes in the stock prices, excess returns over market and such other dimensions has been estimated based on high/low stock prices of each of these companies quoted in Bombay Stock Exchange. The data for this purpose is collected from IFMR data bank, Madras. The market index for computing the systematic risk of the firm is that of the RBI.

VII.8. DATA ANALYSIS

At first, the product profile of the company is used to classify the sample units into different diversification categories. It is carried out by estimating Specialisation Ratio and Relatedness Ratio based on the percentage of product sales of each sample unit.

In the second dimension of data analysis, the performance of diversified units over the control group of undiversified units has been evaluated. This has been carried out under two heads, viz., operating performance and financial performance. Operating performance is carried out by estimating inter-group productivity, value addition, capital output ratios, capacity utilisation and
profitability  The financial performance is estimated based on trends in sources of finance, capital formation, different ratios to evaluate the determinants of capital structure, investment expenditure, debt flows.

Third dimension of data analysis refers to the issues relating to the identification of strategic benefits by diversified units in terms of growth, profitability and risk reduction. The trends in the above said variables have been evaluated for greater comparison between diversifiers and undiversifiers as well as related diversifiers and unrelated diversifiers using statistical ANOVA test. Accounting and market profitability performance measured regressed on different firm specific and market specific variables.

II.9. FINDINGS & CONCLUSIONS

The following are the main findings of the present study. The operating performance of a firm refers to the optimum utilisation of its resources. In fact, better utilisation of its resources will improve the profitability. Operating performance is evaluated with the followings

(1) Better Capital-out ratios

The size of capital employed in order to produce one unit of output is an important indicator of Capital productivity in any enterprise. The firms adopting diversification as a strategy for growth or profitability are expected to generate sizable output for the given quantity of capital. The data reveals that the undiversifiers are using 154.46 units of capital for producing 100 units of output.
while the diversified units record a lower capital-output ranging between 146.27 to 137.6 units respectively.

This trend clearly reveals that there is better productivity levels in the diversified firms rather than in undiversified ones.

(2) Promising sizes of value added

Value added is the excess value of goods and services produced by a firm over the value of total inputs used. The 'Net value added', is generally, worked out as a total of (I) salaries, wages and bonuses, (ii) employer's contribution to provident fund, (iii) employees welfare expenses, (iv) rent paid net of rent received, (v) interest paid net of interest received, (vi) managerial remuneration, (vii) tax provisions, (viii) dividend paid net of dividend received, (ix) retained profits [net of non operating surplus/deficit]. Depreciation provided during the year has been added to net value added to arrive at 'Gross value added'.

The present study observes that the size Gross value added to capital employed in case of related diversified firms as 97.18 units while the unrelated (78.03) and Undiversified (80.80) are recording slightly lower addition. Further, the diversified units are producing 258.65 to 290.30 units of value addition per every Rs.100 of cost incurred to labor. On the other hand the undiversified units record only 270.43 units. The net value added is also equally important measure of performance of an enterprise. The study observes that the net value addition to capital employed ranges in between 69.39 to 89.27 units among the diversified enterprises. Similarly the net value addition to labor works out to range in between 230.02 to 252.02 units in case of unrelated and related groups of companies.
(3) Growth in Partial and Total Factor Productivities

Factor productivities of capital and labor would indicate the efficiency of operations with respect to production function. The study observes that the partial factor productivity of capital at 171.81 units to 174.46 units in case of unrelated and related diversified units respectively. This may be due to the fact that the unrelated diversifier would have chosen the new lines of diversification with less-capital intensiveness and depend upon the learning skills of labor and management and the core competences of the firm. The total factor productivity calculated by using Kenrick, Solow and Divisia indices show a positive trend in case of diversified units. However, the Cobb-Douglas production function has not established any clear superiority of diversified companies in respect of the above observed productivity levels.

(4) Better Capacity Utilisation by Related Diversifiers

The capacity utilisation refers to the use of the potentialities by a business enterprise to its maximum. Among the three groups of units the analysis reveals that the related diversifiers show the maximum percentage of capacity utilisation at 160.96 per cent, followed by the undiversified. The unrelated diversifiers, however, could use the newly created capacities only to the extent of 72.35 per cent.

(5) Trends in Financing capital formation

The process of capital formation implies the diversion of a part of currently available resources to increase the stock of capital goods so as to facilitate the expansion of consumable output in future. The internal and external sources of finance recorded a gradual increase in financing the capital formation. However,
the growth rates varied in between companies. While the internal sources fluctuated around 28.87 to 360.74 per cent, the external sources report wider fluctuations ranging between 65.81 to 1363.21 per cent in the sample units. This result shows that the firms depend too much on external sources of finance.

(6) Trends in Capital Formation

Generally 'capital formation' refers to gross or net capital formation. The gross capital formation is addition to gross fixed assets and inventories net of deductions on account of sales, obsolescence, etc. The net capital formation is the amount after allowances are made for depreciation, obsolescence and accidental changes to fixed capital. The net and gross capital of the unrelated diversifiers increased from Rs 298.03 and Rs 234.51 crores to Rs 383.36 and Rs 2273.53 crores respectively. This increase is significant compared to undiversified group of companies.

(7) The performance evaluation through Ratios

The performance of the three strategic groups of companies are measured through various ratios. The ratios are grouped under 8 heads as stated below: (1) Efficiency ratios, (2) General performance ratios, (3) Indices of managerial performance; (4) Indices of Financial performance (5) Indices of Investment performance (6) Indices of performance return on investment (7) Indices of turnover (8) Indices of Fixed Asset management. (1) The efficiency ratios indicate the relative stand of diversifiers compared to undiversified firms and thus to indicate about the strategic benefits to the firms adopting diversification strategy, (2) The general performance ratios expected to indicate that the firms are not adopting diversification
strategy solely for maximisation of profits. (3) The managerial ratios expected to indicate relative stand of related and unrelated diversifiers in achieving different level of factor productivity through their diversification strategies. (4) The indices of financial performance expected show the superiority of undiversified units in terms of debt holding capacity when compared to that of the undiversified firms. (5) The investment ratios expected to better investment units compared to the undiversified firms. (6) The results of the return on investment indices show that there is a clear edge of diversified units over the undiversified units in respect of assets utilisation. (7) Turn over indices reveal that fixed assets turnover is marginally high (1.45 times undiversified groups) compared to undiversified ones, and (8) The measures on management fixed assets expected to capture the efficiency in utilising the investment made in different fixed assets. Fixed assets created with the size of networth is found substantial. All the diversified units record better performance. Among the diversifiers the related diversifiers report the significant performance.

(8) Promising overall performance

The study has measured the profitability performance of select diversified units in terms of ROI, ROA and ROE. Profitability as measured in terms of ROI seem to range between 32.77 to 30.64 per cent in related and unrelated firms while the same was 27.52 in undiversified firms. Diversified firms are recording better profitability in terms of ROI and ROE.

(9) Profitability as measured in terms of ROA

The result of the study of the firms report marginally higher ROA of 6.69 or 6.7 per cent. Where the unrelated diversified and related diversified firms report
6.63 and 6.55 per cent. Though there are marginal differences in profitability in individual companies in each group, the inter-firm differences are found in related diversifiers with 54 per cent.

(10) **Profitability as measured in terms of ROE**

The average ROE of three categories of companies is ranging between 107.09 per cent and 205.36 per cent. The ROE of undiversified ones has much differences compared to related and unrelated diversifiers. The unrelated diversified group record a higher ROE of 205.36 per cent. While the firms which have entered into related areas report a lower per cent of 159.89. This may be due to the conditions under which diversification was attempted or the way it was implemented.

(11) **Diversification Strategy and size**

The size of undiversified companies are working out to Rs. 8.86 crores, while the diversifier record Rs. 8.94 crores. The interfirm differences in total size of assets in case of companies record Rs. 1.61 crores compared to Rs. 1.30 crores in the case of related diversifiers and Rs 1.49 crores in case of unrelated diversifiers. These differences in size in between categories are found statistically significant.

(12) **Diversification Strategy and Growth in terms of sales**

The growth rate achieved by related diversifiers is about 8.73 per cent during the study period against 9.03 per cent in case of undiversified firms. The inter firm differences with respect to growth rates seem to be larger in unrelated diversifiers.
(13) **Unrelated Diversifiers are better Growth performers**

The unrelated diversifiers report a rate of growth of 15.91 per cent compared to around 7.62 per cent in the case of undiversified business. A study into the firms growth in assets as well as the inter-firm differences report that the related diversifiers record substantial differences.

(14) **Growth measured in terms of Networth and Diversification**

The networth of a company is expected to rise with a rise in internal resources like retained earnings or due to the issue of new equity and debt. The unrelated diversifiers have recorded 539.98 per cent growth in 26 years period (1970-96) compared to 204.9 per cent growth in networth in undiversified firms. Thus the growth rates support the relationship between diversification strategy and growth.

In all, among the three cases, the diversified companies are found to record substantial growth in terms of sales, assets and networth over the undiversified companies.

(15) **Diversification strategy and Earning Instability (σROA)**

The undiversified firms report 3.53 per cent, instability in ROA while the related diversifiers record 5.48 per cent variation in its accounting profits. But the interfirm differences record almost similar with relatively larger quantities in case of related and unrelated diversifiers.

(16) **Diversification Strategy and Instability Return on Investment (σROI)**

Return On Investment is a more commonly used measure of profitability. ROI measures the overall profitability of a firm for the total capital employed whether
A firm is said to exhibit stability in its earnings adopting diversification strategy. The undiversified firms record an average annual variation of about 12 per cent, while the diversified companies record significantly higher figures of variability to the tune of 21 to 33 per cent. The portfolio theory provides that even a simple diversification without much consideration to the patterns has to reduce the combined risk when assets are held in Portfolios but the results are contrary to this expectations.

(17) Diversification strategy and Fluctuations in Return On Equity (σROE)

A new firm is said to be more risky whenever its earnings available to equity shareholders are fluctuating very often. But the efficient capital markets are likely to reward proportionately through increased share price to shareholders, when an additional risk is conveyed through the instability in earnings. The quantum of risk to be experienced by the equity shareholders has considerably declined from 1.85 per cent in related diversifiers to 1.05 per cent in case of undiversified group. But it is 2.41 per cent in the case of unrelated diversifiers. The average size of ROE is seen earlier as marginally lower in case of undiversified companies, but shows a gradual increase in case of related diversifiers and unrelated diversifiers.

(18) Diversification Strategy and Market Returns

The annualised return on equity shares across all the three categories range between 5.51 to 10.95 per cent per annum, while the undiversified firms show 10.95 per cent, the diversifiers record moderate rates of return ranging from 7.51 to 5.51.
per cent respectively. Thus these three groups of firms report a very sizeable differences in their market rates of return to their equity shareholders. One explanation that could be put forth here is the poor performance of stocks belonging to the related diversifiers against the expectations of shareholders.

(19) Diversification Strategy and Risk

The diversification strategy and the standard deviation in equity return report higher value in the case of undiversified firms, compared to the diversifiers, while the risk in undiversified firms show 44.66 per cent, the diversified firms record in between 40.62 and 28.19 during the period.

(20) Extra Market Sensitivity (Beta) due to Diversification Strategy.

The firm-wise evaluation identifies that the size of beta significantly differs among firms and even among categories. The average size of beta is 0.56 in case of unrelated diversifiers and the same is 0.87 in the case of undiversified companies. But the average beta in case of related diversifiers group is 1.47, indicating their ability to beat the market at full phases.

(21) Market Risk and fundamentals

An attempt was made to evaluate the strategic benefits of diversification by considering the possibility of optimising market return through diversified portfolio, which can be done by an individual investor. Besides, calculating the equity returns the study tried to capture the Beta and express return using Sharpe, Treynor and Jensen’s measure. Except beta, all the other measures refer to the profitability / earnings maximisation. An attempt is made to find out the role played by growth,
leverage, size and accounting risk variables on such returns. The results clearly exhibit a positive risk return relation.

**OBSERVATIONS OF THE STUDY:**

1. The Profitability of diversified units as measured as return on capital employed is significantly larger than those of undiversified units. The related diversifiers found to outperform unrelated diversifiers. The growth rate of profit is higher in related diversifiers. Thus diversified firms were more profitable than specialised firms.

2. The gains per share is found substantially high when measured through earning per share, in case of the diversified units. Three groups show only a marginal difference.

3. The risk reduction by diversification is however has not given any conclusive evidence. However, a well diversified enterprise is found beating the market with appropriate size of returns on their scrips.

4. The three groups of firms are different from each other in their performance when measured in terms of ROA, ROE and ROI. A comparison of the mean performance of those diversified into related businesses show statistically significant differences in profitability determinants like leverage, growth in total assets and risk difference among groups of firms.
5. The study observes that there is better productivity in the diversified firms rather than in the undiversified ones. The diversified units are producing higher units of value addition.

6. The partial productivity of capital and the Total Factor Productivity are calculated with Kendrick, Solow and Divisia indices show a positive result in case of diversified units. But the Cobb-Douglas Production function model establishes no clear superiority of diversified companies.

7. The impact of diversification on size, growth in sales, growth in assets and growth in networth, is found significant in diversified group of companies.

8. Regarding the size of risk as measured as standard deviation of ROA, ROI and ROE the diversifiers however (Related diversifiers) record decline. Further the size of beta is significantly higher in diversified companies.

A. IMPLICATIONS FOR AND COMPANIES AND COMPANY MANAGERS

The study suggests that company management should adopt a strategy of related diversification for improving company performance in terms of profitability and reduction of risk. However, the organisations decision of growing specifically attracting sizable leverage need to adopt strategy of unrelated diversifications.
B. IMPLICATIONS FOR SHARE HOLDERS

Generally the investors are risk averse. As they like to minimize risk for a given level of expected return or maximised returns for a given level of risk, they need be rewarded with an additional return when they were to assume additional doses of risk. The scips of diversified companies help them in reducing their investment risks as the corporate diversification tries to create portfolio and diversification on a large scale.

C. IMPLICATIONS TO THE COMPANY MANAGEMENT

The company management in India, has considerable privilege for the disclosure of information. Though the Indian Companies Act require the companies to publish product wise information regarding licensed and installed capacities of production and sales, many companies give the production and sales information only in terms of quantity and not in terms of values. Therefore, this information is inadequate to an investor to assess the investment efficiency of the company. So necessary action should be taken to pass the law to ensure disclosure of sufficient information.

D. IMPLICATIONS FOR GOVERNMENT

Governments of every country desires to improve the living standards of the people by increasing the flow of goods and services. Besides this flow, the
efficiency with which these goods and services are utilised is important. Since the companies are controlling a substantial portion of the resources, the action of industries becomes a matter of concern to the government. Similar to the companies, the government is also concerned with return on assets and return on investment.

Thus, to conclude with regard to the performance of the two strategies of diversifications, it is reported in the study that the strategy of the related diversification performs better in terms of profitability and risk reduction. Further, it reports that there is an association between related diversification strategy and higher level of financial performance along with high rate of growth. It is also observed that the companies desires to grow fast are adopting a strategy of unrelated diversification.

DIRECTIONS FOR FUTURE RESEARCH:

The following aspects could be suggested as issues for further research:

(i) Whether really the expectations of the companies are achieved by adopting diversification strategy?

(ii) The extend and the magnitude of the diversifications can be examined in the long run for the Indian companies.

(iii) Whether the product diversification increases the market share of the company?