

**FINANCIAL PERFORMANCE  
AND  
DIVERSIFICATION STRATEGY  
OF  
INDIAN BUSINESS GROUPS**

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# **FINANCIAL PERFORMANCE AND DIVERSIFICATION STRATEGY OF INDIAN BUSINESS GROUPS**

*by*

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## **Non-Technical Summary**

*Product focus based on strong core competencies combined with international diversification has been the success mantra, propounded by academicians and consultants alike. This strategy is adopted by many a successful transnational corporations such as Microsoft, Nokia, Lafarge and Coca-Cola, to name a few, in the western world, especially during the last two decades of growing liberalization and globalization. Most of the business groups in the eastern world adopting this strategy were also successful, contrary to some recent theories proposing product diversification as a success mantra in the emerging markets vis-à-vis focused strategy as success mantra in the developed world. Large number of business groups, which diversified their product range more and more claiming synergies, which were either illusory or were over-rated, eroded their shareholder's wealth, while, the ones which diversified internationally had a higher success rate.*

## **Motivation**

Corporate strategies and their effectiveness constitute a crucial research problem in international trade, finance, and strategic management areas. Product diversification and international diversification are common corporate strategies by which an organization moves into a wider range of products and geographical markets respectively. A growing interest in comparing the relative success of product diversification vis-à-vis focused strategies has spawned a rapidly expanding literature. Similarly, there is

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growing research in comparing success (or failure) of international diversification and export orientation of firms. Nevertheless, in India, there exists a gap in empirical research on the impact of corporate diversification strategy on financial performance. This research is a modest attempt at filling this gap.

## **Background**

Business groups are defined in the literature as collections of formally independent firms (or affiliates) under single common administrative and financial controls, owned by either families or trusts or foundations. These business networks are usually owned through investment firms with crossholdings in affiliates. In most countries of the eastern world, industrial scenario has been and continues to be dominated by these business houses. India's industrial sector remains no different and continues to be dominated by business houses.<sup>2</sup>

Business group affiliates often share a common brand identity<sup>3</sup>, draw on a common labor pool, and rely on each other for financing (Fisman and Khanna, 1998). Groups, through interlocks, would allow knowledge about technological advances, market opportunities, and innovative strategies, to pass among the firms in the group (Keister, 1998). The common thread that often runs through group affiliates acts as a social mechanism that also reduces the likelihood of renegeing of contracts (Granovetter, 1994, 1995). These business groups often diversify across different product lines with many divisions under them.<sup>4</sup> On the other hand it has been observed that traditionally most business groups are often averse at expanding their operations internationally. Table 1 below provides some statistics of the 240 large Indian business groups for the time period 1987-99 (12 years) and these numbers do justify some of the comments made above (to the extent of our sample).

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<sup>2</sup> In the year 1999, Indian business groups constituted more than 64% of the nation's market capitalization.

<sup>3</sup> e.g. Tata or Eicher in India; and Samsung in Korea

<sup>4</sup> In India, for example, the BPL group controls a host of firms predominantly in electrical and selectronics business, whereas, the Tata group, controlled by the House of Tatas, operates in a diverse product portfolio encompassing steel to software to salt.

First, we would argue that each Indian business group could be regarded as a corporate with a larger scope of operation, since:

- (a) The managers of member firms are appointed by the business group (or after taking the consent of the business group) to exercise control over their member firms.
- (b) There is a close relationship among managers of member firms, they take decisions as a single strategic unit, and the decisions are taken in the aggregate interest of the group as a whole.<sup>5</sup>

Moreover, we do observe member firms helping one another with financial and/or real resource transfers in times of financial distress or business hardship or otherwise. Therefore, for our purpose, the business groups with affiliated companies under them are not radically different from the U.S. conglomerates with many divisions under them or the Japanese keiretsus with member firms under them.

Table 1: Descriptive statistics of select variables of sample business groups<sup>6</sup>

Name of the Variable ↓	Mean			Standard Deviation		
	1987-91	1991-95	1995-99	1987-91	1991-95	1995-99
Annual Growth in Total Assets (in %age)	52.91	64.14	8.26	66.99	73.84	15.59
Return on Capital Employed (in %age)	15.54	15.13	10.86	6.04	5.46	7.77
Modified Tobin's Q Ratio	1.20	1.56	1.08	0.29	0.67	0.50
Age of the Group (in Years)	45.71			26.49		
Net Exports of the Group (in %age)	-3.60	-1.48	-0.02	12.46	13.35	14.94
International Trade of the Group (in %age)	14.89	20.31	23.96	15.26	19.87	21.88
Product Diversity (Montgomery's 3-digit SIC measure)	0.45	0.52	0.54	0.28	0.26	0.24
Total Assets (in Rs. crores)	271.14	700.59	1534.74	667.45	1695.93	3722.75

After independence, India has seen large-scale industrialization. In this expansion business groups adopted varied strategies, some more successfully than others did. Business groups' long-term performance would chiefly be an outcome of their corporate strategy including their product and international diversity. This choice and implementation of strategies got a boost after 1985, with the arrival of the era of de-licensing of industries. Such strategies comprise decisions to efficiently utilize, add, retain, or divest its resources

<sup>5</sup> Even when there is a clash between the interests of the business group and a member firm, usually the group's interests are given priority (see Piramal, 1996, 1997).

relative to their portfolio of resources. Little empirical work has been done on the relationship between Indian groups' financial performance and product/international diversification strategies. The primary objective of our study is to look into the relationship between these diversification strategies and financial performance of large Indian business groups.<sup>7</sup>

## **Diversification Issues of Groups**

**Product Diversification:** Galbraith (1998) suggested that there are three types of product diversification. They are – related, linked, and unrelated diversification. While in unrelated diversification the common features are generally limited to finance and business management; in related diversification, on the other hand, additional synergies are present, such as technological know-how, marketing and distribution expertise, or facilities in production. Linked diversification, unlike related diversification, involves moving into new industries and operating at different centers of concern in those industries. However, there is some kind of a chain (integration) among various businesses.

**International Diversification:** International diversification involves producing (or providing) the same products (or services) but developing a wider geographical reach (Mudambi et. al., 1999). Most authors (Slocum, 1997) have observed that international diversification offers several advantages. It allows groups to exploit new market possibilities (Wan, 1998). It helps to stabilize returns by creating economies of scale and economies of scope (Hoskisson and Hitt, 1994). International diversification also provides a broader base of markets in order to obtain returns from innovation. On the risk side, international diversity may increase certain types of risks such as, e.g. bankruptcy risk (Rees, 1998).

If till 1985, business groups' diversification strategies were more driven by the then existing license raj, with the advent of gradual de-licensing of most sectors, they now had to decide about their diversification issues and strategies. Some of the strategic issues facing the business groups were as follows: To what

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<sup>6</sup> Appendix E of the dissertation displays the complete descriptive statistics of the sample business groups.

<sup>7</sup> Our study also extends Khanna and Palepu's (1999, 2000) research on emerging economies by examining groups' characteristics and their performance in the context of major policy changes.

extent should the business houses portfolio of industries/products be diversified? Should diversification be product wise or geography wise? On what basis should they allocate resources in the portfolios' constituents? Etc. These strategic questions become particularly important in the case where a business house had pursued a strategy of unrelated diversification in the past (based on the licenses it had obtained).

### **Existing Empirical Work on Business Groups**

Research on business groups has been scanty in comparison to firm-level research (Granovetter, 1994). Previous empirical studies have mostly compared the performance between business group affiliated firms and unaffiliated firms. We list some of the important research done in the area:

- Chang and Choi (1988) found that the top four Korean chaebols outperform other domestic firms of the economy including smaller chaebol and unaffiliated firms.
- Khanna and Palepu (1999) found that Indian business groups have strengthened the ties that bind their affiliate's together post-liberalization and that their product and geographic scope has generally increased after 1991.<sup>8</sup>
- Khanna and Palepu (2000) aggregated the affiliate members' performance measures to construct group Tobin's Q and group ROA measures. They found that accounting and stock market based measures of firm (affiliate) performance initially decline with business group product diversification and subsequently increase once group product diversification exceeds a certain threshold level. They constructed an industry-adjusted Tobin's Q by subtracting from group Tobin's Q a weighted average of industry Tobin's Q's. As in firm level estimations, a regression of industry adjusted group Tobin's Q on group size and group product diversification revealed a quadratic relationship between performance and group diversification.

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<sup>8</sup> The authors maintained that though the policy changes in India focused on deregulation, restriction on the operation of markets for intermediaries continued to exist and this facilitated increased value creation potential for groups.

- But the above results were empirically weak. Khanna and Palepu (2000) also stated that their work on aggregate group performance has not been exhaustive in nature. For example, they had taken data for only one year, 1993 for aggregate group performance analysis. Their diversification measure was also a simple count of the number of industries a business group operates in, a criterion which has been questioned in the literature (see Berry, 1975; Montgomery, 1982). Also, the authors had used industry-adjusted Tobin's Q and ROA, the comparative figures being taken as the unaffiliated firms median Tobin's Q and ROA respectively. In a country where some industry segments are altogether dominated by business groups and some other industry segments by unaffiliated single-line firms, the use of such measures might lead to spurious results. For example, the 2-digit SIC code industry 33 consisting of firms in primary metal segment is dominated in India by huge business group firms (such as, Hindalco, and TISCO). The single-segment private firms in this industry are usually the small firms operating secondary rolling mills. So use of industry-adjusted measures might not give the best results.

## **Framework of Our Study**

Even though every publicly listed affiliate of a business group publishes its own financial statements and is responsible to its own shareholders, there exists an overriding objective of the group, which guides the goals, and strategies of these firms. Hence, it would be inappropriate to look at the contribution of an affiliate to the total group by a couple of select standard objective measures without taking into consideration the business affiliate's inherent importance to the group. For example, a finance subsidiary is usually created for the sole purpose of fulfilling the group's internal financial needs,<sup>9</sup> rather than the usual objective of maximizing its shareholder value. More specifically, the finance subsidiaries of Indian business groups came up primarily to bypass the regulations created by the state in a capital scarce

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<sup>9</sup> Internal capital market objective.

economy as, in India; non-banking financial companies have access to specific benefits<sup>10</sup> such as higher leveraging which manufacturing firms do not have. Hence, we feel that it is better to look at the performance of the business group as a whole rather than look at affiliate-level performance for business groups, which might reveal distorted results.

Several other factors also make us use aggregates of business group financial statement and capital market data, for the purpose of economic analysis. A business group with synergies would have an asymmetric influence(s) on returns of all affiliate members, if the synergies do not assist all businesses in the group equally (see Brush and Bromiley, 1997). For example, in related diversification, the combination of businesses may help performance in one business or a group of businesses but to the other businesses of the group. Also a multi-affiliate diversified business group might plan to have normal or even lower returns in some affiliates in order to show extraordinary profits in other associate members. Therefore, a firm-based study on business groups' diversification-performance relationship would not be able to capture these aspects, and might even lead to spurious results.

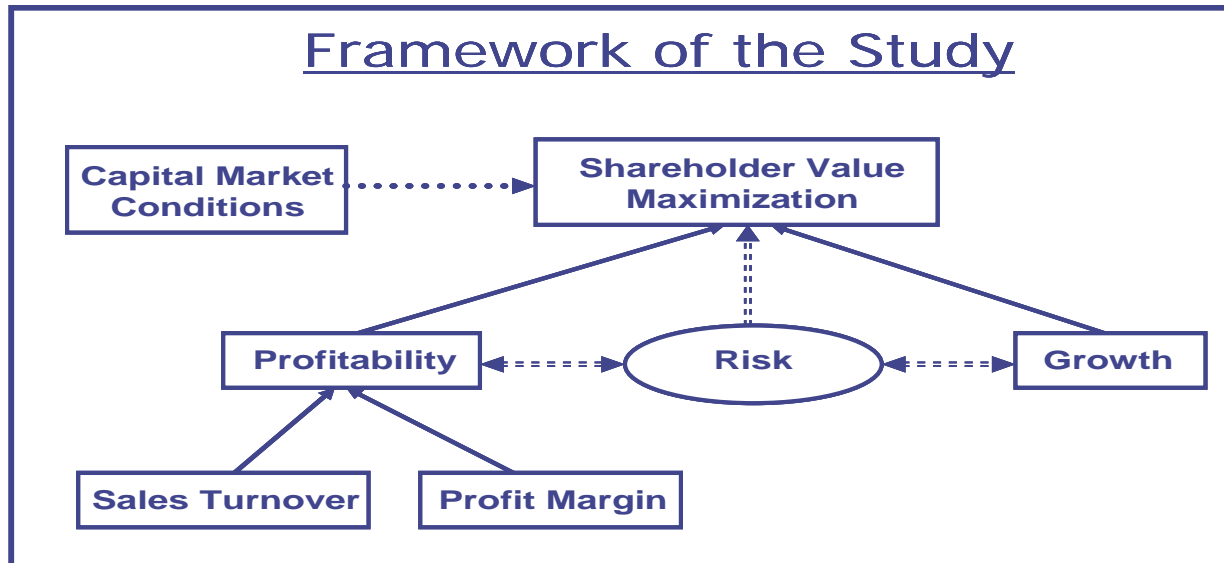
Shareholder value (i.e., *'owner's wealth'*) maximization is a widely accepted objective of business organizations. Value maximization also provides a good conceptual and operational framework for assessing corporate diversification strategies (Alberts and McTaggart, 1979) of groups. This is done by identifying shareholder value as a measure and locating four determinants of value, namely; profitability, growth, risk and capital market conditions (Branch and Gale, 1983). Varaiya et. al. (1987) demonstrated theoretically and empirically that growth and profitability of an organization decide its shareholder value. Since, the market value of a firm is a function of its financial return, given the level of its risk (Fruhan, 1979), we focus on risk as a third determinant of value. Risk affects both growth and profitability of an organization, and would indirectly determine value.

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<sup>10</sup> In India, the advantages are due to restrictions by the Companies Act on liabilities of manufacturing firms. So a group's finance company, a specialized firm usually collects and redistributes funds within the group. For example, one of the rules says that 'manufacturing companies cannot accept deposits (from the public) of more than 25% of its net worth ... but, a finance company can take deposits to the maximum of ten times its net worth.



Hence, diversification strategies can then be assessed in terms of their expected effects on risk, profitability, profitability components, growth, and ultimately on aggregate business group value creation (since capital market conditions though a crucial factor driving groups' shareholder value cannot be objectively measured).



These performance dimensions gain further importance as business groups compete not just for resources, but for political power and institutional legitimacy, for social as well as economic fitness (DiMaggio and Powell, 1983). Some of the business houses also believe in empire building in terms of asset size rather than shareholder value (see Williamson, 1985) as larger the asset size of the group, probably larger will be its economic power and its influence on society. Another reason for going for this kind of value creation constituent analysis may be that diversification strategy does not have a significant effect on shareholder value, but is instead related to its components which neutralize each others influence in the aggregate.<sup>11</sup>

<sup>11</sup> For instance, a group pursuing a cost leadership focused strategy may improve its productivity and lower its prices (Porter, 1980). The impact of these two managerial actions may be mutually offsetting, and no change may be registered in the profitability ratio to reflect these actions (Banker et. al., 1996). In these circumstances it will be the sales turnover and profit margin, which will reflect this action properly.

## **Research Methodology**

**Data Sources:** The financial statement and capital market data for our research are obtained primarily from publicly available databases maintained by Centre for Monitoring the Indian Economy (CMIE) and Bombay Stock Exchange (BSE)<sup>12</sup>. The product-wise sales data for calculating the product diversification indices was also obtained from CMIE. These standard Indian databases are most widely used by academic researchers and executives to analyze Indian firms/business groups.

**Identifying Group Affiliation<sup>13</sup>:** The data set we used in our analysis consists of all Indian business groups affiliated to private sector and listed on the stock exchanges with the required data and a listing history of at least 10 years by their affiliates. For this purpose, we adopted the CMIE database's classification of firms into groups. There is no ambiguity between CMIE's classification of firms into groups and those attempted by other reliable sources against which we have cross-checked. In the case of family controlled groups, succession from one generation to another often results in the group being split into multiple parts. We identified several groups that had gone through such periods of succession in the past two decades, and checked to see that CMIE had indeed classified each sub-group separately.

**Sample and Size:** For the purpose of our research, we take a firm as belonging to a particular business group in which the sample business group has at least 10 percent of the control rights of the company and which is not controlled by anybody else (similar to Claessens et. al., 1999). This study covers public limited companies only, quoted in any one of the Indian stock exchanges. Availability of data being the constraint, the study included all dominant business houses (final size of 240) in India in the sample.<sup>14</sup>

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<sup>12</sup> Minor gaps in data (say, missing stock price for a year or missing financial statement for a year) were filled up using other sources such as annual reports of the group affiliates, and archives of daily financial newspapers.

<sup>13</sup> Khanna and Palepu (1998b) rightly pointed out that the identification of group membership in India is more reliable and easier than in several other countries. First, unlike in a variety of countries, firms in India are members of only one group (see Strachan, 1976; Goto, 1982). Second, there is virtually little movement of affiliates across groups.

<sup>14</sup> Thesis Appendix C lists the sample of business groups covered by the study. It also lists the groups that were eliminated due to reasons, such as: 1.Business groups promoted by government or government owned firms; 2.Business groups that did not have listed affiliates for a period of more than 10 years during the time frame of the study; 3.Business groups that had negative net-worth; 4.Business groups whose parents were Multinationals; and 5.Foreign group affiliates guided by the policies of their foreign parents rather than the local interests;

**Time Span of Study:** To avoid factors such as temporal stability and economic/business cycles influencing our study, we used a longer time frame of study of a twelve-year period. As the business houses and firms were at liberty to choose their diversification strategy from 1985 onwards (due to delicensing of industries), the study would be carried out for the period 1987-1999. This total period of study of 12 years was divided into 3 equal sub-periods of 4 years each. Period 1 would be from financial year 1987-88 to financial year 1990-91 (period of pre-liberalization). Period 2 would be from 1991-92 to 1994-95 (period of post-liberalization; growth phase). Period 3 would be from 1995-96 to 1998-99 (period of post-liberalization; recession phase).

**Profile of the Sample:** In all we had 230, 239, and 240 business groups for the periods 1987-91, 1991-95 and 1995-99 respectively. The difference in the number of business groups for the three periods is due to the fact that some groups had split during the period of study. There were also some groups that had sold or merged or divested their affiliates during the period of study. A list of all the mergers and acquisitions (M&A) during the period of study was scanned for all M&A related to business group affiliates (either on the buyer side or on the seller side). We then included this in the sample of our business groups.

Table 1 gives descriptive details of the sample business groups. The total sales and the total assets of the sample of business groups in our study were around Rs. 2,50,000 crores and Rs. 3,70,000 crores respectively for the year 1998-99. Based on the CMIE data we find that our sample of business groups owned more than 45% of the total market capitalization of the Indian capital markets in the year 1998-99. This shows the importance of doing business group level studies in India over firm level studies. Tables 2 and 3 gives detailed definitions of the measures listed in table 1. The mean growth, profitability and Tobin's Q figures show that average performance level of business groups in period 3 has decreased compared to the first two periods. It also reveals that sample business groups' product and international scope increased consistently from period 1 to 2, and from period 2 to 3.

**Control Variables:** As various factors other than product and international diversification strategy can influence group performance and as researchers (Varadarajan and Ramanujam, 1987) had argued for the

inclusion of potentially important moderator variables, our study will include the following variables: Size of the Group; Leverage of the Group; Short-term Solvency Position; Long-term Solvency Position; Net Exports of the Group; Age of the Group; Industry Fixed Effects; and Ownership Pattern.

Inclusion of Short-term solvency and long-term solvency position of an organization are primarily dictated by the industry in which the organization performs (Rees, 1990; Varazdin, 1999). So by using them as control variables in our regression we are also attempting to capture the industry influence on a business group's performance in terms of continuous variables.

**Measures of Performance:** As discussed in the framework of the study, we will evaluate performance on the following five dimensions – shareholder value, accounting profitability, profitability components, growth, and risk. We first aggregated all the financial statement and capital market data of the individual affiliate firms to get aggregate financial statement and capital market figures of each and every individual business group in the sample. We then calculated all the aggregate group performance measures based on their ratios and formulas given in table 2 for each of the four-year periods during the total study time frame from 1987-99.

*Table 2: Notations and measures used for the dependent variables in the study<sup>15</sup>*

<i>Variable Name</i>	<i>Notation</i>	<i>Measure</i>
1. <i>Value Creation</i>	<i>TOBIN<sup>v</sup></i>	{market value of equity + book value of preferred stock + book value of debt}/{book value of assets}
	<i>PBV<sup>v</sup></i>	{market value of equity}/{book value of equity}
2. <i>Profitability</i>	<i>CFM<sup>v</sup></i>	{net income + depreciation}/{total assets}
	<i>ROA<sup>v</sup></i>	{net income + interest × (1-tax rate)}/{total assets}
	<i>ROCE<sup>v</sup></i>	{net income + interest + tax}/{net worth + long-term liabilities}
3. <i>Profitability Components</i>	<i>NPM<sup>v</sup></i>	{net income}/{total sales}
	<i>STA<sup>v</sup></i>	{total sales}/{total assets}

<sup>15</sup> Note: (1) All the notations marked with <sup>v</sup> have their measures as 4-year averages for the consolidated business group financial and capital market figures during the period of study. (2) Growth variables were calculated using the aggregate business group's first and last financial year figures of the period (say, for period 1, annualized growth between the financial years 1987-88 and 1990-91). (3) Risk category variables were calculated based on yearly aggregate profitability ratios of a business group.

<i>Variable Name</i>	<i>Notation</i>	<i>Measure</i>
4. <i>Growth</i>	<i>CAGR<sub>TA</sub></i>	Compounded annual growth in total assets
	<i>CAGR<sub>FA</sub></i>	Compounded annual growth in fixed assets
5. <i>Risk</i>	<i>VROA</i>	Coefficient of variance in return on total assets
	<i>VROCE</i>	Coefficient of variance in return on capital employed

**Measures of Independent Variables:** Give the constraints on the data availability for using the best measures such as international diversification, we computed the aggregate group independent variables based on their ratios and formulas given in table 3. To make our results comparable with previous studies in the area we will use one categorical product diversification measure and two continuous product diversification measures.

*Table 3: Notations and measures used for all independent variables in the study<sup>16</sup>*

<i>Variable Name</i>	<i>Notation</i>	<i>Description</i>
1. <i>Size</i>	<i>LNTA<sup>v</sup></i>	Natural logarithm of total assets
	<i>LNMC<sup>v</sup></i>	Natural logarithm of total market capitalization
	<i>LNTS<sup>v</sup></i>	Natural logarithm of total sales
2. <i>Product Diversification</i>	<i>RUM<sub>XX</sub></i>	Rumelt's categorical diversification index for category XX
	<i>P2</i>	Palepu's 2-digit SIC based continuous unrelated measure (DT)
	<i>P3</i>	Palepu's 3-digit SIC based continuous related measure (DU)
	<i>M2</i>	Montgomery's 2-digit SIC based continuous unrelated measure
	<i>M3</i>	Montgomery's 3-digit SIC based continuous related measure
3. <i>Industry Effects</i>	<i>IND<sub>YZ</sub></i>	Groups largest sales from the industry with 2-digit SIC code YZ
4. <i>Current Ratio</i>	<i>CR<sup>v</sup></i>	{current assets}/{current liabilities}
5. <i>Working Capital Ratio</i>	<i>WCM<sup>v</sup></i>	{current assets – current liabilities}/{total sales}
6. <i>Age</i>	<i>AGE</i>	1999 – {Year of Incorporation of the first group affiliate}
7. <i>Net Exports</i>	<i>NETEXP<sup>v</sup></i>	{total exports – total imports}/{total sales}
8. <i>Leverage</i>	<i>LTD<sup>v</sup></i>	{long-term debt}/{net worth}

<sup>16</sup> Note: (1) All the notations marked with <sup>v</sup> have their measures as 4-year averages for the consolidated business group financial and capital market figures during the period of study. (2) The third year product-wise sales figures of the 4-year period were taken for calculating the product diversification measures and industry fixed effects measures. For example, we calculated diversification measures for period 1 (1987-91) based on the product-wise sales figures of the year 1989-90. (3) Thesis Appendix A gives details of measuring all the diversification variables.

<i>Variable Name</i>	<i>Notation</i>	<i>Description</i>
9. <i>International Diversification</i>	<i>GEODIV<sup>v</sup></i>	{total exports + total imports}/{total sales}
10. <i>Promoters Stake</i>	<i>INSIDER</i>	Weighted average of the business groups' stake in its affiliates. Weights being based on the total assets of the affiliate firms.
11. <i>Foreign Holdings</i>	<i>FIIS</i>	Weighted average of the foreign holders' stake in the affiliates. Weights being based on the total assets of the affiliate firms.
12. <i>Domestic Institutions Stake</i>	<i>DIIS</i>	Weighted average of the domestic institutional investors' stake in the affiliates. Weights being based on the total assets of the affiliate firms.

**Econometric Analysis:** We tested the diversification strategy and financial performance linkage using linear multiple regression techniques which model group performance as a function of size of the group, its diversification, leverage, and industry fixed effects among others as shown as follows:

$$Performance^{17} = f(\text{product diversification, size, leverage, long-term solvency, short-term solvency, insider ownership, foreign ownership, domestic institutional ownership, international diversification, net exports, age, industry fixed effects})$$

The regressions were computed all the three periods for each of dependent variable with the nine relevant explanatory variables. For period 3, the regressions were also performed using each of dependent variables with the twelve explanatory variables.<sup>18</sup> These linear multiple full model regressions were performed using both the best variables<sup>19</sup> and the standard variables<sup>20</sup>. We also made use of transformations of product diversification variable in the multivariate regression techniques to look into the exact fit between performance and diversification variable given all the control variables. Both the continuous and non-continuous measures of diversification were used separately for performing these multiple regressions. Also regressions using the ten industry control dummy variables were performed separately.

<sup>17</sup> The various performance dimensions (dependent variable) used are: shareholder value maximization, growth, profitability, profitability components, and risk)

<sup>18</sup> (including the three ownership variables whose data was available for only period 3)

<sup>19</sup> Best variables mean variables those that best fit among all the available variables for a particular category in the regression equation. For example, in size category we have three variables viz., LNMC, LNTS, LNTA which can capture the effect of size category. In regressions using best measures, we use the variable which best captures (provides highest *Adjusted R Square*) the effect of size category on the dependent variable.

<sup>20</sup> Standard variables are those that have been used in all the regression equations irrespective of the one which best captures the effect of a category. For example, in regressions using the standard measures we use the variable LNTA irrespective of the one that best captures the effect of size category on the dependent variable.

## Product Diversification Results

We found that shareholder value creation was negatively related to product diversification level of business houses during all the three periods. The econometric results were quite robust considering the large sample size, multiple diversification measures, long time frame, multiple aggregate group performance measures, and more control variables used. On further analysis, we found that during period 1 and 2, the result was driven by the negative relationship between a group's product diversification strategy and its profitability. For period 1, *ceteris paribus*, we found that more diversified business groups had lesser profit margins and higher levels of risk in comparison to less diversified groups driving the negative product diversification-profitability relationship. For period 2, *ceteris paribus*, we found that highly diversified business groups had both, lesser margins and lower sales turnover in comparison to more focused groups. *Ceteris paribus*, we found highly diversified groups growth and sales turnover ratio to be lower than less diversified groups in period 3. Presumably, the adverse capital market outlook towards diversified business groups in India, as in other parts of the world (see Servaes, 1996; Lamont and Polk, 1999), also drove the relation during the later period of study.

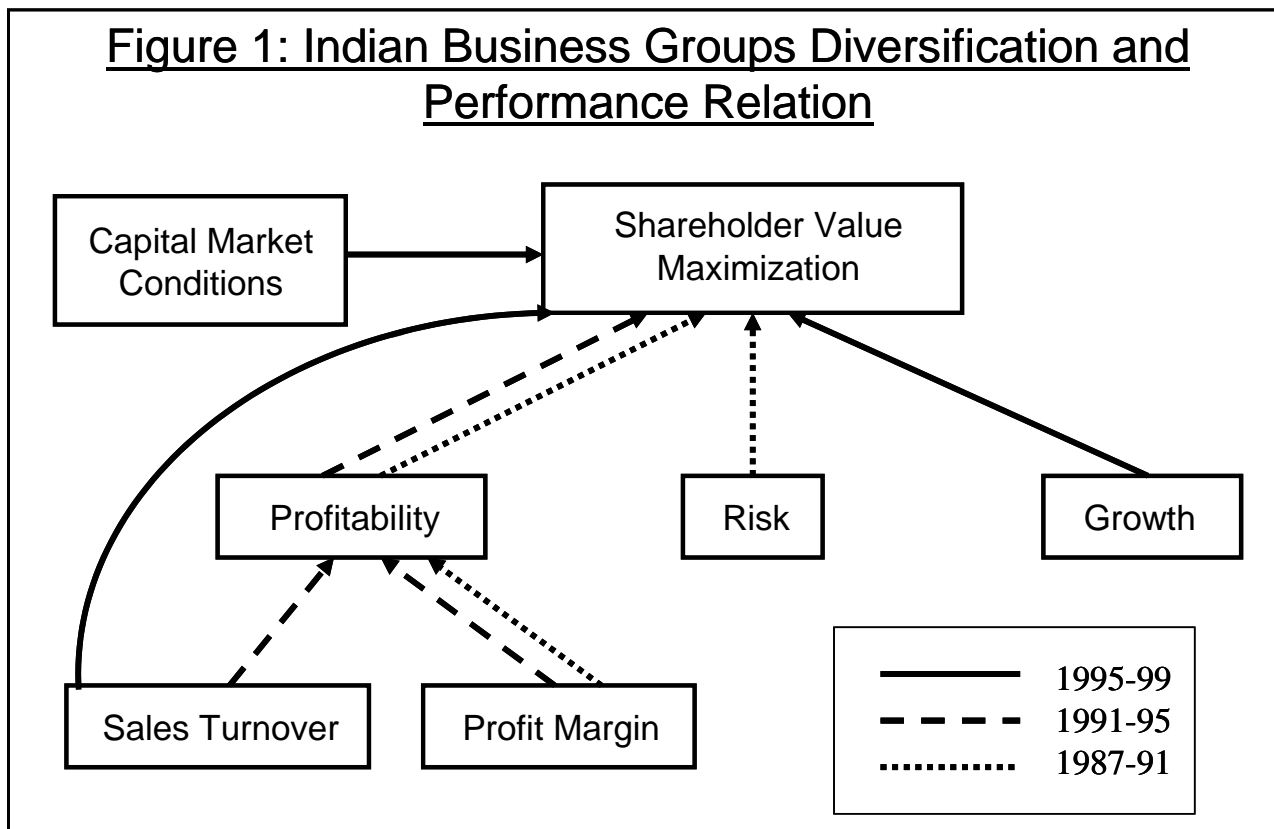


Figure 1 above provides a pictorial representation of only the significant relations between financial performance and product diversification of this study. It reveals how accounting-based performance dimensions and capital market conditions impact market value by influencing various components given diverse competitive and economic conditions. Before liberalization, the competition was relatively low, hence focussed groups had more profit margins in comparison to their highly diversified counterparts. This may be due to their greater segmental market power and higher scale economies. But as the level of competition increased, in the next two periods, more specialized groups had higher sales turnover than their diversified counterparts, probably due to lower diversification overheads. As the competitive conditions change, so do indicators and determinants of relative profitability.

Based on the above results, we note that product diversification benefits through economies of scope, internal capital markets, co-insurance of debt, and others either do not matter or are overwhelmed by the downsides. The results show that most diversified business groups yielded low segmental market power (Montgomery and Singh, 1984) and were probably bleeding out money from the business group, with cross-subsidization of failing business segments. In fact, diversified groups might have been suffering from a value loss (*diversification discount*) due to misallocation of capital among their divisions (see Claessens et. al., 1999). This value loss increases their cost of capital (Chwdhary and Nanda, 1994), which further affects their profitability and other performance parameters adversely. Apart from the above reasons, we note that diversified groups were probably paying extra costs due to distraction among the top management from their core competencies and consequent loss of focus.<sup>21</sup>

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<sup>21</sup> We tested for non-linear relations in the business group data fitting regressions using transformations of product diversification variable with two different performance measures. Montgomery's Diversification Measure was used to measure the product diversification. The Modified Tobin's Q Ratio measured the market-based performance and Return-on-Assets measured the accounting performance. After controlling for other explanatory variables, we found that 'inverse of product diversification' was giving the best results with both the financial performance measures. Page 86 in thesis provides a graphic view of this non-linear relationship between Montgomery's 3-digit SIC diversification index and Modified Tobin's Q Ratio. The figure conveys that the reduction in shareholders wealth becomes greater and greater as business group's product diversity increases more and more. This implies that a movement from Related to Unrelated diversification by business groups would be more value destroying in comparison to a movement from Single Business to Dominant Constrained product diversification strategy by business groups. It also conveys the negative impact of increasing diversification by business groups.



We found that during periods of low competition in the Indian economy (1987-91), profitability and net profit margins were negatively related to degree of product diversification. During 1991-95, a period of high growth rates for business groups post-liberalization, it was found that profitability, net profit margins and sales turnover were negatively related to a group's product scope. In 1995-99, a period of high competition from industrial deregulation, we found that growth and sales turnover of business groups were negatively related to their diversification levels. The results in the later periods also seem to be influenced by the capital market's preference for focussed business groups. So, the differences among the performance indicators across sub-periods apparently exhibit the influence of diverse competitive factors and economic characteristics prevailing during the three sub-periods.

**If high diversity business groups are destroying value then why are many groups still diversifying?**

*While we found that Indian business groups' diversification usually generated a relative loss for their aggregate shareholder, we also observed that most business groups had, on an average, increased their product diversification levels during the study period. One strong motive for Indian business groups with pyramidal (cross holding) structures increasing their product scope levels could be the non-efficiency based self-seeking factors and empire building psychology, rather than efficiency oriented strategic considerations. Through holding company structures, especially while forming new divisions for entering into new sectors, business groups have more control gains than the cash flow dividends (see Tricker, 1984; Nicodano, 1998) giving owner-managers a strong incentive to diversify. Further research is needed to throw more light on this area. The new opportunities existing in the developing economies due to deregulation combined with their herd mentality could be an additional factor motivating greater business group diversification (see Song and Cho, 1999). For example, the deregulation of sugar, cement and financial services sectors during the last two decades in India led to many Indian business groups entering those sectors and losing money.*

## **International Diversification, Net Exports and Performance**

International diversification was positively related to business groups growth, profitability, profit margin, and shareholder value during period 1 and 2, while in period 3 we find that net exports was positively related to business groups' profitability and shareholder value. Either international diversification or net exports positive significance indicates benefits to the business groups having high international exposure. Therefore, movement into international markets may allow groups to achieve a long-term strategic competitiveness and hence higher shareholder value. The result apparently conveys that geographic diversification allows groups to exploit their core competencies and distinctive group capabilities across units in different international markets (Hoskisson and Hitt, 1990). International exposure might have also provided a broader base of markets for obtaining returns from innovation and provide new market possibilities (Wan, 1998).

The positive relation of performance with international diversification in the initial periods of study could be due to increased opportunities for import intensive business groups, with the slow removal of protectionist policies. From a stress on import substitution till the 1980s, the national economic policies shifted their focus to export promotion in 1990s by opening up of economy, removing quota restrictions on imports, and by increasing the Open General License (OGL) list for imports (World Bank, 2000). So there existed opportunities for business groups that had a lot of global transactions to take advantage of new markets, especially those which largely depended on imported raw materials which had faced decreased import tariff rates (say, chemical intermediaries or capital goods).

The positive relation between net exports and performance in later periods probably suggests that exporters benefited from incentives given by the state. Also, business groups with high exports, probably gained from the learning they had in the global markets (say, in terms of better packaging, technological innovation). Moreover, capital markets seem to have favored businesses and business groups that were net exporters during this period.

## **Importance of Size**

We found, *ceteris paribus*, large sized business groups had more shareholder value, profitability, and profit margins in comparison to smaller sized groups in all periods of study; and we also found large sized groups growth to be higher than small-sized groups in period 3. The result could indicate that (a) larger sized business groups were leveraging on their market power and financial clout; and (b) liberalization has helped larger groups grow faster and perform better than smaller ones. Large sized groups could also more easily attract technological know-how from foreign partners, joint ventures with foreign alliances in the changed economy by leveraging their size (see Khanna and Palepu, 1998a; 2000).

## **Varied Institutional Context**

Theories proposed in the literature argue that institutional contexts in India, Korea and many other developing countries are different from the western developed countries of Europe and the U.S.A., and therefore, would give diversified conglomerates many advantages to operate. These theories argue that, since these markets suffer from informational problems, misguided regulations and inefficient judicial systems, a diversified conglomerate will have many advantages in filling these institutional voids in comparison to their focused counterparts. Our research shows that this view is not borne out by reality on the ground. Empirical evidence points to the contrary.<sup>22</sup>

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<sup>22</sup> Some of these arguments and their critique could be as follows: 1. The cost of operating diversified conglomerates and especially those in unrelated areas outweigh the cost imposed by the institutional context you are in (since these costs are so high they adversely affect the financial performance of those highly diversified conglomerates). Most of the empirical evidence in the East and the West, in the developed and the developing countries have found a negative relation between product diversification and financial performance of firms. World over, it is also largely observed in the empirical literature, that firms with larger international exposure have better performance than the ones with lesser exposure; 2. These institutional voids argument has been blown out of proportion. It is often pointed out that these markets suffer from a scarcity of well-trained manpower. However, we find that India has one of the largest pools of skilled and unemployed manpower. Another case in point is that India rank among the top seven capital markets in the world in terms of market capitalization with a century old equity exchange. How could one support the argument that these markets have underdeveloped, illiquid equity markets?; 3. The gaps in institutional mechanisms pointed out create more or less equal difficulties to diversified groups and focussed groups. The non-transparent operations and other peculiarities of the diversified groups are more prominent negative influence. For example, the linkages within the group operations are so high that it becomes very difficult for a group to exit a business operation without consequences for the rest of the group. In spite of repeated attempts Hindustan Motors of BK Brita group has not been

The diversified groups exist because of the varied institutional context and historic development. In many a case they grew, not out of any conscious strategic decisions, but out of historic circumstances. Table 4 shows the sources of some of these institutional voids in the literature and their negative impacts on diversified groups. However, there is no evidence to show that the impact of these costs is minimized in case of diversified groups.

<b>Table 4</b>	
<b>How Product-wise Diversified Groups Lose from the Varied Institutional Context in Eastern Countries and Emerging Economies?</b>	
<b>Sources of Institutional Deficiencies in India</b>	<b>Negative Impact on Diversified Groups</b>
<b>Informational Problems:</b> Buyers in financial, labor, product markets need reliable information while taking decisions. Without reliable and timely information, they are reluctant to do business.	Diversified business groups are very reluctant in revealing information and they are the most non-transparent business organizations. For example, the groups seldom reveal their cross-holdings or their ownership stake in the affiliates. The result is both foreign and domestic investors and funds are wary of investing in diversified group affiliates. Therefore, shares of these groups trade at discounts in the markets.
<b>Misguided Regulations:</b> Frequent socio-political interference leading to distorted and misplaced regulations influencing the functioning of markets.	Diversified groups frequently lobby with the political systems and influence the regulations.

Integrating diverse affiliates operating in varied businesses and managing them from the headquarters is a very difficult task. Since each business, be it manufacturing cement or producing motion pictures operates within a particular market structure.<sup>23</sup> Even the make or buy decisions is a complex one to undertake. Moreover, the dynamics of the world markets and the technology for serving them are constantly changing, and top management therefore needs to be highly adaptable in its approach to corporate strategy and selection of portfolio of businesses and their composition within a group.

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able to close their Uttarpara operations for the last one-decade and the group has to continue subsidizing the loss-making divisions.

<sup>23</sup> The affiliates operating in some product markets such as electricity or steel need to be highly capital intensive, some others do not. Some affiliates such as those in software sector need to buy relatively few materials and services from outside but would require high intellectual (human) capital to consistently perform and stay with them for long.

On the other hand international diversification allows business groups to take care of new market possibilities and provides a broader base of markets for focused groups in order to obtain greater returns from innovation and therefore, allows it to achieve a long-term strategic competitiveness and hence higher shareholder value.

## **Possible Limitations**

We deleted in our study all Indian business groups that had a size lower than Rs. 5 crores during the period of study; or had a negative net-worth during one of the periods of the study. Thus, the sample may contain relatively large number of better performing large business groups. Data constraints also led us to use coefficient of variance in earnings as the measure for risk. A better measure based on the market returns could have revealed more information. Also use of market based performance measures such as Sharpe and Treynor measures, apart from tested strategic variables such as brand value could have led to more insights into the factors determining excellence.<sup>24</sup>

### **MANAGERIAL IMPLICATIONS**

*Top management of business groups in the eastern world while formulating their group's corporate strategy will have to take into account the costs and the negative impact of product diversity and the problems arising from this in the organization. Apart from building their distinctive capabilities, these business groups competing against multinationals should consider it vital that in order to stay and prosper in the world market they would need to have a critical mass (size of the group) and they should also appreciate the enormous learning's (and other benefits) of international diversification.*

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<sup>24</sup> Further Scope of Research: (a) This was a large exploratory study on business group characteristics and the kind of influence they have on business group performance in India. Further research, both quantitative and qualitative in nature, should take place to investigate these initial results on aggregate business group performance. This research would add to the small (and growing) body of knowledge concerning the business group level studies; (b) Although large sample statistical research of the type in this study is a powerful device for identifying the general relationships between pairs of variables, it is a comparatively weak method to gain insight into complex interactions between business group variables. To gain this insight, detailed examination of the experiences of a sample of the individual groups is needed in the form of extensive case studies. Scope for building theoretical models to explain the above research results also exists; and (c) In many other countries (such as, Argentina, Belgium, Denmark, Sweden and Thailand), there exist business groups with apparently many features similar to the Indian business groups. But research work on business groups had been limited in these countries. By replicating the study there through international comparisons, the differences, if any, due to different structural, economic, social, and cultural characteristics and their impact on business group performance will be addressed.

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