

# Group affiliation advantage: Policy favors, Market Imperfections and Internal Capital Market

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## **GROUP AFFILIATION ADVANTAGE: POLICY FAVORS, MARKET IMPERFECTIONS AND INTERNAL CAPITAL MARKET**

### **ABSTRACT**

Group affiliate firms in India controlled 89% of all privately held industrial assets in 1993. This study examines the causes for group formation and expansion, and finds evidence for policy favors, market imperfections and internal capital market contributing to the formation of groups. Additionally, it finds only a tenuous performance differential compared with standalone firms, which diminishes in subsequent years. Successive liberalization is also accompanied by evidence of continuance of policy favor and market imperfection.

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### **I. INTRODUCTION**

Business groups abound in developed and developing economies, including India and operate in diversified industry sectors. A typical group in India, House of Tatas, holds interests in cement, chemicals, detergent and soaps, steel, hotels, software, and commercial vehicles, to name a few. Each affiliated firm in a segment may hold further investments in related or unrelated industries. In 1993, group affiliated firms controlled nearly 89% of total sales and assets of in private sector (Ghemawat and Khanna, 1998). What leads to this agglomeration of industrial activity in an emerging economy like India? Secondly, is such wide diversification beneficial?

Several propositions for group formation have been put forward. Leff (1978) argues group structure is a response to factor market imperfections, which arise from informational imperfections in product, capital and labor market in emerging economies. Khanna and Palepu (1997) argue that such market imperfections lead firms to internalize many functions which would otherwise be conducted by intermediary institutions, and thus lead to group structure to realize scope economies. Ghemawat and Khanna (1998) argue policy favors and market imperfections are the more likely reasons for emergence and dominance of business groups in India. Consequently, Group affiliated firms are expected to show better performance than standalone firms as a result of such resource advantages. Khanna and Palepu (2000a, 1999) found some performance differential and scope expansion by groups in India, which they argued was consistent with the transaction cost economizing view. However, in a later study Khanna

and Rivkin (2001) found the performance of group affiliates did not support either transaction cost economizing view or government related distortions. Thus, the causes of group emergence remain unsubstantiated.

This study reexamines the issue from a resource-based perspective. Idiosyncratic resources, which are valuable and subject to market failure, are central to competitive advantage of firms (Barney, 1991). Group affiliated firms in emerging markets benefit from a coordinated approach to acquisition of valuable resources which are subject to market failure and inaccessible (or inaccessible at the same low cost) to other standalone firms. Thus, an examination of the terms of acquisitions of resources by firms may help clarify why some firms tend to expand or owe allegiance to the group form. In the Indian context, the process of liberalization started in 1991 and progressively reduced the role of government in business and improving market infrastructure. Thus, some of the important conditions for group formation proposed in the prior literature were expected to recede gradually.

In this study, I examine the two routes of financial resource acquisition proposed by Ghemawat and Khanna (1998) – policy favors and market imperfections – through a comparative study of group affiliated and standalone firms in the manufacturing sector in pre-and post-liberalization era. I begin by documenting the univariate differences in the patterns of financing of group affiliate and standalone firms using firm-level accounting data for the period 1989 to 2003. This is further supplemented by cross-sectional (Tobit) regressions including controls for firm size, industry, and year effects. The control variables also include capital structure which might affect the nature of financing at the firm level.

The results show group affiliated firms are able to access cheaper and preemptory debt financing on softer terms from the state-controlled financial system comprising large financial institutions, nationalized banks, and other corporate bodies compared with standalone firms. This asymmetric allocation of finance is also observed in the equity markets. Group affiliated firms tend to invest in other group firms rather than seeking other external investment opportunities. The results hold for 12 years after liberalization was introduced in 1991. The financial and market performance of standalone and group affiliated firms in both manufacturing and services sectors is largely undifferentiated and any performance differential is only sporadic.

This study contributes to the literature on business groups in emerging economies such as India. The study questions the prior evidence on superior performance of group firms compared with standalone firms. Such evidence has prompted some scholars to argue that rather than a narrow focus on core competencies, firms in emerging economies ought to pursue diversification. However, the evidence in this study suggests that the business group form only helps affiliated firms get preferential access to financing and does not lead to superior operating or market performance compared with non-affiliated firms.

The rest of the study is organized as follows. Section II covers literature review followed by section III on methodology and the variables used in analysis. Section IV covers data source and descriptive statistics. Section V presents the results of our analysis. Results are discussed in section VI. Section VII discusses limitations of the study and Section VIII concludes.

## **II. LITERATURE REVIEW**

Business groups in India are different from their conglomerate counterparts or diversified corporations in competitive markets. Conglomerates in developed economies such as the United States own a collection of lines of business whereas most firms affiliated to Indian business groups have distinct sets of shareholders and are organized as conglomeration of independent firms. Another difference between Indian groups and their counterparts elsewhere is the wide diversity in the lines of business pursued by firms affiliated to groups.

Prior research most closely related to the present study examine, among other issues, the evolution and structure of Indian business groups, resource sharing and coordination of activities among group-affiliated firms, and potential performance advantage of group firms compared with standalone firms. Some representative studies are reviewed below.

Studies such as Ghemawat and Khanna (1998), Probert and Turcq (1996), Khanna and Palepu (1995), and Khanna (1997) describe the evolution and structure of typical Indian business groups. Khanna and Rivkin (2001) detail how India business groups are organized and how they coordinate their activities. This crucial difference in character of 'diversification' or 'scope' necessitates a much closer scrutiny of the costs and benefits of affiliation for a complete understanding of Indian business groups. While firms affiliated to an Indian business group gain from resource sharing, the costs imposed by the group structures include agency costs, conflict of interest, inefficient investments and a lack of expertise. These costs are further exacerbated by

weak disclosure requirements, inefficient governance mechanisms and poorly developed markets for corporate control.

Khanna and Palepu (2000a) compare the performance of group affiliates with non-affiliates and find better performance in the case of large groups, and beyond a threshold diversification level as measured by the number of group firms. They posit group benefits and costs consistent with scope economies in the transaction costs arising from the absence of intermediary institutions.

Khanna and Palepu (1999) examine the response of business groups to policy shocks, e.g., rapid change in macroeconomic environment due to liberalization of economies. They find a strengthening of group scope, social and economic ties, and an increase in intermediation attempts in the period following liberalization, presumably due to the slow development of market intermediaries.

Khanna and Rivkin (2001) do not find that the performance of Indian group affiliates is positively associated with market development and government related policy distortions. They find group affiliation to be more profitable, the greater the capital market development. Thus, Khanna and Rivkin (2001) do not find empirical support for the two key causes of group emergence proposed by prior studies, i.e., policy favors and market imperfections.

The three studies discussed above follow different lines of enquiry. Whereas Khanna and Palepu (2000a) examine the diversification-performance linkage, Khanna and Palepu (1999) examine the impact of policy shocks on group intermediation. Finally, Khanna and Rivkin (2001) take the

profitability variance approach in prior studies and examine the group effect against market development and policy distortion proxies.

The diversification performance linkage, especially in the context of emerging markets, is tenuous given the un-relatedness and wide expansion scope of Indian business groups. Secondly, group affiliated firms in India have independent sets of shareholders making it difficult to come up with reasonable measures of diversification. Third, business groups have historically been dominant in manufacturing and have not actively participated in service industries. In a study of Indian business groups, Bertrand et al (2002) find evidence of tunneling, a practice of transferring profits from one group firm to another where the owners have high cash flow rights, to the extent of more than 25% of marginal profits. Moreover, firms relying on subsidized finance from government owned institutions are expected to show a performance decline (Patibandla, 2006).

Another issue relates with the measurement of performance in an emerging markets context. Problems of accounting in inflationary environments preclude utilizing the return on capital as a yardstick (Leff, 1978). The deficiencies of capital markets in developing countries prevent the use of share prices in the stock market as an evaluating mechanism (Leff, 1978). Till about the mid-1990s, Bombay Stock Exchange, the largest bourse in India, followed paper based trading which involved delays in share transfers, thus leading to several mal-practices including price manipulation and rigging. Market measure would be inappropriate in such a setting. These issues present specification problems clouding understanding of causes of group emergence.



An alternative theory rooted in the resource based view permits an examination of conditions of resource acquisition by firms. Barney (1986) argued that firms that have superior resource picking skills in strategic factor markets earn above normal economic returns. Apparent strategic factor market imperfections include instances when a firm controls unique resources, when only a small number of firms attempt to implement a strategy and when some firms have access to lower cost capital than others. Barney (1991) further argued that resources meeting valuable, rare, inimitable and non-substitutable conditions impart firms with a competitive advantage. Peteraf (1993) argued that heterogeneity in industry may reflect the superior productive factors, which are limited in supply. They may be quasi-fixed and their supply cannot be expanded rapidly. They are scarce in the sense that they are insufficient to satisfy demand for their services. Thus resources that are valuable (in a product market sense), acquired differentially at lower cost or the supply of which cannot be expanded to meet their total demand become the source of competitive advantages. Resources obtained by policy favors (exclusive licenses, favorable tax policies, subsidized and cheaper capital) and/ or market imperfections (preferred access to capital, managerial labor or product markets) fulfill these conditions.

Research in resource-based stream suggests that a performance effect due to superior resources is not explicit. Effect of superior resources alone may not be reflected in superior accounting returns and that the same is observable in improvement in some business processes. Other inefficient processes in the business may destroy the superior value created by superior resources and thus performance measures may not be appropriate dependant variable (Ray et al, 2004). Coff (1999) argues that value created by superior resources may not be appropriable due to claim by different stakeholders leading to indifferent economic performance. In view of this, enquiry

into intrinsic advantages of firms in acquiring resources need not be tied up with economic performance. Furthermore, fungible resources may be applied across product markets, as they are still scarce relative to their total demand (Peteraf, 1993).

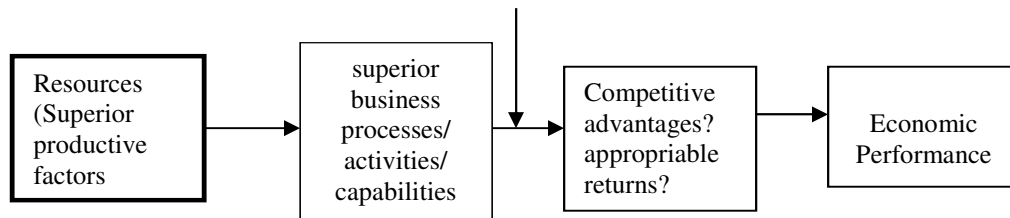
Other researchers stressed treating firm as unit of analysis rather than other aggregating forms. Rumelt (1991) advocated studying the firm for finding important sources of profitability and treating it 'unit of analysis' rather than any other aggregating alternative. He argued that taking any other unit of analysis such as 'industry' or 'corporation' to reveal theoretical or statistical explanations of business unit performance would only explain up to 8% and 2% of observed dispersion among business unit profit rates respectively. Teece et al (1997) also suggest that one of the normative implications of their research on firm's dynamic capabilities is its implicit focus on unit of analysis which is the firm and that such an analysis should be situational since the opportunities flow from a firm's unique resources.

Thus the propositions of how group affiliated firms benefit from market imperfections and policy favors need to be studied at firm level in their acquisition of resources. We propose to examine the same with following analytical framework.

### **Analytical framework**

From the above discussion in resource-based view, the following causality chain emerges.

Other inefficient processes
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**FIGURE 1: CHAIN OF CAUSALITY IN RESOURCE BASED VIEW**

This paper examines superior resource access and economic performance separately as presented in the analytical framework.

Superior resource access by Policy favors and market failures and the varied ways in which they are operationalized as exclusively available to group affiliated firms in comparison to standalone firms, constitute superior productive factors as;

- a. these are valuable in that they are accessed differentially and at lower costs by group affiliate firms in non-market fashion and are applied into various product markets
- b. they are rare, since they are not available to achieve equilibrium with their demand by other producers (standalone firms), again as they are dispensed by government in a non-market fashion or in case of market failures, offered by sellers of labor, capital and buyers of products to affiliates without information on competing offers

- c. they are inimitable or inimitable at same cost since they are differentially obtained or obtained at lower cost, and their access is limited to the sources of origin favoring group affiliate firms
- d. they are non-substitutable for reason of lower historical cost

Thus in order to establish differential and valuable resource access, it needs to be established that various resources are obtained on favorable terms, or at lesser cost or to exclusion of others on favorable terms, by group affiliate firms for laying conditions precedent for generating differential resource advantage. Finally, group affiliated firm in India have historically operated in manufacturing sector and only marginally in services sector. Thus a favorable resource allocation in manufacturing sector needs to be examined separately from services sector as pooling would tend to moderate results.

**Contextuality in resource advantages and performance:** Khanna and Rivkin (2001) find that performance impact of group affiliation is country and context specific as they find positive performance of group affiliates in 3 of 14 emerging markets and negative or impartial performance in others. Petit et al (2005) find some performance benefits for group affiliates in pre reform period before 1991 and no performance benefits in post reform period in India. Ramaswamy (2001) argues that there is no ownership effect or performance differential in absence of competition. Mayer and Whittington (2003) also find sharp variations in performance in different countries and time periods. The last study has been conducted in France, Germany and United Kingdom. India liberalized its economy and introduced gradual liberalization in Industrial, international trade and financial sector in stages. Some of the important changes are

highlighted in Appendix 1. Changes were implemented in successive annual budgets, which had the impact of changing the competitive intensity yearly by exit and entry of new firms. The policy changes had the effect on market structure and reducing role of government thus affecting resource allocation differently in each year. A performance differential in group affiliates and standalone firms needs to be examined for each year in view of changed policy context and entry and exit of firms.

The following hypotheses are formulated, based on propositions of both policy favor and market imperfections imparting significant advantages to group affiliates. Ghemawat and Khanna (1998) elaborate ways in which policy favors are extended to group firms. These include favorable tax policy, and subsidized, cheaper and preemptory finance on favorable terms from state run financial institutions and banks. Khanna and Rivkin (2001) elaborate various market failures in India, capital market included. Various sources of finance in India included Government run banks and financial institutions, capital market, corporate funds market comprising of private and government corporate bodies and various public sector enterprises. Financial resources from Government run banks and financial institutions are argued as instances of misguided policy choice by Ghemawat and Khanna (1998) and accordingly operationalized. Discriminate allocation of finance by other sources, given industry and size parity, would be symptomatic of market imperfections. This leads to the following hypotheses.

H<sub>0</sub>: Firms in both manufacturing and service industry in private sector in India,

- (i) benefit equally by government policy through tax incentives, enjoy equitable access to various sources of finance from state run banks, and financial institutions, and there are no favorable terms offered to any firm
- (ii) enjoy equitable access to capital market, and in corporate funds market
- (iii) group affiliate firms are non- discriminating between other affiliates and standalones while investing
- (iv) Access to funds is not discriminate in pre and post liberalization in 1991 for group affiliate and standalone firms,

The alternative hypothesis can be stated as;

H<sub>1</sub>: Group affiliated firms are treated preferentially by Government by extending policy favors, by way of preferential access to financial resources from Government owned banks and financial institutions as also by Capital market for equity and debt issues, by corporate funds market and access to internal capital market.

As regards performance of firms, there is no reason to expect superior performance of group affiliates given various costs imposed by virtue of affiliation.. This leads to the hypothesis,

H'<sub>0</sub>: There is no performance differential between affiliated and non-affiliated firms pre or post liberalization.

Alternatively, Superior resource access will lead to better performance in comparison to standalone firms. Also, there may not be agency problems in that firm owners are also managers of the firm and incentives are properly aligned with other shareholders, and also employees or other stakeholders may not appropriate that excess value generated by superior resources due to owner manager supervision. Further if there are inefficient business processes, they may not be more inefficient in comparison to other standalone firms. This leads to the hypothesis that;

H<sub>1</sub>: Group affiliated firms outperform non-affiliates in periods prior to and immediately post liberalization.

### **III. RESEARCH METHODOLOGY**

To measure differential resource access, following different avenues, as proposed by Ghemawat and Khanna (1998) to resources are investigated,

1. Policy favors:
  - a. Tax policy structure
  - b. Financial preemption and subsidized loans from government owned banks and financial institutions
2. Market Imperfection
  - a. Capital market and corporate debt market
  - b. Internal capital market

for two groups of firms, group affiliated and standalone firms. Empirical analysis of firm annual accounts, balance sheet, capital market and other data by analysis of variance (ANOVA) test is conducted for the two sets of firms on dependant variables separately for each year from 1989 to

2003 in manufacturing industry. Annual analysis is done in view of gradual changes in various policies relating to reforms in industrial, financial and foreign direct investment and import tariff structure, affecting entry and exit of firms. Finally, Tobit regression analysis is conducted on dependant variable controlling for size, industry and capital structure effects on pooled data.

The performance of the two sets of firms is separately measured. For measuring performance, Tobin's q and return on assets (ROA) measures were constructed in the same fashion as Khanna and Palepu (2000a) and Khanna and rivkin (2001) to facilitate comparability. Two other accounting measures, operating profit margin and margin on total assets, were also estimated as these represent popular accounting measures guiding managers to compare performance and influencing choices.

#### **Variables selection:**

#### **III (i) Policy distortions**

(a) Favorable tax policy structure:

**LGSC** = sales tax deferrals/ total borrowings: sales tax deferrals as share of borrowings indicates loan from Government without interest (Gulyani, 2001; Leff, 1978)

(b) Loan funds availability on favorable terms from banks and financial institutions:

**FIB** = Financial Institutions borrowings/ (Financial Institutions borrowings + Bank Borrowings): financial institution loans are long term and subsidized loans (Ghemawat and Khanna: 1998)

(c) Preemptive borrowing



**STBB** = Short term bank borrowings / total bank borrowings: represents preemptive borrowings from banks as banks lend short-term funds which reduce availability to others as most Banks are controlled by state and limits are imposed by controlling authorities on commercial lending.

(d) Favorable terms:

**UNSECL** = (Unsecured Loans/ total liabilities)\*100: Unsecured loans represent loans from Banks which are mostly in form of cash credits etc

(e). Capital access or equity contribution by banks and financial institutions: Government owned financial institutions provided long-term project loan for industrial projects and were the major source of finance in absence of institutional intermediaries and capital market. 'Scope economies,' if any, in securing favors from bureaucrats and higher officials in these financial institutions would be most observable in capital contribution ratio of FIs in equity of population of firms. Analysis of composition of equity held by government floated and controlled financial institutions like IDBI, IFCI, LIC, UTI, ICICI and other groups of shareholders in private business would highlight, if a systematically skewed allocation of capital exists.

### **III (ii) Market Imperfections:**

(f) Capital Market imperfections: Promoter's, public and others (constituting of foreign investors, corporate bodies and government affiliated financial and public sector undertakings)

share contributions in various issues of equity and debt are examined, for over 9000 issues of capital during years 1989-2002.

(g) Public issues of debt: are examined by

$$\mathbf{DEB} = (\text{debentures/ total liabilities}) * 100$$

$$\mathbf{FD} = (\text{Fixed deposits/ total liabilities}) * 100$$

Higher share of DEB and FD in composition of liabilities represents an asymmetric allocation of funds by capital market. (Goto, 1982)

(h) Corporate funds market:

Funds access in corporate market is measured following variables.

$$\mathbf{LFOC} = (\text{loans from other companies / total liabilities}) * 100$$

LFOC measures loans from companies other than group companies. These include public sector undertakings, state owned enterprises, and other corporate bodies (Goto, 1982)

(i) **Internal capital Market:**

$$\mathbf{LFGC} = ((\text{Loan from group companies} - \text{loan from other companies}) / \text{total liabilities}) * 100$$

LFGC represents loans from group companies as compared to loans from other companies as a share of liabilities. A higher share of investment from group affiliates net of investment by independent companies captures internal movement of funds within group affiliates on non commercial considerations.

**Funds constrained firms-** Investment by financially constrained firms can provide a more robust test of internal capital market and its consequential effect of superior capital access to affiliate firms. Corporate office of business groups would avoid paying dividend and direct the

investment of surpluses if any, to enhance their own power consistent with agency theory. Its control rights vest with it authority to redistribute resources (Hubbard and Palia, 1999). Therefore group-affiliated firms, even when financially constrained would tend to invest in other group related firm. Hubbard and Palia (1999) and Klein (2001) suggest that financial constraint can be argued for companies that pay lower than the median dividend payout ratio. The following variables are examined in a population of funds constrained firms to reveal differentiated investment behavior of firms.

$$\text{IG RATIO} = ((\text{Investments} - \text{investment in group companies}) / \text{Investments}) * 100$$

IG Ratio represents investment by funds constrained firms, which are identified as firms paying less than mean dividend payout. A lower IG ratio captures investment in group companies at cost of paying dividends.

#### **IV. DATA**

Data was obtained from Center for Monitoring Indian Economy, Mumbai. CMIE collects data on firms from various sources, like published annual accounts, mandatory filings before various statutory authorities and news reports. It converts the published data in soft form in various products like 'Prowess'. The data on group affiliation is compiled by CMIE on same basis. For identifying group affiliation, CMIE classification is adopted as in earlier studies .

This data was updated up to November 13, 2003. There are a total of 4686 public limited firms in manufacturing industry, which include both group affiliated and private firms in 'Prowess' database. All firms are listed on Bombay Stock exchange. Number of firms in each year varies due to entry and exit of firms. Firms not reporting data for a period of 3 years and firms going private are deleted from database by CMIE. Firms with '0' total assets, and whose assets had either doubled in next year or halved from previous year were eliminated from the data. Missing data was handled by dropping the firm on a case-by-case basis.

Data on industry classification is available under National Industrial Classification (NIC). This code is assigned to firms based on their product market by CMIE. Starting with 2 digit broad industry category, the data extends to 5 digits signifying product market by major product category. We adopt a 3 digit NIC number to identify industry of firms.

Similarly, data on shareholding information for years 1989-2000 was obtained from CMIE. Data for years 2001 to 2003 is available in Prowess database. Similarly, data on capital issues for the years from year 1989 to 2002 was obtained separately from CMIE for this research. A total of 9851 issues of capital including of both equity and debt were obtained. In Table 1, we present descriptive statistics of firms in the sample.

There are 37,818 observations in the pooled data. These observations are truncated for missing values for some variables, which reduces the sample to 11,415 observations. Differential statistics are presented in panel A-D for each variable separately.

**TABLE 1: DESCRIPTIVE STATISTICS**

**Rs. in x 10 Million**

YEAR	Stand Alone			Group Affiliated			
	net_sales	other_income	total_assets	net_sales	other_income	total_assets	
<b>1989</b>	Mean	18.38	0.18	14.95	72.02	1.20	81.44
	S.D.	18.20	0.24	14.51	140.66	2.87	191.20
	Median	12.66	0.09	11.40	28.02	0.31	28.00
<b>1990</b>	Mean	21.81	0.21	16.86	85.47	1.63	95.63
	S.D.	20.88	0.33	16.28	164.81	4.26	237.70
	Median	16.16	0.10	12.18	35.06	0.35	32.53
<b>1991</b>	Mean	19.54	0.19	16.56	85.12	1.79	98.98
	S.D.	21.49	0.30	19.41	172.68	5.47	244.45
	Median	12.97	0.07	11.78	33.42	0.36	32.92
<b>1992</b>	Mean	20.06	0.23	19.56	94.71	2.05	115.35
	S.D.	23.52	0.40	27.43	207.38	6.26	321.07
	Median	12.88	0.08	12.33	36.69	0.41	37.19
<b>1993</b>	Mean	18.92	0.22	19.02	97.55	2.46	128.55
	S.D.	25.99	0.41	25.60	227.94	8.40	382.20
	Median	10.77	0.07	11.47	36.29	0.40	39.45
<b>1994</b>	Mean	17.46	0.20	18.95	105.41	2.40	150.21
	S.D.	26.39	0.46	26.71	261.51	7.88	464.91
	Median	8.36	0.05	10.91	36.27	0.38	43.16
<b>1995</b>	Mean	18.29	0.22	22.02	127.15	3.32	188.96
	S.D.	29.10	0.47	32.25	324.82	11.78	581.50
	Median	7.82	0.06	12.30	43.30	0.55	55.21
<b>1996</b>	Mean	22.49	0.30	25.98	154.63	4.22	227.17
	S.D.	37.19	0.76	38.54	404.13	14.69	716.12
	Median	9.92	0.08	13.92	54.65	0.59	66.44
<b>1997</b>	Mean	23.72	0.31	28.40	165.75	4.36	255.25
	S.D.	38.93	0.84	44.44	463.56	15.97	859.73
	Median	10.24	0.08	14.70	54.00	0.58	69.62
<b>1998</b>	Mean	25.78	0.31	31.02	177.14	4.22	291.32
	S.D.	45.23	0.84	51.34	511.95	16.68	1042.80
	Median	10.89	0.07	15.52	56.53	0.55	73.66
<b>1999</b>	Mean	27.16	0.30	32.67	183.94	4.45	311.68
	S.D.	50.29	0.91	60.69	540.41	22.04	1194.13
	Median	11.35	0.07	15.51	53.22	0.52	73.86
<b>2000</b>	Mean	29.52	0.33	35.26	205.00	4.83	331.94
	S.D.	58.29	1.19	70.07	667.26	28.32	1257.13
	Median	12.03	0.07	15.68	56.62	0.61	77.58
<b>2001</b>	Mean	35.12	0.41	40.33	245.04	5.03	347.26
	S.D.	77.28	1.74	85.35	1138.30	29.94	1305.45
	Median	13.10	0.08	17.12	62.23	0.56	84.48
<b>2002</b>	Mean	43.17	0.48	49.74	285.08	5.25	402.26
	S.D.	103.72	2.11	112.87	1631.31	26.34	1871.39
	Median	16.16	0.10	20.49	77.42	0.65	101.62
<b>2003</b>	Mean	80.07	0.82	87.88	456.21	8.01	612.49
	S.D.	206.34	4.64	215.35	2366.96	46.04	2694.14
	Median	30.15	0.19	37.98	122.04	1.28	154.40

## Descriptive statistics for the main dependent variables

### Panel A: Whole Sample

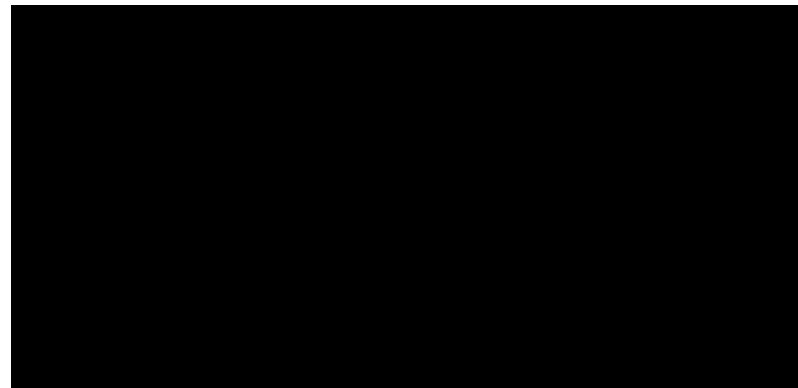
	Mean	Std. Dev.	Q1	Median	Q3	N
LGSC	0.0262	0.0937	0	0	0	37,818
FIB	0.3056	0.3183	0	0.22	0.56	37,818
STBB	0.6113	0.4405	0	0.88	1	11,415
UNSECL	0.1235	0.2496	0	0	0.09	11,415
DEB	0.0083	0.0731	0	0	0	11,415
FD	0.0234	0.1134	0	0	0	11,415
LFOC	0.0102	0.0661	0	0	0	11,415
LFGC	-0.2328	0.5208	-1	0	0	37,818

### Panel B: OWNER = 0 Standalone Firms

	Mean	Std. Dev.	Q1	Median	Q3	N
LGSC	0.0251	0.0899	0	0	0	20,773
FIB	0.2863	0.3211	0	0.16	0.54	20,773
STBB	0.6318	0.4358	0	0.93	1	7,606
UNSECL	0.1272	0.2506	0	0	0.12	7,606
DEB	0.0031	0.0440	0	0	0	7,606
FD	0.0155	0.0937	0	0	0	7,606
LFOC	0.0107	0.0689	0	0	0	7,606
LFGC	-0.2595	0.4883	-1	0	0	20,773

### Panel C: OWNER = 1 Group affiliated firms

	Mean	Std. Dev.	Q1	Median	Q3	N
LGSC	0.0275	0.0980	0	0	0.01	17,045
FIB	0.3290	0.3133	0	0.29	0.58	17,045
STBB	0.5705	0.4470	0	0.77	1	3,809
UNSECL	0.1162	0.2475	0	0	0.03	3,809
DEB	0.0185	0.1096	0	0	0	3,809
FD	0.0391	0.1437	0	0	0	3,809
LFOC	0.0092	0.0602	0	0	0	3,809
LFGC	-0.2002	0.5562	-1	0	0	17,045



## V. ANALYSIS AND RESULTS

For analysis, results of one-way ANOVA are presented in the tables for manufacturing companies followed by regression analysis panels and discussion.

In Table 2, ANOVA results are presented with following abbreviations.

- (i) Sample size presented on top, number of independent firms followed by number of affiliated firms (in bracket)
- (ii) Variable heading in rows, followed by sample mean values of stand alone firms and group affiliated mean (in bracket), followed by
- (iii) 'f' ratio in lower cell, which is starred according to level of significance

Notation: Standalone '0' group, Business group affiliated '1'

Analysis results in respect of few years 1989, 1992, 1994, 1996, 1999, 2001 and 2003 are being presented. Detailed year-by-year results are available with researchers.

**Table 2: ANOVA analysis**

	<b>1989</b>	<b>1992</b>	<b>1994</b>	<b>1996</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
0 (1)	310(676)	647(952)	1413(1198)	2074(1332)	2123(1423)	2121(1443)	502(747)
df	985.00	1598.00	2610.00	3405.00	864.00	3563.00	1248.00
LGSC			.019(.026) 4.301**				.02(.03) 8.000***
FIB			.326(.401) 34.212***	.31(.36) 14.497***	.28(.32) 15.291***	.234(.288) 25.423***	.17(.21) 4.408**
STBB			.753(.785) 4.851***	.71(.76) 13.638***	.73(.71) 4.067***		
UNSECL		5.51(7.40) 12.892***	6.05(8.18) 13.968***	5.32(8.83) 29.500***	8.47(11.4) 10.292***	10.5(13.6) 7.231***	
DEB	1.22(3.55) 38.689***	1.47(4.29) 74.688***	.935(3.95) 146.210***	.65(3.42) 151.496***	.72(3.71) 168.137***	.810(3.74) 167.514***	.87(3.61) 39.199***
FD	1.43(2.28) 17.252***	.777(1.43) 24.520***	.363(1.11) 88.763***	.27(.83) 70.348***	.42(1.14) 78.570***	.533(1.01) 21.594***	
LFOC				1.37(1.77) 5.826**			
LFGC				(-.29)(-.23) 10.172***	(-.28)(-.22) 12.965***	(-.247)(-.162) 24.083***	
IG RATIO	29.4(47.2) 26.854***	26.3(35.7) 14.960***	28.6(32.7) 4.648**	39.4(32.5) 15.185***	40.9(30.1) 36.789***	44.12(34.86) 28.758***	39.38(34.29) 16.781***

Significance: \*\*\* = .01, \*\* = .05, \* = .10

In Table 2, group affiliate firm's means for variables LGSC are higher and significant in some years. This suggests that group affiliate firms have a higher sales tax outstanding (which represent interest free loans from government) consistent with hypothesis that group affiliates benefit from a favorable tax policy structure. Variable STBB, representing short term bank borrowing as a ratio of total bank borrowings are higher for group affiliates in some years and lower in some others which would indicate replacement of STBB by other means of finance,



possibly cheaper such as other affiliate firms or other means of financing as proxied in this paper. Affiliate firm means are higher and significant for most years for variable FIB, which represents borrowing from financial institutions as a ratio of total borrowings from banks and FIs. Variable UNSECL represents unsecured loans as a ratio of total liabilities. This is again higher and significant for most years in the analysis.

These results imply that group affiliate firms have preferential access to financial institutions in securing loans and have a higher ratio of unsecured loans in their total liabilities, which mean softer loan terms. Results imply financial pre-emption (FIB and STBB), cheaper loans (FIB) and softer terms (UNSECL) from banks and financial institutions favoring group affiliate firms for most years up to 2003.

Turning to market imperfection proxies, variables DEB and FD, representing debentures and fixed deposits as ratio of total liabilities, group affiliates' means are again higher and significant for most years up to 2003. Affiliate firm means for LFOC representing loans from other than group companies (consisting of corporate bodies, state government owned enterprises, and public sector undertakings) is significant in some years, representing discriminating advantage in corporate funds market. Results of LFGC indicate that group other group affiliates are a major source of funding.

Turning to Panel A, we conduct cross-sectional tests of our hypothesis  $H_0$  by regressing several debt-related variables on OWNER, a dummy variable equal to 1 if the firm belongs to a business group and 0 otherwise. The regression equations also include an intercept term and controls for

firm size (defined as LN\_SALES, the natural logarithm of sales in the prior year) and capital structure (defined as D/E, the debt-equity ratio). In addition, all regression models include industry dummies where industry membership is defined at the 3-digit NIC level and year dummies to control for any temporal trends.<sup>1</sup>

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<sup>1</sup> We repeated all analyses in Panel E with different specifications excluding firm size, D/E ratio, and industry and year dummies. The results are very similar and are available upon request from the authors.

**Panel E: Cross-Sectional Analysis of Debt (Including D/E Ratio)**

Variable	Exp Sign	Specificat ion	Intercept	OWNER	LN_SALES	D/E Ratio	Ind/Year Dummies	N	Adj R <sup>2</sup> /LogL
LGSC	+	Tobit	-0.351 (0.00)	-0.009 (0.03)	0.024 (0.00)	-0.000 (0.29)	<i>Included</i>	36,009	-10122
FIB	+	Tobit	0.019 (0.11)	0.017 (0.00)	0.035 (0.00)	-0.000 (0.02)	<i>Included</i>	36,009	-23952
STBB	-	Tobit	0.3468(0.00)	-0.329(0.00)	0.188(0.00)	-0.000 (0.36)	<i>Included</i>	10511	0.2140
UNSECL	-	Tobit	-0.4166(0.00)	-0.061(0.00)	0.078(0.00)	0.000(0.39)	<i>Included</i>	10511	0.0691
DEB	+	Tobit	-4.3296(0.00)	0.186(0.021)	0.464(0.00)	-0.005(0.21)	<i>Included</i>	10511	0.0435
FD	+	Tobit	-1.50(0.00)	0.142(0.00)	0.149(0.00)	-0.001(0.39)	<i>Included</i>	10511	0.0622
LFOC	-	Tobit	-0.472 (0.00)	-0.037(0.001)	0.002(0.41)	0.0002(0.57)	<i>Included</i>	10511	0.0046
LFGC	+	Truncated	-0.295 (0.00)	0.089 (0.00)	-0.021 (0.00)	0.001 (0.00)	<i>Included</i>	36,009	-39340



A tobit regression was estimated for each dependent variable using the maximum likelihood (ML) approach [Maddala, 1986 and Greene, 1997]. This allows for two-sided truncation in our dependent variables. Standard errors are reported after robust Huber-White correction. The variables including LGSC, FIB, STBB, UNSECL, DEB, FD LFOC and LFGC are censored below at zero and above at 1 (see Table 2 for detailed variable definitions). Panel E gives the expected sign on OWNER for each independent variable. Adjusted r-squared values are reported for each model.

Starting with LGSC, defined as Loan Government Sales Tax credit, OWNER has significantly negative coefficient (-0.009, two-tailed p-value 0.03). This suggests that sales tax incentives, while they are discriminately higher for group affiliates as compared to standalone firms, are not a significant portion of borrowings of group affiliates. Other variable like FIB, STBB and UNSECL have significant coefficients for OWNER (with two tailed p values of 0.00) and expected signs, consistent with hypothesis  $H_1$ . The positive sign on OWNER in the regression of FIB and negative sign on STBB implies that, all else being equal, group affiliates are more likely than standalone firms to approach financial institutions for their capital requirements and less likely to go for short term borrowings from Banks, which is costlier. Coupled with a higher mean as compared to standalone firms sample, this suggests that group companies enjoy preferential access to both financial institutions and banks, which lends empirical support to our hypothesis  $H_1$ . UNSECL representing unsecured loans, OWNER has a significantly negative coefficient (-0.061, two-tailed p-value 0.00). This suggests that group affiliate firms are likely to have less unsecured loans in total loans portfolio, which in other words means most of their funds are sourced from financial institutions, which are cheaper.

Other variable for market imperfections, namely DEB, and FD defined as debentures, and fixed deposits, also have significant and positive co-efficient on OWNER with (with tow tailed p values of 0.00) consistent with hypothesis  $H_1$ . This implies group affiliates are more likely to approach capital market for their borrowings and have better access to these sources. A significant negative coefficient of LFOC suggests that loans from other companies are not a significant portion of group affiliates borrowings. This may imply higher borrowings from group companies. LFGC, which represents excess of loans from group companies as compared to other corporate bodies, has a significant coefficient on owner (0.089, with two tailed p value of 0.00) implying other group firms constitute a major portion of borrowings from corporate bodies for group affiliates. This is consistent with internal capital market hypothesis. Positive and significant coefficient of FD and DEB imply that group firms enjoy preferential access to capital market.

We also find that the coefficient on LN\_SALES is statistically significant in all but one models, suggesting that firm size is associated with LGSC, FIB, UNSECL, STBB, DEB, FD and LFGC. For example, in the OLS regression of STBB, the coefficient on LN\_SALES is 0.188 with a two-tailed p-value of 0.00. Likewise, in tobit regression of FIB, the coefficient on LN\_SALES is 0.035 with a two-tailed p-value of 0.00. This implies that, all else being equal, relatively larger firms have better access to both financial institutions (which lend only long term funds) and Banks (which lend only for short-term). Coefficients of LFGC on LN\_SALES are opposite, implying that relatively larger firms are less likely to approach group companies for their

financing needs. This is consistent with hypothesis of superior access to external sources of finance like those from financial institutions, banks and capital market.

In summary, results from Panel A suggest that there is a systematic difference between group and non-group firms in terms of their reliance on different sources of finance like government owned financial institutions and banks and also on capital market, with group affiliates enjoying superior access to both sources. Results also indicate reliance for funds on other group firms only in case of relatively smaller group affiliates.

Internal Capital Market: variable LFGC, defined as excess of loan from group companies over loans from other companies as share of total liabilities, OWNER has a significantly positive coefficient (.089, with two tailed p value of 0.00). This suggests that group affiliate firms tend to rely on other group affiliates for a higher portion of their borrowings than from other corporate bodies supporting the hypothesis about a vibrant internal capital market existing within business groups. However, a negative coefficient on LN\_SALES indicates that larger firms tend to rely more on external sources of financing than internal funds.

Firms under funds constraints: Variable IG Ratio is defined as excess of investments over investment in group firms as a ratio of total investments of funds constrained firms. In Table 2, sample means are significantly different for two sets of firms for all years up to 2003. Sample means for IG Ratio are higher for group affiliate firms in years up to 1994, indicating that affiliated firms invested higher share of investments in external opportunities. The means for group affiliates are lower from 1994 to 2003 implying that group firms tended to redirect their

investments inwards into other group firms after the year 1994. This could be a response to withdrawal of Monopolies and Restricted Trade Practices Act, which had earlier motivated groups to hold firms outside the group structure, which were later merged in the group. Investment in group firms is consistent with hypothesis of internal capital market.

Capital Access or equity contribution by banks and financial institution: Analysis data in Table 3 suggests that for all the years from 1991 to 2003, Government/ Banks or Financial Institutions holdings have higher and significant mean ratio for group affiliated firms as compared to standalone firms suggestive of higher equity holdings in group affiliated firms. This is consistent with systematic policy discrimination and preferential access to finance for group affiliated firms. Another discriminating block of capital contributors is corporate holder, which may include companies from within or outside the group that favor affiliate companies. Mean share contribution by corporate bodies are again higher and significant for group affiliates up to year 2000. Similarly, standalone firms' major contributions to capital came from either the promoters or entrepreneur/directors up to the year 2000. For the year 2001 to 2003, direction of means for these two sources is reversed. It could be due to change in reporting format implemented from year 2001 onwards by market regulator, with respect to various classes of shareholders. Thus in case of standalone firms, directors and their relative and other/ public class of shareholders have a higher mean consistent with a hypothesis of a disadvantage in accessing capital. In comparison to group affiliates, this indicates a resource constraint.



**TABLE 3: SHAREHOLDING BLOCKS**

	1989	1992	1994	1996	1999	2001	2003
N	4(10)	391(696)	401(541)	1378(932)	897(653)	1593(1008)	2040(1107)
df	13	1080	941	2309	1549	2600	3146
Foreign Holding		.136/.107 6.98**	.12/.09 7.37**			4.04/6.3 31.51**	3.36/5.69 49.78*
Govt./Financial institutions		.117/.178 41.53***	.09/.16 65.13***	.05/.13 310.8***	.05/.12 171.2***	3.4/11.2 401.96***	2.75/9.62 472.4***
Corporate bodies) (not covered above)		.201/.281 49.77***	.20/.32 86.14***	.22/.34 210.6***	.22/.35 151.3***	10.7/9.0 9.41***	9.87/8.60 6.82***
Directors & their relatives	.33/.10 6.28*	.134/.073 51.76***	.17/.08 64.49***	.22/.09 248.6***	.24/.12 132.6***	42.8/44.9 6.59**	46.16/47.8 3.95**
Others/Public		.412/.361 21.05***	.63/.35 44.24***	.42/.34 141.7***	.40/.31 85.97***	39.1/28.5 195.12***	37.89/28.3 180.89***

Significance: \*\*\* = .01, \*\* = .05, \* = .10

## 5.2 Market Imperfections - Capital market

ANOVA analysis data in Table 4 for issue size of equity indicates significant difference in means of issue size for private and affiliated firms and mean is higher for group affiliates in the years 1992-2000.

**Table 4: Issue size of Equity (Public issues)**

YEAR	1989	1992	1994	1996	1999	2000
N 0(1)	76(55)	334(142)	1048(206)	677(40)	28(17)	98(6)
df	130	475	1253	716	44	103
security amount	361.2(613.2) 5.116**	533.5(1508.9) 30.441***	618.7(2951.6) 123.260***	486.6(1963.6) 177.592***	1466.9(9752.7) 4.518**	976.5(16673.8) 21.863***

Significance: \*\*\* = .01, \*\* = .05, \* = .10

**Panel F Cross-Sectional Analysis of Public Issues**

Variable	Exp Sign	Specification	Intercept	GROUP	Year Dummies	N	Log Likelihood
SHR_PROM	–	Tobit	–8.916 (0.00)	–0.013 (0.03)	<i>Included</i>	4,965	–19.89
SHR_IND	–	Tobit	3.171 (0.00)	–0.007 (0.28)	<i>Included</i>	5,284	168.21
SHR_OTH	+	Tobit	–2.003 (0.99)	0.020 (0.00)	<i>Included</i>	5,077	362.07

As reported in Panel F, in the tobit regression of SHR\_PROM, the independent variable of interest, GROUP has a significantly negative coefficient (-0.013, with two-tailed p-value of 0.03). This suggests that in group-affiliated firms the promoter’s share of the security issue tends to be lower compared with non-affiliated firms. This result is consistent with our hypothesis  $H_1$ . Further examination of contributions by various other types of investors reveals that SHR\_OTH, the proportion of security issue contributed by other investors (consisting of corporate and other institutional investors), is significantly positively associated with GROUP (coefficient estimate 0.020, two-tailed p-value 0.00). This is consistent with the hypothesis that group affiliates have preferential access to corporate and other institutional investors. On the whole, the empirical evidence from Panel B is consistent with the hypothesis that in public issues of securities by group-affiliated firms, the promoters make a smaller contribution compared with non-affiliated firms and corporate and other institutional investors make a higher contribution. This suggests that group affiliate firms have a discriminate advantage in capital market over standalone firms in accessing capital.

### 5.3 PERFORMANCE OF FIRMS

As the differential of group affiliates and standalone firm's performance has been related to country specific environments, which is also likely to change from year to year as liberalization in India was introduced in successive years in successive industry sectors through annual budget of Government, this is examined by ANOVA analysis, comparing performance of two sets of firms for following variables .

Following measures are developed for measuring performance.

1.  $ROA = (\text{Net Income} + \text{Interest} (1-t)) / \text{Total Net Assets}$

Net income is taken as profit after tax and tax rate has been computed as in Berger and Ofek (1996).

2.  $\text{Tobin's } q = (\text{Market value of equity} + \text{book value of preference shares} + \text{book value of debt}) / \text{book value of assets}$
3.  $\text{PBIT} / \text{Total assets}$
4.  $\text{PBIT} / \text{Sales}$

Last two measures are taken as they are useful ready tools to communicate and transact by managers as also to understand comparative business performance especially when markets are not fully developed. The data on performance of manufacturing firms is presented year by year in interest of understanding specific year effects as also to compare the same against year-by-year changes in industrial and trade policies.

**TABLE 5: PERFORMANCE OF MANUFACTURING FIRMS**

	<b>1989</b>	<b>1992</b>	<b>1994</b>	<b>1996</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>
<b>N- 0 (1)</b>	310(676)	647(952)	1413(1198)	2074(1333)	2123(1426)	2121(1443)	502(747)
<b>df</b>	985	1598	2610	3406	3548	3563	1248
<b>ROA</b>				.065(.091) 36.64***	.01(.03) 17.66***		
<b>Tobin q</b>			2.14(3.01) 21.44***				
<b>Pbit/TA</b>	.10 (.10) 3.614**		.102(.115) 7.65***	.076(.111) 58.8***	.023(.052) 26.05***		
<b>pbit/Sales</b>	.108(.124) 5.221**			.113(.335) 3.793**			(-.04) (.46) 3.926**

Significance: \*\*\* = .01, \*\* = .05, \* = .10

As can be seen from Table 5, group affiliated firms outperform the standalone firms in only some of the years. Different measures of performance yield non-corresponding performance differential. The performance parameters exhibit year and measure sensitivity. Last two measures, namely Pbit/TA and pbit/Sales are also sensitive to indiosyncratic accounting practices which are non uniform across companies both standalone and group affiliated. The differential performance of group affiliate firms as compared to standalone firms does not seem to be robust.

## **VI. Results and discussion.**

Analysis of policy favors as measured by tax deferrals, subsidized and preemptory finance and capital contribution indicates that one of the policy favor variable relating to favorable tax policy (LGSC) show somewhat tempering in later years of liberalization, the other three (FIB, STBB and UNSECL) representing financial resource access remain robust up to final years of analysis. This is supported in regression analysis of variable FIB (Panel E) as also in regression of SHR\_OTH (Panel F). This finding is further supported by analysis of equity holding patterns (Table 3). Thus there is robust evidence of state run financial system according preemptory and subsidized capital access to group affiliated firms. Capital contribution by state run funding agencies is discriminately higher for group affiliates. Thus null hypothesis  $H_0$ , in each case is rejected and alternate hypothesis  $H_1$ , is accepted. Even though policy favors were supposed to wither as successive waves of liberalization dismantled discriminatory frameworks, it is apparent that those related to government controlled financial system may last longer.

There is also evidence of capital market imperfections working in favor of group affiliates as measured by issue size (Table 4), promoter share (Panel F) and other corporate contributors (Table 3) as well as analysis and regression of other variables (DEB, FD, in Table 2 and Panel E). Standalone firms are identified with a higher promoter share and smaller issue size, which along with higher transaction costs effectively starves them of capital resources. The evidence of capital market imperfections remains in the year 2003. Thus null hypothesis regarding equitable access to capital market is rejected and alternate hypothesis  $H_1$  is accepted.

Capital market imperfections are consistent with Khanna & Palepu (2000a) who did not find even longer term like 25 years for reforms in Chile to have reduced group scope, despite development of intermediary institutions. Khanna and Rivkin (2001) had found that greater the capital market development, higher is the group effect. Our analysis is consistent with this finding in that group affiliates tend to benefit from superior access to capital markets. It is apparent that discriminate behavior of capital markets affecting resource mobilization in India has less to do with development of intermediary institutions and more to do with firm ownership. This leaves scope for investigating other reasons for market preference. As the results on performance indicate, market preference in extending superior access to capital to group affiliate firms is not driven by performance of these firms.

Group affiliates also benefit by internal capital market which provides avenues for not only deploying capital but also provide succor in obtaining loans from other companies in group, a source not available to standalone firms. The finding is consistent with Bertrand et al (2002) finding of tunneling in Indian business groups.

Differential Performance: Preceding the years of reform in 1991 and post reform period up to 1993, group affiliates do not outperform standalone firms on ROA or the Tobin's q measure. ROA for group affiliate firms is significant only for years 1995-1999. The market measure, Tobin's q is not significant in any year but 1994 and 1995. These results are also closely tracked by third measure, PBIT/Total assets. PBIT/ Sales does not show much significant difference for years 1989-1995.

Khanna and Palepu (2000a) measure Tobin's q for the year 1993 and find difference only in median of data when all groups are included and when only smallest groups are included. There is no significant performance difference when groups of other sizes are matched with standalone firms. Thus their results show group size and data sample sensitivity. Our data sample in 1993 is 1968 manufacturing firms of which 892 are independent and 1076 are group affiliated. We find no performance differential, between group affiliated and standalone firms. Khanna and Rivkin (2001) find differential performance in India using pooled data for 1989-1995 period and they measure ROA. Their total numbers of observations are 10531 of which group affiliates are 49%, which include firms in service industry. We perform analysis on manufacturing firms only.

Thus we suspect, that group affiliates performance differential may be sensitive to firms in the sample and time period under study. This is supported by successive years' analysis, which shows no such performance differential. As group affiliate firms were hypothesized to have benefited most prior to liberalization, these results indicate presence of value destroying processes or appropriation by stakeholders in term of RBV theory. Absence of competition may have driven the slack (Ramaswamy, 2001).

In sum, the performance differential between group affiliated and stand alone firms appears sensitive to sample, year in issue and measurement. Group affiliates outperforming standalone firms in India is suspect. We therefore accept the null hypothesis  $H'_0$ , regarding indifferent performance of group affiliates vis-à-vis stand-alone firms.

## **VII. LIMITATIONS OF THE STUDY**

There are limitations of data. There are a priori, severe differences in accounting treatment given by firms to various transactions including 'other income', and to cope with those limitations, CMIE accords its own treatment to data. Though CMIE data is claimed to be used by Reserve Bank of India, Government and various researchers, the account re-classifications done by CMIE are not ratified by any statutory body. Similarly, group classification is prone to inconsistency as pointed out earlier with case example of Tata group. Besides, several standalone firms may replicate the group behavior, particularly in view of different tax treatment given to small and large firms as they would multiply the numbers rather than be classified as large firm. There are some limitations with regard to identification of affiliation whereby firms were not publicly admitted to be group affiliates in the era of MRTP Act.

Future research on performance may take cognizance and consistency of treatment of other income. As the issues arising from indifferent performance relate to resources allocation, further research needs to be conducted to find if performance differential between group affiliates and standalone firms exists under varying competitive conditions.

**VIII. CONCLUSIONS:** Business Groups hold a significant share of economic activity in emerging market economies like India. Literature suggests that part of the reasons is political favors obtained by business groups as also various kinds of market failures which benefit group affiliate firms. Earlier studies did not find evidence for either of the causes in India. Group affiliate firms were also shown to exhibit superior performance under certain contexts in some countries, leading to indiscriminate unrelated diversification by business group in emerging



economies. This study explored various sources of policy favors and market failures and found evidence for both. Presence of internal capital market is also indicated. Indifferent performance of group affiliate firms calls for further research as answering this issue has important implication for resource allocation and growth strategies to be pursued by business groups in emerging markets.

With their interactivity investment allocations, the groups may replicate functions of capital market more efficiently in emerging economies but the costs imposed by group structure both on affiliates firms and economy are no less severe. There are reports of more than Rs. 473 Billion (Approx. \$ 11 Billion) of non performing bank loans outstanding against Indian businesses, mainly from Government controlled banks and financial institutions. This had swollen to Rs. 709 Billion in 5 years from 1997 to 2002, as per Reserve Bank of India report<sup>2</sup>. One government owned financial institution; Industrial Finance Corporation of India has buckled under the weight of high non-performing assets. Several state owned enterprises, having advanced loans as ‘corporate deposits’ to large businesses have gone bankrupt as a result of inability to collect such ‘unsecured’ advances. Bhagwati (1993) argues that despite achieving a saving rate of 20% in 70s and 80s, India achieved an economic growth rate of 3%. Misallocation and inefficient use of public savings by public sector financial institutions and the public and private sector corporations with a corresponding high degree of moral hazard could be one explanation. Leff (1978) argues that business groups transmute factor market imperfections in to product market imperfections and cause political-economic effects on overall development patterns. While this study highlights some causes for their emergence and growth, further research into costs imposed by group structure would help streamline resource allocation in emerging economies.

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<sup>2</sup> The Hindu, Sep 8, 2003 (<http://www.hindu.com/thehindu/biz/2003/09/08/stories/2003090800060200.htm>)

**POLICY CHANGES****Industrial Policy Changes 1991-98**

- July 1991
- \* abolished licensing for all projects except in 18 industries
  - \* MRTP act amended to eliminate prior approval for large companies for capacity expansions
  - \* Requirement of phased manufacturing program (PMP) discontinued for all projects.
  - \* Schedule A of industries reserved exclusively for state enterprises cut down from 17 to 8
  - \* Schedule B of industries where SOEs were to acquire dominant position abolished
  - \* small scale enterprises allowed to offer up to 24% equity to large enterprises
- 1992-93
- \* List of delicensed industries expanded
  - \* Oil exploration and refining removed from list of industries reserved for public sector
  - \* Power sector opened to FDI and private investment
- 1993-94
- \* Mineral removed from industries reserved for public sector
  - \* Licensing of industries reduced further (delicensing of motor car, white goods industries). Readymade garments removed from small scale sector reserved industries
- 1994-95
- \* Licensing of bulk drugs abolished, also added to automatic APPROVAL of foreign equity
  - \* basic telecom opened to private sector, including foreign investment
  - \* Reduction in tax rates on foreign and domestic companies,
  - \* major overhaul of excise duty structure
- 1995-96
- \* Number of measures to attract private investment in infrastructure
  - \* policy for drugs and pharmaceutical liberalized and price control reduced
- 1996-97
- \* Delicensed consumer electronics, bringing list of licensed industries
  - \* SSI investment limit raised to 7.5 million, export obligation on non-SSI firms reduced to 50% from 75%
  - \* List of industries for automatic approval expanded
- 1997-98
- \* number of industries requiring license reduced from 14 to 9
  - \* SSI reservation list pruned further, Corporate tax and tax on dividends reduced

**Foreign Direct Investment Policy Changes 1991-98**

- 1991-96
- \* Limit on foreign equity holding raised from 40 to 51% in wide range of industries; foreign exchange outflow as dividends to be balanced by export
  - \* Technology imports liberalized by increasing import limits
  - \* Automatic approval for FDI in high priority industries
  - \* Reduction in tax rates for foreign and domestic companies
  - \* Pricing norms for raising level of foreign equity liberalized
- 1996-98
- \* Automatic approval of FDI up to 74% by RBI in 9 category of industries
  - \* issued guidelines for expeditious approval of foreign investment in areas not covered under automatic approval
  - \* taxes on royalties reduced

## REFERENCES

- Barney, J.B., (1986) 'Strategic Factor Markets: Expectations, Luck and Business Strategy', *Management Science*, 5:1231-1241.
- \_\_\_\_\_, (1991) 'Firm Resources and sustained competitive advantage', *Journal of Management*, 17(1): 99-120.
- Berger, P. G. and Ofek, E. (1995) "Diversification effect on firm Value", *Journal of Financial Economics*, 37:39-65.
- Bertrand, M., P. Mehta and S. Mullainathan (2002). 'Ferretting out tunneling: An application to Indian Business groups', *The Quarterly Journal of Economics*, Pp 121-148
- Bhagwati, J. (1993). 'India in transition: freeing the Economy', Oxford University Press, Oxford.
- Chang, S.J. & Hong, J. (2002). 'How much does business group matter in Korea', *Strategic Management Journal*, 23(3): 265-274.
- Chang, S.J. and Singh, H. (2000) 'Corporate and Industry effects on business unit competitive position', *Strategic Management Journal*, 21(7): 739-752.
- Coase R. H. (1937) "The Nature of the Firm", *Economica*, 4: 386-405.
- Coff. R. W. (1999) 'When competitive advantage does not lead to performance: The resource based view and stakeholder bargaining power', *Organization Science*, 10 (2):119-133.
- Ghemawat, P. and Khanna, T. (1998) 'The nature of diversified business groups: A research design and two case studies', *Journal of Industrial Economics*, 46 (1): 35-62.
- Goto, A. (1982) 'Business Groups in a Market Economy', *European Economic Review*, 19, Pp 53–70.
- Gulyani, S., (2001) 'Effects of poor transportation on lean production and industrial Clustering: Evidence from Indian auto industry', *World Development*, 29 (7):1157-1177.
- Glenn, H. and Palia, D. (1999) 'A reexamination of conglomerate merger wave in the 1960s: An internal capital market view', *Journal of Finance*, 54(3):1131-1153.
- Greene, William H., (1997), 'Econometric Analysis', 3<sup>rd</sup> Edition, Upper Saddle River, NJ: Prentice Hall.
- Hubbard R. Glenn and Darius Palia, (1999) "A reexamination of conglomerate merger wave in the 1960s: An internal capital market view", *Journal of Finance*, 54(3), 1131-1153
- Khanna, T. (1997). 'RPG Enterprises, 1995', Harvard Business School case, Harvard Business school Publishing, Boston M.A.
- Khanna, T. and Rivkin, J. (2001) 'Estimating the performance effects of business groups in emerging markets', *Strategic Management Journal*, 22(1): 45-74.
- Khanna, T., K. Palepu, and D. Melito Wu (2006). 'House of Tata- 1995: The Next Generation (A)', Harvard Business School case, Harvard Business school Publishing, Boston M.A.
- Khanna, T. and Palepu, K. (1997) 'Why focused strategies may be wrong for emerging markets', *Harvard Business Review*, 41-49.

\_\_\_\_\_. (1999) 'Policy shocks, market intermediaries, and corporate strategy: The evolution of business groups in Chile and India', *Journal of Economics and Management Strategy*, 99 (8): 271-310.

\_\_\_\_\_. (2000a) 'Is group affiliation profitable in emerging markets ? An analysis of diversified Indian business groups', *The Journal of Finance*, LV(2):867-891.

\_\_\_\_\_. (2000b) 'The future of business groups in emerging markets: Long run evidence from Chile', *Academy of Management Journal*, 43 (3): 268-285.

Klein, P. (2001) 'Were the acquisitive conglomerates inefficient', *Rand Journal of Economics*, 32 (4):745-762.

Leff, N. H (1978). 'Industrial Organization and Entrepreneurship in the Developing Countries: The Economic Groups', *Economic Development and Cultural Change*, 26 (4). Pp 661-675

Maddala, G. S., (1986), 'Limited-Dependent and Qualitative Variables in Econometrics', Cambridge: Cambridge University Press.

Mauri, A.J. and Michaels, M. (1998) 'Firm and Industry effects within strategic management: an empirical examination', *Strategic Management Journal*, 19(3): 211-219.

Mayer, M and Whittington, R. (2003). 'Diversification in context: A cross national and cross-temporal extension', *Strategic Management Journal*, 24 Pp 773-781

McGahan, A.M. and Porter, M. (1997) 'How much Industry matter, really?', *Strategic Management Journal*, 18(1):15-30.

Patibandla, M. (2006). 'Equity pattern, corporate governance and performance: A study of India's corporate sector'. *Journal of Economic Behavior and Organization* Vol 59, Pp 29-44

Peteraf, M. (1993) 'The cornerstone of competitive advantage: A resource-based view', *Strategic Management Journal*, 14 (3):171-191.

Petit, B. S. P., K. Ramaswamy and M. Li (2005). 'A temporal study of diversification, group affiliation and performance among Indian manufacturers', *Academy of Management Best Conference Paper*, 2005

Probert, J, Turcq, D. (1996). 'An Indian Family History: The Munjals and the Hero Group', Insead Euro Asia Center case, European Case Clearing House, Bedford, UK

Ramaswamy, K (2001) 'Organizational ownership, competitive intensity, and firm performance: an empirical study of the Indian manufacturing sector', *Strategic Management Journal*, 22(10): 989-998.

Ray, G., Barney, J. and Muhanna, W. (2004) 'Capabilities, business processes and competitive advantage: Choosing the dependant variable in empirical tests of the resource based view', *Strategic Management Journal*, 25:23-37.

Roquebert, J; Philips, R. and Westfall, P., (1996). 'Market versus Management: what drives profitability', *Strategic Management Journal*, 17(8): 653- 664.

Rumelt R., (1991) 'How much does Industry matter', *Strategic Management Journal*, 12(3):167-185.

Schmalensee, R. (1985) 'Do markets differ much', *American Economic Review*, 75(3):341-351.

Teece, D. J., Pisano, G. and Shuen, A. (1997) 'Dynamic Capabilities and strategic management', *Strategic Management Journal*, 18 (7):509-530.

Wernerfelt, B. and Montgomery, C. (1988) 'Tobin's q and the importance of focus on firm's performance', *American Economic Review*, 78: 246-251.

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