

## ABSTRACT

Business group is a set of companies which are owned and/or controlled by a common entity and are connected to each other through either economic or social ties. Business groups are present in many parts of the world and play an important role in the Indian economy as well. Affiliated companies of Indian business groups accounted for three quarters of the total assets and net sales for the recent year.

Many potential benefits from the business group parent that accrue to the affiliated companies in a business group are studied in the literature. Reduction in transaction costs and agency costs, compensation of institutional deficiencies are some of the benefits discussed in the literature. There are other reasons like historical and political reasons that help business groups. Many of the benefits are said to be contextual. Similarly, there are certain costs associated with the business group affiliated companies in being affiliated to their group parent. In the light of these affiliation benefits and costs, one interesting question that arises is whether the net effect of business group affiliation is beneficial or not. An extension of this objective is whether the effect of affiliation on the performance changes as the institutional context changes during the post-liberalization period. Role of group characteristics like group size and diversification are also interesting to observe for their moderating effect.

In addition to group affiliation there are other influences on the performance of business group affiliated companies as well. Important of these are that of industry which is well discussed in the literature for its influence on the performance of companies. Another source that may create performance difference is that of company's organizational resources. Macro-economic fluctuations affect the performance of affiliated companies as well.

In the light of the above influences on the performance of business group affiliated companies, another interesting question that arises is which of these influences are important in an emerging economy. In other words given the group affiliation effect, which other factors influence the performance of affiliated companies of business groups? An extension of this objective is examining the change in the importance of different effects stemming from above factors with time and group characteristics. Our study addressed above two broad objectives.

As a part of our study, we explored the question of whether group affiliation results in significantly different performance. An extension of this is, studying the shift in this effect over different sub-periods as well as examining the changes in this with group characteristics like size and diversification. For achieving this, performance in terms of annual return on assets of business group affiliated companies and unaffiliated companies are compared over

four different sub-periods. This is also performed using different sub-samples based on group characteristics. Secondly, to determine the importance of different factors on the performance of business group affiliated companies, variance in the performance of business group affiliated companies is examined to estimate the contribution of different effects from above mentioned sources. This is also performed in case of different sub-samples based on group characteristics and sub-periods.

Context for this work is set in India for the reasons that there are number of business groups as well as unaffiliated companies. India has also undergone policy reforms in the recent past. These presented an ideal setting for inquiring questions emanating from above objectives. Data from secondary database Prowess from Centre for Monitoring Indian Economy (CMIE) Pvt. Limited is used in this study. Data of recent twelve-year period, financial year 1995-96 to financial year 2006-07, is used. Companies in the database are categorized into three different heads that of business group affiliated, unaffiliated and thirdly 'other' categories. Universe level dataset consisting of 42,757 observations belonging to 5,597 companies is constructed by applying different criteria drawn from the literature.

From the universe level dataset, sample for business group affiliated and unaffiliated companies was drawn on the condition that the company occurs for all twelve years of the study period. This is done so to have the comparison of same companies across all sub-periods. For estimating the effect of group affiliation on the performance of companies, potential factors like size, age and industry in which company participates are controlled for. For distinguishing group affiliation, dummy variable is used and the significance of the same over different sub-periods is estimated using linear regression method. This is also performed in case of different sub-samples constructed based on group characteristics of size and diversification to determine the changes in the effect of affiliation with group characteristics.

For the second part of the study, average performance of the 'universe' during study period is computed as the average return on assets of all the observations in the dataset. Similarly, using the same dataset, different effects (average performance of all companies belonging to that source, net of universe's average performance) are computed in case of affiliated companies of groups. Computed effects are in case of year, industry, group and company.

For estimating relative importance of different sources on the performance of business group affiliated companies, variance component estimation is performed on different sub-samples belonging to business groups with more than one company in their portfolio. This criterion of eliminating business groups with single company in their portfolio is implemented as by including such groups we cannot distinguish and separate group-parent and company effects.

Results from our study indicate that larger groups grown faster than smaller ones. When compared, it is unaffiliated companies that have grown faster than affiliated during the study period. When comparison of mean performances of affiliated and unaffiliated over four sub-periods are performed, performance advantage in general has shifted from affiliated to unaffiliated over years. Our study has also found that when age, size, industry are controlled, group affiliated companies have performed significantly poorer in comparison to unaffiliated companies during latter three sub-periods. During the first sub-period, performance of group affiliated appears better but this could not be established with significance. Thus, transition in the effect of group affiliation has happened during our study period. As the institutional context evolved during post-liberalization period, effect of business group affiliation has changed from being beneficial in the beginning of the period to a liability by the end of the period.

When relative importance of different sources of performance difference is investigated, 'company' emerged as the dominant source on the performance of affiliated companies. Highest portion of explained variance observed in the performance of business group affiliated companies for the entire twelve-year period is on account of company effect. Year effect, business group effect and industry effect are the next important effects in that order.

When we explored the changes in the importance of these effects on the performance of group affiliated companies with different group characteristics like group size, diversification and also across different sub-periods, there are differences. Across sub-periods, company effect has seen an increase in its importance. On the other hand, industry effect is on the decline and business group effect is almost at the same level. In case of affiliates of smaller business groups, industry and group effects are stronger.

With the two broad objectives of comparing performance of business group affiliated and unaffiliated companies in the post-liberalization period on one hand and examining the relative importance of different factors on the performance of group affiliated companies on the other, this study contributed along the above lines. We conclude with a discussion of the results, limitations of our study and direction for future work.

*Key words: Business groups, Performance, Group affiliation, Industry effect, Economic Reforms, Post-liberalization period.*