

# 行政院國家科學委員會補助專題研究計畫成果報告

新興市場之企業集團：交易成本理論、體制理論，  
與社會網絡觀點之整合

Business Groups in Emerging Markets: An Integration of  
Transaction Costs Economics, Institutional Theory, and Social  
Network Perspectives

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## 新興市場之企業集團：交易成本理論、體制理論，與社會網絡觀點之整合 **Business Groups in Emerging Markets: An Integration of Transaction Costs Economics, Institutional Theory, and Social Network Perspectives**

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### I. ABSTRACT

This research project integrates three theoretical perspectives: transaction cost, institutional and the social network perspectives, to investigate the theoretical rationales and economic performance of group affiliation in emerging economies, by using data of 763 TSE and OTC companies in Taiwan in 1997-99.

**Keywords:** business group, emerging market

#### 中文摘要

本研究計劃整合交易成本理論、制度理論，以及社會網理論，來探討新興市場之中企業集團存在之理論基礎，以及其經濟效益。並以台灣的763家上市上櫃公司1997-99之資料為樣本，實證探討集團隸屬的經濟效益。

**關鍵詞：**企業集團，新興市場

### II. MOTIVATION AND BACKGROUND

The business group has been a dominant form of economic organizations in modern economies (Chandler, 1991; Granovetter, 1995; Whitley, 1994). Especially in the emerging markets like Taiwan, Korea, India and Southeast Asia, the national economies are dominated by a handful of leading business groups which represent quite a large proportion of their national outputs (Chu and MacMurray, 1993).

For example, in Taiwan, the top one hundred business groups together account for more than 35 percent of the country's GNP.

Traditionally, scholars have adopted three theoretical perspectives to explain the existence of business groups: transaction cost, institutional, and social network perspectives. Different theoretical perspectives provide explanations through different lenses, and so far consensus is still lacking. An integrated perspective thus proves needed.

#### *Transaction Cost Perspective*

Transaction cost economists consider the business group as a microeconomic response adopted by firms to reduce the high transaction costs resulted from external economies in emerging markets (Left, 1978; Chang and Choi, 1988; Khanna and Palepu, 2000). In a less developed economy, the markets for some scarce resources and important inputs can be imperfect, causing high quasi rent for companies. Some of the resources and inputs are inherently difficult for companies to acquire, and some of them are even not available in the markets. For example, the honesty, trustworthy and competent high-level managers (which represent a strategic resource with high asset specificity) can hardly be acquired through market transactions (Chang

and Choi, 1988; Park, 1999); information which relevant for actual or potential investment and production decisions can hardly be transferred from one group activity to another. Even financial capital, which might be marketed more efficiently, can be centralized and controlled by certain sectors due to the highly skewed distribution of wealth in the economies (Park, 1999). Under such circumstances, the diversified business group can be seen as a strategy to avoid being dependent on an uncertain sources of inputs or outlet channels, and to deal with risks and uncertainties of instability and rapid structure change (Leff, 1978).

### *Institutional Perspective*

An emerging line of studies emphasizes the significance of group affiliation in improving firms' economic performance in emerging economies (Chang and Choi, 1988; Chang and Hong, 2000; Ghemawat and Khanna, 1998; Khanna and Palepu, 1997, 1999, 2000). Overall, these studies argue that although core competencies and focus are the mantras of corporate strategies in Western economies, emerging countries show different institutional contexts in which large business groups can add significant value and become more profitable than non-group focused firms. Khanna and Palepu (1997, 1999, 2000) further argue that unlike advanced economies in which efficient institutions are taken for granted, emerging markets suffer from weak institutions so that basic business operations can not be supported. There exist three main sources of market failure in emerging markets, but business groups can overcome these imperfections by imitating institutions. Given information problems pertained to product markets, capital markets and factor

markets, companies in developing countries spend much higher costs in building credible brands, in raising capital, and in searching and developing trustworthy and experienced managers. But the umbrella branding effect helps group-affiliated firms gain brand loyalty in new business areas more easily than non-group firms. Also large groups can act as an internal capital market to help member firms obtain financial resources.

Another source of market failure is the regulation problems resulting from governments' heavily involvement in an intricate array of business decisions and the inefficient judicial systems in emerging markets. Large groups own more resources to lobby against inappropriate regulations than small firms do. Also large groups can use vertical integration and sharing credibility/reputation established from honest dealings of the whole group in the past with all group members, inefficiency in the judicial systems can be covered.

### *Social Network Perspective*

The social network perspective argues that economic actions are embedded in structures of social relations, which form social norms, rules and obligations, further direct the decisions of economic exchanges (Coleman, 1988, 1990; Granovetter, 1985, 1995). Therefore, the driving forces of business groups are not merely based on the motives for vertical integration to economizing transaction costs (as transaction cost economists argue), nor determined merely by institutional contexts (as institutionalism scholars argue). Rather, the business group represents a complex "intermediate form" between idealized atomized markets and completely integrated firms, bound with

networks of personal relations (Granovetter, 1985).

In the context of business groups, for actors belonged to the network system, economic exchanges are safeguarded not by contract (price mechanism) or equity (authority mechanism), but by the following three functions: (a) the mutual obligations, expectation, and trustworthiness of members granted by the network; (b) reciprocal patterns of communication and exchanges among members, and (c) effective collective sanctions for opportunistic behaviors of members (Coleman, 1988, 1990; Gulati, 1998; Powell, 1990; Uzzi, 1997). Therefore, the higher the closure of a social network, the more effectiveness it can safeguard transactions. Business groups thus can be viewed as firms' efforts to seek for informal social ties to develop inter-organizational networks.

### *Summary of Theoretical Perspectives*

Based on these three perspectives, a common finding is that: business groups are common in emerging economies because such form of business organizations represent economic efficiency in emerging economies, through eliminating high transactions costs, through imitating institutions, and enhancing collaboration through collection social sanctions.

Therefore, this research project tests empirically that whether in emerging economies, those firms affiliated with business groups will show superior financial performance to firms that are not affiliated with any business groups.

### **III. EMPIRICAL RESULTS**

### *Sample and Data*

Taiwanese firms were used as the research sample. The data are obtained from a publicly available database maintained by TEJ, Taiwan Economic Journal. TEJ provides detailed company profiles and financial information of 485 non-financial-sector companies publicly listed in the Taiwan Stock Exchange Market, and of 278 non-financial-sector companies listed in the Taiwan Over-The-Counter Securities Exchange Market. Therefore, there are a total of 763 firms in the research sample. The financial service firms were not in the sample because their accounting schemes are not compatible with those of firms in other industries. This project analyzes data in 1997-99 because of the highest data coverage in this period.

The business group membership was identified by using the data provided by TEJ. Group memberships were further consolidated through a double check with data provided by another database, *Business Groups in Taiwan* published by the China Credit Information Service Company. In total, 340 firms out of the 763 firms (44.6%) are associated with 198 diversified business groups, and the rest (423 firms, 55.4%) are focused firms unaffiliated with any business groups.

### *Variables*

The independent variable in this research project is the economic performance of the group-affiliated firms. The major explanatory variable is Group Affiliation. Other control variables include: firm size, diversification, market share, research & development intensity, and industry. All data are obtained through TEJ database.

### *Analytical Methods*

A multivariate regression model was constructed to examine the overall influences of group affiliation, firm size and diversification on the accounting performance and stock market performance of Taiwanese firms.

### *Results*

In the regression model, the influence of group affiliation on profitability is not significant. After controlling for the size of business groups by separating the influence of group affiliation into two variables (GPII and GPIII), GPIII stands out significant in Model 2, with a negative sign. This indicates that firms associated with small (non-top-30) business groups significantly underperform other firms. This finding suggests that group affiliation can not always create value for members firms. The size of business groups matter. The findings are also different from the value-creation hypothesis of business groups in emerging markets proposed by other scholars.

Other variables that stand out significantly in the ROA models are market share, firm size, and R&D intensity. The larger the market share of a firm, the higher the profitability of the firm. Firm size is negatively associated with profitability, suggesting the existence of diseconomy of scale. It is also found that the higher the R&D intensity of a firm, the higher the profitability of the firm. This echoes with the traditional industrial organization literature that the investment in research and development can create entry barriers as well as imitation barriers and thus raise the profits of firms. The results are shown in Table One.

## IV. DISCUSSION AND EVALUATION

This research project provides are based on three theoretical perspectives to examine the economic rationales and associated performance of group affiliation in emerging economies. It is found that group affiliation is indeed positively related to firms' performance, but only when firms are affiliated with very large (top 30) business groups. The affiliation with small business groups does not improve firms' performance because small groups are not big enough to resolve problems of high transaction costs and to imitate institutions. Findings of this research project are expected to increase our understandings on the value creation nature of business groups in emerging economies.

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**Table One: Results of Regression Results**

Variable	Dependent: ROA	
	Model 1	Model 2
Constant	32.444 (5.347)	34.499 (5.377)
GPI	-.997 (.821)	
GPII		1.623 (1.265)
GPIII		-1.576 (.810) **
SR	.015 (.017)	.017 (.017)
MS	.077 * (.041)	.069 (.041) *
SIZE	-2.133 (.351) ***	-2.280 (.354) ***
RD	.198 (.110) *	.188 (.112) *
INDUS <sup>a</sup>	--	--
$R^2$	.22	.23
$F$	9.42	9.41
Significant $F$	.000	.000

a: For presentation parsimony, the seventeen industrial dummy variables are included in the regression model but are not shown in this table.

\*\*\*, \*\*, \* denote significance at the 1, 5 and 10 percent levels, respectively.