

行政院國家科學委員會專題研究計畫 成果報告

集團效果與事業單位效果在新興市場中之比較

計畫類別：個別型計畫

計畫編號：NSC92-2416-H-002-038-

執行期間：92年08月01日至93年07月31日

執行單位：國立臺灣大學工商管理學系

計畫主持人：朱文儀

計畫參與人員：李致慧，顧永生，逢皓如，郭欣茹

報告類型：精簡報告

處理方式：本計畫可公開查詢

中 華 民 國 93 年 10 月 28 日

集團效果與事業單位效果在新興市場中之比較

中文摘要

傳統的策略管理文獻主要北美等已開發經濟體為研究對象，提出的研究結論多為：影響企業獲利的主要因素為事業單位效果，產業效果次之，而集團效果極微小。晚近對新興市場的研究，則認為企業的集團化策略，能有效克服新興經濟體中因為市場失靈與制度缺陷所帶來的高交易成本，實證結果也支持集團效果在新興市場中極為顯著。因此，經濟體系中市場效率的程度高低，是影響集團效果與事業單位效果大小的重要因素。隨著經濟體系的漸趨成熟健全，集團效果將逐漸式微，而事業單位效果漸趨顯著。

本研究以台灣的上市上櫃公司為研究對象，實證探討在新興市場的制度系絡之中，集團效果、事業單位效果，以及產業效果三者之間，對於企業價值創造的影響程度；並以長期資料，來驗證集團效果以及事業單位效果，是否受到制度環境中市場效率演變的影響，而呈現消長的現象。資料來源以台灣經濟新報資料庫為主。涵蓋兩個期間：1991-93，以及 1997-99。透過變異數分解分析，本研究發現，不同於其它新興經濟體的研究發現，台灣的集團效果並沒有隨著制度環境的演進而呈現減弱的現象，其比重由 8.7% 增加到 28.4%，而事業單位效果卻由 25.7% 減少至 14.7%。

關鍵詞：集團效果、事業單位效果、新興市場、制度

ABSTRACT

Traditional studies in developed economies found that the major source of profitability is the business unit effect; the industry effect is minor; while the business group effect is negligible. However, recent studies on the emerging markets see business groups as firms' attempt to eliminate high transaction costs and to imitate institutions in less developed economies. Their common finding is that: group effect matters a lot in emerging markets. This line of research implies that the relative significance of group and business unit effect is influenced by the level of market efficiencies in economic systems. When an economic system evolves from under-developed to well-developed, the group effect is expected to decline while the business unit effect dominates.

This research project uses Taiwanese firms publicly listed in the TSE and OTC Markets as the research sample. Data were mainly collected through the TEJ database. Data cover two periods of time: 1991-93, and 1997-99. Through the variance decomposition analysis, this research finds that, different from other emerging economies, group effect did not decline with the evolution of contextual environments in Taiwan. It became even more significant with an explanatory power increased from 8.7% to 28.4%. Also it is found that the business unit effect dropped from 25.7% to 14.7%.

Keywords: Group Effect, Business Unit Effect, Emerging Market, Institution

INTRODUCTION

The rationales and associated economic performance of business groups have been a core research topic in the strategic management literature. The stability of business groups implies certain efficiency and effectiveness for firms organizing their transactions in such ways. Traditional studies on the developed economies such as North America found that the major source of firm profitability is the business unit effect; the industry effect is minor; while the corporate or business group effect is negligible (McGahan and Porter, 1997; Rumelt, 1991; Schmalensee, 1985). However, recent studies on the emerging markets provide different viewpoints: business group and corporate effect matters (Chang and Choi, 1988; Ghemawat and Khanna, 1998; Khanna and Palepu, 1997, 1999). However, it remains unclear whether it is a generic phenomenon in emerging markets that group affiliation can create value for individual lines of businesses. Also, empirical evidence in Taiwan has not been provided yet. It is still unclear whether the economic institutions in Taiwan really favor the large diversified business groups, and allow them higher profitability than unaffiliated focus firms.

Therefore, this research project aims to examine the cross-sectional and long-run influence on performance of group effect versus business unit effect in emerging markets, by using Taiwanese firms as the research sample.

RESEARCH PURPOSE

- To investigate the relative significance of the three major determinants of firm profitability (that is: industry effect, group effect, and business unit effect) in Taiwan.
- To examine whether the relative significance of the three effects change when the institutional context changes and the economic system evolves from less-developed to developed.
- To explore whether the empirical findings of Taiwan any different from the results of other emerging economies, such as India, Chile or Korea.

LITERATURE REVIEW

Group Effect versus Business Effect: A Traditional View

The role of the corporate center in influencing the performance of individual business units has been a core research topic in strategic management. Porter (1987) has called the diversification strategy as a “step child”, implying that the corporate center itself cannot create value for individual businesses. Another stream of research on corporate refocusing and downsizing provides similar viewpoints (e.g., Markides, 1995).

Similar line of reasoning can be found in the industrial organization economics literature. Traditionally, three major sources of profitability difference have been addressed: industry effect, corporate (or business group) effect, and business unit effect

(Buzzel, Gale, and Sultan, 1976; McGahan and Porter, 1997; Rumelt, 1991; Schmalensee, 1985). Scholars found that the major source of firm profitability is the business unit effect; the industry effect is minor; while the corporate or business group effect is negligible. All these studies propose that large diversified business groups do not necessarily create more value than non-group focused firms. In other words, in developed markets, the group effect hardly has influence on profitability, and therefore is much less important than the business unit effect.

Group Effect in Emerging Markets: An Emerging View

Recently, an emerging line of research has provided empirical evidences that confirm the significance of the group effect in emerging economies (e.g., Ghemawat and Khanna, 1998; Khanna and Palepu, 1997, 1999). These studies integrate the institutional theory and the transaction cost economics perspective, to 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. Peng and Heath (1996) point out that some institutional contexts in emerging economies set an ideal platform for the network-based business strategies, and business groups are thus common. Khanna and Palepu (1997) point out three main sources of market failures in emerging markets, including information problems in product, capital and factor markets, regulation problems, and inefficient judicial systems that hinder the actualization of contract laws.

Give all have discussed in the earlier sections, this research project predicts that in the context of emerging economies, the group effect will be significant in determining profitability, while the business unit effect will be less significance.

Evolution of Institutional Context: A Long-Run View

When the institutional settings are less developed, markets are pertained to high transaction costs and abundant inefficiencies so that the group effect is more significant than the business unit effect. On the other hand, when the institutional settings are well developed, market inefficiencies are limited and the business unit effect is more significant than the group effect.

This conclusion leads to another interesting research question: What will happen if the economic system involves from less mature to more developed? As widely observed, a nation's economic systems and market institutions become more and more efficient when the government adopts a open-market policy to enhance liberalization and international. This is exactly the case in Taiwan during the past 10 years. Therefore, it is expected that in Taiwan the degree of market inefficiencies declines during the past 10 years. Therefore, the group effect is expected to decline and the business unit effect becomes more significant.

RESEARCH METHODS

Research Sample and the Data

Taiwanese firms were used as the research sample. Data were 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 (TSE) Market, and of 278 non-financial-sector companies listed in the Taiwan Over-The-Counter (OTC) Securities Exchange Market. Therefore, there will be a total of 763 firms in the research sample.

For the long-run comparison, two periods of time were chosen: 1991-93, and 1997-99. The period during 1991-1993 was used to represent a stage in which institutional environments are less developed and higher market inefficiencies exist. The period during 1997-1999 was used to represent a stage in which institutional environments are more developed and less market inefficiencies exist.

Variables and Measurements

Return on assets (ROA) was used for performance measurement. For each sample firm, two averaged ROA were calculated: 1991-1993, and 1997-1999.

The three effects are the major explanatory variables of this research project. A dummy independent variable was constructed to specify whether a company is group-affiliated (=1) or non-group-affiliated (=0). The industry effect was measured by using the industry classification of the Taiwan Stock Exchange Market. Seventeen dummy variables will be utilized to sort all firms into eighteen industries.

FINDINGS AND DISCUSSIONS

Evolution of institutional context in Taiwan

Table 1 shows the indexes of institutional contexts that were examined to proxy the evolution of evolution of institutional efficiency in Taiwan. Overall, it is found that market efficiency is increased in capital, labor, and product markets, indicating a clear movement of Taiwanese economy from emerging to developed.

Results of Variance Decomposition Analysis

Table 2 summarizes the descriptive statistics of the research project. Overall, for each research sample, statistics were repeated three times to produce the results of time periods of 1991-93, 1997-99, and 6-year pooled respectively.

The results of three-period of variance decomposition analysis were summarized in Table 3. During 1991-93, company effect was the largest, the group effect came next, with the industry effect the smallest. This finding is similar to those findings based on other emerging economies. However, when the two periods are compared, it is found that group effect did not decline with the evolution of contextual environments. It became even more significant with an explanatory power increased from 8.7% to 28.44%. Also it

is found that the business unit effect dropped from 25.68% to 14.74%. This research further repeated the analysis by categorizing the whole research sample into two sub-samples (top-30 business groups and smaller business groups) to see whether the results differ. Similar findings confirm the robustness of the research.

Table 1: Institutional Variables Examined

Institutional Variables	Data Coverage
Total Market Value (at Year-End)	1967/1989-2003
Number of Listed Companies	1967/1989-2003
Gross Domestic Product, GDP	1979-2003
Foreign Investment in Taiwan's Stock Market	1991-2003
Overseas Chinese and Foreign Investment	1994-2003
Securities Issued Abroad by Public Companies	1994-2003
Number of Financial Institutions	1993-2003
Labor Force Status by Educational Attainment	1978-2002
Employed Persons by Educational Attainment	1978-2002
Educational Level	1978-2002

Table 2: Descriptive Statistics of Samples

	Pooled	Period I: 1991-93	Period II: 1997-99
Number of observations	1949	934	1015
Business group	200	200	200
Industry	123	123	121
Company	339	339	339
Year	6	3	3
Mean value of profits	5.07	6.62	3.65
Standard deviation of profits	11.03	7.43	13.37
No. of companies per group	1.70	1.70	1.70

Table 3: Results of Variance Decomposition Analysis (Dependent: ROA)

Source	Pooled		Period I: 1991-93		Period II: 1997-99	
	variance component	%	variance component	%	variance component	%
Business group	13.31	10.75	4.90	8.70	57.14	28.44
Industry	0.71	0.57	4.53	8.05	0.22	0.12
Company	18.10	14.63	14.46	25.68	28.06	14.74
Year	6.10	4.92	0.10	0.18	7.43	3.90
Industry-Year	10.34	8.35	2.13	3.79	10.09	5.30
Error	75.20	60.76	30.18	53.61	87.41	45.92
Total	123.76	100.00	56.30	100.00	190.35	100.00

REFERENCES

- Buzzel, R. D., Gale, B. T., and Sultan, R. G. M. 1976, Market Share: A Key to Profitability, *Harvard Business Review*, 53, January-February, 97-106.
- Chang, S. J. and Choi, U. 1988, Strategy, Structure and Performance of Korean Business Groups: A Transactions Cost Approach, *Journal of Industrial Economics*, 37(2), 141-158.
- Ghemawat, P. and Khanna, T. 1998, The Nature of Diversified Business Groups: A Research Design and Two Case Studies, *The Journal of Industrial Economics*, XLVI (1), 35-61.
- Guillen, M. 2000. 'Business Groups in Emerging Economies: A Resource-Based View'. *Academy of Management Journal*, 43: 362-381.
- Khanna, T. and Palepu, K. 1997, Why Focuses Strategies May Be Wrong for Emerging Markets, *Harvard Business Review*, July-August, 3-10.
- Khanna, T. and Palepu, K. 1999, The Right Way to Restructure Conglomerates in Emerging Markets, *Harvard Business Review*, July-August, 125-134.
- Markides, C. C. 1995, Diversification, Restructuring and Economic Performance, *Strategic Management Journal*, 16, 101-118.
- McGahan, A. M. and Porter, M. E. 1997, How Much Does Industry Matter, Really? *Strategic Management Journal*, 18, 15-30.
- Peng, M. W. and Heath, P. S. 1996. The Growth of the Firm in Planned Economies in Transition: Institutions, Organizations, and Strategic Choice. *Academy of Management Review*, 21: 492-528.
- Porter, M. E. 1987, From Competitive Advantage to Corporate Strategy, *Harvard Business Review*, May-June, 43-59.
- Rumelt, R. P. 1991, How Much Does Industry Matter? *Strategic Management Journal*, 12, 167-185.
- Schmalensee, R. 1985, Do Markets Differ Much? *American Economic Review*, 341-351.