

國立交通大學

經營管理研究所

碩士論文

併購研究：擴散與主要趨勢

Mergers and Acquisitions: Dissemination and Main
Trends



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中華民國九十七年六月

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摘 要

併購(M&As)在近三十年來，隨著企業發展全球化，漸漸成為了各公司執行長為擴大營運或多角化等因素，所行使的主要策略。然而隨著併購的成功與失敗，使得併購策略成為了管理領域中的主要議題。本研究透過歸納式與量化的文獻計量法來探索併購研究的知識發展結構

本研究主要以文獻共引(Co-citation Analysis)、以及多維尺度分析(Multidimensional Scaling, MDS)等研究方法，透過 ISI 資料庫(1980~2007)，針對 SMJ 等主要期刊，客觀地對併購領域文章進行歸納分析，以匯整出該領域中的主流議題及其近期趨勢。研究結果發現，由因素分析可萃取出 (1) 併購相關 (2) 多角化相關 (3) 組織學習構面 (4) 財務相關 等四個因素。其中併購相關與多角化相關兩個因素為 M&As 領域中主要探討的重心。

另外，由多維尺度分析提供的文獻之間距離關係的圖表，將併購文獻分為財務與非財務兩觀點來探討。研究結果預期能提供給後續併購研究主要的研究方向。

關鍵字：合併與收購、共被引分析、文獻計量法

Mergers and Acquisitions: Dissemination and Main Trends

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ABSTRACT

Mergers and acquisitions (M&As) has been extensively conducted for past three decades. There are a variety of orientations in discussing this subject during this period. This paper inductively and quantitatively performs the bibliometric analysis to explore the intellectual structure in the field of M&As. By using co-citation method, this research extracts four main streams from factor analysis: M&As-related, diversification, organizational learning perspective, and finance-related. And two perspectives of finance-related and non-finance-related identified from multidimensional scaling (MDS). Two new research interests are discovered from our result for future study. The analysis provides a clear and graph description to understand the dissemination and main trends of M&As.

Keywords: Mergers and Acquisitions (M&As), Co-citation analysis, bibliometrics

誌 謝

兩年的交大經管所生涯，收穫甚豐。首先要感謝的是交大所老師毫不保留地將知識傳授給我們，有別於大學時代的數學系思維，對人的管理沒有正確答案的方式，著實讓我在剛開始有不少的不適應感。隨著時間的增長，也漸漸地能夠接受這樣的思考方式，慢慢地瞭解到，凡事遇上了人，隨時都有可能會改變。這樣的想法，讓我不再拘泥於所謂的正確答案，也開始學著接受每個人的多樣性，心胸也寬大了不少。

再來，感謝楊老師與凱喻學長在生產論文的過程中，不厭其煩地給予指導，每當有瓶頸出現時，學長指引的方向總是能夠讓我立刻豁然開朗。老師淵博的學識與豐富的管理實務經驗，總以幽默風趣的方式表達，聽來不會讓人覺得有壓力，也不會有教條式教學的呆版。老師就像個百寶庫，只要有問題，問老師必定會有不少的收穫。也感謝老師容忍我們兩個小女生不時的吵鬧拜訪，想必老師現在應該是清境許多了吧。

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I.Introduction

Most corporations faced the limitation of growth in recent decades, thus, managers started to search for solutions to deal with the plight. Mergers and Acquisitions (M&As) is one of the fast growing strategies to achieve economic scale or enlarge the business scope. For example, near 74,000 M&As transactions estimated over 12,000 billion dollars market values were completed from 1996 to 2001 in America. In fact, the value of M&As were up to 3,500 billion dollars in year 2000. However, M&As did not bring the anticipated profit to corporations. In fact, researches indicated that almost 70 percent of M&As failed. Besides, evidences showed that target-firms generally received short-term return, while the acquiring firms usually experienced underperformance measured by stock value after acquisition. In addition, some researchers considered M&As as a notorious strategy of creating value for stockholders. Therefore, they concluded that creating synergy through M&As were only exist in the minds of CEOs.



Because of risky and costly strategy, M&As started to attract scholars' attention. Scholars explore this problem from different perspectives such as strategy management, psychology, human behavior, law and finance. According to Hitt, Ireland, and Harrison (2001), effective M&As begins with a well prepared due

diligence. Others suggested a successful acquisition may be affected by different calculation methods of payment. Several studies also concerned about whether the synergy can be created after acquisition. The main impact factors to the performance of M&As were also considered from organizational perspectives such as cultural differences, organizational learning, and the hubris of top manager. Thus, three characteristics can be summarized from the above M&As issues: (1) it's a complicate management practice; (2) it is long-lived and relative mature in the field of strategy management; and (3) its multidisciplinary features have been applied into different academic fields.



For the past years, few articles attempted to systematically analyze the structure of M&As. In Datta, Narayanan's study (1992), meta-analysis was used to find out the factors influencing wealth creation from M&As. King et. al. (2004) also used meta-analysis to identify the antecedents of post-acquisition performance. Their result indicated that there still remain some unidentified moderators in M&As. Finally, Cartwright and Schornberg (2006) summarized M&As literatures of the past three decades into three main streams: strategic fit, organizational fit, and acquisition process itself. These studies reviewed literatures from different approaches. In order to have a better understanding of the whole scope of M&As, different bibliometric

approaches are recommended.

Bibliometry is one of the most popular methods in integrating large amounts of literatures. Authors prone to cite papers that related to the topics of their research. Thus, a context can be observed between this article and its references. Co-citation analysis measures the relationships between two documents by counting their joint citations. The more often they are cited together, the closer the relationship they have. Thus, those frequently cited literatures are considered to have greater influence in that field. Therefore, with these significant contributing literatures, co-citation analysis facilitates a more comprehensive and detailed insight in analyzing M&As.



In this study, bibliometric approach is adopted to investigate the intellectual structure of M&As. This quantitative approach with co-citation analysis and multidimensional scaling (MDS) tends to carry out the main trends of M&As and the exploration of its dissemination to other fields. On one hand, this statistical technique offers an objective way to summaries literatures in M&As. Besides, bibliographics provides a simple and easy understanding process to extract the characters of M&As. On the other hand, a graphic view from MDS makes it easy to analyze the complicated structure of M&As.

The rest of this paper is organized as the following: first, M&As literatures and bibliometric methodology were reviewed. Second, research process by using co-citation analysis is defined in the third section. Findings and discussions were presented in the fourth section. In addition, four extracted factors and the map of MDS were also exhibited in this segment. Finally, the conclusion of this study will be listed at the last paragraph.



II.Literature Review

Most review literatures integrated with a subjective viewpoint. Experts studied a great deal of essays and summarized it to a brief conclusion. For example, one of these articles is the study of Cartwright and Schornberg (2006), which attempted to reflect the multidisciplinary nature of M&As in strategic management field. Thirty-one articles were analyzed and summarized into three main streams- strategic fit, organizational fit, and acquisition process itself. While strategic fit links the performance of M&As and the strategic attributes, organizational fit is related to the organizational problems between two firms. The acquisition process focuses on the process itself and the post acquisition process. Finally, Cartwright and Schornberg (2006) also suggested three directions for future research: non-value maximizing motives, the connection with practitioner community, and unidentified variables.

Compared with a subjective method, another statistical approach was employed by meta-analysis. Meta-analysis is one of the popular methods in integrating literatures, because meta-view could provide an objective way to identify a congruent conclusion from past researches.

For instance, Datta and Narayanan (1992) used this method to synthesis the

findings of studies on wealth creation in mergers and acquisitions. Five factors were considered as the major variables in this empirical analysis: regulatory changes, the number of bidders, the bidder's approach (merger vs. tender offer), the mode of financing (cash vs. stock), and the type of merger or acquisition (conglomerate vs. Non-conglomerate). Besides, Palich, Cardinal, and Miller (2000) used meta-analysis to synthesize three decades of research to address the major theoretical issues that remain open to debate. Moreover, King, Dalton, Daily, and Covin (2004) summarized the findings of previous studies in post-acquisition performance and identified promising directions for further M&As research with meta-analysis.



However, both subjective method and meta-analysis have limitation. First, subjectivity may focus on specific perspective of that field, which is easy to generate bias from individual judgment. Second, the statistical methodology with meta-analysis aims on limited variables and emphasizes on the findings of relationship between these factors and dependent variables. Besides, it is difficult to cover three decades intellectual structure development of M&As field within these two methods. We attempt to use co-citation analysis to provide a rather broadly viewpoint and an intellectual structure of M&As based on these review papers discussed in this chapter.

III. Methodology

3.1 Co-citation Analysis

There are several methods for integrating a mature and well popular research field, and bibliometrics is one of them. Bibliometric provides a powerful and objective procedure to induct main trends of theories. When doing a research, the author will consult articles that relate to his study. Whenever two documents (A and B) were cited together, showing in another article (C), we would say that they are related to each other (Figure 1). Therefore, a context can be found between the research and its citing references.

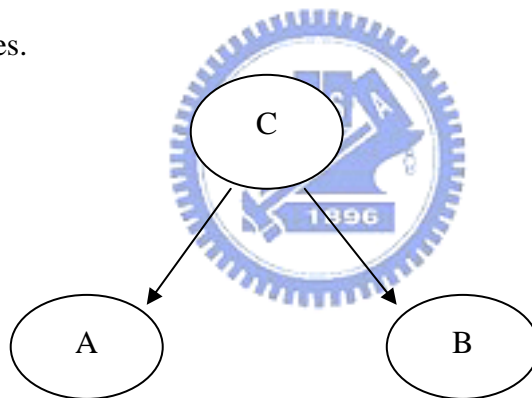


Figure 1. The relationship between documents

Co-citation analysis counts the number of co-cited times between two papers (White and Griffith, 1981). The more they are cited together, the closer the relationship between them (White and Griffith, 1986). Thus, this statistical count suggests an operational way to analyze large amount of data. A rather neat and concrete map can be exposed from this method.

From this point of view, co-citation analysis starts with relative articles that offer reliable and mutual influence (Remos and Ruiz, 2004). Thus, co-citation analysis offers two advantages in this study. First, different from the research of Cartwright and Schoenberg (2006) who use subjective approach, co-citation analysis provides a statistical and quantitative approach in investigating the literatures of M&As. Second, since co-citation analysis requires a large literature database, an extensive browsing through this territory is needed. Thus, a greater insight into M&As can also be discovered from this approach (Acedo, et. al. 2006).



Nevertheless, despite the claim of co-citation analysis for a mathematical approach, it still has some limitations in source collection:

First, to cover the overall developments of M&As, the critical stage is to find influential and representative documents. In this case, most authors will select those documents whose citation times are relative high. This criterion prefers picking out older documents rather than selecting recent published ones. Therefore, a new trend of M&As research may be left out from this procedure. To solve this problem, an advanced data selecting procedure suggested by Hummon & Dorein (1989) and Hummon & Carley (1993) will be conducted in this study. Further details are shown later.

Second, because M&As has been developed for a long time, its widespread discussion diverged into many fields such as strategy management, organizational behavior, finance, law, psychology, economics, etc. In order not to diversify our study from a managerial point of view, we will focus on strategic management, organizational perspective, and financial issues. Therefore, we selected and analyzed articles published in mainstream journals such as Strategic Management Journal (SMJ), Journal of Management (JoM), Journal of Finance (JF), Academy of Management Review (AMR) and Academy of Management Journal (AMJ).



The statistical methods used in this study are factor analysis, cluster analysis, and multidimensional scaling (MDS). Factor analysis is used to reduce the number of dimensions and find out the main streams of M&As. Cluster analysis is used to confirm the result from factor analysis and MDS can provide greater insight from the above findings.

3.2 Data Collection

3.2.1 Data Selecting

The starting point for co-citation method is to select the core papers; this is an important step with huge influence on later analysis. Since it is impossible to include

all the published research papers into our core documents, the set of core documents must cover the whole development of the research field as large as possible.

To ensure this prior condition, we would like to follow the method of Hummon & Doreian (1989) and Hummon & Carley (1993). They suggested that the core data could start from an initial core paper which made up the most basic foundation of the theory. Then extend the core set within this initial core paper.

In order to find out the initial core, we searched articles which were published within three years. After a brief survey of articles published after year 2000, we found out there are sufficient literature review papers to cover all the past issues and new trends in M&As within these three years. By doing so, a comprehensive review of past researches can be obtained. First, “diversification, merger, and acquisition” were used as key words and searched in ISI database. Then, the study of Cartwright and Schoenberg (2006) was singled out as our initial document, because it carried out an integrative review of Mergers and Acquisitions for the past three decades.

By using its references, we continued to search for review documents which could also have an extension in this field. Then, additional researches (Seth, 1990;

Haleblian, 1999; Ahuja & Katila 2001; and King, 2004) were included in the initial core set. They were selected for several reasons. First, for the variance concern, these documents published in a widespread years. From the end of 1980s to recent years, it covered thirty years development of M&As. Second, they provide an integrative and longitude review of this issue and make up the foundation of the core set more consolidate. Third, since organizational perspective has overlapped with strategic management, we would like to consider the perspective of related organization issues. Fourth, there are higher citation times in our core sets than in other references. Finally, they are all published in prestigious management journals with high impact factors (2.632 with Strategic Management Journal; 2.455 with Administrative Science Quarterly).



3.2.2 Central Core

According to the initial core set we chose before, the extended core papers for our research are met with additional criteria as follows:

- (1) Articles which were cited by either the initial papers or by the references of the initial papers after 1980.
- (2) Articles which were published in the Strategic Management Journal (SMJ), Academy of Management Journal (AMJ), Academy of Management Review

(AMR), Journal of Management (JOM), and Journal of Finance (JF) .

(3)Articles were listed within top ten citation times.

Finally, in order not to be left out some important articles, we used the same key words to find the documents with significant citations in ISI database. In conclusion, 68 documents in total were selected out to be our core papers. The 68 articles with total of 5359 citations are listed in Table 1.



Table 1. Central Core Documents

Title	Journal	Year	First Author	ISI CT
A-01 Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities	BJM	2006	Cartwright S	2
A-02 Meta-analyses of post-acquisition performance: indications of unidentified moderators	SMJ	2004	King DR	20
A-03 When do acquirers earn abnormal returns?	SMJ	2002	Capron L	20
A-04 The performance impact of strategic similarity in horizontal mergers: Evidence from the US banking industry	AMJ	1997	Ramaswamy K	25
A-05 Diversification and top management team complementarity: Is performance improved by merging similar or d	SMJ	1997	Krishnan HA	26
A-06 Foreign acquisitions in Central and Eastern Europe: Outcomes of privatization in transitional economies	AMJ	2000	Uhlenbruck K	28
A-07 Resource complementarity in business combinations: Extending the logic to organizational alliances	JM	2001	Harrison JS	28
A-08 Corporate-Mergers, stockholder diversification, and changes in systematic-risk	SMJ	1990	Chatterjee S	29
A-09 What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions	JF	2002	Fuller K	32
A-10 Relative standing and the performance of recently acquired European firms	SMJ	1997	VERY P	36
A-11 When do firms learn from their acquisition experience? Evidence from 1990-1995	SMJ	2002	Hayward ML	37
A-12 The Method of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership	JF	1996	Martin KJ	38
A-13 Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-Analysis	SMJ	1992	Datta DK	39
A-14 Doing a Deal: Merger and Acquisition Negotiations and Their Impact Upon Target Company Top Managemen	SMJ	1989	Walsh JP	40
A-15 Diversification strategy and systematic-risk	SMJ	1984	Montgomery CA	44
A-16 Merger Motives and Merger Prescriptions	SMJ	1990	Trautwein F	44
A-17 Curvilinearity in the diversification-performance linkage: An examination of over three decades of research	SMJ	2000	Palich JE	45
A-18 Asset redeployment, acquisitions and corporate strategy in declining industries	SMJ	1997	Anand J	46
A-19 The impact of merger bids on the participating firms security holders	JF	1982	Asquith P	46
A-20 Synergies and Post-Acquisition Performance: Differences versus Similarities in Resource Allocations	JM	1991	Harrison JS	47
A-21 Learning through Acquisitions	AMJ	2001	Vermeulen F	52
A-22 Connecting diversification to performance - A Sociocognitive approach	AMR	1990	Ginsberg A	51
A-23 Does Corporate Diversification Destroy Value? -	JF	2002	Graham JR	52
A-24 Dicersification and performance - Areexamination usinf a new two - dimensional conceptualization of diversit	AMJ	1987	Varadarajan P	53
A-25 Determinants of Acquisition Integration Level: A Decision-Making Perspective	AMJ	1994	Pablo AL	55

Table 1 Central Core Documents (cont.)

Title	Journal	Year	First Author	ISI CT
A-26 Diversification strategies, business cycles and economic-performance	SMJ	1988	AMIT R	54
A-27 Structure and process of diversification, compensation strategy, and firm performance	SMJ	1992	Gomez-Mejia LR	54
A-28 The long-term performance of horizontal acquisitions	SMJ	1999	Capron L	56
A-29 Value creation in acquisitions - A Reexamination of performance issues	SMJ	1990	Seth A	59
A-30 Relative Standing: A Framework for Understanding Departures of Acquired Executives	AMJ	1993	Hambrick DC	61
A-31 Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992	SMJ	1998	Capron L	61
A-32 Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study	SMJ	2001	Ahuja G	67
A-33 The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective	ASQ	1999	Haleblian J	65
A-34 Explaining the diversification discount	JF	2002	Campa JM	69
A-35 Do Long-Term Shareholders Benefit From Corporate Acquisitions?	JF	1997	Loughran T	71
A-36 Organizational learning and diversification	AMJ	1994	PENNINGS JM	70
A-37 The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the united states	SMJ	1997	HENNART JF	70
A-38 Organizational Fit and Acquisition Performance: Effects of Post-Acquisition Integration	SMJ	1991	Datta DK	75
A-39 Conjectures on cognitive simplification in acquisition and divestment decision - making	AMJ	1985	IRENE MD	78
A-40 Cultural Differences and Shareholder Value in Related Mergers: Linking Equity and Human Capital	SMJ	1992	Chatterjee S	82
A-41 The value of diversification during the conglomerate merger wave	JF	1996	Servaes H	83
A-42 Effects of acquisitions on research-and-development inputs and outputs	AMJ	1991	HITT MA	83
A-43 The Success of Acquisitions: Evidence from Divestitures	JF	1992	Kaplan SN	83
A-44 Returns to Bidding Firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis	SMJ	1988	Barney JB	87
A-45 The Post-Merger Performance of Acquiring Firms: A Re-Examination of an Anomaly	JF	1992	Agrawal A	87
A-46 Acculturation in Mergers and Acquisitions	AMJ	1988	Nahavandi A	92
A-47 Antecedents and Performance Outcomes of Diversification: A Review and Critique of Theoretical Perspective	JM	1990	Hoskisson RE	95
A-48 Merger Strategies and Stockholder Value	SMJ	1987	Lubatkin M	98
A-49 Top Management Turnover Following Mergers and Acquisitions	SMJ	1988	Walsh JP	100
A-50 MERGERS AND THE PERFORMANCE OF THE ACQUIRING FIRM	AMR	1983	Michael lubatkin	105
A-51 Diversification strategy, accounting determined risk, and accounting determined return	AMJ	1982	BETTIS RA	112
A-52 International expansion through start-up or acquisition: A learning perspective	AMJ	1998	Barkerma HG	112

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Table 1 Central Core Documents (cont.)

Title	Journal	Year	First Author	ISI CT
A-53 The measurement of firm diversification - some new empirical-evidence	AMJ	1982	Montgomery CA	115
A-54 Types of Synergy and Economic Value: The Impact of Acquisitions on Merging and Rival Firms	SMJ	1986	Chatterjee S	116
A-55 The market for corporate control and firm innovation	AMJ	1996	Hitt MA	125
A-56 Corporate acquisition strategies and economic performance	SMJ	1987	Singh H	127
A-57 The link between resources and type of diversification: Theory and evidence	SMJ	1991	Chatterjee S	127
A-58 Communication with Employees following a Merger: A Longitudinal Field Experiment	AMJ	1991	Schweiger DW	129
A-59 The cost of diversity: The diversification discount and inefficient investment	JF	2000	Rajan R	130
A-60 Corporate takeover bids, Methods of payment, and bidding firms stock returns	JF	1987	Travlos NG	143
A-61 Performance differences in related and unrelated diversified firms	SMJ	1981	Bettis RA	146
A-62 Corporate economic-performance-diversification strategy versus market-structure	SMJ	1981	Christensen HK	151
A-63 Research on corporate diversification - A Synthesis	SMJ	1989	Ramanujam V	156
A-64 Corporate Acquisitions: A Process Perspective	AMR	1986	Jemison DB	171
A-65 Diversification strategy and profitability	SMJ	1982	RUMELT RP	205
A-66 Do managerial objectives drive bad acquisitions	JF	1990	Morck R	230
A-67 Diversification strategy, Profit performance and the entropy measure	SMJ	1985	PALEPU K	250
A-68 The dominant logic - A New linkage between diversity and performance	SMJ	1986	Prahalad CK	353
				5738

3.2.3 Retrieval of Data

Once the enlarged central core documents have been selected, a 68×68 co-citation matrix revealed in Table 2 was then obtained for next analysis. These figures are derived from the collected data from ISI database. Each of them indicates the co-citation times related to the two documents from the row and column. The more frequently they cited together, the greater relationship they have with each other. Microsoft Excel and SPSS are used in the whole process.

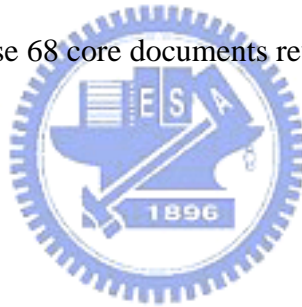
For the diagonal part, two approaches had been used to deal with it. The figures in the diagonal part are replaced with adjusted number which sums the three highest grades and divides them by two (White and Griffith, 1981). The other one is considered as an undefined item, thus ignoring these places as missing data (Ramos-Rodriguez and Ruiz-Navarro, 2004). Since the first method was a result from try and error, we prefer to treat it as an undefined item to estimate Pearson's correlation matrix.

IV Result

4.1 Co-citation Analysis

For further analysis, a Pearson's correlation from co-citation matrix is required. This Pearson correlation matrix represents the similarities between two documents from the core. Using correlation matrix instead of the original co-citation matrix for further analysis has two important advantages (White and McCain, 1998). First, correlation matrix can provide a standardized data structure to avoid scale effect due to the relative citation of documents. For example, the citation range of our initial core documents is between 0 and 81, while the correlation matrix reduces the range from 0 to 1 after transforming. Second, correlation matrix converts zero into a meaningful number since zero is a critical value of statistical calculation.

The correlation matrix of these 68 core documents reviewed in Table 3.

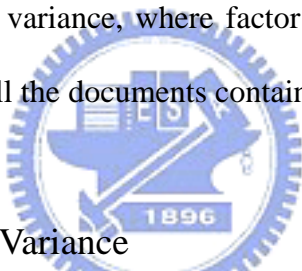


4.2 Factor Analysis

The next step is factor analysis, which is often used in reducing variables to manageable dimensions. These variables in each reduced criterion have similar information structure and the whole data became easy to analyze.

In this study, four factors have been extracted out with principle component analysis and varimax rotation. Table 4 represents the factor loadings related to each document. The higher the factor loading, the greater influence this document contributes to that factor. Besides, documents with more than 0.9 loadings are considered as main components of each factor. Moreover, those loadings less than 0.4 would be regarded as less contribution. Thus, documents with factor loadings between ± 0.4 are eliminated from the table. The whole result explains 93.2 percent of the total variance, where factor 1 and 2 account for more than 75 percent (Table 4). In conclusion, all the documents contained in each factor perform very high loadings.

Table 4. Explanation of Total Variance



Extracted Components	Eigenvalues	% of Variance Accounted For	Cumulative Variance
1	31.91	46.93	46.93
2	19.92	29.30	76.23
3	8.49	12.49	88.72
4	3.03	4.46	93.18

After summarizing from the prior studies, we named each factor with M&As-related, diversification, organizational learning perspective, and finance-related. Factor 1 represents all researches related to M&As itself. This factor includes the merger motivation, factors that affect M&As performance, and the effects for the acquiring and acquired corporation. Some studies also discussed the relationship between top managers and the merger performance. Furthermore, integration process and post-acquisition performance are also contained in this

factor.

In contrast to factor 1, documents in factor 2 are related to diversification activities. In this factor, M&As is considered as a means of the diversification. It contains performance issues, causes, and the process of diversification. Factor 3 indicates the organizational learning perspective from past M&As affairs. This factor also involves the comparison between start-ups and M&As corporations from a learning perspective. Finally, factor 4 represents the financial issues of M&As. The issues in this factor are about measurement of M&As performance, and volatility of stock price after M&As activities.

Besides these factors, other interesting results also come out from our analysis. First, several documents load on more than one factor. For documents that load positively on more than one factor represent a bridge between these factors. They link the concepts between two factors, especially for factor 1 and factor 3. This phenomenon also tells us that some researches provide a special attention in inter-relationship between two research territories. Second, documents with negative loading indicate a reverse relationship the other works expressed by that factor. It shows that whenever researchers cite these documents with positive loadings in a given factor, they would not cite those documents with negative loadings within the same factor (Acedo, etc, 2006).

Another result is shown on Table 5. When we rank the documents according to publication year, the evolution of M&As has been discovered. In the early 1980s, M&As was a growing strategy studied in the field of diversification (factor 2). This suggests that M&As was a special issue of diversification. Latter in the middle of 1980s to 2000, M&As was largely discussed by researchers, and then emerged as a popular field in strategic management. Finally, an organizational learning perspective (factor 3) has been noticed in recent years.

Table 5. Factor Analysis

Factor analysis		Component			
		1	2	3	4
A16	Merger Motives and Merger Prescriptions	0.974			
A50	Mergers and the performance of the acquisitions	0.974			
A29	Value creation in acquisitions - A reexamination of performance issues	0.953			
A64	Corporate Acquisitions: A Process Perspective	0.950			
A14	Doing a Deal: Merger and Acquisition Negotiations and Their Impact Upon Target Company Top Management Turnover	0.922			
A49	Top Management Turnover Following Mergers and Acquisitions	0.918			
A48	Merger Strategies and Stockholder Value	0.910			
A40	Cultural Differences and Shareholder Value in Related Mergers: Linking Equity and Human Capital	0.909			
A44	Returns to Bidding Firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis	0.908			
A56	Corporate acquisition strategies and economic performance	0.902			
A54	Types of Synergy and Economic Value: The Impact of Acquisitions on Merging and Rival Firms	0.899			
A30	Relative Standing: A Framework for Understanding Departures of Acquired Executives	0.881			
A13	Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-Analysis	0.879			
A39	Conjectures on cognitive simplification in acquisition and divestment decision - making	0.865			
A38	Organizational Fit and Acquisition Performance: Effects of Post-Acquisition Integration	0.862			
A46	Acculturation in Mergers and Acquisitions	0.862			
A20	Synergies and Post-Acquisition Performance: Differences versus Similarities in Resource Allocations	0.855			
A58	Communication with Employees following a Merger: A Longitudinal Field Experiment	0.828	-0.466		
A42	Effects of acquisitions on research-and-development inputs and outputs	0.810			
A5	Diversification and top management team complementarity: Is performance improved by merging similar or dissimilar teams?	0.804			
A25	Determinants of Acquisition Integration Level: A Decision-Making Perspective	0.784	-0.462		
A8	Corporate-mergers, stockholder diversification, and changes in systematic-risk	0.776	0.553		
A10	Relative standing and the performance of recently acquired European firms	0.771	-0.488		
A4	The performance impact of strategic similarity in horizontal mergers: Evidence from the US banking industry	0.758			
A34	Explaining the diversification discount	-0.685		-0.568	
A23	Does Corporate Diversification Destroy Value? -	-0.674		-0.566	
A59	The cost of diversity: The diversification discount and inefficient investment	-0.661		-0.578	
A41	The value of diversification during the conglomerate merger wave	-0.642		-0.581	
A26	Diversification strategies, business cycles and economic-performance		0.961		
A63	Research on corporate diversification - A synthesis		0.959		
A57	The link between resources and type of diversification: Theory and evidence		0.958		
A24	Diversification and performance - A reexamination using a new two - dimensional conceptualization of diversity in firms		0.954		
A67	Diversification strategy, profit performance and the entropy measure		0.951		

Table 5. Factor Analysis (cont.)

Factor analysis		Component			
		1	2	3	4
A47	Antecedents and Performance Outcomes of Diversification: A Review and Critique of Theoretical Perspectives		0.945		
A61	Performance differences in related and unrelated diversified firms		0.940		
A65	Diversification strategy and profitability		0.940		
A68	The dominant logic - A new linkage between diversity and performance		0.939		
A62	Corporate economic-performance-diversification strategy versus market-structure		0.937		
A51	Diversification strategy, accounting determined risk, and accounting determined return		0.929		
A27	Structure and process of diversification, compensation strategy, and firm performance		0.927		
A15	Diversification strategy and systematic-risk		0.925		
A22	Connecting diversification to performance - A sociocognitive approach		0.842		
A17	Curvilinearity in the diversification-performance linkage: An examination of over three decades of research	-0.431	0.774		
A1	Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities		-0.587	0.489	
A21	Learning through Acquisitions			0.885	
A52	International expansion through start-up or acquisition: A learning perspective			0.870	
A11	When do firms learn from their acquisition experience? Evidence from 1990-1995		-0.444	0.845	
A33	The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective		-0.470	0.842	
A37	The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the united states			0.822	
A3	When do acquirers earn abnormal returns?		-0.431	0.802	
A7	Resource complementarity in business combinations: Extending the logic to organizational alliances			0.796	0.404
A32	Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study			0.745	
A36	Organizational learning and diversification	0.516		0.739	
A18	Asset redeployment, acquisitions and corporate strategy in declining industries	0.604		0.712	
A6	Foreign acquisitions in Central and Eastern Europe: Outcomes of privatization in transitional economies			0.702	
A2	Meta-analyses of post-acquisition performance: indications of unidentified moderators	0.451	-0.522	0.666	
A28	The long-term performance of horizontal acquisitions	0.564	-0.424	0.660	
A31	Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992	0.569	-0.429	0.648	
A55	The market for corporate control and firm innovation			0.617	0.527
A19	The impact of merger bids on the participating firms security holders				-0.910
A60	Corporate takeover bids, methods of payment, and bidding firms stock returns				-0.864
A45	The Post-Merger Performance of Acquiring Firms: A Re-Examination of an Anomaly		-0.460		-0.861
A53	The measurement of firm diversification - some new empirical-evidence		-0.407		-0.860
A66	Do managerial objectives drive bad acquisitions				-0.857
A9	What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions				-0.844
A35	Do Long-Term Shareholders Benefit From Corporate Acquisitions?				-0.827
A12	The Method of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership				-0.825
A43	The Success of Acquisitions: Evidence from Divestitures				-0.790

4.3 Cluster Analysis

To emphasize our result from factor analysis, cluster analysis provides another approach to segment the core documents. Unlike other techniques for analyzing the relationships between variables, cluster analysis groups the variables with their similarity. This method starts with similar group of data, and attempted to classify it into homogeneous subgroups. Therefore, cluster analysis shares some similarity with factor analysis. In this study, cluster analysis is not only used for confirming our result from factor analysis, but also used to graph later map of MDS.

We use average linkage method for cluster analysis. This method calculate the all possible distance pair wisely rather than the nearest or the farthest neighbor. The result shown in Figure 2 is similar to factor analysis. Groups from three to five are all acceptable, it confirms our prior result from factor analysis. This diagram also helps us to analyze multidimensional scaling.



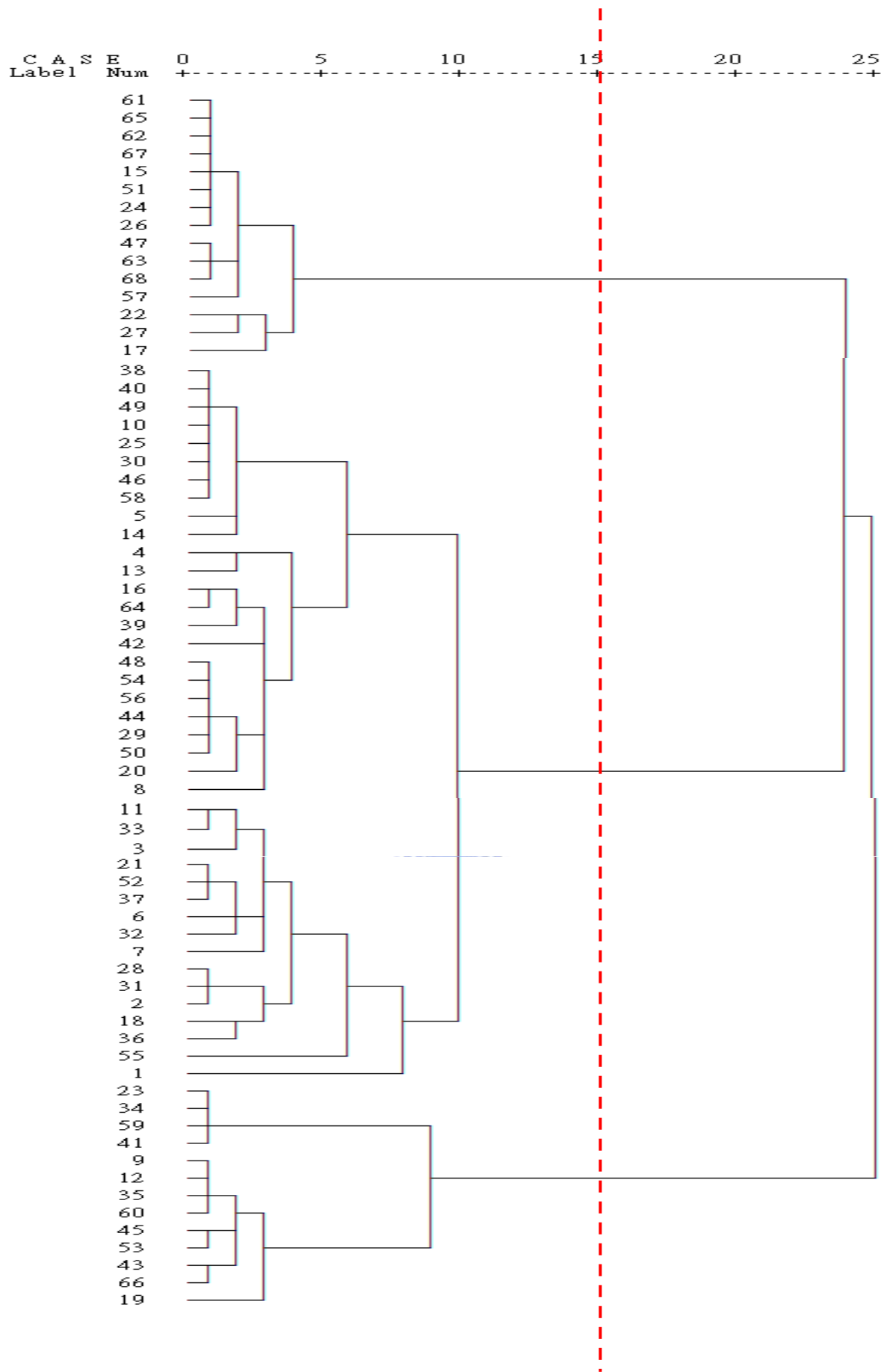
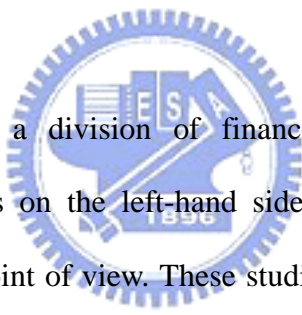


Figure 2. Hierarchical Cluster Analysis

4.4 Multidimensional Scaling (MDS)

A further insight for this research is proposed by multidimensional scaling analysis. In contrast to factor analysis, MDS suggests a direction for measuring the construct characteristics by individuals. These constructs are often connotatively and hard to measure directly. Besides, similar items will be collected together on a perceptual map within MDS. Therefore, a graphic view with clearly communities will be identified easily.

The graphic map in Figure 3 helps us to identify the documents easily. In Figure 3, for comparison, we also marked out the four groups based on cluster analysis. Three phenomenon are discussed as follows, and the stress value of MDS is 0.084, the r^2 is 0.969, which indicates a perfect fit for our data.



First, the y-axis expresses a division of finance-related and non finance-related perspective. For the communities on the left-hand side in Figure 3, G2 and G3 explore diversification from a financial point of view. These studies discuss the relationship between financial performance and diversification strategies. Most articles in our data base before year 1985 tried to find out the reasons why related mergers outperform unrelated diversifications. For example, Bettis (1981) concluded that R&D expenditures are important factors for acquisition performance. On the other hand Rumelt (1982) focused on the explanation between success profitability and the degree of relatedness. Finally, Bettis (1982) also found that related diversifications enjoy superior returns than unrelated ones may due to industry effects. In addition, authors in this community also curious about the effects of diversification strategy to corporate value. For example, Amit & Livnat (1988) indicates that related diversification gains synergies from operating process, while unrelated diversification gains financial benefits from greater stability of cash flows (Graham, Lemmon, and Wolf, 2002; Loughran and Vjih, 1997). Other researchers investigated the relationship between types of

diversification, methods of payment and the performance (Chatterjee and Wernerfelt, 1991; Betti, 1981; Travlo, 1987; Martin, 1996). Public financial information such as ROA, ROE, stock value, shareholder value, etc is usually used to evaluate the performance of diversification. Besides,

Within the finance-related side, two subgroups, G2 and G3, can be divided along the x-axis. Most documents in each subgroup is the same as factor analysis (factor 2 for G2 and factor 4 for G3), only four documents from factor 1(A23, A34, A41, and A59) are categorized to G3 in this analysis. These four articles gain negative factor loadings within factor 1 in factor analysis. This phenomenon indicates that authors prefer not to concern financial literatures when writing non-finance-related researches.

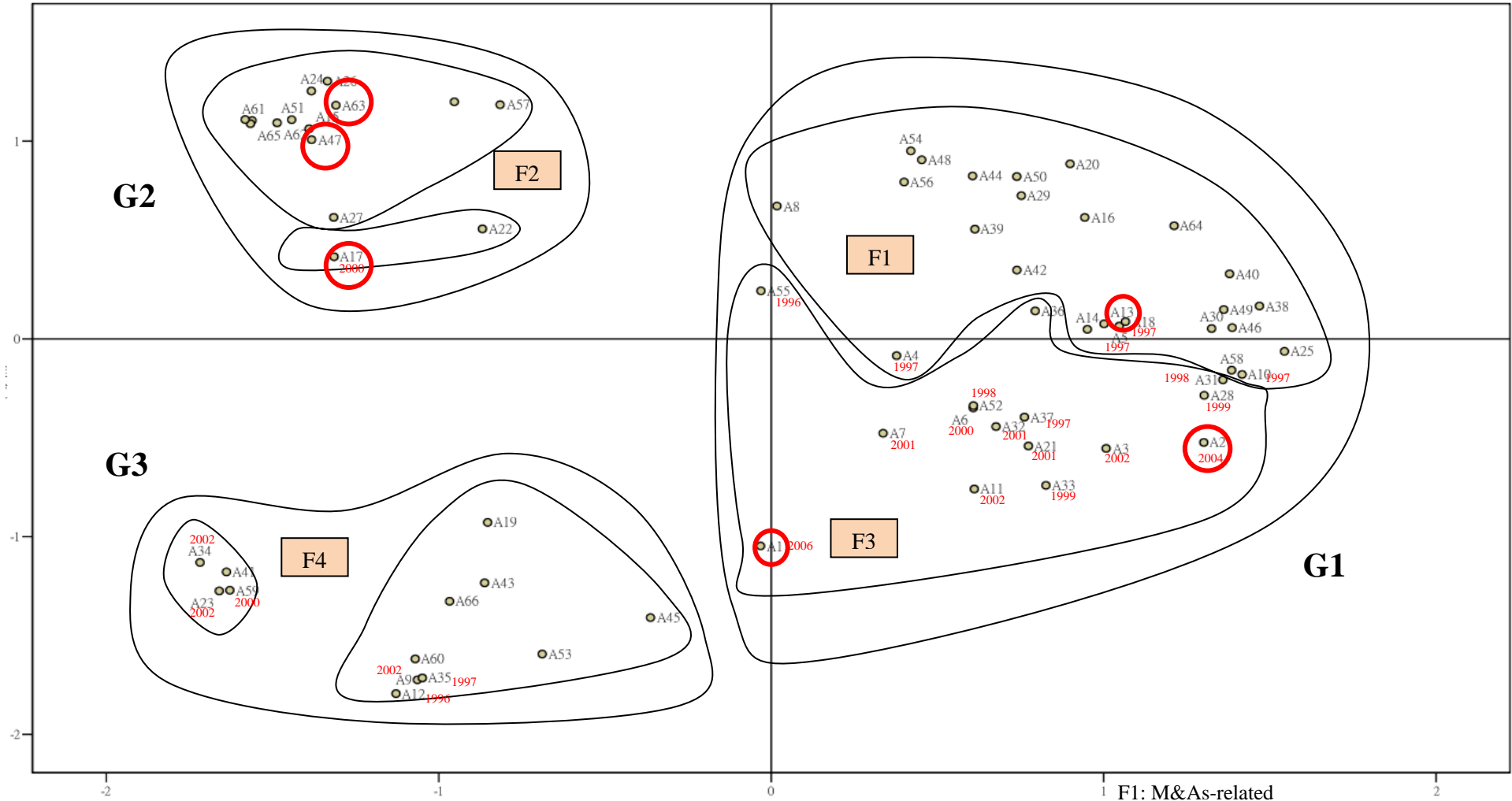
On the other side, the main character in group G1 is non-finance-related perspective. Documents in this group discussed M&As from corporation internal resources view to organizational perspective (Wals, 1988; Hitt, et. al., 1991). These articles focused on strategic fit, organizational fit, and M&As process to find out main reasons for influencing the success of M&As (Pennings, et. al., 1994; Ramaswamy, 1997; Datta, et. al., 1992; Walsh, 1989; Hambrick and Chennella, 1993; Anand and Harbir, 1997). Research issues such as post-integration process, cultural difference between two firms, organization experience of M&As activities and organizational learning are all included in this part (Pablo, 1994; Chatterjee, et. al., 1992; Vermeulan, 2001). Besides, impact of M&As activities to top management teams also revealed as one of the main subjects in M&As (Walsh, 1988; Walsh, 1989; Krishnan et.al., 1997).

Second, the finance-related perspective leads the main direction of M&As in the early ten years, while the non-finance-related perspective conducts the main concept of M&As in

recent two decades. As shown in Table 7, most documents from G2 and G3 are published during 1980 to 1990. Those published after 1990 and located in left side are usually giving a review of past literatures (Cartwright and Schoenberg, 2006; Palich, et. al., 2000; Agrawal, et. al., 1992). On the other hand, documents from G1 are published abundantly after year 1990. Moreover, new articles after year 2000 are intensively located at the lower part of G1 (Figure 3), which indicates that the Resource-based perspective of organizational learning issue became the new focus of M&As in recent years.

Finally, most scholars publish articles in one group, which represents that one researcher generally master only in one field. As we can see from Figure 3, only our initial core paper (A1) situated at the middle part of this map which proves that this paper performed a connector between finance-related and non-finance-related perspectives. However, other review articles are either located at the left side of G2 or at the right side of G1 (A2, A13, A17, A47, A63). This phenomenon showed that authors may still focus on specific issue or territory with particular perspective in reviewing articles.

To summarize, MDS exhibited an entire map of the thirty years development of M&As researches. The left hand side groups focused on finance-related issues, while the right hand side concentrated on non-finance-related issues. Specifically, the finance-related perspective play an important role in the early ten years, and the non-finance-related perspective demonstrates the main trend of M&As within these twenty years. Furthermore, the corporation internal resources and organizational learning issues have become the new trend of M&As after year 2000. Finally, our result also proves that co-citation analysis could provide a rather comprehensive review of literatures.



- F1: M&As-related
- F2: Diversification
- F3: Organizational Learning Perspective
- F4: Finance-related
- G1: Finance-related perspective
- G2+G3: Non-Finance-Related Perspective
- : Review Literatures

Figure 3. Multidimensional analysis

Table 6. Multidimensional Analysis

				G1				G2				G3			
F1				F3				F2				F4			
A-16	Trautwein F	SMJ	1990	A-21	Vermeulen F	AMJ	2001	A-26	AMIT R	SMJ	1988	A-19	Asquith P	JF	1982
A-50	Michael lubatkin	AMR	1983	A-52	Barkerma HG	AMJ	1998	A-63	Ramanujam V	SMJ	1989	A-60	Travlos NG	JF	1987
A-29	Seth A	SMJ	1990	A-11	Hayward ML	SMJ	2002	A-57	Chatterjee S	SMJ	1991	A-45	Agrawal A	JF	1992
A-64	Jemison DB	AMR	1986	A-33	Haleblian J	ASQ	1999	A-24	Varadarajan P	AMJ	1987	A-53	Montgomery CA	AMJ	1982
A-14	Walsh JP	SMJ	1989	A-37	HENNART JF	SMJ	1997	A-67	PALEPU K	SMJ	1985	A-66	Morck R	JF	1990
A-49	Walsh JP	SMJ	1988	A-03	Capron L	SMJ	2002	A-47	Hoskisson RE	JM	1990	A-09	Fuller K	JF	2002
A-48	Lubatkin M	SMJ	1987	A-07	Harrison JS	JM	2001	A-61	Bettis RA	SMJ	1981	A-35	Loughran T	JF	1997
A-40	Chatterjee S	SMJ	1992	A-32	Ahuja G	SMJ	2001	A-65	RUMELT RP	SMJ	1982	A-12	Martin KJ	JF	1996
A-44	Barney JB	SMJ	1988	A-36	PENNINGS JM	AMJ	1994	A-68	Prahalad CK	SMJ	1986	A-43	Kaplan SN	JF	1992
A-56	Singh H	SMJ	1987	A-18	Anand J	SMJ	1997	A-62	Christensen HK	SMJ	1981				
A-54	Chatterjee S	SMJ	1986	A-06	Uhlenbruck K	AMJ	2000	A-51	BETTIS RA	AMJ	1982				
A-30	Hambrick DC	AMJ	1993	A-02	King DR	SMJ	2004	A-27	Gomez-Mejia LR	SMJ	1992				
A-13	Datta DK	SMJ	1992	A-28	Capron L	SMJ	1999	A-15	Montgomery CA	SMJ	1984				
A-39	IRENE MD	AMJ	1985	A-31	Capron L	SMJ	1998	A-22	Ginsberg A	AMR	1990				
A-38	Datta DK	SMJ	1991	A-55	Hitt MA	AMJ	1996	A-17	Palich JE	SMJ	2000				
A-46	Nahavandi A	AMJ	1988					A-01	Cartwright S	BJM	2006				
A-20	Harrison JS	JM	1991												
A-58	Schweiger DW	AMJ	1991												
A-42	HITT MA	AMJ	1991												
A-05	Krishnan HA	SMJ	1997												
A-25	Pablo AL	AMJ	1994												
A-08	Chatterjee S	SMJ	1990												
A-10	VERY P	SMJ	1997												
A-04	Ramaswamy K	AMJ	1997												
A-34	Campa JM	JF	2002												
A-23	Graham JR	JF	2002												
A-59	Rajan R	JF	2000												
A-41	Servaes H	JF	1996												

Table 7. Documents ranking by publication years

Year	Factor	Title
1981	G2 A61	Performance differences in related and unrelated diversified firms
1981	G2 A62	Corporate economic-performance-diversification strategy versus market-structure
1982	G2 A65	Diversification strategy and profitability
1982	G2 A51	Diversification strategy, accounting determined risk, and accounting determined return
1982	G3 A19	The impact of merger bids on the participating firms security holders
1982	G3 A53	The measurement of firm diversification - some new empirical-evidence
1983	G1 A50	MERGERS AND THE PERFORMANCE OF THE ACQUIRING FIRM
1984	G2 A15	DIVERSIFICATION STRATEGY AND SYSTEMATIC-RISK
1985	G1 A39	Conjectures on cognitive simplification in acquisition and divestment decision - making
1985	G2 A67	DIVERSIFICATION STRATEGY, PROFIT PERFORMANCE AND THE ENTROPY MEASURE
1986	G1 A64	Corporate Acquisitions: A Process Perspective
1986	G1 A54	Types of Synergy and Economic Value: The Impact of Acquisitions on Merging and Rival Firms
1986	G2 A68	THE DOMINANT LOGIC - A NEW LINKAGE BETWEEN DIVERSITY AND PERFORMANCE
1987	G1 A48	Merger Strategies and Stockholder Value
1987	G1 A56	Corporate acquisition strategies and economic performance
1987	G2 A24	Diversification and performance - A reexamination using a new two - dimensional conceptualization of diversity in firms
1987	G3 A60	CORPORATE TAKEOVER BIDS, METHODS OF PAYMENT, AND BIDDING FIRMS STOCK RETURNS
1988	G1 A49	Top Management Turnover Following Mergers and Acquisitions
1988	G1 A44	Returns to Bidding Firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis
1988	G1 A46	Acculturation in Mergers and Acquisitions
1988	G2 A26	DIVERSIFICATION STRATEGIES, BUSINESS CYCLES AND ECONOMIC-PERFORMANCE
1989	G1 A14	Doing a Deal: Merger and Acquisition Negotiations and Their Impact Upon Target Company Top Management Turnover
1989	G2 A63	RESEARCH ON CORPORATE DIVERSIFICATION - A SYNTHESIS
1990	G1 A16	Merger Motives and Merger Prescriptions
1990	G1 A29	VALUE CREATION IN ACQUISITIONS - A REEXAMINATION OF PERFORMANCE ISSUES
1990	G1 A08	CORPORATE-MERGERS, STOCKHOLDER DIVERSIFICATION, AND CHANGES IN SYSTEMATIC-RISK
1990	G2 A47	Antecedents and Performance Outcomes of Diversification: A Review and Critique of Theoretical Perspectives
1990	G2 A22	CONNECTING DIVERSIFICATION TO PERFORMANCE - A SOCIOCOGNITIVE APPROACH
1990	G3 A66	DO MANAGERIAL OBJECTIVES DRIVE BAD ACQUISITIONS
1991	G1 A38	Organizational Fit and Acquisition Performance: Effects of Post-Acquisition Integration
1991	G1 A20	Synergies and Post-Acquisition Performance: Differences versus Similarities in Resource Allocations
1991	G1 A58	Communication with Employees following a Merger: A Longitudinal Field Experiment
1991	G1 A42	EFFECTS OF ACQUISITIONS ON RESEARCH-AND-DEVELOPMENT INPUTS AND OUTPUTS
1991	G2 A57	The link between resources and type of diversification: Theory and evidence
1992	G1 A40	Cultural Differences and Shareholder Value in Related Mergers: Linking Equity and Human Capital
1992	G1 A13	Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-Analysis
1992	G2 A27	Structure and process of diversification, compensation strategy, and firm performance
1992	G3 A45	The Post-Merger Performance of Acquiring Firms: A Re-Examination of an Anomaly
1992	G3 A43	The Success of Acquisitions: Evidence from Divestitures

Table 7. Documents ranking by publication years (cont.)

Year	Factor	Title
1993	G1	A30 Relative Standing: A Framework for Understanding Departures of Acquired Executives
1994	G1	A25 Determinants of Acquisition Integration Level: A Decision-Making Perspective
1994	G1	A36 ORGANIZATIONAL LEARNING AND DIVERSIFICATION
1996	G1	A41 The value of diversification during the conglomerate merger wave
1996	G1	A55 The market for corporate control and firm innovation
1996	G3	A12 The Method of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership
1997	G1	A05 Diversification and top management team complementarity: Is performance improved by merging similar or dissimilar teams?
1997	G1	A10 Relative standing and the performance of recently acquired European firms
1997	G1	A04 The performance impact of strategic similarity in horizontal mergers: Evidence from the US banking industry
1997	G1	A37 The choice between mergers/acquisitions and joint ventures: The case of Japanese investors in the united states
1997	G1	A18 Asset redeployment, acquisitions and corporate strategy in declining industries
1997	G3	A35 Do Long-Term Shareholders Benefit From Corporate Acquisitions?
1998	G1	A52 International expansion through start-up or acquisition: A learning perspective
1998	G1	A31 Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992
1999	G1	A33 The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective
1999	G1	A28 The long-term performance of horizontal acquisitions
2000	G1	A59 The cost of diversity: The diversification discount and inefficient investment
2000	G2	A17 Curvilinearity in the diversification-performance linkage: An examination of over three decades of research
2000	G1	A06 Foreign acquisitions in Central and Eastern Europe: Outcomes of privatization in transitional economies
2001	G1	A21 Learning through Acquisitions
2001	G1	A07 Resource complementarity in business combinations: Extending the logic to organizational alliances
2001	G1	A32 Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study
2002	G1	A34 Explaining the diversification discount
2002	G1	A23 Does Corporate Diversification Destroy Value? -
2002	G1	A11 When do firms learn from their acquisition experience? Evidence from 1990-1995
2002	G1	A03 When do acquirers earn abnormal returns?
2002	G3	A09 What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions
2004	G1	A02 Meta-analyses of post-acquisition performance: indications of unidentified moderators
2006	G2	A01 Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities

G2 & G3: Finance-Related Perspective
 G1: Non-Finance-Related Perspective

4.5 Discussion

Co-citation analysis is a strong methodology for providing a whole map of a mature research field. Our results perform the evolution of M&As from finance-related perspective to non-finance-related perspective. Both factor analysis and MDS analysis indicated that finance-related perspectives with diversification-related and finance-related issues were the main trends for the early ten years, while M&As-related issues with non-finance-related perspective demonstrate the main trend of M&As. These results show a consistent with literatures of past three decades.

In the early 1980s, M&As strategy was one of the most frequently used methodology to enlarge business scope or to reach economic scale. At that time, financial performance was the easiest and clearest way to evaluate their outcome of this strategy. Most inventers will also depend on corporate financial statements to decide whether to invest this corporation or not. Therefore, financial performance could be considered as the reflection of M&A effectiveness. Moreover, a finance-perspective for studying M&As strategy became the main trend in the early 1980s. The investigation of relationship between strategic fit and the financial fit in M&As were the leading issues during that time. Several external and observable variables such as type of acquisition, method of payment, were taken into concern main factors for influencing the horrible result of M&As strategy.

However, evidence showed that M&As activities still increased tremendously, and the failure rate also remained high. This phenomenon indicated that these financial solutions might not work. As a result, experts began to concentrate on internal corporate factors and the motives of using M&As. For example, the resource-based view (RBV) of proper individual resources such as human resource, cultural difference, experience of M&As, and organizational learning ability, etc, started to attract researchers' attention. Barney (1991,

2001) claimed that corporation with valuable, rare, imperfectly imitable and substitutable resources could have better competitive advantage in that industry. And this kind of resources could not be learned easily through post-integration process. Therefore, these non-finance-related perspectives have been raised as the main trend of M&As in this twenty years. In addition to the resource-based view, other non-finance-perspective of the motives for using M&As as techniques to reach some purpose also took researchers' eyes. For instance, CEOs may merge for complementary resources or abilities that they do not have. Other motives like the eager to gain market power or private information, to achieve operational synergies and managerial synergies, and to maximize manager's own utility were all discussed extensively. According to above, CEOs did not take the financial performance as their priority, but other concerns of different reasons.

In addition to resource-based and motive oriented perspectives discovered by experts, two new non-finance-related research issues have been stood out. First, since M&As activities generally do not lead to superior financial performance as they wish, starting up a new business may be even better than merger or acquisition. Besides, building new business through start-ups could exploit specific advantages that are difficult to obtain from M&As. Therefore, the comparison of M&As strategy and start-ups became a new research interest. Second, according to prior discussion, previous studies examined a variety of factors in M&As, but their researches did not have a great change of the failure rate. As a result, authors began to think about learning knowledge from M&As activities for organizations. A new approach with organizational learning perspective was used to extract out the intellectual structure of M&As.

V. Conclusion

This study carried out an inductive view of M&As. The evolution of the intellectual structure of M&As researches has accomplished by factor analysis and MDS. Four factors and two different perspectives of M&As researches have been extracted out within bibliographic methodology.

Four factors from factor analysis are M&As-related, Diversification, Organizational Learning perspective, and Finance-related. M&As-related explored the reasons that affect the performance of M&As, such as merger motives, organizational culture difference, and top management teams. Diversification discussed the relationship between strategic fit and financial fit, and takes M&As as a special case in diversification. Then the organizational learning perspective brought out new trend of M&As. This perspective began to think about learning knowledge from acquisition experience. Finally, finance-related considered financial performance issues. Articles in this factor focused on the financial statement, and wondering about whether M&As brings profit to the firm.

In addition to factor analysis, MDS provides a clear map to analyze M&As from finance-related perspective to non-finance-related perspective. Studies with finance-related perspective focused on financial performance and external corporate variables in the early period. And the non-finance-related perspective with resource-based view (RBV) demonstrates the main trend of M&As in recent twenty years. Furthermore, articles with organizational learning perspective or the comparative of M&As corporation and start-ups became new issues during these years.

In spite of the claim for a quantitative way by bibliometric methodology, this statistical technique remains some limitations from this approach. First, it is difficult to avoid some

subjective point of view in selecting the initial core papers. Therefore, a more objective way for similar researches would be suggested. Second, since publishing an article in a journal requires a long time, the identification of citations might result in underestimating the contribution of low citation articles. Finally, it is possible that articles with significant contribution to M&As could appear in other journals. Despite of these limitations, our process enabled us to select most representative articles in M&As. We believe that these drawbacks will not deviate our result in a significant way.

To summarize, our study played as a documentary film of past articles in M&As, and offered a clear and graphic description to understand the dissemination and main trends of M&As. Besides, our results provide some degree of confirmatory evidence to certain literatures. We hope this paper could be helpful for future researches to have a broadly review of three decade literatures. Moreover, we would like to suggest a further study for extending our research over future periods to prove whether the new trends are enduring natures or just a short period idea.



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