

International Strategic Alliance: Past Research and Future Directions

Tsai-Lung Liu, Tajen University, Taiwan

ABSTRACT

Studies on international strategic alliance rarely take a longitudinal perspective, which explores relevant research over time. The purpose of this study is to examine the research trend of international strategic alliance from 1986 to 2003, and to suggest some potential directions for future research. Content analysis is proposed to analyze the literature in the related areas, to include such elements as the focus of study, application field, methodology, design, data, related constructs, and variables. Through the content analysis of 138 papers, the present study shows the development of research on international strategic alliance over the past 18 years. In addition, this study provides some suggestions for future research on international strategic alliance

Keywords: *International Strategic Alliance, Content Analysis, Longitudinal Perspective*

INTRODUCTION

The alliance, joint venture and global strategic partnership are the types of basic organizational cooperation by which business will enter the global market in the future (Perlmutter and Heenan, 1986). Especially in the 1990s, strategic alliance seemed to be an efficient means for business to achieve growth, create competitive advantage, pursue transformation or upgrade organizational goals. Due to such factors as rapid technological development, shortened life cycle of products and popularization of trade protectionism, strategic alliance has already become a basic and necessary organizational strategy (O'Hame, 1989). In a transitional economic environment, organizations adopt strategic alliance as their means of entry into global market (Holmlund and Kock, 1996).

Past research related to international diversification has focused on such areas as its formation (Brouthers, Brouthers, and Wilkinson, 1995; Shan and Visudtibhan, 1990; Maynard, 1996), goals (Forrest, 1990; Osborn and Hagedoorn, 1997), types (Li and Slocum, 1991; Nueno and Oosterveld, 1988; Pekar and Allio, 1994), partner selection criteria (Anderson and Narus, 1990; Beamish, 1994; Yoshino and Rangan, 1995), and performance (Chakravarthy, 1986; Dussauge, Garrette, and Bernard, 1995; Peaker, 1993). However, these studies lack integration and assessment of their potential application to each other.

Hence, in order to deepen our understanding of the issue of international strategic alliance over the past years, and our knowledge of the likely trends in its future development, this study applies content analysis to a selection of 138 papers (chosen via ABI/INFORM and EBSCO Global Search System) on international strategic alliance that were published from 1986 to 2003. This study was designed to achieve two purposes:

- (1) Explore what kind of international strategic alliance research has been done during the last 17 years, using such factors as the focus of study, application field, level of analysis, methodology, data, related constructs, and variables.

- (2) Determine a direction of international strategic alliance studies, to provide a comprehensive understanding of the relevant specific research over these years. This may aid future scholars who seek to enrich the fields of research.

DATABASE DEVELOPMENT

This study employs content analysis, defined as a tool for the systematic and objective analysis of message characteristics (Naccarato & Neuendorf, 1998). Content analysis is any technique for making inferences by objectively and systematically identifying specified characteristics of messages (Holsti, 1969). Content analysis uses a qualitative or narrative method to make a synopsis of various primary research issues, and then collects the primary research results to make a comparison and find the common conclusions (Hunter & Schmidt, 1990).

When developing the database for content analysis, effort was focused on identifying studies involving international strategic alliance. To identify these studies, the author searched two electronic databases (ABI/Inform and Ebsco) by entering keywords such as “international strategic alliance,” “international strategic alliance motivation,” “international strategic alliance type,” “international strategic alliance goal,” “international strategic alliance partner selection criteria,” “international strategic alliance performance,” and so forth. Further, the author also searched the citation and document texts, abstracts and citations, and titles of documents found in identified studies, and also performed a manual search among the leading journals in which articles of international strategic alliance were most likely to be published (e.g., *Academy of Management Journal*, *Strategic Management Journal*, *International Journal of Operations & Production Management*, *Journal of International Marketing*, *Organization Studies*, *Research Technology Management*, *Journal of International Business Studies*, *Harvard Business Review*, *Journal of International Marketing*, *Long Rang Planning*, *Journal of General Management*, *Journal of Business Research*, *The Academy of Management Executive*, *Journal of Euro Marketing*, *International Journal of Technology Management*, *Journal of Management*, *International Journal of Studies of Management & Organization*, *Research Policy*, *European Management Journal*, and *R & D Management*, and so on). Book reviews and editorials were excluded from the database development. Ultimately, there were 4,743 papers examined, and 138 (2.90%), published from 1986 to 2003, were selected for analysis. The reference details of the 138 papers can be found in the Appendix.

ANALYSES

The major procedures of content analysis are: determination of population, sampling, construction of categories, determination of analytic units, coding, and estimation reliability. These are described below.

1. Construction of categories and determination of analytic units: since the information collected by means of content analysis is mostly of nominal scale nature, this study mainly focused on the 138 papers selected, and analyzed their category data, including focus of study, application field, level of analysis, methodology, data, related constructs, and variables. The content of a research paper was taken as the analytic unit.
2. Coding and estimation reliability: focusing on the selected 138 papers on international strategic alliance, the three coders of this study carefully read the contents of each paper and judged their semantics after thorough, mutual communication, in order to pursue a consistent coding procedure. The mutual agreement was $0.86 = (0.87 + 0.85 + 0.86) / 3$, and the reliability was $0.95 = 3 * 0.86 / (1 + 2 * 0.86)$, reaching an acceptable standard of reliability (Kassarjian, 1977).

RESULTS

Table 1 reports a comprehensive explanation of the data gathered. Of the papers examined, 98 were found to be qualitative papers (71.01%) and 40 were quantitative papers (28.99%), giving different methodological implications. These 138 papers mainly emphasized the independent variable of international strategic alliance (X), i.e. motivation, formation factors, partner selection criteria, strategy, policy, activity, technology, knowledge transfer, innovation, firm management, role, type, scale, network, structure, vertical and horizontal integration, characteristics of top management, structural design and establishment of competitive competence; and the dependent variable of international strategic alliance (Y), i.e. formation, benefit, performance, cooperation management, geographical expansion, risk reduction, knowledge acquisition, technological transfer and consumers' preference, competition or growth, choice of alliance form, innovation, product development, technology efficiency, asset or resource acquisition, alliance barriers, partner selection, vertical integration, and portfolio. Most of these studies indicated a positive relationship between X and Y, with only seven papers finding a negative relationship.

Table 2 lays out the findings concerning application field, level of analysis and data. With regard to application field, management field is most commonly discussed (113 papers, constituting 81.88% of the sample), followed by marketing (15 and 10.87%), and then economy (5 and 3.62%), finance (3 and 2.17%) and human resources (2 and 1.45%). For the category of level, organization level was the most commonly discussed (27 papers, for 64.29% of the total), followed by industry level (93 and 67.39%), and then industry level (20 and 14.49%), nation level (13 and 9.42%), market level (7 and 5.07%), individual level (4 and 2.90%) and the level of team (1 and 0.72%). In the category of data, cross-section data were most commonly discussed (136 papers and 98.55% respectively), followed by longitudinal data (2 and 1.45%).

Furthermore, this study uses cross analysis of the qualitative or quantitative characteristics of X and Y. Table 3 shows that for the independent variable(X), both the analytic results of qualitative and quantitative characteristics were most commonly. Over the dependent variables (Y) of cooperation management of strategic alliance, formation of strategic alliance, benefit and performance of strategic alliance and the acquisition of learning and knowledge, the analytic results of qualitative and quantitative characteristics were discussed most frequently.

Table 1 Previous Literature (1986 – 2003) of International Strategic Alliance (referred to as “ISA,” hereinafter) Research

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
1. Nielsen (2003)	M	O	Partner selection criteria (X); formation of ISA (Y)	2	C	P
2. Tehrani (2003)	M	i	Strategy of ISA (X); performance (Y)	2	C	P
3. Janell (2003)	m	O	Motivating factors of ISA (X ₁); structural organization (X ₂); risk reduction (Y)	1	C	P
4. Chen & Chen (2003)	M	O	Policy of ISA (X); risk reduction (Y)	2	C	P
5. Chen, Z (2003)	E	M	ISA's commit ability to monopoly levels (X); the degree of lessening of competition (Y)	1	C	P
6. Chen, C. J. (2003)	M	O	Environmental effect (X ₁); partner characteristic of ISA (X ₂); the choice of alliance forms (Y)	2	C	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
7. Larsson et al., (2003)	M	O	Cooperation of ISA (X); international growth (Y)	1	C	P
8. Mehta et al., (2003)	m	O	Strategic alliance of international marketing channel (X) performance (Y)	2	C	P
9. Townsend (2003)	M	O	Motivating factors of ISA (X ₁); Structural organization of ISA (X ₂); performance (Y)	1	C	P
10. Gebrekidan & Awuah (2002)	M	O	Specific focal alliance factor (X); formation of ISA (Y)	2	C	P
11. Matthew (2002)	M	O	Partner selection criteria of alliances (X); performance of ISA (Y)	1	C	P
12. Supphellen, Stven & Korneliusen (2002)	M	O	Planning of ISA (X); core strategy of company (Y ₁); partner dissimilarity (Y ₂)	2	C	P
13. Duffield (2002)	E	N	Effect of ISA (X), international expansion (Y)	2	C	P
14. Esteban (2002)	M	O	Global alliance (X), international expansion (Y)	2	C	P
15. Mayrhofer (2002)	M	N	Collaborative agreement of ISA (X); international coalition activity (Y)	2	C	P
16. Camuffo (2002)	M	i	Organizational ISA (X); Synergy (Y)	1	C	P
17. Rodriguez (2002)	M	N	Trust and commitment of ISA (X); intern dependency relationship (Y)	1	C	P
18. Luo (2002)	M	O	Trust of ISA (X), performance of ISA (Y)	2	C	P
19. Kauser & Shaw (2001)	M	O	High level of coordination, commitment, trust and communication (X); success of alliance partnership (Y)	2	C	P
20. Mejias & Vargas-Hernandez (2001)	E	N	Strategic trade of ISA (X); bilateral agreements (Y)	1	C	P
21. Murraray (2001)	M	O	Global sourcing strategic alliance (X); Competitive advantage (Y)	1	C	P
22. Brueckner (2001)	M	i	Effect of ISA (X); benefits of ISA (Y)	1	C	P
23. Saffu & Mamman (2000a)	M	O	Strategic motivation for formation of alliance (X); partner selection criteria (Y)	2	C	P
24. Joseph (2000)	E	i	Domestic alliance (X); strategic international gains (Y)	2	C	P
25. Shaw & Kauser (2000)	M	O	Activity of ISA (X); competitive position of ISA (Y)	2	L	P
26. Arvanitis & Nicholas (2000)	M	O	Technical condition of ISA (X); technological transfer and learning (Y)	1	C	P
27. Saffu & Mamman (2000b)	M	O	Motivation of ISA (X); international collaborative activity (Y)	2	C	N
28. Ahuja (2000)	M	O	Collaboration networks of ISA (X ₁); structural holes of ISA (X ₂); innovation (Y)	2	L	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
29. Apostolopulos (2000)	m	i	Cooperative marketing of ISA (X); Competitive advantage (Y)	1	C	P
30. Hitt et al., (2000)	M	M	Partner selection of ISA (X); developed market contexts (Y)	2	C	P
31. Dussauge et al., (2000)	M	N	Competing partners of ISA (X); learning and capability acquisition (Y)	1	C	P
32. Bhatnagar & Viswanathan (2000)	M	M	Global supply chains alliance (X); successful outcome (Y)	1	C	P
33. Tsang (1999)	M	O	International strategic alliance (X); organizational learning (Y)	1	C	P
34. Bernard (1999)	m	O	Knowledge transfer (X); learning of ISA (Y)	2	C	P
35. Narula & Hagedoorn (1999)	M	i	Innovation of ISA (X); partnership and contractual agreement (Y)	1	C	P
36. Jacobsen & Adrian (1999)	F	i	Policy of ISA (X); alliance cooperation (Y)	1	C	P
37. Davenport et al., (1999)	M	i	Strategy framework of ISA (X); organizational operation practice (Y)	1	C	P
38. Carr (1999)	M	O	Cooperation of ISA (X); Technology transfer (Y)	1	C	P
39. Alvarez Gil (1999)	M	O	International technology alliances (X); new product development (Y)	1	C	P
40. Luo (1999)	M	i	Industrial structure characteristic (X); ISA performance (Y)	1	C	P
41. Flood (1999)	M	N	Industrial structure characteristic (X); ISA performance (Y)	1	C	P
42. Simonin (1999)	m	O	Knowledge ambiguity (X); knowledge transfer of ISA (Y)	2	C	N
43. Rajneesh & John (1999)	M	O	Partnerships and contractual agreement of ISA (X); innovating (Y)	1	C	P
44. Pilkington (1999)	M	O	Relationship of ISA (X); Design and manufacturing capabilities (Y)	1	C	P
45. Voss & Tansuhaj (1999)	m	O	Brand ISA (X); building brands (Y)	1	C	P
46. Saffu & Mamman (1999)	m	O	Partnership of ISA (X); financial resources and market opportunities (Y)	1	C	P
47. Andrew (1998)	M	O	Policy of ISA (X); learning and knowledge acquisition (Y)	1	C	P
48. Lee (1998)	m	O	Intention of ISA (X); formation of strategic alliance (Y)	2	C	P
49. Hagedoorn & Sedaitis (1998)	M	O	Planning of ISA (X); technological transfer (Y)	2	C	P
50. William (1998)	H	I	Inter-management of ISA (X); decision of leader (Y)	1	C	P
51. Sharma (1998)	M	O	Governance structure of ISA (X); knowledge of ISA(Y ₁), opportunism and prevention of defection (Y ₂)	1	C	P
52. Hadjimarcou & John (1998)	M	O	Role of ISA (X); franchising success of ISA (Y)	1	C	P
53. Inkpen (1998)	M	O	Learning of ISA (X); knowledge	1	C	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
54. Parkhe (1998a)	M	O	acquisition (Y) Trust (X); Successful benefit of ISA (Y)	1	C	P
55. Parkhe (1998b)	M	O	Trust (X); Successful benefit of ISA (Y)	1	C	P
56. Osborn et al., (1998)	M	O	Embedded patterns (X); formation of ISA (Y)	1	C	P
57. Rao & Schmitd (1998)	M	O	Negotiating of international alliance (X); tactics of senior executives (Y)	2	C	P
58. Chang et al., (1998)	M	O	International Collaboration (X); acquiring strategic asset (Y)	1	C	P
59. Pearson et al., (1998)	M	O	Strategic actions of ISA (X); logistics barriers (Y)	1	C	P
60. Gourdin (1998)	M	i	Industrial policy of ISA (X); Expanding organizational service (Y)	1	C	P
61. John & Sedaitis (1998)	M	O	Partnership of ISA (X); organizational configuration (Y)	1	C	P
62. Madhavan et al., (1998)	M	i	Industrial events (X); network relationship of ISA	2	C	P
63. Nuese et al., (1998)	M	O	Searching partners of ISA (X); alliance barriers (Y)	1	C	P
64. Clarke-Hill et al., (1998)	M	O	Skills and competence transfers of ISA (X); Competitive advantage (Y)	1	C	P
65. Haley (1998)	M	N	Strategic goals formation of ISA (X); governmental policy (Y)	1	C	P
66. Omer (1998)	M	O	Interim management of ISA (X); partners' resources (Y)	1	C	P
67. Hadjimarcou & Barnes (1998)	M	O	Role of ISA (X); international franchising efficiency (Y)	1	C	P
68. Dickson & Weaver (1997)	M	I	Environmental uncertainty (X); individual perceived effect of ISA (Y)	1	C	N
69. Barber (1997)	M	N	Authority formation of ISA (X); benefits of partner (Y)	1	C	P
70. Dacin et al., (1997)	M	O	Selecting partners' objectives of ISA (X); success of ISA (Y)	1	C	P
71. Sanjit & Monica (1997)	M	O	Cultural difference (X); success of ISA (Y)	2	C	P
72. Roth (1996)	M	O	Domestic law (X); corporate management of ISA (Y)	1	C	N
73. Hertz (1996)	M	i	Formation of international strategic alliance (X); cooperation change of ISA (Y)	1	C	N
74. Glaister & Buckley (1996)	M	O	Motivation for formation of ISA (X); market and geographical expansion (Y ₁); risk reduction (Y ₂)	2	C	P
75. Simonin & Ruth (1996)	m	M	Business restructuring (X); consumer's preference for ISA (Y)	1	C	P
76. Samli, Kaymak & Sharif (1996)	m	O	Planning of ISA (X); learning (Y)	1	C	P
77. Esteban (1996)	M	O	Inter-company transaction (X);	1	C	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
78. Joshi & Inkpen (1996)	M	O	contractual form of ISA (Y) Selecting strategy of international alliance (X); global goal of competitive advantage (Y)	1	C	P
79. Oh (1996)	M	i	Global strategic alliance (X); industrial development (Y)	1	C	P
80. Luo (1996)	M	N	ISA (X); financial performance (Y)	1	C	P
81. Bernard & Tamym (1996)	M	i	Cooperative agreements of ISA (X); successful industry effect (Y)	1	C	P
82. Susanne (1996)	M	O	Selecting criteria of ISA (X); international network effect (Y)	1	C	P
83. Spekman et al., (1996)	M	O	Business and interpersonal relationship (X); success of ISA (Y)	1	C	P
84. John & Rajneesh (1996)	M	i	Technological characteristic (X); selecting mode (Y)	1	C	P
85. Aram et al., (1996)	M	O	Cooperative agreement of ISA (X); effect of ISA (Y)	1	C	P
86. Yoon et al., (1996)	m	M	Integrative marketing relationship of ISA (X); channel integration effect (Y)	2	C	P
87. Kate & Teegen (1996)	M	M	Market liberalization (X); motivation formation of ISA (Y ₁); partner selection of ISA (Y ₂)	1	C	P
88. Glaister (1996)	M	O	Motivation formation of ISA (X ₁); selection criteria of ISA (X ₁); performance of ISA (Y)	2	C	P
89. Green & Gerber (1996)	M	O	Partnership of ISA (X); alliance effect (Y)	1	C	P
90. Johnson et al., (1996)	M	N	Trust and strategic integration (X); effect of ISA (Y)	1	C	P
91. Simonin of Ruth (1996)	m	M	Capitalizing on consumer level of ISA (X); Restricting business effect (Y)	1	C	P
92. Salter (1995)	M	O	Domestic law (X); corporate management of ISA (Y)	1	C	N
93. Murray (1995)	M	O	Domestic market (X); international market alliance (Y)	1	C	
94. Dussauge & Earrette (1995)	M	i	Different types of ISA (X); performance of ISA (Y)	2	C	P
95. Yuan & Wang (1995)	M	i	Scale (X ₁); industrial environment (X ₂); competence (X ₃)	2	C	P
96. Hara & Kanai (1995)	M	O	Entrepreneurial network (X); success of ISA (Y)	1	C	P
97. Murray (1995)	M	i	ISA (X); strategic choice (Y)	1	C	P
98. Amin et al., (1995)	M	N	Cooperative relationship of ISA (X); Competitive advantage (Y)	1	C	P
99. Preece (1995)	M	O	Incorporating ISA (X); overall firm strategy (Y)	1	C	P
100. John (1995a)	M	O	International networks alliances (X); Competitive position (Y)	2	C	P
101. John (1995b)	M	O	Networks partnering of ISA (X);	2	C	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
102. Arbelaeg & Culpan (1995)	M	I	market leading position (Y) Partner selection of ISA (X); competitive advantage (Y)	1	C	P
103. McArthur & Schill (1995)	M	O	Arrangement of ISA (X); improving firm's competitive strategy (Y)	2	C	P
104. Saul & Jehiel (1995)	M	M	Choice of global strategic alliance (X); geographical scope (Y)	1	C	P
105. Pasi (1995)	M	i	Development of international horizontal alliances (X); gaining operational opportunity (Y)	2	C	P
106. Elizabeth & Halcolm (1994)	M	O	Global alliance (X); vertical integration (Y)	1	C	P
107. Atul & Gupta (1994)	m	O	ISA in marketing (X); enhancement market place leverage (Y)	1	C	P
108. George & Toshihiro (1994)	M	O	Entrepreneurial networks (X); promotion of ISA (Y)	1	C	P
109. Schill et al., (1994)	M	O	International technology alliance (X); competitive technology (Y)	1	C	P
110. Wolff (1994)	M	O	Trust (X); effect of ISA (Y)	1	C	P
111. Crossan & Inkpen (1994)	M	O	ISA (X); Commentary promise (Y ₁); learning (Y ₂)	1	C	P
112. Morrison (1994)	m	i	ISA in marketing (X); business performance (Y)	1	C	P
113. Erdmann (1993)	M	O	Policy of ISA (X); business alternative (Y)	1	C	P
114. Ahern (1993)	M	O	Structure of ISA (X); cost of ISA (Y)	2	C	P
115. Simonin (1993)	M	O	Knowledge transfer (X); ISA in different companies (Y)	2	C	N
116. Ricks (1993)	m	N	Vertical and horizontal ISA (X); benefit of ISA (Y)	1	C	P
117. Peter (1993)	M	O	Co-operative ISA (X); Effect of corporate strategy	1	C	P
118. Dileep (1993)	F	O	Financial restricting of ISA (X); Choices of portfolio reconfiguration (Y)	1	C	P
119. John (1993)	M	O	Motivation for partnerships of ISA (X); innovation effect (Y)	2	C	P
120. Oum et al., (1993)	M	i	Network policy of ISA (X); operational quality (Y)	1	C	P
121. Kim & Hwang (1992)	M	O	Incorporation of ISA (X); entry mode decision (Y)	2	C	P
122. Merrifield (1992)	M	O	Building successful elements of ISA (X); effect of strategic objectives (Y)	1	C	P
123. Forr & Fischer (1992)	M	O	Cooperative projects of ISA (X); operational effect of ISA (Y)	2	C	P
124. Fogg (1991)	M	T	Top management team (X); deployment of different types of ISA (Y)	1	C	P
125. Hamel (1991)	M	I	Competition for competence of ISA;	2	C	P

No. / Author / Year	Application Field	Level of Analysis	Study's Focus	Methodology	Data	Result
126. Backes (1991)	F	I	inter-partner learning (Y) Executive partnership of ISA; benefit of ISA (Y)	1	C	P
127. Woodside (1991)	M	I	Design of ISA (X); implementation process of ISA (Y)	1	C	P
128. Parkhe (1991)	M	O	Organizational learning of global strategic alliance (X); alliance effectiveness (Y)	1	C	P
129. Blecke & Ernst (1991)	M	O	Mechanisms of ISA (X); benefit of ISA (Y)	1	C	P
130. Hamel (1991)	M	O	Inter partner learning of ISA (X); Competitive competence (Y)	2	C	P
131. Link (1990)	M	N	Technological intelligence development of ISA (X); Strategic planning (Y)	1	C	P
132. Bertodo (1990)	M	i	Partnership relationship of ISA (X); benefits of ISA (Y)	1	C	P
133. Kenich (1989)	M	O	Selecting partnership of ISA (X); customer need (Y)	1	C	P
134. Hamel et al., (1989)	M	O	Collaborate with competitors (X); benefits of ISA (Y)	1	C	P
135. Bruce (1989)	M	O	ISA (X); innovation competitive advantage (Y)			
136. Pucik (1988)	H	O	Building organizational learning in ISA (X); Competitive advantage (Y)	1	C	P
137. Billon (1986)	E	N	Global strategic alliance (X); improving trade deficit (Y)	1	C	P
138. Perlmutter & Heenan (1986)	M	O	Global strategic alliance (X); global competitive advantage (Y)	1	C	P

Note: Application Field
F = Finance; E = Economy
Level of Analysis
M = Market; N = Nation
Variable
Methodology
Data
Result

M = Management; H = Human Resource; m = Marketing;
I = Individual; T = Team; O = Organizational; i = industry;
X = Independent; Y = Dependent
1 = Qualitative; 2 = Quantitative
L = Longitudinal; C = Cross-section
P = Positive relationship; N = Negative relationship

Table 2. International Strategic Alliance Application Field, Level of Analysis and Data Content Frequency (1986-2003)

Application Field	Qty.*	%	Level of Analysis	Qty.*	%	Data	Qty.*	%
Management	113	81.88%	Individual	4	2.90%	Cross-section	136	98.55%
Marketing	15	10.87%	Team	1	0.72%			
Human Resource	2	1.45%	Organization	93	67.39%	Longitudinal	2	1.45%
Finance	3	2.17%	Industry	20	14.49%			
Economy	5	3.62%	Market	7	5.07%			
			Nation	13	9.42%			
Total	138	100%	Total	138	100%	Total	138	100%

Remarks: * Qty. = Quantity

Table3. Quantitative and Qualitative Results of International Strategic Alliance Research Variable, and Content Frequency (1986-2003)

Study's Focus	Qualitative	%	Quantitative	%
Independent (X):				
Individual level	5	5.05%	1	1.79%
Team level	1	1.01%	0	0%
Organizational level	57	57.58%	27	48.21%
Industrial level	16	16.16%	7	12.50%
Market level	7	7.07%	2	3.57%
Nation level	12	12.12%	1	1.79%
Total	99	100%	56	100%
Dependent (Y):				
Formation of strategic alliance	7	7.45%	5	11.11%
Benefit & performance of strategic alliance	31	32.98%	15	33.33%
Strategic management alliance corporation	11	11.70%	6	13.33%
Expansion	8	8.51%	5	11.11%
Risk reduction	0	0%	2	4.44%
Learning and knowledge acquisition	6	6.38%	2	4.44%
Technological transfer	3	3.19%	3	6.67%
Consumer's preference	2	2.13%	0	0%
Competition or growth	11	11.70%	3	6.67%
Choice of alliance form	2	2.13%	1	2.22%
Innovation, product development, technology efficiency	7	7.45%	2	4.44%
Asset or resource acquisition	1	1.06%	0	0%
Alliance barriers	1	1.06%	1	2.22%
Partner selection	1	1.06%	0	0%
Vertical integration	2	2.13%	0	0%
Portfolio	1	1.06%	0	0%
Total	94	100%	45	100%

IMPLICATIONS

As shown in Tables 1, 2 and 3, the analytic results of this study provide some valuable implications for future research. Just as in these three tables, they report the main independent variables and dependent variables, application fields, level of analysis, methodologies, data and results of international strategic alliance collected from the 138 research papers. These findings will be helpful to professional researchers or those who are interested in this issue, to increase their research reference and generalization in the future.

FUTURE DIRECTIONS

There are some limitations to this study, such as sole adoption of historical secondary data and the use of content analysis to explore past research on international strategic alliance. Nevertheless, the following suggestions for future research on international strategic alliance can be offered.

The first recommendation involves research on other efficiency mediators or moderate variable effects, such as innovation and trust, which can linked with other theory such as, institutional theory, dynamic capability perspective, knowledge-based view, or transaction cost theory. The second calls for research on multiple-level analysis of independent variables, such as individual level, team level, strategy

level, industrial level, market or region level, product level and portfolio level. The third research suggestion deals with comparative analysis of different independent variables as well as comparison of the relationships among different dependent variables, such as performance, benefit or return, portfolio return, risk measurement and cost reduction of a firm.

REFERENCES

- Anderson, J. C. and Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54, 42-58.
- Beamish, P. W. (1994). Joint ventures in LCDs: Partner selection and performance. *Management International Review*, 34, 60 -74.
- Brouthers, K.D., Brouthers, L.E. and Wilkinson, T. J. (1995). Strategic alliances: choose your partners? *Long Range Planning*, 28, 18-25.
- Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal*, 7, 437 -458.
- Dussauge, P., Garrette, B. and Bernard, H. (1995). Determinants of successful in international strategic alliances: Evidences form the global aerospace industry. *Journal of International Business Studies*, 3, 505-530.
- Forrest, J. E. (1990). Strategic alliance and the small technology-based firm. *Journal of Small Business Management*, 28(3), 37-45.
- Holmulund, M. and Kock, S. (1996). Buyer dominated relationships in a supply chain – A case study of four small sized suppliers. *International Small Business Journal*, 15(1), 26-40.
- Hoslti, O. R. (1969). *Content Analysis for the Social Sciences and Humanities Reading*, Massachusetts: Addison Wesley, pp. 24-35.
- Hunter, J. E. and Schmidt, F. L. (1990). *Methods of Meta-Analysis: Correcting Error and Bias in Research Finding*, Sage Publications.
- Li, D. and Slocum, J. W. (1991). Global strategic alliance: Payoffs and pitfalls. *Organizational Dynamics*, 19, 44-62.
- Maynard, R. (1996). Strategic the right match. *Nation's Business*, 84(5),18-20.
- Naccarato, J. L. and Neuendorf, K. A. (1998). Content analysis as a predictive methodology: Recall, readership, and evaluations of business-to-business print advertising. *Journal of Advertising Research*, 38,19-33.
- Nueno, P. and Osterveld, J. (1988). Management technological alliances. *Long Rang Planning*, 21(3), 11-17.
- Ohame, K. (1989). The global logic of strategic alliances. *Harvard Business Review*, 20, 143-154.
- Osborn, R. N. and Hagedoorn, J. (1997). The institutional and evolutionary dynamics of international alliance and networks. *Academy of Management Journal*, 40(2), 261-278.
- Pekar, P. (1993). How battle-tested managers access strategic alliances. *Planning Review*,17, 34-37.
- Pekar, P. and Allio, R. (1994). Making alliance work-guidelines for success. *Long Range planning*, 27(4), 54-65.
- Perlmutter, H. V. and Heenan, D. A. (1986). Cooperate to compete globally. *Harvard Business Review*, March, 136-152.
- Shan, W. and Visudtibhan, K. (1990). Cooperative strategic in commercializing an emerging technology.

- European Journal of Operational Research*, 47, 172-181.
- Yoshino, H. and Rangan, A. (1995). Strategic alliances: An entrepreneurial approach to globalization.
Sloan Management Review, 36, 103-122.

APPENDIX

“138 papers available upon request from 【Tsai-Lung Liu】 .”