

董事會結構與企業國際多角化：體制力量的調節效果

Board Structure and Firm International Diversification: The Moderating Effects of Institutional Forces

謝存瑞 / 靜宜大學國際企業學系副教授

Tsun-Jui Hsieh, Associate Professor, Department of International Business, Providence University

鍾憲瑞 / 國立中正大學企業管理學系教授

Hsien-Jui Chung, Professor, Department of Business Administration, National Chung Cheng University

黃佑安 / 國立暨南國際大學國際企業學系副教授

Yu-An Huang, Associate Professor, Department of International Business Studies, National Chi Nan University

Received 2011/2, Final revision received 2012/8

摘要

本研究探討董事會結構與企業國際多角化的關係，並且檢測董事會規模、國際董事、獨立董事與機構董事對於企業國際多角化的影響；除此之外，本文亦進一步探討體制力量對於董事會結構與企業國際多角化的調節效果。本研究以台灣上市企業為樣本，實證結果發現董事會規模、國際董事、獨立董事與機構董事會影響企業國際多角化，而且體制力量對於董事會結構與企業國際多角化的關係具有部份的調節效果；本文之研究發現對於目前公司治理、國際多角化以及董事會策略決策程序的相關文獻具有理論與實證上的貢獻。

【關鍵字】董事會結構、國際多角化、體制理論

Abstract

This paper investigates how board structure affects firm international diversification and examines the effects of board structure, including board size, international director, independent director, and institutional director on firm international diversification. This study further investigates the moderating effects of institutional forces on the relationships between board structure and firm international diversification. Using a sample of Taiwanese firms, the results show that board attributes are significantly associated with firm international diversification and that institutional forces partially moderate the relationships between board structure and firm international diversification. This study contributes to the growing literature in the field of strategic management by demonstrating the effect of institutional forces on the strategic board decision-making process.

【Keywords】board structure, international diversification, institutional theory

1. Introduction

Corporate governance has attracted considerable attention from both academics and practitioners and has become an important research topic across different disciplines including accounting, finance, sociology, organizational theory, and strategic management. Corporate governance research suggests that firm strategy is shaped at the top level of management and is influenced largely by board structure (Finkelstein & Hambrick, 1996; Kor, 2006). Although researchers have conducted considerable work in understanding the importance and influence of corporate governance in business society, attention given to how board structure affects firm international diversification strategy is scant. Numerous studies on corporate governance consist of qualitative research that outlines corporate governance development, such as comparative research on governance systems (Chambers, 2005; Liu, 2005), reports of corporate governance status (Diederich, 2011), legislative reforms (Michael, 2005; Ntim, Opong, & Danbolt, 2012), and family-owned firm governance (Brenes, Madrigal, & Requena, 2011). Certain quantitative research investigates the effects of corporate governance on performance (Bebenroth & Li, 2007; Guest, 2009; Kiel & Nicholson, 2003; McDonald, Westphal, & Graebner, 2008), board structure effects on IPO (Certo, 2003), and director/CEO compensation (Lin, 2005; Matsumura & Shin, 2005). This paper considers a firm's board structure as a unique driving force to influence firm strategy formation and thus systematically investigate the relationship between board structure and international diversification.

International diversification advances firm growth (Hitt, Hoskisson, & Kim, 1997), particularly for new emerging economies such as Taiwan, South Korea, Singapore, China, Brazil, and Mexico. Enterprises in these countries have aggressively expanded themselves into international markets to enhance their performance. For example, Acer and Samsung are two typical companies in Taiwan and South Korea, respectively, which have successfully internationalized and reap a large proportion of their profits from overseas markets. Firms can benefit from expanding their business to foreign markets by exploiting their current advantages in their home countries. Previous studies contend that international diversification contributes to firm value and a moderate degree of international diversification has proven to enhance firm performance (Hitt et al., 1997; Lu & Beamish, 2004). Although numerous scholars contend that international expansion enhances firm performance (Hitt et al., 1997; Lu & Beamish, 2004), this notion is fundamentally founded on long-term orientation. In the early diversification period, international expansion may suffer from unavoidable risks and costs that exceed gains from internationalization, and

thus, undermine short-term performance¹ (Lu & Beamish, 2004; Thomas, 2006). Consequently, different types of board members do not have consistent preferences on how long firm profit should be realized. For example, agency theory (Eisenhardt, 1989; Jensen & Meckling, 1976) suggests that inside directors may prefer short-term strategies because their performance is evaluated on a quarterly or yearly basis. Hence, the nature of international strategies arouses interest in exploring how board structure affects corporate international strategies.

Although international diversification has been recognized as an effective growth strategy, few scholars have engaged in empirical work to investigate the effects of board structure on a firm's decision to engage in international diversification. Sanders and Carpenter (1998) asserted that board structure and diversification are related, but the ambiguous causality between them remains because of the limitations of their cross-sectional data. Datta, Musteen, and Herrmann (2009) investigated how board characteristics and managerial incentives shape the foreign entry mode decision of a firm. Datta et al. (2009) explored the effect of board characteristics on the choice between foreign acquisitions and international joint ventures. However, their study focused on agency theory to interpret how board characteristics influence entry mode choice without accounting for institutional and mimetic perspectives, considered important triggering factors for firms intending to invest in foreign countries (Delios, Gaur, & Makino, 2008; Guillén, 2002; Yenyurt, Townsend, Cavusgil, & Ghauri, 2009). Hence, this paper shifts the scope of foreign expansion from entry modes to a broader dimension: international diversification, and contributes to the literature by exploring the effects of external institutional forces on the interactions of board structure and international diversification.

This paper is organized as follows: Section 2 introduces a review of the literature and the development of the hypotheses; Section 3 provides a discussion on the data and methodologies used; Section 4 presents a discussion of the research results; and lastly, the final section offers a conclusion.

2. Theory and Hypotheses

The board plays a critical role in the corporate decision-making process in public listed

¹ The authors thank one of the reviewers for the suggestion to gauge the effects of international diversification on firm value by using the dataset of this study. The results of our data are consistent to the prior studies, indicating an inverted-U shape between international diversification and firm value. Due to space limitations, statistical table was not reported.

firms, by reviewing and discussing strategic decisions, including firm international diversification (Barroso, Villegas, & Pérez-Calero, 2011). The literature has demonstrated that board structure influences corporate strategic change in various aspects (Finkelstein & Hambrick, 1996). For example, Westphal and Fredrickson (2001) suggested that corporate boards might initiate outside CEO succession to help them implement new strategies. Board members monitor management behaviors and decisions on behalf of common shareholders. Board volition could thus be imprinted on corporate strategic directions (Barroso et al., 2011).

Internationalization extends corporate business domains to international markets to reap greater benefits. However, as firms pursue benefits through internationalization, they must also bear risks arising from these expansions. For example, international expansion surrounds firms with a relatively complex environment and increases business uncertainties resulting from heterogeneous customer tastes, unfamiliar legal systems, and increasingly competitive conditions (Liesch, Welch, & Buckley, 2011). Such factors all serve to weaken a firm's intention to go global. Thus, it is necessary to obtain critical strategic resources for international expansions to offset the accompanying risks. Board members are boundary spanners who can tap into their social reputation and position to help firms access external resources (Hillman, Nicholson, & Shropshire, 2008; Mizruchi & Stearns, 1994). For instance, Mizruchi and Stearns (1994) found that, because firms are in need of financial resources, their board structures tend to include more members with access to capital and financial markets, facilitating firms to fulfill their financial needs by board members' professional advice or external networks. Because of huge resource consumption, an appropriate board structure becomes a helpful intermediary tied to external resources to facilitate corporate internationalization.

This study examines the variables of board size, international director, independent director, institutional director², and institutional forces that moderate the relationship between board structure and international diversification. The hypotheses are developed in the following sections.

² The authors thank one of the reviewers for the suggestion to introduce board characteristics in the beginning of this article. International directors are defined as board members who represent international investors on the board. Independent directors are non-management members on the board and meet the criterion of "independent director" set by the Taiwan Stock Exchange Corporation. Institutional directors are appointed to represent institutional investors on the board of invested firms.

2.1 Board Size

Board size is an important factor affecting firm performance and other strategic decisions (Elsayed, 2011; Goodstein, Gautam, & Boeker, 1994; Guest, 2009; Hartarska & Nadolnyak, 2012). Board size indicates the scale of the board that contributes to director efforts to maximize the firm value to all shareholders. Prior studies have suggested that board size has significant influence on firm decision-making, grounded on efficiency and information processing views (Goodstein et al., 1994; Schnake & Williams, 2008). From an efficiency viewpoint, larger board size may increase group conflict and coordination cost on the board and makes a decision-making consensus difficult (Schnake & Williams, 2008). However, from the information processing view, a function of directors is to advise top managers in strategic firm decision-making (Pugliese, Bezemer, Zattoni, Huse, Van den Bosch, & Volberda, 2009; Stevenson & Radin, 2009). Expanding the board size can acquire expertise and information from various director sources, facilitating organizations to initiate strategic changes in a turbulent environment (Goodstein et al., 1994).

International business literature suggests that firms adopting an international diversification strategy face a more complex environment (Liesch et al., 2011; Lu & Beamish, 2004). Conducting business in international markets encompasses various market differences and risks. Manager decision-making tasks is more difficult in cross-border operations, and firms thus have greater information processing needs (Henderson & Fredrickson, 1996; Hillman & Dalziel, 2003) to manage global opportunities and threats in international markets. Large board size provides diverse expert advice by taking advantage of numerous board members to fine-tune strategic decision making and consequently reduce risks arising from international expansion.

International expansion often requires a substantial quantity of resources to sustain success. The board elaborates the “co-optative” mechanism that connects firms with their external environment to acquire critical resources (de Villiers, Naiker, & van Staden, 2011; Klein, 1998; Pfeffer & Salancik, 1978). Large board size implies that the directors offer more opportunities linked to necessary external resources, such as capital funds, technologies, and other cooperative partnerships, supporting firms to engage in international expansion. The arguments suggest that large board size contributes to the degree of international diversification. Thus, we hypothesize the following:

Hypothesis 1: Board size is positively associated with firm international diversification.

2.2 International Director

Bartlett and Ghoshal (2003) suggested that a fundamental challenge MNCs face is their lack of managerial talent with international expertise because managers without international experience may not easily adjust to cross-border operations. This study suggests that successful internationalization requires international experience to develop a geocentric sense essential for international diversification strategy. International directors, defined as board members who represent international investors on the board, are capable of building comprehensive global schemata based on their cross-cultural experience (Fiske & Taylor, 1984), and are more likely to perceive business opportunities in overseas markets than those with less international experience. Their international background provides firms with first-hand awareness of a foreign investment environment (Tihanyi, Ellstrand, Daily, & Dalton, 2000), which in turn reinforces in their confidence to form international expansionary strategies through prior accumulated experience (Jonsson & Foss, 2011). From the network perspective, international investors typically conduct business in different countries; thus, the international director has stronger links to overseas markets. This international network connection helps firms reduce foreign liabilities and develop local contacts to facilitate future international ventures.

The upper echelons of an organization reflect the profile and direction of that organization (Hambrick, 2007; Hambrick & Mason, 1984). Based on the arguments of previous studies, the upper echelons influence management perception toward environmental challenges and opportunities. Directors with international experience are more likely to identify the potential opportunities in foreign markets. A higher representation of international directors can infuse the geocentric outlooks of directors into firm strategic considerations on the board, particularly in responding to an increasingly globalized market (Sambharya, 1996; Tuggle, Schnatterly, & Johnson, 2010). This study suggests that international directors play a crucial role in their global visions, and lead other directors on the board to awareness of promising foreign markets that would otherwise be invisible. Based on these arguments, this study presents the following hypothesis:

Hypothesis 2: The proportion of international directors on the board is positively associated with firm international diversification.

2.3 Independent Director

Inside directors are defined as directors who currently serve as firm officers, and outside directors are non-management members of the board (Peng, 2004). Prior studies of

outside directors focused mostly on the role of outside directors in bridging the relationships between firms and the external environment (Finkelstein & Hambrick, 1996). In addition to addressing their liaison role with the environment, this study emphasizes the fiduciary duties that outside directors exert when serving on the corporate board. Recent studies have used independent directors to replace outside directors to stress their independent duties on the board (Johanson & Østergren, 2010; Young, Tsai, & Hiseh, 2008).

The familiarity of inside directors with internal firm operations may assist the board in processing complex information on strategic decisions such as international expansion. Previous studies suggested that inside directors typically concentrate on daily routine operations and are not sensitive to the potential outside the organization or local markets. In an empirical study, Sanders and Carpenter (1998) found that inside directors are not significantly associated with the degree of firm internationalization. However, the study proposes that independent directors place greater emphasis on vigilance against agency problems between shareholders and management. Independent directors are appointed to maximize shareholder wealth and reduce the self-interest of inside managers. Managers may be too conservative to take risks in expanding their business to foreign markets because they tend to make short-term decisions (Schulze, Lubatkin, & Dino, 2003).

An international diversification strategy incurring higher risk and profit may be realized only after years in international markets (Lu & Beamish, 2004; Zahra, 2003). Rising business uncertainty causes managers to maintain their business domains and become more risk-averse to protect their short-term performance (Datta et al., 2009), resulting in less preference for a risk-taking strategy. However, because independent directors do not hold managerial positions, they are expected to review firm strategies more independently and monitor whether management actions are in line with corporate interests (Sanders & Carpenter, 1998; Schnake & Williams, 2008). Ellstrand, Tihanyi, and Johnson (2002) suggested that firms with vigilant boards tended to have higher tolerance to take risky international actions. Independent directors sustain the long-term oriented interests of shareholders. Therefore, independent directors can reduce self-interest agency costs and help monitor management adoption strategies that might harm short-term performance, but contribute to long-term development.

Hypothesis 3: The proportion of independent directors on the board is positively associated with firm international diversification.

2.4 Institutional Director

An institutional director is appointed to represent the institutional investors on the board of the invested firm. In contrast to individual investors, institutional investors own a substantial amount of corporate equity and have escalating influence on corporate decisions (Bruton, Filatotchev, Chahine, & Wright, 2010). Although institutional investors are highly involved in corporate equity, their basic principles or guidelines for investments may vary with their attitudes toward internationalization.

From the aspect of financial stability and safety, institutional investors may have conservative attitudes toward risky international expansions. For example, Tihanyi, Johnson, Hoskisson, and Hitt (2003) suggested that pension fund managers tend to avoid risky international strategies because many of their clients are conservative. Johnson and Greening (1999) stated that mutual fund managers concentrate on earning a high current return because they are rewarded quarterly according to how their funds perform against a certain index. Ramaswamy, Li, and Veliyath (2002) suggested that institutional investors, similar to those who invest in mutual funds and financial institutions, are often characterized as pure investors with clear profit and growth objectives. They often exercise their influence to prevent organizational management from engaging in wealth-destroying actions. Risky international expansion distracts investors from their fundamental objectives. They may either avoid internationalization risk or directly invest in firms that have already successfully internationalized. Hence, institutional investors might tend to avoid risky internationalization decisions to sustain stable returns.

Hypothesis 4a: The proportion of institutional directors on the board is negatively associated with firm international diversification.

From the aspect of strategic intent, international diversification may be a form of corporate global resource deployment. International multipoint operations achieve firm capability exploitation and building to enhance global market competitiveness (Luo, 2002). The purpose for institutional investment may not only be financial profit, but other strategic concerns (Chen, 2008; Kiessling & Richey, 2005). Institutional investors are not merely profit-driven, but may strategically invest in their buyers, suppliers, financial institutions, and other business partners to integrate their business networks (Kiessling & Richey, 2005; Peng, 2000). This suggests that the invested firm may be forced to adopt internationalization to become aligned with institutional investor strategy. For example, institutional investors may appoint directors to their supplier boards, and then press suppliers to invest in the country with which they have conducted business for securing material supplies. Thus, the

presence of institutional investors is expected to be positively related to firm international diversification.

Hypothesis 4b: The proportion of institutional directors on the board is positively associated with firm international diversification.

2.5 Institutional Forces

Institutional theory suggests that firms may strategically comply with institutional demands to increase their legitimacy (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Organizations may act in a manner that will not result in their being singled out by criticism (Meyer & Rowan, 1977). Substantial work has been conducted in understanding how institutional forces affect firm decisions. Tolbert and Zucker (1983) found that cities tend to adopt new civil service procedures substantially more widely and rapidly when increasingly more cities have adopted these procedures. Straw and Epstein (2000) asserted that firms adhering to industrial trends in a timely manner are regarded as engaging in a form of innovation, compared to those who maintain the status quo. Hensiz and Delios (2001) investigated the imitation of international plant location decisions by Japanese multinational enterprises (MNEs), and suggested that previous location decisions of other MNEs significantly influence the location choices of Japanese MNEs. Barreto and Baden-Fuller (2006) suggested that firms shape their behaviors by imitating their legitimacy-based reference groups in Portuguese banking industries. Drawing from the institutional research on firm mimetic behaviors, because numerous firms are internationalized, internationalization has become a legitimate trend, pressuring firms to follow this industrial trend to enhance their legitimacy.

Following this logic, the internationalization tendency of an increasing number of firms can be considered an institutional force, influencing firm strategic decision-making. For instance, for the past decade in Taiwan, firms investing in China have grown rapidly because investing in China has become an institutional trend and firms that have not invested in the country are thought to lack aggressive intentions to grow. Therefore, as board members perceive this trend toward international diversification, institutional pressure increases to urge firms to mimic this industrial trend (DiMaggio & Powell, 1983).

A larger board size indicates more extensive industrial information that board members can obtain. Hence, increasing board size can enhance the possibility to sense industrial trends. International directors represent the interests of international investors who are typically joint venture partners from Japan, Europe, and North America. Foreign partners are

experienced in global investment decisions and are more likely to perceive industrial trends in international expansion. Inside directors serving as firm officers may concentrate on internal management, which may cause them to overemphasize internal operations and pay little attention to outside environmental changes. Independent directors do not involve themselves in daily firm operations, enabling them to interface with information outside the firm and be more sensitive to institutional trends. This study proposes contrasting hypotheses to examine the effect of institutional directors on firm internationalization and the expected direction of the moderating effects on the relationship between institutional director and firm international diversification. Thus, the following hypothesis is proposed:

Hypothesis 5: Institutional forces moderate the relationship between firm international diversification and (a) board size; (b) international director; (c) independent director; and (d) institutional director.

3. Methods

3.1 Data and Sample

To test the hypotheses, this study collected data from 2002 to 2010 for listed companies in the Taiwan Stock Exchange. Since the late 1990s, industries have been undergoing business environmental change in Taiwan, such as legal deregulation, technological change, and escalating competitive pressures, which may provide firms managerial discretion to decide whether to go global. Thus, the period under observation is suitable for research purposes in view of international expansion. The firms in our sample were drawn from the annual reports of listed companies and the database maintained by the Taiwan Economic Journal (TEJ). TEJ is the most prestigious database in academic research in Taiwan and is subscribed to widely by many international research agents such as Datastream and Reuters. The board characteristic data were drawn from the “Corporate Governance” and “TEJ Company DB” modules in TEJ, including board size, independent director, international director, and institutional director. Firms that did not report complete board characteristics or international operations were excluded, finally obtaining 6,656 observations.

3.2 Measures

3.2.1 Dependent Variable

International diversification: Prior studies have recommended various measures to gauge international diversification. Numerous researchers have divided foreign sales by total sales (FSTS) to represent the degree of international diversification (Tallman & Li, 1996;

Tihanyi et al., 2000). Other studies have measured international diversification based on country scope, that is, the number of foreign countries in which firms have subsidiary operations (Tallman & Li, 1996; Tihanyi et al., 2000). Although numerous uni-dimensional approaches have been used to gauge international diversification, recent studies suggest that using composite measures could improve their validity (Sullivan, 1994). To cover more dimensions, this study measured international diversification by using the entropy approach (Hitt et al., 1997). This measure was found to be more valid than other firm diversification measures (Hoskisson, Hitt, Johnson, & Moesel, 1993) because it simultaneously considers sales distribution and segments (countries) to gauge the degree of diversification. The entropy measure of international diversification is

$$\text{Entropy} = \sum_{i=1}^n P_i \ln(1/P_i)$$

where P_i is the sales of the i th country divided by the firm's total sales, and n is the number of countries where the firm has invested.

3.2.2 Independent Variables

1. *Board size*: Board size is measured by the number of board members in firm i in year t .
2. *International director*: International director is measured based on the proportion of board members who are appointed by international investors in firm i in year t .
3. *Institutional director*: Institutional director is measured based on the proportion of board members who represent the institutional investors in firm i in year t .
4. *Independent director*: Independent director is defined as board members who meet the criteria of "independent director" set by the Taiwan Stock Exchange Corporation. Such criteria are officially designed to strictly exclude the effects of gray and affiliated directors and guarantee that independent directors can be fully independent to exert their fiduciary duties to protect the wealth of common shareholders. This variable was measured by the proportion of independent directors in firm i in year t .
5. *Institutional forces*: Institutional forces are gauged based on international diversification from the industrial level. According to the Peng (2004) study, institutional forces may have time lag effects. Thus, we sum up the internationalizing scores of each firm in an industry in year $t-1$ and then calculate the industrial average scores to proxy for the industrial trend of international diversification. For example, the average number of industrial internationalizing scores in year $t-1$ is used to represent the institutional forces

in year t .

3.2.3 Control Variables

To highlight the relationships between dependent and independent variables, it is necessary to control for several potential confounding variables.

Firm age, measured by the number of years the firm has been in operation, influences firm intentions to initiate strategic changes. Older firms are more likely to be burdened with bureaucracy and inertia, which may have a negative effect on firm international diversification. However, the opposite viewpoint suggests that old firms may face matured and saturated markets and downside prospects for further growth. The vanishing high-value niches may pressure firms into taking action to expand into foreign markets.

Firm performance has long been regarded as an important factor to shape corporate strategy. Firms with poor performance may seek new strategies to improve the current condition of their profit base. For example, firms may change their strategies to enter international markets in pursuit of an operational breakthrough. However, international expansion involves substantial resources. Poor firm performance may result in a lack of resources to sustain the need for internationalization. Thus, prior performance is included as a control variable and measured by a firm's net income before tax divided by total assets (Return on Assets ; ROA) (Bobillo, López-Iturriaga, & Tejerina-Gait, 2010; Hitt et al., 1997; Kiel & Nicholson, 2003; Lu & Beamish, 2004).

Firm leverage reflects the situation in which companies finance capital from debt. The extant literature frequently uses firm leverage as a control variable in corporate internationalization topics (Tihanyi et al., 2003). International diversification consumes large amounts of resource inputs. Such international expansionary projects typically need financial support from capital market or financial institutions. Higher debt ratio may increase the likelihood of bankruptcy or financial distress (Chang & Hong, 2000), and undermine corporate credibility to obtain the financial capital necessary for internationalizing activities. Thus, firm leverage is negatively related to international diversification and included as a control variable defined as the ratio of total debt to total sales.

Firm size, measured by the natural logarithm of firm total sales, may influence a firm's ability to initiate international expansion (Tallman & Li, 1996; Tihanyi et al., 2003). Larger firms possess greater physical and managerial resources to facilitate their international expansion. To account for potential influences, firm size is included as a control variable in this analysis.

Corporate competitiveness can be an important driving force triggering firms to expand

internationally. To cover the effects of corporate competitiveness, advertising intensity and R&D intensity are added as control variables in the analysis. Advertising intensity is measured by annual advertising expenditures, which represents corporate brand names and goodwill, whereas R&D intensity is measured by annual R&D expenditures, representing corporate innovative capability.

Firm growth is measured by the annual growth rate of total sales. Institutional ownership is measured by the ratio of institutional shareholdings to outstanding company shares. CEO ownership is measured by the ratio of CEO shareholdings to outstanding company shares. Director's stock pledge ratio is the ratio of pledged director shareholdings to total director shareholdings. Director's compensation is measured by the annual compensation company directors receive.

Because observations may vary by year, the regressions incorporate year dummy variables, setting 2002 as the base year. Finally, firms in different industries may face diverse market conditions to engage in international diversification. Hence, industry membership was included as a control dummy variable, setting electronics as the base industry.

4. Analyses and Results

To verify the amount to which independent variables explain additional variance after introducing the controls, the hypotheses were tested using hierarchical regression analysis, in which the control variables were entered in step 1, the independent variables in step 2, and the interaction terms in step 3. The changes in the amount of variance explained among the models are significant.

The variable correlations are reported in Table 1. To examine the multicollinearity between variables, the procedures proposed by Neter, Wasserman, and Kutner (1985) were used to calculate the VIF (Variance Inflation Factor) values. The results suggest no multicollinearity problem for all VIF values less than 10. Table 2 presents other descriptive statistics, including the mean, standard deviation, median, minimum, and maximum values.

Table 1 Correlation Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. International diversification	1															
2. Board size	0.13***	1														
3. International director	0.09***	0.01	1													
4. Independent director	0.23***	-0.17***	-0.03***	1												
5. Institutional director	-0.15***	0.15***	0.14***	-0.32***	1											
6. Firm age	-0.04***	0.21***	0.03**	-0.36***	0.2***	1										
7. Firm size	0.2***	0.28***	0.26***	-0.12***	0.12***	0.14***	1									
8. Firm performance	0.1***	0.04***	0.11***	0.09***	-0.08***	-0.03**	0.27***	1								
9. Firm leverage	-0.07***	0.00	0.02*	0.04***	0.00	-0.04***	-0.23***	0.08***	1							
10. Firm growth	-0.03***	-0.02	-0.01	0.01	0.02	-0.01	-0.01	0.03**	-0.01	1						
11. Advertising intensity	-0.03**	0.01	0.01	-0.02	0.03***	0.02	-0.13***	-0.04***	0.03***	-0.01	1					
12. R&D intensity	0.00	-0.02	0.01	0.06***	-0.03**	-0.11***	-0.17***	-0.1***	0.16***	-0.01	0.08***	1				
13. Institutional ownership	-0.07***	0.21***	0.36***	-0.04***	0.52***	-0.02	0.34***	0.22***	0.02**	0.01	0.00	-0.02*	1			
14. CEO ownership	0.07***	-0.12***	-0.09***	0.16***	-0.02	-0.07***	-0.08***	0.03***	-0.03***	0.06***	0.05***	0.00	-0.06***	1		
15. Director compensation	0.06***	0.23***	0.22***	-0.06***	0.08***	0.08***	0.41***	0.23***	0.008	0.00	-0.02*	-0.02**	0.26***	-0.05***	1	
16. Director stock pledge	0.03**	0.01	-0.00	-0.21***	0.20***	0.18***	0.15***	-0.08***	-0.09***	-0.01	0.02*	-0.04***	0.04***	-0.03***	0.04***	1

N=6,656

Significance level: *p < 0.1 **p < 0.05 ***p < 0.01

Variable definitions:

1. International diversification is measured by the value of entropy.
2. Board size is measured by the number of board members.
3. International director is measured based on the proportion of board members who are appointed by international investors.
4. Independent director is measured by the proportion of independent directors.

5. Institutional director is measured based on the proportion of board members who represent the institutional investors.
6. Firm age is measured by the number of years the firm has been in operation.
7. Firm size is measured by the natural logarithm of firm total sales.
8. Firm performance is measured by a firm's return on assets (net income before tax / total assets).
9. Firm leverage is measured by the ratio of total debt to total sales.
10. Firm growth is measured by the annual growth rate of total sales.
11. Advertising intensity is measured by the annual advertising expenditures.
12. R&D intensity is measured by the annual R&D expenditures.
13. Institutional ownership is measured by the ratio of institutional shareholdings to outstanding company shares.
14. CEO ownership is measured by the ratio of CEO shareholdings to outstanding company shares.
15. Director compensation is measured by the annual compensation company directors receive.
16. Director stock pledge is measured by the ratio of pledged director shareholdings to total director shareholdings.

Table 2 Descriptive Statistics

Variable	Mean	Std. Dev.	Median	Min	Max
International diversification	0.64	0.43	0.69	0.00	2.22
Board size	6.89	2.24	7.00	2.00	27.00
International director	0.12	0.23	0.00	0.00	2.17
Independent director	0.14	0.16	0.00	0.00	0.67
Institutional director	0.32	0.30	0.25	0.00	1.00
Firm age	24.60	11.76	23.00	2.00	64.00
Firm size	9.40	0.65	9.35	5.71	12.36
Firm performance	4.26	10.34	4.66	-100.72	85.76
Firm leverage	3.51	3.06	2.68	0.78	78.78
Firm growth	17.12	122.25	4.68	-99.75	5714.12
Advertising intensity	0.01	0.03	0.00	0.00	1.28
R&D intensity	0.04	0.21	0.01	0.00	11.26
Institutional ownership	33.44	21.52	29.23	0.00	98.41
CEO ownership	1.11	2.13	0.33	0.00	23.14
Director compensation *	6.80	21.35	1.14	0.00	576.00
Director stock pledge	9.47	18.28	0.00	0.00	100.00

N=6,656

* In millions (Taiwan dollars)

** Variable definitions are showed in Table 1.

Table 3 shows the results of hierarchical regression analyses that estimate the effects of board structure on international diversification. Step 1 includes all control variables. The results show that firm age negatively influences diversification, suggesting that younger firms are more likely to internationalize themselves. Firm size is positively associated with firm international diversification. This finding is consistent with that of previous research (Tallman & Li, 1996), indicating that large firms possess more resources and capabilities to initiate international expansionary activities. Advertising and R&D intensities are positively related to diversification, indicating that firm competitiveness is able to trigger firm internationalization. Compared to the other three industries, the electronics industry involves a higher degree of internationalization. A possible explanation may be the Taiwan electronics

industry has played an important role in the global market in the past decade, which pushed it to deploy its business internationally to fit the needs of global customers. CEO ownership and director compensation also have a significant positive association with firm international diversification, indicating that goal alignment and incentives for CEO and directors may increase the degree of firm international diversification. For year effects, Taiwan companies have escalating commitments on international diversification over time compared to the 2002 base year.

Step 2 adds the independent variables. Hypothesis 1 predicts that board size is positively related to international diversification. Table 3 shows that the board size coefficient is positive and significant, indicating that a large board size contributes to firm international diversification. Hence, Hypothesis 1 is supported. Hypothesis 2 predicts a direct effect of international director on firm international diversification. The international director coefficient is positive and significant, indicating that a higher proportion of international directors on the board will enhance firm international diversification, which supports Hypothesis 2. Hypothesis 3 states that independent director representation is positively associated with international diversification. The independent director coefficient is also statistically significant. Thus, Hypothesis 3 is supported.

A pair of competing hypotheses, Hypotheses 4a and 4b, predicts that the institutional director would negatively or otherwise positively influence firm international diversification. As shown in Table 3, the institutional director coefficient is negative but not significant in step 2, whereas it is negative and significant in step 3. The results partially support the expectation that the conservative orientation of institutional investors in Taiwan may adversely affect firm international diversification. Hence, Hypothesis 4a is supported. Step 3 presents the full model and the results of the independent variables are highly consistent with the results shown in step 2. Hypothesis 5 states that institutional forces moderate the relationship between board characteristics (including board size, international director, independent director, and institutional director) and firm international diversification. The interaction coefficients for board size and international director are positive and significant, but the coefficients for independent director and institutional directors are non-significant, indicating that institutional forces largely strengthen the effects of board size and international director on international diversification. Hypothesis 5 is thus partially supported.

Table 3 Results of the Hierarchical Regression Analysis

Dependent Variable: International Diversification	Expected Sign	Step 1	Step 2	Step 3
Intercept		-0.58 (0.00)***	-0.60 (0.00)***	-0.04 (0.16)
Board size	+		0.04 (0.00)***	0.01 (0.00)***
International director	+		0.19 (0.00)***	0.06 (0.00)***
Independent director	+		0.45 (0.00)***	0.14 (0.00)***
Institutional director	+/-		-0.02 (0.14)	-0.05 (0.00)***
Board size × institutional force	+			0.00 (0.04)**
International director × institutional force	+			0.03 (0.08)*
Independent director × institutional force	+			-0.05 (0.18)
Institutional director × institutional force	+/-			-0.05 (0.00)***
Institutional force				0.84 (0.00)***
Firm age		0.00 (0.00)***	0.01 (0.00)***	0.00 (0.30)
Firm size		0.14 (0.00)***	0.11 (0.00)***	0.01 (0.00)***
Firm performance		0.00 (0.00)***	0.00 (0.00)***	0.00 (0.00)***
Firm leverage		-0.01 (0.00)***	-0.01 (0.00)***	-0.00 (0.03)**
Firm growth		-0.00 (0.05)**	0.00 (0.05)**	0.00 (0.10)*
Advertising intensity		0.45 (0.01)***	0.36 (0.03)**	0.07 (0.22)
R&D intensity		0.06 (0.01)***	0.04 (0.03)**	0.00 (0.50)
Institutional ownership		-0.00 (0.00)***	-0.00 (0.00)***	-0.00 (0.00)***
CEO ownership		0.01 (0.00)***	0.01 (0.00)***	0.00 (0.00)***

Director compensation	0.00 (0.03)**	-0.00 (0.00)***	0.00 (0.00)***
Director stock pledge	0.00 (0.00)***	0.01 (0.00)***	0.00 (0.00)***
Industry dummy	YES	YES	YES
Year dummy	YES	YES	YES
Model R ²	0.50	0.55	0.92
Adjusted R ²	0.25	0.30	0.84
Model F	59.01	69.64	78.89
ΔR^2	0.25	0.05	0.54
F for ΔR^2	59.01	69.64	758.89

N=6,656 Significance level: *p < 0.1 **p < 0.05 ***p < 0.01

* Variable definitions are showed in Table 1.

5. Sensitivity Analysis

This section tests the sensitivity of the results to various alternative specifications: (1) considering endogeneity problems in the regressions; (2) averaging individual firm observations, and (3) including several types of institutional investors. The results of these sensitivity tests are reported in Table 4, and are largely consistent with the reported results in the previous sections.

5.1 Endogeneity Issue

The variables of board structure are assumed to be exogenous. However, the variables are likely endogenous; for instance, a higher degree of international diversification may lead to a large corporate board size or a higher proportion of international directors. Thus, these potential endogenous problems must be addressed.

Two-stage least squares (2SLS) were used to re-test the hypotheses (for a similar method in corporate governance context, see Agrawal and Knoeber (1996) and Bartholomeusz and Tanewski (2006)). The first step used board structure as the dependent variable to identify the instrument variables further. The second step used international diversification as the dependent variable, and the predictors of board structure obtained from the first step as the independent variables of the structural model. The selected instrument variables are introduced in the appendix.

After controlling for potential unobserved endogeneity, Model 1 in Table 4 shows the examination results using 2SLS. The findings are highly consistent with that obtained using hierarchical regressions. The coefficients of board size and international director are positive

and significant. Institutional director remains negative but significant, whereas independent director becomes insignificant. Accounting for endogeneity, the empirical results largely support our arguments and improve the robustness of this research.

5.2 Averaging Individual Firm Observations

The data analysis consists of cross-sectional and time-serial observations because the sample timeframe ranges from 2002 to 2010. Such data characteristics may generate spurious results because during the research period, a company appeared for a maximum of nine years, and the data obtained in these years are probably homogeneous. For example, board structure is a relatively stable variable and data in each year are highly similar.

To mitigate this issue, all available observations for a given firm were averaged and used in the regressions (Greene, 2008). Model 2 in Table 4 shows that the new results are similar to that in Table 3. The results indicate that support for the hypotheses is not attributed to the frequent appearance of certain sample companies.

5.3 Types of Institutional Investors

This paper further investigates how different types of institutional investors influence a firm's decision to diversify. This study identified several types of institutional directors and found that the influence of institutional investors on international diversification vary with types of institutions. The types of directors are categorized based on the prestigious databank of the TEJ. Category I consists of family and non-family institutional directors. Category II contains three types of directors, including listed, non-listed, and foundation institutions. The proportion of each type of director on the board was counted, and the regressions were re-run to examine whether institutional investors are all conservative toward international diversification.

The empirical results are shown in Models 3 and 4 in Table 4. Model 3 shows that family directors are negative in relation to international diversification at a significant level, whereas non-family directors are positive but not significant. The results indicate that family institutional directors have conservative attitudes toward foreign expansions. Model 4 shows that listed directors are positively associated with international diversification at a significant level. Non-listed directors are positive and non-significant, whereas foundation directors are negative and significant. The results of international diversification indicate that listed institutional investors are the most aggressive and foundation institutional investors are the most conservative in international expansion.

Table 4 Results of Sensitivity Analysis

Dependent Variable: International Diversification	Expected Sign	2SLS	OLS (AOEF) ^a		
			OLS (INS_DIR)		
			Category I	Category II	
		Model 1	Model 2	Model 3	Model 4
Intercept		0.58 (0.00)***	-0.09 (0.06)*	-0.46 (0.31)	-0.05 (0.29)
Board size	+	0.03 (0.02)**	0.01 (0.02)**	0.01 (0.00)***	0.01 (0.00)***
International director	+	0.93 (0.04)**	0.04 (0.04)**	0.07 (0.00)***	0.07 (0.00)***
Independent director	+	0.26 (0.50)	0.12 (0.00)***	0.10 (0.00)***	0.11 (0.00)***
Institutional director (INS_DIR)	+/-	-0.19 (0.06)*	-0.05 (0.01)***		
Board size × institutional force	+	0.03 (0.03)**	0.00 (0.10)*		
International director × institutional force	+	0.37 (0.10)*	0.06 (0.04)**		
Independent director × institutional force	+	-0.25 (0.42)	-0.03 (0.25)		
Institutional director × institutional force	+/-	-0.24 (0.06)*	-0.06 (0.00)***		
Family INS_DIR				-0.003 (0.08)*	
Non-family INS_DIR				0.04 (0.82)	
Listed INS_DIR					0.09 (0.00)***
Non-listed INS_DIR					0.02 (0.11)
Foundation INS_DIR					-0.11 (0.00)***
Adjusted-R ²		0.83	0.94	0.84	0.84

N=6,656

Significance level: *p < 0.1 **p < 0.05 ***p < 0.01

^a Average observation for each firm

* Variable definitions are showed in Table 1.

6. Discussion

This paper is one of the first attempts to systematically study the effects of board structure on international diversification in emerging market firms. This work decomposes board structure into several constituents and investigates how each constituent affects corporate international diversification. The research findings suggest that board attributes on Taiwan firms significantly affect their international diversification. Another important finding is that institutional forces partially moderate the relationship between board structure and international diversification.

This study argues that board structure influences corporate international diversification. The empirical results are generally consistent with our predictions. Board demographic variables, including board size, international director, and independent director, have a positive association with diversification, whereas institutional director has a negative effect. In light of agency theory (Jensen & Meckling, 1976) and resource dependence theory (Pfeffer & Salancik, 1978), this study systematically examines how the constituents of board structure influence corporate decision on diversification. Our findings echo the propositions of numerous previous studies (Finkelstein & Hambrick, 1996; Sanders & Carpenter, 1998; Westphal & Fredrickson, 2001), and confirm that board structure can shape decisions concerning diversification in emerging markets. Charan (1998) suggested that the board is a potential source of creative thinking on future growth. The findings of this study indicate that board composition can help firms identify and evaluate opportunities in international markets.

Institutional forces can reinforce the relationships among board size, international director, and firm international diversification. However, the independent director does not receive the same moderating effects. The possible explanation could be because the requirements of the independent director are so strict that many independent directors in Taiwan firms can only be found in the academic community. Academic professionals spend considerable time in teaching and research on campus, and may not closely scan and keep up with industrial trends as do practitioners.

The results of sensitivity analysis show that not all types of institutional investors have the same preferences for international diversification. Taiwan family institutional investors have relatively low intentions to adopt internationalization, compared with their non-family counterparts. This may be because first-generation Taiwan family business founders achieved success by suffering hardship (Biggart & Hamilton, 1990), making them more conservative toward diversification to maintain their current status quo. First-generation

founders in Taiwan may also lack international foresight because most are locally educated (Chung & Luo, 2005). Such local-educated backgrounds narrow the alternatives of their strategic decisions and constrain them from deploying global business domains. Compared with non-listed and foundation counterparts, listed institutional investors are more likely to diversify internationally. They are typically large firms that enhance their operational efficiency by integrating their multiple businesses across borders. Hence, they may have strategic needs to push the firms in which they invest to internationalize to align with their global deployment.

This paper also extends the study by Sanders and Carpenter (1998) to consider the causal effect of the board structure-internationalization relationship, using 2SLS to substantiate their relationship. In contrast to views of some corporate governance observers who propose that corporate boards are a rubber stamp (Stiles & Taylor, 2001), our results confirm the existence of an opposite causal chain (compared with the study by Sanders and Carpenter (1998)), and board structure can influence firm strategy formation and actually help firms internationalize.

7. Conclusion

This paper empirically investigates the effect of board structure on firm international diversification and how institutional forces moderate this relationship. In light of extant theories, this paper draws on the rich insights of agency theory, resource dependence theory, and institutional theory to probe into the relationship between board structure and firm internationalization. The findings of this study show that board structure has a significant influence on firm internationalization. The results specifically show that institutional forces significantly moderate the relationships among firm internationalization, board size, and international director. The findings fill the research gap of the study by Sanders and Carpenter (1998) and support the opposite causal relationship. This study also contributes to the extant literature by linking corporate governance research with strategic management and organizational theory. This study also leaves research issues to explore. Because of the data limitation in this study, we suggest that future researchers extend this issue further by classifying firm motivations to engage in international expansion with their voluntariness.

Appendix: Instrument Variables

The instrument variables for two-stage least squares are selected and described as follows:

- (1) Directors' Compensation: Board remuneration has been regarded as an important factor associated with board structure (Ng, 2005). This variable is measured by the amount of board remuneration disclosed in each company's annual report.
- (2) State Ownership: State ownership can affect board composition (Beiner, Drobetz, Schmid, & Zimmermann, 2004), particularly for that in transition economies such as Taiwan. We use dummies to measure this variable. If the state holds more than 5% of shareholdings, the variable is coded as 1; otherwise, 0.
- (3) Volatility: Demsetz and Lehn (1985) argued that higher volatility of the business environment would induce a company to concentrate their ownership on affecting the board structure and control the company. Thus, we define volatility by the standard deviation of a company's return on assets (ROA) for the previous five years.
- (4) Market value: Higher market value of a company can attract more international investors and institutional investors. Tobin's Q incorporates current operations, potential growth opportunities, and future operating performance. We use Tobin's Q as a proxy of firm market value. Tobin's Q is estimated as the market value of the assets divided by book value of the assets (Yeh, 2005).
- (5) CEO duality: The CEO also acting as a board chairperson can reduce internal coordination costs and facilitate corporate strategy formulation. However, CEO duality also causes role conflicts between board and management (Beiner et al., 2004). Hence, CEO duality may further affect board composition. For example, Shivdasani and Yermack (1999) argued that CEO duality concentrates corporate power and causes the company to avoid appointing outside directors (Beiner et al., 2004). Hence, dummies to measure CEO duality are set as 1; otherwise, 0.

References

- Agrawal, A., & Knoeber, C. R. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31 (3): 377-397.
- Barreto, I., & Baden-Fuller, C. 2006. To conform or to perform? Mimetic behavior, legitimacy-based groups and performance consequences. *Journal of Management Studies*, 43 (7): 1559-1581.
- Barroso, C., Villegas, M., & Pérez-Calero, L. 2011. Board influence on a firm's internationalization. *Corporate Governance: An International Review*, 19 (4): 351-367.
- Bartholomeusz, S., & Tanewski, G. A. 2006. The relationship between family firms and corporate governance. *Journal of Small Business Management*, 44 (2): 245-267.
- Bartlett, C. A., & Ghoshal, S. 2003. What is a global manager? *Harvard Business Review*, 81 (8): 101-108.
- Bebenroth, R., & Li, D. 2007. Performance impact at the board level: Corporate governance in Japan. *Asian Business & Management*, 6: 303-326.
- Beiner, S., Drobotz, W., Schmid, F., & Zimmermann, H. 2004. Is board size an independent corporate governance mechanism? *KYKLOS*, 57 (3): 327-356.
- Biggart, N. W., & Hamilton, G. G. 1990. *Explaining Asian business success Theory no. 4. the economic organization of east Asian capitalism*. Newbury Park, CA: Sage.
- Bobillo, A., López-Iturriaga, F., & Tejerina-Gait, F. 2010. Firm performance and international diversification: The internal and external competitive advantages. *International Business Review*, 19 (6): 607-618.
- Brenes, E., Madrigal, K., & Requena, B. 2011. Corporate governance and family business performance. *Journal of Business Research*, 64 (3): 280-285.
- Bruton, G., Filatotchev, I., Chahine, S., & Wright, M. 2010. Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. *Strategic Management Journal*, 31 (5): 491-509.
- Certo, S. T. 2003. Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Journal*, 28 (3): 432-446.
- Chambers, A. D. 2005. Audit committees: Practice, rules and enforcement in the UK and China. *Corporate Governance: An International Review*, 13 (1): 92-100.
- Chang, S. J., & Hong, J. 2000. Economic performance of group-affiliated companies in

- Korea: Intragroup-resource sharing and internal business transactions. *Academy of Management Journal*, 43 (3): 429-448.
- Charan, H. 1998. *Boards at work: How corporate boards create competitive advantage*. San Francisco, CA: Wiley.
- Chen, S. F. 2008. The motives for international acquisitions: Capability procurements, strategic considerations, and the role of ownership structures. *Journal of International Business Studies*, 39 (3): 454-471.
- Chung, C. N., & Luo, X. 2005. *Institutional change and human agency: The erosion of familism in the leadership of Taiwanese business groups*. Paper presented at Academy of International Business Conference, Québec City, Canada.
- Datta, D. K., Musteen, M., & Herrmann, P. 2009. Board characteristics, managerial incentives, and the choice between foreign acquisitions and international joint ventures. *Journal of Management*, 35 (4): 928-953.
- de Villiers, C., Naiker, V., & van Staden, C. J. 2011. The effect of board characteristics on firm environmental performance. *Journal of Management*, 37 (6): 1636-1663.
- Delios, A., Gaur, A. S., & Makino, S. 2008. The timing of international expansion: Information, rivalry and imitation among Japanese firms, 1980-2002. *Journal of Management Studies*, 45 (1): 169-195.
- Demsetz, H., & Lehn, K. 1985. The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93 (6): 1155-1177.
- Diederich, M. 2011. Corporate governance in Germany. *Economic Studies & Analyses*, 5 (2): 148-165.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48 (2): 147-160.
- Eisenhardt, K. M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, 14 (1): 57-74.
- Ellstrand, A. E., Tihanyi, L., & Johnson, J. L. 2002. Board structure and international political risk. *Academy of Management Journal*, 45 (4): 769-777.
- Elsayed, K. 2011. Board size and corporate performance: The missing role of board leadership structure. *Journal of Management & Governance*, 15 (3): 415-446.
- Finkelstein, S., & Hambrick, D. 1996. *Strategic leadership: Top executives and their effects on organizations*. St Paul, MN: West.
- Fiske, S. T., & Taylor, S. E. 1984. *Social cognition*. Reading, MA: Addison-Wesley.

- Goodstein, J., Gautam, K., & Boeker, W. 1994. The effects of board size and diversity on strategic change. *Strategic Management Journal*, 15 (3): 241-250.
- Greene, W. H. 2008. *Econometric analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Guest, P. M. 2009. The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, 15 (4): 385-404.
- Guillén, M. F. 2002. Structural inertia, imitation, and foreign expansion: South Korean firms and business groups in China. *Academy of Management Journal*, 48 (3): 509-525.
- Hambrick, D. C. 2007. Upper echelons theory: An update. *Academy of Management Review*, 32 (2): 334-343.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9 (2): 193-206.
- Hartarska, V., & Nadolnyak, D. 2012. Board size and diversity as governance mechanisms in community development loan funds in the USA. *Applied Economics*, 44 (33): 4313-4329.
- Henderson, A., & Fredrickson, J. 1996. Information-processing demands as a determinant of CEO compensation. *Academy of Management Journal*, 39 (3): 575-606.
- Hensiz, W. J., & Delios, A. 2001. Uncertainty, imitation, and plant location: Japanese multinational corporations. *Administrative Science Quarterly*, 46 (3): 443-475.
- Hillman, A. J., & Dalziel, T. 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28 (3): 383-396.
- Hillman, A. J., Nicholson, G., & Shropshire, C. 2008. Directors' multiple identities, identification, and board monitoring and resource provision. *Management Science*, 19 (3): 441-456.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40 (4): 767-798.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Moesel, D. D. 1993. Construct validity of an objective (entropy) categorical measure of diversification strategy. *Strategic Management Journal*, 14 (3): 215-235.
- Jensen, M., & Meckling, W. 1976. Theory of the firm: Managerial behavior, agency cost, and ownership structure. *Journal of Financial Economics*, 3 (4): 305-360.
- Johnson, R. A., & Greening, D. W. 1999. The effects of corporate governance and

- institutional ownership types on corporate social performance. *Academy of Management Journal*, 42 (5): 564-576.
- Johanson, D., & Østergren, K. 2010. The movement toward independent directors on boards: A comparative analysis of Sweden and the UK. *Corporate Governance: An International Review*, 18 (6): 527-539.
- Jonsson, A., & Foss, N. 2011. International expansion through flexible replication: Learning from the internationalization experience of IKEA. *Journal of International Business Studies*, 42 (9): 1079-1102.
- Kiel, G. C., & Nicholson, G. J. 2003. Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11 (3): 151-160.
- Kiessling, T. S., & Richey, R. G. 2005. International acquisitions from a network perspective and market based competencies. *Journal of Business Strategies*, 22 (1): 1-20.
- Klein, A. 1998. Firm performance and board committee structure. *Journal of Law and Economics*, 41 (1): 275-303.
- Kor, Y. 2006. Direct and interaction effects of top management team and board composition on R&D investment strategy. *Strategic Management Journal*, 27 (11): 1081-1099.
- Liesch, P., Welch, L., & Buckley, P. 2011. Risk and uncertainty in internationalization and international entrepreneurship studies. *Management International Review*, 51 (6): 851-873.
- Lin, Y. F. 2005. Corporate governance, leadership structure and CEO compensation: Evidence from Taiwan. *Corporate Governance: An International Review*, 13 (6): 824-835.
- Liu, G. S. 2005. Comparative corporate governance: The experience between China and the UK. *Corporate Governance: An International Review*, 13 (1): 1-4.
- Lu, J. W., & Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47 (4): 598-609.
- Luo, Y. 2002. Capability exploitation and building in a foreign market: Implications for multinational enterprises. *Organizational Science*, 13 (1): 48-63.
- Matsumura, E. M., & Shin, J. Y. 2005. Corporate governance reform and CEO compensation: Intended and unintended consequences. *Journal of Business Ethics*, 62 (2): 101-113.
- McDonald, M. L., Westphal, J. D., & Graebner, M. E. 2008. What do they know? The effects of outside director acquisition experience on firm acquisition performance.

- Strategic Management Journal*, 29 (11): 1155-1177.
- Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2): 340-363.
- Michael, N. 2005. Corporate governance and company law reform: A German perspective. *Corporate Governance: An International Review*, 13 (3): 368-376.
- Mizruchi, M., & Stearns, L. 1994. A longitudinal study of borrowing by large American corporations. *Administrative Science Quarterly*, 39 (1): 118-140.
- Neter, J., Wasserman, W., & Kutner, M. 1985. *Applied linear statistical models* (2nd ed.). Homewood, IL: Irwin.
- Ng, C. Y. M. 2005. An empirical study on the relationship between ownership and performance in a family-based corporate environment. *Journal of Accounting, Auditing and Finance*, 20 (2): 121-146.
- Ntim, C., Opong, K. K., & Danbolt, J. 2012. The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa. *Corporate Governance: An International Review*, 20 (1): 84-105.
- Peng, M. W. 2000. *Business strategies in transition economies*. Thousand Oaks, CA: Sage.
- _____. 2004. Outside directors and firm performance during institutional transitions. *Strategic Management Journal*, 25 (5): 453-471.
- Pfeffer, J., & Salancik, G. 1978. *The external control of organizations: A resource dependence perspective*. New York, NY: Harper and Row.
- Pugliese, A., Bezemer, P. J., Zattoni, A., Huse, M., Van den Bosch, F. A. J., & Volberda, H. W. 2009. Boards of directors' contribution to strategy: A literature review and research agenda. *Corporate Governance: An International Review*, 17 (3): 292-306.
- Ramaswamy, K., Li, M., & Veliyath, R. 2002. Variations in ownership behavior and propensity to diversify: A study of the Indian corporate context. *Strategic Management Journal*, 23 (4): 345-358.
- Sambharya, R. B. 1996. Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations. *Strategic Management Journal*, 17 (9): 739-746.
- Sanders, WM. G., & Carpenter, M. A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41 (2): 158-178.
- Schnake, M. E., & Williams, R. J. 2008. Multiple directorships and corporate misconduct:

- The moderating influences of board size and outside director. *Journal of Business Strategies*, 25 (1): 1-14.
- Schulze, W., Lubatkin, M., & Dino, R. N. 2003. Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, 18 (4): 473-490.
- Shivdasani, A., & Yermack, D. 1999. CEO involvement in the selection of new board members: An empirical analysis. *Journal of Finance*, 54 (5): 1829-1854.
- Stevenson, W., & Radin, R. F. 2009. Social capital and social influence on the board of directors. *Journal of Management Studies*, 46 (1): 16-44.
- Stiles, P., & Taylor, B. 2001. *Boards at work: How directors view their roles and responsibilities*. Oxford, UK: Oxford University Press.
- Straw, B., & Epstein, L. 2000. What bandwagons bring: Effects of popular management techniques on corporate performance, reputation, and CEO pay. *Administrative Science Quarterly*, 45 (3): 523-556.
- Sullivan, D. 1994. Measuring the degree of internationalization of a firm. *Journal of International Business Studies*, 25 (2): 325-342.
- Tallman, S., & Li, J. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39 (1): 179-196.
- Thomas, D. E. 2006. International diversification and firm performance in Mexican firms: A curvilinear relationship? *Journal of Business Research*, 59 (4): 501-507.
- Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. 2000. Composition of the top management team and firm international diversification. *Journal of Management*, 26 (6): 1157-1177.
- Tihanyi, L., Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. 2003. Institutional ownership differences and international diversification: The effects of boards of directors and technological opportunity. *Academy of Management Journal*, 46 (2): 195-211.
- Tolbert, P. S., & Zucker, L. G. 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform. *Administrative Science Quarterly*, 28 (1): 22-39.
- Tuggle, C. S., Schnatterly, K., & Johnson, R. A. 2010. Attention patterns in the boardrooms: How board composition and processes affect discussion of entrepreneurial issue? *Academy of Management Journal*, 53 (3): 550-571.
- Westphal, J. D., & Fredrickson, J. W. 2001. Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. *Strategic*

Management Journal, 22 (12): 1113-1137.

- Yeh, Y. H. 2005. Do controlling shareholders enhance corporate value? *Corporate Governance: An International Review*, 13 (2): 313-325.
- Yeniyurt, S., Townsend, J. D., Cavusgil, S. T., & Ghauri, P. N. 2009. Mimetic and experiential effects in international marketing alliance formations of US pharmaceuticals firms: An event history analysis. *Journal of International Business Studies*, 40 (2): 301-320.
- Young, C. S., Tsai, L. C., & Hsieh, P. G. 2008. Voluntary appointment of independent directors in Taiwan: Motives and consequences. *Journal of Business Finance & Accounting*, 35 (9/10):1103-1137.
- Zahra, S. A. 2003. International expansion of U.S. manufacturing family business: The effect of ownership and involvement. *Journal of Business Venturing*, 18 (4): 495-512.

Biographical Notes

* 謝存瑞

國立暨南國際大學國際企業博士，現為靜宜大學國際企業學系副教授兼系主任，研究領域為集團企業研究、創新與國際擴張等議題，目前的研究成果已刊登或即將刊登於 *Journal of Business Research*, *Industrial Marketing Management*, *Journal of Accounting, Auditing & Finance*, *International Journal of Innovation and Technology Management*, 《管理學報》、《管理與系統》以及《中山管理評論》等期刊。

鍾憲瑞

現為國立中正大學企業管理學系教授，國立中山大學企管博士，清華大學（北京）歷史博士候選人。曾任中正大學管理學院高階主管碩士在職專班執行長以及中正大學企管系碩士在職專班執行長，著有產業分析精論、問題與個案分析、策略管理、商業模式創新與管理等著作，曾在 *British Journal of Management*, *Journal of Business Research*, *Technovation*, 《管理學報》、《管理評論》、《台大管理論叢》、《中山管理評論》等知名期刊發表文章。

黃佑安

政治大學企業管理博士，現任國立暨南國際大學國際企業學系專任副教授，曾赴澳洲科廷大學進修研究。研究領域包括消費者行為、國際行銷與資訊管理，近五年發表學術論文於 *AsiaPacific Management Review*, *European Journal of Information Systems*, *European Journal of Marketing*, *Internet Research*, *Technovation*, *Tourism Management* 及《管理評論》等期刊。

*E-mail: tjhsieh@pu.edu.tw