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性別權力、公司治理與組織績效：以高科技產業為例

Gender Empowerment, Corporate Governance and Organizational Outcomes: Evidence from High-Technology Industry

中文摘要

隨著近年來我國女性勞動參與率和女性勞動人口比率持續地攀升，相較於傳統，女性在職場上的重要地位已不可同日而語。公司治理的要義之一，在於如何利用相關的制衡機制，幫助達成促使公司價值極大化的目標。故本研究之主要目的在於探討董事會之性別組成差異，是否會對企業在社會責任的表現，甚或可能對企業財務績效的表現發生關聯性。本研究同時輔以「董事報酬」與「高階主管薪酬」兩個重要的公司治理議題，進一步探討其與董事會性別組成差異的關聯性，從而延伸討論女性董事對公司治理所可能產生的影響。本研究以民國 94 年至 97 年上市公司為研究對象。首先利用多元迴歸分析分別估計董事會之性別組成差異與企業社會責任、董事報酬和高階主管薪酬的關聯性。再利用二階段最小平方法，進一步檢測女性董事、董事報酬和高階主管薪酬與企業財務績效之關係。實證結果顯示，女性董事的存在與否和董事會之性別組成差異程度對企業社會責任的表現有顯著的正向關聯性，另一方面，對企業財務績效整體而言亦呈現正向關聯性。但在科技業中，女性董事比重對企業財務績效並未有正向顯著影響。

關鍵字：董事會多元性、女性董事、公司治理、企業社會責任、

Abstract One of the major indicators that serve to demonstrate a perceived inequality between males and females is female presences in senior management positions. According to the Gender empowerment measure in Human Development Report 2007/2008 by United Nations Development Programme (UNDP), the percentage of female as senior officials and managers are lower than 30% in most developed countries. While the issue of board gender diversity has attracted researchers' attention these years, most empirical results are based on U.S. data. This article adds to a growing number of non-U.S. studies by investigating the link among gender diversity in the boardroom, corporate governance and firm performance in Taiwan. We used a panel data set of listed Taiwanese companies from 2005 to 2008. Gender diversity was measured by the percentage of women on board. The empirical result shows that gender diversity on board was positively related to the firm's social performance, especially in community and employee welfare. Surprisingly, gender diversity on board was negatively related to the firm's financial performance. The outcome suggested that female directors could be more aligned with the interests of shareholders.

Key Words: Gender Diversity, corporate governance, corporate social performance

1. Introduction

Across the rich world more women are working than ever before. Coping with this change will be one of the great challenges of the coming decades (The Economist print edition, 2010). Women now make up almost half of American workers (49.9% in October, 2009). They earn almost 60% of university degrees in America and Europe. As for Taiwan, the female participation rate in workforce has come up to almost 50%, the highest rate in recording, in 2008. In the meantime, the proportion of female students in universities has reached half levels. The trends towards female power rising is almost certain to continue.

Based on the current trends in corporate governance including both gender diversity in the boardroom and corporate social responsibility, the object of this article is to examine the impact on firm performance of the presence of women in the boardroom and corporate social performance. We also examine the relationship between gender diversity in the boardroom and corporate social performance in addition. We study the relationship between firm value and two measures of the extent of female board membership: a dummy measure indicating the existence of one or more female directors and the percentage of female directors. We measure corporate social performance using five dummies representing CSR column, the detailed activities about environmental protection, employee concerns, neighboring communities and social welfare in the annual report and the total scores of the sum of the five dummies above. We measure firm performance using both return on assets (ROA) and an approximation of Tobin's Q.

This work makes a number of contributions to the relative literature. First, it adds to the scarce empirical evidence on the topic. Most articles that examine the effect of gender composition of the board on firm value use data from western countries. This article provides evidence from Taiwan, a good sample in widening the understanding of gender diversity in the boardroom and CSP. As a representative country in Asia, the culture and economy in Taiwan differs quite from the West. Second, an increased role for women on company boards has been the subject of political debate in Taiwan and is now positively advocated for ethical reasons. In this context, it is interesting to ascertain the effect group composition has on board work and the likely success or failure of governance proposals advocating greater diversity. In other words, the results can help us understand whether such a policy passes the "market test" – that is, whether the financial markets encourage or punish gender diversity. Third, our analysis employed panel data methodology, which is more powerful in controlling unobservable heterogeneity. Finally, our paper contributes to the literature on the relationship between gender diversity in boards and corporate social performance.

2. Literature review

Gender diversity in the boardroom and corporate governance

The term corporate governance refers to "the responsibilities of the board are to ensure the strategic guidance of the company, the effective monitoring of management on behalf of the shareholders, and the board's accountability to the corporation and stockholders, according to the OECD Principles of Corporate Governance (2004). Good corporate governance is concerned with the development of systems and practices that ensure the accountability of corporate managers and support good corporate performance. Boards of directors playing a central role in the corporate governance system of large organization (Fama & Jensen, 1983), the more dutiful directors of corporate boards could be, the better corporate governance it will have. And one of the debates about effectiveness promoting on corporate boards is diversity.

Diversity is beneficial for better understanding of employees and customers and problem-solving (Cox et al. 1991; Robinson et al.). According to the propositions of Adams and Ferreira (2009), with tapping broader talent pools for corporate board of directors, diversity could enhance effectiveness. Furthermore, female directors could work more independently because they do not belong to the "old boys club". Their empirical results show that women appear to have less attendance problem than men. In particular, women are more like to be assigned to audit, nominating, and corporate governance committees, but less likely to sit on compensation committees than men do. Overall, they find that gender-diverse boards are tougher monitors.

Gender diversity in the boardroom and firm value

During the 1980s and 1990s female participation in labor markets worldwide grew substantially, although this was not always matched by improvements in job quality (ILO, 2007). In Taiwan, the labor force participation rate of women is lower than that of men at that time. In 2008, 49.7% of Taiwanese women, the highest level than ever before, participated in the workforce. As female power had risen in labor force and society, there has been increasing pressure from both society (Grosser & Moon, 2005) and investors to appoint women directors on corporate boards (Burgess and Tharenou, 2002) in recent years. Most of legislative initiatives about gender diversity in the boardroom are based on the presence of women on boards could affect corporate governance and firm value in significant ways.

Ellis and Key (2003) find evidence that the market values diversity of the workforce although not focusing on the composition of corporate boards. Their empirical result show that firms on Fortune's list of top diversity promoting ones from 1998 to 2002 experience positive , significant abnormal returns on the announcement date. Campbell and Minguez-Vera (2008) find that the diversity of the board measured by the percentage of women, has a positive impact on firm value. Adams and Ferreira (2009) find direct evidence that more diverse boards are more likely to hold CEOs accountable for poor stock price performance and CEO turnover is more sensitive to stock return performance in firms with sensitive to stock return performance in firms with relatively more female directors on boards. On the other hand, they also find that gender diversity has positive impact on companies with weak shareholder rights, where additional board monitoring could enhance firm value.

The preceding arguments lead to the following hypothesis:

Hypothesis 1a: There is a positive correlation between corporate financial performance and gender diversity in the boardroom.

Hypothesis 1b: There is a positive correlation between corporate financial performance and the percentage of female directors in the boardroom.

Gender diversity in the boardroom and corporate social performance

Corporate Social Responsibility (CSR) is another important debate in the business world today. According to the review of Gao (2009), there are two different trends including the viewpoint of social and stakeholder management, in the definition of the term 'CSR'. One focuses on the additional responsibilities of firm beyond making a profit. The other focuses on the obligation toward "society/broad stakeholders" beyond the interests of their owner and shareholders. We focus on the viewpoint of stakeholder management, that business has an obligation toward "society/broad stakeholders" beyond the interests of their owners and shareholders. For example, CSR as "societal expectations of corporate behavior; a behavior that is alleged by a stakeholder to be expected by society or morally required and is therefore justifiably demanded of a business".

According to Robinson et al. (1997), there are some characteristics of human nature including cognitive functioning and beliefs (e.g. language, emotional sensitivity, etc.) beliefs are not randomly distributed in the population, but tend to vary systematically with demographic variables instead. As a result, women board members may exert a positive impact on tasks of qualitative nature, such as strategic and CSR controls (Bilimoria, 2000; Rosener, 1990, 1995; Selby, 2000). The basic argument of men is that comparing to women, they are less likely to concern the human and social aspects of business but more likely to focus on money and quantifiable issues (Huse & Solberg, 2006). We expect women to be more socially oriented than men and female directors could have the potential to broaden discussions on strategic and CSR control issues (Burgess & Tharenou, 2002; Ibrahim & Angelides, 1994; Williams, 2003). The preceding arguments regarding the female characteristics lead to the following hypotheses:

Hypothesis 2a: There is a positive correlation between corporate social performance and gender diversity in the boardroom.

Hypothesis 2b: There is a positive correlation between corporate social performance and the percentage of female directors in the boardroom.

3. Data and methodology

Data set

We tested our hypotheses through a deductive study based on a data set of all listing companies in Taiwan. The sample of the statistical analysis comprises all Taiwanese listing companies during January 2005 and December 2008. Information about female directors on corporate boards and corporate social performance was collected from annual reports of all listing companies in the Market Observation Post System (M.O.P.S) of Taiwan Stock Exchange (TWSE). The board, directors, and data relative to corporate governance was collected from the Taiwna Economic Journal (TEJ) Data Bank in the sector of corporate governance Accounting information, including total assets, return on total assets (ROA), and return on equity (ROE), was collected from the TEJ Financial Report Data Bank.

In 2001, CLSA issued a report on corporate governance practices in emerging markets that provided scores which attempt to broadly measure a firm's social responsibility. Gao (2008) propose a general scope of CSR/ CSP information includes three aspects: We adapt the scores of CLSA's report and Gao's study respectively for the CSP information in our study. There are five dummies of scope about the CSP information in our study: (1) CSPR: representing a value of one when a company published a CSR-like report or established a CSR-like column on its annual report or in its official website, and zero otherwise. (2) CSPE: representing a value of one when there are eco-friendly or environment issues or actions on its CSR report or column, and zero otherwise. (3) CSPCH: representing a value of one when there are philanthropic issues or actions on its CSR report or column, and zero otherwise. (4) CSPNC: representing a value of one when there are issues or concrete actions about neighboring community on its CSR report or column, and zero otherwise. (5) CSPEW: representing a value of one when there are issues or concrete actions about employee welfare on its CSR report or column, and zero otherwise. Since the Regulations Governing Information to be published in Annual Reports of Public Companies in Taiwan suggests but not force companies to reveal their information about corporate social performance before 2008, few companies revealed their information about CSP. Due to the limitation in the sufficiency of the data, our sample about CSP information only comprises the data in 2008.

The variables

Concerning the independent variables for the gender diversity on the board, we use a dummy variable, WOMAND, equals to one when one or above woman is present on the board, and zero otherwise. The second one is the percentage of women on the board, WOMENP, calculated as the number of female directors divided by the total number of directors.

As a measure of firm value, we use an approximation of Tobin's Q (Q) and return on total assets (ROA). Tobin's Q defined as the sum of the market value of stock and the book value of debt divided by the book value of total assets. Tobin's Q as measure of firm value can reflect the expectations of markets in future earnings and is thus a good proxy for a firm's competitive advantage (Montgomery and Wernerfelt, 1988). ROA is a profit evaluation earned in relation to total assets and has been used in several corporate governance research studies. It is a key indicator of corporate financial performance as they offer information on how firms utilize total resources to earn returns (Chotigeat et al., 2004). The measures of CSP as depicted in the former section were CSPR, CSPE, CSPCH, CSPNC, CSPEW and CSPT representing the sum of all the five aspects about CSP information.

We also control a number of variables. Specifically, the logarithm of the total number of directors, BOARD SIZE; the percentage of independent directors on the board, IDP; the size of the firm, SIZE (calculated as the natural logarithm of total assets); the debt level, LEVER (calculated as the ratio of total debt to total assets).

Methodology

When analyzing the effect of women on governance, we could eliminate any unobservable heterogeneity that may be present among the companies in our sample by using the panel data methodology. We attempt to employ a conditional inference using the fixed effects method, if there are omitted unobservable firm characteristics (highlighted by Himmelberg et al., 1999) correlated with the explanatory variables, thereby biasing the coefficients obtained. On the other hand, we exert unconditional inference using the random effects method (Arellano & Bover, 1990), if the effects are not correlated with the independent variables. We use the Hausman test to distinguish from the existence of any correlation between unobservable heterogeneity and the explanatory variables. This test examines the equality of the coefficients of the fixed estimations and random effect estimations (Campbell & Mínguez-Vera, 2008). The null hypothesis is that the coefficients of both models are similar. If this hypothesis is rejected, the coefficients will differ markedly among themselves, with only the intragroup estimation (fixed effects) being consistent.

To examine the relationship between female board membership and firm value, we estimate the following model:

$$\begin{aligned} &Y_{jit} = \\ &\beta_0 + \beta_1 \mathrm{WOMAN}_{jit} + \beta_2 \mathrm{BOARD\ SIZE}_{it} + \beta_3 \mathrm{IDP}_{\ it} + \beta_4 \mathrm{SIZE}_{it} + \\ &\beta_5 \mathrm{LEVER}_{it} (+\beta_6 \mathrm{INDUSTRY\ DUMMIES}_{it}) + \sigma_t + \rho_i + \varepsilon_{it} \end{aligned} \quad (1)$$

where "$_{it}$" represents the ith firm of the sample at time period t. Y_j includes tobin's Q and ROA. WOMAN_j represents two alternative variables – a dummy variable that takes a value of one when one or more women are present on the board, and zero otherwise (WOMAND), the percentage of women on the board fo directors (WOMENP). The remaining terms representing control variables are BOARD SIZE, IDP, SIZE, and LEVER respectively.[1] The multiple regression analysis takes account of the industry dummies as control variables. Finally, the expectations σ_t and ρ_i refer to time effects and unobservable heterogeneity, respectively.

We expected that the sign of the variable, BOARD SIZE, is negative if there is a positive relationship between the number of directors on the board and the inefficiency of the board. The expected sign for the percentage of independent directors, IDP, is positive if independent director is an efficient mechanism for reducing the agency conflict in the firm. The expected sign for firm size, SIZE, is positive because large firms have abundant resources to invest in innovation, pursue more aggressive strategies in growth and achieve better performance. The expected sign for the leverage variable, LEVER, is positive if debt is an efficient mechanism for reducing the agency conflict in the firm.

In the second model, we examine the relationship between the variables representing female board membership and the variables representing CSP. We specify CSP including CSPR, CSPE, CSPCH,

[1] The selection of the control variables is based on the previous work of Campbell and Mínguez-Vera (2008) and Adams and Ferreira (2009)

CSPNC, CSP and CSPT, as independent variables and WOMAND and WOMENP as dependent variables. The control variables are BOARD SIZE, SIZE, and LEVER respectively. We estimate the following model:

$$Y_{jit} = \beta_0 + \beta_1 WOMAN_{jit} + \beta_2 BOARD\ SIZE_{it} + \beta_3 SIZE_{it} + \beta_4 ROA_{it} + \beta_5 LEVER_{it} + \beta_6 INDUSTRY\ DUMMIES_{it} + \varepsilon_{it} \quad (2)$$

We expected the sign of the variable, BOARD SIZE, to be negative if there is a positive relationship between the number of directors on the board and the inefficiency of the board. The expected sign for firm size, SIZE, is positive because large firms have additional resources to carry out their CSP. The expected sign for return on total assets, ROA, because firms with more profits are more likely to exert CSR and improve their CSP. The expected sign for the leverage variable, LEVER, is negative if debts are obstacles for firms to exert their CSP.

4. Empirical results

Our Table 1 shows that there are differences among different sector of firms. Tourism industry has the highest percentage female directors on corporate boards, while the one is the lowest in the industry of Telecommunication and Network.

Our Table 3 examined a simple model of performance that includes the dummy variable representing whether there is a female director or not on the board, the fraction of women on the board, board size, independence, size, the debt level, industry dummies and year dummies. We can observe that the presence of women on the board (WOMAND) is negatively and significantly related to our approximation of ROA and the percentage of women on the board (WOMENP) is negatively and significantly related to both tobin’s q and ROA in the analysis of multiple linear regression. This result contrasts with Carter et al. (2003) and Campbell and Mínguez-Vera (2008) who report a positive relationship in the U.S. and Spain, respectively. The reason why there are different impacts of firm value and operating performance between WOMAND and WOMENP may result from that one female director on the board does not influence the process of decision making of the board. The significant correlation, however, disappears once we apply reasonable procedures to tackle omitted variables.

Concerning the control variables, we find that there are positive and significant relationships between the logarithm of the number of directors (BOARD SIZE) and tobin’s Q and ROA, respectively which is unsurprising as more directors may result in more conflict and contribute to inefficiency of the board. It is the same with our expectation that the fraction of independent directors (IDP) has a positive influence on Tobin’s Q and ROA. The reason might be that the independent director is beneficial for the monitoring role of the board. The logarithm of the total assets, SIZE, are positively related to Tobin’s Q and ROA while the ratio of total debt to total assets, LEVER, has a negative influence on Tobin’s Q and ROA.

Our Table4 displays the relationship between corporate social performance and women board membership. We observe that the presence of women on the board (WOMAND) is positively and significantly related to the measure of corporate social performance in the

CSR-related report or column, charity, and neighboring community while the percentage of women on board (WOMENP) is positively and significantly related to the measure of the CSP aspects in the CSR-related report or column and neighboring community. Overall, our result suggests there is a positive and significant relationship between the measure of woman board membership and CSP. This result is similar to Huse et al. (2009) whose report showed a positive relationship in Norway. Concerning the control variables, we find that there are positive and significant relationships between the logarithm of the number of directors (BOARD SIZE) and the CSP measures. ROA, however, is not significantly related to any of the CSP measures.

5. Conclusions

This article attempts to explore not only the relationship between board diversity and firm financial performance, but also the relationship between women board membership and the related impacts on corporate social performance. The empirical result shows that gender diversity on board was positively related to the firm’ s social performance, especially in community and employee welfare.

Surprisingly, gender diversity on board was negatively related to the firm’ s financial performance. Although the correlation between gender diversity and either firm value or operating performance appears to be negative at first investigation, this correlation disappears once we apply reasonable procedures to tackle omitted variables. Despite the complexity of their relationship, there are still possible explanations for the negative relationship between gender diversity in the boardroom and corporate financial performance. Female directors may behave differently compare to male directors in the boardroom.

First, female directors’ social networks are not as strong as which male directors own. Medland (2004), for example, argues that one of the impediments to female directorships is that the informal social network linking directors consists primarily of men. Second, if female board appointments are related to family links rather than external or fair assessment, women board membership won’t do any goodness of corporate performance (Campbell & Mínguez-Vera, 2008). Further, investors might discriminate higher presence of female directors on the board cause reducing their shareholding proposition (Dobbin, 2009).

There are some implications of this study for further research about diversity in boards of directors. There is a need to penetrate the relationship between board task performance and gender diversity in the board. Research about women board membership should go beyond easily measurable data to improve the understanding of the true impacts on corporate boards of female directors.

計畫成果自評：

Our results show that the presence of one or more women on the board has an insignificant effect on firm value, but significant effect on operating performance, as measured by Tobin’s Q and ROA respectively. Our results suggested that firms perform worse when the gender diversity of the board is greater. Besides, the relationship between gender diversity on boards and corporate social performance is positive.

本研究目的在探討董事會之性別組成差異，是否會對企業在社會責任的表現，甚或可能對企業財務績效的表現發生關聯性。以民國 94 年至 97 年台灣上市公司為研究對象。研究結果發現實證結果顯示，女性董事的存在與否和董事會之性別組成差異程度對企業社會責任的表現有顯著的正向關聯性，另一方面，對企業財務績效整體而言亦呈現正向關聯性。

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REFERENCES

Adams, R. B., and Ferreira, D.: 2009, 'Women in the Boardroom and Their Impact on Governance and Performance', *Journal of Financial Economics* ***94***, 291-309.

Arellano, M. and O. Bover: 1990, 'Un Estudio Econométrico Con Datos de Panel', *Investigaciones Económicas* ***14***, 3-45.

Barnett, Michael: 2007, 'Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility', *Academy of Management Review* ***32***, 794-816.

Biggins, J. V.: 1999, 'Making Board Diversity Work', *Corporate Board* ***20***, 11-17.

Bilimoria, D.: 2000, 'Building the Business for Women Directors', in R.J. Burke and M. C. Mattis (eds), Women on Corporate Strategy', *Academy of Management Review* ***15***, 72-87.

Bilimoria, K. and Wheeler, J. V.: 2000, 'Women Corporate Directors: Current research and future directions', In R. J. Burke and M. C. Mattis (eds), *Women in Management: Current research issues* ***2***, The Netherlands: Kluwer Academic Publishers, 138-163.

Brammer S., Millington A. and Pavelin S.: 2007, 'Gender and Ethnic Diversity Among UK Corporate Boards', *Corporate Governance* ***15***, 393-403.

Bonini, Sheila M.J., Lenny T. Mendonca, and Jeremy M. Oppenheim: 2006, 'When Social Issues Become Strategic', *Mckinsey Quarterly, 2(2)*, 20-31.

Burgess, A. and P. Tharenou: 2002, 'Women Board Directors: Characteristics of the few', *Journal of Business Ethics* ***37***, 39-49.

Burke, R. J.: 2000, 'Company Size, Board Size and the Number of Women directors', In R. J. Burke and M. C. Mattis (eds) *Women on Corporate Boards of Directors: International challenges and opportunities*. The Netherlands: Kluwer Academic Publishers, 157-167.

Campbell K. and Minguez-Vera A.: 2008, 'Gender Diversity in the Boardroom and Firm Financial Performance', *Journal of Business Ethics* ***83***, 435-451.

Carter, D. A., Simkins, B. J. and Simpson, W. G.: 2003, 'Corporate Governance, Board Diversity, and Firm Value', *Financial Review* ***38***, 33-53.

CFACG (Committee on the Financial Aspects of Corporate Governance): 1992, 'Report with Code of Best Practice', *Cadbury Report*, London: Gee Publishing.

Cheng, S.: 2008, 'Perceived Importance of Corporate Boards in October 1987', *Financial Research Letters* ***5***, 146-155.

CLSA CG Watch: 2001, *Corporate Governance in Emerging Markets* (Credit Lyonnais).

Leung, C. Y., Tan, W., Ahn Hee-Joon, and Zhang Zheng: 2010, 'Does Corporate Social Responsibility Matter in Asian Emerging Markets?', *Journal of Business Ethics* ***92***, 401-413.

Chotigeat T, Kramer S and Pyun CS: 2004, 'Efficiency and Resilience of French Multinational Banks: Evidence from the Pre-Euro era', The Multinational Business Review 12(1), 3-17.

Conyon, M. J. and Mallin, C.: 1997, 'Women in the Boardroom: Evidence from large UK companies', *Corporate Governance: An International Review* ***5***, 112-117.

Cox, T., Lobel, S. A., and Mcleod, P. L.: 1991, 'Effects of Ethnic Group Cultural Differences on Cooperative and Competitive Behavior on a Group Task', *Academy of Management* ***4***, 827-847.

Daily, C. M. and Dalton, D. R.: 2003, 'Women in the Boardroom: A business imperative', *Journal of Business Strategy* ***24***, 8-10.

Fama e. and Jensen M.: 1983, 'Separation of ownership and control', *Journal of Law and Economics* ***26***, 301-325.

Farrel K. A. and Hersch P. L.: 2005, 'Additions to Corporate Boards: the Effect of Gender', *Journal of Corporate Finance* ***11***, 85-106.

Gao, Yongqiang: 2009, 'Corporate Social Performance in China: Evidence from large companies', *Journal of Business Ethics* ***89***, 23-35.

Grosser, K. and J. Moon: 2005, 'Gender Mainstreaming and Corporate Social Responsibility: Reporting Workplace Issues', *Journal of Business Ethic* ***62***, 327-340.

Higgs, D.: 2003, 'Review of the Role and Effectiveness of Non-Executive Directors', London: Department of Trade and Industry / HMSO, Available online at: http://www.dti.gov.uk/cld/non_exec_review.

Himmelberg, C. P., R. G. Hubbard and D. Palia: 1999, 'Understanding the Determinants of Managerial Ownership and the Link Between Ownership and Performance', *Journal of Financial Economics* ***53***, 353-384.

Huse M., Nielsen, S. T., and Hagen, I. M.,: 2009, 'Women and Employee-Elected Board Members, and Their Contributions to Board Control Tasks', *Journal of Business Ethics* ***89***, 581-597.

Ibrahim, N. A. and J. P. Angelides: 1994, 'Effect of Board Members ' Gender on Corporate Social

Responsiveness Orientation', *Journal of Applied Business Research **10***, 35-40.
ILO: 2007, 'Global Employment Trends for Women Brief', March, International Labour Organization, Geneva.
Keys, P. Y., P.A. Turner, and S.S. Friday: 2002, 'Shardholder benefits of diversity', *Working paper*, University of Delaware.
KPMG: 2008, 'International Corporate Responsibility Survey 2008', (KPMG, Amsterdam).
Kutner MH, Nachtsheim CJ and Neter J: 2004, 'Applied Linear Regression Models, 4th eds, Mcgraw-Hill Irwin.
Luo, Xueming and Bhattacharya C. B.: 2009, 'The Debate over Doing Good: Corporate Social Performance, strategic marketing levers, and firm-idiosyncratic risk', *Journal of Marketing **73***, 198-213.
Maznevski, M. L.: 1994, 'Understanding Our Differences: Performance in decision-making groups with diverse members', *Human Relations **47***, 531-542.
Mc Williams, A. and D. Siegel: 2000, 'Corporate Social Responsibility and Financial Performance: Correlation or misspecification?', *Strategic Management Journal **31***, 854-872.
Medland, D.: 2004, 'Small Steps for Womankind', *Corporate Board Member Europe **Winter***.
Milliken, F. J. and Martins, L. L.: 1996, 'Searching for Common Threads: Understanding the multiple effects of diversity in organizational groups, *Academy of Management Review **21***, 402-433.
Montgomery, C. and B. Wernerfelt: 1988, ' Tobin's q and the Importance of Focus in Firm Performance', *American Economic Review **78(1)***, 246-250.
OECD (Organisation for Economic Co-operation and Development): 2004, 'OECD Principles of Corporate Governance', *OECD Publications*, Paris.
Pelled, L. H., Eisenhardt, K. M., and Xin, K. R.: 1999, 'Exploring the Black Box: An analysis of work group diversity, conflict, and performance', *Administrative Science Quarterly **44***, 1-28.
Robinson, G. and K. Dechant: 1997, 'Building a Business Case for Diversity', *Academy of Management Executive **11***, 21-30.
Rosener, J. B.: 1990, 'Way Women Lead', *Harvards Business Review **68***, 119-125.
Rosener, J. B.: 1995, *America's Competitive Secret: Utilizing Women as Management Strategy* (Oxford University Press, New York).
Singh, V. and Vinnicombe, S.: 2004, 'Why So Few Women in Top UK Boardrooms? Evidence and theoretical explanation', *Corporate Governance: An International Review **9***, 206-216.
The Economist print edition: 2010, 'Women in the Workforce: Female Power', *The Economist **394***, 49-54.
The Economist print edition: 2010, '**La vie en rose; Women on company boards**', *The Economist **395***, 66.
Turnbull Committee: 1999, 'Internal Control: Guidance for directors on the combined code', London: Institute of Chartered Accountants.
Watson, W. E., Kumar, K., and Michaelsen, L. K.: 1993, 'Cultural Diversity's Impact on Interaction Process and Performance: Comparing Homogeneous and Diverse Task Groups', *Academy of Management Journal **36***, 590-602.
Westphal, J. D. and Milton, L. P.: 2000, 'How Experience and Network Ties Affect the Influence of Demographic Minorities on Corporate Boards', *Administrative Science Quarterly **45***, 366-398.
Whetten, D. A., G. Rands and P. Godfrey: 2002, 'What are the Responsibilities of Business to Society?', in A. Pettigrew, H. Thomas and R. Whittington (eds.), *Handbook of Strategy and Management* (Sage, London), 373-408.
Williams, R. J.: 2003, 'Women on Corporate Boards of Directors and Their Influence on Corporate Philanthropy', *Journal of Business Ethics **42***, 1-10.
Yang, Jia Lynn: 2007, 'New Rules for Do-good Funds', *Fortune, **February 5***, 109-112

無研發成果推廣資料

98 年度專題研究計畫研究成果彙整表

計畫主持人：黃啟瑞			計畫編號：98-2410-H-305-030-				
計畫名稱：性別權力、公司治理與組織績效：以高科技產業為例							
成果項目			量化			單位	備註（質化說明：如數個計畫共同成果、成果列為該期刊之封面故事...等）
			實際已達成數（被接受或已發表）	預期總達成數(含實際已達成數)	本計畫實際貢獻百分比		
國內	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	0	0	100%		
		專書	0	0	100%		
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（本國籍）	碩士生	2	2	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		
國外	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	1	1	100%		
		專書	0	0	100%	章/本	
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（外國籍）	碩士生	0	0	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		

其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)	無

	成果項目	量化	名稱或內容性質簡述
科教處計畫加填項目	測驗工具(含質性與量性)	0	
	課程/模組	0	
	電腦及網路系統或工具	0	
	教材	0	
	舉辦之活動/競賽	0	
	研討會/工作坊	0	
	電子報、網站	0	
	計畫成果推廣之參與（閱聽）人數	0	

國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

■達成目標

□未達成目標（請說明，以 100 字為限）

　　□實驗失敗

　　□因故實驗中斷

　　□其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形：

論文：□已發表 □未發表之文稿 ■撰寫中 □無

專利：□已獲得 □申請中 ■無

技轉：□已技轉 □洽談中 ■無

其他：（以 100 字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以 500 字為限）

公司治理的要義之一，在於如何利用相關的制衡機制，幫助達成促使公司價值極大化的目標。故本研究之主要目的在於探討董事會之性別組成，是否會對企業在社會責任的表現，甚或可能對企業財務績效的表現發生關聯性。本研究同時以「董事報酬」與「高階主管薪酬」兩個重要的公司治理議題，進一步探討其與董事會性別組成差異的關聯性，從而延伸討論女性董事對公司治理所可能產生的影響。本研究結果顯示，女性董事的存在與否和董事會之性別組成差異程度對企業社會責任的表現有顯著的正向關聯性，另一方面，對企業財務績效整體而言亦呈現正向關聯性。研究結果具管理實務與學術之參考價值。本研究初步研究結果發表於(2010)世界企業倫理國際學術研討會，發表學術論文：’Gender Diversity in Boardroom, Corporate Financial Performance and Social Performance,’ The Third World Business Ethics Forum (WBEF), Macau。將來修改後，會進一步投稿 SSCI 期刊。