Corporate Fraud, Board Gender Diversity and Stock Market Reaction

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Statement of Originality

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision. The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the *Copyright Act 1968* and any approved embargo.

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2SLS	Two-stage Least Squares
AAER	Accounting and Auditing Enforcement Release
AAR	Average Abnormal Returns
ACFE	Association of Certified Fraud Examiners
ANOVA	Analysis of Variance
CAAR	Cumulative Average Abnormal Return
CAR	Cumulative Abnormal Returns
CEO	Chief Executive Officer
CFO	Chief Financial Officer
GAAP	Generally Accepted Accounting Principles
NYSE	New York Stock Exchange
OLS	Ordinary Least Squares
SEC	Securities and Exchange Commission
SIC	Standard Industrial Classification
SOX	Sarbanes–Oxley Act
US	United States

Abstract

Conventional wisdom suggests that corruption reduces efficiency; thus, corporate fraud has received much attention during the last decade because of the enormous costs it imposes on firms, investors and the economy. Given that fraud is a result of a complex framework of individual moral choices, group decision-making processes and the internal control systems of corporations, the composition of the board of directors plays an important role in the ultimate unethical behaviour of the managerial team. Therefore, it is essential to explore the attributes of top managers that prevent opportunistic behaviour.

From psychological, sociological and economic perspectives, there have been extensive studies trying to establish behaviour differences between men and women. Prior studies suggested that women are different from men in terms of moral development, risk perception and leadership styles. Some studies have sought to investigate the connection between demographic characteristics, such as age, education, and financial expertise and misconducts. However, the association between board gender diversity and corporate fraud has been largely ignored in empirical research. Therefore, this thesis addresses these research gaps by focusing on one specific demographic feature of the violators—namely, gender. This feature may be significant in reducing corporate misconducts and in enhancing firm reputation. In addition, this thesis provides a unique platform to get an overview of the key features of the financial frauds of US corporations during the period 1999-2015.

Chapter 1 provides an overview of the corporate fraud literature, beginning with the early studies that brought the subject into academic research. With the first study in 1940, frauds in organisations gradually became part of the literature

in disciplines such as psychology, sociology, economics and business. However, prior studies were mostly limited to examining the association between certain board characteristics (such as the presence of independent directors, the number of board meetings and the activity of audit committees) and corporate fraud, with little focus on board gender. This thesis investigates the association between female board presence and corporate fraud, with two separate yet related empirical studies. A hand-collected dataset of fraud committed by United States (US) corporations over the period 1999 to 2015 is examined. The firms were convicted by the Securities and Exchange Commission (SEC) through Accounting and Auditing Enforcement Releases (AAERs) during the period.

Chapter 2 presents the first empirical study that investigated the effect of board gender diversity on the incidence of corporate fraud in the US. Using a hand-collected matched sample of 195 fraud firms and 195 non-fraud firms, this study found that firms with at least one female board member were approximately 20 per cent less likely to commit corporate fraud than otherwise comparable firms with an all-male board. Moreover, the effect of female board presence on fraud likelihood was stronger in the post-Sarbanes–Oxley period and in male-dominated industries and low fraud-intensive industries. We further found that firms with a gender-diverse board were less likely to be involved in financial statement frauds and reduced the likelihood of more serious frauds. However, the study showed that, the benefits derived from additional female board members seemed to disappear at higher levels of diversity, thereby implying the presence of an optimum level of gender diversity.

The second empirical study is presented in Chapter 3. This study examined the market reaction to the detection of corporate frauds for firms with gender-diverse and non-gender-diverse boards. Using a hand-collected dataset of 246 US firms, and manually collected disclosure dates of the fraud, the study found that the sample firms experienced a share price decline of -8.94 per cent in the three-day event window around the disclosure date. Cross-sectional regressions demonstrated that the announcement period's negative cumulative abnormal returns (CAR) were significantly less pronounced for firms with gender-diverse boards. In a three-day event window, stock price reduction was significantly less negative for firms with two or more female board members (CAR -2.83 per cent) than for firms with zero or one female board member (CAR -11 per cent). Further analysis revealed that the stock price decline around announcements was severe for financial statement frauds and for restatement announcements. The study also examined the penalties imposed on the firms, and found that, the allegation-related wealth losses were much larger compared with the court-imposed monetary penalty.

Overall, this thesis finds evidence of a positive contribution of gender-diverse boards in terms of curtailing frauds and improving firms' reputation. The results of the studies provide evidence in favour of the dynamism that women board members may bring to an organisational climate. This may help regulators, especially in the US, to consider ensuring better gender representations on boards while devising guidelines to manage fraud risks in the corporations.