

The Effect of Powerful CFOs on Financial Reporting Quality

Submitted by

Lutfu Tilat Ferdous

Bachelor of Business Administration (with Hons) (Finance and Accounting), University
of Dhaka, Bangladesh

Master of Business Administration (Finance), University of Dhaka, Bangladesh

Master of Philosophy (Accounting), The University of Sydney, Australia

Graduate Certificate of Higher Education (Tertiary Teaching), The University of
Sydney, Australia

A thesis submitted in total fulfilment
of the requirements for the degree of
Doctor of Philosophy

Department of Accounting and Data Analytics
La Trobe Business School
College of Arts, Social Sciences and Commerce
La Trobe University
Victoria, Australia

February 2020

Contents

Contents	i
List of Tables.....	iv
List of Figures	vii
List of Abbreviations	viii
Abstract	xi
Statement of Authorship.....	xiv
Acknowledgements	xv
Thesis-related Research Outcomes	xvi
Chapter 1: Introduction	1
1.1 Introduction.....	1
1.2 Thesis Motivation, Background and Research Gap	1
1.3 Research Questions	10
1.4 Thesis Key Findings and Contributions	12
1.5 Thesis Structure.....	16
Chapter 2: Literature Review	19
2.1 Introduction.....	19
2.2 Importance of CFOs for Quality Financial Reporting	19
2.2.1 Definition of CFO Power.....	20
2.2.2 CFO, Earnings and Financial Reporting Quality	21
2.2.3 CFO Incentives and Financial Reporting Quality.....	23
2.2.4 CFO Characteristics and Financial Reporting Quality	24
2.2.5 CFO Career, Turnover and Financial Reporting Quality	26
2.2.6 CFO, Audit Process and Financial Reporting Quality.....	28
2.2.7 Executive Power and Financial Reporting Studies	28
2.3 Three Determinants of Financial Reporting Quality.....	31
2.3.1 Financial Reporting Quality.....	31
2.3.2 Methods of Measuring Financial Reporting Quality	32
2.3.3 Disclosure and Earnings Quality	33
2.3.4 Financial Statement Disaggregation	34
2.3.5 Properties of Analyst Forecasts.....	35
2.3.6 Accounting Conservatism	37
2.4 Financial Reporting Quality and Corporate Governance	38
2.4.1 Financial Statement Disaggregation and Corporate Governance	38
2.4.2 Properties of Analyst Forecasts and Corporate Governance	40
2.4.3 Accounting Conservatism and Corporate Governance	43
2.5 Conclusion	46
Chapter 3: Theoretical Framework and Hypotheses Development.....	47
3.1 Introduction.....	47
3.2 Theoretical Framework	47
3.2.1 Agency Theory (Rent Extraction Hypothesis).....	47
3.2.2 Stewardship Theory (Efficient Contracting Hypothesis).....	50
3.3 Hypotheses Development	52

3.3.1 H ₁ : Financial Statement Disaggregation Disclosure Quality and CFO Power	53
3.3.2 H ₂ : Analyst Forecast Disclosure Quality and CFO Power.....	56
3.3.3 H ₃ : Accounting Conservatism and CFO Power	58
3.3.4 H ₄ : CFO Power and Monitoring Intensity	60
3.4 Conclusion	62
Chapter 4: Research Design and Method	64
4.1 Introduction.....	64
4.2 Research Design and General Methodology	64
4.2.1 Sample and Data Collection	64
4.2.2 Sources of Data	65
4.2.3 Source Documentation Justification	66
4.3 Variables Measurement	66
4.3.1 Measurement of Test/Major Independent Variable.....	66
4.3.1.1 Measure of CFO Power	66
4.3.2 Measurement of Dependent Variables.....	69
4.3.2.1 Construction of Financial Statement Disaggregation Disclosure Quality.....	70
4.3.2.2 Construction of Analyst Forecast Disclosure Quality.....	72
4.3.2.3 Additional Dependent Variables for Robustness Check	74
4.3.2.4 Measurement of Accounting Conservatism.....	75
4.3.3 Measurement of Monitoring Intensity.....	78
4.3.4 Control Variables	80
4.4 Estimation Method and Econometric Issues.....	83
4.5 Research Model.....	85
4.5.1 Financial Statement Disaggregation Disclosure Quality: H ₁	85
4.5.2 Analyst Forecast Disclosure Quality: H ₂	87
4.5.3 Conditional Conservatism Measure: H ₃	88
4.5.4 Unconditional Conservatism Measure: H ₃	89
4.6 Additional Analysis and Endogeneity Issues	90
4.6.1 Additional Analysis.....	90
4.6.1.1 Financial Disaggregation Disclosure Quality and Analyst Forecast Disclosure Quality with CFO Power—High- versus Low-growth Firms	90
4.6.1.2 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling Compensation Motivation.....	90
4.6.1.3 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling CEO Power	90
4.6.1.4 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling CFO Background Characteristics	91
4.6.2 Alternative Measures of Disclosure and Information Quality.....	91
4.6.3 Endogeneity Issues: Financial Disaggregation Disclosure Quality and Analyst Forecast Disclosure Quality	92
4.6.3.1 2SLS Regression	92
4.6.3.2 Propensity Score Matching	93
4.6.3.3 Heckman Selection Model.....	93
4.6.4 Additional Analysis for Accounting Conservatism	94

4.6.4.1 Additional Conditional Conservatism Measure	94
4.6.4.2 Additional Analysis Model Unconditional Conservatism	95
4.7 Conclusion	95
Chapter 5: Data Analysis and Findings	96
Introduction	96
5.1 Descriptive Statistics	96
5.2 Multivariate Analysis	106
5.2.1 Hypothesis 1: Financial Statement Disaggregation Disclosure Quality (FSDQ) Relationship with Powerful CFOs	106
5.2.2 Hypothesis 2: Analyst Forecast Disclosure Quality (AFDQ) Relationship with Powerful CFOs	109
5.2.3 Hypothesis 3: Accounting Conservatism (CON) Relationship with Powerful CFOs	111
5.2.4 Hypothesis 4: Monitoring Intensity of the Relationship between Financial Reporting Quality and Powerful CFOs	115
5.3 Additional Analysis and Validation Test	121
5.3.1 CFO Power and Financial Reporting Quality: Controlling for CFO Background	121
5.3.2 CFO Power and Financial Reporting Quality: Controlling for CEO Power	127
5.3.3 CFO Power and Financial Reporting Quality: Controlling for CFO Compensation	133
5.3.4 CFO Power, Disclosure Quality and Firm Growth	138
5.4 Alternative Measurements of H ₁ and H ₂ : FSDQ and AFDQ	144
5.4.1 CFO Power and Properties of Analyst Forecasts	144
5.4.2 CFO Power and Bid–Ask Spread	146
5.4.3 CFO Power and Cost of Debt	147
5.4.4 CFO Power and Market Liquidity	149
5.5 Alternative Measurement of Conservatism: H ₃ CON	150
5.5.1 Conditional Conservatism	150
5.5.2 Unconditional Conservatism	155
5.6 Endogeneity Analysis	157
5.7 Conclusion	165
Chapter 6: Conclusions	167
6.1 Introduction	167
6.2 Thesis Overview	167
6.3 Major Findings	168
6.4 Implications of the Findings	172
6.5 Limitations	174
6.6 Directions for Future Research	175
Appendix A: Variable Definitions	177
References	181

List of Tables

Table 1.1: Overview of Research Findings	13
Table 4.1: Sample and Data Selection	65
Table 4.2: Sources of Data	65
Table 5.1 (a): Descriptive Statistics—Financial Statement Disaggregation and Analyst Forecast Disclosure Quality	98
Table 5.1 (b): Descriptive Statistics—Accounting Conservative Variables	98
Table 5.2 (a) : Industry Classification.....	99
Table 5.2 (b): Yearly Distribution	99
Table 5.3 (a): Pearson Correlation Matrix—FSDQ.....	102
Table 5.3 (b): Pearson Correlation Matrix—AFDQ.....	103
Table 5.3 (c): Pearson Correlation Matrix—CON_TACC	104
Table 5.3 (d): Pearson Correlation Matrix—CON_ACRU.....	105
Table 5.4 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality	107
Table 5.4 (b): CFO Power and Analyst Forecast Disclosure Quality.....	109
Table 5.5 (a): CFO Power and Conditional Conservatism	113
Table 5.5 (b): CFO Power and Unconditional Conservatism	115
Table 5.6 (a): High versus Low Monitoring Intensity—Financial Statement Disaggregation Disclosure Quality	116
Table 5.6 (b): High versus Low Monitoring Intensity—Analyst Forecast Disclosure Quality	118
Table 5.6 (c): High versus Low Monitoring Intensity—Conditional Conservatism	119
Table 5.6 (d): High versus Low Monitoring Intensity—Unconditional Conservatism	121
Table 5.7 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—Controlling CFO Background.....	123
Table 5.7 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling CFO Background.....	124
Table 5.7 (c): CFO Power and Conditional Conservatism—Controlling CFO Background	125
Table 5.7 (d): CFO Power and Unconditional Conservatism—Controlling CFO Background	127

Table 5.8 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—Controlling for CEO Power.....	128
Table 5.8 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling for CEO Power.....	129
Table 5.8 (c): CFO Power and Conditional Conservatism—Controlling for CEO Power.....	131
Table 5.8 (d): CFO Power and Unconditional Conservatism—Controlling for CEO Power.....	132
Table 5.9 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—Controlling for CFO Compensation.....	134
Table 5.9 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling for CFO Compensation.....	135
Table 5.9 (c): CFO Power and Conditional Conservatism—Controlling for CFO Compensation.....	136
Table 5.9 (d): CFO Power and Unconditional Conservatism—Controlling for Compensation.....	138
Table 5.10 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—High- versus Low-growth Firms.....	141
Table 5.10 (b): CFO Power and Analyst Forecast Disclosure Quality—High- versus Low-growth Firm	143
Table 5.11 (a): CFO Power and Analyst Forecast Individual Attributes.....	145
Table 5.11 (b): CFO Power and Bid–Ask Spread	147
Table 5.11 (c): CFO Power and Cost of Debt	148
Table 5.11 (d): CFO Power and Market Liquidity	150
Table 5.12 (a): Sensitivity of Earnings to Returns Measure of Conservatism	152
Table 5.12 (b): Persistence of Earnings Change Measure Conservatism	154
Table 5.12 (c): Alternative Measurement—Unconditional Accounting Conservatism	156
Table 5.13 (a): Fixed-effect Analysis for Endogeneity—AFDQ and FSDQ with CFO Power.....	158
Table 5.13 (b): Bivariate Analysis for Pre- and Post-PSM Sample	160
Table 5.13 (c): PSM for FSDQ and AFDQ.....	161
Table 5.13 (d): Heckman Two-stage Self-Selection.....	162
Table 5.13 (e): First-stage IV Regression	164
Table 5.13 (f): Second-stage IV Regression	164

Table 6.1: Research Questions and Findings	169
Table 6.2 (a): Additional Analysis and Validation Test—Robustness Check— Alternative Measurement of Disclosure and Information Quality	171
Table 6.2 (b): Robustness Check—Control of CEO Power, Compensation, CFO Characteristics and Firm Growth	171
Table 6.2 (c): Robustness Check—Alternative Measurement of Conservatism	172

List of Figures

Figure 1.1: Thesis Motivation	2
Figure 2.1: Determinants of Financial Reporting Quality	32
Figure 3.1: Theoretical Framework of CFO Power and Financial Reporting Quality ...	48
Figure 3.2: Hypotheses Development—H ₁ , H ₂ , H ₃ and H ₄	53
Figure 4.1: Determinants of CFO Power Index (<i>CFPI</i>).....	69
Figure 4.2: Determinants of Financial Statement Disaggregation Disclosure Quality (<i>FSDQ</i>)	70
Figure 4.3: Determinants of Analyst Forecast Disclosure Quality (<i>AFDQ</i>)	73
Figure 4.4: Determinants of Conditional and Unconditional Accounting Conservatism.....	76
Figure 4.5: Determinants of Governance Monitoring Intensity	79

List of Abbreviations

2SLS	Two-Stage Least Squares
Adj. R ²	Adjusted R-squared
AFDQ	Analyst Forecast Disclosure Quality
<i>AGE</i>	Firm's Age
<i>ANA</i>	Number of Analysts
<i>AUD</i>	Audit Committee
<i>BAS</i>	Bid–Ask Spread
<i>Bias</i>	Forecast Bias
<i>Big4</i>	Big 4 Audit Firms
<i>BTM</i>	Book-to-Market Ratio
CEO	Chief Executive Officer
<i>CEPI</i>	CEO Power Index
CFO	Chief Financial Officer
<i>CFPI</i>	CFO Power Index
<i>CG</i>	Corporate Governance
<i>CH</i>	Cash and Short-term Investments
<i>CoD</i>	Cost of Debt
<i>Coeff.</i>	Coefficient
<i>COM</i>	Compensation
<i>CON</i>	Accounting Conservatism
<i>CON_ACRU</i>	Unconditional Conservatism
<i>CON_TACC</i>	Conditional Conservatism
<i>CPS</i>	CFO Pay Slice
CRSP	Center for Research in Security Prices
<i>DIR</i>	Directors
<i>DIS</i>	Forecast Dispersion
<i>DQ</i>	Disclosure Quality
EPS	Earnings per Share
<i>EQ</i>	Earnings Quality
<i>ERR</i>	Forecast Error
<i>EW_BS</i>	Equally-Weighted Disclosure Quality of Balance Sheet Items

<i>EW_DQ</i>	Equally-Weighted Disclosure Quality
<i>EW_IS</i>	Equally-Weighted Disclosure Quality of Income Statement Items
<i>FASB</i>	Financial Accounting Standards Board
<i>FS</i>	Foreign Sales
<i>FSDQ</i>	Financial Statement Disaggregation Disclosure Quality
<i>GAAP</i>	Generally Accepted Accounting Principles
<i>GEN</i>	Gender
<i>GR</i>	Growth
<i>IASB</i>	International Accounting Standards Board
<i>IMR</i>	Inverse Mills Ratio
<i>IND</i>	Independent Director
<i>Ind. adj.</i>	Industry Adjusted
<i>IO</i>	Institutional Investors
<i>IV</i>	Instrumental Variable
<i>LEV</i>	Leverage
<i>LIQ</i>	Market Liquidity
<i>LIT</i>	Litigation
<i>MB</i>	Market-to-Book Ratio
<i>MKT</i>	Market
<i>MV</i>	Market Value
<i>N</i>	Number of Observations
<i>NED</i>	Non-Executive Directors
<i>NI</i>	Net Income
<i>OLS</i>	Ordinary Least Squares
<i>PCA</i>	Principal Component Analysis
<i>PR</i>	Profitability
<i>PRC</i>	Share Price
<i>PSM</i>	Propensity Score Matching
<i>Qual</i>	Qualifications
<i>RD</i>	Research and Development
<i>RET</i>	Return
<i>ROA</i>	Return on Assets
<i>RVOL</i>	Forecast Revision Volatility
<i>SEC</i>	Securities and Exchange Commission

<i>SEG</i>	Segments
<i>SH</i>	Shareholders
<i>SIC</i>	Standard Industrial Classification
<i>SKEW</i>	Skewness
<i>SOX</i>	<i>Sarbanes–Oxley Act</i>
<i>SPEC</i>	Specialisation
<i>SUR</i>	Earning Surprise
<i>SZ</i>	Firm’s Size
<i>t</i>	t-Statistics
<i>TA</i>	Total Assets
<i>TAN</i>	Tangibility
<i>US</i>	United States
<i>VLM</i>	Share Volume
<i>VOL</i>	Volatility
<i>VW_BS</i>	Value-Weighted Disclosure Quality of Balance Sheet Items
<i>VW_DQ</i>	Value-Weighted Disclosure Quality
<i>VW_IS</i>	Value-Weighted Disclosure Quality of Income Statement Items
<i>WRDS</i>	Wharton Research Data Services

Abstract

“Today’s CFOs must break away from the number-cruncher stereotype and think of themselves as more of a strategic player in the company. CFOs today need to be creative, understand best practices, and know how to create more value for the company”. - Bill Tobia, LLR Partners’ Managing Director of Strategic Finance (Fugazy, 2018)

This thesis examines the effect of chief financial officers (CFO) and their power on three determinants of financial reporting quality. CFOs supervise corporate financial reporting processes and are directly involved—more than any other senior managers of corporations—in accounting decisions and accounting adjustments (Ge, Matsumoto, & Zhang, 2011; Geiger & North, 2006; Gore, Matsunaga, & Yeung, 2011). Regulators and policy developers have investigated and clarified the required CFO positions in legal terms. For example, the *Sarbanes–Oxley Act (SOX) of 2002* recommends that the chief executive officer (CEO) and CFO must certify financial reports and improve the quality of financial reporting and internal control standards. CFOs and CEOs were the significant players in financial misreporting during significant accounting scandals, such as Enron, Tyco and WorldCom, though CFOs have received less focus and criticism for their engagement since the SOX period. Recently, ING and Huawei’s CFOs have been accused of involvement in accounting misreporting. While prior accounting and finance studies have investigated the effect of powerful CEOs on corporate and financial reporting decisions, comparatively little is known about how powerful CFOs influence financial reporting and corporate decisions. This is somewhat concerning given the crucial role that CFOs play in firms’ financial reporting process. Prior research has suggested that senior managers play dual roles—an agent role and/or a stewardship role—in corporate decision-making (Hiebl, 2015), although it is unclear which role dominates CFOs’ managerial authority and hence the determination of financial reporting choices.

Under efficient contracting hypothesis, CFOs are inherently motivated to pursue organisational goals (Francoeur, Melis, Gaia, & Aresu, 2017) and function as a ‘financial steward’, so they may function better and work in the interests of the firm’s shareholders and other stakeholders (e.g., Boivie, Lange, McDonald, & Westphal, 2011; Davis, Schoorman, & Donaldson, 1997). Conversely, rent extraction hypothesis assumes that powerful CFOs are more prone to self-interest and reaping the benefits of incentives and salary packages at the expense of shareholders (Fama & Jensen, 1983; Jensen &

Meckling, 1976). In particular, this thesis investigates whether powerful CFOs are driven by either efficient or opportunistic perspectives in their financial reporting choices. The thesis is divided into three aspects of financial reporting quality, with each one investigating the relationship between CFO power and separate determinants of financial reporting quality. The first aspect investigates the relationship between powerful CFOs and financial statement disaggregation disclosure quality. The second aspect examines the relationship between powerful CFOs and analyst forecast disclosure quality. The third aspect assesses the effect of CFO power on accounting conservatism.

For empirical analysis, data are collected from United States listed companies for the period 2003 to 2015, and the data are collected from several sources. Financial data—including firm variables, financial statement disaggregation and accounting conservatism data—are collected from Compustat-Capital IQ. Executive data are collected from ExecuComp, while corporate governance data are collected from BoardEx. Finally, analyst forecasts and stock return data are downloaded from the I/B/E/S and Center for Research in Security Prices (CRSP) databases, respectively. Ordinary least squares regressions are performed after controlling for year and industry, using robust standard error and firm clustering, and several sensitivity tests are conducted to provide evidence on the validity of the results. This thesis also conducts additional tests to mitigate potential endogeneity, selection bias and omitted variables issues.

The empirical findings are summarised as follows. First, this thesis finds that powerful CFOs improve the information environment and disclosure quality. Second, CFO power leads to higher (lower) analyst forecast accuracy (dispersion and revision volatility). The first two findings suggest that the quality of disclosure and information environment are higher for firms with powerful CFOs; thus, the level of individual CFO managerial power plays an economically significant role in CFOs' financial disclosure choices. Third, accounting conservatism is negatively related to powerful CFOs, which indicates that powerful CFOs are not conservative in accounting and financial decision-making. Further, the timeliness of bad news recognition is lower for firms with powerful CFOs.

This thesis contributes to the emerging literature on CFOs' role in financial reporting and disclosure choices in the post-SOX era, particularly in their exercise of power over financial reporting practices. This research extends the growing literature in the field of CFO power, especially in terms of the financial statement disaggregation, analyst

forecasts and accounting conservatism literature. In the context of monitoring intensity, a contribution is made by extending prior research in that combined board and audit monitoring intensity wields a significant effect on managerial influence and the quality of financial reporting (Ahmed & Duellman, 2013; Karamanou & Vafeas, 2005). The results documented here have implications for policymakers, regulators, investors, researchers and users of financial reports.

Statement of Authorship

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis accepted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Name: Lutfa Tilat Ferdous

Signature:

11th February 2020

Acknowledgements

I am greatly indebted to my Principal Supervisor, Professor Kamran Ahmed, and my Associate Supervisor, Professor Darren Henry, for their guidance and encouragement throughout the period of my candidature. I would like to especially thank Professor Kamran for being available to guide and support me at all times. Without his supervision and constant help, this dissertation would not have been possible.

I would like to thank Latrobe University for the funding support provided to me as a PhD candidate.

My doctoral thesis benefited from the comments of seminar participants at Latrobe University, the 2019 AFAANZ Doctoral Consortium and the 2019 Asia-Pacific Conference on International Accounting Issues.

I would like to acknowledge my husband, Ishtiaque Mahmood; my mother and siblings; and my PhD colleagues, Victoria Obeng, Dr. Teddy Ossei Kwakye and Michael, for all the support they have provided to me.

Finally, I would like to dedicate this dissertation to my father, Lutfor Rahman Sarker, who passed away suddenly in 2019. He was a source of great encouragement and inspiration to me throughout my life.

This thesis was edited by Elite Editing, and editorial intervention was restricted to Standards D and E of the Australian Standards for Editing Practice.

This work was supported by an Australian Government Research Training Program Scholarship.

Thesis-related Research Outcomes

Conference Paper

Ferdous, L. T., Ahmed, K., & Henry, D. (2019, July 6–9). *Who does disclosure choices? An empirical investigation of the effect of powerful CFOs on disclosure quality*. Paper presented at the 59th Annual AFAANZ Conference, Brisbane, QLD.

Ferdous, L. T., Ahmed, K., & Henry, D. (2019, October 13–17). *An empirical investigation of the effect of powerful CFOs on disclosure quality*. Paper presented at the 31st Asia–Pacific Conference on International Issues, Warsaw, Poland.

Academic Award

Vernon Zimmerman Best Paper Award, presented at the 31st Asia–Pacific Conference for International Accounting Issues, Poland, Warsaw, October 2019.

Chapter 1: Introduction

1.1 Introduction

The purpose of this thesis is to investigate whether powerful chief financial officers (CFOs) influence financial reporting quality and to understand their role in three different aspects of financial reporting choices. Regulatory bodies, the media and the capital market have concentrated on CFOs' responsibilities in implementing and circulating financial reporting. A substantial body of research investigates CFOs' influence on the determinants of firms' financial reporting. These studies primarily analyse whether CFOs' functions, compensation aspects and other relevant background characteristics affect firms' reporting choices. This thesis aims to provide evidence on whether powerful CFOs are associated with high- or low-quality financial reporting. The contribution is to explicitly reflect the level of CFOs' managerial power in determining the quality of firms' reporting decisions. This chapter begins by highlighting the research motivation, background and research gap. Section 1.3 describes the research questions, while Section 1.4 highlights the research findings and contributions. Section 1.5 outlines how the thesis is structured.

1.2 Thesis Motivation, Background and Research Gap

Prior research suggests that executives make financial reporting and related corporate decisions (e.g., Aier, Comprix, Gunlock, & Lee, 2005; Carter, Lynch, & Zechman, 2009; Francis, Huang, Rajgopal, & Zang, 2008; Ge et al., 2011; Huang & Kisgen 2013). However, there is a burning question regarding which factors mostly affect financial reporting, and, in investigating this question, this research considers certain manager-specific factors. The focus is on whether a powerful CFO's managerial role influences both decision-making duties and fiduciary responsibilities over financial reporting (Ge et al., 2011), as CFOs directly report to all senior managers about the firm's reporting processes (e.g., Ge et al., 2011; Geiger & North, 2006; Gore et al., 2011). Below is figure 1.1 which outlines the structure of the motivation for this thesis.

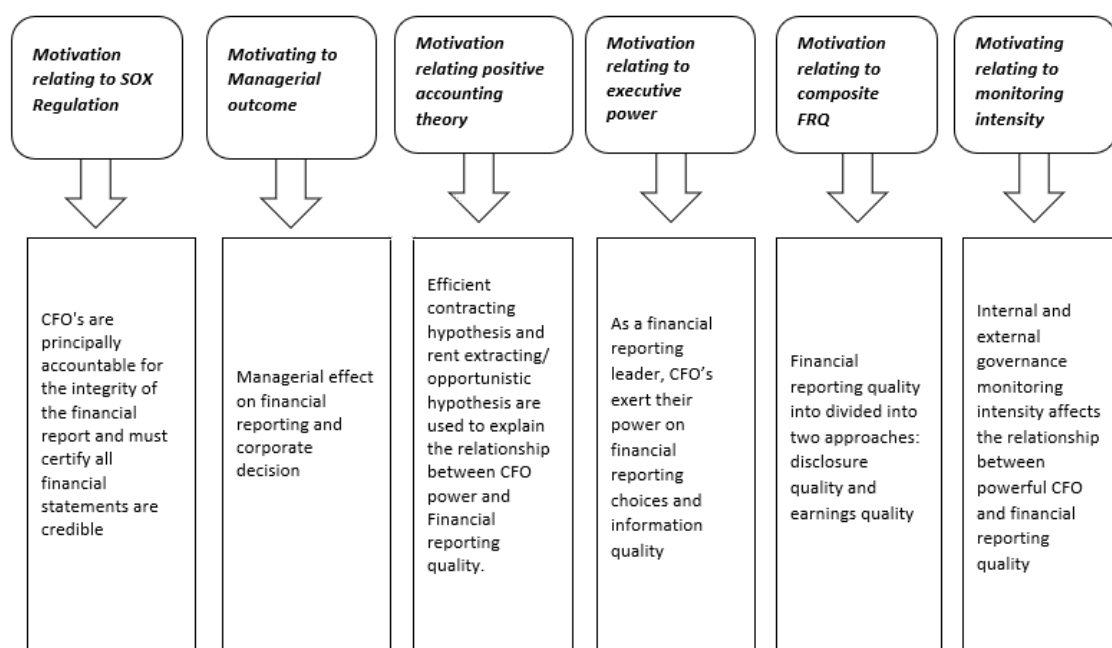


Figure 1.1: Thesis Motivation

Individual CFOs' functions and characteristics are likely to influence various strategies of financial reporting, including earnings, disclosure and audit quality, which influence investors' confidence in the firm's market value. Recent accounting literature has investigated individual CFO characteristics and their effect on the quality of financial reporting. Topics investigated include the effect of CFO gender on financial reporting choices (e.g., Barua, Davidson, Rama, & Thiruvadi, 2012; Francis, Hasan, Park, & Wu, 2015; Ge et al., 2011; Habib & Hossain, 2013; Liu, Wei, & Xie, 2016), how CFO expertise (accounting or financial expertise) affects financial reporting quality (e.g., Aier et al., 2005; Bamber, Jiang, & Wang, 2010; Loyeung & Matolcsy, 2015; Sun, Johnson, & Rahman, 2015), CFOs' role in earnings quality (e.g., Dichev, Graham, Harvey, & Rajgopal, 2013; Dowdell & Krishnan, 2004; Geiger & North, 2006), CFO turnover because of financial restatement and accounting manipulation (e.g., Burks, 2010; Collins, Masli, Reitenga, & Sanchez, 2009; Feldmann, Read, & Abdolmohammadi, 2009; Hennes, Leone, & Miller, 2008), the effect of CFO incentives and bonuses on financial reporting quality (e.g., Alali, 2011; Beaudoin, Cianci, & Tsakumis, 2014; Hui & Matsunaga, 2015; Jiang, Petroni, & Wang, 2010) and CFO influence on audit quality (e.g., Beck & Mauldin, 2014; Gibbins, McCracken, & Salterio, 2007; Hellman, 2011; Kannan, Skantz, & Higgs, 2014; Menon & Williams, 2008). These studies found that CFOs' individual characteristics, styles, preferences, incentives, degrees and motivation

degrees of dominance influence the quality of financial reporting. This research intends to add to the literature that assesses the effect of CFOs' managerial power on firms' reporting quality in terms of financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism.

Legislative reforms following the recent corporate scandals (i.e., WorldCom, Sunbeam and Tyco) highlighted the need for executive responsibility, so that financial reporting is ethical and accurate. The primary motivation of the *Sarbanes–Oxley Act (SOX) of 2002*, legislated in the United States (US), is to 'improve the accuracy and reliability of corporate disclosures made according to the securities laws' (US Congress, SOX Act, 2002). Indeed, the roles of CFOs as key executives are now much more important. The SOX Act resulted in several reforms in improving financial reporting quality, reduced managerial flexibility in financial reporting, and increased the oversight responsibility of chief executive officers (CEOs) and CFOs, who are accountable for producing accurate financial reports and internal control systems. Section 302 of the *SOX Act of 2002* states that the CEO and CFO are required individually to certify both quarterly and annual financial reports for accuracy and reliability. Further, SOX Act Section 302 mandates that CEOs and CFOs are accountable for 'establishing and maintaining internal controls'—thus making them primarily responsible for any failures of these systems (SOX Act, 2002, s. 302, 4.a). Internal controls related to the financial reporting process are explained by the Securities and Exchange Commission (SEC) (2003) as follows:

A process designed by, or under the supervision of, the registrant's principal executive and principal financial officers, or persons performing similar functions, and effected by the registrant's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Carter et al. (2009) explain that the SOX Act works in three categories: financial reporting oversight, enhanced disclosure and penalties for opportunistic behaviour. First, the CEO and CFO are principally accountable for the integrity of financial reports, and both must certify that all financial statement reports are credible to investors and are not misleading (SOX Act, 2002, s. 302). Second, this statute enhances the disclosure quality of financial reporting made available through executive instructions. The Public Company Oversight Board (PCOB) Title IV of US-based legislation proposes several reforms and new disclosure avenues, such as information on material off-balance sheet arrangements and

improved disclosures related to conflicts of interest (Carter et al., 2009). Third, there are also penalties for opportunistic behaviour, such as financial misreporting, fraud and aggressive accounting practices. The SOX Act also proposes that managers must compensate shareholders for any incentives they received (Carter et al., 2009).

The SOX has probably placed greater pressure on CFOs to engage in high-quality financial reporting, and this pressure can reinforce oversight and enhance the likelihood of recognising and preventing accounting misreporting and manipulations. CFOs now undertake a leading role in improving financial reporting accuracy and maintaining internal control compliance (e.g., Collins et al., 2009; Hoitash, Hoitash, & Johnstone, 2012; McConnell & Banks, 2003) and are more accountable in the post-SOX period (e.g., Carter et al., 2009; Collins et al., 2009). It is also expected that CFOs' increased accountability will reduce accounting manipulation as a consequence of the proper enforcement of the SOX Act (Cohen, Dey, & Lys, 2008; Li, Sun, & Ettredge, 2010; Zhang, 2007). Consistent with this notion, Chang, Chen, Liao, and Mishra (2006) hypothesise that CFOs' financial statement certification provides assurance to investors by producing credible and timely disclosure, which can reduce the information asymmetry between owners and management.

These legislation reforms have substantially improved financial reporting quality (Carter et al., 2009). Consequently, Indjejikian and Matějka (2009) find that public listed firms have reduced CFOs' bonuses and incentives, which are determined by firms' financial performance, in the post-SOX period. This suggests that SOX Act reforms have increased the integrity of financial reports and the penalties for non-compliance. Recent research also reports findings in the post-SOX era. For example, Jiang et al. (2010) suggest that the magnitude of accruals and the likelihood of beating analyst forecasts are more sensitive to CFO equity incentives in the post-SOX period. Hoitash, Hoitash, and Johnstone (2012) indicate that Internal Control Material Weakness disclosures are negatively associated with the change in CFO bonus compensation and are more noticeable in firms with stronger governance oversight procedures, compared with those with weaker oversight. In another study, Krishnan, Raman, Yang, and Yu (2011) suggest that a positive relationship exists between CFOs' social networking and earnings management in the post-SOX period. Consistent with these research findings, CFOs' influence over financial reporting in the post-SOX period remains a topic of ongoing

interest. This research extends this line of research and contributes to the rich literature in this area by examining powerful CFO influence on significant financial reporting after the SOX Act.

A universal characteristic of human attitude is that people establish and negotiate social group-based hierarchies that support people's power and reputation (Sidanius & Pratto, 2001). Dominant individuals are more motivated to reach their own goals despite the fluctuating quality of information (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). The management literature recognises managerial dominance and power as fundamental motives for a manager (Gordon, 2011). A significant number of prior studies have investigated the effect of CEO power on corporate decision-making (e.g., strategic, business, financial reporting) and firm performance (e.g., Cohen, Frazzini, & Malloy, 2012; Cormier, Lapointe-Antunes, & Magnan, 2016; Greve & Mitsuhashi, 2007; Tuggle, Sirmon, Reutzel, & Bierman, 2010). These studies assert that powerful CEOs exert managerial and hierarchical power over the board of directors and influence firms' corporate and financial decisions. Yet comparatively little is known about whether powerful CFOs influence financial reporting, particularly in the area of disclosure quality and accounting conservatism. Only a few studies in the accounting literature investigate the effect of CFO power on financial reporting choices. For instance, Beck and Mauldin (2014) examine whether CFOs dominate the audit fee negotiation process, while Collins, Fleischman, Kaden, and Sanchez (2017) suggest that powerful CFOs who hold onto shorter pay duration incentives are more likely to be related to a higher level of increasing accrual-based earnings management and real transactions management. Similarly, Baker, Lopez, Reitenga, and Ruch (2019) find that CFO power is closely linked with real earnings management. To the best of the current researcher's knowledge, the present study is the first by investigating whether CFO managerial power influences financial reporting quality in the context of financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism.

The two conflicting arguments of positive accounting theory—the efficient contracting hypothesis (efficient perspectives) and rent extraction hypothesis (opportunistic perspectives)—are used to explain the relationship between CFO power and the quality of financial reporting. These two arguments align with two well-established corporate governance theories: stewardship theory and agency theory.

While stewardship theory is motivated by psychology and sociology, agency theory is driven by the economic model (Albrecht, Albrecht, & Albrecht, 2004). Stewardship theorists propose that executives are motivated to become stewards of a firm's resources, rather than be opportunistic executives. They expect executives to guard and maximise shareholders' wealth and firm performance, and that such executives would seek intangible rewards, such as achievement, affiliation, self-actualisation, reputation or prospects for career growth, rather than seeking fully self-interest-based rewards, such as incentives, bonuses, higher compensation or share ownership (Davis et al., 1997; Hiebl, 2015). Similarly, the efficient contracting hypothesis suggests that managers are motivated by intrinsic satisfaction through performing responsibility and authority functions (Albrecht et al., 2004). Therefore, to augment their career and managerial reputation, managers are likely to deliver quality accounting reporting and information to users and investors (Fama, 1980; Francis et al., 2008; Hiebl, 2015). Prior research uses this theory to determine managerial attitude towards financial and corporate decision-making (e.g., Albrecht et al., 2004; Donaldson & Davis, 1991; Francis et al., 2008; Hiebl, 2015). Motivated by prior literature, this thesis proposes that powerful CFOs who are driven by stewardship philosophy are more likely to be involved in high-quality financial reporting processes (Fama, 1980).

In contrast to stewardship theory, agency theory explains the relationship between owners and managers. This owner–manager relationship involves mutual trust and delegated responsibilities to managers, but it is assumed that the manager could be opportunistic and self-interested and seek only short-term gains (Albrecht et al., 2004; Davis et al., 1997). This theory posits that managers who are driven by opportunistic role are motivated to act for self-interest, rather than the 'best interests of the firm' (Albrecht et al., 2004; Sundaramurthy & Lewis, 2003). Similarly, rent extraction hypothesis has an alternative view to managerial motivation that differs distinctly from the efficient contracting hypothesis (Donaldson & Davis, 1991). This hypothesis proposes that managers may choose low-quality accounting reporting and earnings quality inspired by opportunistic perspectives to increase their personal wealth, dominance and reputation (Albrecht et al., 2004; Francis et al., 2008; Hiebl, 2015; Malmendier & Tate, 2009). Graham, Harvey, and Rajgopal (2005) suggest that managers can manipulate accounts through earnings smoothing to maintain the firm's market reputation and position. Davis et al. (1997) contend that opportunistic managers are entirely motivated by extrinsic

incentives, such as high cash or stock compensation. Thus, prior research suggests that powerful CFOs manage earnings to promote their own personal incentives and gains (Baker et al., 2019; Collins et al., 2017). Motivated by the prior literature, this thesis argues that powerful CFOs who are driven by an opportunistic philosophy are more likely to be involved in low-quality financial reporting processes (Fama, 1980). Both theory and prior research suggest that managers play a dual role—either an efficient contracting role or rent extraction role—in corporate decision-making (Hiebl, 2015), yet it is unclear which role dominates in CFOs’ exercise of managerial power and determining financial reporting choices.

This thesis discusses three aspects of financial reporting: financial statement disaggregation disclosure quality,¹ analyst forecast disclosure quality² and accounting conservatism. To offer wider-ranging evidence of CFOs’ power over financial reporting quality, this study categorises financial reporting quality into two groups: (1) disclosure-related approaches and (2) earnings-related approaches. Regarding disclosure-related financial reporting approaches, financial statement disaggregation disclosure quality and analyst forecast disclosure quality are deemed important. For earnings-related financial reporting approaches, this study considers accounting conservatism. The first aspect of financial reporting considered is the financial statement disaggregation disclosure quality developed by Chen, Miao, and Shevlin (2015). Financial reporting transparency and reliability are made possible through enhanced disclosure quality, and they have received much attention from regulators and scholars. Prior research identifies that disclosure has some capital market incentives (Sundarasan, Goel, & Zulaini, 2017), such as reducing the expected cost of equity (Botosan & Plumlee, 2001), increasing liquidity (Welker, 1995), reducing bid–ask spread (Healy, Hutton, & Palepu, 1999) and improving disclosure policy (Huang & Zhang, 2011).

According to Durnev and Kim (2005), greater disclosure improves the corporate governance structure. Similarly, enhanced disclosure may limit agency cost through

¹ Financial statement disaggregation disclosure quality is a disclosure index using the financial statement data from Compustat Capital IQ.

² This thesis applies the properties of analyst forecast and analyst forecast disclosure quality interchangeably, as analyst forecast disclosure quality is an index that combines the properties of analyst forecast error, dispersion and revision volatility. This study is proxied financial statement disaggregation disclosure quality and analyst forecast disclosure quality as a disclosure quality. Further, this study applies the disclosure quality and information environment or information quality interchangeably.

controlling self-interested opportunistic managers from misusing organisational resources (Huang & Zhang, 2011) and allowing investors to monitor firms carefully. Chen et al. (2015) use financial statement disaggregation disclosure quality as a new measure of disclosure quality because finely produced disaggregated information leads to better quality information (Blackwell, 1951). Given that highly powerful CFOs can significantly influence corporate reporting quality, this thesis examines whether financial statement disaggregation disclosure quality is influenced by powerful CFOs.

The second aspect of this thesis examines analysts' forecast disclosure quality. Prior research suggests that good governance is related to improved levels of information for investors, analysts and other intended users of financial statements (Ajinkya, Bhojraj, & Sengupta, 2005; Eng & Mak, 2003; Jiraporn, Liu, & Kim, 2014, Karamanou & Vafeas, 2005). Financial analysts are important as economic agents and information intermediaries, who monitor a firm's financial information (Jiraporn et al., 2014); thus, they are effectively an important information channel between firms and investors. Better corporate governance firms are associated with delivering voluntary earnings forecasts and issuing more precise earnings forecasts (Ajinkya et al., 2005; Karamanou & Vafeas, 2005). As stated by Byard, Li, and Weintrop (2006), '[h]igher quality corporate governance is associated with financial analysts' having access to better quality information about upcoming earnings. Thus, analysts' forecasts are more accurate for better-governed firms' (p. 613). Investors and stakeholders are the users of analyst-supplied forecasts for their investment and valuation decisions.

External stakeholders use analyst-provided forecasts for their valuable strategic decisions; thus, analyst-issued forecasts are highly acceptable to them. If an analyst issues any incorrect forecasts to the market, a market participant may lose from their investment. This thesis develops analyst forecast disclosure quality following Hui and Matsunaga (2015), who combine analyst forecast error, forecast dispersion and the volatility of forecast revision—three key determinants of the properties of analyst forecasts. In line with this discussion, this thesis examines whether CFOs with a high level of power can significantly influence the quality of analyst forecast disclosure information.

The third aspect of financial reporting quality examined in this thesis is conditional and unconditional conservatism. Accounting conservatism is an essential principle of better-quality financial reporting that effectively mitigates managerial opportunistic behaviours

(Bushman, Piotroski, & Smith, 2011; Francis & Martin, 2010; Lafond & Roychowdhury, 2008). Accounting conservatism helps reduce information asymmetry (Chi, Liu, & Wang, 2009), enhance corporate governance structure (Ahmed & Henry, 2012) and control moral hazard (Ho, Li, Tam, & Zhang, 2015). Thus, conservatism can be a good way of monitoring managers' financial decisions, increasing managers' efficiency, reducing agency cost (Ball & Shivakumar, 2005; Watts, 2003) and protecting managers from litigation risk (Chung & Wynn, 2008). Thus, accounting conservatism requires higher confirmation to recognise good news, rather than bad news (Basu, 1997; Watts, 2003). Managerial decisions for accounting processes and estimates play a significant role in applying conservative accounting, and, as financial leaders, CFOs' accounting expertise and influence have a significant effect on firms' accounting conservatism. For example, Francis et al. (2015) investigate the influence of CFO gender on accounting conservatism, and find that accounting conservatism is relatively enhanced if a firm's CFO is a woman. This relationship is stronger 'or only exists when firms have higher litigation risk, default risk, systematic risk, or management turnover risk' (Francis et al., 2015, p. 1287). Accordingly, the third aspect of this thesis investigates the relationship between powerful CFOs and accounting conservatism.

Agency theory supports the view that governance monitoring mitigates managers' opportunist behaviour and facilitates growth in shareholder value (e.g., Coles, McWilliams, & Sen, 2001; Duellman, Ahmed, & Abdel-Meguid, 2013; Finegold, Benson, & Hecht, 2007). Ahmed and Duellman (2007) investigate the effects of internal monitoring on the relationship between conservatism. They suggest that good governance has a positive effect on accounting conservatism. In similar research, Duellman et al. (2013) find that executive incentive alignment controls opportunistic financial reporting choices (proxied by earnings management) for high and low monitoring intensity firms. Their findings suggest that the level of governance monitoring affects the relationship between equity incentives and earnings management. Consistent with these findings, this thesis investigates whether the level of monitoring strengthens or weakens the relationship between CFO power and financial reporting quality. Further, this thesis argues that governance monitoring intensity may restrict opportunistic CFOs' power and limit their ability to misreport financial information or improve their ability to produce high-quality reporting.

Although empirical research on CFOs has received increasing interest in recent decades, the accounting literature still knows less about CFOs than CEOs. One relatively unexplored question concerns the influence of CFO power on the quality of financial reporting. This study addresses that research gap by investigating the effects of powerful CFOs on financial reporting choices from the perspectives of financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism.

1.3 Research Questions

This thesis addresses two broad questions regarding the underlying relationship between powerful CFOs and financial reporting quality. The first objective of this study is to investigate the effect of powerful CFOs on financial reporting quality. The second objective is to examine whether the level of governance monitoring intensity strengthens or weakens the relationship between CFO power and reporting quality. Within the framework of the research objectives, the following four research questions are asked and empirically tested in this thesis.

First, financial statement disaggregation disclosure may influence investors' ability to interpret financial information precisely (Esplin, Hewitt, Plumlee, & Yohn, 2014; Hirshleifer & Teoh, 2003) and enhance the predictive content of reported earnings. Although financial disaggregated reporting decisions are still voluntary for firms, managers should take the initiative to issue information according to the standard-setter and regulator when financial information is required (Heitzman, Wasley, & Zimmerman, 2010). Recent accounting literature suggests that managerial decisions regarding financial statement disaggregation influence financial reporting. For example, Libby and Brown (2013) find that voluntary disaggregation limits the average amount of errors tolerated in financial statements. Therefore, correctly produced disaggregated financial data increase investors' predictive power on the simplified financial component (FASB, 1984) and lead to higher quality financial information (Blackwell, 1951). CFOs can undertake a crucial voluntary role in issuing well-produced financial statements of disaggregated information; therefore, it is likely that powerful CFOs prefer to engage in quality corporate disclosure to safeguard their position, reputation and financial/reward incentives. Relying on the above arguments, the following research question is developed:

RQ1: Do powerful CFOs influence financial statement disaggregation disclosure quality?

Second, when financial analysts ‘appropriately assess a company’s financial performance, the reported accounting earnings must closely reflect the economic reality of the organization’s financial activity’ (Krishnan & Parsons, 2008, p. 65). Consistently, the corporate governance structure is essential for analysts to understand the integrity and credibility of financial reporting information and, through using this information, issue precise forecasts for future earnings (Bhat, Hope, & Kang, 2006). The properties of analysts’ forecasts are associated with the quality of future earnings and financial information delivered by firms (Behn, Choi, & Kang, 2008; Byard et al., 2006; Gul, Hutchinson & Lai, 2013). Given that CFOs wield an influential role on the financial reporting process and information disclosure standards, the forecast properties are influenced by powerful CFOs through their effect on information quality and the information environment between firms and markets. Thus, this thesis investigates the relationship between powerful CFOs and analyst earnings forecast properties, which leads to the following question:

RQ2: Do powerful CFOs influence analyst forecast disclosure quality?

Third, conservative accounting enhances the quality of the corporate governance structure. Lara, Osma, and Penalva (2007) suggest that better corporate governance increases the level of accounting conservatism. Koh (2011) presents evidence that celebrity CEOs report better firm performance and exhibit a higher level of conservatism. However, Ahmed and Duellman (2013) present empirical evidence that overconfident CEOs are responsible for non-conservative accounting practices, such as less timely recognition of bad news and high net assets. CFOs are considered significant partners in corporate governance and can influence financial reporting decisions. Previous research provides evidence that CFOs with different characteristics influence the quality of accounting conservatism decisions. Francis et al. (2015) suggest that CFO characteristics (gender) affect financial reporting decisions in the context of accounting conservatism. Their empirical evidence indicates that appointing a female CFO increases the level of accounting conservatism, as compared with a male CFO. A CFO with great power and authority, as the financial reporting leader, can affect accounting conservatism decisions. Several studies report that accounting conservatism is influenced by CFOs (Geiger &

North, 2006; Mian, 2001; Vafeas, 2009). Relying on this argument, the following research question is developed:

RQ3: Do powerful CFOs influence accounting conservatism?

Finally, high-quality governance lessens agency problems and conveys better financial reporting choices. The level of corporate governance structure—such as an independent board of directors, internal and external audit effectiveness, or institutional shareholders—can monitor and correct the negative effects of opportunistic managerial attitudes (Ahmed & Duellman, 2013) and enhance financial reporting decisions. The corporate governance literature shows that an independent, expert board and audit committee enhance the quality of reporting (e.g., Byard et al., 2006; Eng & Mak, 2003; Forker, 1992). Consistent with previous studies, this thesis examines whether monitoring intensity (a combination of board and audit committee monitoring) enhances the quality of financial reporting and reduces distortions in accounting information when firms' CFOs are powerful. Relying on this argument, the following research question is developed:

RQ4: Is the association between CFO power and financial reporting quality positively or negatively influenced by the level of high versus low degrees of monitoring intensity?

1.4 Thesis Key Findings and Contributions

This thesis examines the influence of CFO power on financial reporting quality. Notably, three accounting and market-based aspects are considered as financial reporting determinants. All three aspects investigate the relationship between CFO power and different determinants of financial reporting quality in the US context. The sample covers the years 2003 to 2015 for all US listed firms from the Wharton Research Data Services (WRDS) database for empirical analysis. The year 2003 is selected as the first year for data collection and analysis because the SOX Act became effective in 2003, which increased CFOs' responsibilities. This statute introduced legislated improvements to financial reporting quality and corporate governance in US publicly listed firms (Coates

& Srinivasan, 2014). Table 1.1 provides a synopsis of the main findings of all three determinants of financial reporting.

Table 1.1: Overview of Research Findings

Determinant	Hypothesis	Accepted
Financial statement disaggregation disclosure quality (FSDQ)	Powerful CFOs are positively associated with better quality financial statement disaggregation disclosure	H _{1a}
Analyst forecast disclosure quality (AFDQ)	Powerful CFOs are positively associated with better quality analyst forecast disclosure	H _{2a}
Conditional and unconditional accounting conservatism (CON)	Powerful CFOs are negatively associated with accounting conservatism	H _{3b}
Monitoring	The relationship between CFO power and financial reporting quality is stronger when low monitoring intensity is evident	H _{4b}

A brief synopsis of the thesis contributions is as follows. This thesis contributes to the accounting literature in several ways. Corporate governance literature suggests two conflicting arguments in understanding the attitude of powerful managers towards corporate and financial reporting decisions. For example, powerful CFOs may act in the best interests of a firm's long-term goals and shareholders' wealth (stewardship theory/efficient contracting hypothesis) and improve overall financial reporting quality (e.g., Demerjian, Lev, Lewis, & McVay, 2013; Hiebl, 2015). Conversely, CFOs with high power may be driven by opportunistic behaviour (agency theory/rent extraction hypothesis) and may deteriorate the quality of accounting reports because they seek more money or cash bonuses (Fama & Jensen, 1983; Jensen & Meckling, 1976).

This thesis finds that H₁ (financial statement disaggregation disclosure quality) and H₂ (analyst forecast disclosure quality) support the efficient contracting hypothesis, although H₃ (accounting conservatism) complements the rent extraction hypothesis. Therefore, powerful CFOs act as stewards to deliver better quality information for the firm, although powerful CFOs' motivation can vary when issuing conservative accounting and delivering a non-conservative accounting choice for firms' reporting decisions. The findings conclude that CFO power is associated with high-quality financial reporting in the context of disclosure quality—financial statement disaggregation disclosure quality and analyst forecast disclosure quality. However, powerful CFOs can also extremely

compromise the quality of financial reporting quality in the practice of accounting conservatism. Therefore, this thesis contributes to the literature on the two different theoretical viewpoints regarding CFOs' power and the philosophies by which they operate (Coles et al., 2001). These results are consistent irrespective of alternative measurements of disclosure quality (bid–ask spread, liquidity, cost of debt and individual attributes of analyst forecasts), the conditional (sensitivity of earnings to returns and persistence of earnings changes model) and unconditional (skewness and market model) accounting conservatism model and other additional analyses.

Karamanou and Vafeas (2005) find that firms with effective corporate governance (existence of strong board and audit structures) are more likely to be associated with a higher quality reporting and information environment. The monitoring intensity hypothesis suggests a positive relationship between financial statement disaggregation quality and analyst forecast disclosure quality with powerful CFOs for both high- and low-quality governance monitoring settings. Similarly, in the context of monitoring intensity, this thesis contributes the finding that the governance monitoring system (effectiveness of board and audit structures) is associated with powerful CFOs engaging in better quality corporate disclosure (Ahmed & Duellman, 2013; Karamanou & Vafeas, 2005). However, this research finds that the relationship between powerful CFOs and disclosure quality is stronger and significant when firms experience lower monitoring intensity. This result suggests that powerful CFOs are strongly associated with firm's information environment and disclosure quality, and that the firm does not require a high-quality governance structure when firm is supervised by a powerful CFO. This study reports negative relationship between powerful CFOs and accounting conservatism, as this study finds a negative and significant association between powerful CFOs and accounting conservatism when firms practise a lower level of governance monitoring structures.

CFOs' innate characteristics can also determine financial reporting decisions (e.g., Barua et al., 2010; Duong & Evans, 2016; Francis, Hasan, & Wu, 2013), and financial reporting quality can vary with regard to CFOs' diverse demographic characteristics. Further, prior research extensively suggests that the relationship between CFO compensation and incentives can influence financial reporting (Balsam, Irani, & Yin, 2012; Collins et al., 2017; Hossain & Monroe, 2015). Consistent with this, Hoitash et al. (2012) show that

CFO incentives are negatively related to the disclosure of internal control weaknesses. This thesis contributes to the argument that CFOs' diverse demographic factors and high compensation and incentives complement rather than restrict the significant relationship between powerful CFOs and financial reporting practices.

This thesis argues that the effect of powerful CFOs' on disclosure choices and the information environment are likely to vary based on diverse firms' characteristics, particularly the firm's sales growth level. Khurana, Pereira, and Martin (2006) suggest that growing firms follow stronger disclosure policies. Similarly, Hui and Matsunaga (2015) find that the positive relationship between executives' (both CEOs and CFOs) bonuses and the quality of firm disclosure is strengthened by firms' business growth conditions. This thesis contributes to the prior literature that asserts that high-growth firms display a stronger relationship between powerful CFOs and disclosure quality.

From the organisation hierarchical viewpoint, CEO power overshadows CFO power (Adams, Almeida, & Ferreira, 2005; Feng, Ge, Luo, & Shevlin, 2011; Finkelstein, 1992) and, using this power, CEOs may place pressure on CFOs to manipulate financial reporting (Dichev et al., 2013; Fink, 2002). Consistent with this argument, CFOs may deliver lower quality earnings, such as restatement, manipulation, or meeting or beating earnings benchmarks (Feng et al., 2011; Jiang et al., 2010), because of this pressure from the CEO. This thesis contributes to the literature by providing evidence on how sound governance quality is associated with corporate reporting choices and disclosure practices. This thesis presents evidence that power is not inherently centralised in CEOs; rather, CEO power complements the relationship between the quality of financial reporting and powerful CFOs.

This thesis contributes to the literature on CFO power and financial reporting quality as measured by financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism. The empirical evidence shows that CFO power negatively affects accounting conservatism and positively affects information quality, thereby suggesting a number of policy implications for regulators and policymakers. The policy implications are discussed in the conclusion chapter. Moreover, agency theory and stewardship theory are used as theoretical frameworks to understand managerial opportunism or efficient motivations when financial decisions are being made. In addition, this thesis introduces a unique corporate governance setting—

executive power in terms of CFOs, and the degree of governance monitoring intensity in CFOs' managerial corporate and financial activities.

1.5 Thesis Structure

This thesis is divided into six chapters. Following this introductory chapter, Chapter 2 provides some understanding of the prior literature on CFOs' functions, compensation and characteristics that influence the determinants of financial reporting. The second part of the chapter then discusses financial reporting and introduces three determinants of financial reporting quality. The chapter concludes with a discussion of the prior literature, and focuses on how the three determinants of financial reporting quality are linked with corporate governance.

Chapter 3 provides the theoretical framework applied in this thesis to understand the relationship between powerful CFOs and financial reporting quality. Two established corporate governance theories are discussed: agency theory and stewardship theory. These two theories are aligned with the opportunistic perspectives/rent extraction hypothesis and efficient perspective/efficient contracting hypothesis of positive accounting theory. This chapter also discusses how these theories are related to the relationship between powerful CFOs' attitudes towards financial reporting choices, discussing that CFOs can play either an opportunistic perspective/agent role or an efficient perspective/steward role, depending on which philosophy the powerful CFO follows.

The second part of the chapter develops hypotheses to empirically examine the effect of powerful CFOs and financial reporting quality. This thesis develops four hypotheses to investigate the relationship between powerful CFOs and financial reporting quality. Each hypothesis explains the relationship between variables under two perspectives/theories—opportunistic/agency and efficient/stewardship—and expects a positive relationship between these variables under efficient perspectives, and a negative relationship under opportunistic perspectives. The first hypothesis argues that there is a relationship between powerful CFOs and financial statement disaggregation disclosure quality. The second hypothesis argues that there is a relationship between powerful CFOs and analyst forecast disclosure quality. The third hypothesis examines the relationship between accounting

conservatism and powerful CFOs. The fourth and final hypothesis tests whether the relationship between powerful CFOs and financial reporting quality is strengthened or weakened by high versus low governance monitoring intensity.

Chapter 4 outlines the research design, methods and research models employed in this study. The sample selection procedure is first discussed, and then the description and justification of the sample are provided in the next section. The sources of data are then provided. This chapter also describes how this study measures the key dependent, independent and control variables used for the regression models, and then reports the research models for the financial statement disaggregation disclosure quality (*FSDQ*) score, analyst forecast disclosure quality (*AFDQ*) and the measure of conditional and unconditional accounting conservatism (*CON*). The first two determinants of reporting quality serve as proxies of disclosure quality, while the third determinant is a proxy for earnings quality. And, discusses the econometric issues for endogeneity. The chapter ends with an introduction of the additional analysis models.

Chapter 5 is organised into four parts: descriptive statistics, empirical results, alternative measurement of reporting quality and other additional analyses. The first part reports the descriptive statistics and provides a correlation matrix to identify any potentially harmful levels of multicollinearity. The second part provides the empirical results of the ordinary least squares (OLS) regressions used to test the hypotheses. The results are documented for H_1 , H_2 , H_3 and H_4 . The third part provides several tests to validate the relationship between powerful CFOs and financial reporting quality. This thesis develops an alternative measurement of the information and accounting reporting quality of a firm based on existing literature, and how they could be systematically related to CFO power. Several tests produce further views on how the degree of CFO power is associated with financial reporting quality. These tests serve as a starting point for future researchers interested in investigating CFO power as a managerial influence on firms' strategic operational and financial decisions. These tests include the following:

1. whether diverse demographic characteristics, higher compensation perspectives and powerful CEOs influence, complement or disrupt the relationship between powerful CFOs and the quality of financial reporting

2. whether CFO power influences individual analyst forecast variables (forecast accuracy, dispersion, bias, revision volatility) and other alternative proxies of disclosure quality (bid–ask spread, cost of debt, market liquidity).

The final analysis presents an alternative measure of conditional and unconditional accounting conservatism. The last part of Chapter 5 reports the endogeneity analysis results to understand whether the results/variables relationships are biased or influenced by endogeneity issues. This thesis addresses the potential endogeneity of powerful CFOs and the quality of reporting in five ways. First, fixed-effect panel regression is used, which is a reliable technique in mitigating endogeneity with the relationship between reporting choices and governance relationship (e.g., Bozec, Dia, & Bozec, 2010; Cheung, Jiang, & Tan, 2010). Second, the Heckman self-selection model is used. Third, the propensity score matching (PSM) method is applied. Fourth, two-stage least squares (2SLS) regression instrument variables are examined to correct potential endogeneity issues. These results are robust with baseline regression models.

Finally, Chapter 6 summarises the findings of the thesis and reaches certain conclusions about the topic. This chapter also acknowledges the limitations of the study, outlines the thesis implications and presents recommendations for future research.

Chapter 2: Literature Review

2.1 Introduction

The previous chapter discussed the motivation for studying this topic and the research background, gap, questions and findings, as well as the contributions this study aims to provide. This literature review chapter is structured into two parts. The first part discusses the CFO literature from the perspectives of financial reporting, CFO compensation, CFO background and expertise factors, and CFO turnover. The second part defines CFO power and introduces the determinants of financial reporting quality, and then discusses the relationships between financial reporting and corporate governance.

2.2 Importance of CFOs for Quality Financial Reporting

While there is extensive body of research on CEOs and their influence on the quality of financial reporting, studies on CFOs and financial reporting quality are limited. Compared with CEOs, CFOs are responsible for all financial reporting matters, accounting standard implementation, financial performance, information disclosure and financial management issues (Aier et al., 2005; Geiger & North, 2006; Li, Sun, & Ettredge, 2010). The enactment of the SOX Act in the US in 2002 reinforced the importance of CFOs as corporate managers. Section 302 of the *SOX Act of 2002*, titled ‘Corporate Responsibility for Financial Reports’, suggests that both CEOs and CFOs of publicly listed companies are personally accountable for the appropriateness, accuracy and completeness of financial reporting.

Financial reporting quality is considered a significant factor of ‘efficient resource allocation’ through capital markets (Habib & Hossain, 2013, p. 96). CFOs’ role is crucial in decision-making with reference to the quality of financial reporting. It is certainly the case that CFOs are different from other senior executives, as set out in the SOX regulations (Bedard, Hoitash, & Hoitash, 2014; Hoitash, Hoitash, & Johnstone, 2007). First, CFOs are responsible for ensuring that shareholders’ interests are protected (Graham et al., 2005), Second, CFOs hold sophisticated and sensitive financial information, compared with CEOs. Given that firms’ financial strategies are more strongly controlled by the CFO, CFOs are more conversant with confidential financial information (Wang, Shin, & Francis, 2012). Third, following Bourdieu’s (1977) theory

of practice, Baxter and Chua (2008) argue that CFOs' accounting and financial technical skills differ from the CEO's skillset. They conclude that CFOs hold two skills that enrich CFOs' control over financial reporting matters: technical accounting skills and '[i]nterpersonal, situational and political competencies' (Baxter & Chua, 2008, p. 226). Fourth, CFOs greatly influence firms' management practices, and other studies support these findings (Golden, Dukerich, & Fabian, 2000; Naranjo-Gil, Maas, & Hartmann, 2009).

Gore et al. (2011) suggest that CFOs have greater financial, accounting and industry-related expertise than do other senior executives, such as CEOs and board directors, which may motivate them to provide more asymmetric information and engage in opportunistic behaviours through earnings manipulation. In this case, dishonest CFOs may strive to create information asymmetry and financial misreporting for their own benefit (Collins et al., 2009; Copeland, 2002; Feng et al., 2011). Wang et al. (2012) observe some interesting findings about CFOs and future earnings. They show that CFOs produce an average higher abnormal return (12-month excess return that is 5% higher) following their purchases of firms' shares. They further suggest that CFOs ensure more positive future earnings and better earnings information than do CEOs. These results suggest that, as a corporate financial reporting supervisor, CFOs' equity incentives for inflating earnings are stronger than for CEOs (Jiang et al., 2010). Thus, CFOs' certification requirement in the SOX Act should deter their opportunistic earnings manipulation and suggest that they should be more conservative and less aggressive in accounting decision-making (Lobo & Zhou, 2006).

2.2.1 Definition of CFO Power

Power is often defined as a form of non-linear governance over valuable possessions and procedures within a firm in a specific situation, and established relations in obtaining important outcomes (Galinsky et al., 2008; Keltner, Gruenfeld, & Anderson, 2003; Magee, Galinsky & Gruenfeld, 2007). Galinsky et al. (2008) explain power as follows: '[as a] control mechanism, power often involves putting pressure on others, driving others to do the things that will help the powerful accomplish their own objectives' (p. 1451). This study is inspired by the SOX reforms, which aim to improve the credibility and quality of financial reporting, predominantly in terms of demanding that CFOs certify the annual and interim financial reports. In a firm in which the CFO wields dominant power,

the CFO is a significant player and strongly influences all financial reporting decisions and outcomes. CFO power designates how much financial reporting decision-making power is concentrated in that person's hands. Highly powerful CFOs have the capacity to influence others (Galinsky et al., 2008).

There are multiple contexts for the concept of power, some of which are not directly measurable. Finkelstein (1992) identifies four sources of executive power: structural power, ownership power, expert power and prestige power. This research does not consider prestige power. Tang, Crossan, and Rowe (2011) argue that prestige power is not an applicable variable in explaining executive power, compared with other proxy variables. Elias (2008) explains power by using French and Raven's (1959) taxonomy, which consists of reward, coercion, expertise and referent power. This study focuses on structural power and expert power, and these are combined with referent power and expert from the French and Raven (1959) model.

2.2.2 CFO, Earnings and Financial Reporting Quality

Numerous studies have investigated firm-specific factors and earnings quality (Ashbaugh-Skaife, Collins, Kinney, & Lafond, 2008; Dechow & Dichev, 2002). This thesis seeks to investigate managerial-specific factors and financial reporting quality (Demerjian et al., 2013; Francis et al., 2008; Ge et al., 2011; Jiang et al., 2010). Prior research suggests that CFOs are the most influential promoters of earnings and deliver 'unique insights on earnings quality' (Dichev et al., 2013, p. 2). Among other managers, CFOs are primarily responsible for the financial reporting process and reported earnings quality (Mian, 2001). The accounting literature shows the distribution of CFOs' financial decision-making power and ability within the senior management team to influence financial reporting choices (Beck & Mauldin, 2014; Collins et al., 2017; Demerjian et al., 2013; Ge et al., 2011). CFOs 'make the key decision how to apply accounting standards in their company' and 'have a formal background in accounting, which provides them with keen insight into the determinants of earnings quality' (Dichev et al., 2013, p. 2).

Earnings management and discretionary accounting accruals are considered as lower quality earnings (Myers, Myers, & Omer, 2003; Wang, 2006). Schipper (1989) defines earnings management as 'a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely

facilitating the neutral operation of the process)’ (p. 92). Prior research presents evidence that managers such as CFOs are more likely to engage in earnings management when they are able to receive performance-vested stock options compensation (Kuang, 2008). Compared with CEOs, the magnitude of accruals and propensity to target earnings forecast are more strongly related with CFOs’ equity incentives (Jiang et al., 2010). Discretionary accruals increase when the CFO has incentives to speed up earnings, yet will decline when CFOs are less incentives to increase earnings (Alali, 2011). Dejong and Ling (2013) investigate 37-year data of individual executive roles in accruals and firm policies, and suggest that CEOs are more likely to affect accruals through business policy decisions, while CFOs are more likely to affect accruals through accounting decisions. Geiger and North (2006) suggest that discretionary accruals can curtail the immediate appointment of a new CFO. An increase in the CFO’s risk-reducing (enhancing) incentives is positively related with smoothing of earnings increases (decreases) (Chava & Purnanandam, 2010).

Like discretionary accruals, meeting and beating earnings targets is considered earnings management. The accounting literature shows evidence that CFOs opportunistically structure non–generally accepted accounting principles (GAAP) earnings to ensure they meet or beat earnings targets. Survey-based research on 400 CFOs by Dichev, Graham, Harvey, and Rajgopal (2016) explains that the three motivations of earnings misrepresentation are to influence stock price, to beat earnings targets and to aim for executive compensation.

Erhemjamts, Gupta, and Tumennasan (2009) suggest that earnings surprises are positively related with CFO compensation and incentives. Consistent with this, Mergenthaler, Rajgopal, and Srinivasan (2012) observe that missing quarterly earnings benchmarks will have negative career consequences for both CEOs and CFOs, resulting in their dismissal or reduced incentives or salary. Demerjian et al. (2013) present empirical evidence of CFOs’ ability to influence earnings quality. They suggest that more capable CFOs are less likely to result in subsequent restatement, higher persistence of earnings and accruals, fewer errors in the bad debt provisions, and better-quality accruals estimations. These findings are consistent with individual executive characteristics’ effects on organisational performance.

2.2.3 CFO Incentives and Financial Reporting Quality

The SEC in the US is concerned about executive compensation incentives that may negatively influence financial reporting. Recently, the SEC amended the disclosure rules on executive compensation by requiring firms to disclose CFO compensation. Over a decade ago, the SEC (2006) proposed that:

compensation of the principal financial officer is important to shareholders because along with the principal executive officer, the principal financial officer provides the certifications required with the company's periodic reports and has important responsibility for the fair presentation of the company's financial statements and financial information. (p. 117)

Disclosure of CFO compensation is regulated by the SOX and SEC regulations. It is expected that the implementation of SEC regulations related to executive compensation disclosure and SOX reforms will curtail earnings management and encourage firms to place greater weight on earnings outcomes by offering bonus contracts (Carter et al., 2009).

Recently, there has been increased emphasis on the relationship between CFOs' additional obligations and CFOs' compensation following SOX. CFOs' accountability and responsibilities increased CFO pay in the post-SOX period (Indjejikian & Matějka, 2009; Wang, 2010). CFOs' incentives play a significant role in explaining accounting decisions, such as accruals management, accounting policy choices and execution (Chava & Purnanandam, 2010; Jiang et al., 2010). This relationship is stronger for CFOs than for CEOs (Dejong & Ling, 2013; Jiang et al., 2010).

Prior research suggests that executives' incentives influence earnings manipulation behaviour (Burns & Kedia, 2006; Ibrahim & Lloyd, 2011). Gul et al. (2013) state that 'accruals may be used opportunistically by managers to conceal poor performance and/or to postpone a portion of unusually high current earnings to future years' (p. 444). Hossain and Monroe (2015) classify the relationship between short- and long-term incentives and earnings management, and their findings contend that there is a positive and significant association between long-term compensation (share plus option) and the absolute value of discretionary non-current accruals. Alternatively, short-term compensation (cash bonus) is a sign of a significant and positive relationship between discretionary current accruals. Beaudoin et al. (2015) present research on the effect of CFOs' incentives on earnings management ethics (EM-Ethics) (high versus low ethics, measured as the

ethicalness of key earnings management motivations related to financial reporting decisions). They find that incentive conflict and EM-Ethics interact in a way that influences CFOs' discretionary accruals, such that:

1. in incentive conflict, CFOs with weak (strong) EM-Ethics are inclined to comply with (persist) individual incentive by engaging higher (lower) expense accruals
2. where there is no incentive conflict, CFOs with weak (strong) EM-Ethics tend to provide (persist) corporate incentive by engaging in lower (higher) expense accruals.

CFOs are cumulatively rewarded when they manage earnings expectations and/or discretionary accruals to meet and beat earnings expectations (Balsam et al., 2012). Thus, CFO compensation is significantly related to earnings expectations (Erhemjamts et al., 2009).

2.2.4 CFO Characteristics and Financial Reporting Quality

CFO characteristics and professional expertise are important determinants of financial reporting outcomes (Habib & Hossain, 2013). Naranjo-Gil et al. (2009) show that younger, less tenured and more business-oriented CFOs are innovative. They also find that CFO characteristics moderate the extent of strategic innovation orientation. CFOs' foundation role combines 'practical knowledge' (such as technical accounting practices) and 'generic individual characteristics' (age, gender, education) (Baxter & Chua, 2008). Recent research suggests a relationship between CFO characteristics and earnings quality (measured by earnings restatement, earning management and abnormal accruals). Xu and Zhao (2016) investigate improvements in financial expertise among CFOs hired following restatements, and find that restating firms are more likely to hire new CFOs with greater accounting knowledge and better qualifications (good accounting knowledge and employment) than are non-restating firms. Further, they also find that the number of restatements can lessen after the appointment of qualified CFOs. Similarly, Aier et al. (2005) find that CFOs have financial expertise, such as a Master of Business Administration, while certified public accountants are significantly less likely to restate their earnings.

According to the SOX regulations, a CFO is required to maintain financial process integrity. With regard to reputation and economic incentive, talented CFOs are more

likely to undertake better financial reporting than are less talented ones (Graham et al., 2005; Loyeung & Matolcsy, 2015). Similarly, Matsunaga and Yeung (2008) observe that CEOs who are ex-CFOs are involved in more income-decreasing accruals and present more precise earnings guidance than do CEOs without financial experience. CFOs are accountable for resolving complex accounting issues. These issues might require rigorous analysis via the specialised knowledge and expertise of the people involved. Gore, Matsunaga, and Eric Yeung (2011) provide evidence that executives with financial expertise seek to use lower level incentive-vested compensation packages for their financial officers. This evidence shows that financial expertise provides stronger oversight and proper direction relating to accounting policies, choices and strategies. It results in firms reducing their reliance on contractual incentives to control potential agency problems.

CFOs' personal backgrounds can influence their unique voluntary disclosure styles and financial reporting (Bamber et al., 2010). CFO-specific factors explain a firm's earnings-related and disclosure-related reporting practices and styles (Ge et al., 2011). Duong and Evans (2016) find that female CFOs are more conservative, risk sensitive and motivated to deliver high-quality financial reporting than are male CFOs. They also observe that female CFOs are less involved in accruals and real earnings management. Similarly, Barua et al. (2010) and Peni and Vähämaa (2010) find that female CFOs produce higher quality accruals than do male CFOs in US firms. Meanwhile, in Chinese firms, female CFOs exhibit higher abnormal discretionary expenditures, lower discretionary accruals, lower total accruals and lower abnormal production costs than do their male counterparts (Y. Liu et al., 2016). These results suggest that female CFOs are more cautious, more risk averse, more conservative and act more authoritatively in improving earnings quality and financial reporting choices (Barua et al., 2010; Duong & Evans, 2016; Francis, Hasan, & Wu, 2013; Francis, Hasan, Wu, & Yan, 2014; Srinidhi, Gul, & Tsui, 2011). In other research, Francis et al. (2015) examine the influence of CFO gender on financial reporting choices in the context of accounting conservatism. They suggest that accounting conservatism is enhanced by firms having female CFOs, rather than male CFOs. The relationship is stronger when firms exhibit higher risk because of default risk, systemic risk, litigation risk and executive turnover risk. In this case, risk has a moderating effect on the association between CFO gender and conservatism.

2.2.5 CFO Career, Turnover and Financial Reporting Quality

The SOX requires that CEOs and CFOs must certify financial reporting and prevent financial reporting manipulation through good internal controls. Auditing Standard Number 5 defines a material weakness as ‘a deficiency, or a combination of deficiencies ... such that there is a reasonable possibility that a material misstatement of the firm’s financial statements will not be prevented or detected on a timely basis’ (PCAOB, 2007, para. A7, pp. A1–43). Researchers suggest that firms’ internal controls are highly dependent on the CFO’s reporting choices. Therefore, CFO turnover is higher after the disclosure of internal material weakness (Hermanson & Ye, 2009; Li et al., 2010) and CFO bonus and compensation are reduced because of the existence of weak internal controls (Hoitash et al., 2012; Indjejikian & Matějka, 2009). Mian (2001) asserts that penalties such as CFO dismissals occur because of firms’ poor financial performance. Managers might be ‘penalised’ in the form of internal and external punishment, where internal punishment refers to management turnover and external punishment refers to ‘the subsequent ex-post settling up in the managerial labour market’ (Desai, Hogan, & Wilkins, 2006, p. 84).

The accounting literature reports that corporate executives artificially restate their company’s profit to show they are more profitable to investors (Ettredge, Scholz, Smith, & Sun, 2010; Richardson, Sloan, Soliman, & Tuna, 2006; Wu, 2002). Thus, the cost side of earnings restatement affects CFOs’ jobs and careers. Mergenthaler et al. (2012) show that missing quarterly earnings expectations might have negative consequences for CFOs’ forced turnover and career concerns. Feng et al. (2011) analyse the costs to CFOs if they are caught manipulating financial reports. They suggest that CFOs face both legal and labour market costs when found to be involved in material accounting misstatements. Further, they find that 60% of CFOs of manipulating firms are interrogated by the SEC in the enforcement releases, and the alleged CFOs face penalties, such as future employment restrictions (i.e., being banned from serving as an officer, director or accountant for any public company), fines, disgorgement and criminal charges. Feng et al. (2011) further document that CFOs of manipulation firms do not show higher pay-for-performance sensitivities than do CFOs of a control sample. Similarly, empirical research documents executive penalties because of restatement and internal control weaknesses

(Arthaud-Day, Certo, Dalton, & Dalton, 2006; Collins et al., 2009; Desai et al., 2006; Menon & Williams, 2008). There is empirical evidence that CFO turnover increases because of internal control weaknesses and aggressive accounting practices (Collins et al., 2009; Hennes et al., 2008; Li et al., 2010; Mergenthaler et al., 2012). For example, Collins et al. (2009) observe that CFO bonuses and incentives decrease and turnover increases after restatement years. Similarly, Desai et al. (2006) find that senior managers have high turnover following restatement. Moreover, Hennes et al. (2008) find that the CFO turnover rate is reported to be 31% for accounting misreporting firms, which is considerably higher than the 17% CFO turnover rate in the control firms. In other research, Feldmann et al. (2009) use financial restatements as an event that can threaten ‘organisational legitimacy’ and the cost side of restatement as a form of ‘damaged legitimacy’ (p. 206). They also suggest that CFO turnover restatement moderates the relationship between restatement and increased audit fees. Similarly, Arthaud-Day et al. (2006) argue that top executive turnover challenges the organisation’s legitimacy if this is linked to estrangement from the management team associated with the restatement. These results suggest that top executive turnover after restatement helps regain reporting credibility and restore legitimacy (Feldmann et al., 2009; Menon & Williams, 2008). Loyeung and Matolcsy (2015) assert that CFOs are also likely to be dismissed when they report accounting errors, as opposed to when they report more extreme accounting practices.

These results suggest that CFOs of accounting misreporting firms are dismissed by the board of directors, and this is an extreme punishment, resulting in loss of reputation capital, turnover from position and possibly criminal charges (Collins et al., 2009; Feng et al., 2011; Indjejikian & Matějka, 2009). CFO compensation increases when the CFO can maintain a firm’s strong internal controls (Wang, 2010), yet falls when weakness disclosures are made (Hoitash et al., 2012). Hoitash et al. (2012) suggest that internal control quality is considered a non-financial factor in the judgement of a CFO. This indicates that internal control weaknesses are related to governance disclosure and lead to a reduction of total compensation, bonuses and equity incentives for a CFO. Consistent with this research, Haislip, Masli, Richardson, and Watson (2015) find that CFOs suffer penalties because of internal control material weaknesses. This relationship is more pronounced when related to financial reporting and internal controls. Thus, a firm’s

internal controls over financial reporting are regarded ineffective when material misstatements occur.

2.2.6 CFO, Audit Process and Financial Reporting Quality

Negotiations between CFOs and both internal and external auditors have been documented in prior accounting literature. Given CFOs' interest in prompting the audit process and internal controls, it is common for both CFOs and auditors to concentrate on the same areas: the financial reporting process and internal controls. Corporate governance monitoring, such as CFO oversight, can moderate the positive association between accounting manipulation risk and audit fees (Bedard & Johnstone, 2004). Thus, CFO equity incentive is positively related to audit fees, and this relationship is stronger when a firm's internal controls are weak; thus, CFO equity incentives increase the perceived risk and overall audit risk (Billings, Gao, & Jia, 2013).

To ensure the integrity of financial reporting, CFOs are also responsible for implementing internal controls, securing risk-management procedures and reporting any inadequacies to the audit committee and external auditor (Loyeung & Matolcsy, 2015). Hellman (2011) conducted interviews with the CFOs of 52 Swedish listed companies and the results indicate that CFOs influence the scope and selection of audit processes, particularly in terms of audit planning and internal control. Moreover, they provide a governance role for audit planning and internal control process, rather than managerial role. Gibbins, McCracken, and Salterio (2005) suggest that the CFO retains relationships with clients to resolve auditor–client negotiations when accounting disputes arise. Both CFOs and auditors are responsible for the integrity of financial reporting, as their whole career is closely linked with firm performance, reporting quality and personal reputation.

2.2.7 Executive Power and Financial Reporting Studies

Power plays a significant role in corporate and financial decisions, particularly for CEOs who dominate strategic decision-making (Finkelstein & D'Aveni, 1994; Greve & Mitsuhashi, 2007; Halebian & Finkelstein, 1993), while CFOs exercise their dominance over financial reporting decisions. Recent empirical research documents that strong CEO power increases agency costs and negatively affects firm performance. Bebcuk, Cremers, and Peyer (2011) observe that a powerful CEO is associated with poorer firm value (measured by Tobin's q) and poor financial profitability performance. Powerful

CEOs report variable performance and domination of corporate decisions, yet this could be either beneficial or injurious to the business (Adams et al., 2005).

Cormier et al. (2016) explore how the tension arising between a firm's powerful CEO and equally powerful external factors will lead to the likelihood of financial misreporting. Their study shows that corporate governance mechanisms fail to detect or prevent financial misreporting, and independent boards of directors are ineffective when a powerful CEO overshadows them. Cormier et al. (2016) further observe that CEOs derive their power intrinsically from their status as the firm's founder and/or controlling shareholder. Moreover, the relative power of the CEO within the top executive team is associated with a higher probability of meeting or barely beating financial analysts' earnings forecasts.

The accounting literature observes that CEO power can undermine the effectiveness of reporting and oversight of the audit committee (Adams & Ferreira, 2007; Cohen et al., 2012; Tuggle et al., 2010). Powerful CEOs can influence the information environment and quality of disclosure. Jiraporn, Chintrakarn, and Kim (2012) show that powerful CEOs have fewer incentives to conceal information, resulting in more information transparency, and firms are investigated by fewer analysts. Disclosure quality and the variability of firm performance can be influenced by CEO power. Further, disclosure quality also moderates the associations between variability of firm performance and CEO power – improve in information quality can decline the variability of firm performance, which is instigated by CEO Power (Wu, Quan, & Xu, 2011).

While the CEO is responsible for shareholders' value creation and corporate decisions, the CFO supervises the financial reporting system. However, the CEO may also indirectly influence financial reporting processes. The CFO has a legal obligation to the board of directors and shareholders, and is accountable to the CEO (Mian, 2001). In this case, the CFO also maintains a chain of command regarding reporting structures, either to the board or directly to the CEO (Finkelstein, 1992). Based on the firm's hierarchical structure, the CEO can wield power over the CFO in an attempt to maintain shareholders' value or to force the CFO to exaggerate financial performance through accounting reporting irregularities and manipulation (Feng et al., 2011).

This power has several implications for incentive compensation, reporting quality, firm value and information environments (Friedman, 2014). Friedman (2014) has developed an agency model to analyse the effect of a powerful CEO pressuring the CFO to misrepresent performance measures, such as earnings. This model suggests that CEO power is more likely to be associated with poorer financial reporting quality, bias and lower firm value. Consistent with this finding, Dichev et al. (2013) conduct a survey on 169 CFOs from public listed companies, wherein 91% report pressure as an incentive to manipulate earnings. Another survey-based study on 141 public firms' CFOs reveals that 17% of CFOs were pressured by their company CEOs to misrepresent financial reports during the previous five years. This misrepresentation is motivated by the 'CEO's compensation and his/her ability to avoid costs associated with CFO biasing, where [a] more powerful CEO is better able to avoid these costs (e.g., by making the CFO a scapegoat)' (Friedman, 2014, p. 118). While several studies investigate the effect of CEOs' power over corporate decision-making (strategic, financial reporting), comparatively little is known about whether powerful CFOs influence financial reporting and firm performance and their compensation (including incentives).

Recent accounting literature focuses on the effect of powerful CFOs on earnings quality. Collins et al. (2017) investigate powerful CFO exploitation of equity-based incentive compensation and earnings management. They observe that CFOs who have short pay durations engage more in income-increasing accrual-based earnings management and real transactions management, compared with firms employing powerful CFOs with long pay durations. This suggests that powerful CFOs will manipulate earnings because of their incentive-based compensation. Bedard, Hoitash, and Hoitash (2014) suggest that CFOs who sit on the board reports higher quality financial reporting, (i.e., lower reporting of internal material weakness, lower reporting of restatement and higher quality accruals. Hence, these CFOs gain so much power that they are able to use the firm to further their own interests. During the recent financial crisis, Beck and Mauldin (2014) examine whether CFOs and audit committees can exercise power in determining audit fee negotiation. They suggest that CFOs or audit committees mostly influence audit fees when their counterpart is less powerful. A recent study by Baker et al. (2018) investigates the influence of powerful CEOs and CFOs on both accruals' earnings management and real earnings management before and after the SOX period. They find that powerful CEOs emphasise accruals earnings management to manage firms' earnings in the pre-

SOX period, whereas powerful CFOs affect real earnings management both before and after the SOX period. This result indicates that powerful CEOs and CFOs exploit their major responsibilities.

2.3 Three Determinants of Financial Reporting Quality

This section introduces three measures of financial reporting quality. After the definition of financial reporting quality in Section 2.3.1, Section 2.3.2 discusses methods of measuring financial reporting quality. Section 2.3.3 presents disclosure and earnings quality, while Sections 2.3.4 and 2.3.5 discuss financial statement disaggregation and the properties of analyst forecasts, respectively. Section 2.3.6 discusses accounting conservatism.

2.3.1 Financial Reporting Quality

Financial reporting is undertaken by managers to deliver financial and non-financial information to investors and shareholders to make informed decisions and reduce information asymmetry between owners and managers (Antle & Nalebuff, 1991). Thus, financial reporting is an assurance tool to enhance the quality and credibility of financial information and increase the confidence placed in it (Watts & Zimmerman, 1986). In assessing financial reporting quality, two common viewpoints are broadly used: users' need and shareholder/investor protection need (Jonas & Blanchet, 2000). The users' need viewpoint suggests that financial reporting quality is measured by the accuracy of financial information. This can be explained by the qualitative characteristics of the relevance, reliability, comparability and understandability of the information (Kamaruzaman, Mazlifa, & Maisarah, 2009). Regarding shareholder/investor protection need, Jonas and Blanchet (2000) explain the quality of financial reporting as 'full and transparent financial information that is not designed to obfuscate or mislead users' (p. 357). Thus, financial information should be free from bias and error and should faithfully represent all financial matters rationally and clearly. It must not be in any way misleading or confusing (Jonas & Blanchet, 2000).

There is an essential difference between these two viewpoints of financial reporting quality. The users' need viewpoint is primarily motivated to supply reliable and relevant financial information to the intended users. The shareholder/investor viewpoint is primarily concerned with providing sufficient, transparent and relevant financial

information to people (Jonas & Blanchet, 2000). Economic performance and a firm's business performance can be determined by financial reporting quality so that decisions are better monitored (Reeve, 2004). Better quality financial reporting encourages transparency and delivers high-quality financial data through inclusive disclosure. The quality of financial reporting is important to shareholders, stakeholders, regulatory bodies, the government and accounting bodies (Johnson, Khurana, & Reynolds, 2002).

2.3.2 Methods of Measuring Financial Reporting Quality

Several methods have been used in the accounting literature to empirically measure financial reporting quality. Firms must prepare high-quality financial information and disclose reliable and relevant information so that their users can make informed decisions. It is not easy to comprehend and measure the quality of financial information, but different methods have been devised to make it possible (Lang & Lundholm, 2000). Contemporary accounting research has employed a variety of methods to measure the quality of financial reporting (Biddle, Hilary, & Verdi, 2009; Cohen, Krishnamoorthy, & Wright, 2004; Graham et al., 2005; Ham, Lang, Seybert, & Wang, 2017; Hope, Thomas, & Vyas, 2013; Huang, Rose-Green, & Lee, 2012). Figure 2.1 presents the determinants of financial reporting quality.

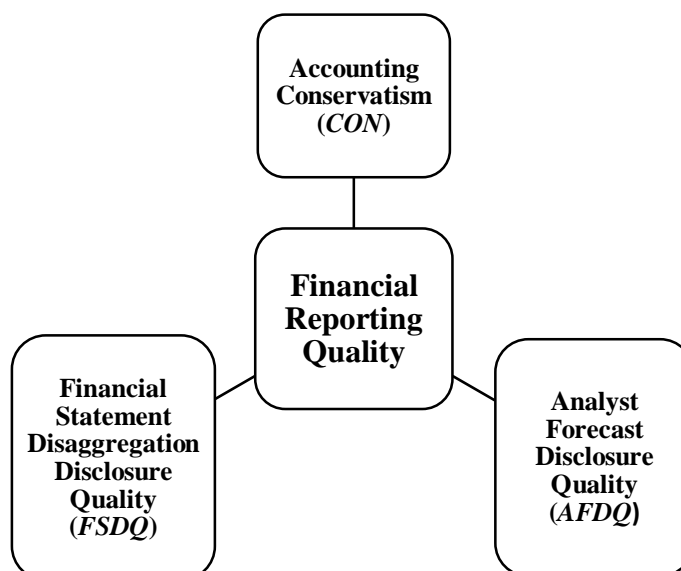


Figure 2.1: Determinants of Financial Reporting Quality

To elicit comprehensive evidence of the effect of CFOs' power on financial reporting quality, the financial reporting quality has been categorised in two groups: (1) disclosure-

related approaches and (2) earnings-related approaches. For disclosure-related financial reporting approaches, financial statement disaggregation disclosure quality and analysts' forecast disclosure quality are considered. For earnings-related financial reporting approaches, accounting conservatism is considered, as earnings-related financial reporting approaches have been the subject of conditional and unconditional accounting conservatism. Disclosure-related financial reporting approaches refer to using Chen et al.'s (2015) financial statement disaggregation disclosure quality and Hui and Matsunaga's (2015) analyst forecast disclosure quality. Ball and Shivakumar's (2005) accruals model represent conditional conservatism, while Givoly and Hayn's (2000) accruals model represents unconditional conservatism. This study combines disclosure and earnings strategies to explain the effect of CFO power on financial reporting quality. The higher the quality of earnings and corporate disclosure choices, the higher the overall financial reporting quality.

2.3.3 Disclosure and Earnings Quality

Disclosure quality is investigated in the accounting literature (Berger, 2011; Core, 2001). Prior research documents that firms have many incentives to disclose better quality financial and non-financial information. For example, corporate disclosure reduces information asymmetry between managers and investors, and among various types of investors (Diamond & Verrecchia, 1991; Lang & Lundholm, 1993, 1996; Welker, 1995). Lang and Lundholm (1996) provide evidence that the level of disclosure quality is significantly associated with the properties of analyst forecasts. They provide empirical evidence that better informative disclosure policies are positively related with analyst earnings forecast accuracy and greater analyst following, and are negatively associated with dispersion among individual analyst forecasts and volatility in forecast revisions. These findings suggest that informative disclosure policies reduce information asymmetry. There are concerns that operationalising these definitions is linked to the difficulty in measuring the firm-driven or investor-driven nature of disclosure quality. Disclosure quality is complex to measure, multifaceted and context sensitive (Beattie, McInnes, & Fearnley, 2004).

Dechow, Ge, and Schrand (2010) define earnings quality as follows: 'Higher quality earnings provide more information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker' (p. 58).

Therefore, higher quality earnings reveal firms' real operating performance (Dechow & Schrand, 2004), high-quality accruals (Francis et al., 2008; Wang, 2006), actual cash flows (Dichev et al., 2016), more predictable earnings (Graham et al., 2005), more sustainable earnings (Dichev et al., 2016) and more persistent earnings (Richardson, Sloan, Soliman, & Tuna, 2005; Schipper & Vincent, 2003). Managers should consider investors' and analysts' forecast perceptions when determining the desired earnings measures and features (Dechow et al., 2010).

2.3.4 Financial Statement Disaggregation

Accounting research suggests that disaggregated accounting data function as a better predictor for investing, valuing and forecasting decisions. Regulators and standard-setters should urge managers to deliver disaggregated accounting data to improve capital market benefit and investor knowledge. Both standard-setters and regulators suggest that disaggregated accounting information enhances the decisions made by financial statement users. The Financial Accounting Standards Board's (FASB's) (1984) Statement of Financial Accounting Concepts No. 5 reports that individual lines of financial items, subtotals or each component of a financial statement may be more valuable than aggregate numbers, especially to investors, creditors and decision-makers. The FASB and International Accounting Standards Board (IASB) worked together in a project on the presentation of financial statements. They recommend a uniform format of financial statements that provides more disaggregated line items and subtotals.

Chen et al. (2015) state that there is an association between disaggregation and 'information quality'. Both the FASB and IASB agree that greater financial statement disaggregation can lead to more reliable, relevant and useful information for users (FASB, 2010). The joint project between the FASB and IASB also encourages the study of disaggregated income and expenses, and suggests that this will enhance the usefulness of information in predicting the entity's cash flows (Preliminary Views, para. 3.42). Consistent with this argument, Amir, Einhorn, and Kama (2014) disaggregate accounting data to improve the details of line items of an aggregate accounting measure, such as incomes and expenses, which are accumulated in the net earnings measure. Although financial disaggregated reporting is voluntary for firms, managers should accommodate information as advised by the standard-setters (Heitzman et al., 2010). Irrespective of

whether it is voluntary or mandatory, disaggregated accounting data can help investors and other users in their decisions.

Accounting research suggests that financial statement disaggregation is related to higher future earnings predictability and management credibility of published corporate disclosure (Hutton, Miller, & Skinner, 2003)—that is, a disaggregation scheme is positively associated with forecasting accuracy and higher financial reporting quality. Voluntary disclosure studies report that managerial credibility enhances financial statement disaggregation (D’Souza, Ramesh, & Shen, 2010; Hirst, Koonce, & Venkataraman, 2007). Fairfield, Sweeney, and Yohn (1996) find that disaggregation earnings data increase the likelihood of future earnings profitability.

2.3.5 Properties of Analyst Forecasts

Analysts play a significant intermediary role between entities and investors. Analysts provide relevant and succinct earnings information about the firm, and this is important to stakeholders and investors who depend on information for investment and contractual decisions. Mansi, Maxwell, and Miller (2011) suggest two important roles of analyst forecasts: (1) the forecasts play a key role in mitigating information asymmetry between firms and market participants and (2) the forecast information helps monitor managers ‘by imposing market discipline from the information revealed in their earnings forecast’ (p. 118). Thus, the analyst forecasting process and the forecast properties can achieve superior investment performance. This study builds on the idea that the properties of analysts’ forecasts serve as a proxy for the quality of financial reporting.

When considering the properties of analysts’ forecasts, prior literature has focused on forecast accuracy, dispersion and revision volatility (Hui & Matsunaga, 2015; Lang & Lundholm, 1996). Kothari (2001) documents two extensive properties of analyst forecasts: consensus analyst forecasts and individual analyst forecasts. Consensus analyst forecasts define the mean or median value of several forecasts issued by one or numerous analysts, whereas individual analyst characteristics influence their issued forecast. Other research classifies the properties of forecast analysts as buy-side and sell-side analyst forecasts. The former works for institutional investors for internal decisions, while the latter acts for brokerage houses and individual investors, and supplies earnings forecasts.

One of the significant factors of analysts' properties is forecast accuracy, which has been documented in the literature (Chang, Hooi, & Wee, 2014; Hope, 2003; Lang & Lundholm, 1996). Prior research suggests that financial and non-financial information will curtail information asymmetry and improve analyst forecast accuracy (Chang et al., 2014; Dhaliwal, Radhakrishnan, Sang, & Yang, 2012; Hope, 2003). There is a significant relationship between analyst forecast accuracy and the quality of firm disclosure. In explaining this relationship, Lang and Lundholm (1996) suggest that 'firm-provided disclosure is informative about future earnings, [thus] analysts' forecast accuracy will increase with the informativeness of a firm's disclosure policy' (p. 472). Any changes in historical earnings affect analyst forecast decision-making (Kross & Suk, 2012) because earnings quality (one of the crucial determinants of financial reporting quality) increases with forecast accuracy (Behn et al., 2008). Therefore, when managers provide earnings information that is not reliable or concise, analysts must depend on private sources, which is difficult for them to do.

The second major determinant of the properties of analyst forecasts is forecast dispersion (Lang & Lundholm, 1996). Analyst forecast dispersion can serve as a proxy for market participants in the capital market (Imhoff & Lobo, 1992). Dispersion can be reduced by increased disclosure (Lang & Lundholm, 1996). This measure serves as a signal about the ambiguity of firms' information environment and future earnings predictability (Hope, 2003). When the availability of information increases in the market, this ultimately lessens uncertainty in the market and reduces forecast dispersion (Behn et al., 2008; Eng & Teo, 1999). Good corporate governance practices reduce dispersion among individual analyst earnings forecasts because analysts share the same level of governance information provided by the firm (Eng & Mak, 2003; Yu, 2010).

The third major determinant of the properties of analyst forecasts is revision volatility (Lang & Lundholm, 1996). Lang and Lundholm (1996) suggest that forecast revision volatility 'in the time period leading up to an earnings announcement is likely to be reduced by a more forthcoming disclosure policy' (p. 472). They find that higher disclosure quality reports lead to less volatility in forecast revisions. As discussed earlier, better governance practices provide similar information to the market (Eng & Mak, 2003; Peasnell, Pope, & Young, 2005; Yu, 2010), which may decrease the volatility of analyst earnings forecast revisions and improve the information environment for investors.

2.3.6 Accounting Conservatism

Accounting conservatism is one of the most powerful accounting principles (Sterling, 1970). Watts (2003) considers conservatism a sign of better and more favourable information. Thus, conservatism is an efficient accounting principle that involves a higher degree of verification of bad news or good news, where bad news is considered a loss and good news is considered a gain for the firm (Basu, 1997; Watts, 2003). According to Basu (1997), when a firm records bad news quickly, it is considered a highly conservative firm, and, when a firm verifies more good news than bad news, this is also the case. Another definition provided by Watts and Zimmerman (1986) suggests that accounting conservatism helps accountants report the highest alternative values for liabilities and lowest alternative values for assets. This process is also applied to expenses and revenues, where expenses should be included sooner rather than later, and alternative treatments are applied to revenues (Zhong & Li, 2017).

Beaver and Ryan (2005) classify accounting conservatism as two different types: conditional and unconditional. Conditional conservatism relies on news-dependent and ex-post conservatism, while unconditional conservatism is ex-ante and news independent (Zhong & Li, 2017). Qiang (2007) suggests that unconditional and conditional conservatism exert different effects on firms' financial reporting. The measurement of conditional and unconditional conservatism is explained in the research design chapter. Accounting conservatism is a significant element in measuring better quality financial reporting. Therefore, following prior accounting literature, this study uses accounting conservatism as a proxy for financial reporting quality (Beekes, Pope, & Young, 2004; Zhong & Li, 2017). A better corporate governance mechanism leads to accounting conservatism (Beekes et al., 2004; Lara, Osma, & Penalva, 2009). Specifically, conservatism improves or limits managers' attitude to using accounting conservatism. As a corporate governance player, the CFO plays a crucial role in employing accounting conservatism and the principles that apply in terms of discretion and authority. For example, it can refer to the issues of depreciation and inventory method that they prefer to use. Thus, CFOs can use their authority to employ a conservative accounting practice and deliver high-quality financial statements that reflect organisation economic activities to market participants. Ball and Shivakumar (2005) propose that conservatism may

restrict opportunistic managers through timely loss recognition and enhance investment efficiency.

2.4 Financial Reporting Quality and Corporate Governance

The association between corporate governance and financial reporting quality has been strongly discussed in the accounting literature. Corporate governance is about safeguarding the quality of accounting processes (Cohen et al., 2004, p. 87). Sloan (2001) suggests that financial information must be a source of faithful representation that is independent, is reliable and communicates business performance to managers. These characteristics of financial reporting are of major interest to managers, yet widespread accounting scandals have raised concerns about the financial reporting process, leading to strategies to strengthen governance mechanisms (Beekes & Brown, 2006; Brown & Caylor, 2006; Cohen et al., 2004; Karamanou & Vafeas, 2005). While extant research examines the association between CFOs and financial reporting quality, CFOs have assumed greater responsibilities in maintaining effective control over financial reporting in the post-SOX period. CFOs are more likely to be delegated greater power to reduce information asymmetry and agency conflict by supplying high-quality financial information to both insiders and outsiders. The following section discusses how three determinants of financial reporting quality relate to corporate governance practices—that is, it investigates financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism.

2.4.1 Financial Statement Disaggregation and Corporate Governance

Current research reports how managers' decisions directly affect financial disaggregation in terms of voluntary disclosure and investor predictability. Financial statements are available to the public and media in annual reports; therefore, financial statement information connects investors, managers' earnings disclosure and use of accrual discretion decisions. Prior research suggests that overall financial statement disaggregated disclosure can mitigate the earnings component mispricing, and this disaggregation may benefit investors in evaluating the persistence of accrual information (Drake, Myers, & Myers, 2009; Venter, Emanuel, & Cahan, 2014). The major implication of this argument is that investors can intuitively project the future economic benefit and investment consequences of accruals through more and better disclosure quality (Drake

et al., 2009; Venter et al., 2014). This argument is connected to the idea that financial statement disaggregation may influence investors' ability to comprehend financial information precisely (Hewitt, 2009; Hirshleifer & Teoh, 2003) and enhance the predictive content of reported earnings. Similarly, Tarca et al. (2008) propose that the disaggregation process of financial statements enhances financial information accuracy and detailed accounting information for market participants. Therefore, the accuracy of the financial information disseminated by firms is extremely important.

In explaining the benefits of manager cash flow disaggregation, Arthur, Cheng, and Czernekowski (2010) state that disaggregated cash flow provides additional information, which is more likely to reduce information asymmetry in the market, and this model is superior to the aggregated model regarding explanatory power, lower prediction error and predictive ability for future earnings. Given the nature of the earnings–return relationship, disaggregation of cash flow has higher explanatory power for returns compared with the model and adds significant information to understand future operating cash flow projections (Clinch, Sidhu, & Sin, 2002). The results from these studies actively support that manager-disclosed disaggregation of aggregate cash flow components would promote investors' ability to forecast future valuation and firm performance.

Existing research argues that manager-derived disaggregated financial statements improve the relevance of voluntary disclosures. Through investigating the relationship between the properties of analyst forecast and information quality with disaggregated financial data, Chen et al. (2015) find that disaggregation quality is associated with higher forecast accuracy and lower dispersion, yet negatively associated with bid–ask spread and cost of equity. Another study finds that financial information disaggregation helps credit analysts recognise the operational cost structure of a firm (Bloomfield, Hodge, Hopkins, & Rennekamp, 2010). This result supports the view that disaggregated financial information reports higher disclosure quality. Correspondingly, in a segment reporting setting, Berger and Hann (2003) document that SFAS No. 131 on disaggregated disclosures improves analysts' forecast accuracy. In a similar manner, Maines, McDaniel, and Harris (1997) argue that different types of disaggregated segment disclosures improve analysts' judgements about firms' performance.

Higher disclosure leads to capital market benefits, such as lower transaction costs and spread, as reported by Chen et al. (2015). The level of financial statement disaggregation

from financial report GAAP line items is achieved by scoring non-missing Compustat variables, following a ‘bigger number representing higher disclosure quality’ (Chen et al., 2015, p.1019). This study is motivated by Blackwell’s (1951) argument that finely disaggregated data lead to better quality information. Further, the US GAAP recommend that US firms provide aggregate accounting data. This recommendation supports the cost-effectiveness and decision-usefulness of financial information. The delivery of disaggregated accounting data increases investors’ predictive power on simplified financial components, such as the cash flow component (FASB, 1984). In this scenario, the degree of disaggregation of mandatory financial report decisions relies on managers’ considerable discretion. Although the financial disaggregated reporting decision requirement is voluntary for firms, managers should accommodate information according to what standard-setters demand (Heitzman et al., 2010).

2.4.2 Properties of Analyst Forecasts and Corporate Governance

The corporate governance structure helps analysts understand financial disclosure integrity and reliability and reduces information uncertainty (Bhat et al., 2006). Krishnan and Parsons (2008) explain that for financial analysts to ‘appropriately assess a company’s financial performance, the reported accounting earnings must closely reflect the economic reality of the organization’s financial activity’ (p. 65). As information mediators and corporate governance observers, analysts implement several economic strategies that influence investors’ confidence and behaviour in investment, along with firm overall valuation (Jiraporn et al, 2014). Early research in accounting and finance emphasises firm-level characteristics with reference to analyst coverage. For instance, O’Brien and Bhushan (1990) investigate the extent of analyst coverage disclosure requirements. They suggest that analysts select industries with larger numbers of firms and maintain strong regulations and intend to avoid stock volatility and contest from precedent analyst followers. Lang and Lundholm (1996) describe the relationship between corporate disclosure policy and analyst coverage and suggest that firms with more informative disclosure policies have greater analyst coverage.

Analyst coverage is incrementally significant to accounting policy disclosure, and serves to decrease uncertainty regarding forecast earnings (Hope, 2003). Firm-level disclosures are significantly associated with forecast accuracy, indicating that a larger number of corporate governance-level disclosures is related to reduced forecast dispersion and

enhanced analyst forecast accuracy (Yu, 2010). However, restrictive disclosures attract higher analyst coverage, even though analyst forecast errors and dispersion both increase (Lehavy, Li, & Merkley, 2011). Analyst forecast accuracy is related to financial reporting quality (Lang & Lundholm, 1996). In other research, Bushman et al. (2004) show that analysts are less concerned about monitoring firms in countries where insider trading restrictions are not rigorously enforced. Bhat et al. (2006) examine governance transparency and analyst forecast accuracy with a country-level variable of governance transparency, and report a positive relationship between them.

Prior research finds that corporate governance practices are related to analyst following. Lang, Lins and Miller. (2004) argue that financial analysts are less motivated to examine firms with expected incentives to manipulate information, especially leading block holders who are controlled by management or family owners. The level of analyst following of a firm is positively related to the level of institutional investment, variability of returns, and correlation between firm return and market return with firm size (Bhushan, 1989; Marston, 1997). Both analyst coverage and forecast accuracy are negatively associated with managerial ownership (Baik, Farber, & Lee, 2011).

The accounting literature investigates board characteristics and analyst forecast coverage. For example, Gul et al. (2013) show that board diversity increases financial reporting transparency and accuracy, which indicates that earnings forecasts are more accurate. Analyst forecast accuracy is significantly related to board size (Cheng, 2008). In a similar manner, financial analyst forecast accuracy is positively associated with board independence and inversely related with board size and CEO duality (Byard et al., 2006).

Financial accounting information wields a significant influence on financial statement users in establishing expectations about a firm's future earnings (Abernathy, Herrmann, Kang, & Krishnan, 2013). Executives and the audit committee should be able to improve the firm's overall information environment and disclosure quality. This relationship should align with external financial analyst forecast and firm-level financial reporting quality. Farber, Huang, and Mauldin (2018) show that accounting expert audit committees are associated with higher trading volume and lower liquidity risk, which provides incentives for higher analyst following. Wu and Wilson (2015) explain how the properties of analyst earnings forecasts influence audit quality, and suggest that experienced and high-quality external auditors may enhance forecast accuracy via 'their

impact on the decision usefulness of clients' prior period reports, and reduce forecast accuracy by constraining client attempts to manage earnings in the direction of the consensus forecast' (p. 167). Consistent with this finding, Abernathy et al. (2013) suggest a positive relationship between accounting expert audit committees and more accurate and less dispersed analyst forecasts. Therefore, technically, expert audit committees improve analyst earnings forecasts. Similarly, analyst forecast behaviour may be influenced by CEOs' optimism. Wong and Zhang (2014) report that the bias in analyst consensus forecasts is inversely associated with the level of CEO optimism, and this relationship is more pronounced with small and highly unsettled firms that are covered by a lower number of analysts.

Hribar and Yang (2006) argue that overconfident CEOs will issue overly optimistic earnings forecasts. Jiraporn et al. (2012) analyse the influence of staggered boards on analyst coverage. The evidence supports the view that staggered boards in a firm draw the attention of a larger number of analyst followers, which results in a smaller degree of information asymmetry and a higher extent of corporate transparency. They further document that managers who are protected by staggered boards are less motivated to conceal information, which results in a lower level of information asymmetry. Chintrakarn, Jiraporn, Kim, and Kim (2015) investigate the level of analyst coverage and quality of corporate governance. They find that analysts examine those firms that practise a lower level of governance procedures, which helps them earn incentives from trading commissions and provide persuasive information to shareholders, specifically about understanding the difference between current price and fundamental value. This outcome means that, occasionally, weaker corporate governance can exhibit higher analyst coverage.

The accounting literature finds that market reaction to corporate governance practices and accounting disclosure reflects the possibility of future profitability (Brown & Caylor, 2006; Gompers, Ishii, & Metrick, 2003; Hope, 2003). Given that governance and financial disclosure mechanisms are subject to higher analyst coverage, this information environment will help financial analysts make better assessments of the credibility of supplied information. Therefore, financial disclosure and non-financial disclosure also strengthen financial analyst forecast accuracy and eliminate the negative effect on forecast accuracy (Dhaliwal et al., 2012). Thus, corporate governance mechanisms have

a corresponding relationship with analysts' dispersion and error (Myring & Shortridge, 2010).

2.4.3 Accounting Conservatism and Corporate Governance

Conservative accounting reports several governance benefits in the accounting literature. These include accounting conservatism eliminating the information gap between informed and uninformed shareholders (Ho et al., 2015; Kim & Pevzner, 2010; Lafond & Roychowdhury, 2008), enhancing managerial investment decisions (Ball, 2001; Ball & Shivakumar, 2005; Watts, 2003), improving the efficiency of debt contracts (Ahmed, Billings, Morton, & Stanford-Harris, 2002; Ahmed & Duellman, 2007; Lara et al., 2009) and decreasing litigation risk (Watts, 2003). Conservative accounting also limits managerial power and incentives to conceal information about upwards earnings, upwards net assets or expected losses (Ahmed et al., 2002; Watts, 2003). Moreover, higher level conservative accounting improves earning quality and economic profitability and also reduces agency costs (Bertomeu, Darrough, & Xue, 2017).

Watts (2003) indicates that agency conflicts arise when the interests between shareholders and managers are not aligned. Accounting conservatism can reduce deadweight losses that arise from agency conflicts (Watts, 2003). Lafond and Roychowdhury (2008) assert that conservative accounting is a better-quality financial reporting practice that decreases agency costs. When an information gap (i.e., asymmetric information) prevails between shareholders and managers, managers may use this situation to manipulate financial reporting. Previous studies suggest that conservative practices of a firm minimise agency costs, and, in relation to agreements made between shareholders and managers, conservative accounting practices may resolve agency conflict and thereby produce better governance (Ahmed & Henry, 2012; Gao, 2013; Lara et al., 2009). Watts (2003) suggests that conservatism plays a role as contracting technology, which decreases managerial incentives to overstate net assets and earnings by involving standards related to revenue recognition.

Corporate governance characteristics—such as managerial ownership, institutional investors, the board of directors, insider directors, audit committees, CEOs and CFOs—have significant influences on accounting conservatism (Ahmed & Henry, 2012; Francis et al., 2015; Ho et al., 2015; Lara et al., 2009). Managerial ownership also affects

accounting conservatism, and, in investigating this relationship, Shuto and Takada (2010) provide evidence that managerial ownership is linked to asymmetric timeliness of earnings. They suggest that accounting conservatism may reduce the agency conflicts between shareholders and managers. Thus, investors demand higher accounting conservatism to reduce the agency conflict that could exist within a firm. This demand is stronger in situations with weaker corporate governance and stronger agency conflict (Chi et al., 2009). Chi et al. (2009) argue that accounting conservatism is a substitute for corporate governance practices, as measured by Khan and Watts's (2009) firm-year C-score conservatism index. They provide evidence that a higher percentage of institutional investors demand less accounting conservatism. Similarly, Lafond and Roychowdhury (2008) state that higher managerial ownership reduces accounting conservatism. Strong internal governance systems are efficient in delivering preliminary signals to those who are monitoring a firm's activities and understand the cause of bad news (Lara et al., 2009).

As a strong corporate governance mechanism, board characteristics also play a key role in increasing accounting conservatism practices (Ahmed & Duellman, 2007; Ahmed & Henry, 2012; Lara et al., 2007). For instance, an Australian-based study by Ahmed and Henry (2012) investigates the relationship between voluntary corporate governance structures (board size, board independence and voluntary formation of an audit committee) and accounting conservatism. They report that more independent members on the board, a small board size and the existence of a voluntary audit committee are positively associated with unconditional accounting conservatism. Thus, strong governance enhances the high level of accounting conservatism practices (Lara et al., 2007; Lara et al., 2009). Using Basu's (1997) conservatism model, Beekes et al. (2004) show a positive association between conservatism and independence of the board of directors. In particular, Beekes et al. (2004) contend that having more outside board members is positively related to realising bad news in earnings in a timely manner. Similarly, Ahmed and Duellman (2007) show strong evidence that accounting conservatism is negatively related to the number of insider directors on the board, and positively associated with the amount of firm's shares owned by outside directors.

Audit committee characteristics are also considered to be related to conservatism. Sultana (2015) examines audit committee characteristics and accounting conservatism in Australia. Using a sample of 7,668 firm-year observations from 2004 to 2012, she finds

a positive association between accounting conservatism and: (1) a director with financial expertise on the audit committee, (2) an experienced director on the audit committee and (3) the frequency of audit committee meetings. This study finds that audit committees are effective internal monitoring mechanisms in limiting management's opportunistic behaviours regarding the overstatement of earnings. Sultana and Van der Zahn (2015) conduct another Australian-based study on audit committee financial expertise and the level of conservatism. Using 494 random firm-year observations for the period 2004 to 2008, following Basu (1997) and Ball and Shivakumar's (2005) conditional conservatism model, they find that audit committees with financial experts are effective in increasing accounting conservatism. Consistent with this study, Krishnan and Visvanathan (2008) find that audit committees' accounting expertise is positively associated with accounting conservatism.

Corporate governance studies suggest that executives' (CEOs') influence and characteristics can significantly affect the accounting conservatism decisions of a firm (Ho et al., 2015). Consistent with these findings, Ho et al. (2015) provide evidence that firms with female CEOs are positively associated with accounting conservatism. This relationship is significant for firms that are exposed to takeover and litigation risk. In investigating managerial overconfidence and financial reporting decisions, Schrand and Zechman (2012) conclude that overconfident managers are more likely to engage in fraudulent financial reporting for earnings. Consistent with these findings, using both conditional and unconditional conservatism, Ahmed and Duellman (2013) find that overconfident managers are inversely associated with both conditional and unconditional accounting conservatism. They indicate that overconfident CEOs report a high value of net assets and less timely recognition of bad news, which is considered to represent less accounting conservatism. Although CEOs' reputation has a positive effect on conservatism, a relevant study by Koh (2011) shows evidence that celebrity CEOs instil better firm performance and a high level of accounting conservatism. According to some research, conservatism has a relationship with CEOs' stock ownership. Lafond and Roychowdhury (2008) suggest that agency conflict can be resolved by allocating share ownership to a CEO. Their study asserts that timely recognition of bad news has a significant positive association with CEOs' managerial share ownership. Chen, Chen, and Cheng (2014) report another CEO share ownership study on founder versus non-founder CEOs' stock ownership and accounting conservatism. They find that conservatism

remains unchanged when founder CEOs enjoy a high share of ownership, while conservatism is higher when non-founder CEOs hold a higher share of ownership.

Francis et al. (2015) argue that CFO characteristics (gender) have a significant effect on financial reporting decisions in the context of accounting conservatism. They report that appointing a female CFO increases accounting conservatism, as compared with their male counterparts. This finding supports the view that female CFOs moderate the effect of risk in firms' financial reporting decisions and protect themselves from legal liability; thus, CFOs should reveal bad news on a timely basis (Beekes et al., 2004; Trueman, 1997).

2.5 Conclusion

This chapter has reviewed the literature on CFOs and how CFOs are related to financial reporting quality—particularly CFOs' role in earnings quality, audit quality and financial reporting quality. It then reviewed the literature, concentrating on which factors motivate CFOs to conduct good-quality financial reporting. This chapter also discussed the level of CFO turnover and career issues because of accounting misreporting, and then explored the literature on executive power in the context of financial reporting and corporate performance.

The second part of the literature review discussed the concepts/definitions and determinants of financial reporting quality. A comprehensive overview presented the concepts, measures and determinants of three aspects of financial reporting quality. A general discussion followed regarding the concept and important role of corporate governance in these three aspects of the financial reporting system. Given that the CFO's function is premised directly on corporate governance theory, Chapter 3 will provide an additional theoretical perspective by outlining the two main theories underpinning corporate governance: agency theory and stewardship theory. Further, Chapter 3 will provide a detailed rationale by referring to the prior empirical literature on each selected financial reporting aspect (that is, financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism). This process will lead to the articulation of the four main hypotheses developed for this study.

Chapter 3: Theoretical Framework and Hypotheses Development

3.1 Introduction

This chapter focuses on this study's theoretical framework and hypotheses development. Agency theory and stewardship theory are explained in the first section of this chapter. The proposed framework establishes the research foundations of this study.

Section 3.2 explains the two major economic theories employed in this thesis to explain powerful CFOs' attitudes towards the quality of financial reporting: agency theory and stewardship theory. The fundamental difference between these two theories is the underlying assumptions used to define managerial attitude towards power. Agency theory suggests that agents are economically rational in their decision to maximise their self-interest (Jensen & Meckling, 1976), whereas stewardship theory proposes that stewards are intrinsically driven because they outweigh extrinsic rewards to guard long-term firm performance, while agents are fully extrinsically driven, mainly by their own interests (Davis et al., 1997; Hernandez, 2012; Hiebl, 2015). Thus, the primary underlying difference between these two theories is that 'agents' are self-interest driven, and 'stewards' are protector driven.

Section 3.3 outlines how four major hypotheses explain the relationship between powerful CFO influence on financial reporting choices. Section 3.3.1 discusses the hypothesis regarding financial statement disaggregation and CFO power. Section 3.3.2 examines the hypothesis concerning the properties of analyst forecasts and CFO power, while Section 3.3.3 outlines the hypothesis for accounting conservatism and CFO power. Finally, Section 3.3.4 presents the fourth hypothesis on how monitoring intensity influences the relationship between financial reporting quality and CFO power.

3.2 Theoretical Framework

3.2.1 Agency Theory (Rent Extraction Hypothesis)

The agency theory hypothesises (opportunistic perspective) that CFOs can cause agency conflict to advance their own incentives at the cost of other stakeholders, such as owning

shares in the company. This opportunistic perspective of agency theory provides similar arguments to the rent extraction hypothesis and proposes that powerful CFOs may not act in the best interests of the firm. Agency theory can explain the relationship between principals and agents, where principals authorise responsibilities to the agent with the anticipation that they will make choices in the best interests of the principals (Jensen & Meckling, 1976). Unavoidable agency conflict arises in this relationship when separation of ownership and control does not exist between owners and managers (Shleifer & Vishny, 1997). A major and damaging conflict can occur when managers do not pursue the principal's interest and exercise their managerial power to instead pursue their self-interest over the principal's wealth. Presented below is the theoretical framework employed in this study.

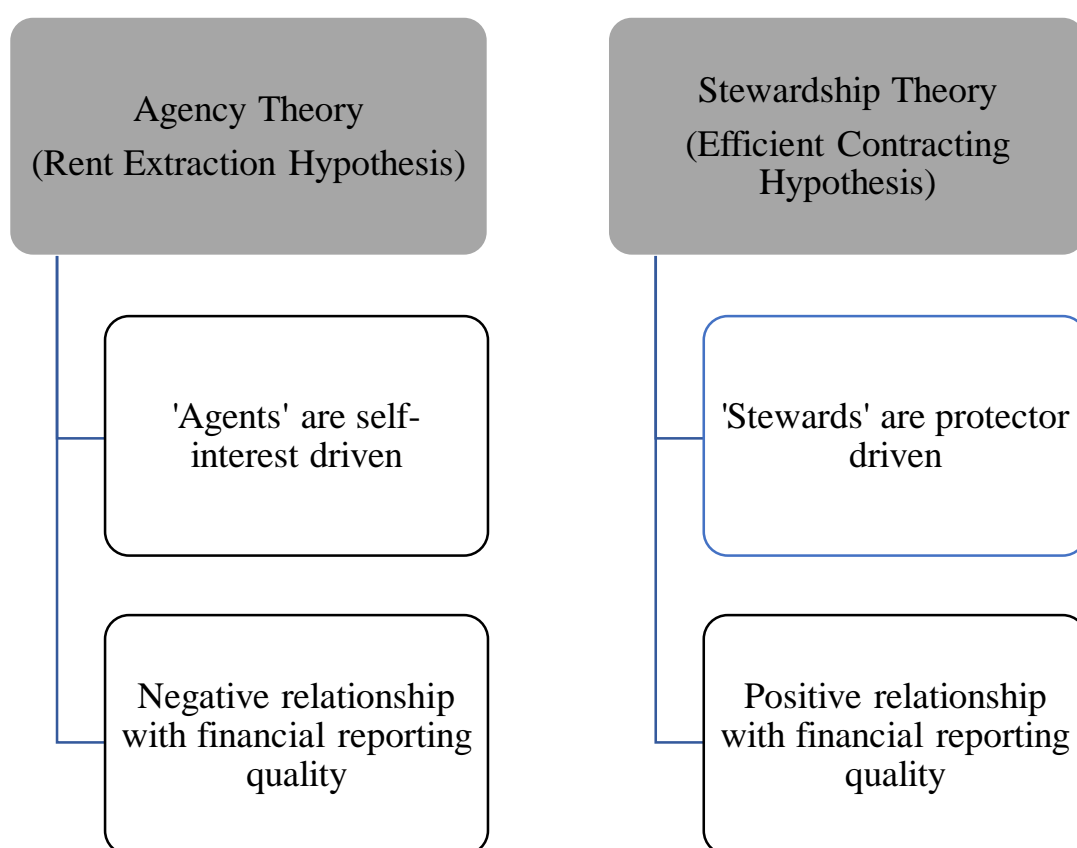


Figure 3.1: Theoretical Framework of CFO Power and Financial Reporting Quality

This self-driven behaviour is deemed to be ‘agency behaviour’ (Hiebl, 2015; Le Breton-Miller, Miller, & Lester, 2011). Two methods are discussed to reduce agency conflict between principals and managers: controlling incentive payments and increasing monitoring activities (Davis et al., 1997; Jensen & Meckling, 1976). The monitoring

process can be conducted through effective corporate governance mechanisms, such as a board of directors, external auditors and an internal audit committee, as they can limit existing or potential agency conflicts (Dalton, Daily, Johnson, & Ellstrand, 1999; Fama & Jensen, 1983). Managerial incentives can be aligned with business prospects or share returns that are not tied to reported profits, which can be oriented with business performance (Eisenhardt, 1985; Jensen & Meckling, 1976).

Agency conflict-limiting methods are connected with financial reporting and business performance. In this case, the financial reporting process and corporate functions are controlled by the CFO (Mian, 2001)—when the CFO holds a powerful managerial position, then additional conflicts of interest can arise. CFOs are responsible for supervising financial and accounting functions, and can be tempted to manipulate the financial reporting process for their own compensation ambitions (Feng et al., 2011). The rent extraction hypothesis implies that powerful CFOs can earn profit because of agency conflicts, and enhance their incentives at the cost of other stakeholders.

The SEC in the US is concerned with executive compensation incentives. Recent research focuses on CFOs' increased obligations in line with the *SOX Act of 2002* and guidelines regarding CFO compensation. There is shared evidence that CFOs' accountability and responsibilities for generating better quality accounting reporting have increased in their pay in the post-SOX period (Indjejikian & Matějka, 2009; Wang, 2010). CFOs' incentives have a significant role in accounting decisions, such as accruals management, accounting policy choices and execution (Chava & Purnanandam, 2010; Jiang et al., 2010). This relationship is even stronger for CFOs than CEOs, as CFOs are more likely to affect accruals through accounting decisions, while CEOs are more likely to affect accruals through firm policy decisions (Dejong & Ling, 2013). CFOs are not only rewarded for beating targets, but also receive incremental rewards for beating or meeting certain targets (Balsam et al., 2012). Thus, CFO compensation is significantly related to earnings expectations (Ehremjamts et al., 2009). Alongside bonuses and incentives, CFOs can have other motivations to manipulate the financial reporting process, which can affect their career development. For instance, CFO hiring, firing, promotion, compensation and incentives are decided by their handling of financial performance (Indjejikian & Matějka, 2009). As a consequence, CFOs may lose their managerial reputation or career or incur labour market costs when they are unable to retain the expected performance.

Baker et al. (2018) investigate the relationship between executive power (for both CEOs and CFOs) with accruals and real earnings management during the pre- and post-SOX periods. Their empirical study suggests that powerful CFOs prefer real earnings management over accruals earnings management in both the pre- and post-SOX periods (Baker et al., 2018). This finding is consistent with Graham et al. (2005), they find that CFOs prefer real earnings management to accruals earnings management to meet earnings targets. Similarly, Collins et al. (2017) provide empirical evidence that powerful CFOs exploit equity-based incentive compensation and earnings management schemes. This finding suggests that powerful CFOs are motivated to manipulate earnings for their own salary ambitions.

Recent studies explain that powerful CFOs are subject to conflicts of interest and situations in which incentives can lead to compromises in misreporting financial statements to meet the performance expectations of stakeholders (Baker et al., 2018; Collins et al., 2017). Consistent with this finding, Ball (2001) suggests that managers who are motivated by self-interest incentives—such as higher compensation, performance bonuses and managerial reputation—are less likely to consider any future losses of cash flow that could arise from a negative return because of risky investment projects. Further, if they report any timely recognition of loss from current earnings, they may experience loss of reputation, executive turnover, loss of bonuses and loss of incentives (Lafond & RoyChowdhury, 2007).

3.2.2 Stewardship Theory (Efficient Contracting Hypothesis)

Stewardship theory argues that managers are motivated by the long-term goals of the firm (Hernandez, 2012; Hiebl, 2015). The management literature shows that managers are either self-interest driven or steward driven (Davis, Allen, & Hayes, 2010; Davis et al., 1997). Stewardship theory suggests that managers' goals can be aligned with the firm's objectives when they are inspired by long-term organisational goals and firm performance (Hiebl, 2015). Eventually, when managers behave like a steward, managerial goals are aligned with organisational goals; however, in some cases, owners/higher executives can impose plans on managers that may not help the business in the long term. Agency-focused managers may prefer short-term business performance to secure their career, incentives or bonuses (Hiebl, 2015; Palley, 1997), while stewardship-focused managers are keen to work for long-term success (Davis et al., 2010; Donaldson & Davis, 1991).

The efficient contracting hypothesis provides similar arguments to the stewardship theory, and suggests that powerful CFOs may act in the best interests of the firm as a steward.

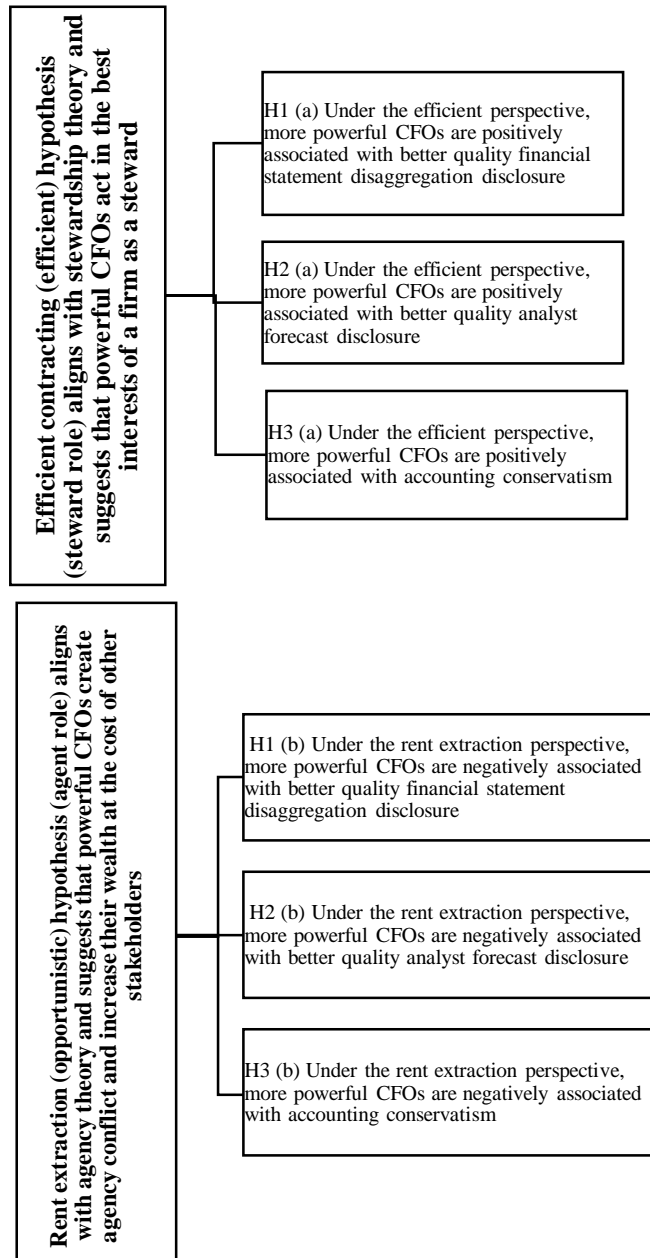
When executives hold different powerful management positions and act as insiders, they are more likely to act as stewards and have a strong legislative identity (Donaldson & Davis, 1991). Under the efficient contracting hypothesis, Francis et al. (2008) suggest that, if reputed CEOs are not releasing better quality financial reports, which effectively means they are censoring information, they are more likely to lose their compensation, reputation, career and so on. Therefore, executives prefer to promote firm performance and shareholders' wealth (e.g., Davis et al., 2010; Donaldson & Davis, 1991). This line of logic implies that CFOs have several economic incentives to increase organisational wealth: (1) promote managerial reputation, (2) reduce agency cost, (3) uphold managerial ethics (Muth & Donaldson, 1998) and (4) perform as a steward because they are reliable pro-organisation individuals who sacrifice their own self-interest (e.g., Donaldson & Davis, 1991). CFOs are responsible as custodians of the financial reporting process, and this responsibility permits them to convey the correct financial numbers and thus work better for the company (e.g., Ge et al., 2011; Geiger & North, 2006; Jiang et al., 2010; Wang et al., 2012).

Prior empirical research documents that executives experience higher career related penalties, such as turnover and dismissal (Arthaud-Day et al., 2006; Collins et al., 2009; Desai et al., 2006; Menon & Williams, 2008), lower bonuses and compensation because of disclosing lower quality financial reporting (Hoitash et al., 2012; Indjejikian & Matějka, 2009). For example, Feng et al. (2011) suggest that CFOs encounter legal costs (e.g., criminal charges, fines and discharge) and labour market costs (e.g., no longer being allowed to work as a director or accountant of a public sector company) because of engaging in accounting misreporting activities. Given that CFOs make financial reporting decisions, in this case, their risk is higher than that of CEOs because, for example, CFOs experience higher litigation risk, greater potential turnover risk and fewer incentives for involving in accounting manipulation (e.g., Baker et al., 2018; Feng et al., 2011). Therefore, CFOs have several economic incentives to increase organisational wealth, such as to promote their reputation, derive inner satisfaction and respect ethical standards (Muth & Donaldson, 1998). Thus, under the efficient perspectives of positive accounting

theory, powerful CFOs are more likely to provide high-quality financial reports and accurate information to the market in a timely manner (Baik et al., 2011; Demerjian et al., 2013).

3.3 Hypotheses Development

The following hypotheses are developed in this thesis.



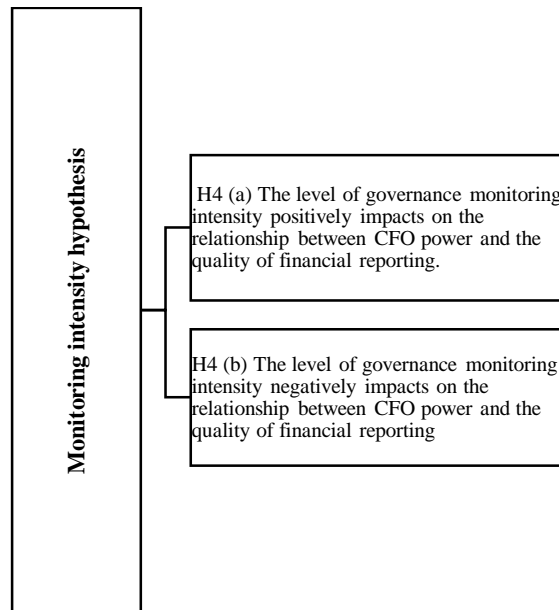


Figure 3.2: Hypotheses Development—H₁, H₂, H₃ and H₄

3.3.1 H₁: Financial Statement Disaggregation Disclosure Quality and CFO Power

The disaggregation process is more useful when financial information is more appropriate to investors (Heitzman et al., 2010; Riedl & Srinivasan, 2010). Recent accounting literature interprets the way management disaggregation decisions influence financial reporting. In some cases, financial disaggregation affects financial reporting materiality and investors' decisions. Managers release special items when this specific information is applicable to investors (Riedl & Srinivasan, 2010). Thus, financial statement disaggregation practices depend on managerial decision-making and whether separately reported details of line items are material and appropriate to investors. Libby and Brown (2013) suggest that income statement disaggregation can reduce the allowable errors in disaggregated numbers and enhance the consistency of disaggregation and statement totals and subtotals. Their findings reveal that voluntary disaggregation reduces the average amount of errors tolerated in current financial statements.

The above argument is supported by recent empirical evidence linked with analyst forecast and manager disaggregation financial reporting disclosure. Hirst, Koonce, and Venkataraman (2007) assume that investors rely more on disaggregated management earnings forecasts. In other words, a disaggregation scheme is positively associated with forecasting accuracy and higher financial reporting quality. They further suggest that delivering a disaggregated forecast by management reduces the drive for earnings management and provides a positive signal of certainty about management forecasts to

investors. In this manner, the credibility of forecasts is realised, which promotes better quality financial reporting. Similarly, D'Souza et al. (2010) find that opportunistic managers who repeatedly manage earnings are restricted by disaggregated disclosures that attract investors' attention to reliable earnings.

Supporting this argument, Libby and Brown (2013) suggest that disaggregated income statements enhance the credibility of income statements' line of items, which mitigates auditor tolerance for misstatement, and may deliver positive signals to investors and users. A greater level of financial statement disaggregation increases auditor confidence about financial statements and may enhance SEC regulatory scrutiny of uncorrected financial statement errors in the disaggregated numbers (Libby & Brown, 2013). This is particularly the case if any accounting irregularities occur, as users might make decisions based on this misstated reporting. Thus, auditors assume that the financial statement disaggregated component is considered in the evaluation of managerial credibility towards information disclosure. They also deliver material judgement about a firm's financial reporting standards (Amir et al., 2014).

Two concurrent audit fee studies suggest that voluntary financial statement disaggregation enhances the relevance of disaggregated disclosure to auditors. Koh, Tong, and Zhu (2016) note that auditors evaluate higher engagement risk and demand higher audit payments from clients. They further suggest that greater financial statement disaggregation is more likely to relate to lawsuits filed because of suspected financial misstatements. This is because of the presence of disaggregated financial components in financial reports. The study by Beck, Glendening, and Hogan (2016) contends that there is a positive association between audit fees (proxied as audit effort) and disaggregated financial statements, and they further report that financial statement disaggregation improves financial reporting quality. It does this through reducing audit fees and increasing managerial effort to engage in more credible reporting. Given that, financial statement disaggregation may have a beneficial effect on financial reporting quality. While CFOs are primarily accountable for managing and supervising financial reporting and accounting processes, they are obliged to disclose disaggregated financial statements according to standard-setters and regulators when information is considered material (Heitzman et al., 2010). This is because standard-setters inspire managers to deliver

disaggregated financial statements to increase investors' predictive power on simplified financial components (FASB, 1984).

According to the rent extraction hypothesis, CFOs may be involved in financial reporting manipulation activities because they have certain motivations that benefit them personally (e.g., Feng et al., 2011; Hossain & Monroe, 2015; Jiang et al., 2010). This opportunistic behaviour causes a potential conflict of interest, which is considered the 'agency problem' or 'agency cost' (Davis et al., 1997). Duong and Evans (2015) present empirical evidence that CFOs receive more non-cash compensation, particularly when firms report poorer quality finance-related reporting. More importantly, they indicate that CFOs who hold more managerial power—where the CFO serves on the board of directors, holds a higher level of stock ownership or stays longer in the position—are more likely to achieve certain compensation outcomes. CFOs with a higher level of authority are involved in potential unethical accounting reporting practices, such as income-increasing accruals-based and real transactions management (Collins et al., 2017). CFOs to manipulate accounting reporting and deliver high profits to promote their own high stock-based compensation and careers (e.g., Balsam et al., 2012; Hoitash et al., 2012). Under the rent extraction hypothesis, this thesis argues that CFOs with more power are involved in delivering low-quality financial reporting and information to market participants, which eventually send negative signals to the market, with serious implications for stakeholders and investors. Therefore, this study expects to find a negative relationship between finely disaggregated financial information and powerful CFOs.

Conversely, Bedard et al. (2014) suggest a positive association between CFOs with board membership (considered a proxy of power) and higher quality earnings (lower amount of financial restatement and internal material weakness, and good-quality accruals). Following the efficient contracting hypothesis, CFOs should not peruse self-interest motivation (Davis et al., 2010; Hiebl, 2015), and may disclose sound financial reporting quality through better disaggregated financial data, which eventually delivers a good signal to market participants. Thus, it is argued that CFOs with more power may deliver a sound information environment and disclose high-quality disaggregated accounting data. Based on the above arguments, the following hypothesis is developed for this thesis:

Hypothesis 1:

- (a) According to the efficient contracting perspective, more powerful CFOs are positively associated with better financial statement disaggregation.
- (b) According to the rent extraction perspective, more powerful CFOs are negatively associated with better financial statement disaggregation.

3.3.2 H₂: Analyst Forecast Disclosure Quality and CFO Power

Analysts are sophisticated users of financial reporting information and are especially interested in financial reports that incorporate improvements in their decision-making process (Abernathy et al., 2013). This thesis seeks to investigate the relationship between the properties of analyst forecasts as a proxy of financial reporting quality through the power of the CFO over the firm's information and reporting transparency. Recent research suggests that corporate governance practices reduce dispersion of financial analysis, increase accuracy and thus increase the overall quality of financial reporting disclosure and the information environment (e.g., Byard et al., 2006). Although the accounting literature examines CEO power and authority towards corporate disclosure, no research considers whether CFO managerial power has any effect on analyst forecasts. Jiraporn et al. (2014) suggest that powerful CEOs are covered by fewer forecast analysts, and they also suggest that powerful CEOs have lower enticements to obscure information which resulting in thus their firms observe less information asymmetry.

Similarly, analysts' forecast behaviour—such as analyst forecast bias—might be negatively affected by CEO optimism (Wong & Zhang, 2014). Matsunaga and Yeung (2008) examine whether there are systematic differences between a firm's financial reporting disclosure policies and having a CEO who has previously served as a CFO (i.e., an ex-CFO). Their research shows that ex-CFOs report more income-decreasing (conservative) accruals and that analyst forecasts for firms managed by ex-CFOs are more accurate, less dispersed and less volatile. Further, they state that firms run by ex-CFOs supply fewer positive earnings forecasts. These findings indicate that ex-CFOs document more conservative accounting policies and provide more precise earnings guidance to analysts. Working in this manner supports the credibility of the firm's financial disclosures and is positively related to CFOs' financial experience. CFOs have significant incentives to use domain-specific expertise (accounting and financial) to maintain their

reputation capital. Consistent with this, Abernathy et al. (2013) find a positive relationship between financial accounting expert audit committees and analyst earnings forecasts.

Alternatively, analyst coverage improves in tandem with better quality firm disclosures and a more trustworthy information environment (Lang & Lundholm, 1996). Here, the financial reporting environment can be controlled by the CFO, who can exercise more authority within the business, which can potentially induce bias in analysts' earnings forecasts (Wong & Zhang, 2014). However, when an analyst is informed about management authority and power over disclosure, they may focus on management guidance to maintain a better network with management level in the future (Wong & Zhang, 2014).

Given that CFOs directly supervise financial reporting processes, a high degree of expertise in financial reporting and disclosure standards is generally a prerequisite for the position (Matsunaga & Yeung, 2008). It is reasonable to assume that CFOs have better control over firms' reporting environment and are more capable of concealing disclosure. Further, managerial guidance has the intention to walk analysts 'down' to a manageable forecast earnings level, which serves to modify the accuracy of end-of-year forecasts than beginning-of-year forecasts (Wu & Wilson, 2015, p. 170). When a firm operates in a complex information environment, an analyst is more dependent on management, and thus has stronger motivation to rely on management guidance (Wong & Zhang, 2014).

Based on the rent extraction perspective, agents do not act in shareholders' best interests; thus, as a financial leader, CFOs will eventually raise the agency cost for a firm. For example, this includes corporate expenditure, bonding cost, price protection cost or increasing the cost of debt through not aligning with shareholders' expectations. When CFOs use their status and power to become deeply involved in earnings management (Baker et al., 2018; Collins et al., 2017), analysts are likely to produce less accurate forecasts. When a firm's corporate governance mechanism is weak, analysts rely less on financial reporting disclosure, and instead employ other sources of information (i.e., other analysts' reports, direct discussions with managers or other executives, or other published information) and provide more precise analyst forecasts (Bhat et al., 2006). This hypothesis suggests that powerful CFOs will elevate agency conflicts and increase their

wealth by reporting low-quality earnings at the expense of shareholders (e.g., Beaudoin et al., 2015). This view is similar to managerial power from the opportunistic perspective.

In contrast, the efficient contracting hypothesis aligns with stewardship theory and suggests that powerful CFOs act in the best interests of a firm. When managers perform their responsibilities, they are more likely to follow the legal requirements. Correspondingly, CFOs gain intrinsic reward economic motivations, such as career growth, reputation capital and upholding managerial ethics to enhance shareholders' wealth (Muth & Donaldson, 1998). Thus, CFOs who follow the stewardship philosophy and are devoted pro-organisation individuals also limit agency cost (e.g., Donaldson & Davis, 1991; Hiebl, 2015). CFOs must perform their authority as a protector, rather than an antagonist, in conveying quality accounting data and a quality information environment (e.g., Ge et al., 2011; Geiger & North, 2006; Jiang et al., 2010). This reasoning leads to a hypothesis regarding how CFOs' power may positively influence analysts' forecast disclosure quality (i.e., a positive association between forecast accuracy and a negative influence on forecast dispersion and revision volatility):

Hypothesis 2:

- (a) According to the efficient contracting perspective, more powerful CFOs are positively associated with analyst forecast disclosure quality.
- (b) According to the rent extraction perspective, more powerful CFOs are negatively associated with analyst forecast disclosure quality.

3.3.3 H₃: Accounting Conservatism and CFO Power

CFOs' accounting estimates play a crucial role in selecting conservative accounting methods. As an example, CFOs choose the firm's inventory valuation method, bad debt allowance, accounts receivables collection, or other critical accounting decisions. Accounting conservatism is interchangeably considered an important attribute of high-quality earnings and financial reporting quality (Beekes et al., 2004; Zhong & Li, 2017). Prior research shows that the distribution of CFOs' financial decision-making power and skills, as part of the top management team, affects financial reporting choices (e.g., Beck & Mauldin, 2014; Collins et al., 2017; Demerjian et al., 2013; Ge et al., 2011; Jiang et al., 2010). Dichev et al. (2013) suggest that CFOs are directly accountable for earnings

quality, as ‘CFOs are direct producers of earnings quality’ who ‘make the key decision [about] how to apply accounting standard in their company’ (p. 2). Further, CFOs ‘have a formal background in accounting, which provides them with keen insights into the determinants of earnings quality’ and ‘whether to use or abuse discretion in financial reporting’ (Dichev et al., 2013, p. 2). Even CFOs’ personal characteristics (such as gender) influence accounting conservatism. For example, Francis et al. (2015) find that female CFOs are more likely to be associated with greater accounting conservatism than are male CFOs.

The two conflicting perspectives of positive accounting theory—efficient contracting and rent extraction hypotheses—are applied to support the relationship between CFO power and accounting conservatism. CFOs with greater authority may act as a steward of a firm and work in the best interests of shareholders or, alternatively, may act as an agent and trigger conflicts of interest under the rent extraction hypothesis. As the chief authority in financial reporting, the CFO significantly influences decisions regarding the firm’s financial reporting mechanisms. Supporting the rent extraction hypothesis, agency theory contends that CFOs should act to maximise a company’s market value; however, instead, they act out of self-interest and trigger information asymmetry (Hiebl, 2015; Malmendier & Tate, 2009). CFOs can misuse their authority and exploit accounting methods and processes within existing regulatory settings, and subsequently report high firm profitability when there is none (Malmendier & Tate, 2009).

For example, Collins et al. (2017) explain that powerful CFOs are positively related with higher levels of income-increasing accrual-based earnings management and real transactions management, and exploit influential power on their incentive-based compensation. Consistent with these findings, Bedard et al. (2014) argue that CFOs who act as insiders and sit on the board can negotiate from a powerful position to receive higher compensation in both cash and total salary. They also exert their power in managerial decisions, and their turnover is less likely (i.e., CFO turnover is around 4.7% less among CFOs who sit on the board). Research shows evidence that CFOs also dominate audit quality (which reflects earnings and financial reporting quality) and exercise their power over audit fees (Beck & Mauldin, 2014).

Similarly, Ahmed and Duellman (2013) find that overconfident CEOs are more likely to be linked to lower accounting conservatism practices, such as less recognition of bad

news and greater reporting of net asset value. Given that accounting conservatism is associated with practising high-quality corporate governance and better monitoring (e.g., Ahmed & Henry, 2012; Francis et al., 2015; Lafond & Roychowdhury, 2008; Sultana & Van der Zahn, 2015), it is expected, according to rent extraction hypothesis, that powerful CFOs can compromise the quality of corporate governance and conservative accounting practices. They can do this by manipulating financial reporting choices for their own personal benefit.

Based on the efficient contracting perspective, CFOs seek to establish a positive long-term reputation; therefore, they intend to earn reputation capital and are more likely to engage in high-quality conservative accounting practices. CFOs with more power should have greater monitoring control over financial reporting and are thus predicted to provide higher quality financial reporting, as reflected in more timely recognition of bad news. Thus, firms with more powerful CFOs—who should involve in stronger corporate governance—may be more likely to provide good-quality financial reporting, resulting in practices of conservative reporting. The above discussion leads to the following third hypothesis:

Hypothesis 3:

- (a) According to the efficient contracting perspective, more powerful CFOs are positively associated with accounting conservatism.
- (b) According to the rent extraction perspective, more powerful CFOs are negatively associated with accounting conservatism.

3.3.4 H₄: CFO Power and Monitoring Intensity

The extant literature provides evidence that monitoring improves the quality of financial reporting. This study argues that monitoring intensity may enhance CFOs' influence on the quality of financial reporting and the information environment, and further assist in reducing distortions in accounting information. The empirical model of this thesis examines whether governance interventions (the combination of board monitoring and external and internal audit effectiveness) may strengthen or weaken powerful CFOs' influence on financial reporting.

Good governance seeks to eliminate agency problems and convey better reporting choices and outcomes. The board of directors supervises and manages the work undertaken by senior executives (Bonn & Pettigrew, 2009). Corporate governance considers the responsibilities and obligations of a firm's board leadership and structure, and this board enjoys a high concentration of executive power (Bebchuk, Cohen, & Ferrell, 2009; Dalton et al., 1999; Sundaramurthy, Rhoades, & Rechner, 2005). Research also indicates that the presence of a stronger board may enhance internal control and serve as an internal effective monitoring device for improving financial reporting quality (e.g., He, Labelle, Piot, & Thornton, 2009; Marra, Mazzola, & Prencipe, 2011; Osma & Noguer, 2007). Additionally, the audit committee assists the board of directors in improving the integrity of financial reporting. The existence of a competent audit committee can enhance the quality of financial reporting by checking the correct implementation of accounting policies, reviewing financial statements and being vigilant about internal control procedures.

The board's responsibility complements internal auditors' activities. The prior auditing literature suggests that effective accounting reporting quality is influenced by a variety of audit committee characteristics, including audit committee meetings, size, financial expertise and independence (Bédard, Chtourou, & Courteau, 2004; Carcello, Neal, Palmrose, & Scholz, 2011; DeZoort, Hermanson, Archambeault, & Reed, 2002; DeZoort & Salterio, 2001). Alternatively, when the audit committee/external auditor and board monitoring are not aligned for the purposes of accounting regulation, the manager may trade-off between accounting decision-making and manipulation incentives. The governance and disclosure literature suggest that board independence and expertise enhance the quality of financial reporting (e.g., Byard et al., 2006; Eng & Mak, 2003; Forker, 1992; Ho & Wong, 2001).

CFOs' fiduciary duties are related to internal controls and oversight of financial reporting (Indjejikian & Matějka, 2009). CFOs are monitored by internal and external corporate governance mechanisms, which can pressure them to manage earnings expectations downwards, yet manage earnings accruals upwards (Liu, 2014). Further, CFOs can employ their authority to misrepresent financial information to maximise their self-interest. The level of monitoring intensity may moderate the effect of opportunist financial reporting practices. For example, Hope (2003) finds that strong governance

monitoring of the manager is related to better forecast accuracy, as it forces the manager to apply the recommended accounting rules, which reduces analysts' forecast decisions about future earnings. Monitoring is a dimensional measure, where strong governance mechanisms complement or replace each other in an attempt to reduce managerial power over financial misreporting, disclosure quality and the firm's overall financial information environment (Duellman et al., 2013). CFOs may not be able to manipulate financial reporting when a firm implements and enforces a high-level monitoring procedure. It is expected that governance monitoring may force CFOs to disclose bad news in a timely manner, adhere to conservative accounting, and supply better quality financial disclosure and information to analysts and other users who depend on accurate financial reporting.

This study investigates how the level of monitoring intensity may positively or negatively impacts on the relationship between powerful CFO and the financial reporting process. The above reasoning leads to the following testable hypothesis:

Hypothesis 4:

- (a) The level of governance monitoring intensity positively impacts on the relationship between CFO power and the quality of financial reporting.
- (b) The level of governance monitoring intensity negatively impacts on the relationship between CFO power and the quality of financial reporting.

3.4 Conclusion

This chapter has presented testable hypotheses with an analysis of agency theory and stewardship theory. In total, four hypotheses were developed regarding the effect of the quality of financial reporting and the way powerful CFOs behave. Hypotheses 1 and 2 predict the relationship between powerful CFOs and financial statement disaggregation disclosure quality and analyst forecast disclosure quality, while Hypothesis 3 considers the influence of powerful CFOs on accounting conservatism. The first three hypotheses are tested under efficient and opportunistic perspectives, with an overall focus on powerful CFOs and how and why they implement their financial reporting choices. Finally, Hypothesis 4 tests how the level of monitoring intensity strengthens or weakens

the relationship between powerful CFOs and the quality of financial reporting. The next chapter discusses the research design and methodology selected to test the hypotheses.

Chapter 4: Research Design and Method

4.1 Introduction

This chapter presents the research design and methods used to test the hypotheses that were developed and presented in Chapter 3, and justifies the selected research methods. This chapter is organised as follows. Section 4.2 details the sample selection, data sources, sample size and justification of the current sample. Section 4.3 defines the general methodology for measuring the dependent, independent and control variables. Section 4.4 discusses the estimation of econometric issues related to the research models. Section 4.5 focuses on the empirical models to analyse the data and provide evidence for the hypotheses and Section 4.6 explains additional analysis and endogeneity issues. Finally, the conclusion ends this chapter regarding the research design and methodology.

4.2 Research Design and General Methodology

4.2.1 Sample and Data Collection

Table 4.1 presents the sample selection process. The initial sample consists of 143,254 firms from Compustat for the years 2003 to 2015. From this initial sample, 24,700 foreign firms and 17,248 duplicate firms are deleted. A further 13,412 observations are dropped because of merging with the historical segment database. A total of 72,285 observations are dropped because of merging with ExecuComp, while 3,582 observations are dropped because of merging with BoardEx. This study conducts several robustness tests using different datasets; thus, the sample size varies for each analysis. Following prior US research, this study further eliminates financial and utilities firms, as these types of businesses have different reporting practices and regulatory requirements (Chen et al., 2015; Pittman & Fortin, 2004). Thus, the final sample consists of 9,679 firm-year observations from 1673 firms.

Table 4.1: Sample and Data Selection

Sample selection procedure	Observations
Firms available at Compustat for period 2003 to 2015	143,254
First-stage exclusions	
Foreign firms	(24,700)
Duplicate observations	(17,248)
Data deleted because of merge with historical segment	(13,412)
Second-stage exclusions	
Data deleted because of merge with ExecuComp	(72,285)
Data deleted because of merge with BoardEx	(3,582)
Financial institutions	(1,522)
Utilities institutions	(826)
Final sample	9,679

4.2.2 Sources of Data

The data are collected from several sources and the thesis constructs the sample for the period 2003 to 2015 from WRDS. Executive data are collected from ExecuComp and then financial data from Compustat. The stock return data are from Center for Research in Security Prices (CRSP). Financial analyst forecasts data are from I/B/E/S. The motivation to choose this sample is that the SOX legislation introduced in 2002 sought to generate greater transparency and financial reporting accuracy for the benefit of market participants. Table 4.2 below presents the details of the data sources.

Table 4.2: Sources of Data

Data	Database Source
Financial statement disaggregation	Compustat—Capital IQ
Analysts' forecasts	I/B/E/S
Accounting conservatism	Compustat and CRSP
Executive information	ExecuComp
Corporate governance data	BoardEx
Financials and firm characteristics	Compustat—Capital IQ
Market data	CRSP
Institutional ownership	Worldscope

4.2.3 Source Documentation Justification

The test variable is the CFO power index, which is obtained from the ExecuComp database. For the dependent variables, the financial statement disaggregation disclosure quality data are collected from Compustat—Capital IQ (Chen et al., 2015), the analyst forecast disclosure data are gathered from I/B/E/S (Hui & Matsunaga, 2015) and the accounting conservatism data are obtained from Compustat and CRSP (Ahmed & Duellman, 2013; Francis et al., 2015). The data for the control variables are collected from ExecuComp (executive characteristics and compensation), while the firm variables are collected from Compustat—Capital IQ. Finally, the governance data are extracted from BoardEx, the market data from CRSP and the institutional ownership data from Worldscope.

4.3 Variables Measurement

4.3.1 Measurement of Test/Major Independent Variable

4.3.1.1 Measure of CFO Power

Power is defined as the ‘capacity of individual actors to exert their will’ (Finkelstein, 1992, p. 506). This research measures the CFO power index (*CFPI*) based on Finkelstein’s (1992) measure of executive power: structural power, expert power, ownership power and prestige power. Prestige power does not apply as a proxy variable because this measure can be explained more through managerial reputation than powerful influence in the institutional environment (Finkelstein, 1992; Tang et al., 2011). Further, this power may not be significantly associated with the CFO power involved in firms’ corporate decision-making.

Although the CEO power literature emphasises several measures of executive power (e.g., Abernethy, Kuang, & Qin, 2015; Adams et al., 2005; Finkelstein, 1992), this study extends previous measures of CFO power (e.g., Baker et al., 2019; Beck & Mauldin, 2014; Bedard et al., 2014; Collins et al., 2017; Duong & Evans, 2015) by combining four variables: CFO title dummy, CFO insider dummy, CFO tenure dummy and CFO shareholding dummy. Any one of these variables alone cannot fully capture the complexity of CFO power. For an individual CFO, the power measure equals the sum of

these four dichotomous variables; therefore, this study constructs an index ³for composite CFO power. When CFO's sit on the board, stay longer period, holding more positions and holding large number of shares in firms may involve more influences, and this combination is considered as CFO influence over financial reporting quality. CFOs can influence their firm's financial reporting and information quality only when they exert power over important decisions (Adams et al., 2005).

The first measure of CFO structural power applying in this study is the CFO insider dummy, where the CFO sits on the board as a director (Beck & Mauldin, 2014; Bedard et al., 2014; Collins et al., 2017; Duong & Evans, 2015). Agency theory suggests that executives who function as board members may exercise both power and influence (Finkelstein, 1992). A CFO who is also an insider can influence dual decision-making power together with the CEO (Adams et al., 2005), have voting authority regarding the firm's matters and be more accountable to market participants (Collins et al., 2017). When an insider manager/officer (such as a CFO) sits on the board, he or she is more likely to work on principle financial and corporate decisions, alongside the CEO (Adams et al., 2005). Thus, this study analyses CFO directorship as the degree of power that a CFO has over a firm's reporting quality—that is, CFO directorship increases CFO power, which in turn should positively affect financial reporting quality. The management literature explains that the joint position of an executive as a board member and manager creates social networking across the board of directors (O'Reilly & Main, 2010; Phan & Lee, 1995), and this dual position enhances CFO power. Joint CFO–director roles can enhance CFO power and positively affect the reporting quality of a firm. Hence, this study uses a dummy variable to measure the CFO insider, which takes the value of 1 if the CFO also serves as a board member and 0 otherwise.

The second measure of CFO structural power is the CFO title dummy. This variable is defined as the number of official titles of a CFO stated in annual reports (e.g., Collins et al., 2017; Finkelstein, 1992; Liu & Jiraporn, 2010). This measure is the most common type of power in a corporation and is generally determined by the top hierarchical structure. Given that CFOs hold senior positions within organisational/business

³ CFO power index that equals the sum of CFO board dummy, CFO title dummy, CFO shareholding dummy and CFO tenure dummy which ranges from 0 to 4. Alternatively, this study is used PCA and scaled index, both methods are tested on baseline regression and report similar results (untabulated).

structures, they have the right to exert influence on other members. When they hold more titles, organisations permit CFOs to handle financial reporting uncertainty by controlling the behaviours of subordinates and managing the firm's reporting choices. Hence, this study uses a dummy variable to measure the CFO title variable, which takes a value of 1 if the CFO has more titles greater than the median value and 0 otherwise.

The only measure of expert power and third measure of CFO power is the CFO tenure dummy, which can be considered the total duration of time that a CFO has been employed (Beck & Mauldin, 2014; Collins et al., 2017; Duong & Evans, 2015; Liu & Jiraporn, 2010). Other studies attribute the relationship between CFO tenure and accounting quality to the level of CFO power (Beck & Mauldin, 2014; Collins et al., 2017). Long CFO tenure can be an indication of a CFO's power (Shen, 2003), and this power may increase as the appointment continues. The more power a manager holds, the more power he or she may wield in the board's financial reporting decision-making. CFO tenure indicates a CFO's knowledge of the accounting policies and skills in his or her firm (Collins et al., 2017) and this position enables greater bargaining power in decision-making with the board and CEO (Shen, 2003). Therefore, the duration of a CFO's position should be positively related to reporting quality. Hence, a dummy variable to measure the CFO tenure variable is defined, which takes the value of 1 if the CFO tenure is greater than the median value and 0 otherwise.

The fourth measure of CFO power and first measure of ownership is the percentage of shareholding held by a CFO who actively participates in corporate decisions (Beck & Mauldin, 2014; Duong & Evans, 2015; Finkelstein, 1992). Prior literature suggests that more substantial managerial ownership leads to greater alignment of shareholder and manager interests and reduces agency problems between owners and management (e.g., Demsetz & Villalonga, 2001; Jensen & Meckling, 1976). Managerial ownership permits managers to control the company and participate in corporate policies because, in this case, the manager also acts as a shareholder (Khan, Chand, & Patel, 2013). Thus, a CFO who also has some degree of ownership of a firm has more power in the agent–principal relationship.

When a CFO with shareholdings is even more powerful, it means that he or she holds both management and shareholding positions, and effectively means having more control over monitoring decision-making and ability to influence the board. Warfield, Wild, and

Wild (1995) suggest that the degree of management shareholding is positively associated with information disclosure about earnings. Similarly, Eng and Mak (2003) note that lower managerial ownership increases monitoring and agency problems. Another view asserts that management's and shareholders' interests are affiliated (Donnelly & Mulcahy, 2008). Thus, managerial ownership may promote the best reporting practices. This study applies a dummy variable to measure CFO ownership power: percentage of CFO shareholding above the median value, which takes the value of 1 if the CFO has shareholdings in a firm and 0 otherwise. Figure 4.1 presents the measurement proxies used in this study to measure CFO power.

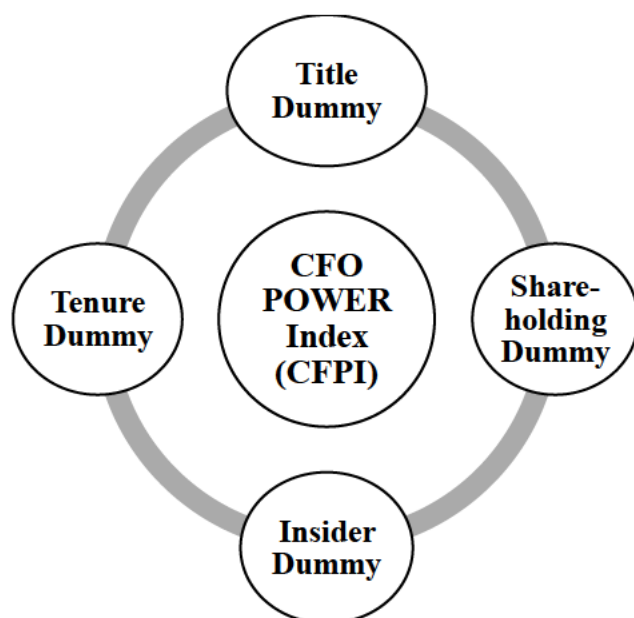


Figure 4.1: Determinants of CFO Power Index (*CFPI*)

4.3.2 Measurement of Dependent Variables

The first measure of financial reporting quality is financial statement disaggregation disclosure quality, as proposed by Chen et al. (2015). The second measure of financial reporting quality is analyst forecast disclosure quality, which uses the properties of analyst forecast (forecast accuracy, dispersion of analyst forecasts and analyst forecast revisions volatility serve as analyst ratings of a firm's financial disclosures). This measure is derived as an indirect measure of reporting quality (Hui & Matsunaga, 2015; Lang & Lundholm, 1996). This study utilises Ball and Shivakumar (2005) accrual-based

estimates of loss recognition as conditional accounting conservatism measure and Givoly and Hayn (2000) accruals measure as unconditional accounting conservatism. The determination of these three variables is explained in the dependent variables section of this chapter.

4.3.2.1 Construction of Financial Statement Disaggregation Disclosure Quality

This study adopts the new disaggregation quality (*DQ*) measure introduced by Chen et al. (2015) to measure disclosure quality by recording the level of disaggregation of accounting data through a count of non-missing Compustat line of items. Chen et al. (2015) compute the completed *DQ* measure based on a simple average of the balance sheet (*DQ_BS*) score, income statement (*DQ_IS*) score and composite *DQ* score. The procedure for the measurement of financial statement disaggregation disclosure quality is shown below in figure 4.2.

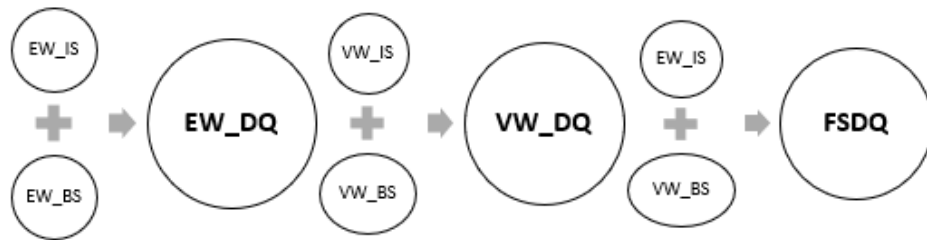


Figure 4.2: Determinants of Financial Statement Disaggregation Disclosure Quality (*FSDQ*)

The overall *DQ* measured is the simple average of the balance sheet (*DQ_BS*) score and income statement (*DQ_IS*) score. To calculate the *DQ_BS* score, Chen et al. (2015) develop an association of 11 group accounts and 25 parent accounts, with a total of 93 sub-accounts linked to this process. Group accounts are from the assets and liabilities side for developing the balance sheet score. Likewise, to compute the *DQ_IS* score, Chen et al. (2015) link 51 sub-accounts and 7 group accounts from the sales and expenditure sides. They then measure the number of non-missing items from the 11 balance sheet group accounts, with the total number of non-missing accounts divided by the total group account for each category. For example, the current liabilities possess four parent accounts, which are linked to 11 sub-accounts. If four of the sub-accounts are considered as missing, the current liabilities might have reported a non-missing item ratio of 0.63

(7/11). These non-missing account calculation processes continue for the 11 group accounts from the balance sheet items. The *DQ_IS* score is measured with a similar process concerning the *DQ_BS* score. An equally-weighted *DQ_IS* score is calculated by following the average ratio of non-missing items over 7 group accounts, and this notional score ranges between 0 and 1.

Each non-missing item ratio is multiplied by the group accounts' value-weighted percentage (like the dollar value of total current assets divided by the dollar value of total assets for each group account). The 11 value-weighted non-missing ratios are then summed, which conveys a balance sheet disclosure score with a notional minimum of 0 and maximum of 2 (because the balance sheet includes both assets and liabilities). This score is further divided by 2; thus, the *DQ_BS* value-weighted score ranges between 0 and 1. Using value-weighting construction releases additional weight to the measurement, which apparently is more acceptable to investors and the organisation's financial operation processes (Chen et al., 2015). Chen et al. (2015) follow two methods to calculate the final *DQ_BS* and *DQ_IS* scores: equally-weighted score (equally-weighted score for both *BS* and *IS*) and value-weighted score (value-weighted score for both *BS* and *IS*). Chen et al. (2015) use the equally weighted score for *DQ_IS* and the value-weighted score for *DQ_BS*. The final disclosure quality (*DQ*) is the simple average of these two scores. This study operationalises the financial statement disaggregation disclosure quality as '*FSDQ*'.

Chen et al. (2015) claim that disclosure quality derived from financial statement disaggregation is theoretically different from other existing disclosure quality measures (e.g., CIFAR disclosure index [1993, 1995]; Fog Index Li [2008]; analyst [e.g., AIMR scores], management forecast, conference calls or researcher self-constructed index) employed in the accounting literature to evaluate overall disclosure quality. They advise that the financial statement disaggregation disclosure measure obtains the 'fineness of data and is based on a comprehensive set of accounting line items in annual reports' (Chen et al., 2015, p. 1019). Existing disclosure methods report some limitations about industry-specific disclosure quality. Chen et al. (2015) state that 'DQ is conceptually very different from existing measures of disclosures, which are often limited to a subset of firms, to a subset of disclosed items, or to texts in MD&A' (p. 1021). The disclosure quality measure introduced by Chen et al. (2015) is valid and applicable to all Compustat industrial firms.

4.3.2.2 Construction of Analyst Forecast Disclosure Quality

Forecast error is measured by the error in analysts' earnings forecasts, the absolute difference between the last consensus forecast of earnings per share (EPS) estimate prior to the release of earnings, and the actual EPS is scaled by the beginning-of-year stock price (Choi, Chen, Wright, & Wu, 2014; Hui & Matsunaga, 2015):

$$ERR_t = (|FORECAST_t - EPS_t| \div PRICE_{t-1})$$

where $FORECAST_t$ is the mean I/B/E/S consensus analyst forecast in the most recent month prior to the earnings announcement; EPS_t is the actual EPS before extraordinary items at time t , collected from I/B/E/S; and $PRICE_{t-1}$ is the stock price at the end of period t .

Forecast dispersion among analysts is significantly used as an estimate of uncertainty about future earnings because it reflects the consensus among analysts regarding future firm prospects (e.g., Abernathy et al., 2013; Barron & Stuerke, 1998). Lower dispersion indicates a transparent information environment subsequent to less uncertainty encompassing expectations of future earnings (Abernathy et al., 2013).

Dispersion of analysts' forecasts ($DISP$) is defined as the standard deviation of earnings forecasts issued by individual analysts in year t (Gul et al., 2013). Dispersion is calculated as the standard deviation of individual analysts' forecasts divided by stock price at the beginning of fiscal year t . Forecast dispersion is a measure of the degree of uncertainty about future earnings (Gul et al., 2013):

$$DISP_t = STD (FORECAST_t) \div PRICE_{t-1}$$

Revision volatility ($RVOL$) is the standard deviation of the monthly revision of the median forecast deflated by the beginning-of-year price (Hui & Matsunaga, 2015; Lang & Lundholm, 1996). The greater the optimism of analysts, the larger the downwards revision in the analyst forecasts and the higher the future stock volatility (Athanassakos & Kalimipalli, 2003, p. 11). Recent empirical evidence suggests that analysts' forecast revisions have an effect on the movement of stock prices (e.g., Lys & Sohn, 1990). In other words, the higher the number of analysts following a firm, the less optimism, less

scope for forecast revisions and lower the future stock volatility (Alford & Berger, 1999; Athanassakos & Kalimipalli, 2003). Figure 4.3 shows the determinants of analyst forecast disclosure quality.

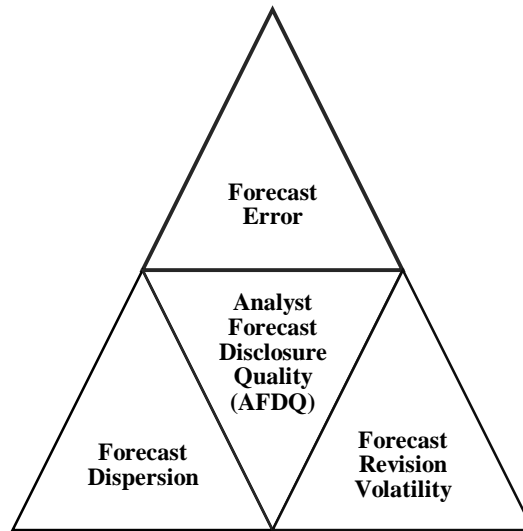


Figure 4.3: Determinants of Analyst Forecast Disclosure Quality (*AFDQ*)

This study converts three analysts' forecasts measures – error, dispersion, and revision volatility to sum decile ranking, which high decile means lowest forecast error, lowest forecast dispersion and lower level of revision volatility (Hui & Matsunaga, 2015). Then, principal component analysis (PCA) is conducted to calculate composite analysts' forecast disclosure quality, which is coded as '*AFDQ*'. PCA (considered 'factor analysis') processes the data to seek components that are selections of practices with different weights, and subsequently best explain the variance between the objects of study (Nobes, 2011, p. 276). Alternatively, this study also divides sum decile ranking by 30, following Hui and Matsunaga (2015). Both methods provide similar findings; however, this study employs PCA because: (1) it can locate hidden patterns of data, (2) it lessens the dimensionality of the data by removing noise and redundancy in the data and (3) it can explain the variance–covariance structure of a set of variables through linear combinations that help recognise correlated variables (Karamizadeh, Abdullah, Manaf, Zamani, & Hooman, 2013; Kassambara, 2017). The PCA procedure reduces the variables to fewer components, which account for the variance of the data (Duellman et al., 2013). In particular, this study selects the component with eigenvalues greater than 1.

4.3.2.3 Additional Dependent Variables for Robustness Check

This study applies analyst forecast bias as an additional properties of analysts' forecasts variables in the validation test. Consistent with prior research (e.g., Das, Levine, & Sivaramakrishnan, 1998; Duru & Reeb, 2002), analyst forecast bias is the signed difference between mean consensus analyst-forecasted EPS and actual EPS (averaged over fiscal months one to 12), scaled by the stock price of a firm for time period $t - 1$. The quality of financial reporting also has a strong association with forecast bias. The accounting literature argues that analyst forecasts disclose biased forecasts for different reasons, such as when analysts fail to forecast earnings appropriately or seek to achieve personal incentives (Das et al., 1998; Ke & Yu, 2006; Lim, 2001). Prior research (Das et al., 1998) argues that analyst forecasts optimistically predict earnings for firms whose earnings are less predictable, and this declines with high-quality and less volatile earnings (Behn et al., 2008; Ghosh & Moon, 2010). The following provides the measurement of forecast bias:

$$Bias_t = (FORECASTED EPS_{it} - ACTUAL EPS_{it}) / PRICE_{t-1}$$

Bid–ask spread (*BAS*) serves as a proxy variable to check Hypotheses 1 and 2. This study uses *BAS* as the 12-month average of quoted bid–ask spread divided by the mid-point of the bid and ask quotes (e.g., Chen et al., 2015; Fu, Kraft, & Zhang, 2012). Cohen (2003) finds that corporate reporting quality is associated with bid–ask spreads. Prior research (Francis, Nanda, & Olsson, 2008; Fu et al., 2012) uses *BAS* as the proxy for information asymmetry.

Following prior research (Dhaliwal, Naiker, & Navissi, 2010; Farber et al., 2018), this study applies market liquidity as a proxy for information quality. This study measures market liquidity as suggested by Amihud's (2002) illiquidity; however, this study converts this measure to a reciprocal form, which is explained as market liquidity. Higher level of market liquidity indicates the greater level of firms' information environment and better reporting quality. Healy et al. (1999) find a positive relationship between firm disclosure and market liquidity; therefore, enhanced financial disclosure is associated with improved market liquidity (Heflin, Shaw, & Wild, 2005).

Jensen (1986) suggests that growth firms have adequate investment opportunities that are expected to lower the cost of debt, compared with mature or low-growth firms. Prior empirical evidence shows an association between the quality of financial reporting and cost of debt financing (Francis et al., 2008; Sengupta, 1998). This study measures the cost of debt via the ratio of the firm's interest expense in year $t + 1$ to average interest-bearing debt outstanding in year t and year $t + 1$.

4.3.2.4 Measurement of Accounting Conservatism

4.3.2.4.1 Conditional Conservatism Measure

This study uses an accrual-based estimate of loss recognition following Ball and Shivakumar's (2005) conditional conservatism as the primary measure. This measure a similar piecewise-linear association between accruals and cash flows (Ahmed & Henry, 2012). Therefore, this method tests a linear association between accruals and cash flow. Ball and Shivakumar (2005) argue that asymmetry in gain and loss recognition makes a significant contribution to predicted empirical accruals models and necessary inferences for estimating discretionary accruals. In practice, economic gains are accepted when realised and recorded as cash; in contrast, economic losses are recognised on time through unrealised (i.e., non-cash) accruals. The following Ball and Shivakumar (2005) conservatism model is applied:

$$CON_TACC_t = \beta_0 + \beta_1 DOCF_t + \beta_2 OCF_t + \beta_3 DOCF_t \times OCF_t + \beta_4 CFPI + \beta_5 OCF_t \times CFPI + \beta_6 DOCF_t \times CFPI + \beta_7 DOCF_t \times OCF_t \times CFPI + Control\ Variables + \mu_t$$

where *CON* denotes accounting conservatism and *TACC_t* indicates total annual accruals, measured as income before extraordinary items minus cash flow from operations, scaled by total assets at the beginning of the fiscal year (Ho et al., 2015). Therefore, together, this study operationalises this measure as *CON_TACC*.

Cash flows from operations (*OCF_t*) are measured as earnings before abnormal and extraordinary items less accruals. Both accruals and cash flows from operations are standardised by dividing them by the beginning-of-period total assets. *DOCF_t* is a dummy variable taking the value of 1 if *OCF_t* is negative and 0 otherwise. Following Ball and Shivakumar (2005), β_2 is expected to be suggestively negative, which expresses a negative relationship between cash flows and accruals (Ahmed & Henry, 2012, Dechow,

1994), because “conditional conservatism arising from asymmetry in the treatment of good and bad cash flow news is reflected in a higher positive relation between accruals and cash flows when cash flows are negative, as it is likely that the negative impact of earnings was recognised in a prior period” (Ahmed & Henry, 2012, p.646) . B_3 is projected to have a positive relationship in conditional conservatism, which explains the positive relationship between cash flows and accruals during negative news periods. β_7 expresses the effect of CFO power ($CFPI$) on accounting conservatism. When powerful CFOs adopt more conservative accounting practices, this study expects β_7 to be significantly positive, and vice-versa. There is no expectation drawn for the intercept B_0 or dichotomous variable B_1 . Presented below is Figure 4.4 which shows the determinants of conditional and unconditional accounting conservatism.

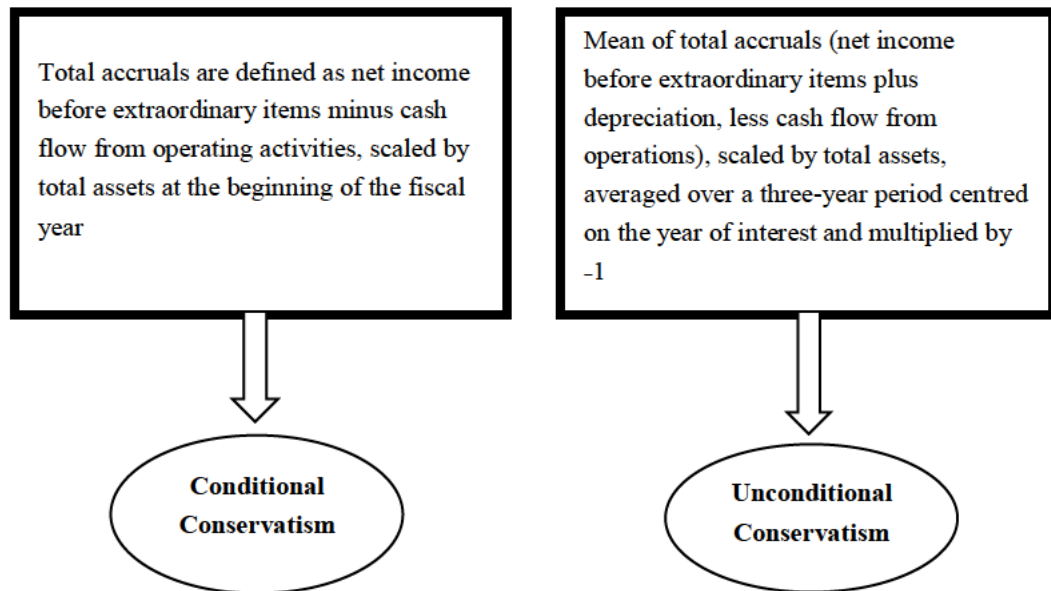


Figure 4.4: Determinants of Conditional and Unconditional Accounting Conservatism

The first additional conditional conservatism measure is Basu’s model (1997), which was modified by Lafond and Roychowdhury (2008). This model aims to identify how rapidly bad news is recognised in earnings numbers. Basu (1997) considers conservatism as ‘asymmetric verification of gains and losses and uses the earnings/returns relationship to investigate accounting conservatism’ (Ahmed & Henry, 2012, p. 640). Commonly, this model uses stock returns as a proxy for identified bad news or good news of a firm. Market reactions, such as stock price volatility, depend on news variability in the market. Beeks

et al. (2004) suggest “Earnings conservatism refers to bad news being reflected more quickly than good news in earnings” (p.48). Therefore, earnings are positively associated with good news, and negatively associated with bad news (Basu, 1997). This study uses Basu’s (1997) conservatism model as follows:

$$NI_t = \beta_0 + \beta_1 RET + \beta_2 DR + \beta_3 RET \times DR + \beta_4 CFPI + \beta_5 RET \times CFPI + \beta_6 DR \times CFPI + \beta_7 RET \times DR \times CFPI + \text{Control Variables} + \mu_t$$

Here, NI_t is net income before extraordinary items, deflated by the beginning-of-period prices; R_t is the stock price of return of the firm, measured by compounding 12-monthly stock returns ending the last day of fiscal year t ; and D_t is a dummy variable that equals 1 when reporting bad news (in this case, negative or zero market-adjusted share rate of return) and otherwise equals 0 (when it reports good news—in this case, positive market-adjusted share rate of return).

The second additional conditional conservatism measure is the persistence of earnings change measure of conservatism (CON_NI) developed by Basu (1997). The following persistence of earnings change conservatism measure (Ho et al., 2015) is used for the robustness check of conditional conservatism:

$$\Delta NI = \beta_0 + \beta_1 \Delta DNI_{t-1} + \beta_2 \Delta NI_{t-1} + \beta_3 D\Delta NI_{t-1} \times \Delta NI_{t-1} + \beta_4 CFPI + \beta_5 D\Delta NI_{t-1} \times CFPI + \beta_6 \Delta NI_{t-1} \times CFPI + \beta_7 D\Delta NI_{t-1} \times \Delta NI_{t-1} \times CFPI + \mu_t$$

Here, ΔNI_t is the change in net income before extraordinary items in fiscal year t divided by total assets at the beginning of the fiscal year, ΔNI_{t-1} . The change in net income before extraordinary items in fiscal year $t - 1$ divided by total assets at the beginning of the fiscal year, and $D\Delta NI_{t-1}$ is a dummy variable equal to 1 if ΔNI_{t-1} is negative, and 0 otherwise.

4.3.2.4.2 Unconditional Conservatism Measure

For measuring unconditional conservatism, this study uses Givoly and Hayn’s (2000) accruals model, which is calculated by the mean of total accruals (total accruals measured as net income before extraordinary items, plus depreciation, less cash flow from operations) divided by the total assets (over a three-year period centred on the year of interest), multiplied by -1 (Francis et al., 2015; Krishnan & Visvanathan, 2008). This method is extensively used in the accounting literature (e.g., Francis et al., 2013; Francis et al., 2015; Zhang, 2008). From this model, a higher level of accruals indicates greater

conservatism. Unconditional conservative accounting inclines to increase the recognition of losses and accedes the understating of gains which subsequent in determinedly negative number of accruals (Francis et al., 2015). This study operationalises this unconditional conservatism as *CON_ACRU*.

The first alternative measure of unconditional conservatism is Zhang's (2008) skewness, which is the time series skewness of earnings. Following Zhang (2008), this study deflates skewness of earnings by the skewness of cash flows to control for the variation in firm performance (Francis et al., 2015). Then the value is multiplied by -1 for consistency in direction. From the analysis, a higher value of Zhang's (2008) skewness of unconditional conservatism indicates higher conservatism. The second alternative unconditional conservatism measure is Beaver and Ryan's (2000) market-based model. The market value-based measure of conservatism is the book-to-market ratio multiplied by -1. Therefore, positive values suggest higher conservatism. The book-to-market ratio is an important measure because it integrates conservatism over the life of the organisation (Ahmed & Henry, 2012). Given that conservatism explains the book value of equity, compared with the market value of equity, firms using conservative accounting should have lower book-to-market ratios, and are thus considered examples of unconditional conservatism. Beaver and Ryan (2000) follow Feltham and Ohlson's (1995) valuation model, which identifies conservatism based on the degree of understatement of operating assets. Prior accounting literature uses the market-to-book ratio as a measure of a firm's growth opportunities and economic rents generated from assets-in-place (e.g., Ahmed & Duellman, 2007; Ahmed & Henry, 2012; Francis et al., 2015). In this case, it is necessary to control for economic rents and growth opportunities (Ahmed et al., 2002; Ahmed & Henry, 2012).

4.3.3 Measurement of Monitoring Intensity

To investigate the effects of monitoring intensity on the relationship between CFO power and financial reporting quality, this study uses two sets of variables to estimate the extent of monitoring intensity. These proxies are selected from governance studies in the accounting literature. Governance monitoring is a multifaceted measure, where corporate governance attributes may complement or substitute each other (Duellman et al., 2013). Following relevant literature (Duellman et al., 2013; Larcker, Richardson, & Tuna, 2007), this study uses PCA. This study selects principal components with an eigenvalue greater

than unity, using an extraneous rotation to overcome complications of multicollinearity (Duellman et al., 2013). Below is the figure which presents the determinants of governance monitoring intensity structures.

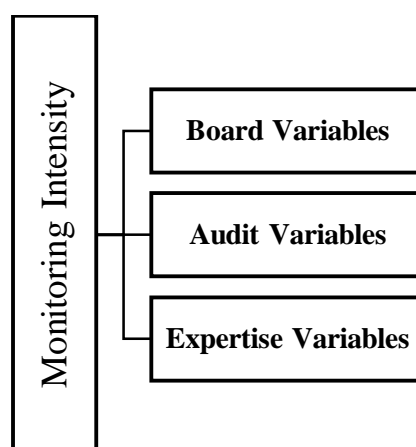


Figure 4.5: Determinants of Governance Monitoring Intensity

This PCA applies to the two major factors of governance monitoring variables: effectiveness of board and audit variables (variable details are explained in Appendix A). The first factor represents the board size, board independence, board members' average qualifications, and percentage of insider directors and percentage of executive directors on the board. The second factor represents audit committee size, percentage of independent members on the audit committee, percentage of audit committee members with financial expertise, Big 4 and audit firm industry specialisation- these governance indicators are expected to implement strong monitoring mechanisms to ensure high levels of governance monitoring across multiple dimensions (Ahmed & Duellman, 2013). The total sample is separated into high versus low monitoring intensity by comparing each monitoring factor score to the median factor score. Further, the selected factor scores above the median score indicate a high level of monitoring, while scores below the median score indicate a low level of governance monitoring of a firm. The relationship between powerful CFOs and financial reporting quality can be explained under High vs. Low monitoring intensity:

High governance monitoring intensity = positive and significant, denotes stronger association between the variable under high monitoring intensity and follow efficient contracting hypothesis.

High governance monitoring intensity = positive and insignificant, denotes weaker association between the variable under high monitoring intensity and follow efficient contracting hypothesis.

Low governance monitoring intensity = positive and significant, denotes stronger association between the variable under low monitoring intensity and follow efficient contracting hypothesis.

Low governance monitoring intensity = positive and insignificant, denotes weaker association between the variable under low monitoring intensity and follow efficient contracting hypothesis.

However, this assumption will report in a reverse way when a powerful CFO may motivate by rent extraction hypothesis.

4.3.4 Control Variables

To empirically test H_1 and H_2 , a number of control variables are included in the research model. Numerous firm characteristics are included as control variables, consistent with the earlier relevant literature. Larger firms hold more scope and complex operations than do smaller ones. This study controls firm size (TA) using firms' total assets, where more complex operating firms are more likely to have larger non-missing items (Chen et al., 2015). Similarly, firm size (TA) is calculated by natural logarithm of total assets. Firm size has a positive relationship with forecast accuracy and a negative relationship with forecast dispersion and analyst forecast revision volatility (Hui & Matsunaga, 2015; Lang & Lundholm, 1996). Firm age (AGE), research and development intensity (RD) and foreign sales (FS) are used in the regression model to assess the complexity of the firm's operational activities (Chen et al., 2015; Hui & Matsunaga, 2015). To reduce the influence of skewness, this study uses the natural log of TA , AGE and SEG for the above three variables in the regressions. The number of segments (SEG) explains the operational complexity of multiple product markets, which would make accounting reporting more challenging to forecast (Hui & Matsunaga, 2015).

Prior studies (e.g., Gul et al., 2013; Hui & Matsunaga, 2015) use loss ($LOSS$) as an indicator variable in the research model to document negative income for a firm. This study controls growth (GR), financial leverage (LEV), research and development expense (RD), institutional ownerships (IO), shareholder (SH), foreign Sales (FS) and market-to-

book ratio of equity (*MB*). Following relevant research (Hui & Matsunaga, 2015; Lang & Lundholm, 1993), this study includes growth and institutional investors in the model. Firms with higher growth and greater institutional investors produce information for market participants and the public (Bhushan, 1989; Hui & Matsunaga, 2015). Further, this study applies sales growth (*GR*) as growth opportunities and return on assets (*ROA*) as a proxy for profitability. Meanwhile, debt-to-asset ratio (*LEV*) indicates financial leverage, while the market value of equity divided by the book value of equity serves as the market-to-book ratio (*MB*).

Further, this study includes the number of analysts (*ANA*) and earnings surprise (*SUR*) in the H₂ model as analyst forecast variables. Earnings surprise (*Surprise*) is defined as the changes in EPS deflated by last year's stock price (Abernathy et al., 2013; Gul et al., 2013). Consistent with analyst forecast research (Abernathy et al., 2013; Gul et al., 2013; Lang & Lundholm, 1996), larger variability of earnings is related to larger forecast errors and is expected to be positively related to forecast dispersion and negatively related to forecasting accuracy. This study computes ROA volatility (*VOL*) by the standard deviation of the annual ROA for the six-years immediately prior to the current year, and includes it as a control variable because volatility affects analyst forecast and information quality (Frankel, Kothari, & Weber, 2006; Hui & Matsunaga, 2015; Jiraporn et al., 2014; Lang & Lundholm, 1996). The number of analysts following (*ANA*) is measured by the natural logarithm of number of analysts (Abernathy et al., 2013; Gul et al., 2013; Hui & Matsunaga, 2015; Lang & Lundholm, 1996).

The third dependent variable of this study is accounting conservatism. To empirically test H₃, a number of control variables are included in the research model. Numerous firm characteristics are included, consistent with prior conservatism studies. Larger firms may have less information asymmetry than smaller firms, thereby decreasing the tendency of conservatism (Lafond & Watts, 2008). Consistent with this, firm size (*SZ*) is measured by the natural log of total assets, as a control variable in the regression model. Firms with more growth opportunities (*GR*) are more associated with aggressive accounting policies (Ahmed & Duellman, 2007; Lafond & Watts, 2008); thus, market-to-book ratio (*MB*) and sales growth (*GR*) are used as proxies for growth opportunities. Sales growth affects accruals, such as inventories and receivables (Ahmed et al., 2002), and a higher *MB* ratio tends to lower accounting conservatism (Givoly & Hayn, 2000). Debt-to-asset ratio is

used as a leverage (*LEV*) proxy variable in the conservatism regression model and exerts a positive effect on accounting conservatism. Higher leverage is more likely to lead to greater shareholder conflicts, and thus a tendency towards more conservative accounting (Ahmed & Duellman, 2007; Ahmed et al., 2002).

Basu (1997) and Watts (2003) argue that litigation risk is an important driver of accounting conservatism. The projected cost of litigation is higher for firms that overstate earnings and asset than for firms that understate earnings and/or use conservative accounting practices to reduce probable litigation costs (Ahmed & Duellman, 2007; Watts, 2003). The indicator variable, *LIT*, is equal to 1 if the firm operates in a litigious industry and 0 otherwise. Following prior studies (Bentley, Omer, & Sharp, 2013; Goh & Li, 2011; Gong, Ke, & Yu, 2013; Ho et al., 2015), this study employs the following primary Standard Industrial Classification (SIC) codes to represent litigious industries: 2833 to 2836 (biotechnology), 3570 to 3577 (computer equipment), 3600 to 3674 (electronics), 5200 to 5961 (retailing) and 7370 to 7374 (computer services). The cost connected with conservative accounting is higher for less profitable (*PR*) firms than for highly profitable firms; thus, a positive relationship exists between conservatism and profitability (Ahmed et al., 2002).

Further, research and development (*RD*) serves as a control in the regression model for unconditional conservatism. *RD* is GAAP-mandated, which means it is more likely to derive economic rents produced by assets-in-place. GAAP-mandated conservatism is positively associated with accounting conservatism (Ahmed & Duellman, 2007; Francis et al., 2015). Cash holding (*CH*)—the cash and short-term investment divided by total assets—is used as the control for cash-based performance (Ahmed & Duellman, 2007; Francis et al., 2015). Following prior research (Ahmed & Duellman, 2007; Francis et al., 2015; Watts, 2003), this thesis expects to find a positive relationship between accounting conservatism and cash holding because conservatism limits cash wastage and reduces agency cost. Tangibility (*TAN*)—measured by net property, plant and equipment divided by total assets—is also controlled in the conservatism regression model (Francis et al., 2015). Finally, this study controls industry and year variables to ensure that the results are not influenced by industry and year difference. Refer to the research model section and Appendix A for details about the measurement of these variables.

4.4 Estimation Method and Econometric Issues

This study estimates the OLS regression after controlling for year and industry. It is given that firms are associated with the key independent variable (*CFPI*) and both dependent variables (firms' reporting and disclosure choices—financial statement disaggregation disclosure quality and analyst forecast disclosure quality). Therefore, it is essential to control for firm-specific effects to mitigate a correlated omitted variable problem and effectively insulate CFO power specific effects.

In addition, outliers or any extreme values in the data can lead to heteroscedasticity issues in the data, which is an unequal variance of the error term across multiple observations, which interrupts the assumption of linear regression (Wooldridge, 2010) and can significantly affect the results (Gujarati, 2014). To overcome such a problem, data are winsorised at the 1% and 99% levels. This study also checks the existence of heteroscedasticity in the data by performing White/Koenker statistics, which are standard tests for heteroscedasticity in linear regression (Baum, Schaffer, & Stillman, 2003). Additionally, cluster standard errors by the firm are checked to remove heteroscedasticity and autocorrelation, since every firm has had its own intercept for multiple years, considering the heterogeneity of attributes between firms (Gujarati, 2014).

Endogeneity has always plagued the accounting and corporate governance literature. Endogeneity problems can arise because of measurement error in the regressor, correlated omitted variables bias, selection bias, simultaneous equation bias, equilibrium conditions or autocorrelation in the error terms of the regression equation (e.g., Gujarati, 2014; Lennox, Francis, & Wang, 2011; Wooldridge, 2010). In general, endogeneity is always considered alongside governance, firm value and performance, or corporate governance and disclosure quality (e.g., Ammann, Oesch, & Schmid, 2011; Benson & Davidson, 2010). Given that CFO power (corporate governance variable) and disclosure quality (financial variables) are subject to endogeneity, it is necessary to address this problem by undertaking appropriate tests suggested in the literature to generate more reliable results.

Prior research uses panel regression with fixed-effects as an efficient technique for controlling endogeneity associated with corporate governance, disclosure, firm performance studies (e.g., Bebhuk et al., 2009; Bozec et al., 2010; Cheung et al., 2010). Following other studies, to address and alleviate endogeneity issues, this study controls

year and industry fixed-effects, runs fixed-effects regressions and uses specific additional control variables, which may work well in mitigating endogeneity bias (Li, 2016).

This study addresses unobservable data issues, because unobservable data issues sample may not produce accurate observations of populations and analysis; thus, the results could be biased (Guo & Fraser, 2015). Prior research describes this as ‘self-selection bias due to unobservable result from a failure to control for the effect of differences researchers cannot observe’ (Tucker, 2010, p. 32). Following prior governance and managerial research (e.g., Gul et al., 2013; Henderson, Masli, Richardson & Sanchez, 2010), to overcome any potential self-selection bias (e.g., analyst forecast variables, disaggregation system and CFO power proxy variables), this study estimates Heckman’s (1976) two-step model. In the first stage, the inverse Mills ratio (IMR) is calculated. In the second stage, the IMR is used as an additional control variable in the main regression to control for potential self-selection bias.

Further, this study uses PSM method to confirm that the results are not caused by firm-specific factors (Sun, Kent, Qi, & Wang, 2017), as pre-matched descriptive statistics indicate the ultimate firm variable differences exists between low-power and high-power CFO firms. Shipman, Swanquist, and Whited (2016) state that ‘PSM works by balancing treatment and control samples across multiple dimensions. In practice, however, because the propensity score is an aggregate measure of all variables, it will reduce differences in covariates’ (p. 218). This method controls the differences in firm characteristics between high- and low-power CFO firms. The propensity score is first calculated for each executive-year as the predicted value, and then match each executive-year for low-powerful CFOs with an executive-year which high-powerful CFOs which has the closet propensity score in the same year (Sun et al., 2017, p.2722). To do so, one must assign differences in the propensity scores for each match to .02 calliper. In this process, a total of 1,396 observations are obtained for financial statement disaggregation and analyst forecast matched samples.

Finally, in most corporate governance research (e.g., Lim, Matolcsy, & Chow, 2007), endogeneity is usually mitigated by using the instrumental variable (IV) method. 2SLS is an effective way to solve the problem of omitted variables and reverse causality (Gujarati, 2014; Wooldridge, 2010). Variables may be omitted from models because of the influence of analyst forecasts or disaggregation samples. It is possible that CFO power

may not be a true predictor, and the variation of disclosure quality could be sourced by other omitted variables through CFO power, such as CFO pay slice. Any difference in reporting quality or choices indirectly depends on the omitted variables (e.g., CFO pay slice) by endogenous CFO power. This questionable condition can create reasonable doubt regarding the rationality of the main finding. Thus, the instrument variable may help isolate CFO power's influence on disclosure choices and avoid potential endogenous issues. The validity of the 2SLS method largely depends on identifying an appropriate instrument variable, and this variable could be associated with CFO power, but not the probability of disclosure choices. To adjust for potential endogeneity, this study treats the CFO power indicator as endogenous and conducts 2SLS regressions. Specifically, this study applies industry-adjusted CFO power Index and industry-adjusted CFO pay slice (*CPS*) as an instrument variable. The instrument is relevant because it partially measures executive power (e.g., Baker et al., 2019; Henderson et al., 2010; Mande & Son, 2012) in executive research and greatly influences the CFO power proxies.

4.5 Research Model

The four regression equations used to test H_1 to H_3 , respectively, are explained below.

4.5.1 Financial Statement Disaggregation Disclosure Quality: H_1

The dependent variable is *CFPI*, which is the index of powerful CFOs. The explanatory variable in this study is *FSDQ*, which captures financial statement disaggregation disclosure quality. When *FSDQ* is positively related with a powerful CFO, indicates higher disclosure and financial reporting quality, and vice-versa. The construction of *FSDQ* indexes is explained in the general methodology section. A set of firm variables is included in this model.

The following OLS regression model examines the effect of a powerful CFO on *FSDQ* with robust standard errors clustered by firm:

$$DQ_BS/DQ_IS/FSDQ = \beta_0 + \beta_1 CFPI + \beta_2 TA + \beta_3 AGE + \beta_4 SEG + \beta_5 MB + \beta_5 LEV + \beta_7 ROA + \beta_8 VOL + \beta_9 RD + \beta_{10} LOSS + \beta_{11} GR + \beta_{12} SH + \beta_{13} FS + \beta_{14} IO + YR + IND + e \quad (H_1)$$

Here:

DQ_{BS} = balance sheet disclosure quality—the value-weighted disclosure quality of balance sheet items (theoretical maximum of 1, minimum of 0).

DQ_{IS} = income statement disclosure quality—the equally-weighted disclosure quality of income statement items (theoretical maximum of 1, minimum of 0).

$FSDQ$ = financial statement disaggregation disclosure quality: $0.5 \times (DQ_{BS} + DQ_{IS})$.

$CFPI$ = a measure of CFO power that equals the sum of CFO insider dummy, CFO title dummy, CFO shareholding dummy and CFO tenure dummy.

TA = total assets—the log of total assets as of the beginning of year t .

AGE = firm age—the log of firm age measured as the number of years of financial data that appear in Compustat.

SEG = segments—the log number of segments. The number of segments is the number of business segments within the firm.

MB = the log of market value of equity divided by the book value of equity at the beginning of year t .

LEV = leverage—the book value of total liabilities divided by the book value of assets.

ROA = return on assets—earnings before extraordinary items divided by beginning total assets.

VOL = ROA volatility—standard deviation of the annual ROA for the six-year period immediately prior to the current year.

RD = research and development expenditure—the research and development expenses divided by beginning total assets.

$LOSS$ = operating loss—an indicator variable equal to 1 if a loss occurs within the current year (income before extraordinary items is negative) and 0 otherwise.

GR = sales growth—sales growth over three years, from $t1$ to $t + 3$.

SH = shareholders—number of common shareholders (in thousands) at the beginning of year *t*.

FS = foreign sales—the proportion of sales by foreign segments.

IO = institutional ownerships—the number of shares held by institutions divided by beginning total outstanding common shares.

YR = year dummy.

IND = industry dummy.

4.5.2 Analyst Forecast Disclosure Quality: H₂

The dependent variable is *CFPI*, which is the index of powerful CFOs. The explanatory variable is *AFDQ*, which captures analyst forecast disclosure quality. *AFDQ* is positively related with powerful CFOs, where *AFDQ* symbolises higher disclosure and financial reporting information quality, and vice-versa. The construction of the *AFDQ* indexes is explained in the general methodology section. A set of firm variables is included in this model:

$$AFDQ = \beta_0 + \beta_1 CFPI + \beta_2 TA + \beta_3 AGE + \beta_4 SEG + \beta_5 MB + \beta_5 LEV + \beta_7 ROA + \beta_8 VOL + \beta_9 RD + \beta_{10} LOSS + \beta_{11} GR + \beta_{12} SH + \beta_{13} FS + \beta_{14} IO + \beta_{15} ANA + \beta_{16} SUR + YR + IND + e \quad (H_2)$$

Here:

AFDQ = analyst forecast disclosure quality—the PCA score from the lowest forecast error, lowest forecast dispersion and lowest revision volatility. From this score, the highest number represents the lowest error, lowest dispersion and lowest volatility. It is explained in the measurement of dependent variables section.

ERR = forecast error—the absolute difference between the last consensus forecast of EPS estimate prior to the release of earnings and the I/B/E/S EPS scaled by the beginning-of-year stock price.

DIS = forecast dispersion—the standard deviation of the analyst forecasts included in the year-end consensus forecast, deflated by the absolute value of the mean consensus forecast at the end of the year.

ANA = forecast analyst log—number of analysts covering each firm at the beginning of year *t*.

SUR = surprise—this year's earnings minus last year's earnings, deflated by stock price.

4.5.3 Conditional Conservatism Measure: H_3

The following cash flows and accruals conservatism mode was developed by Ball and Shivakumar (2005), and subsequently built by Lara et al. (2009) and Ball et al. (2008):

$$\begin{aligned} CON_TACC_t = & \beta_0 + \beta_1 DOCF_t + \beta_2 OCF_t + \beta_3 DOCF_t \times CFO_t + \beta_4 CFPI + \beta_5 OCF_t \times \\ & CFPI + \beta_6 OCF_t \times CFPI + \beta_7 OCF_t \times OCF_t \times CFPI + \beta_8 SZ + \beta_9 LEV + \beta_{10} MTB + \beta_{11} \\ & LIT + \beta_{12} TAN + \beta_{13} PR + \beta_{14} GR + YR + IND + e \end{aligned} \quad (H_3)$$

Here:

CON_TACC_t = total accruals—defined as net income before extraordinary items minus cash flow from operating activities, scaled by total assets at the beginning of the fiscal year.

CFPI = a measure of CFO power that equals the sum of CFO insider dummy, CFO title dummy, CFO shareholding dummy and CFO tenure dummy.

OCF = cash flow—operating cash flow deflated by total assets at the beginning of the fiscal year.

DOCF = negative CFO—a dummy variable that equals 1 if CFO is negative and 0 otherwise.

SZ = total assets—the firm's size calculated as the natural log of total assets at the end of the fiscal year.

LEV = leverage—book value of total liabilities divided by the book value of assets.

MTB = market to book—the market-to-book ratio calculated as the market value of equity, scaled by the book value of equity at the end of the fiscal year.

LIT = litigation—a dummy variable that equals 1 if the firm is in a litigious industry and 0 otherwise. Following Ho et al. (2015), the primary SIC codes are considered to represent litigious industries, as follows: 2833 to 2836 (biotechnology), 3570 to 3577 (computer equipment), 3600 to 3674 (electronics), 5200 to 5961 (retailing) and 7370 to 7374 (computer services).

TAN = tangibility—net amount of property, plant and equipment scaled by total assets.

PR = profitability—earnings before interest, tax, depreciation and amortisation scaled by total assets.

GR = growth—sales growth, defined as the percentage of annual growth in total sales.

4.5.4 Unconditional Conservatism Measure: H₃

Givoly and Hayn's (2000) accruals model:

$$CON_ACRU_t = \beta_0 + \beta_1 CFPI + \beta_2 SZ + \beta_3 LEV + \beta_4 CFO + \beta_5 LIT + \beta_6 TAN + \beta_7 PR + \beta_8 GR + \beta_9 RD + \beta_{10} CH + YR + IND + e \quad (H_3)$$

Here:

CON_ACRU_t = mean total accruals (net income before extraordinary items plus depreciation less cash flow from operations) scaled by total assets, averaged over a three-year period centred on the year of interest and multiplied by -1 (Ahmed et al., 2002; Givoly & Hayn, 2000; Krishnan & Visvanathan, 2008).

RD = research and development expenditure—research and development scaled by total assets.

CH = cash and short-term investments scaled by total assets.

4.6 Additional Analysis and Endogeneity Issues

4.6.1 Additional Analysis

4.6.1.1 Financial Disaggregation Disclosure Quality and Analyst Forecast Disclosure Quality with CFO Power—High- versus Low-growth Firms

In this analysis, the same baseline regressions for H_1 and H_2 are tested by high-growth versus low-growth opportunities of a firm. High growth versus low growth can be measured by the sales growth median value. When sales growth is more than the median value can be considered high growth firm and lower than the median value is deemed as low growth firm. High-quality disclosure conveys a positive signal to investors; therefore, this study tests whether the association between powerful CFOs and the quality of disclosure can be varied for high-growth versus low-growth firms.

4.6.1.2 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling Compensation Motivation

In this analysis, the same baseline regression model is run for the three determinants of financial reporting quality, alongside control of the CFO compensation variable. CFO compensation data are collected from ExecuComp. The variable is known as *TDC1* from this database, and comprises the following: salary, bonus, other annual compensations, total value of restricted stock granted, total value of stock options granted (using Black-Scholes model), long-term incentive pay-outs and all other totals. This study constructs a compensation dummy where CFO compensation is greater than the median equals 1 and otherwise equals 0. This study then tests whether CFO compensation enhances or deters the relationship between powerful CFOs in terms of delivering good-quality financial reporting. The following regression model is run:

$$FSDQ/AFDQ/CON = \beta_0 + \beta_1 CFPI + \beta_2 COMP + Controls + YR + IND + e$$

4.6.1.3 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling CEO Power

Here, the same baseline regression model is run to test the relation between the quality of financial reporting and powerful CFOs. CEO power can be measured by the sum of CEO

on board, CEO title dummy, CEO shareholding dummy and CFO tenure dummy. CFOs' capabilities can be restricted or forced by the presence of powerful CEOs during financial reporting choices (e.g., Feng et al., 2011; Indjejikian & Matějka, 2009). Therefore, this study examines the relationship between powerful CFOs and the quality of reporting practices in the existence of powerful CEOs in the firm. The following regression model is run:

$$FSDQ/AFDQ/CON = \beta_0 + \beta_1 CFPI + \beta_2 CEPI + Controls + YR + IND + e$$

4.6.1.4 Financial Disaggregation Disclosure Quality, Analyst Forecast Disclosure Quality and Accounting Conservatism with CFO Power—Controlling CFO Background Characteristics

Recently, the accounting and finance literature has examined whether executive characteristics influence financial reporting quality (Hambrick, 2007; Hambrick & Mason, 1984). CFO age is measured by a dummy variable equal to 1 if the CFO's age is 55 or older at the beginning of the year, and 0 otherwise. The CFO gender dummy is 1 if the CFO is female and 0 otherwise. These variables' information is collected from ExecuComp. In this analysis, the same baseline regression model for H1, H2 and H3 are run, alongside controlling for CFO age and gender dummy. This analysis tests whether CFO's diverse background can be dominant in the relationship between powerful CFOs and financial reporting quality. The following regression model is run:

$$FSDQ/AFDQ/CON = \beta_0 + \beta_1 CFPI + \beta_2 CFO\ AGE\ Dummy + \beta_3 CFO\ GEN\ Dummy + Controls + YR + IND + e$$

4.6.2 Alternative Measures of Disclosure and Information Quality

Relationship between Bid–ask spread (*BAS*) and CFO power:

$$BAS = \beta_0 + \beta_1 CFPI + \beta_2 PRC + \beta_3 VLM + \beta_4 BTM + \beta_5 Beta + \beta_6 TA + \beta_7 AGE + \beta_8 SEG + \beta_9 MV + \beta_{10} LEV + YR + IND + e$$

Relationship between Cost of debt (*CoD*) and CFO power:

$$CoD = \beta_0 + \beta_1 CFPI + \beta_2 BTM + \beta_3 Beta + \beta_4 TA + \beta_5 AGE + \beta_6 SEG + \beta_7 MV + \beta_8 LEV + \beta_9 ROA + YR + IND + e$$

Relationship between Market liquidity (*LIQ*) and CFO power:

$$LIQ = \beta_0 + \beta_1 CFPI + \beta_2 PRC + \beta_3 VLM + \beta_4 BTM + \beta_5 Beta + \beta_6 TA + \beta_7 AGE + \beta_8 SEG + \beta_9 MV + \beta_{10} LEV + YR + IND + e$$

Here:

BAS = 12-month average of quoted bid-ask spread divided by the mid-point of bid and ask quotes.

LIQ = reciprocal form of Amihud's (2002) illiquidity measure, where illiquidity is measured by daily absolute return divided by trading volume.

CoD = cost of debt, measured as the ratio of the firm's interest expense in year $t + 1$ to average interest-bearing debt outstanding in year t and year $t + 1$.

VLM = volatility—log *VOL* is the average daily trading volume (in million shares) over the fiscal year.

PRC = price—log of share price at the end of the current fiscal year.

BTM = book to market—log of book value of common equity divided by market value of common equity.

Beta = estimated via a market model regression of at least 18 of the 60 monthly return observations in the five-year period from Beta Suite.

The *CFPI*, *AT*, *AGE*, *SEG*, *ROA*, *MV* and *LEV* variable measurements have already been explained in the H_1 and H_2 regression models.

4.6.3 Endogeneity Issues: Financial Disaggregation Disclosure Quality and Analyst Forecast Disclosure Quality

4.6.3.1 2SLS Regression

This study applies the 2SLS and the first step of this process is to recognise the instrument variables that correlate with CFO power, but should not relate to other aspects of the

dependent variable, other than indirectly through a variable on the right side of the regression model devised by Francis et al. (2008). The following model is applied for the test:

$$FSDQ/AFDQ = \beta_0 Ind\ CPS + \beta_1 Ind\ CFPI + Control\ Variables + YR + IND + e$$

Here:

Ind CPS = When Ind. adj. CPS is greater than the industry-adjusted CPS median, then ind. adj. CPS dummy is equal to 1; otherwise, it is equal to 0.

Ind CFPI = Industry-adjusted CFO power. This measure is calculated by using two-digit SIC industry.

The control variables are similar to the H₁ and H₂ regression models. Using 2SLS could help detach the influence of CFO power on financial statement disaggregation disclosure quality and analyst forecast disclosure quality. Therefore, the statistical equations for both H₁ and H₂, which is re-calculated by applying 2SLS to recognise and eliminate potential endogeneity issues.

4.6.3.2 Propensity Score Matching

PSM can be applied to empirical accounting research, particularly in studies examining casual variables in an endogenous choice by managers (Armstrong, Jagolinzer, & Larcker, 2010). This scoring method helps researchers explicitly quantify the sensitivity of results for the primary causal variable of unobserved correlated omitted variables (Armstrong et al., 2010, p. 228). In this matched-pair research design, first estimate an ordered logistic propensity score model, then develop matched-pair for two groups which identifies the pairings. This process influences observations with the smallest propensity score differences. Finally, it examines the relationship between *FSDQ/AFDQ* with a powerful CFO by calculating whether *FSDQ* and *AFDQ* are significantly different between the treatment and control groups. The control variables are similar to the H₁ and H₂ regression models.

4.6.3.3 Heckman Selection Model

This study controls potential self-selection bias using the two-stage Heckman (1976) procedure. It is first important to calculate the IMR (Heckman, 1976) using a probit

model, which predicts CFO power. The IMR is included as an additional control variable for the second-stage model. This method expects to correct for self-selection bias when it is robust in cases where the two sets of variables are not similar (one recognised for the probit model and the other to estimate the influences of powerful CFOs on *FSDQ* and *AFDQ*) (Gul et al., 2013). To empirically test H₁ and H₂, the following equation is estimated:

$$FSDQ/AFDQ = \beta_0 + \beta_1 CFPI + \text{Control Variables} + IMR + YR + IND + e$$

The control variables are similar to the H₁ and H₂ regression models.

4.6.4 Additional Analysis for Accounting Conservatism

4.6.4.1 Additional Conditional Conservatism Measure

The sensitivity of earnings to returns measures conservatism as explained in Basu (1997) and modified by Lafond and Roychowdhury (2008).:

$$\begin{aligned} CON_RTN = & \beta_0 + \beta_1 RET + \beta_2 DR + \beta_3 DR \times RET + \beta_4 CFPI + \beta_5 RET \times CFPI + \beta_6 DR \\ & \times CFPI + \beta_7 RET \times DR \times CFPI + \beta_8 SZ + \beta_9 RET \times SZ + \beta_{10} DR \times SZ + \beta_{11} RET \times DR \\ & \times SZ + \beta_{12} LEV + \beta_{13} RET \times LEV + \beta_{14} DR \times LEV + \beta_{15} RET \times DR \times LEV + \beta_{16} MTB \\ & + \beta_{17} RET \times MTB + \beta_{18} DR \times MTB + \beta_{19} RET \times DR \times MTB + \beta_{20} LIT + \beta_{21} RET \times LIT \\ & + \beta_{22} DR \times LIT + \beta_{23} RET \times DR \times LIT + YR + IND + e \end{aligned}$$

Here:

CON_RTN = NI is net income before extraordinary items, deflated by the beginning-of-period prices.

RET = return—the accumulated market-adjusted stock returns from nine months before the fiscal year end to three months after the fiscal year end.

DR = negative return—a dummy variable that equals 1 if *RET* is negative and 0 otherwise.

The persistence of earnings changes measure of conservatism developed by Basu (1997):

$$\begin{aligned} CON_NI = & \beta_0 + \beta_1 D\Delta NI_{t-1} + \beta_2 \Delta NI_{t-1} + \beta_3 D\Delta NI_{t-1} \times \Delta NI_{t-1} + \beta_4 CFPI + \beta_5 D\Delta NI_{t-1} \times \\ & CFPI + \beta_6 \Delta NI_{t-1} \times CFPI + \beta_7 \Delta NI_{t-1} \times D\Delta NI_{t-1} \times CFPI + \beta_8 SIZE + \beta_9 SIZE \times D\Delta NI_{t-1} \\ & + \beta_{10} SIZE \times \Delta NI_{t-1} + \beta_{11} SIZE \times D\Delta NI_{t-1} \times \Delta NI_{t-1} + \beta_{12} MTB + \beta_{13} MTB \times D\Delta NI_{t-1} + \beta_{14} \end{aligned}$$

$$MTB \times \Delta NI_{t-1} + \beta_{15} MTB \times \Delta NI_{t-1} \times D\Delta NI_{t-1} + \beta_{16} LEV + \beta_{17} LEV \times D\Delta NI_{t-1} + \beta_{18} LEV \times \Delta NI_{t-1} + \beta_{19} LEV \times D\Delta NI_{t-1} \times \Delta NI_{t-1} + \beta_{20} LIT + \beta_{21} LIT \times D\Delta NI_{t-1} + \beta_{22} LIT \times \Delta NI_{t-1} + \beta_{23} LIT \times D\Delta NI_{t-1} \times \Delta NI_{t-1} + YR + IND + e$$

Here:

CON_NI = ΔNI change in net income before extraordinary items ($\#IB$) in fiscal year t , divided by total assets at the beginning of the fiscal year.

ΔNI_{t-1} = change in net income before extraordinary items ($\#IB$) in fiscal year $t - 1$, divided by total assets at the beginning of the fiscal year.

$D\Delta NI_{t-1}$ = a dummy variable that equals 1 if DNI_{t-1} is negative and 0 otherwise.

4.6.4.2 Additional Analysis Model Unconditional Conservatism

Beaver and Ryan's (2000) market model and Zhang (2008) Skewness Model:

$$CON_MKT/CON_SKEW = \beta_0 + \beta_1 CFPI + \beta_2 SZ + \beta_3 LEV + \beta_4 OCF + \beta_5 LIT + \beta_6 TAN + \beta_7 PR + \beta_8 GR + \beta_9 RD + \beta_{10} CH + YR + IND + e$$

Here:

CON_MKT = book-to-market ratio (BTM) on current annual stock returns (RET) (Beaver & Ryan, 2000), multiplied by -1.

CON_SKEW = the skewness of earnings divided by the skewness of cash flow from operations, multiplied by -1.

4.7 Conclusion

This chapter has presented in detail the research method employed to test the hypotheses regarding the association between powerful CFOs and financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism. This chapter has justified the selected sample, source documentation and time period analysed. Subsequently, this chapter introduced the regression models used to measure and test the hypotheses. The chapter also justified using the econometric method, including for the robustness test and endogeneity issues. The next chapter will discuss the descriptive

statistics, the main empirical findings generated in this research, and the robustness analysis used to validate the findings derived from the baseline regression models.

Chapter 5: Data Analysis and Findings

Introduction

This chapter presents the results of the OLS regressions examining the relationship between the quality of financial reporting and CFO power. Section 5.2 presents the descriptive statistics, correlation matrix and industry sample distributions, while Section 5.3 explains the H_1 to H_4 regression outcomes and results. Section 5.4 presents the additional analysis and validation test, then Section 5.5 presents alternative measurements of disclosure and information quality. Section 5.6 reports the results of the alternative measurement of accounting conservatism, while Section 5.7 explains the endogeneity issues and test results. Finally, Section 5.8 ends the chapter with a summary and conclusion.

5.1 Descriptive Statistics

Table 5.1 (a) reports the descriptive statistics for the variables used in the regression analysis for financial statement disaggregation disclosure quality ($FSDQ^4$) and analyst forecast disclosure quality ($AFDQ$). The variable definitions are listed in Appendix A. The summary statistics in Table 5.1 (a) show that the median value of $FSDQ^5$ (1.45) is slightly greater than the mean value (1.40); however, the median value of $AFDQ$ (0.40) is comparatively greater than the mean value (.02). The mean value of $CFPI$ (2.30) is lower than the median value (3.00). The remaining variables seem reasonable and consistent with prior research findings. The control variable results (TA , ROA , MB , RD) are consistent with studies conducted in the US (Hui & Matsunaga, 2015).

⁴ $FSDQ$ indicates the financial statement disaggregation disclosure quality, $AFDQ$ indicates the analyst forecast disclosure quality and $CFPI$ indicates the CF power index.

⁵ The measurement of this variable is explained in Appendix A.

The summary statistics for high-power versus low-power⁴ CFOs [Table 5.13.(b)] document that all independent variables' mean differences between CFOs with high versus low power are statistically significant at the 1% and 5% level of significance, except for the variables *ROA*, *IO*, and *SH*. These variables' mean differences report insignificant statistical differences between high versus low power. Some interesting conclusions can be drawn from these findings. *ROA*, *VOL*, *FSDQ*, *AFDQ* and *AGE* are higher for firms governed by highly powerful CFOs. These variables are consistent with additional analyses that test the relationship between *FSDQ* and *AFDQ* with powerful CFOs. More importantly, less powerful CFOs are more likely to be related to potential loss, higher leverage and higher earnings surprise. Further, the foreign sales, segment and number of analyst variables are higher for less powerful CFOs than more powerful CFOs.

Table 5.1 (b) reports the descriptive statistics for the variables used in the regression analysis for conditional and unconditional accounting conservatism. The H_1 , H_2 and H_3 regression models use the same *SZ (TA)*, *RD*, *GR* and *LEV* variables; therefore, these three variables' descriptive statistics are not reported in Table 5.1 (b). The mean value of total accruals (*TACC*) is -0.060. This negative total accrual is similar to previous studies (Ho et al., 2015), which infers that accrual accounting is commonly conservative in nature (e.g., Ball & Shivakumar, 2005; Basu, 1997; Ho et al., 2015). The mean value of operating cash flows (*OCF*) is 0.11, while the proportion of negative operating cash flow (*DOCF*) mean value is 0.05. This finding is consistent with Ho et al. (2015), Krishnan and Visvanathan (2008) and Givoly and Hayn (2000). The mean values of the remaining variables of *PR*, *CH*, *LIT*, *TAN* and *ACRU* are consistent with those of the accounting conservatism studies by Krishnan and Visvanathan (2008) and Francis et al. (2015).

Table 5.1 (a): Descriptive Statistics—Financial Statement Disaggregation and Analyst Forecast Disclosure Quality

Variables	OBS	Mean	SD	Min	Q1	Q2	Q3	Max
FSDQ	9,679	1.40	0.45	-7.90	1.20	1.45	1.60	4.50
AFDQ	8,260	0.02	1.27	-51.09	-0.01	0.35	0.40	0.46
CFPI	9,679	2.30	0.90	0.00	2.00	2.00	3.00	4.00
RD	6,782	0.06	0.08	0.00	0.01	0.04	0.09	0.86
ROA	9,677	0.06	0.11	-1.10	0.03	0.06	0.10	2.10
TA	9,677	7.30	1.50	2.30	6.20	7.20	8.30	14.00
SH	9,576	35	1053	0.00	0.45	2.00	8.00	100300
MB	9,429	5.20	1.50	-6.10	4.10	5.00	6.20	14.00
SEG	9,679	1.80	0.75	0.00	1.10	1.80	2.50	3.40
LOSS	9,679	0.15	0.36	0.00	0.00	0.00	0.00	1.00
LEV	9,641	0.20	0.19	0.00	0.02	0.18	0.30	2.60
VOL	9,679	114	38	81	91	100	110	193
ANA	9,679	2.00	0.84	0.00	1.60	2.10	2.60	3.60
SUR	9,676	-0.01	0.20	-3.20	-0.01	0.00	0.02	1.30
FS	8,951	0.96	0.95	0.00	0.05	0.80	1.60	11.00
GR	9,339	0.10	0.20	-0.65	0.02	0.07	0.15	6.30
IO	9,664	0.88	0.15	0.00	0.81	0.94	1.00	1.00
AGE	9,679	3.10	0.69	0.69	2.60	3.00	3.70	4.20

Table 5.1 (b): Descriptive Statistics—Accounting Conservative Variables

Variables	OBS	Mean	SD	Min	Q1	Q2	Q3	Max
TACC	9,679	-0.06	0.07	-0.47	-0.08	-0.05	-0.02	0.24
OCF	9,679	0.11	0.09	-0.25	0.06	0.10	0.16	0.46
DOCF	9,679	0.05	0.22	0.00	0.00	0.00	0.00	1.00
MTB	9,540	2.90	3.60	-40.00	1.50	2.30	3.60	56.00
LIT	9,679	0.30	0.46	0.00	0.00	0.00	1.00	1.00
PR	9,677	0.13	0.09	-0.49	0.09	0.13	0.18	0.47
TAN	9,679	0.24	0.22	0.00	0.07	0.16	0.33	0.90
ACRU	9,679	0.02	0.07	-0.69	-0.01	0.01	0.03	1.90
CH	9,679	0.17	0.17	0.00	0.04	0.11	0.25	0.80

See Appendix A for a definition of the variables.

Table 5.2 (a): Industry Classification

Industry classifications	Freq.	Per cent	Cum.
Consumer non-durables	551	5.7	5.7
Consumer durables	314	3.25	8.94
Manufacturing	1,689	17.46	26.41
Oil, gas and coal extraction and products	415	4.29	30.7
Chemicals and allied products	392	4.05	34.75
Business and equipment	2,618	27.07	61.82
Telephone and television transmission	176	1.82	63.64
Wholesale, retail and some services	1,296	13.4	77.04
Healthcare, medical equipment and drugs	1,042	10.77	87.81
Other	1,186	12.19	100
Total	9,679	100	

Table 5.2 (b): Yearly Distribution

Year	Freq.	Percent	Cum.
2003	582	6.01	6.01
2004	638	6.59	12.6
2005	655	6.77	19.37
2006	724	7.48	26.85
2007	781	8.07	34.92
2008	773	7.99	42.91
2009	845	8.73	51.64
2010	830	8.58	60.21
2011	788	8.14	68.35
2012	785	8.11	76.46
2013	806	8.33	84.79
2014	762	7.87	92.66
2015	710	7.34	100
Total	9,679	100	

Table 5.2 (c): Mean Difference for CFO Characteristics

	Total	High Power	Low Power	Mean Difference	T-test (P value)
CFO Tenure	4.27	7.05	3.04	4.01	0.00
CFO Title	2.48	3.52	2.02	1.49	0.00
CFO on Board	0.10	0.27	0.02	0.24	0.00
CFO Shareholding	0.27	0.39	0.09	0.31	0.00
CFO Age	51.03	53.06	49.74	3.32	0.00
CFO Gender	0.08	0.07	0.08	0.01	0.10

Table 5.2 presents industry classification for the whole sample. A higher number of firms in the total sample are from the business and equipment industry (27.07%) and manufacturing industry (17.46%), while the lowest number of firms are from the telephone and television transmission industry (1.82%). Subjective findings are reported (untabulated) for industry classification according to *FSDQ*, *AFDQ*, *CFPI*, *CON_TACC* and *CON_ACRU*. Chemicals and allied products (mean value of 1.46) and consumer non-durables (mean value of 1.46) report higher quality financial statement disaggregation disclosure (*FSDQ*). In contrast, telephone and television (mean value of 1.08) and oil, gas and coal extraction products (mean value of 1.12) industries indicate that these two industries practise a lower level of information disclosure. However, a higher percentage of analyst forecast disclosure quality (*AFDQ*) is reported by oil, gas and coal industry (mean value of 0.11), and other industries present moderately similar results. These findings support the notion that information disclosure can vary based on industry-wide regulation and reporting disclosure requirements.

Moreover, the CFO power industry classification (untabulated) indicates that the highest *CFPI* exists in the telephone and television industry (mean value of 1.67), followed by the wholesale and retail industry (mean value of 1.65) and the consumer non-durables industry (mean value of 1.62). This result suggests that these industries have more powerful CFOs.

Within the total accounting conservative industry sample (untabulated), the majority of sample firms are in the business equipment industry (27%) and manufacturing industry (17%). For both conditional conservatism (*CON_TACC*) and unconditional conservatism (*CON_ACRU*) samples, the oil and gas industry report the highest mean value for *CON_TACC* (0.12) and highest mean value for *CON_ACRU* (0.04).

From the table 5.2 (b), based on the yearly distribution of sample firms, the highest number of firms are included from the year 2009 (8.73%), 2010 (8.58%) and 2013 (8.33%) and the lowest (6.01%) number of firms are included from the first year (2003) in the sample.

From the table 5.2 (c), the summary statistics of *CFPI*—a combination of title, tenure, insider and shareholding⁶ results—show that powerful CFOs hold more than two titles in their supervised firm, where high-powerful CFOs hold an average of 3.5 titles. A huge difference is apparent in regard to shares owned by powerful CFOs. Overall, CFOs are holding 27% shares within the total sample, where high-powerful CFOs own 39% and less powerful CFOs own only 9.3% of shares. Overall, CFOs stay 4.3 years with the firm, although highly powerful CFOs' tenure is 7 years—double that of low-powerful CFOs' tenure (3.04 years). From the total sample, 9.7% of CFOs are also involve as insiders, and this figure seems larger for high-powerful CFOs. The summary statistics report that total 27% of high-powerful CFOs sit on boards as directors, compared with only 2.4% of less powerful CFOs sit on the board as directors. In summary, these results suggest that high-powerful CFOs hold higher senior management positions, greater shareholding and stay longer in the firm.

⁶ Title considers the number of titles held by a CFO. Tenure denotes how many years the CFO stayed with the sample firm. Insider denotes whether the CFO sat on the board. Shareholding considers the percentage of shares owned by the CFO. For summary statistics, this study considers a continuous variable not tested on dummy variables.

Table 5.3 (a): Pearson Correlation Matrix—FSDQ

	CFPI	RD	ROA	TA	SH	MB	SEG	LOSS	LEV	VOL	FS	GR	IO	AGE
CFPI	1													
RD	-.032**	1												
ROA	0.004	-.122**	1											
TA	-.033**	-.251**	-0.011	1										
SH	-0.011	-0.019	0.002	.045**	1									
MB	-.085**	.139**	.279**	.640**	.037**	1								
SEG	-.036**	-.242**	-0.002	.295**	0.015	.096**	1							
LOSS	-.030**	.212**	-.583**	-.126**	-0.009	-.217**	-.059**	1						
LEV	-.042**	-.153**	-.155**	.311**	0.019	.135**	.082**	.102**	1					
VOL	.154**	-.027*	-.044**	.113**	.020*	.064**	0.006	.023*	.096**	1				
FS	-.040**	.248**	.060**	.111**	.024*	.184**	.084**	-.031**	-.114**	-0.007	1			
GR	-.066**	.238**	.133**	-.141**	0.000	.098**	-.108**	-.081**	-0.018	-.121**	.057**	1		
IO	-0.018	-.037**	.033**	0.018	-0.014	-.088**	-.043**	-.068**	0.019	-.091**	0.020	.060**	1	
AGE	.087**	-.189**	-.033**	.381**	0.016	.151**	.315**	-.051**	.106**	.121**	.099**	-.201**	-.099**	1

** Correlation is significant at the 0.01 level (two-tailed).

* Correlation is significant at the 0.05 level (two-tailed).

Table 5.3 (b): Pearson Correlation Matrix—AFDQ

	CFPI	RD	ROA	TA	SH	MB	SEG	LOSS	LEV	VOL	FS	GR	IO	AGE	ANA	SUR
CFPI	1															
RD	-.031*	1														
ROA	0.012	-.114**	1													
TA	-.033**	-.252**	0.003	1												
SH	-.051**	-.037**	.040**	.384**	1											
MB	-.084**	.145**	.305**	.643**	.369**	1										
SEG	-.036**	-.252**	-0.003	.293**	.091**	.094**	1									
LOSS	-.030**	.204**	-.661**	-.124**	-.052**	-.219**	-.059**	1								
LEV	-.037**	-.212**	-.183**	.341**	.043**	.134**	.099**	.098**	1							
VOL	.154**	-.029*	-.051**	.115**	0.003	.065**	0.006	.023*	.104**	1						
FS	-.037**	.287**	.059**	.115**	.044**	.180**	.095**	-.030**	-.123**	-0.007	1					
GR	-.100**	.202**	.264**	-.173**	-.057**	.108**	-.103**	-.162**	-.065**	-.155**	.070**	1				
IO	-0.018	-.028*	.037**	0.010	-.180**	-.085**	-.046**	-.064**	.025*	-.093**	.035**	.083**	1			
AGE	.086**	-.202**	-.026**	.382**	.134**	.153**	.315**	-.051**	.118**	.121**	.116**	-.262**	-.103**	1		
ANA	-.027**	.031*	.168**	.589**	.238**	.632**	-0.009	-.168**	.068**	.049**	.092**	.096**	.184**	0.000	1	
SUR	.038**	.042**	.320**	-.030**	0.007	.139**	-0.001	-.252**	-.048**	-.025*	.031**	.091**	-.044**	-0.006	0.010	1

* Correlation is significant at the 0.05 level (two-tailed).

** Correlation is significant at the 0.01 level (two-tailed).

Table 5.3 (c): Pearson Correlation Matrix—CON_TACC

	OCF	DOCF	SZ	LEV	MTB	LIT	PR	TAN	GR	CFPI
OCF	1									
DOCF	-.502**	1								
SZ	.030**	-.167**	1							
LEV	-.153**	.021*	.315**	1						
MTB	.225**	-.033**	.030**	-0.006	1					
LIT	.100**	.042**	-.100**	-.198**	.062**	1				
PR	.715**	-.376**	.095**	-.048**	.223**	-.042**	1			
TAN	.123**	-.077**	.170**	.246**	-.065**	-.176**	.113**	1		
GR	.236**	-.051**	-.048**	-.037**	.096**	.041**	.214**	-.049**	1	
CFPI	-0.005	-.031**	-.038**	-.029**	-0.014	-.029**	0.007	0.001	-.095**	1

* Correlation is significant at the 0.05 level (two-tailed). ** Correlation is significant at the 0.01 level (two-tailed).

Table 5.3 (d): Pearson Correlation Matrix—CON_ACRU

	SZ	LEV	GR	RD	CH	LIT	PR	TAN	OCF	CFPI
SZ	1									
LEV	.324**	1								
GR	-.047**	-.036**	1							
RD	-.237**	-.226**	.024*	1						
CH	-.331**	-.340**	.050**	.549**	1					
LIT	-.103**	-.199**	.037**	.397**	.378**	1				
PR	.102**	-.051**	.219**	-.226**	-.075**	-.038**	1			
TAN	.170**	.249**	-.048**	-.351**	-.380**	-.183**	.107**	1		
OCF	.033**	-.152**	.238**	-.076**	.148**	.098**	.709**	.124**	1	
CFPI	-.042**	-.028**	-.094**	-.031**	-.020*	-.029**	0.009	0.010	-0.001	1

* Correlation is significant at the 0.05 level (two-tailed). ** Correlation is significant at the 0.01 level (two-tailed).

Table 5.3 reports the correlation matrix, with Tables 5.3 (a), 5.3 (b), 5.3 (c) and 5.3 (d) presenting the *FSDQ*, *AFDQ*, *CON_TACC* and *CON_ACRU* correlation matrices, respectively. Correlations are significant at the level of .05 and .01. From the Pearson correlation analysis, this study does not observe any multicollinearity issues.⁷

The correlation analysis from Table 5.3 (a) reports that the variables - *RD*, *MB*, *TA*, *SEG*, *FS* and *LEV* are negatively correlated with *CFPI*, these results support with H₁ findings. However, the correlation coefficient between *MB* and *TA* is 0.64, which is higher than 0.50. This finding is similar to the Table 5.3 (b) correlation matrix which reports correlation coefficient between *MB* and *TA* is 0.64. The correlation coefficients between *MB* and log analyst (0.63) and correlation coefficients between *LOSS* and *ROA* (-0.66) are higher than the other correlations from this table 5.3 (b).

The correlation matrix in Table 5.3 (c) reports a negative correlation between *CFO*, *SZ*, *LEV*, *GR*, *MTB* and *LIT* with *CFPI*. The correlation coefficient between *PR* and *CFO* indicate positive and highly significant relationships (0.72). This finding is consistent with Table 5.3 (d). These results align with the findings of the baseline regression models, which supports the research findings. Many other correlations are significant, and the signs of the correlation coefficients are consistent with prior research.

5.2 Multivariate Analysis

5.2.1 Hypothesis 1: Financial Statement Disaggregation Disclosure Quality (FSDQ) Relationship with Powerful CFOs

Table 5.4 (a) shows the balance sheet, income statement and combined financial statement disaggregation disclosure quality with the results concerning the relationship between CFO power and all three financial statement disaggregation properties—*DQ_BS*, *DQ_IS* and *FSDQ*—for the 2003 to 2015 sample. Columns (1) to (3) report the results for

⁷ This study measures multicollinearity between independent variables using correlation coefficients. Statisticians suggest different thresholds to better understand multicollinearity between variables. When the correlation coefficient, *r*, between two independent variables is equal to or greater than 0.80, it can be considered multicollinearity (Gujarati, 2003). However, Stone and Rasp (1991) indicate that, if the correlation coefficient, *r*, between two independent variables is equal to or greater than 0.50, this can be considered multicollinearity. In this case, no multicollinearity exists between these variables when following Gujarati's (2003) method. Further, this study uses robust standard error to control for extreme values of independent variables.

the pooled OLS regressions, including industry and year dummies, with the results clustered by firm.⁸ This is conducted after considering the missing value for the total of 5,949 observation tests for this regression analysis. Table 5.4 (a) column (1) shows *DQ_BS*, column (2) shows *DQ_IS* and column (3) shows the *FSDQ* results. This regression result indicates the relationship between *DQ_BS*, *DQ_IS* and *FSDQ* with *CFPI*.

Table 5.4 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality

	(1) DQ_BS	(2) DQ_IS	(3) FSDQ
CFPI	0.052*** (2.72)	0.006*** (4.10)	0.026*** (2.73)
RD	-2.143** (-2.02)	0.112*** (3.46)	-1.019* (-1.92)
ROA	1.630*** (4.13)	-0.011 (-0.67)	0.808*** (4.09)
TA	-0.029 (-1.35)	0.000 (0.28)	-0.015 (-1.37)
SH	-0.000 (-0.53)	-0.000*** (-3.06)	-0.000 (-0.69)
MB	-0.038 (-1.47)	0.002 (1.10)	-0.017 (-1.32)
SEG	-0.049 (-1.27)	-0.007** (-2.54)	-0.028 (-1.43)
LOSS	-0.039 (-0.59)	0.016*** (4.04)	-0.012 (-0.37)
LEV	-1.240*** (-4.55)	-0.110*** (-8.95)	-0.675*** (-4.99)
VOL	0.001 (0.95)	0.000*** (2.72)	0.001*** (3.35)
FS	0.051* (1.83)	0.001 (0.34)	0.026* (1.85)
GR	-0.297* (-1.67)	-0.017** (-2.52)	-0.156* (-1.72)

⁸ Where the unreported variance inflation factor is less than 5 for *FSDQ* and *AFDQ*, and 1.25 and 1.56 for *CON_TACC* and *CON_ACRU*, respectively.

IO	0.259 (1.22)	0.027** (2.35)	0.139 (1.31)
AGE	0.134*** (3.62)	-0.002 (-0.49)	0.066*** (3.49)
Intercept	2.033*** (6.44)	0.683*** (34.70)	1.188*** (7.46)
N	5,949	5,949	5,949
adj. R ²	0.176	0.172	0.180

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The relationship between *DQ_BS* (coeff. = .052, $t = 2.72$), *DQ_IS* (coeff. = .006, $t = 4.10$) and *FSDQ* (coeff. = .026, $t = 2.73$) and *CFPI* reports a positive coefficient that is highly significant at the 1% level. The model summary reports a 17% adjusted R-squared for both *DQ_BS* and *DQ_IS*, while the *FSDQ* regression reports an 18% R-squared.

This study argues that powerful CFOs are positively associated with financial statement disaggregation disclosure quality when they work efficiently and serve as stewards for better quality financial reporting. Conversely, powerful CFOs are negatively associated with financial statement disaggregation disclosure quality when they are opportunistic in their job or adhere to the rent extraction hypothesis of positive accounting theory. In this context, they act only for their personal incentives. The results show that powerful CFOs are positively related to financial statement disaggregation disclosure quality, which supports the argument for the efficient contracting perspective of CFOs' attitude towards *FSDQ*. This financial reporting quality measure (measured by *FSDQ*) is positively related with credible information disclosure and higher-level financial reporting practices. Moreover, this high-quality information environment helps managers deliver material judgements about financial reporting matters (Libby & Brown, 2013). Recent accounting studies (Beck et al., 2016; Koh et al., 2016) similarly find that financial statement disaggregation influences better quality accounting reporting. The results for this hypothesis suggest that powerful CFOs act as a 'steward and protector' in their businesses, and function to ensure that good-quality financial information is being reported. It is evident that sound corporate governance mechanisms are in place.

Concerning the control variables, this study focuses on the *FSDQ* regression with *CFPI*. Column (3) reports that firms are more profitable and volatility of earnings are higher

(*ROA* and *VOL* report positive which are highly significant at the 1% level), and more complex firms because *FS* reports positive and marginal significance. Further, elder firms (*AGE* reports positive coefficient which is significant at 1% level) and firms are not highly leveraged (*LEV* variable reports a negative coefficient that is significant at the 1% level). The results for the control variables and model summary remain quantitatively similar with other validation regression models. This disclosure measure is newly developed and subsequently difficult to compare with the results of prior studies, although the control variables results are consistent with Beck et al. (2016).

5.2.2 Hypothesis 2: Analyst Forecast Disclosure Quality (AFDQ) Relationship with Powerful CFOs

Table 5.4 (b) reports the results on the relationship between CFO power and analyst forecast disclosure quality for the 2003 to 2015 sample. This disclosure quality presents each year of analyst forecast errors, forecast dispersion and revision volatility, with the highest score representing the lowest error, lowest dispersion and lowest volatility of a firm.

Table 5.4 (b): CFO Power and Analyst Forecast Disclosure Quality

	AFDQ
CFPI	0.034** (2.17)
RD	-0.184 (-0.28)
ROA	0.319 (0.47)
TA	-0.023 (-0.47)
ANA	0.161*** (3.24)
SUR	-0.450 (-1.40)
SH	0.000* (1.73)
MB	-0.003 (-0.04)
SEG	0.018

	(0.98)
LOSS	-0.464***
	(-7.40)
LEV	-0.146
	(-1.01)
VOL	-0.001
	(-0.55)
FS	-0.016
	(-1.32)
GR	0.146*
	(1.06)
IO	0.027
	(0.12)
AGE	0.010
	(0.48)
Intercept	0.049
	(0.17)
<hr/>	
N	5,065
adj. R ²	0.053
<hr/>	

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The results present the pooled OLS regressions including industry and year dummies, with the results clustered by firms. The relationship between *AFDQ* and CFO power is positive and significant at the 5% level (coeff. = 0.034, $t = 2.17$).

This study argues that powerful CFOs are positively associated with analyst forecast disclosure quality when they pursue efficient perspectives and act as a steward to deliver better quality financial reporting. Conversely, powerful CFOs are negatively associated with analyst forecast disclosure quality when they follow the opportunistic perspective or rent extraction hypothesis of positive accounting theory and act for their own personal incentives. According to the results for H₂, it is argued that the efficient perspectives behaviour of powerful CFOs is positively related to analyst forecast disclosure quality. Powerful CFOs directly supervise the financial reporting process with great expertise. Further, their guidance reduces financial analyst dispersion and revision volatility, increases accuracy, and improves the quality of financial reporting disclosure and information environment of firms (Byard et al., 2006). As sophisticated users of financial reporting information, analysts may focus on CFOs implementing a better network that

supplies optimistic forecasts at reduced cost (Wong & Zhang, 2014). This condition affects the strength of that relationship. The findings for the control variables also remain quantitatively similar in the additional analysis and robust regression model.

This regression further finds that firms supervised by powerful CFOs are followed by a higher number of analysts and report less propensity to loss. The *ANA* variable reports a positive coefficient (coeff. = 0.161, $t = 3.24$) and loss variable reports negative coefficient (coeff. = -0.464, $t = -7.40$), both variables are significant at the 1% level with *AFDQ*. This regression further documents that the *SH* (shareholders) and Sales growth (*GR*) report a positive coefficient with a marginally significant (10% level) outcome. The control variables are consistent with prior analyst forecast research (Gul et al., 2013; Jiraporn et al., 2014). The *SEG*, *LOSS*, *RD*, *IO*, *ANA* and *SH* variables report similar results to those documented in the study by Hui and Matsunaga (2015).

5.2.3 Hypothesis 3: Accounting Conservatism (CON) Relationship with Powerful CFOs

Following prior studies (Ahmed & Duellman, 2007; Ahmed & Henry, 2012; Lafond & Roychowdhury, 2008), this study selects control variables for accounting conservative regression models. Tables 5.5 (a) and 5.5 (b) report the results on the relationship between CFO power and conditional and unconditional accounting conservatism. This study follows the cash flows and accruals conservatism model developed by Ball and Shivakumar (2005), which is deemed a form of conditional conservatism (*CON_TACC*), while Givoly and Hayn (2000) measure unconditional conservatism (*CON_ACRU*) in their accruals model. Both conservatism models are tested on the 2003 to 2015 sample. The results for the pooled OLS regressions including industry and year dummies. This study hypothesises that powerful CFOs are negatively associated with conservative accounting practices when they work as opportunistic managers, which leads to lower quality financial reporting. Conversely, powerful CFOs are expected to be positively associated with conservative accounting practices when they pursue the efficient perspective or efficient contracting hypothesis of positive accounting theory and not act in their own personal interests and incentives.

Column (1) in Table 5.5 (a) does not consider control variables, while column (2) considers all variables together. As shown in columns (1) and (2), variable of interest

$OCF \times DOCF \times CFPI$ reports a negative coefficient (coeff. = -0.125, $t = -2.70$) without control variables and (coeff. = -0.103, $t = -2.45$) with control variables is significant at the level of 1% for column (1) and 5% level for column (2), and this result is consistent with the assumption of H_{3b}. This suggests that powerful CFOs are associated with a lower degree of conditional accounting conservatism, and complements with the rent extraction perspective of positive accounting theory. This result indicates that powerful CFOs adopt less conservative accounting policies, and vice-versa. This outcome supports the argument of the opportunistic or rent extraction perspective behaviour of powerful CFOs, where executives exert their power to deliver low-quality financial reporting.

The negative coefficient of the $OCF \times DOCF \times CFPI$ variable means that accruals are less sensitive to negative cash flow news when the firm has a powerful CFO, suggesting that powerful CFOs can turn more good news into higher earnings than deliver bad news about earnings and cash flows. The model summary shows an adjusted R-squared of 16.36% for column (1) and 46.21% for column (2). Summing up, the overall results suggest that powerful CFOs influence on the accruals to cash flow conditional conservatism. In terms of the control variables, Table 5.5 (a) shows a positive coefficient (coeff = 0.004, $t = 6.78$) on SZ , significant at a 1% level for column (2), which indicates that large firms exhibit less conservatism. This finding is consistent with the prediction made by M. Khan and Watts (2009). Further, the coefficient on LEV (coeff = -0.045, $t = -9.69$) is negative with a 1% level of significance, thus suggesting that the firm is not highly leveraged. However, high-growth and profitable firms are not conservative because they maintain their profitability by using opportunistic earnings conservatism.

Table 5.5 (a): CFO Power and Conditional Conservatism

	(1)	(2)
	CON_TACC	CON_TACC
OCF	-0.324*** (-26.15)	-0.666*** (-49.11)
DOCF	0.012** (2.05)	0.004 (0.81)
OCF× DOCF	0.278*** (4.33)	0.187*** (3.25)
CFPI	0.001 (0.74)	0.004*** (3.13)
OCF × CFPI	0.001 (0.09)	-0.022*** (-2.98)
DOCF × CFPI	-0.001 (-0.15)	-0.001 (-0.32)
OCF × DOCF × CFPI	-0.125*** (-2.70)	-0.103** (-2.45)
SZ		0.004*** (6.78)
LEV		-0.045*** (-9.69)
LIT		-0.005* (-1.85)
MTB		0.000 (0.82)
PR		0.580*** (59.06)
TAN		-0.080*** (-15.12)
GR		0.046*** (16.01)
Intercept	-0.029*** (-9.76)	-0.068*** (-10.09)
N	9,053	9,610
adj. R ²	0.1636	0.4621

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.5 (b) reports a negative coefficient (coeff. = -0.001, $t = -2.28$) on the *CFPI* variable, which is significant at 5%. This result suggests that powerful CFOs exploit the

accounting method and processes within existing regulatory settings by engaging in opportunistic behaviours and managing earnings to indicate that the business is profitable (Malmendier & Tate, 2009). This finding is similar to prior studies, which find that overconfident executives (CEOs) practise less accounting conservatism. Examples of this include placing less emphasis on bad news and providing more reporting of net asset value (Ahmed & Duellman, 2013). The model summary shows an adjusted R-squared of 26%.

With regard to the control variables, the results show that the coefficients on *SZ*, *CH*, *GR* and *PR* are negative and significant at the 1% level. The results show that firms are highly leveraged, experience lower sales growth and may be more likely to experience litigation risk. Lafond and Watts (2008) suggest that there is less information asymmetry for large firms than small ones, which may reduce the demand for conservative accounting in large firms. Regarding profitability, Ahmed et al. (2002) argue that potential costs related with conservative accounting are larger compared with low-profitability firms. Table 5.5 (b) reports lower *PR*, which indicates a negative relationship between profitability and conservatism. Litigation risk is a crucial factor affecting conservatism (Watts, 2003), and conservatism can reduce any potential litigation risk by following a more conservative accounting policy (Francis et al., 2015) in an effort to curtail agency conflict between the firm and shareholders (Lubberink & Huijgen, 2001). Firms that are characterised by higher litigation risk tend to employ powerful CFOs who are not concerned with potential litigation. Overall, the results for the control variables are consistent with prior findings.

A finding for H_{3b} suggests that powerful CFOs exercise their power in an inverse manner for financial reporting quality and earnings quality (Collins et al., 2017). Previous studies similarly find that powerful CFOs use their status and authority to engage in earnings management (Baker et al., 2018; Collins et al., 2017).

Table 5.5 (b): CFO Power and Unconditional Conservatism

	CON_ACRU
SZ	-0.001*** (-2.69)
LEV	0.043*** (9.57)
GR	-0.072*** (-21.72)
RD	0.171*** (10.25)
CH	-0.017*** (-3.20)
LIT	0.002 (0.75)
PR	-0.488*** (-46.31)
TAN	-0.005 (-1.14)
OCF	0.448*** (46.93)
CFPI	-0.001** (-2.28)
Intercept	0.041*** (8.23)
N	9,318
adj. R ²	0.265

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.2.4 Hypothesis 4: Monitoring Intensity of the Relationship between Financial Reporting Quality and Powerful CFOs

Tables 5.6 (a), (b), (c) and (d) report the baseline regression for the three determinants of financial reporting under high versus low governance—two monitoring structures that firms may practise. Consistent with previous regression results, the monitoring intensity models are tested on the 2003 to 2015 sample. The results for the pooled OLS regressions including industry and year dummies, with the regression models clustered by firm. For testing monitoring intensity of the relationship between financial reporting quality and

powerful CFOs, three main baseline regression - FSDQ, AFDQ and CON with powerful CFOs are separated by high versus low governance monitoring structure.

Table 5.6 (a): High versus Low Monitoring Intensity—Financial Statement Disaggregation Disclosure Quality

	(1)	(2)
	High Monitoring Intensity	Low Monitoring Intensity
CFPI	0.014 (1.05)	0.033*** (2.78)
RD	-0.907 (-1.06)	-1.267*** (-3.10)
ROA	0.780*** (2.66)	0.891*** (3.60)
TA	-0.029** (-2.45)	-0.001 (-0.07)
SH	-0.000 (-0.50)	-0.000 (-1.20)
MB	0.003 (0.13)	-0.039** (-2.33)
SEG	0.007 (0.21)	-0.063*** (-3.13)
LOSS	-0.064 (-1.60)	0.023 (0.49)
LEV	-0.522*** (-3.43)	-0.811*** (-4.22)
VOL	0.001 (1.55)	0.001** (2.53)
FS	0.036* (1.72)	0.021 (1.30)
GR	-0.106 (-1.05)	-0.347*** (-3.13)
IO	0.079 (0.63)	0.172 (1.27)
AGE	0.044 (1.52)	0.071*** (3.29)
Intercept	1.324*** (5.72)	1.201*** (6.55)

N	3,082	2,867
adj. R ²	0.130	0.282

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Following prior research (Ahmed & Duellman, 2007; Duellman et al., 2013; Lara et al., 2009), it is argued that governance monitoring is a measure in which strong governance mechanisms may complement or substitute each other to sustain high-quality financial reporting. This study develops a governance monitoring index (Appendix A documents the chosen governance variable for developing the governance index) using PCA method, and separated the total sample by using the median value. When governance monitoring index is higher than the governance monitoring index median value is considered a higher level of governance monitoring, and lower than the median value is considered a lower level of governance monitoring of a firm.

Table 5.6 (a) reports the relationship between *CFPI* and *FSDQ* under two governance monitoring structures that firms may practise. As indicated in Table 5.6 (a), the relationship between powerful CFOs and *FSDQ* indicates positive coefficients (coeff. = 0.014, $t = 1.05$ for column [1] and coeff. = 0.033, $t = 2.78$ for column [2]) for both monitoring intensities. However, the relationship between them is stronger under a lower degree of monitoring intensity, which is significant at 1% level. The model summary shows an adjusted R-squared of 13% for a higher level of governance monitoring and 25% for a lower level of governance monitoring. The control variable results are consistent with the baseline regression.

Table 5.6 (b) reports the relationship between *CFPI* and *AFDQ* under two governance monitoring structures that firms may practise. As shown in Table 5.6 (b), the relationship between powerful CFOs and *AFDQ* indicates positive coefficients (coeff = 0.012, $t = 1.24$ for column [1] and coeff = 0.060, $t = 2.13$ for column [2]) for both monitoring intensities. However, the relationship between them is stronger under a lower degree of monitoring intensity, which is marginally significant (10% level). The control variable results are consistent with the baseline regression. The model summary shows an adjusted R-squared of 15% for a higher level of governance monitoring and 5% for a lower level of governance monitoring.

Table 5.6 (b): High versus Low Monitoring Intensity—Analyst Forecast Disclosure Quality

	(1) High Monitoring Intensity	(2) Low Monitoring Intensity
CFPI	0.012 (1.24)	0.060* (2.13)
RD	-1.209*** (-4.41)	0.707 (0.49)
ROA	0.039 (0.13)	0.717 (0.45)
TA	-0.096*** (-5.14)	0.053 (0.43)
ANA	0.099* (1.94)	0.224* (2.16)
SUR	-0.804 (-1.50)	-0.225 (-0.42)
SH	0.000 (0.95)	0.000** (2.52)
MB	0.102** (2.50)	-0.114 (-0.72)
SEG	0.032* (1.72)	0.003 (0.14)
LOSS	-0.396*** (-4.87)	-0.535*** (-4.97)
LEV	-0.240 (-1.52)	-0.121 (-0.45)
VOL	-0.000 (-0.74)	-0.002 (-0.85)
FS	-0.015 (-0.96)	-0.028 (-0.76)
GR	-0.039 (-0.32)	0.386 (1.03)
IO	0.246 (0.82)	-0.142 (-0.32)
AGE	0.020 (1.07)	-0.005 (-0.10)
Intercept	0.069 (0.24)	0.068 (0.21)

N	2,647	2,418
adj. R ²	0.155	0.050

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Consistent with prior research predictions (Ahmed & Duellman, 2007; Lara et al., 2009), the current study predicts that firms demonstrating strong governance will show significantly higher levels of accounting conservatism. Table 5.6 (c) reports the relationship between *CFPI* and *CON_TACC* under two governance monitoring structures that firms may practise. For both – high and low-level monitoring intensity, the variable of interest $OCF \times DOCF \times CFPI$ reports a negative coefficient (coeff. = -.033, $t = -.55$ for column [1] and coeff. = -.177, $t = -3.00$ for column [2]), though, this relationship is significant for low monitoring intensity at 1% level of significant. The adjusted R-squared for column (1) is 49% and for column (2) is 43%.

Table 5.6 (c): High versus Low Monitoring Intensity—Conditional Conservatism

	(1) High Monitoring Intensity	(2) Low Monitoring Intensity
OCF	-0.688 (-38.03)	-0.656*** (-31.95)
DOCF	-0.007 (-0.87)	0.016** (2.12)
OCF \times DOCF	0.157* (1.91)	0.254*** (3.24)
CFPI	0.002 (1.48)	0.004*** (2.64)
OCF \times CFPI	-0.014 (-1.42)	-0.026** (-2.36)
DOCF \times CFPI	0.004 (0.86)	-0.005 (-0.93)
OCF \times DOCF \times CFPI	-0.033 (-0.55)	-0.177*** (-3.00)
SZ	0.005*** (4.46)	0.004*** (4.62)
LEV	-0.051*** (-7.82)	-0.040*** (-6.17)
LIT	-0.004 (-0.96)	-0.008** (-2.27)
MTB	0.001***	-0.000

	(2.78)	(-1.23)
PR	0.577***	0.577***
	(43.84)	(39.22)
TAN	-0.082***	-0.073***
	(-11.30)	(-10.43)
GR	0.058***	0.031***
	(14.22)	(7.86)
Intercept	-0.065***	-0.068***
	(-6.64)	(-7.62)
N	4,821	4,789
adj. R ²	0.486	0.433

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The results indicate that, at a lower level of governance monitoring, the variable $OCF \times DOCF \times CFPI$ is negative and significant at the 1% level. This finding supports the notion that powerful CFOs are opportunistic and take advantage of poor governance monitoring and follow the rent extraction hypothesis. Powerful CFOs exploit their authority over monitoring intensity. Table 5.6 (d) reports the relationship between $CFPI$ and CON_ACRU under two governance monitoring structures that firms may practise. The relationship between powerful CFOs and unconditional conservatism is negative (coeff. = 0.002, $t = -1.82$ for column [1] and coeff. = -0.003, $t = -2.56$ for column [2]) for both a higher level and lower level of governance monitoring, although the relationship is more pronounced and significant (significance at the 5% level) with a lower level of governance monitoring. The adjusted R-squared is 31% for column (1) and 29% for column (2). These findings are consistent with the notion that the level of monitoring influences the relationship between powerful CFOs and the quality of financial reporting.

Table 5.6 (d): High versus Low Monitoring Intensity—Unconditional Conservatism

	(1) High Monitoring Intensity	(2) Low Monitoring Intensity
SZ	-0.001 (-0.81)	-0.001** (-2.30)
LEV	0.054*** (7.85)	0.040*** (7.19)
GR	-0.090*** (-18.30)	-0.053*** (-13.13)
RD	0.193*** (7.75)	0.116*** (5.59)
CH	-0.037*** (-4.86)	-0.008 (-1.21)
LIT	-0.003 (-0.87)	0.003 (1.26)
PR	-0.589*** (-37.84)	-0.522*** (-35.29)
TAN	-0.016** (-2.51)	-0.009* (-1.71)
OCF	0.610*** (37.44)	0.580*** (38.10)
CFPI	-0.002 (-1.82)	-0.003** (-2.56)
Intercept	0.043*** (5.03)	0.029*** (4.90)
N	4,814	4,504
adj. R ²	0.315	0.286

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.3 Additional Analysis and Validation Test

5.3.1 CFO Power and Financial Reporting Quality: Controlling for CFO Background

The accounting and finance literature examine whether executives' characteristics influence the quality of financial reporting (Hambrick, 2007). CFOs are responsible for financial planning, budgeting, accounting strategy choices and overall financial reporting

processes (Gore et al., 2011). Therefore, their demographic characteristics (e.g., age, gender, experience, personalities and values) may influence financial reporting practices (Hambrick, 2007). Similarly, CFOs' styles have a significant effect on the outcomes of financial reporting in explaining the upper echelons theory (Ge et al., 2011). Managers are not identical and have many specific differences in cognition, values and perceptions of corporate decision-making.

CFOs' innate characteristics are very significant for financial reporting and its consequences (Habib & Hossain, 2013). Two studies suggest that CFOs' demographic background influences the relevance of disclosure choices. Bamber et al. (2010) propose that managers' exclusive disclosure styles are related to their personal demographic and professional backgrounds. Their results suggest that finance, accounting and legal backgrounds and having prior military experience will help create the exact disclosure style in which conservative characteristics are evident. Similarly, Plöckinger, Aschauer, Hiebl, and Rohatschek (2016) study 60 top management executives exerting a significant influence on financial reporting decisions, particularly in terms of disclosure quality.

Tables 5.7(a), (b), (c) and (d) report the relationship between powerful CFOs and the quality of financial reporting quality in terms of diverse backgrounds (controlling for CFO age and gender). The measurements of CFO age and gender are explained in Appendix A. Ge et al. (2011) provide empirical evidence of how CFOs relate to a set of financial reporting practices, yet find little correlation between individual CFO characteristics (such as age, gender and education) and reporting practices.

In Table 5.7 (a), columns (1), (2) and (3) for *DQ_BS* (coeff. = .038, $t = 2.13$), *DQ_IS* (coeff. = .006, $t = 4.13$) and *FSDQ* (coeff. = .020, $t = 2.19$), respectively, indicate a positive and significant coefficient—at the 5% significance level for columns (1) and (3) and at the 1% level for column (2) with CFPI. From this regression, column (3) shows that *CFO GEN* is positively related with *FSDQ*, but is insignificant outcome, whereby female CFOs deliver better quality financial reports (e.g., Barua et al., 2010; Francis et al., 2015). This regression further documents that the coefficient on *CFO AGE* is negative, which suggests that younger CFOs mostly operate those firms.

**Table 5.7 (a): CFO Power and Financial Statement Disaggregation Disclosure
Quality—Controlling CFO Background**

	(1) DQ_BS	(2) DQ_IS	(3) FSDQ
CFPI	0.038** (2.13)	0.006*** (4.13)	0.020** (2.19)
RD	-1.437 (-1.17)	0.105*** (2.80)	-0.674 (-1.10)
ROA	2.307*** (6.64)	-0.020 (-0.96)	1.139*** (6.60)
TA	-0.029 (-1.07)	-0.001 (-0.41)	-0.016 (-1.16)
SH	0.000 (0.07)	-0.000*** (-3.10)	-0.000 (-0.13)
MB	-0.038 (-1.49)	0.002 (1.10)	-0.017 (-1.34)
SEG	-0.053 (-1.40)	-0.006** (-2.23)	-0.029 (-1.54)
LOSS	-0.005 (-0.11)	0.017*** (3.94)	0.005 (0.23)
LEV	-0.740*** (-4.64)	-0.129*** (-10.22)	-0.435*** (-5.37)
ROA	0.001 (1.26)	0.000*** (3.03)	0.001*** (3.75)
FS	0.051* (1.87)	0.001 (0.44)	0.026* (1.91)
GR	-0.608*** (-3.63)	-0.027*** (-3.42)	-0.315*** (-3.73)
IO	0.052 (0.30)	0.033*** (2.87)	0.040 (0.45)
AGE	0.140*** (4.22)	-0.002 (-0.52)	0.069*** (4.06)
CFO AGE	-0.060 (-1.48)	0.000 (0.03)	-0.032 (-1.54)
CFO GEN	0.004 (0.05)	-0.000 (-0.03)	0.001 (0.03)
Intercept	2.209*** (8.07)	0.676*** (34.21)	1.271*** (9.12)

N	5,835	5,835	5,835
adj. R ²	0.161	0.179	0.164

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.7 (b) summarises the association between *AFDQ* and *CFPI* in the presence of CFO age and gender dummies. This analysis presents a positive and significant coefficient (coeff = .036, $t = 2.23$) at the 5% level, where CFO age and gender dummies report a negative and insignificant relationship with *AFDQ*.

Table 5.7 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling CFO Background

	AFDQ
CFPI	0.036** (2.23)
RD	-0.184 (-0.28)
ROA	0.324 (0.48)
AT	-0.023 (-0.47)
ANA	0.160*** (3.21)
SUR	-0.452 (-1.40)
SH	0.000* (1.74)
MB	-0.003 (-0.04)
SEG	0.018 (1.00)
LOSS	-0.464*** (-7.40)
LEV	-0.149 (-1.02)
VOL	-0.001 (-0.50)
FS	-0.016 (-1.28)

GR	0.146 (1.07)
IO	0.028 (0.13)
AGE	0.010 (0.51)
CFO AGE	-0.021 (-0.87)
CFO GEN	-0.020 (-0.38)
Intercept	0.045 (0.16)
N	5,065
adj. R ²	0.053

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.7 (c) documents the correlation between *CON_TACC* and *CFPI* in the presence of CFO age and gender dummies. This analysis presents a negative coefficient (coeff = - .102, $t = - 2.43$) of $OCF \times DOCF \times CFPI$, significant at the 5% level. In this case, the CFO age dummy reports a negative coefficient that is statistically insignificant in relation to *CON_TACC*.

Table 5.7 (c): CFO Power and Conditional Conservatism—Controlling CFO Background

	CON_TACC
OCF	-0.666*** (-49.12)
DOCF	0.004 (0.80)
OCF \times DOCF	0.186*** (3.23)
CFPI	0.004*** (3.20)
OCF \times CFPI	-0.022*** (-3.00)
DOCF \times CFPI	-0.001 (-0.33)
OCF \times DOCF \times CFPI	-0.102**

	(-2.43)
SZ	0.004***
	(6.77)
LEV	-0.045***
	(-9.69)
LIT	-0.005*
	(-1.87)
MTB	0.000
	(0.82)
PR	0.580***
	(59.06)
TAN	-0.080***
	(-15.13)
GR	0.046***
	(16.01)
CFO AGE	-0.001
	(-0.62)
CFO GEN	0.002
	(0.73)
Intercept	-0.068***
	(-10.09)
<hr/>	
N	9,316
adj. R ²	.481
<hr/>	

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.7 (d) documents a negative correlation (coeff. = -0.002, $t = -2.64$) between *CON_ACRU* and *CFPI* in the presence of CFO age and gender dummies. This analysis presents a negative coefficient that is significant at the 1% level. Therefore, CFO power is the sole authoritative attribute that influences the level of reporting quality when diverse individual characteristics are evident.

Table 5.7 (d): CFO Power and Unconditional Conservatism—Controlling CFO Background

	CON_ACRU
SZ	-0.002*** (-3.47)
LEV	0.050*** (11.30)
GR	-0.074*** (-22.76)
RD	0.159*** (9.77)
CH	-0.027*** (-5.23)
LIT	0.000 (0.03)
PR	-0.566*** (-52.31)
TAN	-0.014*** (-3.37)
OCF	0.600*** (53.41)
CFPI	-0.002*** (-2.64)
CFO AGE	-0.001 (-0.59)
CFO GEN	0.002 (0.65)
Intercept	0.041*** (8.31)
N	9,318
adj. R ²	0.301

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.3.2 CFO Power and Financial Reporting Quality: Controlling for CEO Power

CFOs are supervised by the CEOs (to some extent), holding a position under command, CFOs are indebted and possibly keen to update CEOs of any confidential financial information (Graham & Harvey, 2001), thus, the quality of financial reporting may be

compromised. Prior research states that CEOs are more likely to be monitored or restricted when other executives holding the same level of power in the firm (e.g., Baker et al., 2018; Zajac & Westphal, 1996). CEO power can be circulated or restricted by another senior executive who wields similar authority and responsibility for firm performance (Cannella, Fraser, & Lee, 1995). Table 5.8 depicts the relationship between powerful CFOs and financial reporting in the presence of a highly powerful CEO. Table 5.8 (a) shows a positive relationship between *DQ_BS*, *DQ_IS* and *FSDQ* and *CFPI* in the presence of a powerful CEO. Column (1) presents the result for *DQ_BS*, column (2) shows the result for *DQ_IS* and column (3) reports the *FSDQ* output. From Table 5.8 (a), columns (1), (2) and (3) report a positive coefficient (coeff. = .046, $t = 2.50$ for column [1]; coeff. = .004, $t = 2.36$ for column [2]; coeff. = .023, $t = 2.52$ for column [3]), which is consistent with the baseline regression and is significant at 5%. Moreover, CEO power is positively related to *DQ_BS*, *DQ_IS* and *FSDQ* and significant at 1% for *DQ_IS*.

Table 5.8 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—Controlling for CEO Power

	(1) DQ_BS	(2) DQ_IS	(3) FSDQ
CFPI	0.046** (2.50)	0.004** (2.36)	0.023** (2.52)
RD	-2.144** (-2.02)	0.111*** (3.41)	-1.019* (-1.93)
ROA	1.633*** (4.13)	-0.012 (-0.70)	0.809*** (4.09)
TA	-0.030 (-1.37)	0.000 (0.13)	-0.015 (-1.40)
SH	-0.000 (-0.47)	-0.000*** (-2.95)	-0.000 (-0.64)
MB	0.037 (1.44)	0.002 (1.22)	0.017 (1.29)
SEG	-0.050 (-1.28)	-0.007** (-2.49)	-0.028 (-1.44)
LOSS	-0.038 (-0.57)	0.016*** (4.00)	-0.012 (-0.35)
LEV	-1.239*** (-4.58)	-0.110*** (-8.88)	-0.675*** (-5.03)
VOL	0.000	0.000**	0.001**

	(0.20)	(2.12)	(2.34)
FS	0.052*	0.001	0.026*
	(1.84)	(0.35)	(1.87)
GR	-0.303*	-0.017***	-0.158*
	(-1.73)	(-2.71)	(-1.77)
IO	0.257	0.027**	0.139
	(1.22)	(2.34)	(1.31)
AGE	0.131***	-0.002	0.064***
	(3.56)	(-0.61)	(3.43)
CEPI	0.046	0.005***	0.022
	(1.60)	(3.21)	(1.56)
Intercept	2.051***	0.678***	1.196***
	(6.54)	(33.96)	(7.56)
N	5,949	5,949	5,949
adj. R ²	0.177	0.175	0.181

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.8 (b) shows the positive relationship between *AFDQ* and *CFPI* in the presence of a powerful CEO, which is significant at 5% and reports a positive coefficient (coeff. = 0.029, $t = 2.23$), where CEO power is positively related with *AFDQ*, but not significant.

Table 5.8 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling for CEO Power

	AFDQ
CFPI	0.029**
	(2.23)
RD	-0.191
	(-0.30)
ROA	0.322
	(0.48)
TA	-0.024
	(-0.49)
ANA	0.160***
	(3.25)
SUR	-0.447
	(-1.39)
SH	0.000*

	(1.77)
MB	-0.002
	(-0.03)
SEG	0.018
	(0.95)
LOSS	-0.462***
	(-7.48)
LEV	-0.148
	(-1.03)
VOL	-0.001
	(-0.82)
FS	-0.016
	(-1.32)
GR	0.143
	(1.05)
IO	0.032
	(0.15)
AGE	0.008
	(0.42)
CEPI	0.035
	(1.27)
Intercept	0.056
	(0.20)
<hr/>	
N	5,065
adj. R ²	0.054
<hr/>	

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.8 (c) documents the negative relationship between *CON_TACC* and *CFPI* in the presence of a powerful CEO. The *OCF* \times *DOCF* \times *CFPI* variable reports a negative coefficient (coeff. = -0.103, $t = -2.45$) with a 5% level of significance, although this regression provides a positive coefficient of CEO power with a 5% level of significance.

Table 5.8 (c): CFO Power and Conditional Conservatism—Controlling for CEO

Power	
	CON_TACC
OCF	-0.666*** (-49.11)
DOCF	0.004 (0.80)
OCF × DOCF	0.187*** (3.26)
CFPI	0.004*** (3.15)
OCF × CFPI	-0.022*** (-2.98)
DOCF × CFPI	-0.001 (-0.32)
OCF × DOCF × CFPI	-0.103** (-2.45)
SZ	0.004*** (6.79)
LEV	-0.045*** (-9.69)
LIT	-0.005* (-1.84)
MTB	0.000 (0.81)
PR	0.580*** (59.03)
TAN	-0.080*** (-15.11)
GR	0.046*** (16.01)
CEPI	-0.000 (-0.42)
Intercept	-0.068*** (-9.93)
N	9,316
adj. R ²	.4620

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.8 (d) shows a negative relationship between *CON_ACRU* and *CFPI* in the presence of a powerful CEO, where the variable *CFPI* reports a negative coefficient (coeff. = -.0002, $t = -2.77$) that is significant at the 1% level. From this table, powerful CEOs report positive and insignificant association with *CON_ACRU*. This evidence strongly indicates that executive power is not centralised in one executive, but authority can be circulated to those who have similar responsibilities. When the financial decision-making authority and power are exercised by powerful CFOs, they follow the efficient contracting hypothesis, as it relates to the quality of disclosed financial information and the information environment of a firm. Further, they undertake opportunistic perspectives so that they benefit from non-conservative accounting practices.

Table 5.8 (d): CFO Power and Unconditional Conservatism—Controlling for CEO Power

	CON_ACRU
SZ	-0.002*** (-3.49)
LEV	0.050*** (11.27)
GR	-0.074*** (-22.74)
RD	0.158*** (9.73)
CH	-0.027*** (-5.20)
LIT	0.000 (0.04)
PR	-0.566*** (-52.31)
TAN	-0.014*** (-3.36)
OCF	0.600*** (53.40)
CFPI	-0.002*** (-2.77)
CEPI	0.000 (0.45)
Intercept	0.040***

	(7.95)
N	9,318
adj. R ²	0.301

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.3.3 CFO Power and Financial Reporting Quality: Controlling for CFO Compensation

According to the rent extraction theory, senior executives' domination can have undesirable effects on organisational outcomes (Hirshleifer & Thakor, 1992; Malmendier & Tate, 2009) and these executives can make opportunistic financial decisions that improve their own reputation, but do not increase wealth for shareholders. In contrast, efficient contracting theory suggests that senior executives work to produce positive organisational outcomes (Francis et al., 2008; Jian & Lee, 2011). The efficient contracting hypothesis and stewardship theory suggest that CFOs can function as stewards when they conduct their fiduciary duties for the benefit of shareholders. The accounting literature on managerial performance also supports the efficient contracting theory on this issue (e.g., Baik et al., 2011; Jian & Lee, 2011).

Jiang et al. (2010) suggest that the magnitude of accruals and the likelihood of beating analyst forecasts have become more sensitive to CFO equity incentives in the post-SOX period. Similarly, Wang (2010) finds that CFOs' rewards are positively related to higher internal control weakness. This supports the notion that increased regulation leads to the potential governance benefits of good internal control disclosure systems and superior reporting quality. These characteristics can mitigate agency cost and information asymmetry. It is expected that CFOs should exercise their power to ensure the better-quality financial reporting and consistent internal controls that are expected of the SOX legislation. The association between CFO compensation disclosure and CFOs' enhanced role in internal control after SOX should enhance information quality and prevent criminal accounting practices from occurring.

Table 5.9 summarises the test on whether higher compensation motivations can deter or support the relationship between powerful CFOs and quality of financial reporting. Tables 5.9 (a), (b), (c) and (d) show the result after controlling high compensation alongside other control variables from the baseline regression. The following table report consistent results with the baseline regression, and the relationship between powerful CFOs and the

quality of reporting practice is similar after controlling for CFOs' high compensation perpectives. Table 5.9 (a) reports *FSDQ* and *CFPI*, (b) shows *AFDQ* and *CFPI*, (c) documents *CON_TACCC* and (d) reports *CON_ACRU*. Table 5.9 (a) reports a positive and significant relationship at 1% level for *CFPI* and *DQ_BS* (coeff. = .052, $t = 2.75$), *DQ_IS* (coeff. = .006, $t = 4.07$) and *FDSQ* (coeff. = .026, $t = 2.76$), where *COMP* shows a negative and significant association with *DQ_BS* (coeff. = -0.112, $t = -2.36$) and *FSDQ* (coeff. = -0.056, $t = -2.35$) at 5% level.

Table 5.9 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality— Controlling for CFO Compensation

	(1) DQ_BS	(2) DQ_IS	(3) FSDQ
CFPI	0.052*** (2.75)	0.006*** (4.07)	0.026*** (2.76)
RD	-2.062* (-1.93)	0.111*** (3.41)	-0.978* (-1.84)
ROA	1.664*** (4.20)	-0.012 (-0.70)	0.824*** (4.16)
TA	-0.006 (-0.26)	0.000 (0.04)	-0.003 (-0.29)
SH	-0.000 (-0.67)	-0.000*** (-3.04)	-0.000 (-0.83)
MB	-0.035 (-1.34)	0.002 (1.09)	-0.015 (-1.19)
SEG	-0.049 (-1.27)	-0.007** (-2.54)	-0.028 (-1.43)
LOSS	-0.044 (-0.66)	0.017*** (4.04)	-0.015 (-0.44)
LEV	-1.238*** (-4.56)	-0.110*** (-8.97)	-0.674*** (-5.01)
VOL	0.001 (1.33)	0.000*** (2.64)	0.002*** (3.75)
FS	0.051* (1.82)	0.001 (0.34)	0.026* (1.85)
GR	-0.291* (-1.68)	-0.017** (-2.50)	-0.152* (-1.73)
IO	0.286 (1.34)	0.026** (2.32)	0.153 (1.43)

AGE	0.129*** (3.51)	-0.001 (-0.47)	0.063*** (3.38)
COM	-0.112** (-2.36)	0.002 (0.44)	-0.056** (-2.35)
Intercept	1.866*** (5.60)	0.685*** (33.53)	1.104*** (6.58)
N	5,949	5,949	5,949
adj. R ²	0.178	0.172	0.182

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.9 (b) reports that *AFDQ* is positive and significant at the 5% level with *CFPI* after controlling for CFOs' high compensation (coeff. = .034, $t = 2.17$), while *COMP* shows a negative and insignificant coefficient.

Table 5.9 (b): CFO Power and Analyst Forecast Disclosure Quality—Controlling for CFO Compensation

	AFDQ
CFPI	0.034** (2.17)
RD	-0.183 (-0.28)
ROA	0.319 (0.47)
TA	-0.023 (-0.48)
ANA	0.161*** (3.25)
SUR	-0.450 (-1.40)
SH	0.000* (1.70)
MB	-0.003 (-0.04)
SEG	0.018 (0.99)
LOSS	-0.464*** (-7.38)
LEV	-0.146

	(-1.01)
ROA	-0.001
	(-0.55)
FS	-0.016
	(-1.32)
GR	0.146
	(1.07)
IO	0.027
	(0.12)
AGE	0.010
	(0.49)
COM	-0.05
	(-0.028)
Intercept	0.049
	(0.17)
N	5,064
adj. R ²	0.053

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.9 (c) reports a negative and significant relation at the 5% level (coeff. = -0.102, $t = -2.42$), where *COMP* is negative (coeff. = -0.004, $t = -2.64$) and significant at the 1% level. The model's explanatory power is 46%.

Table 5.9 (c): CFO Power and Conditional Conservatism—Controlling for CFO Compensation

	(1)
	CON_TACC
OCF	-0.666***
	(-49.10)
DOCF	0.004
	(0.83)
OCF × DOCF	0.186***
	(3.23)
CFPI	0.004***
	(3.25)
OCF × CFPI	-0.022***
	(-2.99)
DOCF × CFPI	-0.001

	(-0.32)
OCF × DOCF × CFPI	-0.102**
	(-2.42)
SZ	0.005***
	(7.28)
LEV	-0.046***
	(-9.73)
LIT	-0.005*
	(-1.78)
MTB	0.000
	(0.90)
PR	0.582***
	(59.14)
TAN	-0.081***
	(-15.25)
GR	0.046***
	(16.11)
COMP	-0.004***
	(-2.64)
Intercept	-0.072***
	(-10.44)
<hr/>	
N	9,316
adj. R ²	0.462
<hr/>	

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.9 (d) reports a negative and significant relation between *CON_ACRU* and *CFPI* after controlling for CFOs' high compensation, at the 1% level (coeff. = -.002, $t = -3.10$), where *COMP* is positive (coeff. = 0.006, $t = 3.35$) and significant at the 1% level. The model's adjusted R-squared is 30%.

Therefore, powerful CFOs pursue higher quality financial reporting when they implement disclosure-related decision-making. In contrast, powerful CFOs have an opportunistic attitude towards conservative accounting practices, which is not restricted or improved by high compensation.

Table 5.9 (d): CFO Power and Unconditional Conservatism—Controlling for Compensation

	CON_ACRU
SZ	-0.003*** (-4.77)
LEV	0.049*** (11.17)
GR	-0.074*** (-22.94)
RD	0.155*** (9.56)
CH	-0.028*** (-5.36)
LIT	0.000 (0.01)
PR	-0.568*** (-52.47)
TAN	-0.013*** (-3.03)
OCF	0.600*** (53.39)
CFPI	-0.002*** (-3.10)
COM	0.006*** (3.35)
Intercept	0.047*** (8.94)
N	9,318
adj. R ²	0.302

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.3.4 CFO Power, Disclosure Quality and Firm Growth

This analysis tests whether the relationship between CFO power and disclosure quality is stronger or weaker in the context of high- versus low-growth firms. Tables 5.10 (a) and (b) report the CFO power relationship with *FSDQ* and *AFDQ* for both kinds of firms. The link between powerful CFOs and disclosure is stronger for higher growth firms than for lower growth firms. Consistent with Hui and Matsunaga (2015), the current study divides

the sample by the median value,⁹ where sales growth (*GR*) is higher than the sales growth median value indicates a high-growth firm, and lower than the median value considers as low-growth firm. Three years of sales growth are used as a proxy for growth firms when measuring high- versus low-growth businesses, and regressions are run separately for the high- and low-growth conditions.

The results suggest that high-growth and successful firms report better quality disclosure, based on the information presented in Tables 5.10 (a) and (b). Table 5.10 (a) reports the high growth versus low growth analysis for *DS_BS*, *DS_IS* and *FSDQ*. These three properties of financial statement disaggregation disclosure quality report a positive coefficient for both high- and low-growth firms, although the result is significant for high-growth firm scenarios. The *FSDQ* variable is positively significant at the 5% level (coeff. = .028, $t = 2.51$) for high growth firms. Consistent with prior research, this study contends that the relationship is stronger for high-growth firms. The adjusted R-squared is also higher for high-growth firms (*FSDQ* = 25%, *AFDQ* = 13%) for both disclosure proxies. The control variables report a consistent result with the baseline regression. Table 5.10 (b) reports the same result as Table 5.10 (a). The relationship between *AFDQ* and powerful CFOs is positive in both high- and low-growth firms, yet is stronger and significant (marginally significant at 10%) for high-growth firms (coeff. = 0.019, $t = 1.91$).

This finding suggests that powerful CFOs can influence reporting choices and the information environment, and this relationship more likely to vary based on firms' diverse characteristics, where the firm's growth level is closely linked to its performance. The quality of corporate disclosure is a financial performance measure for investors, creditors, analysts and other types of users. Better quality corporate disclosure of a growth firm indicates a signal to investors and the wider finance community of future growth and firm performance. Similarly, Khurana et al. (2006) suggest that high-growth firms implement stronger disclosure policies. Hui and Matsunaga (2015) find that the positive relationship between executives' (both CEOs and CFOs) bonuses and the quality of firm disclosure is strengthened by good business conditions. In summary, executive decision-making on disclosure choices enables executives to create the conditions for a competitive

⁹ Following Hui and Matsunaga (2015), this study uses three years of sales growth as the calculation growth variable.

investment strategy influenced by growth opportunities. High-quality reporting practices and disclosure indicate a positive signal to investors of a firm's market value and performance. Powerful CFOs can implement and oversee better quality disclosure systems in businesses that are aware of how they should operate.

Table 5.10 (a): CFO Power and Financial Statement Disaggregation Disclosure Quality—High- versus Low-growth Firms

	High Growth DS_BS	Low Growth DS_BS	High Growth DS_IS	Low Growth DS_IS	High Growth FSDQ	Low Growth FSDQ
CFPI	0.054** (2.39)	0.045 (1.64)	0.009*** (5.07)	0.003 (1.42)	0.028** (2.51)	0.022 (1.57)
RD	-1.173*** (-3.43)	-4.068* (-1.82)	0.136*** (3.66)	0.208*** (4.63)	-0.522*** (-3.06)	-1.935* (-1.73)
ROA	1.002*** (2.65)	3.103*** (4.78)	-0.011 (-0.55)	0.001 (0.05)	0.494*** (2.62)	1.548*** (4.80)
TA	-0.021 (-0.73)	-0.066*** (-2.70)	-0.002 (-1.02)	0.002 (1.18)	-0.012 (-0.83)	-0.032*** (-2.62)
SH	0.000 (0.26)	-0.000 (-1.29)	-0.000 (-0.57)	-0.000*** (-3.50)	0.000 (0.25)	-0.000 (-1.53)
MB	-0.032 (-1.05)	-0.012 (-0.28)	0.001 (0.62)	0.004 (1.50)	-0.014 (-0.96)	-0.003 (-0.14)
SEG	-0.002 (-0.04)	-0.103** (-2.30)	-0.002 (-0.47)	-0.009*** (-2.59)	-0.002 (-0.09)	-0.056** (-2.50)
LOSS	-0.170** (-2.01)	0.110 (1.43)	0.017*** (2.67)	0.017*** (3.25)	-0.078* (-1.81)	0.063 (1.64)
LEV	-1.455*** (-4.05)	-1.134*** (-4.45)	-0.110*** (-8.31)	-0.115*** (-6.30)	-0.785*** (-4.44)	-0.625*** (-4.86)
VOL	0.002 (1.40)	0.001 (0.83)	0.000** (2.52)	0.000 (1.12)	0.002*** (3.23)	0.001** (2.43)

FS	0.031 (1.40)	0.104* (1.95)	0.005** (2.20)	0.005* (1.84)	0.018 (1.62)	0.054** (2.02)
GR	-0.225* (-1.80)	-0.552 (-0.88)	-0.014** (-2.22)	-0.075*** (-2.79)	-0.118* (-1.85)	-0.293 (-0.94)
IO	0.724*** (2.90)	-0.128 (-0.49)	0.036*** (2.64)	0.017 (1.10)	0.380*** (3.07)	-0.060 (-0.46)
AGE	0.121*** (3.23)	0.105** (2.09)	-0.009** (-2.38)	0.001 (0.24)	0.056*** (2.93)	0.052** (2.05)
Intercept	1.332*** (3.10)	2.602*** (6.42)	0.660*** (34.53)	0.647*** (28.75)	0.819*** (3.85)	1.462*** (7.13)
N	3,130	2,823	3,130	2,823	3,130	2,823
adj. R ²	0.245	0.172	0.146	0.165	0.256	0.171

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.10 (b): CFO Power and Analyst Forecast Disclosure Quality—High- versus Low-growth Firm

	High Growth	Low Growth
	AFDQ	AFDQ
CFPI	0.019* (1.91)	0.041 (1.31)
RD	-0.841*** (-2.80)	1.487 (0.94)
ROA	-0.642*** (-3.05)	1.738 (1.00)
TA	-0.047** (-2.24)	0.032 (0.28)
ANA	0.072*** (3.51)	0.175** (2.23)
SUR	0.733 (1.07)	-0.813** (-2.16)
SH	0.000 (1.61)	-0.000 (-0.09)
MB	0.035 (1.23)	-0.060 (-0.40)
SEG	0.026* (1.85)	-0.008 (-0.19)
LOSS	-0.310*** (-6.39)	-0.362*** (-4.57)
LEV	-0.235* (-1.90)	0.040 (0.13)
VOL	-0.001* (-1.95)	-0.001 (-0.24)
FS	-0.017 (-1.52)	-0.020 (-0.83)
GR	-0.568*** (-4.08)	1.574*** (3.31)
IO	0.266** (2.50)	-0.160 (-0.36)
AGE	-0.011 (-0.63)	0.024 (0.70)
Intercept	0.501*** (2.86)	-0.138 (-0.24)

N	2,698	2,367
adj. R ²	0.127	0.070

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.4 Alternative Measurements of H₁ and H₂: FSDQ and AFDQ

This study computes four alternative measurements of disclosure and information quality to analyse the relationship between disclosure quality and powerful CFOs. These variables are chosen from prior research (Chen et al., 2015; Fu et al., 2012). The first set tests the relationship between CFO power and the properties of analyst forecasts—forecast accuracy, dispersion, revision volatility and bias. The second set refers to analysed bid–ask spread with powerful CFOs, while the third set measures the relationship with cost of debt with powerful CFOs. The fourth and final relationship deals with market liquidity.

5.4.1 CFO Power and Properties of Analyst Forecasts

This study applies the properties of analyst forecasts—forecast accuracy, forecast dispersion, forecast bias and revision volatility—as a proxy for the quality of a firm’s information environment. Prior research suggests that sound governance mechanisms increase the quality of firms’ mandatory and voluntary disclosures (Eng & Mak, 2003). Managers supply financial disclosure functions as a significant contributory indicator of analyst forecasts, as part of their forecasting processes (Byard et al., 2006). Analysts’ idiosyncratic information accuracy depends on firms’ higher quality accounting-related disclosure (Byard et al., 2006). Ashbaugh and Pincus (2001) suggest that analyst forecast accuracy increases with the level of disclosure. Consistent with this, Lang and Lundholm (1996) provide evidence that a firm with high-quality informative disclosure produces more accurate earnings forecasts.

Table 5.11 (a) reports the relationship between Powerful CFOs with analyst forecast individual attributes). This study suggests that powerful CFOs choose high-quality corporate financial disclosure methods, where a powerful CFO is related to less volatility in forecast revision (coeff. = -0.009, $t = -2.54$), less forecast dispersion (coeff. = -0.058, $t = -2.56$), less forecast bias (coeff. = -.093, $t = -3.46$) and better forecast accuracy (coeff. = 0.136, $t = 2.98$), with revision volatility significant at 5% level, forecast accuracy at 1% level, forecast bias at 1% level and forecast dispersion at 5% level. The

model summary reports an adjusted R-squared of 15%, 22%, 25% and 28% for revision volatility, forecast accuracy, bias and dispersion, respectively. These results suggest that more informative high-quality disclosure practices reduce information asymmetry, where a powerful CFO is positively related to high-quality analyst forecast. This result is consistent with previous research (Byard et al., 2006; Lang & Lundholm, 1996) and the *AFDQ* relation with powerful CFOs from Table 5.4 (b). This provides valid evidence that powerful CFOs choose a sound disclosure policy to provide subjective benefits to analysts.

Table 5.11 (a): CFO Power and Analyst Forecast Individual Attributes

	(1) Revision Volatility	(2) Forecast Accuracy	(3) Bias	(4) Dispersion
CFPI	-0.009** (-2.54)	0.136*** (2.98)	-0.093*** (-3.46)	-0.058** (-2.56)
RD	0.389*** (4.48)	-3.713*** (-3.72)	1.798*** (3.08)	2.135*** (4.25)
ROA	0.341*** (5.32)	2.080*** (3.14)	-1.613*** (-3.87)	-1.894*** (-5.73)
TA	0.048*** (8.13)	-0.020 (-0.32)	-0.041 (-1.06)	-0.034 (-1.15)
ANA	-0.022*** (-3.28)	0.611*** (7.86)	-0.307*** (-6.66)	-0.212*** (-5.35)
SUR	-0.117*** (-3.66)	-0.830*** (-3.41)	0.618*** (3.46)	0.576*** (4.74)
SH	-0.000 (-0.72)	0.000 (0.37)	0.000 (0.67)	-0.000 (-0.31)
MB	-0.039*** (-8.34)	0.277*** (4.94)	-0.090*** (-2.66)	-0.072*** (-2.70)
SEG	-0.013** (-2.30)	0.080 (1.08)	-0.010 (-0.24)	-0.026 (-0.73)
LOSS	0.108*** (8.54)	-1.254*** (-8.94)	0.545*** (6.58)	0.579*** (9.31)
LEV	0.009 (0.41)	-0.660** (-2.36)	-0.025 (-0.15)	0.621*** (4.36)
VOL	0.000*** (2.95)	0.008** (2.28)	-0.000 (-0.05)	-0.005*** (-3.90)
FS	0.003 (0.62)	-0.037 (-0.59)	-0.010 (-0.28)	0.001 (0.04)

GR	0.028 (0.87)	0.937*** (2.73)	-0.102 (-0.51)	-0.419** (-2.44)
IO	0.071*** (2.89)	1.108*** (3.19)	-0.770*** (-3.77)	-0.617*** (-3.60)
AGE	-0.004 (-0.58)	-0.013 (-0.15)	0.025 (0.49)	0.025 (0.60)
Intercept	-0.120*** (-2.59)	1.780** (2.08)	-4.545*** (-8.87)	-4.878*** (-13.68)
N	5,355	5,728	3,591	5,236
adj. R ²	0.145	0.218	0.255	0.284

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.4.2 CFO Power and Bid–Ask Spread

The second set of alternative measurement tests analyses the relationship between bid–ask spread and powerful CFOs. Prior research considers bid–ask spread a proxy measure of information asymmetry (Amiram, Owens, & Rozenbaum, 2016; Chen et al., 2015). Bid–ask spread is the average daily quoted bid–ask spread (Chen et al., 2015), and variable details are shown in Appendix A. From the table 5.11 (b), the regression in column (1) includes only the log price, log volume, log *BTM*, beta, while column (2) considers all variables together. Further, this regressions control industry and year, and select robust standard errors clustered by firm. Result reports that powerful CFOs are negatively related (coeff. = -0.040, $t = -1.86$ for column [1] and coeff. = -0.044, $t = -2.01$ for column [2]) to bid–ask spread for both column (1) and column (2). Though, this relationship highly significant at the 5% level for column (2) and marginally (10% level) significant in column (1).

In both cases, bid–ask spread is negatively related to powerful CFOs, and the adjusted R-squared for column (1) is 2.8% and for column (2) is 3%. This result is consistent with Chen et al.'s (2015) adjusted R-squared, and indicates that powerful CFOs improve information quality and reduce information in the bid–ask spread.

Table 5.11 (b): CFO Power and Bid–Ask Spread

	(1)	(2)
	BAS	BAS
CFPI	-0.040* (-1.86)	-0.044** (-2.01)
PRC	-0.274*** (-7.93)	-0.281*** (-7.17)
BTM	-0.006 (-0.24)	0.011 (0.27)
VLM	-0.051** (-2.20)	-0.048* (-1.82)
Beta	-0.108*** (-2.92)	-0.106*** (-2.82)
TA		-0.008 (-0.17)
SEG		-0.047 (-1.35)
MV		0.019 (0.30)
LEV		0.139 (0.82)
AGE		0.060 (1.39)
Intercept	1.808*** (7.55)	1.676*** (5.82)
N	9,346	9,308
adj. R ²	0.028	0.030

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.4.3 CFO Power and Cost of Debt

Table 5.11 (c) suggests that powerful CFOs are negatively related to the cost of debt after controlling log price, log volume, log *BTM*, beta for column (1), while column (2) considers all variables together. Further, both regressions control industry and year, and document robust standard errors clustered by firm. The results support prior research that high disclosure quality reduces less effective interest costs on debt issuances (Sengupta, 1998).

Column (1) in Table 5.11 (c) presents the results without including firm-level control variables, while column (2) reports the regression results including the firm control variables. In both cases, the cost of debt is negatively related to powerful CFOs. The negative coefficient (coeff. = -0.031, $t = -2.54$ for column [1] and coeff. = -0.028, $t = -3.39$ for column [2]) is significant at both the 5% and 1% levels for column (1) and column (2), respectively. Corporate financial disclosure is beneficial for creditors because creditors utilise cost of debt for credit decisions. This measure indicates that trust and assurance among the creditors are being preserved. Further, this result suggests that powerful CFOs create a sound information environment and make disclosure choices that provide transparent information to creditors and assist them in financial decision-making. Companies with powerful CFOs may disclose more information to reduce agency costs and increase debt holders' confidence.

Table 5.11 (c): CFO Power and Cost of Debt

	(1) CoD	(2) CoD
CFPI	-0.031** (-2.54)	-0.028*** (-3.39)
BTM	-0.014 (-0.68)	-0.111* (-2.22)
Beta	-0.011 (-0.13)	-0.020 (-0.24)
MV	0.008 (0.53)	-0.203* (-2.15)
AGE		-0.118*** (-3.50)
TA		0.151* (1.94)
SEG		0.091* (1.94)
LEV		-1.447** (-2.97)
ROA		0.340 (1.15)
Intercept	-0.062 (-0.50)	0.493*** (5.30)

N	7,424	7,422
adj. R ²	0.002	0.006

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.4.4 CFO Power and Market Liquidity

The final set of alternative measurement considers as the relationship between powerful CFOs and information asymmetry in relation to price effect, which is a measure of illiquidity, as suggested by Amihud (2002). This proxy indicates investors' ability to trade in a share without affecting its price (Fu et al., 2012). Following prior research (Daske, Hail, Leuz, & Verdi, 2008; Fu et al., 2012), this study employs Amihud's (2002) illiquidity measure, which is reciprocal¹⁰ to market liquidity. This study includes only log price, log volume, log *BTM*, beta for column (1), while column (2) considers all variables together. This study also controls for year and industry, with robust standard errors, and clusters by firms. Table 5.11 (d) shows that market liquidity has a positive relationship with powerful CFOs, which suggests that powerful CFOs can mitigate information asymmetry.

Column (1) in Table 5.11 (d) presents the results without including firm control variables, while column (2) reports the regression including firm control variables. In both cases, market liquidity is positively related with powerful CFOs. The relation between them is positive (coeff. = 0.011, $t = 1.80$ for column [1] and coeff. = .014, $t = 2.26$ for column [2]) and significant at the 10% and 5% levels for columns (1) and (2), respectively.

¹⁰ Daily absolute return divided by trading volume (measured in 10,000s).

Table 5.11 (d): CFO Power and Market Liquidity

	(1)	(2)
	LIQ	LIQ
CFPI	0.011*	0.014**
	(1.80)	(2.26)
PRC	1.506***	1.489***
	(183.76)	(166.23)
VLM	1.031***	0.995***
	(189.22)	(164.54)
BTM	-0.075***	-0.088***
	(-13.86)	(-9.32)
Beta	-0.123***	-0.107***
	(-14.12)	(-12.52)
TA		0.147***
		(12.35)
AGE		0.160***
		(16.46)
SEG		0.036***
		(4.54)
MV		-0.116***
		(-7.71)
LEV		-0.120***
		(-2.90)
Intercept	-12.205***	-12.484***
	(-202.21)	(-182.74)
N	9,343	9,305
adj. R ²	0.946	0.950

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.5 Alternative Measurement of Conservatism: H₃ CON

5.5.1 Conditional Conservatism

This study considers the sensitivity of earnings to returns and the persistence of earnings changes measure serves as an alternative measurement of conditional conservatism. Both models are devised by Basu (1997) and both models validate the findings from the conditional conservatism baseline regression. The model refers to these constructs as *CON_RTN* and *CON_NI*. Under conservative accounting, earnings capture bad news

faster than good news because of the asymmetric standards of verification of losses and gains (Lara et al., 2009, p. 168). The first Basu model uses stock returns to proxy for good and bad news, while the second model uses change in net income.

The stock price collects all relevant information from the market, including earnings information. Therefore, changes in stock prices are a determination of news arriving during the period (Lara et al., 2009). This measure suggests the sensitivity of earnings to returns (Basu, 1997; Ho et al., 2015). Conservative accounting policy converts current earnings more sensitively for bad news compared to good news (Ho et al., 2015). The second model conjectures that conservatism causes current (future) earnings to be more (less) likely to reflect bad news (Ho et al., 2015, p. 362). Therefore, changes in earnings are likely to be converted in the future, resulting in the recognition of bad news.

Table 5.12 (a) shows the results for the *CON_RTN* regression for all the relevant variables. The result is consistent with Ball and Shivakumar's (2005) conditional conservatism. This analysis reports a negative coefficient (coeff. = -2.987, $t = -3.47$) of the interest variable $DR \times RT \times CFPI$ at the 1% level of significance. The model summary reports a 19% adjusted R-squared.

Table 5.12 (a): Sensitivity of Earnings to Returns Measure of Conservatism

	(1)
	CON_RTN
RET	0.659 (0.76)
DR	-37.495*** (-6.38)
DR \times RET	-3.695 (-0.94)
SZ	5.706*** (7.05)
RET \times SZ	-1.469*** (-3.97)
DR \times SZ	4.154*** (5.13)
DR \times RET \times SZ	2.843*** (4.57)
MTB	0.149 (0.43)
RET \times MTB	0.973*** (2.63)
DR \times MTB	0.159 (0.44)
RET \times DR \times MTB	-1.464*** (-3.05)
LIT	4.781 (0.49)
RET \times LIT	-5.734 (-0.82)
DR \times LIT	-0.926 (-0.10)
DR \times RET \times LIT	5.219 (0.72)
LEV	-54.679*** (-5.05)
RET \times LEV	21.582*** (2.80)
DR \times LEV	19.994* (1.84)

DR \times RET \times LEV	-17.712*
	(-1.88)
CFPI	-0.600
	(-0.95)
RT \times CFPI	1.265**
	(2.11)
DR \times CFPI	1.209**
	(2.32)
DR \times RT \times CFPI	-2.987***
	(-3.47)
Intercept	-23.782***
	(-4.02)
<hr/>	
N	8,264
adj. R ²	0.195
<hr/>	

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.12 (b) reports the results of *CON_NI*. The variable of interest, $\Delta NI_{t-1} \times D\Delta N_{It-1} \times CFPI$, reports a negative coefficient (coeff. = -0.125, $t = -14.92$) at the 1% level of significance, and the adjusted R-squared is 27%. Both measures support the baseline regression, while the control variables report mixed results, which is also consistent with previous research.

Table 5.12 (b): Persistence of Earnings Change Measure Conservatism

	(1) CON_NI
$D\Delta NI_{t-1}$	-0.078*** (-5.85)
ΔNI_{t-1}	-0.352*** (-12.86)
$D\Delta NI_{t-1} \times \Delta NI_{t-1}$	-0.246** (-2.11)
SZ	-0.001 (-1.36)
$\Delta NI_{t-1} \times SZ$	0.044*** (6.61)
$D\Delta NI_{t-1} \times SZ$	0.005*** (2.92)
$\Delta NI_{t-1} \times D\Delta NI_{t-1} \times SZ$	-0.057*** (-3.19)
MTB	0.000 (1.51)
$\Delta NI_{t-1} \times MTB$	0.018*** (3.33)
$D\Delta NI_{t-1} \times MTB$	0.006*** (4.66)
$\Delta NI_{t-1} \times D\Delta NI_{t-1} \times MTB$	0.007 (0.48)
LEV	-0.009 (-0.90)
$\Delta NI_{t-1} \times LEV$	-0.613*** (-4.26)
$D\Delta NI_{t-1} \times LEV$	0.020 (1.15)
$\Delta NI_{t-1} \times D\Delta NI_{t-1} \times LEV$	0.805*** (3.87)
LIT	0.001 (0.14)
$\Delta NI_{t-1} \times LIT$	0.025 (0.49)
$D\Delta NI_{t-1} \times LIT$	0.001 (0.17)

$\Delta NI_{t-1} \times D\Delta N_{It-1} \times LIT$	-0.070 (-0.94)
CFPI	-0.082*** (-3.20)
$\Delta NI_{t-1} \times CFPI$	0.081*** (3.16)
$D\Delta NI_{t-1} \times CFPI$	-0.001 (-0.50)
$\Delta NI_{t-1} \times D\Delta N_{It-1} \times CFPI$	-0.125*** (-14.92)
Intercept	0.030*** (3.18)
N	9,730
adj. R ²	0.274

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

5.5.2 Unconditional Conservatism

This study uses Zhang's (2008) skewness model (*CON_SKEW*) and Beaver and Ryan's (2000) market models (*CON_MKT*) to measure unconditional conservatism. These models are operationalised as *CON_SKEW* and *CON_MKT*. *CON_SKEW* is a time series showing skewness of earnings, which measures the skewness of cash flows to control for the variation in firm performance, which is multiplied by -1 to simplify interpretation of the results (Francis et al., 2015; Zhang, 2008). The *CON_SKEW* measure is determined based on the model developed by Givoly and Hayn (2000), who suggest that accounting conservatism requires immediate and complete recognition of negative news and delayed and gradual recognition of positive events, leading to a negatively skewed earnings distribution (Francis et al., 2015, p. 1290). A higher value of *CON_SKEW* suggests higher conservatism.

Table 5.12 (c): Alternative Measurement—Unconditional Accounting Conservatism

	(1) CON_SKEW	(2) CON_MKT
CFPI	-0.256*** (-2.97)	-0.002*** (-2.59)
SZ	-0.153** (-2.10)	0.005*** (45.74)
PR	-0.356 (-0.15)	0.036*** (10.29)
LEV	1.167* (1.88)	0.011*** (10.57)
GR	0.171 (0.31)	0.004*** (4.29)
RD	-6.135** (-2.27)	0.064*** (17.87)
CH	-1.454* (-1.88)	0.009*** (8.44)
LIT	0.522** (2.18)	0.001*** (3.27)
TAN	-2.135*** (-3.93)	-0.010*** (-8.95)
OCF	-4.237* (-1.84)	0.017*** (5.07)
Intercept	4.363*** (4.59)	-0.061*** (-42.06)
N	9,625	9,611
adj. R ²	0.12	0.338

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

CON_MKT is an important variable that can integrate conservatism over the life of a firm. Ahmed and Henry (2012) suggest that ‘the strength of this measure is that it reflects the cumulative effects of conservatism since the inception of the firm. However, it also reflects economic rents expected to be generated by firms’ assets-in-place as well as future growth opportunities’ (p. 641). Therefore, this measure functions as a crucial factor for a firm’s growth outcomes and economic rents (Ahmed et al., 2002; Ahmed & Henry, 2012). This method is the most widely used conservative measure in the accounting literature (Francis et al., 2015) because firm-level measurement is easy to achieve. Hence,

the higher the market-to-book ratio, the more unconditionally conservative the firm's accounting policy (Beaver & Ryan, 2000; Francis et al., 2015). The market-to-book ratio reproduces asymmetric information owing to the earlier recognition of expenses and losses, and is deferred revenue recognition, thereby catching understated net assets relative to market value (Francis et al., 2015).

Tables 5.12 (c) reports the results of unconditional conservatism. Both findings support the baseline regression model, as powerful CFOs are less likely to employ conservative accounting decisions and reporting practices. Table 5.12 (c) shows the results of *CON_SKEW* (column [1]) and report a negative coefficient (coeff. = -.256, $t = -2.97$) at the 1% level of significance, and a 12% adjusted R-squared.

Column (2) presents the results for *CON_MKT*, reporting a negative coefficient (coeff. = -.002, $t = -2.59$) with a 1% level of significance, and a 34% adjusted R-squared. Both measures support the baseline regression of Givoly and Hayn (2000), while the control variables report mixed results, which is also consistent with previous research.

5.6 Endogeneity Analysis

First, this study uses a panel regression with year and industry fixed-effects as a control measure of endogeneity, and the results are consistent with the baseline regression of CFO power and disclosure quality (Bozec et al., 2010). Table 5.13 (a) shows that *AFDQ* and *FSDQ* positively relate with powerful CFOs, which is consistent with the baseline regression reported in Tables 5.4 (a) and 5.4 (b). *FSDQ* (coeff. = 0.026, $t = 2.80$) is significant at the 1% level, while *AFDQ* (coeff. = 0.006, $t = 2.43$) is significant at the 5% level with *CFPI*.

Table 5.13 (a): Fixed-effect Analysis for Endogeneity—AFDQ and FSDQ with CFO Power

	(1) AFDQ	(2) FSDQ
CFPI	0.006** (2.43)	0.026*** (2.80)
RD	-0.314*** (-4.81)	-1.120*** (-4.49)
ROA	-0.151*** (-3.21)	1.274*** (7.23)
TA	-0.023*** (-5.45)	-0.039*** (-2.70)
LEV	-0.019 (-0.87)	-0.384*** (-4.78)
SH	-0.000 (-1.34)	0.000 (0.35)
VOL	0.001 (1.62)	0.004* (1.82)
FS	-0.007* (-1.81)	0.033** (2.25)
MB	0.027*** (7.08)	0.003 (0.20)
AGE	-0.011** (-2.05)	0.065*** (3.08)
SEG	0.009* (1.80)	-0.002 (-0.10)
LOSS	-0.056*** (-5.20)	0.066 (1.59)
GR	-0.066*** (-2.93)	-0.403*** (-4.72)
IO	-0.046** (-2.00)	0.093 (1.09)
ANA	0.004 (0.60)	
SUR	-0.036* (-1.67)	
Intercept	-0.597*** (-5.73)	0.754* (1.90)

N	1,282	1,282
adj. R ²	0.078	0.147

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.0$.

Second, this study uses a PSM test to control endogeneity. Table 5.13 (b) shows the pre- and post-PSM sample variable mean difference. Before PSM procedures, all variables, except *SH*, *IO* and *ROA*, have a significant mean difference at different significance levels (1%, and 5%). Table 5.13 (c) documents the PSM regression. All variables are used from the baseline regression when estimating FSDQ and AFDQ with CFO power propensity regression:

Table 5.13 (b): Bivariate Analysis for Pre- and Post-PSM Sample

Full Sample (1)				FSDQ (2)			AFDQ (3)		
	Treatment ¹¹	Control	Mean Difference	Treatment	Control	Mean Difference	Treatment	Control	Mean Difference
RD	.052	0.058	0.006**	0.053	0.537	.000	0.054	0.053	-0.001
ROA	0.062	0.059	-0.004	0.061	0.063	0.002	0.067	0.062	-0.004
TA	7.290	7.562	0.273***	7.487	7.426	7.456	7.512	7.484	-0.028
SH	16.480	49.248	32.767	16.594	14.468	-2.126	16.172	16.828	0.656
VOL	119.504	108.533	-10.972***	124.405	123.937	-0.468	125.749	122.99	-2.76
FS	0.782	0.888	0.106***8	1.098	1.125	0.027	1.111	1.16	0.049
AGE	3.115	3.018	-0.097***8	3.105	3.095	-0.01	3.069	3.106	0.036
SEG	1.710	1.825	0.115***	1.806	1.833	0.027	1.789	1.823	0.034
LOSS	0.123	0.146	0.023***	0.15	0.145	-0.005	0.133	0.142	0.009
LEV	0.191	0.220	0.028****	0.202	0.2	-0.002	0.196	0.197	0.001
GR	0.080	0.107	0.027***	0.082	0.081	-0.001	0.086	0.086	.000
IO	0.871	0.875	0.004	0.884	0.887	0.003	0.89	0.889	-0.001
FSDQ	1.393	1.297	-0.096***	1.448	1.404	-0.044			
AFDQ	0.571	0.567	-0.004**				0.573	0.560	-0.012
SUR	-0.001	-0.016	-0.016***				0.386	0.321	-0.065
ANA	1.919	2.013	0.094***				2.182	2.146	-0.035

¹¹ ‘Treatment’ indicates a high-power CFO, while ‘control’ denotes a low-power CFO. See Appendix A for a detailed description of these variables.

Table 5.13 (c): PSM for FSDQ and AFDQ

	(1) FSDQ	(2) AFDQ
TREATMENT	0.065*** (3.03)	0.011* (1.96)
RD	-1.105 (-1.12)	-0.125* (-1.66)
ROA	1.398*** (3.86)	-0.021 (-0.49)
TA	-0.030** (-2.53)	-0.008** (-2.35)
SH	0.000 (0.19)	-0.000 (-0.70)
MB	0.000 (0.04)	0.000 (0.65)
SEG	0.008 (0.46)	0.010* (1.95)
LOSS	0.080 (1.39)	-0.043*** (-3.75)
LEV	-0.537*** (-4.44)	-0.001 (-0.04)
VOL	0.004*** (6.03)	0.001*** (2.79)
FS	0.043** (2.52)	-0.007* (-1.85)
GR	-0.399** (-2.56)	-0.047** (-2.21)
IO	0.153 (1.27)	-0.093*** (-3.85)
AGE	0.051*** (3.01)	-0.016*** (-2.95)
SUR		-0.038* (-1.73)
ANA		0.016*** (2.71)
Intercept	0.728*** (3.54)	-0.536*** (-8.25)

N	1,396	1,250
adj. R ²	0.257	0.077

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

This study identifies 1,396 AND 1250 firm-year observations for *FSDQ* and *AFDQ* for the final propensity regression. This analysis matches the high- versus low-power CFO sample and estimates the propensity score for each firm-year, and then matches each high-power CFO with the low-power sample with the closest propensity score for each year. Here, a reserve 0.02 calliper is identified for each pair. Table 5.13 (c) reports PSM regression results, which result is consistent with the baseline regression from Tables 5.4 (a) and 5.4 (b). In particular, the estimated coefficient on CFO power is (coeff. = 0.065, $t = 3.03$), positively related *FSDQ* which is significant at the 1% level, and positively related with *AFDQ* estimated coefficient is (coeff. = 0.011, $t = 1.96$), which is significant at the 10% level. The result indicates that the relationship between CFO power and disclosure quality is influenced by firm-specific characteristics (Sun et al., 2017).

Table 5.13 (d): Heckman Two-stage Self-Selection

	(1) FSDQ	(2) AFDQ
CFPI	0.029** (2.23)	0.005** (2.11)
RD	-1.078 (-1.03)	-0.137* (-1.77)
ROA	1.453*** (3.85)	-0.019 (-0.44)
TA	-0.026* (-1.82)	-0.009** (-2.37)
SH	0.000 (0.18)	-0.000 (-0.94)
MB	-0.000 (-0.10)	0.000 (0.88)
SEG	0.005 (0.16)	0.009* (1.81)
LOSS	0.094 (1.49)	-0.046*** (-3.90)
LEV	-0.541*** (-3.93)	0.007 (0.38)

VOL	0.004*** (5.43)	0.001*** (2.81)
FS	0.027 (1.26)	-0.008** (-2.14)
GR	-0.450** (-2.38)	-0.045** (-1.99)
IO	0.176 (1.29)	-0.089*** (-3.47)
AGE	0.052** (2.08)	-0.015** (-2.58)
IMR	0.001 (0.02)	0.006 (0.53)
SUR		-0.036 (-1.52)
ANA		0.018*** (2.85)
Intercept	0.656*** (2.71)	-0.549*** (-8.44)
N	1,309	1,309
adj. R ²	0.199	0.1068

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

This study controls for potential self-selection bias with the two-stage Heckman (1976) procedure and calculates the IMR ratio from a probit model. Therefore, this study uses IMR ratio as an additional variable in the second-stage model, which can correct self-selection bias. The bias is essentially robust in this case, where two sets of variables are different (Gul et al., 2013). From the table 5.13 (d), the outcome is consistent with the baseline regression, with a 19% adjusted R-squared and a 5% significance level for *FSDQ* (coeff. = .029, $t = 2.23$), and 11% adjusted R-squared and 5% significance for *AFDQ* (coeff. = .005, $t = 2.11$). Finally, this study conducts IV 2SLS regression following executive and governance research (e.g., Ferrell, Liang, & Renneboog, 2016; S. Lim et al., 2007). Here, this study introduces industry-adjusted CFO power index (Ind. CPFI) and industry-adjusted CFO pay slice (Ind. CPS) dummy as two instrumental variables. Prior corporate governance research argues that CPS partially measures executive power (Baker et al., 2019; Henderson et al., 2010) in, and industry-adjusted *CFPI* is significant to understand how industry-level CFO power influences on industrial economics. Both IV variables have huge influences on the managerial power proxies.

Table 5.13 (e): First-stage IV Regression

	(1)	(2)
	FSDQ	AFDQ
Ind. CPS	0.033*** (3.04)	0.018* (1.98)
Ind. CFPI	0.039** (2.68)	0.017** (2.52)
Control variable	Yes	Yes
Intercept	0.909** (2.26)	0.629*** (5.73)
N	1,282	639
adj. R ²	0.170	0.056

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.13 (f): Second-stage IV Regression

	(1)	(2)
	FSDQ	AFDQ
CFPI	0.027*** (2.76)	0.103** (2.01)
RD	-1.121*** (-4.55)	0.053 (0.50)
ROA	1.273*** (7.33)	-0.027 (-0.34)
AT	-0.039*** (-2.74)	-0.009 (-1.23)
LEV	-0.384*** (-4.85)	0.036 (1.04)
SH	0.000 (0.35)	-0.000 (-0.33)
VOL	0.004* (1.85)	-0.001 (-0.95)
FS	0.033** (2.28)	-0.007 (-1.12)
MB	0.003 (0.21)	0.008 (1.21)
AGE	0.065*** (3.13)	0.004 (0.34)
SEG	-0.002	0.007

	(-0.11)	(0.96)
LOSS	0.066	-0.014
	(1.61)	(-0.75)
GR	-0.403***	-0.029
	(-4.79)	(-0.90)
IO	0.093	-0.020
	(1.10)	(-0.49)
SUR		-0.030
		(-0.93)
ANA		0.007
		(0.69)
Intercept	0.779**	0.329
	(1.97)	(1.50)
N	1,282	639
adj. R ²	0.169	0.075

t-statistics in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5.13 (e) presents the first-stage IV regression, with the results showing that the industry-adjusted CFPI and industry-adjusted CPS – both IV variables are positively related with FSDQ and AFDQ and. Both *FSDQ* (ind. adj. CPS coeff. = 0.033, $t = 3.04$ and significant at 1% level; ind. adj. CFPI coeff. = 0.039, $t = 2.68$ and significant at 5% level) and *AFDQ* (ind. adj. coeff. = 0.018, $t = 1.98$ and significant at 10% level; ind. adj. CFP coeff. = .017, $t = 2.52$ and significant at 5% level). The second-stage IV regression generates findings similar to the baseline regression, where both instrument variables indicate that they are valid instruments, with a 17% and 8% adjusted R-squared, which supports the relationship.

5.7 Conclusion

This chapter has reported the results of the descriptive statistics, discussed the empirical results and validated the hypotheses through robustness and sensitivity analyses. Further, it has conducted validation tests to show the robustness of the baseline regression. Finally, this chapter has reported on the endogeneity issues and the way this study's measurement method corrected these problems. Chapter 6 will discuss the implications of the results and present an overall conclusion to this study. The findings of this study will be explained in terms of their importance for this topic. Subsequently, the overall

implications and limitations of the study will be detailed. Finally, this thesis will provide future directions for research on this subject.

Chapter 6: Conclusions

6.1 Introduction

Chapter 5 described and explained the empirical findings of the relationship between powerful CFOs and three determinants of financial reporting quality. It then explained the results of the robustness tests and sensitivity analyses. This final chapter summarises the major conclusions and policy implications of the research findings. Section 6.2 provides an overview of the thesis, while Section 6.3 summarises the major empirical findings from the main and additional analysis. Section 6.4 discusses the implications of the thesis, while Section 6.5 introduces the limitations of the thesis. Finally, the chapter ends with suggestions for future research opportunities.

6.2 Thesis Overview

This thesis's primary objective is to comprehensively analyse the association between three pivotal types of financial reporting quality—financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism—in US publicly listed firms. This study extends the recent CFO power research by Baker et al. (2018), Collins et al. (2017) and Beck and Mauldin (2014) to inspect the specific managerial influences associated with CFO power and identify any variation in financial reporting quality. Further, this study provides theoretical insights on powerful CFO influences, integrating agency theory and stewardship theory and their effects on financial reporting choices.

Through examining the underlying theoretical perspectives and the findings of other relevant research on this topic, this study develops a number of directional hypotheses for the associations between the three selected financial reporting qualities, and the influences of powerful CFOs. A negative association with powerful CFOs is postulated with the three aspects of reporting quality, according to the theoretical perspectives of rent extraction hypothesis, while a positive association with quality of financial reporting is postulated when considering the efficient contracting hypothesis. Two conflicting arguments—stewardship theory/efficient contracting hypothesis and agency theory/rent extraction hypothesis—are used to examine the relationship between CFO power and financial reporting quality. According to efficient contracting hypothesis, CFOs are

inherently motivated to pursue organisational goals (Francoeur et al., 2017) and act in the best interests of the business's shareholders and other stakeholders (e.g., Boivie et al., 2011; Davis et al., 1997). In contrast, the rent extraction hypothesis assumes that CFOs are more prone to help themselves before anyone else at the cost of shareholders and what is best for the firm (Fama & Jensen, 1983; Jensen & Meckling, 1976).

In the empirical analysis of the derived hypotheses, powerful CFO influences are separately regressed with the three aspects of quality of financial reporting. Following prior research, financial statement disaggregation disclosure quality and analyst forecast disclosure quality are proxied as disclosure and/or information quality measures, while accounting conservatism (both conditional and unconditional) is proxied as the measure of earnings quality. Data to construct the independent and dependent variables are obtained from the ExecuComp database, financial accounting and analysts' forecasts, and the stock return data are collected from Compustat, I/B/E/S and CRSP. For the purposes of the statistical analysis, this study establishes an initial pool of all US companies publicly listed across the observation window covering the financial years of 2003 to 2015.

From this pool and after necessary exclusions, the final sample involves 9,679 observations from 2003 to 2015 for regression analysis. To enhance the generalisability of the results, this thesis conducts validation and robustness checks. In the robustness test, an alternative measurement of reporting quality is employed. To test if endogeneity exists in the relationship between powerful CFOs and reporting quality, a range of endogeneity analyses are conducted. Therefore, these findings suggest that this study corrects any existing endogeneity issues. The findings of the statistical analysis on the testable hypotheses are discussed in the next section.

6.3 Major Findings

Previous research (e.g., Baker et al., 2019; Collins et al., 2017) suggests that CFOs managerial power can affect firm-level earnings decisions. This thesis conducts archival research of CFOs' power on financial reporting choices, and finds that their level of supervisory power plays a significant role in firms' financial reporting disclosure choices. This thesis conducts several validation tests. First, the robustness test includes accuracy, dispersion, bias and revision volatility. Second, the information quality is analysed and

tested in terms of bid–ask spread, cost of debt and market liquidity. Third, regression models are tested regarding the existence of CEO power, CFO background characteristics and higher compensation perspectives. Fourth and finally, an alternative measure of accounting conservatism is employed. This study addresses potential endogeneity using the PSM model, 2SLS, Heckman’s self-selection model and fixed-effects regression. Overall, the results are consistent across a wide range of validation and endogeneity tests in suggesting that CFO power can potentially influence corporate financial reporting choices. While previous literature investigates the power and influence of CEOs in terms of firm-level decisions, this research focuses on the importance of CFOs’ influence and power in financial reporting choices. Tables 6.1 and 6.2 summarise the research questions, research hypotheses and findings documented in this thesis.

Table 6.1: Research Questions and Findings

Research questions	Findings
1 RQ1: Do powerful CFOs influence financial statement disaggregation disclosure quality?	<p>Supporting this research question, H_{1a} hypothesises that CFOs with power are negatively related with financial statement disaggregation disclosure quality, according to the rent extraction hypothesis/opportunistic hypothesis. Conversely, H_{1b} hypothesises that CFOs with power are positively related with financial statement disaggregation disclosure quality, according to the efficient contracting hypothesis.</p> <p>Powerful CFOs have a significant positive effect on financial statement disaggregation disclosure quality. This finding supports the fact that powerful CFOs’ influence is positively associated with corporate disclosure and information quality. It suggests that powerful CFOs undertake a stewardship role, and supports the efficient contracting hypothesis, rather than the agency role, for producing better quality financial reporting choices.</p> <p>This outcome contributes the finding that powerful CFOs in US regulatory settings follow their undertaken professional responsibility properly.</p>
2 RQ2: Do powerful CFOs influence analyst forecast disclosure quality?	<p>Supporting this research question, H_{2a} hypothesises that CFOs with power are negatively related with analyst forecast disclosure quality, according to the rent extraction hypothesis/opportunistic hypothesis. Conversely, H_{2b} hypothesises that CFOs with power are positively related with analyst forecast disclosure quality, according to the efficient contracting hypothesis.</p> <p>This result confirms that forecast accuracy (forecast revision volatility and forecast dispersion) increases (decreases) when the firm has a powerful CFO. Therefore, this finding suggests that powerful CFOs have a positive effect on analyst forecast disclosure quality, which eventually suggests that powerful CFOs provide better reporting quality and information to the market. It also</p>

	<p>supports the efficient contracting behaviour of CFOs, which suggests that they follow a stewardship role.</p> <p>This outcome contributes to the expectation that powerful CFOs in US regulatory settings follow their undertaken financial reporting responsibility properly.</p>
<p>3 RQ3: Do powerful CFOs influence accounting conservatism?</p>	<p>Supporting this research question, H_{3a} hypothesises that CFOs with power are negatively related with accounting conservatism, according to the rent extraction hypothesis/opportunistic hypothesis. Conversely, H_{3b} hypothesises that CFOs with power are positively related with accounting conservatism, according to the efficient contracting hypothesis.</p> <p>The empirical evidence shows that CFOs' power has a significant negative relationship with conditional and unconditional conservatism accounting.</p> <p>This result is consistent with the recent literature on powerful CFOs (Baker et al., 2018; Collins et al., 2017), and suggests that powerful CFOs are less likely to report high-quality earnings (proxies by earnings management) and play the agent role in conservative accounting practices. This reinforces the argument of rent extraction attitude shown by powerful CFOs.</p> <p>This result confirms the conflicting role of powerful CFOs in US regulatory settings.</p>
<p>4 Is the association between CFO power and financial reporting quality positively or negatively influenced when firms implement high versus low degrees of monitoring intensity?</p>	<p>This hypothesis suggests that the relationship between financial statement disaggregation disclosure quality and analyst forecast disclosure quality and powerful CFOs is positive. This is in reference to the governance monitoring intensity of the firm, although this relationship is stronger and more significant when firms experience a lower level of monitoring intensity.</p> <p>This result confirms that powerful CFOs strongly influence the firm's information environment and reporting quality. The relationship between powerful CFOs and accounting conservatism is negative and significant when firms practise a lower level of governance monitoring.</p>

**Table 6.2 (a): Additional Analysis and Validation Test—Robustness Check—
Alternative Measurement of Disclosure and Information Quality**

Alternative measures	Findings
1 Bid–ask spread and CFO power	Powerful CFOs are significantly and negatively related to bid–ask spread. This result supports the argument of the efficient contracting hypothesis that CFOs with power deliver better quality reporting and information environments.
2 Cost of debt and CFO power	This analysis suggests that powerful CFOs are negatively related with cost of debt, which supports the notion that disclosure quality reduces interest costs on debt issuances (Sengupta, 1998). This result suggests that powerful CFOs create an information environment and disclosure choices that provide transparent information to creditors and assist in financial decision-making.
3 Market liquidity and CFO power	This result suggests that firms with powerful CFOs are positively associated with market liquidity and deliver positive signals to market participants and investors about information quality. This proxy indicates investors’ ability to trade in a share without affecting its price (Fu et al., 2012).
4 Properties of individual analyst forecasts and CFO power	For additional analysis, this study uses individual forecast accuracy, forecast dispersion, forecast bias, and revision volatility as alternative measurement of a firm’s information environment and disclosure quality. The results suggest that forecast revision volatility, forecast bias and dispersion are negatively related, while forecast accuracy is positively related to powerful CFOs. Powerful CFOs choose financial reporting quality and disclosure policy to provide subjective benefits to analysts. The inclusive quality of the information published by financial analysts depends on firms providing all financial disclosures.

Table 6.2 (b): Robustness Check—Control of CEO Power, Compensation, CFO Characteristics and Firm Growth

Additional analysis	Findings
1 Financial reporting with CFO power—CEO power	The findings show evidence that power is not essentially centralised in CEOs; rather, CEO power complements the relationship between powerful CFOs and disclosure quality. Consistent with the accounting conservatism baseline regression results, this test reports a negative relationship between powerful CFOs and accounting conservatism when powerful CEOs are apparent.
2 Financial reporting with CFO power—high compensation perspectives	The empirical analysis shows evidence that there is a positive relationship between CFO power and disclosure quality, regardless of whether higher compensation exists. Supporting the findings for the accounting conservatism baseline regression for conditional and unconditional conservatism, this analysis reports a negative relationship between powerful CFOs and accounting conservatism, irrespective of higher compensation perspectives.
3 Financial reporting with CFO power—CFO background characteristics	The results indicate that CFO power and disclosure quality are positively related, and CFO power is a sound corporate governance mechanism that increases the quality of disclosure when diverse CFO backgrounds (CFO age and gender) are evident.

	However, aligning with the accounting conservatism baseline regression findings, this analysis reports a negative relationship between powerful CFOs and accounting conservatism when diverse CFO backgrounds (CFO age and gender) are evident.
4 Financial statement disaggregation disclosure quality and analyst forecast disclosure quality with CFO power—high- versus low-growth firms	The results indicate a stronger association between CFO power and disclosure quality when firms have high growth opportunities.

Table 6.2 (c): Robustness Check—Alternative Measurement of Conservatism

Alternative measurement	Findings
1 Conditional conservatism	The sensitivity of earnings to returns measure of conservatism in Basu (1997) and the persistence of earnings change measure of conservatism in Basu (1997) serve as alternative measurements of conditional conservatism. Both models support the results of Ball and Shivakumar's (2005) conditional conservatism model. This result provides evidence that powerful CFOs are not conservative in their conditional conservatism reporting practices.
2 Unconditional conservatism	Beaver and Ryan's (2000) market model and Zhang's (2008) skewness model are both considered as unconditional conservative models. They support the results generated using Givoly and Hayn's (2000) accruals model. This result provides evidence that powerful CFOs are not conservative in their unconditional accounting conservatism reporting practices.

6.4 Implications of the Findings

CFOs in current times are expected to develop path-finding policies and procedures, redefine growth paradigms and refine business models, while their fiduciary role remains the same (Deloitte, 2017). As stated by Bill Tobia (LLR Partners' Managing Director of Strategic Finance), "[t]here will always be a need for someone to balance the books, crunch the numbers, and perform critical routine tasks but the CFO role is much more dynamic today" (Fugazy, 2018). Now, it is time to extend the work undertaken by academic scholars and regulators, so that they focus on the activities of CFOs as effective organisation leaders and core members of the senior management team.

While there is extensive literature on CEOs' influence and power in business decisions, the existing literature on CFOs and their authority is still growing. CEOs are closely related to firm-level decision-making, while CFOs' major duties are generally concerned with supervising firms' financial reporting quality and corporate disclosure choices. As

stated by Dr Murtaza Abbas, the CFO of Siemens (Pakistan) Engineering Company Limited (cited in IFAC, 2014):

CFOs have to position themselves as primary drivers of corporate strategy along with CEOs. They have to work as a strategist rather than a tactician to ensure the financial health and sustainability of their organizations and, most importantly, to ensure that shareholder expectations are met (p.11).

Theory and prior research suggest that managers play a dual role—an agent role or stewardship role—when making corporate decisions (Hiebl, 2015). Researchers should seriously consider CFOs' wielding of power and its role in deciding financial outcomes and reporting environments. CFOs can act as both 'agents' (a self-interested role) and 'stewards' (a 'protector driven' role). From a policy perspective, this thesis finds evidence that powerful CFOs can positively influence firms' information environment and disclosure quality. Such CFOs are also prone to negative influences on accounting conservatism, as a proxy of earnings quality.

Two separate arguments can be drawn from the findings—powerful CFOs can use their power to extract wealth, while at the same time negotiating the long-term benefits of stakeholders. There is a tension between their function as stewards and agents, and this can have implications for the firm's long-term organisational and business goals. This thesis suggests the rent extraction hypothesis in the relationship between powerful CFOs and accounting conservatism. Given that powerful CFOs are not associated with conservative accounting practices, whereas CFOs must authorise that financial statements and the quality of internal control and reporting practices are justified and credible to the users and they should not be involved in anything untoward as demanded by the SOX legislation and regulations. Investors and debt holders rely on financial reports, effective monitoring of powerful CFOs and their financial reporting practices. Policymakers are required to articulate policy and law to regulate CFOs' power and limit or block any opportunistic behaviour in the US business culture.

Conversely, the results support the efficient contracting hypothesis in the relationship between powerful CFOs and disclosure and/or information quality (financial statement disaggregation and analyst forecast disclosure quality). This is an interesting finding for future research to consider, given that powerful CFOs are increasing the quality of reported information and delivering positive signals to the market. However, their attitudes and influences can vary when accounting decisions related to managing earnings

or accounting practices follow different rationales. Investors can be manipulated by accounting practices and opportunistic conservative accounting practices. The findings from this study also provide scholars with contemporary information on disclosure quality and earnings quality in the US. In summary, this thesis will provide advantages for a range of key stakeholders.

Policymakers and regulators are able to measure the effectiveness and factual influence of SOX legislation to improve executive influences on the quality of financial reporting and the information environment of firms. Therefore, policy regulators and research scholars must shift the focus of their future research towards powerful CFOs' influence on firm performance and corporate decisions.

6.5 Limitations

This thesis contributes to the accounting literature and offers policy implications through investigating powerful CFOs' influence on the quality of financial reporting. Despite making several contributions, this study is subject to limitations, and, because of the specific aim and motivations of this study, some areas are not explored by this thesis.

To test the hypotheses, data for all the dependent, independent and control variables used in this thesis are collected from secondary sources derived from WRDS. This focus on databases is considered a limitation of this thesis, as it restricts the sources of data for this topic. To validate this study's findings, primary sources of data from publicly listed firms could be collected concerning CFOs and their influences on firm-level financial reporting choices. Using primary sources of data will generate alternative measures of the factors that constitute a powerful CFO. Case studies and a qualitative analysis of CFOs' influence on firms' reporting practices could also be conducted to validate this research.

While a range of control variables are included in this study's regression models to control for any potential effect of financial reporting quality, it is highly possible that other factors that are not controlled could influence the quality of financial reporting. For example, some motives involved in CFOs' influences are their style, reputation, level of confidence or overconfidence, aggressiveness, integrity and corporate culture. These factors are difficult yet nonetheless important to measure and explain (Ge et al., 2011; Ham et al., 2017). Nevertheless, this thesis does not emphasise causality, but instead considers the association between powerful CFO influences and the quality of financial reporting.

Although this thesis considers governance-related monitoring intensity variables, there remain several industry-specific factors that may influence the level of CFO power.

This research is limited to studying only the post-SOX period onwards and is unable to compare results between this period and the previous phase of US legislation. Using data from only a single nation, the US, hypothetically restricts the ability to generalise this study's empirical results to other domestic and institutional settings. However, the US does have a mature and well-established capital market with the active participation of regulators and investors. Moreover, the existing institutional structures in that country have been recognised as based on corporate governance principles and values similar to many other developed economies. Accordingly, this study can be conducted on alternative institutional settings.

Finally, this thesis examines publicly listed firms and does not provide evidence on powerful CFOs' roles and activities in private limited firms. Private and public limited companies are subject to different regulations and corporate governance settings. Overall, these limitations do not weaken this study's arguments or outweigh the study's strengths.

6.6 Directions for Future Research

This thesis contributes towards a better understanding of the influence of powerful CFOs on financial statement disaggregation disclosure quality, analyst forecast disclosure quality and accounting conservatism in US firms. In addition, the results provide a useful framework for key stakeholders, including regulators, investors, scholars and corporate governance, through suggesting that powerful CFOs and their influence on financial reporting quality firms in the US deserve further analysis. There are numerous probable avenues for future research, as listed below.

First, given that this thesis examines the influence of CFO power on the quality of financial reporting and related information, future research can be conducted on the role of CFO power with reference to firm performance, investment strategies, agency cost of equity, aggressive accounting practices and internal control weaknesses.

Second, this thesis measures CFO power using a number of proxy variables, while future research can measure CFO power using a different approach. The approaches include CFO Power can be measured from survey-based analysis.

Third, this thesis applies an analytical approach on secondary data, while future research can be undertaken on primary source materials. This would mean undertaking interviews or a survey-based approach with a mixed methodology (qualitative and quantitative) regarding powerful CFOs and their attitudes towards corporate and financial decision-making.

Fourth, given that this research is conducted only on publicly listed companies, future research should be completed with privately held companies, and ascertain whether CFOs' attitudes differ in these types of institutions (Heilb, 2015).

Fifth, this thesis examines the effect of CFO power on the quality of financial reporting and information environment. Future research can focus on assessing the effect of CFOs' reputations, level of optimism and/or aggressiveness in terms of businesses' financial reporting decisions.

Sixth, CFOs' accountability and responsibilities have increased their pay in the post-SOX period in the US. Future research should examine the differences (if any) in terms of powerful CFOs' influence on financial reporting choices in the pre-SOX and post-SOX periods (Baker et al., 2018; Chi, Lisic, & Pevzner, 2011).

Finally, given that this study concentrates on only one country and its institutional settings, future research should incorporate a comprehensive analysis of powerful CFOs in domestic, regional or international settings. Importantly, researchers can conduct related research by selecting countries with different regulatory and institutional settings or jurisdictions, where different investor or legal protection mechanisms exist.

Appendix A: Variable Definitions

Variables	Definition	Sources
CFO variables		
CFPI	CFO power index that equals the sum of CFO board dummy, CFO title dummy, CFO shareholding dummy and CFO tenure dummy.	ExecuComp
CFO title dummy	Equals 1 if the CFO's number of titles exceeds the median number of CFO titles, and 0 otherwise. The number of titles is calculated by counting the titles listed in TITLEANN from ExecuComp.	ExecuComp
CFO tenure dummy	Equals 1 if the CFO's tenure at the current firm exceeds the median of CFO tenure, and 0 otherwise.	ExecuComp
CFO shareholding dummy	If CFO shareholding is greater than the CFO shareholding t median, then CFO shareholding dummy equals 1; otherwise, otherwise equals 0.	ExecuComp
CFO board dummy	Equals 1 if the CFOs sit on the board of directors, and 0 otherwise.	ExecuComp
CFO age dummy	Dummy variable that is equal to 1 if the CFO's age is 55 or greater at the beginning of the year, and 0 otherwise.	ExecuComp
CFO GEN dummy	The CFO gender dummy is equal to 1 if the CFO is a female, and 0 otherwise.	ExecuComp
COM	CFO compensation dummy. If CFO compensation is greater than the CFO compensation median, then the CFO compensation dummy equals to 1; otherwise, it is equal to 0. Total compensation for the individual year is collected from ExecuComp.	ExecuComp
CPS	CFO pay slice (CPS) is the total CFO compensation divided by the total compensation of top five named executives.	ExecuComp
Ind. adj. CPS Ind. adj. CPS dummy	Industry-adjusted CPS is calculated by using two-digit SIC industry. When Ind. adj. CPS is greater than the industry-adjusted CPS median, then ind. adj. CPS dummy is equal to 1; otherwise, it is equal to 0.	
Indus. adj. CFO power	Industry-adjusted CFO power.	ExecuComp
CEO variables		
CEPI	CEO power index that equals the sum of CEO on board, CEO title dummy, CEO shareholding dummy and CEO tenure dummy.	ExecuComp
CEO title dummy	Equals 1 if the CEO's number of titles exceeds the median number of CEO titles, and 0 otherwise. The number of titles is calculated by counting the titles listed in TITLEANN from ExecuComp.	ExecuComp
CEO tenure dummy	Equals 1 if the CEO's tenure at the current firm exceeds the median CEO tenure, and 0 otherwise.	ExecuComp
CEO shareholding dummy	If CEO shareholding is greater than the CFO shareholding t median, then CEO shareholding dummy equals 1; otherwise, otherwise equals 0.	ExecuComp
CEO board dummy	Equals 1 if the CEOs sit on the board, and 0 otherwise.	ExecuComp
Financial statement disaggregation variables		

DQ_BS	Value-weighted disclosure quality of balance sheet items (theoretical maximum of 1 and minimum of 0).	Compustat
DQ_IS	Equally-weighted disclosure quality of income statement items (theoretical maximum of 1 and minimum of 0).	Compustat
FSDQ	Average of DQ_BS and DQ_IS ($DQ = 0.5 \times [DQ_BS + DQ_IS]$).	Compustat
Analyst variables		
AFDQ	PCA score from lower forecast error, lower forecast dispersion and lower revision volatility.	I/B/E/S
ERR	Absolute difference between the last consensus forecast of EPS estimate prior to the release of earnings and the EPS scaled by the beginning-of-year stock price.	I/B/E/S
DISP	Dispersion is calculated as the standard deviation of individual analysts' forecasts divided by stock price at the beginning of fiscal year t .	I/B/E/S
RVOL	Standard deviation of the monthly revision of the median forecast, deflated by the beginning-of-year price.	I/B/E/S
SUR	This year's earnings minus last year's earnings, deflated by stock price.	I/B/E/S
ANA	Log number of analyst coverage for each firm at the beginning of year t .	I/B/E/S
Bias	Analyst forecast bias as the signed difference between mean consensus analyst-forecasted EPS and actual EPS (averaged over fiscal months one to 12), scaled by the stock price of a firm for time period $t - 1$.	I/B/E/S
Control variables—FSDQ and AFDQ		
TA	Log of total assets at the beginning of year t .	Compustat
GR	Sales growth over three years, from $t1$ to $t + 3$.	Compustat
MB	Log value of market value of equity divided by the book value of equity at the beginning of year t .	Compustat
ROA	Earnings before extraordinary items divided by beginning total assets.	Compustat
VOL	Standard deviation of annual ROA for the six-year period immediately prior to the current year.	Compustat
RD	Total research and development divided by beginning total assets.	Compustat
SH	Number of common shareholders (in thousands) at the beginning of year t .	Compustat
LEV	Book value of total liabilities divided by book value of assets.	Compustat
LOSS	Indicator variable set equal to 1 if the firm recorded a loss, and 0 otherwise.	Compustat
FS	Foreign sales, defined as the proportion of sales by foreign segments.	Historical segment
SEG	Log of the number of business segments.	Historical segment
AGE	Log of firm age, as measured as the number of years of financial data appearing in Compustat.	Compustat
IO	Number of shares held by institutions divided by beginning total outstanding common shares.	Worldscope

Accounting conservatism variables		
CON_TACC _t	Total accruals. Defined as net income before extraordinary items minus cash flow from operating activities, scaled by total assets at the beginning of the fiscal year.	Compustat
CON_ACRU _t	Mean of total accruals (net income before extraordinary items plus depreciation less cash flow from operations) scaled by total assets, averaged over a three-year period centred on the year of interest and multiplied by -1.	Compustat
CON_MKT	Book-to-market ratio (BTM) on current annual stock returns (RET) multiplied by -1.	CRSP
CON_SKEW	Skewness of earnings divided by skewness of cash flow from operations, multiplied by -1.	Compustat
CON_NI	Δ NI, change in net income before extraordinary items (#IB) in fiscal year t , divided by total assets at the beginning of the fiscal year.	Compustat
CON_RTN	NI is net income before extraordinary items, deflated by the beginning-of-period prices.	Compustat
OCF	Cash flow—operating cash flow deflated by total assets at the beginning of the fiscal year.	Compustat
DOCF	Negative CFO—a dummy variable that equals 1 if CFO is negative and 0 otherwise.	Compustat
RET	Return—the accumulated market-adjusted stock returns from nine months before fiscal year end to three months after fiscal year end.	CRSP
DR	Negative return—a dummy variable that equals 1 if RET is negative and 0 otherwise.	CRSP
Δ NI _{t-1}	The change in net income before extraordinary items (#IB) in fiscal year $t - 1$, divided by the total assets at the beginning of the fiscal year.	Compustat
D Δ NI _{t-1}	A dummy variable that equals 1 if DNI _{t-1} is negative and 0 otherwise.	Compustat
CON control variables		
SZ	Total assets—the firm's size calculated as the natural log of total assets at the end of the fiscal year.	Compustat
LIT	Litigation—a dummy variable that equals 1 if the firm is in a litigious industry and 0 otherwise. Following Ho et al. (2015), the primary SIC codes are considered to represent litigious industries, as follows: 2833 to 2836 (biotechnology), 3570 to 3577 (computer equipment), 3600 to 3674 (electronics), 5200 to 5961 (retailing) and 7370 to 7374 (computer services).	Compustat
TAN	Tangibility—net amount of property, plant and equipment scaled by total assets.	Compustat
MTB	Market to book—the market-to-book ratio calculated as the market value of equity scaled by the book value of equity at the end of the fiscal year.	Compustat
PR	Profitability—earnings before interest, tax, depreciation and amortisation scaled by total assets.	Compustat
GR	Growth—sales growth, defined as the percentage of annual growth in total sales.	Compustat
RD	Research and development expenditure—research and development scaled by total assets.	Compustat
CH	Cash and short-term investments scaled by total assets.	Compustat

Additional analysis variables		
BAS	Bid-ask spread—12-month average of quoted bid-ask spread divided by the mid-point of bid and ask quotes.	CRSP
LIQ	Market liquidity—reciprocal form of Amihud's (2002) illiquidity measure, where illiquidity is measured by daily absolute return divided by trading volume.	CRSP
Cost of debt	Cost of debt, measured as the ratio of a firm's interest expense in year $t + 1$ to average interest-bearing debt outstanding in year t and year $t + 1$.	Compustat
VLM	Log VOLUME is the average daily trading volume (in million shares) over the fiscal year.	CRSP
PRC	Log PRICE is the average price over fiscal year t .	CRSP
BTM	Book value of common equity divided by market value of common equity.	Compustat
Beta	Estimated via a market model regression of at least 18 of the 60 monthly return observations in the five-year period.	Beta Suite WRDS
Governance variables		
Audit committee member	Number of members in the audit committee.	BoardEx
Fin AUD	Percentage of finance specialists in the audit committee.	BoardEx
IND AUD	Independent director in the audit committee.	BoardEx
Big4	Big 4—defined as a dummy variable equal to 1 if the firm is audited by one of the Big 4 auditors, and 0 otherwise. Data are obtained from Compustat fundamental annual files.	Compustat
SPEC	Audit industry specialisation. SP is coded 1 if the audit firm is an industry specialist, and 0 otherwise.	Compustat
NUM DIR	Total directors in the board.	BoardEx
Per NED	Percentage NED to board.	BoardEx
Per IND	Percentage IND to board.	BoardEx
Qual	Average qualifications.	BoardEx

References

- Abernathy, J. L., Herrmann, D., Kang, T., & Krishnan, G. V. (2013). Audit committee financial expertise and properties of analyst earnings forecasts. *Advances in Accounting*, 29(1), 1–11.
- Abernethy, M. A., Kuang, Y. F., & Qin, B. (2015). The influence of CEO power on compensation contract design. *The Accounting Review*, 90(4), 1265–1306.
- Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *The Review of Financial Studies*, 18(4), 1403–1432.
- Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *The Journal of Finance*, 62(1), 217–250.
- Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, 77(4), 867–890.
- Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics*, 43(2–3), 411–437.
- Ahmed, A. S., & Duellman, S. (2013). Managerial overconfidence and accounting conservatism. *Journal of Accounting Research*, 51(1), 1–30.
- Ahmed, K., & Henry, D. (2012). Accounting conservatism and voluntary corporate governance mechanisms by Australian firms. *Accounting & Finance*, 52(3), 631–662.
- Aier, J. K., Comprix, J., Gunlock, M. T., & Lee, D. (2005). The financial expertise of CFOs and accounting restatements. *Accounting Horizons*, 19(3), 123–135.
- Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of Accounting Research*, 43(3), 343–376.
- Alali, F. (2011). Audit fees and discretionary accruals: Compensation structure effect. *Managerial Auditing Journal*, 26(2), 90–113.
- Albrecht, W. S., Albrecht, C. C., & Albrecht, C. O. (2004). Fraud and corporate executives: Agency, stewardship and broken trust. *Journal of Forensic Accounting*, 5(1), 109–130.

- Alford, A. W., & Berger, P. G. (1999). A simultaneous equations analysis of forecast accuracy, analyst following, and trading volume. *Journal of Accounting, Auditing & Finance*, 14(3), 219–240.
- Amihud, Y. (2002). Illiquidity and stock returns: Cross-section and time-series effects. *Journal of Financial Markets*, 5(1), 31–56.
- Amir, E., Einhorn, E., & Kama, I. (2014). The role of accounting disaggregation in detecting and mitigating earnings management. *Review of Accounting Studies*, 19(1), 43–68.
- Amiram, D., Owens, E., & Rozenbaum, O. (2016). Do information releases increase or decrease information asymmetry? New evidence from analyst forecast announcements. *Journal of Accounting Economics*, 62(1), 121–138.
- Ammann, M., Oesch, D., & Schmid, M. M. (2011). Corporate governance and firm value: International evidence. *Journal of Empirical Finance*, 18(1), 36–55.
- Armstrong, C. S., Jagolinzer, A. D., & Larcker, D. F. (2010). Chief executive officer equity incentives and accounting irregularities. *Journal of Accounting Research*, 48(2), 225–271.
- Arthaud-Day, M. L., Certo, S. T., Dalton, C. M., & Dalton, D. R. (2006). A changing of the guard: Executive and director turnover following corporate financial restatements. *Academy of Management Journal*, 49(6), 1119–1136.
- Arthur, N., Cheng, M., & Czernekowski, R. (2010). Cash flow disaggregation and the prediction of future earnings. *Accounting & Finance*, 50(1), 1–30.
- Antle, R., & Nalebuff, B. (1991). Conservatism and auditor-client negotiations. *Journal of Accounting Research*, 29, 31–54.
- Ashbaugh, H., & Pincus, M. (2001). Domestic accounting standards, international accounting standards, and the predictability of earnings. *Journal of Accounting Research*, 39(3), 417–434.
- Ashbaugh-Skaife, H., Collins, D. W., Kinney Jr., W. R., & Lafond, R. (2008). The effect of SOX internal control deficiencies and their remediation on accrual quality. *The Accounting Review*, 83(1), 217–250.
- Athanassakos, G., & Kalimipalli, M. (2003). Analyst forecast dispersion and future stock return volatility. *Quarterly Journal of Business and Economics*, 42(1/2), 57–78.
- Baik, B. O. K., Farber, D. B., & Lee, S. A. M. (2011). CEO ability and management earnings forecasts. *Contemporary Accounting Research*, 28(5), 1645–1668.

- Baker, T. A., Lopez, T. J., Reitenga, A. L., & Ruch, G. W. (2019). The influence of CEO and CFO power on accruals and real earnings management. *Review of Quantitative Finance and Accounting*, 52(1), 325–345.
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton papers on financial services*, 2001(1), 127-169.
- Ball, R., Bushman, R. M., & Vasvari, F. P. (2008). The debt-contracting value of accounting information and loan syndicate structure. *Journal of Accounting Research*, 46(2), 247-287.
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of accounting and economics*, 39(1), 83-128.
- Balsam, S., Irani, A. J., & Yin, Q. J. (2012). Impact of job complexity and performance on CFO compensation. *Accounting Horizons*, 26(3), 395-416.
- Bamber, L. S., Jiang, J., & Wang, I. Y. (2010). What's my style? The influence of top managers on voluntary corporate financial disclosure. *The Accounting Review*, 85(4), 1131-1162.
- Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO gender and accruals quality. *Accounting Horizons*, 24(1), 25-39.
- Barron, O. E., & Stuerke, P. S. (1998). Dispersion in analysts' earnings forecasts as a measure of uncertainty. *Journal of Accounting, Auditing & Finance*, 13(3), 245-270.
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24(1), 3-37.
- Baum, C. F., Schaffer, M. E., & Stillman, S. (2003). Instrumental variables and GMM: Estimation and testing. *The Stata Journal*, 3(1), 1-31.
- Baxter, J., & Chua, W. F. (2008). Be (com) ing the chief financial officer of an organisation: Experimenting with Bourdieu's practice theory. *Management Accounting Research*, 19(3), 212-230.
- Beattie, V., Mcinnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205-236.
- Beaudoin, C. A., Cianci, A. M., & Tsakumis, G. T. (2015). The impact of CFOs' incentives and earnings management ethics on their financial reporting decisions:

- The mediating role of moral disengagement. *Journal of business ethics*, 128(3), 505-518.
- Beaver, W. H., & Ryan, S. G. (2000). Biases and lags in book value and their effects on the ability of the book-to-market ratio to predict book return on equity. *Journal of Accounting Research*, 38(1), 127-148.
- Beaver, W. H., & Ryan, S. G. (2005). Conditional and unconditional conservatism: Concepts and modeling. *Review of accounting studies*, 10(2-3), 269-309.
- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *The Review of financial studies*, 22(2), 783-827.
- Bebchuk, L. A., Cremers, K. M., & Peyer, U. C. (2011). The CEO pay slice. *Journal of financial Economics*, 102(1), 199-221.
- Beck, M. J., Glendening, M., & Hogan, C. E. (2016). Financial Statement Disaggregation, Auditor Effort and Financial Reporting Quality, 1-52, Working Paper. Retrieved from <https://pages.business.illinois.edu/accountancy/wpcontent/uploads/sites/12/2016/08/Bec-k-Glendening-Hogan.pdf> (accessed on 15 January 2019)
- Beck, M. J., & Mauldin, E. G. (2014). Who's really in charge? Audit committee versus CFO power and audit fees. *The Accounting Review*, 89(6), 2057-2085.
- Bedard, J. C., & Johnstone, K. M. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review*, 79(2), 277-304.
- Bédard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory*, 23(2), 13-35.
- Bedard, J. C., Hoitash, R., & Hoitash, U. (2014). Chief financial officers as inside directors. *Contemporary Accounting Research*, 31(3), 787-817.
- Beekes, W., & Brown, P. (2006). Do better-governed Australian firms make more informative disclosures? *Journal of Business Finance & Accounting*, 33(3-4), 422-450.
- Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: Evidence from the UK. *Corporate Governance: An International Review*, 12(1), 47-59.
- Behn, B. K., Choi, J. H., & Kang, T. (2008). Audit quality and properties of analyst earnings forecasts. *The Accounting Review*, 83(2), 327-349.

- Benson, B. W., & Davidson, W. N. (2010). The relation between stakeholder management, firm value, and CEO compensation: A test of enlightened value maximization. *Financial Management*, 39(3), 929–964.
- Bentley, K. A., Omer, T. C., & Sharp, N. Y. (2013). Business strategy, financial reporting irregularities, and audit effort. *Contemporary Accounting Research*, 30(2), 780–817.
- Berger, P. G. (2011). Challenges and opportunities in disclosure research—A discussion of ‘the financial reporting environment: Review of the recent literature’. *Journal of Accounting and Economics*, 51(1–2), 204–218.
- Berger, P. G., & Hann, R. (2003). The impact of SFAS No. 131 on information and monitoring. *Journal of Accounting Research*, 41(2), 163–223.
- Bertomeu, J., Darrough, M., & Xue, W. (2017). Optimal conservatism with earnings manipulation. *Contemporary Accounting Research*, 34(1), 252–284.
- Bhat, G., Hope, O. K., & Kang, T. (2006). Does corporate governance transparency affect the accuracy of analyst forecasts? *Accounting & Finance*, 46(5), 715–732.
- Bhushan, R. (1989). Firm characteristics and analyst following. *Journal of Accounting and Economics*, 11(2–3), 255–274.
- Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics*, 48(2–3), 112–131.
- Billings, B. A., Gao, X., & Jia, Y. (2013). CEO and CFO equity incentives and the pricing of audit services. *Auditing: A Journal of Practice & Theory*, 33(2), 1–25.
- Blackwell, D. (1951). Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability. *Chapter Comparison of Experiments*, 93–102.
- Bloomfield, R., Hodge, F., Hopkins, P., & Rennekamp, K. (2010). Does enhanced disaggregation and cohesive classification of financial information help credit analysts identify firms’ operating structures? *Johnson School Research Paper Series*, 14–2011.
- Boivie, S., Lange, D., McDonald, M. L., & Westphal, J. D. (2011). Me or we: The effects of CEO organizational identification on agency costs. *Academy of Management Journal*, 54(3), 551–576.
- Bonn, I., & Pettigrew, A. (2009). Towards a dynamic theory of boards: An organisational life cycle approach. *Journal of Management & Organization*, 15(1), 2–16.

- Botosan, C. A., & Plumlee, M. (2001). Estimating expected cost of equity capital: A theory-based approach. Available at SSRN Electronic Journal: <http://dx.doi.org/10.2139/ssrn.279309>
- Bourdieu, P. (1977). *Outline of a theory of practice* (Vol. 16). Cambridge University Press.
- Bozec, R., Dia, M., & Bozec, Y. (2010). Governance–performance relationship: A re-examination using technical efficiency measures. *British Journal of Management*, 21(3), 684–700.
- Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. *Journal of Accounting and Public Policy*, 25(4), 409–434.
- Burks, J. J. (2010). Disciplinary measures in response to restatements after Sarbanes–Oxley. *Journal of Accounting and Public Policy*, 29(3), 195–225.
- Burns, N., & Kedia, S. (2006). The impact of performance-based compensation on misreporting. *Journal of Financial Economics*, 79(1), 35–67.
- Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2011). Capital allocation and timely accounting recognition of economic losses. *Journal of Business Finance & Accounting*, 38(1–2), 1–33.
- Byard, D., Li, Y., & Weintrop, J. (2006). Corporate governance and the quality of financial analysts' information. *Journal of Accounting and Public Policy*, 25(5), 609–625.
- Cannella Jr., A. A., Fraser, D. R., & Lee, D. S. (1995). Firm failure and managerial labor markets evidence from Texas banking. *Journal of Financial Economics*, 38(2), 185–210.
- Carcello, J. V., Neal, T. L., Palmrose, Z. V., & Scholz, S. (2011). CEO involvement in selecting board members, audit committee effectiveness, and restatements. *Contemporary Accounting Research*, 28(2), 396–430.
- Carter, M. E., Lynch, L. J., & Zechman, S. L. (2009). Changes in bonus contracts in the post-Sarbanes–Oxley era. *Review of Accounting Studies*, 14(4), 480–506.
- Chang, H., Chen, J., Liao, W. M., & Mishra, B. K. (2006). CEOs'/CFOs' swearing by the numbers: Does it impact share price of the firm? *The Accounting Review*, 81(1), 1–27.
- Chang, M., Hooi, L., & Wee, M. (2014). How does investor relations disclosure affect analysts' forecasts? *Accounting & Finance*, 54(2), 365–391.

- Chava, S., & Purnanandam, A. (2010). CEOs versus CFOs: Incentives and corporate policies. *Journal of Financial Economics*, 97(2), 263–278.
- Center for International Financial Analysis and Research (CIFAR). (1993, 1995) International Accounting and Auditing Trends, Princeton, NJ: CIFAR Publications Inc. 1, 2.
- Chen, S., Chen, X., & Cheng, Q. (2014). Conservatism and equity ownership of the founding family. *European Accounting Review*, 23(3), 403–430.
- Chen, S., Miao, B., & Shevlin, T. (2015). A new measure of disclosure quality: The level of disaggregation of accounting data in annual reports. *Journal of Accounting Research*, 53(5), 1017–1054.
- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics*, 87(1), 157–176.
- Cheung, Y. L., Jiang, P., & Tan, W. (2010). A transparency disclosure index measuring disclosures: Chinese listed companies. *Journal of Accounting and Public Policy*, 29(3), 259–280.
- Chi, W., Lisic, L. L., & Pevzner, M. (2011). Is enhanced audit quality associated with greater real earnings management? *Accounting Horizons*, 25(2), 315–335.
- Chi, W., Liu, C., & Wang, T. (2009). What affects accounting conservatism: A corporate governance perspective? *Journal of Contemporary Accounting & Economics*, 5(1), 47–59.
- Chintrakarn, P., Jiraporn, P., Kim, Y., & Kim, J. C. (2015). Does corporate governance quality affect analyst coverage? Evidence from the Institutional Shareholder Services (ISS). *Applied Economics Letters*, 22(4), 312–317.
- Choi, K. W., Chen, X., Wright, S., & Wu, H. (2014). Analysts' forecasts following forced CEO changes. *Abacus*, 50(2), 146–173.
- Chung, H. H., & Wynn, J. P. (2008). Managerial legal liability coverage and earnings conservatism. *Journal of Accounting and Economics*, 46(1), 135–153.
- Clinch, G., Sidhu, B., & Sin, S. (2002). The usefulness of direct and indirect cash flow disclosures. *Review of Accounting Studies*, 7(4), 383–404.
- Coates, J. C., & Srinivasan, S. (2014). SOX after ten years: A multidisciplinary review. *Accounting Horizons*, 28(3), 627–671.
- Cohen, Daniel A. (2003). Quality of Financial Reporting Choice: Determinants and Economic Consequences. Available at SSRN Electronic Journal: <http://dx.doi.org/10.2139/ssrn.422581>

- Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The Accounting Review*, 83(3), 757–787.
- Cohen, J. R., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 23, 87–152.
- Cohen, L., Frazzini, A., & Malloy, C. J. (2012). Hiring cheerleaders: Board appointments of ‘independent’ directors. *Management Science*, 58(6), 1039–1058.
- Coles, J. W., McWilliams, V. B., & Sen, N. (2001). An examination of the relationship of governance mechanisms to performance. *Journal of Management*, 27(1), 23–50.
- Collins, D., Fleischman, G., Kaden, S., & Sanchez, J. M. (2017). How powerful CFOs camouflage and exploit equity-based incentive compensation. *Journal of Business Ethics*, 153(2), 591–613.
- Collins, D., Masli, A. D. I., Reitenga, A. L., & Sanchez, J. M. (2009). Earnings restatements, the Sarbanes-Oxley Act, and the disciplining of chief financial officers. *Journal of Accounting, Auditing & Finance*, 24(1), 1–34.
- Combs, J. G., Ketchen Jr., D. J., Perryman, A. A., & Donahue, M. S. (2007). The moderating effect of CEO power on the board composition–firm performance relationship. *Journal of Management Studies*, 44(8), 1299–1323.
- Copeland, T. E. (2002). What do practitioners want? *Journal of Applied Finance*, 12(1), 5–12.
- Core, J. E. (2001). A review of the empirical disclosure literature: Discussion. *Journal of Accounting and Economics*, 31(1–3), 441–456.
- Cormier, D., Lapointe-Antunes, P., & Magnan, M. (2016). CEO power and CEO hubris: A prelude to financial misreporting? *Management Decision*, 54(2), 522–554.
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42(6), 674–686.
- Das, S., Levine, C. B., & Sivaramakrishnan, K. (1998). Earnings predictability and bias in analysts’ earnings forecasts. *Accounting Review*, 73 (2), 277–294.
- Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46(5), 1085–1142.

- Davis, J. H., Allen, M. R., & Hayes, H. D. (2010). Is blood thicker than water? A study of stewardship perceptions in family business. *Entrepreneurship Theory and Practice*, 34(6), 1093–1116.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47.
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics*, 18(1), 3–42.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2–3), 344–401.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(s-1), 35–59.
- Dechow, P. M., & Schrand, C. M. (2004). *Earnings quality*. Charlottesville, VA: Research Foundation of CFA Institute.
- Dejong, D., & Ling, Z. (2013). Managers: Their effects on accruals and firm policies. *Journal of Business Finance & Accounting*, 40(1–2), 82–114.
- Deloitte (2017). *The Future CFO: Thriving in Chaos and Driving Change*. Deloitte Touche Tohmatsu Limited 10th International Conference, Mumbai, India. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/finance/in-finance-cfo-future-of-cfo-thriving-chaos-driving-change-noexp.pdf> (accessed on 10 December, 2019)
- Demerjian, P. R., Lev, B., Lewis, M. F., & McVay, S. E. (2013). Managerial ability and earnings quality. *The Accounting Review*, 88(2), 463–498.
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209–233.
- Desai, H., Hogan, C. E., & Wilkins, M. S. (2006). The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review*, 81(1), 83–112.
- DeZoort, F. T., Hermanson, D. R., Archambeault, D. S., & Reed, S. A. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. *Journal of Accounting Literature*, 21, 38–75.

- DeZoort, F. T., & Salterio, S. E. (2001). The effects of corporate governance experience and financial-reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice & Theory*, 20(2), 31–47.
- Dhaliwal, D. A. N., Naiker, V. I. C., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research*, 27(3), 787–827.
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *The Accounting Review*, 87(3), 723–759.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *The Journal of Finance*, 46(4), 1325–1359.
- Dichev, I., Graham, J., Harvey, C. R., & Rajgopal, S. (2016). The misrepresentation of earnings. *Financial Analysts Journal*, 72(1), 22–35.
- Dichev, I. D., Graham, J. R., Harvey, C. R., & Rajgopal, S. (2013). Earnings quality: Evidence from the field. *Journal of Accounting and Economics*, 56(2–3), 1–33.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64.
- Donnelly, R., & Mulcahy, M. (2008). Board structure, ownership, and voluntary disclosure in Ireland. *Corporate Governance: An International Review*, 16(5), 416–429.
- Dowdell, T. D., & Krishnan, J. (2004). CAP forum on Enron: Former audit firm personnel as CFOs: Effect on earnings management. *Canadian Accounting Perspectives*, 3(1), 117–142.
- Drake, M. S., Myers, J. N., & Myers, L. A. (2009). Disclosure quality and the mispricing of accruals and cash flow. *Journal of Accounting, Auditing & Finance*, 24(3), 357–384.
- Duellman, S., Ahmed, A. S., & Abdel-Meguid, A. M. (2013). An empirical analysis of the effects of monitoring intensity on the relation between equity incentives and earnings management. *Journal of Accounting and Public Policy*, 32(6), 495–517.
- Durnev, A., & Kim, E. H. (2005). To steal or not to steal: Firm attributes, legal environment, and valuation. *The Journal of Finance*, 60(3), 1461–1493.
- Duru, A., & Reeb, D. M. (2002). International diversification and analysts' forecast accuracy and bias. *The Accounting Review*, 77(2), 415–433.

- Duong, L., & Evans, J. (2016). Gender differences in compensation and earnings management: Evidence from Australian CFOs. *Pacific-Basin Finance Journal*, 40, 17-35.
- Duong, L., & Evans, J. (2015). CFO compensation: Evidence from Australia. *Pacific-Basin Finance Journal*, 35, 425–443.
- D’Souza, J., Ramesh, K., & Shen, M. (2010). Disclosure of GAAP line items in earnings announcements. *Review of Accounting Studies*, 15(1), 179-219.
- Eisenhardt, K. M. (1985). Control: Organizational and economic approaches. *Management science*, 31(2), 134-149.
- Elias, S. (2008). Fifty years of influence in the workplace: The evolution of the French and Raven power taxonomy. *Journal of Management History*, 14(3), 267–283.
- Eng, L. L., & Mak, Y. T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22(4), 325–345.
- Eng, L. L., & Teo, H. K. (1999). The relationship between annual report disclosures, analysts’ earnings forecasts and analyst following: Evidence from Singapore. *Pacific Accounting Review*, 11(1/2), 219-239.
- Erhemjamts, O., Gupta, A., & Tumennasan, B. (2009). *The effect of Sarbanes–Oxley Act on CFO compensation and rank*. Reno, NV: Financial Management Association.
- Esplin, A., Hewitt, M., Plumlee, M., & Yohn, T. L. (2014). Disaggregating operating and financial activities: Implications for forecasts of profitability. *Review of Accounting Studies*, 19(1), 328–362.
- Ettredge, M., Scholz, S., Smith, K. R., & Sun, L. (2010). How do restatements begin? Evidence of earnings management preceding restated financial reports. *Journal of Business Finance & Accounting*, 37(3–4), 332–355.
- Fairfield, P. M., Sweeney, R. J., & Yohn, T. L. (1996). Accounting classification and the predictive content of earnings. *Accounting Review*, 71(3), 337–355.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288–307.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327–349.
- Farber, D. B., Huang, S. X., & Mauldin, E. (2018). Audit committee accounting expertise, analyst following, and market liquidity. *Journal of Accounting, Auditing & Finance*, 33(2), 174–199.

- FASB. (1984). *Recognition and measurement in financial statements of business enterprises—Statement of financial accounting concepts no. 5*. Norwalk, CT: FASB.
- FASB. (2010). *Staff draft of an exposure draft on financial statement presentation*. Norwalk, CT: FASB.
- Feldmann, D. A., Read, W. J., & Abdolmohammadi, M. J. (2009). Financial restatements, audit fees, and the moderating effect of CFO turnover. *Auditing: A Journal of Practice & Theory*, 28(1), 205–223.
- Feltham, G. A., & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11(2), 689–731.
- Feng, M., Ge, W., Luo, S., & Shevlin, T. (2011). Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics*, 51(1–2), 21–36.
- Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122(3), 585–606.
- Finegold, D., Benson, G. S., & Hecht, D. (2007). Corporate boards and company performance: Review of research in light of recent reforms. *Corporate Governance: An International Review*, 15(5), 865–878.
- Fink, R. (2002). The fear of all sums as nervous investors flee from companies with even a hint of murky accounting, the pressure is on CFOS to rein in pro forma reporting, renounce off-balance-sheet maneuvers, and disclose more information. *CFO*, 18(8), 34–41.
- Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management Journal*, 35(3), 505–538.
- Finkelstein, S., & D'Aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*, 37(5), 1079–1108.
- Forker, J. J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research*, 22(86), 111–124.
- Francis, B., Hasan, I., Park, J. C., & Wu, Q. (2015). Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research*, 32(3), 1285–1318.

- Francis, B., Hasan, I., & Wu, Q. (2013). The impact of CFO gender on bank loan contracting. *Journal of Accounting, Auditing & Finance*, 28(1), 53–78.
- Francis, B. B., Hasan, I., Wu, Q., & Yan, M. (2014). Are female CFOs less tax aggressive? Evidence from tax aggressiveness. *The Journal of the American Taxation Association*, 36(2), 171–202.
- Francis, J., Huang, A. H., Rajgopal, S., & Zang, A. Y. (2008). CEO reputation and earnings quality. *Contemporary Accounting Research*, 25(1), 109–147.
- Francis, J. R., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of Accounting and Economics*, 49(1–2), 161–178.
- Francoeur, C., Melis, A., Gaia, S., & Aresu, S. (2017). Green or greed? An alternative look at CEO compensation and corporate environmental commitment. *Journal of Business Ethics*, 140(3), 439–453.
- Frankel, R., Kothari, S. P., & Weber, J. (2006). Determinants of the informativeness of analyst research. *Journal of Accounting and Economics*, 41(1–2), 29–54.
- French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. *Classics of organization theory*, 7, 311–320.
- Friedman, H. L. (2014). Implications of power: When the CEO can pressure the CFO to bias reports. *Journal of Accounting and Economics*, 58(1), 117–141.
- Fu, R., Kraft, A., & Zhang, H. (2012). Financial reporting frequency, information asymmetry, and the cost of equity. *Journal of Accounting and Economics*, 54(2–3), 132–149.
- Fugazy, D. (2018, April 19). The Changing Role of the CFO. [Blog Comment]. Retrieved 20 April 2018 from <https://www.axial.net/forum/changing-role-cfo/>
- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95(6), 1450.
- Gao, P. (2013). A measurement approach to conservatism and earnings management. *Journal of Accounting and Economics*, 55(2–3), 251–268.
- Ge, W., Matsumoto, D., & Zhang, J. L. (2011). Do CFOs have style? An empirical investigation of the effect of individual CFOs on accounting practices. *Contemporary Accounting Research*, 28(4), 1141–1179.

- Geiger, M. A., & North, D. S. (2006). Does hiring a new CFO change things? An investigation of changes in discretionary accruals. *The Accounting Review*, 81(4), 781–809.
- Ghosh, A., & Moon, D. (2010). The effect of CEO ownership on the information content of reported earnings. *Review of Quantitative Finance and Accounting*, 35(4), 393–410.
- Gibbins, M., McCracken, S. A., & Salterio, S. E. (2005). Negotiations over accounting issues: The congruency of audit partner and chief financial officer recalls. *Auditing: A Journal of Practice & Theory*, 24(s-1), 171–193.
- Gibbins, M., McCracken, S. A., & Salterio, S. E. (2007). The chief financial officer's perspective on auditor–client negotiations. *Contemporary Accounting Research*, 24(2), 387–422.
- Givoly, D., & Hayn, C. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics*, 29(3), 287–320.
- Goh, B. W., & Li, D. (2011). Internal controls and conditional conservatism. *The Accounting Review*, 86(3), 975–1005.
- Golden, B. R., Dukerich, J. M., & Fabian, F. H. (2000). The interpretation and resolution of resource allocation issues in professional organizations: A critical examination of the professional-manager dichotomy. *Journal of Management Studies*, 37(8), 1157–1188.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107–156.
- Gong, G., Ke, B., & Yu, Y. (2013). Home country investor protection, ownership structure and cross-listed firms' compliance with SOX—Mandated internal control deficiency disclosures. *Contemporary Accounting Research*, 30(4), 1490–1523.
- Gordon, R. (2011). *Leadership and power: The Sage handbook of leadership*. London, England: Sage.
- Gore, A. K., Matsunaga, S., & Eric Yeung, P. (2011). The role of technical expertise in firm governance structure: Evidence from chief financial officer contractual incentives. *Strategic Management Journal*, 32(7), 771–786.
- Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics*, 60(2-3), 187–243.

- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1–3), 3–73.
- Greve, H. R., & Mitsuhashi, H. (2007). Power and glory: Concentrated power in top management teams. *Organization Studies*, 28(8), 1197–1221.
- Gujarati, D. (2014). *Econometrics by example* (2nd ed.). Macmillan Education, United Kingdom.
- Gujarati, D. N. (2003). *Basic econometrics* (4th ed.). Boston: McGraw-Hill, United States.
- Gul, F. A., Hutchinson, M., & Lai, K. M. (2013). Gender-diverse boards and properties of analyst earnings forecasts. *Accounting Horizons*, 27(3), 511–538.
- Guo, S., & Fraser, M. W. (2015). *Propensity Score Analysis: Statistical Methods and Applications* (1st ed.), Thousand Oaks, Sage Publications, United States, 129–202.
- Habib, A., & Hossain, M. (2013). CEO/CFO characteristics and financial reporting quality: A review. *Research in Accounting Regulation*, 25(1), 88–100.
- Haislip, J. Z., Masli, A., Richardson, V. J., & Watson, M. W. (2015). External reputational penalties for CEOs and CFOs following information technology material weaknesses. *International Journal of Accounting Information Systems*, 17, 1–15.
- Haleblian, J., & Finkelstein, S. (1993). Top management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36(4), 844–863.
- Ham, C., Lang, M., Seybert, N., & Wang, S. (2017). CFO narcissism and financial reporting quality. *Journal of Accounting Research*, 55(5), 1089–1135.
- Hambrick, D. C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal*, 50(6), 1346–1352.
- 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.
- He, L., Labelle, R., Piot, C., & Thornton, D. B. (2009). Board monitoring, audit committee effectiveness, and financial reporting quality: Review and synthesis of empirical evidence. *Journal of Forensic & Investigative Accounting*, 1(2), 1–42.
- Healy, P. M., Hutton, A. P., & Palepu, K. G. (1999). Stock performance and intermediation changes surrounding sustained increases in disclosure. *Contemporary Accounting Research*, 16(3), 485–520.

- Heckman, J. J. (1976). The common structure of statistical models of truncation, sample selection and limited dependent variables and a simple estimator for such models. *In Annals of Economic and Social Measurement, The National Bureau of Economic Research*, 5 (4), 475–492.
- Heitzman, S., Wasley, C., & Zimmerman, J. (2010). The joint effects of materiality thresholds and voluntary disclosure incentives on firms' disclosure decisions. *Journal of Accounting and Economics*, 49(1–2), 109–132.
- Heflin, F. L., Shaw, K. W., & Wild, J. J. (2005). Disclosure policy and market liquidity: Impact of depth quotes and order sizes. *Contemporary Accounting Research*, 22(4), 829-865.
- Hellman, N. (2011). Chief financial officer influence on audit planning. *International Journal of Auditing*, 15(3), 247–274.
- Henderson, B. C., Masli, A., Richardson, V. J., & Sanchez, J. M. (2010). Layoffs and chief executive officer (CEO) compensation: does CEO power influence the relationship? *Journal of Accounting, Auditing & Finance*, 25(4), 709-748.
- Hennes, K. M., Leone, A. J., & Miller, B. P. (2008). The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. *The Accounting Review*, 83(6), 1487–1519.
- Hermanson, D. R., & Ye, Z. (2009). Why do some accelerated filers with SOX Section 404 material weaknesses provide early warning under Section 302? *Auditing: A Journal of Practice & Theory*, 28(2), 247–271.
- Hernandez, M. (2012). Toward an understanding of the psychology of stewardship. *Academy of Management Review*, 37(2), 172–193.
- Hewitt, M. (2009). Improving investors' forecast accuracy when operating cash flows and accruals are differentially persistent. *The Accounting Review*, 84(6), 1913–1931.
- Hiebl, M. R. (2015). Agency and stewardship attitudes of chief financial officers in private companies. *Qualitative Research in Financial Markets*, 7(1), 4–23.
- Hirshleifer, D., & Thakor, A. V. (1992). Managerial conservatism, project choice, and debt. *The Review of Financial Studies*, 5(3), 437-470.
- Hirshleifer, D., & Teoh, S. H. (2003). Limited attention, information disclosure, and financial reporting. *Journal of Accounting and Economics*, 36(1–3), 337–386.

- Hirst, D. E., Koonce, L., & Venkataraman, S. (2007). How disaggregation enhances the credibility of management earnings forecasts. *Journal of Accounting Research*, 45(4), 811–837.
- Ho, S. S., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics*, 127(2), 351–370.
- Ho, S. S. M., & Wong, K. S. (2001). A study of corporate disclosure practices and effectiveness in Hong Kong. *Journal of International Financial Management and Accounting*, 12(1), 75–101.
- Hoitash, R., Hoitash, U., & Johnstone, K. M. (2012). Internal control material weaknesses and CFO compensation. *Contemporary Accounting Research*, 29(3), 768–803.
- Hoitash, U., Hoitash, R., & Johnstone, K. M. (2007). The effects of internal control quality, CFO characteristics, and board of director strength on CFO annual compensation. *Contemporary Accounting Research*, 29(3), 786–803.
- Hope, O. K. (2003). Analyst following and the influence of disclosure components, IPOs and ownership concentration. *Asia-Pacific Journal of Accounting & Economics*, 10(2), 117–141.
- Hope, O. K., Thomas, W. B., & Vyas, D. (2013). Financial reporting quality of US private and public firms. *The Accounting Review*, 88(5), 1715–1742.
- Hossain, S., & Monroe, G. S. (2015). Chief financial officers' short-and long-term incentive-based compensation and earnings management. *Australian Accounting Review*, 25(3), 279–291.
- Hribar, P., & Yang, H. (2006). *CEO confidence, management earnings forecasts, earnings management*. Available at SSRN Electronic Journal: <http://ssrn.com/abstract=929731>.
- Huang, H. W., Rose-Green, E., & Lee, C. C. (2012). CEO age and financial reporting quality. *Accounting Horizons*, 26(4), 725–740.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822–839.
- Huang, P., & Zhang, Y. (2011). Does enhanced disclosure really reduce agency costs? Evidence from the diversion of corporate resources. *The Accounting Review*, 87(1), 199–229.
- Hui, K. W., & Matsunaga, S. R. (2015). Are CEOs and CFOs rewarded for disclosure quality? *The Accounting Review*, 90(3), 1013–1047.

- Hutton, A. P., Miller, G. S., & Skinner, D. J. (2003). The role of supplementary statements with management earnings forecasts. *Journal of Accounting Research*, 41(5), 867-890.
- Ibrahim, S., & Lloyd, C. (2011). The association between non-financial performance measures in executive compensation contracts and earnings management. *Journal of Accounting and Public Policy*, 30(3), 256–274.
- IFAC (2013). *The Role and Expectation of a CFO: A Global Debate on Preparing Accountants for Finance Leadership*. International Federation of Accountants. Retrieved from <https://www.ifac.org/system/files/publications/files/Role%20of%20the%20CFO.pdf> (accessed on 9-November 2018)
- Imhoff Jr., E. A., & Lobo, G. J. (1992). The effect of ex ante earnings uncertainty on earnings response coefficients. *Accounting Review*, 67 (2), 427–439.
- Indjejikian, R., & Matějka, M. (2009). CFO fiduciary responsibilities and annual bonus incentives. *Journal of Accounting Research*, 47(4), 1061–1093.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jian, M., & Lee, K. W. (2011). Does CEO reputation matter for capital investments? *Journal of Corporate Finance*, 17(4), 929–946.
- Jiang, J. X., Petroni, K. R., & Wang, I. Y. (2010). CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics*, 96(3), 513–526.
- Jiraporn, P., Chintrakarn, P., & Kim, Y. S. (2012). Analyst following, staggered boards, and managerial entrenchment. *Journal of Banking & Finance*, 36(11), 3091–3100.
- Jiraporn, P., Liu, Y., & Kim, Y. S. (2014). How do powerful CEOs affect analyst coverage? *European Financial Management*, 20(3), 652–676.
- Johnson, V. E., Khurana, I. K., & Reynolds, J. K. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research*, 19(4), 637–660.

- Jonas, G. J., & Blanchet, J. (2000). Assessing quality of financial reporting. *Accounting Horizons*, 14(3), 353–363.
- Kamaruzaman, A. J., Mazlifa, M. D., & Maisarah A. R (2009). The association between firm characteristics and financial statements transparency: The case of Egypt. *International Journal of Accounting*, 18(2), 211–223.
- Kannan, Y. H., Skantz, T. R., & Higgs, J. L. (2014). The impact of CEO and CFO equity incentives on audit scope and perceived risks as revealed through audit fees. *Auditing: A Journal of Practice & Theory*, 33(2), 111–139.
- Karamanou, I., & Vafeas, N. (2005). The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. *Journal of Accounting Research*, 43(3), 453–486.
- Karamizadeh, S., Abdullah, S. M., Manaf, A. A., Zamani, M., & Hooman, A. (2013). An overview of principal component analysis. *Journal of Signal and Information Processing*, 4(3), 173.
- Kassambara, A. (2017). *Practical guide to principal component methods in R* (1st ed.) STHDA Publishers, Retrieved from <https://www.datanovia.com/en/wp-content/uploads/dn-tutorials/book-preview/principal-component-methods-in-r-preview.pdf>
- Ke, B., & Yu, Y. (2006). The effect of issuing biased earnings forecasts on analysts' access to management and survival. *Journal of Accounting Research*, 44(5), 965–999.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110(2), 265.
- Khan, I., Chand, P. V., & Patel, A. (2013). The impact of ownership structure on voluntary corporate disclosure in annual reports: Evidence from Fiji. *Accounting & Taxation*, 5(1), 47–58.
- Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics*, 48(2–3), 132–150.
- Khurana, I. K., Pereira, R., & Martin, X. (2006). Firm growth and disclosure: An empirical analysis. *Journal of Financial and Quantitative Analysis*, 41(2), 357–380.

- Kim, B. H., & Pevzner, M. (2010). Conditional accounting conservatism and future negative surprises: An empirical investigation. *Journal of Accounting and Public Policy*, 29(4), 311–329.
- Koh, K. (2011). Value or glamour? An empirical investigation of the effect of celebrity CEOs on financial reporting practices and firm performance. *Accounting & Finance*, 51(2), 517–547.
- Koh, K., Tong, Y. H., & Zhu, Z. (2016). The effects of financial statement disaggregation on audit pricing. Available at SSRN Electronic Journal: <http://dx.doi.org/10.2139/ssrn.2795401>.
- Kothari, S. P. (2001). Capital markets research in accounting. *Journal of Accounting and Economics*, 31(1–3), 105–231.
- Krishnan, G. V., & Parsons, L. M. (2008). Getting to the bottom line: An exploration of gender and earnings quality. *Journal of Business Ethics*, 78(1–2), 65–76.
- Krishnan, G. V., Raman, K. K., Yang, K., & Yu, W. (2011). CFO/CEO-board social ties, Sarbanes–Oxley, and earnings management. *Accounting Horizons*, 25(3), 537–557.
- Krishnan, G. V., & Visvanathan, G. (2008). Does the SOX definition of an accounting expert matter? The association between audit committee directors’ accounting expertise and accounting conservatism. *Contemporary Accounting Research*, 25(3), 827–858.
- Kross, W. J., & Suk, I. (2012). Does regulation FD work? Evidence from analysts’ reliance on public disclosure. *Journal of Accounting and Economics*, 53(1–2), 225–248.
- Kuang, Y. F. (2008). Performance-vested stock options and earnings management. *Journal of Business Finance & Accounting*, 35(9–10), 1049–1078.
- Lafond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research*, 46(1), 101–135.
- Lafond, R., & Watts, R. L. (2008). The information role of conservatism. *The Accounting Review*, 83(2), 447–478.
- Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246–271.
- Lang, M. H., & Lundholm, R. J. (1996). Corporate disclosure policy and analyst behavior. *Accounting Review*, 71 (4), 467–492.

- Lang, M. H., & Lundholm, R. J. (2000). Voluntary disclosure and equity offerings: Reducing information asymmetry or hyping the stock? *Contemporary Accounting Research*, 17(4), 623–662.
- Lang, M. H., Lins, K. V., & Miller, D. P. (2004). Concentrated control, analyst following, and valuation: Do analysts matter most when investors are protected least? *Journal of Accounting Research*, 42(3), 589–623.
- Lara, J. M. G., Osma, B. G., & Penalva, F. (2009). Accounting conservatism and corporate governance. *Review of Accounting Studies*, 14(1), 161–201.
- Lara, J. M. G., Osma, B. G., & Penalva, F. (2007). Board of directors' characteristics and conditional accounting conservatism: Spanish evidence. *European Accounting Review*, 16(4), 727–755.
- Larcker, D. F., Richardson, S. A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, 82(4), 963–1008.
- Le Breton-Miller, I., Miller, D., & Lester, R. H. (2011). Stewardship or agency? A social embeddedness reconciliation of conduct and performance in public family businesses. *Organization science*, 22(3), 704–721.
- Lehavy, R., Li, F., & Merkley, K. (2011). The effect of annual report readability on analyst following and the properties of their earnings forecasts. *The Accounting Review*, 86(3), 1087–1115.
- Lennox, C. S., Francis, J. R., & Wang, Z. (2011). Selection models in accounting research. *The Accounting Review*, 87(2), 589–616.
- Li, F. (2008). Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics*, 45(2-3), 221–247.
- Li, C., Sun, L., & Ettredge, M. (2010). Financial executive qualifications, financial executive turnover, and adverse SOX 404 opinions. *Journal of Accounting and Economics*, 50(1), 93–110.
- Li, F. (2016). Endogeneity in CEO power: A survey and experiment. *Investment Analysts Journal*, 45(3), 149–162.
- Li, X. (2015). Accounting conservatism and the cost of capital: An international analysis. *Journal of Business Finance & Accounting*, 42(5–6), 555–582.
- Libby, R., & Brown, T. (2013). Financial statement disaggregation decisions and auditors' tolerance for misstatement. *The Accounting Review*, 88(2), 641–665.

- Lim, S., Matolcsy, Z., & Chow, D. (2007). The association between board composition and different types of voluntary disclosure. *European Accounting Review*, 16(3), 555–583.
- Lim, T. (2001). Rationality and analysts' forecast bias. *The Journal of Finance*, 56(1), 369–385.
- Liu, A. Z. (2014). Can external monitoring affect corporate financial reporting and disclosure? Evidence from earnings and expectations management. *Accounting Horizons*, 28(3), 529–559.
- Liu, Y., & Jiraporn, P. (2010). The effect of CEO power on bond ratings and yields. *Journal of Empirical Finance*, 17(4), 744–762.
- Liu, Y., Wei, Z., & Xie, F. (2016). CFO gender and earnings management: Evidence from China. *Review of Quantitative Finance and Accounting*, 46(4), 881–905.
- Lobo, G. J., & Zhou, J. (2006). Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? Initial evidence. *Accounting horizons*, 20(1), 57–73.
- Loyeung, A., & Matolcsy, Z. (2015). CFO's accounting talent, compensation and turnover. *Accounting & Finance*, 55(4), 1105–1134.
- Lubberink, M., & Huijgen, C. (2001). A wealth-based explanation for earnings conservatism. *Review of Finance*, 5(3), 323–349.
- Lys, T., & Sohn, S. (1990). The association between revisions of financial analysts' earnings forecasts and security-price changes. *Journal of Accounting and Economics*, 13(4), 341–363.
- Magee, J. C., Galinsky, A. D., & Gruenfeld, D. H. (2007). Power, propensity to negotiate, and moving first in competitive interactions. *Personality and Social Psychology Bulletin*, 33(2), 200–212.
- Maines, L. A., McDaniel, L. S., & Harris, M. S. (1997). Implications of proposed segment reporting standards for financial analysts' investment judgements. *Journal of Accounting Research*, 35, 1–24.
- Malmendier, U., & Tate, G. (2009). Superstar CEOs. *The Quarterly Journal of Economics*, 124(4), 1593–1638.
- Mande, V., & Son, M. (2012). CEO centrality and meeting or beating analysts' earnings forecasts. *Journal of Business Finance & Accounting*, 39(1–2), 82–112.
- Mansi, S. A., Maxwell, W. F., & Miller, D. P. (2011). Analyst forecast characteristics and the cost of debt. *Review of Accounting Studies*, 16(1), 116–142.

- Mian, S. (2001). On the choice and replacement of chief financial officers. *Journal of Financial Economics*, 60(1), 143-175.
- Marra, A., Mazzola, P., & Prencipe, A. (2011). Board monitoring and earnings management pre-and post-IFRS. *The International Journal of Accounting*, 46(2), 205–230.
- Marston, C. (1997). Firm characteristics and analyst following in the UK. *The British Accounting Review*, 29(4), 335–347.
- Matsunaga, S. R., & Yeung, P. E. (2008). *Evidence on the impact of a CEO's financial experience on the quality of the firm's financial reports and disclosures*. Available at SSRN Electronic Journal: <http://dx.doi.org/10.2139/ssrn.1014097>
- McConnell Jr., D. K., & Banks, G. Y. (2003). How Sarbanes–Oxley will change the audit process. *Journal of Accountancy*, 196(3), 49.
- Menon, K., & Williams, D. D. (2008). Management turnover following auditor resignations. *Contemporary Accounting Research*, 25(2), 567-604.
- Mergenthaler, R., Rajgopal, S., & Srinivasan, S. (2012). CEO and CFO career penalties to missing quarterly analysts' forecasts. Available at SSRN Electronic Journal: <http://dx.doi.org/10.2139/ssrn.1152421>
- Muth, M., & Donaldson, L. (1998). Stewardship theory and board structure: A contingency approach. *Corporate Governance: An International Review*, 6(1), 5–28.
- Myers, J. N., Myers, L. A., & Omer, T. C. (2003). Exploring the term of the auditor–client relationship and the quality of earnings: A case for mandatory auditor rotation? *The Accounting Review*, 78(3), 779–799.
- Myring, M., & Shortridge, R. T. (2010). Corporate governance and the quality of financial disclosures. *International Business and Economics Research Journal*, 9(6), 103–110.
- Naranjo-Gil, D., Maas, V. S., & Hartmann, F. G. (2009). How CFOs determine management accounting innovation: An examination of direct and indirect effects. *European Accounting Review*, 18(4), 667–695.
- Nobes, C. (2011). IFRS practices and the persistence of accounting system classification. *Abacus*, 47(3), 267–283.
- O'Brien, P. C., & Bhushan, R. (1990). Analyst following and institutional ownership. *Journal of Accounting Research*, 28, 55–76.

- O'Reilly III, C. A., & Main, B. G. (2010). Economic and psychological perspectives on CEO compensation: A review and synthesis. *Industrial and Corporate Change*, 19(3), 675–712.
- Osma, B. G., & Noguer, B. G. D. A. (2007). The effect of the board composition and its monitoring committees on earnings management: Evidence from Spain. *Corporate Governance: An International Review*, 15(6), 1413–1428.
- Palley, T. I. (1997). Managerial turnover and the theory of short-termism. *Journal of Economic Behavior & Organization*, 32(4), 547–557.
- PCAOB. (2007). *An audit of internal control over financial reporting that is integrated with an audit of financial statements—Auditing standard no. 5*. Washington, DC: PCAOB.
- Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting*, 32(7–8), 1311–1346.
- Phan, P., & Lee, S. (1995). Human capital or social networks: What constrains CEO dismissals? *Academy of Management Journal*, 37–41.
- Pittman, J. A., & Fortin, S. (2004). Auditor choice and the cost of debt capital for newly public firms. *Journal of accounting and economics*, 37(1), 113–136.
- Plöckinger, M., Aschauer, E., Hiebl, M. R., & Rohatschek, R. (2016). The influence of individual executives on corporate financial reporting: A review and outlook from the perspective of upper echelons theory. *Journal of Accounting Literature*, 37, 55–75.
- Qiang, X. (2007). The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: Cross-sectional evidence at the firm level. *The Accounting Review*, 82(3), 759–796.
- Reeve, W. (2004). *Financial accounting for future business leaders*. Cincinnati, OH: South Western Publishing.
- Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2005). Accrual reliability, earnings persistence and stock prices. *Journal of Accounting and Economics*, 39(3), 437–485.
- Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2006). The implications of accounting distortions and growth for accruals and profitability. *The Accounting Review*, 81(3), 713–743.

- Riedl, E. J., & Srinivasan, S. (2010). Signaling firm performance through financial statement presentation: An analysis using special items. *Contemporary Accounting Research*, 27(1), 289–332.
- SOX. (2002). Sarbanes-Oxley Act of 2002. In *The Public Company Accounting Reform and Investor Protection Act*. Washington DC: US Congress.
- Schipper, K. (1989). Earnings management. *Accounting Horizons*, 3(4), 91-102.
- Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting Horizons*, 17, 97–110.
- Schrand, C. M., & Zechman, S. L. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics*, 53(1–2), 311–329.
- Sengupta, P. (1998). Corporate disclosure quality and the cost of debt. *The Accounting Review*, 73 (4), 459-474.
- SEC. (2003). Final rule: Management’s reports on internal control over financial reporting and certification of disclosure in exchange act periodic reports, Nos. 33-8238, 34-47986. August 14. Washington, DC: SEC. Retrieved from 20 September 2018
<http://www.sec.gov/rules/final/33-8238.htm>.
- SEC. (2006). Securities and Exchange Commission Final rule: executive compensation and related person disclosure. Release No. 33-8732a. File No. s7-03-06. Retrieved from 20 December 2018
<https://www.sec.gov/rules/final/finalarchive/finalarchive2006.shtml>
- Shen, W. (2003). The dynamics of the CEO–board relationship: An evolutionary perspective. *Academy of Management Review*, 28(3), 466–476.
- Shipman, J. E., Swanquist, Q. T., & Whited, R. L. (2016). Propensity score matching in accounting research. *The Accounting Review*, 92(1), 213–244.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783.
- Shuto, A., & Takada, T. (2010). Managerial ownership and accounting conservatism in Japan: A test of management entrenchment effect. *Journal of Business Finance & Accounting*, 37(7–8), 815–840.
- Sidanius, J., & Pratto, F. (2001). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press, United States.
- Sloan, R. G. (2001). Financial accounting and corporate governance: A discussion. *Journal of Accounting and Economics*, 32(1–3), 335–347.

- Srinidhi, B., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, 28(5), 1610–1644.
- Sterling, R. R. (1970). *The theory of the measurement of enterprise income*. Lawrence, KS: University of Kansas Press.
- Stone, M., & Rasp, J. (1991). Tradeoffs in the choice between logit and OLS for accounting choice studies. *Accounting Review*, 66 (1), 170–187.
- Sun, J., Kent, P., Qi, B., & Wang, J. (2017). Chief financial officer demographic characteristics and fraudulent financial reporting in China. *Accounting & Finance*, 59(4), 2705-2734.
- Sun, L., Johnson, G., & Rahman, F. (2015). CFO financial expertise and corporate governance concerns: Evidence from S & P SmallCap 600 Index. *International Journal of Law and Management*, 57(6), 573–581.
- Sultana, N. (2015). Audit committee characteristics and accounting conservatism. *International Journal of Auditing*, 19(2), 88-102.
- Sultana, N., & Mitchell Van der Zahn, J. L. (2015). Earnings conservatism and audit committee financial expertise. *Accounting & Finance*, 55(1), 279-310.
- Sundaramurthy, C., & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28(3), 397–415.
- Sundaramurthy, C., Rhoades, D. L., & Rechner, P. L. (2005). A meta-analysis of the effects of executive and institutional ownership on firm performance. *Journal of Managerial Issues*, 17 (4), 494–510.
- Sundarasan, S., Goel, S., & Zulaini, F. A. (2017). Impact of investors' protection, transparency level and legal origin on initial public offering (IPO) initial returns. *Managerial Finance*, 43(7), 738–760.
- Tang, J., Crossan, M., & Rowe, W. G. (2011). Dominant CEO, deviant strategy, and extreme performance: The moderating role of a powerful board. *Journal of Management Studies*, 48(7), 1479–1503.
- Tarca, A., Hancock, P., Woodliff, D., Brown, P., Bradbury, M., & Van Zijl, T. (2008). Identifying decision useful information with the matrix format income statement. *Journal of International Financial Management & Accounting*, 19(2), 184–217.
- Trueman, B. (1997). Managerial disclosures and shareholder litigation. *Review of Accounting Studies*, 2(2), 181–199.
- Tucker, J. W. (2010). Selection bias and econometric remedies in accounting and finance research. *Journal of Accounting Literature*, 29, 31-57.

- Tuggle, C. S., Sirmon, D. G., Reutzel, C. R., & Bierman, L. (2010). Commanding board of director attention: Investigating how organizational performance and CEO duality affect board members' attention to monitoring. *Strategic Management Journal*, 31(9), 946–968.
- Vafeas, N. (2009). Is accounting education valued by the stock market? Evidence from corporate controller appointments. *Contemporary Accounting Research*, 26(4), 1143–1174.
- Venter, E. R., Emanuel, D., & Cahan, S. F. (2014). The value relevance of mandatory non-GAAP earnings. *Abacus*, 50(1), 1–24.
- Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research*, 44(3), 619–656.
- Wang, W., Shin, Y. C., & Francis, B. B. (2012). Are CFOs' trades more informative than CEOs' trades? *Journal of Financial and Quantitative Analysis*, 47(4), 743–762.
- Wang, X. (2010). Increased disclosure requirements and corporate governance decisions: Evidence from chief financial officers in the pre-and post-Sarbanes–Oxley periods. *Journal of Accounting Research*, 48(4), 885–920.
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61–91.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17(3), 207–221.
- Welker, M. (1995). Disclosure policy, information asymmetry, and liquidity in equity markets. *Contemporary Accounting Research*, 11(2), 801–827.
- Wong, M. F., & Zhang, X. F. (2014). CEO optimism and analyst forecast bias. *Journal of Accounting, Auditing & Finance*, 29(3), 367–392.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). MIT Press, United States.
- Wu, M. (2002). Earnings restatements: A capital market perspective. Working Paper, Available at SSRN Electronic Journal SSRN: <http://dx.doi.org/10.2139/ssrn.1844265>

- Wu, S., Quan, X., & Xu, L. (2011). CEO power, disclosure quality and the variability of firm performance: Evidence from China. *Nankai Business Review International*, 2(1), 79–97.
- Wu, Y., & Wilson, M. (2015). Audit quality and analyst forecast accuracy: The impact of forecast horizon and other modelling choices. *Auditing: A Journal of Practice & Theory*, 35(2), 167–185.
- Xu, Y., & Zhao, L. (2016). An investigation of financial expertise improvement among CFOs hired following restatements. *American Journal of Business*, 31(2), 50–65.
- Yu, M. (2010). Analyst forecast properties, analyst following and governance disclosures: A global perspective. *Journal of International Accounting, Auditing and Taxation*, 19(1), 1–15.
- Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. *Managerial Finance*, 36(7), 629–645.
- Zajac, E. J., & Westphal, J. D. (1996). Who shall succeed? How CEO/board preferences and power affect the choice of new CEOs. *Academy of Management Journal*, 39(1), 64–90.
- Zhang, I. X. (2007). Economic consequences of the Sarbanes–Oxley Act of 2002. *Journal of Accounting and Economics*, 44(1–2), 74–115.
- Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of accounting and economics*, 45(1), 27–54.
- Zhong, Y., & Li, W. (2017). Accounting conservatism: A literature review. *Australian Accounting Review*, 27(2), 195–213.