Corporate governance, institutional investors and firm performance: A comparative study of South Africa and China

by

Qiaowen Zhang

Dissertation presented for the degree of Doctor of Philosophy

in the Faculty of Economic and Management Sciences

at Stellenbosch University

Promotor: **Prof. Pierre Erasmus**

December 2016

Declaration

By submitting this dissertation electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Signature: Qiaowen Zhang
December 2016

Abstract

As growing role players in corporate governance, institutional investors are regulated and guided by a series of rules, according to which they are required to address their fiduciary duty by protecting the interests of their clients as well as a diverse group of stakeholders. This study explores whether institutional investors comply with this fiduciary duty through an investigation of their prudent stockholding behaviour and their impact on improved corporate governance.

The first empirical chapter assesses what types of firms institutional investors tend to invest in. The impact of institutional investors on corporate governance has been considered from both financial and non-financial perspectives in prior studies. The financial perspective includes institutional investors' impact on financial performance and on corporate operations (earnings management in this study). These aspects are discussed in Chapters 3 and 4 respectively. The non-financial perspective is represented by the impact of institutional investors on corporate environmental, social and governance (ESG) performance, which is studied in Chapter 5.

South Africa and China, two major emerging markets where institutional investors and corporate governance have experienced considerable development in recent years, were employed as cases for this study. The selected sample came from South African companies listed on the Johannesburg Stock Exchange (JSE), observed over the period 2010 to 2013, and Chinese companies listed on either the Shanghai Stock Exchange (SSE) or the Shenzhen Stock Exchange (SZSE), observed over the period 2008 to 2013. After taking account of endogeneity problems and by using pooled ordinary least squares (OLS), fixed effect (FE), two-stage least squares (2SLS) and system generalized method of moments (Sys-GMM) estimations, this study observed that similarities and differences co-exist in terms of institutional investors' stockholding behaviour and their relationship with improved corporate governance

between South Africa and China, between pressure-insensitive and pressure-sensitive institutional investors, and between passive and non-passive institutional investors.

More specifically, it was found that institutional investors overall in both South Africa and China are not always prudent in terms of their stockholding behaviour; although institutional ownership was observed to have a significant relationship with improved corporate financial performance and earnings management alleviation, it was insignificantly associated with corporate ESG performance. Institutional investors are therefore considered more conventional than socially responsible, and seem unlikely to accept suboptimal financial performance to pursue ESG aims. It should be noted that institutional investors seem effective in promoting corporate governance disclosure in South Africa, but this phenomenon was not detected in China.

By disaggregating institutional investors into specific types, this study found that pressure-insensitive institutional investors, compared to their pressure-sensitive counterparts, appear to be more effective in monitoring, with a resulting advancement in corporate financial performance. Additionally, passive institutional investors in both South Africa and China were noted to show less preference towards past financial performance when they select stocks; in China, however, they exhibit a stronger association with improved corporate financial performance after the investment relationship has been built than their non-passive peers.

Key words: institutional investors; fiduciary duty; responsible investment; corporate governance; stockholding preference; financial performance; earnings management; ESG performance

Opsomming

Institusionele beleggers, wat deesdae ’n al hoe groter rol in korporatiewe beheer vervul, word deur verskeie reëls gelei en gerig om hulle fidusiêre plig na te kom, naamlik om die belange van hulle kliënte sowel as van ’n diverse groep belanghebbendes te beskerm. Hierdie navorsing ondersoek of institusionele beleggers wel hierdie vertrouensplig nakom deur hulle omsigtige aandeelhoudingsgedrag en hulle impak op beter korporatiewe beheer te bestudeer.

Die eerste empiriese hoofstuk bepaal in watter soorte firmas institusionele beleggers geneig is om te belê. Vorige studies het die impak van institusionele beleggers op korporatiewe beheer uit ’n finansiële sowel as ’n nie-finansiële hoek beskou. Eersgenoemde sluit in institusionele beleggers se impak op finansiële prestasie en korporatiewe werksaamhede (“verdienstebestuur” in hierdie studie). Hierdie aspekte word in hoofstuk 3 en 4 onderskeidelik bespreek. Die nie-finansiële beskouing handel oor institusionele beleggers se impak op korporatiewe omgewings-, maatskaplike en beheer- (“ESG”-)prestasie, wat in hoofstuk 5 ondersoek word.

Suid-Afrika en China, twee belangrike ontluikende markte waar institusionele beleggers en korporatiewe beheer die afgelope paar jaar beduidend ontwikkel het, is as gevallestudies gebruik. Die gekose steekproef kom uit Suid-Afrikaanse maatskappye wat op die Johannesburgse Effektebeurs (JEB) genoteer is en oor die tydperk 2010 tot 2013 waargeneem is, sowel as Chinese maatskappye wat op hetsy die Shanghai-effektebeurs (SEB) of die Shenzhen-effektebeurs (SZEB) genoteer is en oor die tydperk 2008 tot 2013 waargeneem is. Ná inagneming van endogeniteitsprobleme en met behulp van momenteberamingsmetodes soos saamgevoegde gewone kleinste kwadrate (“OLS”), vaste effek (“FE”), tweestadium-kleinste kwadrate (“2SLS”) en stelselveralgemening (“Sys-GMM”), toon hierdie studie dat, wat institusionele beleggers se aandeelhoudingsgedrag en verband met beter korporatiewe beheer betref, daar ooreenkomste én verskille bestaan tussen Suid-

Afrika en China, tussen druk-onsensitiewe en druksensitiewe institusionele beleggers, en tussen passiewe en nie-passiewe institusionele beleggers.

In die besonder word daar bevind dat institusionele beleggers in Suid-Afrika én China oor die algemeen nie altyd omsigtig is in hulle aandeelhoudingsgedrag nie; waarnemings toon ’n beduidende verband met beter korporatiewe finansiële prestasie en laer verdienstebestuur, maar ’n onbeduidende verband met korporatiewe ESG-prestasie. Institusionele beleggers word dus as meer konvensioneel as maatskaplik verantwoordelik beskou, en sal waarskynlik nie suboptimale finansiële prestasie aanvaar om ESG-doelwitte na te jaag nie. ’n Interessante bevinding is dat institusionele beleggers in Suid-Afrika doeltreffend blyk te wees in die bevordering van openbaarmaking van korporatiewe beheer, terwyl hierdie verskynsel nie in China opgemerk word nie.

Deur institusionele beleggers in bepaalde tipes in te deel, bevind die studie dat druk-onsensitiewe institusionele beleggers klaarblyklik meer doeltreffend as hulle druksensitiewe eweknieë moniteer, wat korporatiewe finansiële prestasie bevorder. Daarbenewens toon passiewe institusionele beleggers in sowel Suid-Afrika as China minder voorkeur vir vorige finansiële prestasie wanneer hulle aandele kies; in China blyk hulle egter ’n sterker invloed te hê op beter korporatiewe finansiële prestasie as hulle nie-passiewe eweknieë nadat die beleggingsverhouding gevestig is.

Trefwoorde: institusionele beleggers; fidusiêre plig; verantwoordelike belegging; korporatiewe beheer; aandeelhoudingsvoorkeur; finansiële prestasie; verdienstebestuur; omgewings-, maatskaplike en beheer- (“ESG”-)prestasie

Acknowledgements

I would like to express my deepest and sincere gratitude to my supervisor, Prof. Pierre Erasmus, for his enlightening guidance, sincere support and constant encouragement. In the process of meeting and discussion, his rigorous attitudes towards research greatly impressed me, and I believe it will continuously inspire me in my future academic career.

Thanks also go to the University and the Faculty for the multi-faceted support; and I am very grateful to Dr. Jaco Franken whose assistance, guidance and advice have contributed immensely to my research throughout my doctoral journey.

I appreciate my friends and colleagues for their academic support for my research as well as emotional support for my life.

I also acknowledge and thank the National Research Foundation (NRF) for the financial support to complete this study.

A special gratitude goes to my family, thanks for their understanding, strength and unfailing support.

The completion of this work could not have been possible without the participation and assistance of so many people. Some may not be mentioned here but are nonetheless also thanked.

Table of contents

Declaration.....i
Abstract.....ii
Opsomming.....iv
Acknowledgements.....vi
Table of contents.....vii
List of figures.....xi
List of tables.....xii
List of acronyms and abbreviations.....xiv
CHAPTER 1 INTRODUCTION.....1
1.1 Background.....1
1.1.1 Corporate governance: A salient issue around the world.....1
1.1.2 Institutional investors: A prominent role-player in corporate governance.....2
1.1.3 Responsible investment: Moving into the mainstream.....4
1.1.4 Challenges in emerging markets.....5
1.2 The South African and Chinese context.....6
1.2.1 Basic statistics.....7
1.2.2 Institutional investors.....10
1.2.2.1 South Africa.....10
1.2.2.2 China.....12
1.2.3 Corporate governance and responsible investment.....16
1.2.3.1 South Africa.....16
1.2.3.2 China.....19
1.3 Theoretical framework.....20
1.4 Problem statement and research objectives.....24
1.4.1 Research problem.....24
1.4.2 Research objectives.....27
1.5 Research design.....27
1.5.1 Measures.....27
1.5.1.1 Institutional investors.....28
1.5.1.2 Financial performance.....29
1.5.1.3 Earnings management.....30
1.5.1.4 Corporate governance.....30
1.5.1.5 ESG.....31
1.5.1.6 Responsible investing.....31
1.5.2 Data collection and sampling.....31
1.5.3 Selected estimation methods.....32
1.6 Orientation of the study.....34
1.6.1 Chapter 2: Investigating prudent behaviour of institutional investors.....35
1.6.2 Chapter 3: The impact of institutional ownership on corporate financial performance.....36
1.6.3 Chapter 4: Does institutional ownership matter? Evidence from earnings management.....36
1.6.4 Chapter 5: Responsible investment and ESG performance: The institutional ownership effect.....37
1.6.5 Chapter 6: Conclusions and recommendations.....38

1.6.6 Prospective benefits 38
CHAPTER 2 INVESTIGATING PRUDENT BEHAVIOUR OF INSTITUTIONAL INVESTORS 39
2.1 Introduction 39
2.2 Literature review 42
2.2.1 Preferences for prudent investment 42
2.3.2 Evidence of imprudent investment 44
2.3 Data and methods 47
2.3.1 Data source and sample 47
2.3.2 Variables 48
2.3.2.1 Measurements of institutional stockholding preferences 48
2.3.2.2 Prudence measurements 50
2.3.3 Methodology 52
2.4 Results 54
2.4.1 Aggregate institutional preferences for prudent investment 55
2.4.2 Prudent preferences of institutional investors: A disaggregated view 59
2.4.3 Attitudes towards indexing strategy 63
2.5 Conclusions 69
CHAPTER 3 THE IMPACT OF INSTITUTIONAL OWNERSHIP ON CORPORATE FINANCIAL PERFORMANCE 73
3.1 Introduction 73
3.2 Literature review 76
3.2.1 The efficient monitoring hypothesis 77
3.2.2 The negative monitoring hypothesis 79
3.2.3 The insignificant monitoring hypothesis 80
3.2.4 Impact of institutional ownership heterogeneity 81
3.3 Data and methods 83
3.3.1 Data source and sample 83
3.3.2 Variables 83
3.3.2.1 Financial performance measures 83
3.3.2.2 Independent variables 84
3.3.2.3 Control variables 85
3.3.3 Methodology 87
3.4 Results 89
3.4.1 Aggregated institutional ownership and financial performance 89
3.4.2 Pressure sensitivity and heterogeneous impact 92
3.4.3 The effectiveness of passive institutional investors 96
3.5 Conclusions 102
CHAPTER 4 DOES INSTITUTIONAL OWNERSHIP MATTER? EVIDENCE FROM EARNINGS MANAGEMENT 105
4.1 Introduction 105
4.2 Literature review 108
4.2.1 Earnings management and earnings thresholds 108
4.2.2 Institutional ownership and earnings management 110

4.3 Data and methods 113
4.3.1 Data source and sample 113
4.3.2 Variables 114
4.3.2.1 Earnings management 114
4.3.2.2 Other variables 115
4.3.3 Methodology 116
4.4 Results 119
4.4.1 Descriptive statistics of earnings management 120
4.4.1.1 Earnings distribution 120
4.4.1.2 Accrual-based earnings management 122
4.4.2 Regression results 125
4.4.2.1 Income-increasing versus income-decreasing earnings management 125
4.4.2.2 Non-linear relationship between institutional ownership and earnings management 131
4.5 Conclusions 142
CHAPTER 5 RESPONSIBLE INVESTMENT AND ESG PERFORMANCE: THE INSTITUTIONAL OWNERSHIP EFFECT 145
5.1 Introduction 145
5.2 Overview of RI in South Africa and China 148
5.2.1 RI in South Africa 148
5.2.2 RI in China 150
5.2.3 Good practices in corporate governance in South Africa and China 154
5.3 Literature review 159
5.3.1 Financial performance of RI 159
5.3.2 Effectiveness of RI in corporate ESG performance 160
5.3.2.1 The influences of screening 160
5.3.2.2 The influence of shareholder activism 161
5.4 Data and methods 164
5.4.1 Data source and sample 164
5.4.2 Variables 164
5.4.2.1 ESG performance 164
5.4.2.2 Other variables 166
5.4.3 Methodology 168
5.5 Results 170
5.5.1 Institutional ownership and ESG performance 170
5.5.2 Institutional ownership and corporate governance 175
5.5.3 Moderating effects of ESG 177
5.6 Conclusions 184
CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS 186
6.1 Overarching conclusions and implications 186
6.1.1 Overarching conclusions 187
6.1.1.1 Not always prudent 187
6.1.1.2 Still conventional 188
6.1.1.3 Heterogeneous 189
6.1.2 Implications for institutional ownership engagement in corporate governance 190

6.1.2.1 For institutional investors: To establish sound mechanisms to improve their ability to engage in corporate governance 190
6.1.2.2 For corporations: To standardise information transfer to enhance the effectiveness of institutional investor engagement 191
6.1.2.3 For government and regulators: To reduce external barriers to institutional investors' engagement in corporate governance 191
6.2 Contributions 192
6.2.1 Research perspective 192
6.2.2 Research content 194
6.2.3 Research methodology 195
6.3 Limitations and suggestions for future study 196
6.3.1 Limitations 196
6.3.2 Future research 197
REFERENCES 199
APPENDIX 1 VARIABLE DEFINITION 230
APPENDIX 2 INSTITUTIONAL OWNERSHIP AND FINANCIAL PERFORMANCE (CHINA, 2010-2013) 231
APPENDIX 3 DISCRETIONARY ACCRUALS DISTRIBUTION 234

List of figures

Figure 1.1 Current regulation structure for financial institutions in South Africa. 12
Figure 1.2 Current regulation structure for financial institutions in China 15
Figure 1.3 The research problem identification 26
Figure 1.4 The research design 28
Figure 1.5 Development of initial research questions 34
Figure 4.1 Earnings management patterns 110
Figure 4.2 Distribution of ROE.....121
Figure 4.3 Distribution of changes in ROE (DROE) 121
Figure 4.4 Overall distribution of discretionary accruals (DA) 123
Figure 4.5 Distribution of discretionary accruals (DA) by index.....125

List of tables

Table 1.1 Overview of economic and institutional indicators in South Africa and China 8
Table 1.2 Some relevant regulations for institutional investors 16
Table 2.1 Descriptive statistics of institutional ownership 49
Table 2.2 Descriptive statistics of major variables 51
Table 2.3 Correlation matrix 53
Table 2.4 Regressions of aggregate institutional preferences for stocks 57
Table 2.5 Regressions of institutional preferences for stocks at the disaggregated level 61
Table 2.6 Regressions of aggregate institutional preferences for stocks (including INDEX) 64
Table 2.7 Regressions of institutional preferences for stocks at a disaggregated level (including INDEX) .67
Table 3.1 Descriptive statistics 86
Table 3.2 Correlation matrix 88
Table 3.3 Regressions of relationships between aggregated institutional ownership and financial performance 90
Table 3.4 Regressions of relationships between disaggregated institutional ownership and financial performance 94
Table 3.5 Regressions of relationships between aggregated institutional ownership and financial performance (including INDEX) 98
Table 3.6 Regressions of relationships between disaggregated institutional ownership and financial performance (including INDEX) 100
Table 4.1 Descriptive statistics 116
Table 4.2 Correlation matrix 118
Table 4.3 Descriptive statistics of discretionary accruals (DA) 122
Table 4.4 Regressions of relationships between aggregated institutional ownership and earnings management 126
Table 4.5 Regressions of relationships between disaggregated institutional ownership and earnings management 128
Table 4.6 Regressions of non-linear relationships between aggregated institutional ownership and earnings management 132
Table 4.7 Regressions of non-linear relationships between disaggregated institutional ownership and earnings management 135
Table 4.8 Regressions of relationships between institutional ownership and earnings management (including earnings threshold consideration) 140
Table 5.1 Selected regulations relevant to ESG issues in South Africa 149
Table 5.2 Selected regulations relevant to ESG issues in China 151
Table 5.3 Comparison of the JSE SRI Index and the SSE Social Responsibility Index 152
Table 5.4 Corporate governance best practices for South Africa and China 155
Table 5.5 Differences in the mean of ESG_SCORE and G_SCORE 166
Table 5.6 Descriptive statistics 168
Table 5.7 Regressions of relationships between aggregated institutional ownership and ESG performance 171
Table 5.8 Regressions of relationships between disaggregated institutional ownership and ESG performance 173

Table 5.9 Moderating effects of ESG performance on the relationship between aggregated institutional ownership and financial performance (ROE).....178
Table 5.10 Moderating effects of ESG performance on the relationship between disaggregated institutional ownership and financial performance (ROE).....180

List of acronyms and abbreviations

2SLS	-	two-stage least squares
AMAC	-	Asset Management Association of China
AuM	-	assets under management
B-BBEE	-	Broad-based Black Economic Empowerment
BEPS	-	basic earnings per share
BRICS	-	Brazil, Russia, India, China, South Africa
CAPM	-	capital asset pricing model
CBRC	-	China Banking Regulatory Commission
CFP	-	corporate financial performance
China SIF	-	China Social Investment Forum
CIRC	-	China Insurance Regulatory Commission
CIS	-	collective investment schemes
CRISA	-	Code for Responsible Investing in South Africa
CSI 300	-	Shanghai Shenzhen CSI 300 index
CSP	-	corporate social performance
CSR	-	corporate social responsibility
CSRC	-	China Securities Regulatory Commission
DA	-	discretionary accruals
EMH	-	efficient market hypothesis
EPS	-	earnings per share
ES	-	environmental, social
ESG	-	environmental, social, governance
Eurosif	-	European Sustainable Investment Forum
FDI	-	foreign direct investment
FE	-	fixed effects
FSB	-	Financial Services Board
FSCA	-	financial sector conduct authority
FTSE	-	Financial Times Stock Exchange
GDP	-	gross domestic product
GEPF	-	Government Employees Pension Fund
HEPS	-	headline earnings per share
IFC	-	International Finance Corporation
IFRS	-	International Financial Reporting Standards
IMF	-	International Monetary Fund
IoD	-	Institute of Directors
IoDSA	-	Institute of Directors in Southern Africa
IOSCO	-	International Organization of Securities Commissions
IPOs	-	initial public offerings
JSE	-	Johannesburg Stock Exchange
MOHRSS	-	Ministry of Human Resources and Social Security
MPT	-	modern portfolio theory
NAS	-	new accounting standards
NI	-	neo-institutional
NTS	-	non-tradable shares

OECD	-	Organisation for Economic Co-operation and Development
OLS	-	ordinary least squares
PIC	-	Public Investment Corporation
PRC	-	People's Republic of China
QFII	-	qualified foreign institutional investors
R&D	-	research and development
RE	-	random effects
RI	-	responsible investing
ROA	-	return on assets
ROE	-	return on equity
RQFII	-	renminbi qualified foreign institutional investor
RSA	-	Republic of South Africa
S&P 500	-	Standard & Poor's 500
SAFE	-	State Administration of Foreign Exchange
SAR	-	Special Administrative Region
SARB	-	South African Reserve Bank
SOE	-	state-owned enterprise
SRI	-	socially responsible investment
SSE	-	Shanghai Stock Exchange
Sys-GMM	-	system generalized method of moments
SZSE	-	Shenzhen Stock Exchange
Top 40	-	FTSE/JSE Top 40 index
UK	-	United Kingdom
UN	-	United Nations
UNEP FI	-	United Nations Environment Programme Finance Initiative
UNPRI	-	United Nations Principles for Responsible Investment
US	-	United States
US SIF	-	United States Social Investment Forum
WFE	-	World Federation of Exchanges

CHAPTER 1

INTRODUCTION

1.1 Background

1.1.1 Corporate governance: A salient issue around the world

Agency theory treats the company as a contract under which the shareholders (principals) engage managers (the agent) to perform some service on their behalf, and commonly principals delegate decision-making authority to the agent (Jensen & Meckling, 1976; Wu, Zhao & Tang, 2014). Under this agency relationship, the misalignment of interests between shareholders and managers is created by the separation of ownership and control (Berle & Means, 1932; Fama & Jensen, 1983). The agency problem (also known as the principal-agent problem) thus arises and has become a pervasive phenomenon in modern corporations across the globe (McGee, 2009; Romano, 1993; Steyn & Stainbank, 2013).

Corporate governance is essentially viewed as a mechanism in the agency relationship to mitigate the agent's self-serving behaviour (Bar-Yosef & Prencipe, 2013; Eisenhardt, 1989; Peni & Vähämaa, 2012; Renders & Gaeremynck, 2012). While "in its broadest sense, corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals…the aim is to align as nearly as possible the interests of individuals, of corporations, and of society" (Cadbury, 2003: vii), which is in line with stakeholder theory, where companies are required to not only ensure the interests of shareholders, but also those of the other stakeholders[1] (Donaldson & Preston, 1995; Gillan, 2006). That is, the objective of corporate governance is not limited to assuring the suppliers of finance to corporations of getting a return on their investment, as Shleifer and Vishny (1997) suggested, but to maximise the contribution of the firm to society and the economy

[1] A stakeholder is commonly referred to as "any group or individual that can affect or be affected by realization of an organization's purpose" (Freeman, Harrison, Wicks, Parmar & De Colle, 2010: 26).

overall. This concept is increasingly accepted worldwide (Ayuso, Rodríguez, García-Castro & Ariño, 2014; Gnan, Hinna, Monteduro & Scarozza, 2013).

As a result of events such as the worldwide wave of privatisation, the takeover wave, the 1997-1998 Asian financial crisis, the most recent global financial crisis and a series of corporate scandals (Chen, 2013; Leng, 2009), the importance of corporate governance for firms, for markets and for countries has been widely recognised (Claessens, 2006; Claessens & Yurtoglu, 2013). Corporate governance has become a prominent concern, with increased attention from both academics and practitioners (Allen, 2005; Aguilera & Jackson, 2010). One of the keystones of corporate governance research is the idea that good corporate governance practices could enhance competitive advantages (Madhani, 2014; Zeidan, 2011), and firms are accordingly becoming more likely to adopt better corporate governance practices (Aggarwal, Erel, Ferreira & Matos, 2011). Nonetheless, the questions of how to advance corporate governance and mitigate the agency problem remain debated.

1.1.2 Institutional investors: A prominent role-player in corporate governance

Institutional investors have become increasingly important as equity holders in many markets, especially in more developed markets. For instance, over 50 per cent of the total equity ownership in both the United States (US) and the United Kingdom (UK) is held by institutional investors (Andriosopoulos & Yang, 2015; Çelik & Isaksson, 2014; Lewellen, 2011). In recent years, emerging markets have also witnessed a substantial growth in the participation of institutional investors (Ashraf & Muhammad, 2013; IOSCO, 2012; OECD & IFC, 2011).

Along with their increased participation in markets, institutional investors at the same time have abilities and incentives to monitor their investee companies (Gillan & Starks, 2000; Lin, Wu, Fang & Wun, 2014; Rose, 2007; Yuan, Xiao & Zou, 2008). This is in accordance with property rights theory, which suggests that property rights could create incentives for owners to supervise management (Alchian & Demsetz,

1972; Carroll, 2004). In this regard, institutional investors are identified as an important mechanism of corporate governance (Elsayed & Wahba, 2013; Gillan & Starks, 2003; Mallin, 2012): they could advance corporate governance practices either by selling shares ('voting with their feet' or the 'Wall Street Rule'), or by direct intervention through conducting shareholder activism ('voice' or shareholder engagement) (Aggarwal et al., 2011; Bajo, Barbi, Bigelli & Hillier, 2013; Brickley, Lease & Smith, 1988; Hirschman, 1970), the latter of which has gained increased prominence over the last few years (Gillan & Starks, 2000; Mallin, 2012; Nix & Chen, 2013). McCahery, Sautner and Starks (2016) documented that the governance benefits of corrective actions through either 'voting with their feet' or 'voice' are likely to discipline management.

Accordingly, it is not surprising to observe that American corporations have moved from an era of managerial capitalism to one of investor capitalism (Useem, 1996). It is in fact not limited to the US and other countries that have adopted the Anglo-Saxon model of governance, where firms are outsider-dominated. Improving corporate governance by means of institutional investors' participation is an approach that is also being adopted in Continental Europe, as well as in Japan, where firms are bank-oriented and insider-dominated (Mizuno, 2010; Nix & Chen, 2013; Schaefer & Hertrich, 2013; Suto & Takehara, 2012). Additionally, the attendance of institutional investors in corporate governance is also likely to provide an effective way for transition economies and emerging markets to overcome internal control problems and protect the rights of minority shareholders (Huang & Zhu, 2015; IOSCO, 2012; OECD & IFC, 2011; Reed, 2002; Vaughn & Ryan, 2006). Noting that different contexts hold different needs for corporate governance, the role of institutional investors in corporate governance varies across contexts. Whether institutional investors are a part of the solution or a part of the problem for corporations and equity markets is hotly debated (Heineman & Davis, 2011; Pound, 1988).

1.1.3 Responsible investment: Moving into the mainstream

The increasingly important role that institutional investors are playing in equity markets can be linked to their increased fiduciary responsibilities towards the individuals who contribute their money to these institutions (Heineman & Davis, 2011), as well as to a diverse group of other stakeholders (Aon, 2007). In recent years, the increasing growth in the institutional investment industry has been extended to responsible investment (RI) (Barreda-Tarrazona, Matallín-Sáez & Balaguer-Franch, 2011), which has evolved into a significant phenomenon in global financial markets (Scholtens, 2014). RI is commonly considered as an investment process that combines investors' financial objectives with concerns about environmental, social (ES) and governance (ESG) issues (Eurosif, 2008). Conventionally, the fiduciary duty of institutional investors is to maximise investment returns for their clients. Institutional investors who support this view argue that there are conflicts between the implementation of their fiduciary obligations and ESG integration (Berry, 2011). This restrictive perception, however, has been challenged. The 2005 Freshfields Report on fiduciary duty states that "it may be a breach of fiduciary duties to fail to take account of ESG considerations that are relevant and to give them appropriate weight, bearing in mind that some important economic analysts and leading financial institutions are satisfied that a strong link between good ESG performance and good financial performance exists" (Freshfields Bruckhaus Deringer, 2005: 100). That is to say, fiduciary duty is not an obstacle to integrating ESG; instead, incorporating ESG is an approach to addressing fiduciary duty (UNPRI, UNEP FI, UNEP Inquiry & UN Global Compact, 2015).

Along with this deepening understanding towards RI, RI is moving from a marginal concern to a mainstream strategy (Child, 2015; Glac, 2009; PwC, 2014; Sparkes & Cowton, 2004). According to the US Forum for Sustainable and Responsible Investment (US SIF), there were over USD 6.57 trillion of assets managed under an RI strategy as of year-end 2013 in the US, signifying that one out of every six dollars

under management was invested according to an RI strategy (US SIF, 2014). In the UK, GBP 2.89 trillion of assets were invested in the RI market through various strategies by the end of 2013 (Eurosif, 2014). Furthermore, the United Nations-supported Principles for Responsible Investment Initiative (UNPRI) was established in April 2006[2]. This initiative has attracted 1 380 signatories globally, representing USD 59 trillion assets under management (AuM), and the signatories are willing to integrate ESG concerns into their decision-making. It should, however, be noted that RI is still an emerging topic for mainstream academic researchers (Capelle-Blancard & Monjon, 2012; Glac, 2009; Zarbafi, 2011) and remains under-explored.

1.1.4 Challenges in emerging markets

Emerging markets are increasingly becoming attractive destinations for international investors, even if investors still have to bear higher risks when investing in these markets compared to developed markets (Patel, McKay, Van Rensburg & Bhagwan, 2013; Van Dijk, Griek & Jansen, 2012). EIRIS (2012) found that poor corporate ESG disclosure is one of the biggest challenges to investing in emerging markets. McKinsey (2002) observed that investors are willing to pay a higher premium for better-governed companies in emerging markets than for their peers in developed markets. It is no wonder that Claessens (2006), Munisi and Randøy (2013) and Rossouw (2002) stated that the prominence of corporate governance in most developing markets is driven by the desire to attract foreign investment, to gain national and international legitimacy and to stimulate country-level economic development.

Furthermore, when referring to the agency problem, unlike in the US and the UK (where firms have dispersed ownership), firms in most emerging markets are identified with concentrated ownership (Hu, Tam & Tan, 2010; Munisi, Hermes & Randøy, 2014; Zhang, Uchida & Bu, 2013). These firms may be in pyramidal

[2]The United Nations-supported Principles for Responsible Investment (UNPRI) Initiative is "an international network of investors working together to put the six Principles for Responsible Investment into practice. Its goal is to understand the implications of sustainability for investors and support signatories to incorporate these issues into their investment decision making and ownership practices" (UNPRI, n.d.).

ownership structures, under the dominance of business groups, and may also demonstrate high levels of related-party transactions (Claessens & Fan, 2002; He, Mao, Rui & Zha, 2013). In other words, apart from the principal-agent problem, there exists conflicts between controlling shareholders (principals) and minority shareholders (principals), known as the principal-principal problem (Chen & Zhang, 2014; Hu et al. 2010; La Porta, Lopez-de-Sailnes & Shleifer, 1999). Accordingly, the agency problem gets more complicated in emerging markets where, combined with weak protection of minority investor rights, high demands are placed on a sound corporate governance mechanism (McGee, 2009).

It is undeniable that corporate governance has generally improved in most emerging markets in recent years (Hugill & Siegel, 2014). Yet it is still not well established and remains a critical risk element for investors. There are high expectations on institutional investors to promote corporate governance (Hu et al., 2010). They have witnessed great development in many emerging markets, while generally still remaining small in their ownership scale (Faias & Ferreira, 2016) and lagging behind their developed market counterparts in terms of RI (IFC, 2011a). The investment behaviour of institutional investors as well as their relationship with improved corporate governance has not been well researched.

1.2 The South African and Chinese context

As member countries of BRICS (Brazil, Russia, India, China and South Africa), South Africa (officially the Republic of South Africa, RSA) and China (officially the People's Republic of China, PRC) were selected as the context of this study. China includes Mainland China and two special administrative regions (SARs): Hong Kong and Macao. Due to the differences in the development stages of corporate governance, responsible investment and investor structure between Mainland China and the two SARs (Li, 2016), this study collected only evidence from Mainland China to avoid ambiguity.

Along with improved economic and institutional conditions, South Africa and China have been undertaking corporate governance reforms for years. At the same time, institutional investors are playing increasingly important roles in these two major emerging markets. Their investment behaviour and relationships with improved corporate governance are, however, still largely unknown. This section summarises the general economic and institutional conditions in South Africa and China; and introduces the situations regarding corporate governance, institutional investors and responsible investing in these two countries to provide a solid basis for further discussion.

1.2.1 Basic statistics

A country's macro-environment has an influence on corporate governance practices (Claessens & Yurtoglu, 2013). Basic and salient statistics regarding the economic and institutional conditions in South Africa and China are provided in Table 1.1.

South Africa is the most sophisticated economy on the African continent (Boulle & Chella, 2014). In terms of gross domestic product (GDP), it was the second largest economy in Africa in 2014, and third in 2016. China is the second largest economy in the world, with a GDP exceeding USD 10 trillion. Nonetheless, GDP per capita for both countries is low compared to more developed markets (Claessens & Yurtoglu, 2013). In terms of GDP growth, China is no longer on a double-digit path, but did manage to keep growth above 6.5 per cent in 2015. South Africa has faced slow economic growth in recent years, with its annual growth falling to 1.3 per cent in 2015. South Africa was the top destination for inward FDI in Africa by project numbers in 2015, while China was the leading recipient of inward FDI by project numbers in Asia-Pacific (fDi Intelligence, 2016). Trade plays an important role in both South Africa's and China's economy. The statistics provided in Table 1.1 show that South Africa's economy relies much more on trade than China.

Table 1.1

Overview of economic and institutional indicators in South Africa and China

	South Africa	China	Period	Source
GDP				
GDP (USD billions)	312.7	10 866.4	2015	World Bank
GDP growth (annual %)	1.3	6.9	2015	World Bank
GDP per capita (USD)	5 691.7	7 924.7	2015	World Bank
Trade				
Foreign direct investment, net inflows (USD millions)	1 575	249 858	2015	World Bank
Foreign direct investment, net inflows (% of GDP)	0.5	2.3	2015	World Bank
Trade (% of GDP)	63	41	2015	World Bank
Stock market				
Stock market	JSE	SSE/SZSE	-	WFE
Year of establishment	1887	SSE: 1990/SZSE:1990	-	JSE/SSE/SZSE
Board	Main board/ AltX	SSE: Main board/SZSE: Main board; SME board; ChiNext board	-	JSE/SSE/SZSE
Market capitalisation (USD millions)	735 945.2	SSE: 4 549 288.0/ SZSE:3 638 731.3	2015	WFE
Worldwide ranking	19	SSE: 3/SZSE: 5	2015	WFE
Number of listed companies	382	SSE: 1 081/SZSE: 1 746	2015	WFE
Annual share turnover (%)	31.8	480.3	2015	World Bank
Benchmark index	e.g. FTSE/JSE Top 40	e.g. CSI 300	-	JSE/SSE/SZSE
Institution				
Strength of minority investor protection index (0-10)	7.2	4.3	2015	World Bank
Extent of shareholder governance index (0-10)	6.3	3.7	2015	World Bank
Corruption perception index (0-100)	44	37	2015	Transparency International

Source: Author's own construction

With regard to equity markets, South Africa and China both have world-class stock exchanges according to World Federation of Exchanges (WFE) statistics, i.e. the Johannesburg Stock Exchange (JSE) in South Africa, and the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE) in China. The JSE was established in 1887; it is the largest stock exchange in Africa and ranks the nineteenth largest in the world by market capitalisation. Currently, the JSE has around 380 companies listed on its main board and AltX. Moreover, the JSE, a partner member of the United Nations Sustainable Stock Exchange Initiative, is the world's first stock exchange to require integrated reporting from its listed companies (JSE, 2016). China set up its stock markets (SSE and SZSE) in 1990, but they have grown rapidly since. Today, the SSE and SZSE are among the world's top ten exchanges by market capitalisation, and have around 2 800 listed firms on their main board, SME board and ChiNext board. Although the Chinese equity market is larger than its South African counterpart in overall market capitalisation, it is smaller when considering market capitalisation as a share of GDP. In terms of market liquidity, China has shown a higher turnover ratio than South Africa.

Table 1.1 presents some salient institutional environment indicators that are generally relevant to corporate governance and market development. A legal environment for minority investor (shareholder) rights protection seems well established in South Africa, compared to in China. South Africa has an Anglo-Saxon legal tradition, and South African law is a mixed legal system with a combination of common law and civil law (De Waal, 2004). China's legal system is a mixture of socialist law and civil law (Zhang, 2010). Common law is generally considered to offer better protection of property rights than civil law (Roland, 2016; Schmiegelow, 2014). The extent of shareholder governance index in Table 1.1 indicates that South African firms in general show favourable performance in the extent of shareholder rights, the strength of governance structure and the extent of corporate transparency compared to their Chinese counterparts. However, corruption, as reflected in the relatively low corruption perception scores (higher scores mean less corruption), is a serious problem in both South Africa and China.

1.2.2 Institutional investors

1.2.2.1 South Africa

In South Africa, institutional investors account for the vast majority of investors on the JSE (National Treasury of RSA, 2013), and they mainly consist of pension and provident funds, insurance companies and collective investment schemes (CIS) (Nonhlanhla & Nombulelo, 2011; Sibanda & Holden, 2014). The assets held by different types of institutional investors have increased substantially over the last few decades. For instance, the assets held by non-bank financial institutions represented 214 per cent of the country's GDP by the end of 2012, according to the Federal Reserve Bank of St. Louis (2016). More specifically, the total assets held by the South African long-term and short-term insurance industries by March of 2015 were over R2.5 trillion (including reinsurers); the retirement fund industry's assets had reached R3.2 trillion in 2015; while assets to the value of R1.8 trillion, R318 billion, R37 billion and R1.1 billion were being managed by local CIS managers in securities, foreign CIS managers, CIS managers in property and CIS managers in participation bonds respectively by the end of March 2015, according to the Financial Service Board's (FSB) annual report for 2015.

It is worth noting that South Africa possesses the largest pension fund on the African continent, i.e. the South African Government Employee Pension Fund (GEPF), which is also the eighth biggest pension fund in the world (Towers Watson, 2015). The GEPF was launched in May 1996, and the total assets of the GEPF had reached R1.6 trillion (of which 59 per cent was allocated to equity) by the end of March 2015, according to the GEPF's 2015 annual report. The assets held by the GEPF are largely managed by the Public Investment Corporation (PIC), the wholly South African government-owned asset manager.

Additionally, numerous European and North American investors divested from South Africa under the apartheid system (Teoh, Welch & Wazzan, 1999), and since the collapse of apartheid in 1994, foreign investors have gradually returned (Vaughn & Ryan, 2006).

South Africa has become an attractive destination for foreign investment (Gstraunthaler, 2010). The equity market features high participation of foreign investors, partly due to its improved regulatory environment. For instance, foreign investors held about 39 per cent of the Top 100 listed companies at the end of 2013, and almost half of the FTSE/JSE Top 40 index listed companies were majority-owned by foreigners in 2015 (JSE, 2015).

The financial sector cannot fully develop without a conducive regulatory environment. In recent years, South Africa has been undergoing financial regulatory reform so as to make the financial system safer and more stable, and to make financial institutions work more effectively and fairly (National Treasury of RSA, 2011). Taking lessons from the most recent global financial crisis, the National Treasury of RSA released a policy document titled *A safer financial sector to serve South Africa better* in February 2011. The document outlined reform initiatives for the financial sector, in which four policy objectives were addressed, namely financial stability, consumer protection and market conduct, expanding access through financial inclusion, and combating financial crime. In order to attain these objectives, the policy document suggested a shift towards a twin peaks approach of financial sector regulation, which features a separation of prudential and market conduct regulators (National Treasury of RSA, 2011).

This shift was approved by the Cabinet in July 2011. Later, in December 2013, the draft Financial Sector Regulation Bill was released. It intended to establish two regulators under the twin peaks approach, namely a Prudential Authority within the South African Reserve Bank (SARB) and a new Financial Sector Conduct Authority (FSCA). This draft bill was revised in December 2014, and finalised in October 2015. Figure 1.1 shows a diagrammatic simplification of the current regulatory structure for financial institutions. Once the twin peak model is enacted, the Prudential Authority will act as the prudential regulator, with the FSCA as the market conduct regulator. Table 1.2 presents the parts of the regulations relevant to institutional investors. The quality of relational regulations and supervision is expected to be further improved with this financial regulation shift.

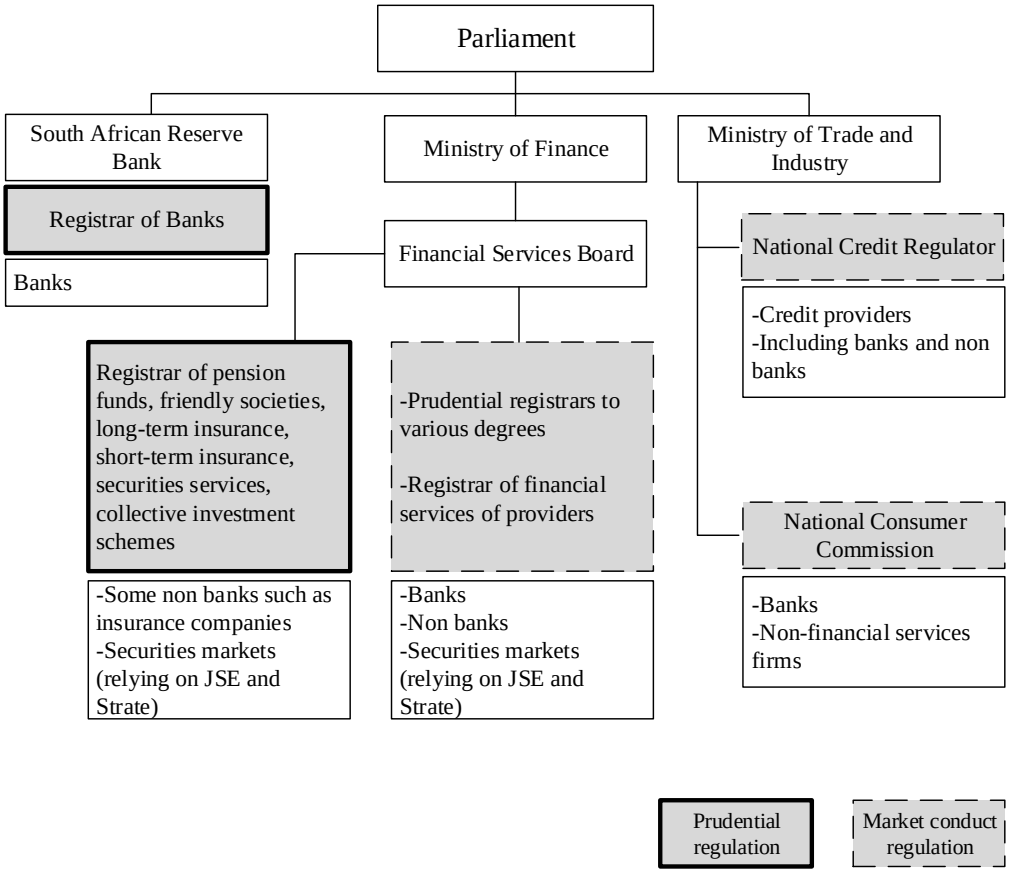


Figure 1.1 Current regulation structure for financial institutions in South Africa. This figure is adapted from Goodspeed (2013) and the National Treasury of RSA (2011: 32).

1.2.2.2 China

China has experienced enormous changes in the investor structure of its equity market since the 1990s. According to He (2003), Huang and Jiang (2010) and Yang and Zhou (2014), the development process of institutional investors can be divided into three phases: the initial phase (1990-1996), the adjustment phase (1997-2003) and the rapid development phase (2004 to present). Each one of these phases will be discussed in detail in the following section.

During the initial phase, the equity market was highly dominated by individual investors, with institutional investors not playing a significant role at the time. Institutional investors were mainly presented as securities firms, and the scales of securities investment funds were small at this stage (Yang & Zhou, 2014). In 1991, the Wuhan Securities Investment Fund and the Shenzhen Nan Shan Risk Investment

Fund were established, marking the beginning of the securities fund industry (Gong, 2014). The Shandong Zibo Township Investment Fund was issued in 1992, and listed as the first closed-end fund on the SSE in 1993 (Mu, 2007). Operating under an absence of regulations, the funds established before 1997 were referred to as 'old funds', a term which is used to distinguish them from securities investment funds launched after the release of the Interim Measures on the Management of Securities Investment Funds (henceforth the Interim Measures) in 1997 (Li, 2005). In total, there were 75 old funds with AuM of more than RMB 5.8 billion at the end of 1997 (Gong, 2014). Most of these funds were allocated to real estate and industries projects, and limited to securities (Yang & Zhou, 2014). During this period, the development of investment funds was stagnant largely due to the lack of proper regulations (He, 2003; Li, 2005; Yang & Zhou, 2014).

In the adjustment phase, the Chinese authorities conducted a series of actions to promote institutional investors' development, which began with the release of the Interim Measures in 1997 and the launch of the mutual funds of Jintai and Kaiyuan (closed-end funds) in 1998. In 2000, the China Securities Regulatory Commission (CSRC) stated that "government will nurture and develop institutional investors unconventionally and creatively". Subsequently, the first open-end mutual fund was launched in 2001. The Provisional Measures on Administration of Domestic Securities Investments of Qualified Foreign Institutional Investors (QFIIs) took effect in December 2002, indicating that QFIIs would be allowed to enter the Chinese A-share market. However, due to the presence of a large number of non-tradable shares (NTS), institutional investors' influence on the market was mostly limited at that point, regardless of them holding a relatively large proportion of the outstanding shares.

In 2004, with the enactment of Some Opinions of the State Council on Promoting the Reform and Opening and Steady Growth of Capital Markets (henceforth the 2004 Opinions), the equity market gained considerable momentum. The 2004 Opinions suggests guiding institutional investors to become the prominent force in the equity

market. Since then, institutional investors have entered a rapid development phase. In 2004, insurance companies were permitted to directly invest in the Chinese stock market. Starting in 2005, the Non-tradable Share Reform (henceforth the NTS Reform) provided the solution to the circulation problem of NTS. As a result of the NTS Reform, companies promised to gradually unlock the NTS, hence the Chinese stock market gained liquidity. The completion of the NTS Reform increased the value of investing in the Chinese stock market and provided wider development opportunities for institutional investors. More recently, in March 2015, a policy proposal by the Ministry of Human Resources and Social Security (MOHRSS) showed that China would channel a proportion of the local pension fund (RMB 3.06 trillion) to the stock market.

Currently, the key institutional investors in the Chinese equity market consist of mutual funds (referred to as securities investment funds in China), social security funds, insurance companies, securities firms and QFIIs. According to the SSE Statistics Annual 2015, in the SSE, the market value of shares held by institutional investors accounted for 14.65 per cent of the total market value of A-shares in circulation at the end of 2014. This indicator was 18.32 per cent of the SZSE at the end of 2012. More specifically, mutual funds represent the largest institutional investors in the Chinese equity market, their total AuM having reached RMB 3.9 trillion by the end of May 2014 (CSRC, 2014). The proportion of shares held by other institutional investors remains small.

Furthermore, unlike the South African equity market, the Chinese equity market has not been entirely open to foreign investors. Foreign institutional investors were not allowed to directly invest in the A-share market until the QFII scheme was created in 2002. Following this, the Renminbi QFII (RQFII) scheme was released in 2011. Unlike the QFII, which is foreign currency settled, the RQFII uses RMB for settlement. According to the State Administration of Foreign Exchange (SAFE) of the PRC, altogether 274 (158) overseas institutions have received QFII (RQFII) quotas, amounting to USD 80.951 billion (RMB 471.425 billion) by March 2016.

Overall, China is making excellent progress in financial liberalisation, but at the same time, the country has been facing challenges in the stability of its financial markets in recent years (Huang, 2010; IMF, 2011). A silo (institutional) approach to financial regulation is currently used by the regulators (see Figure 1.2), while China has been considering a transition to a more effective financial regulatory system (Li, 2016).

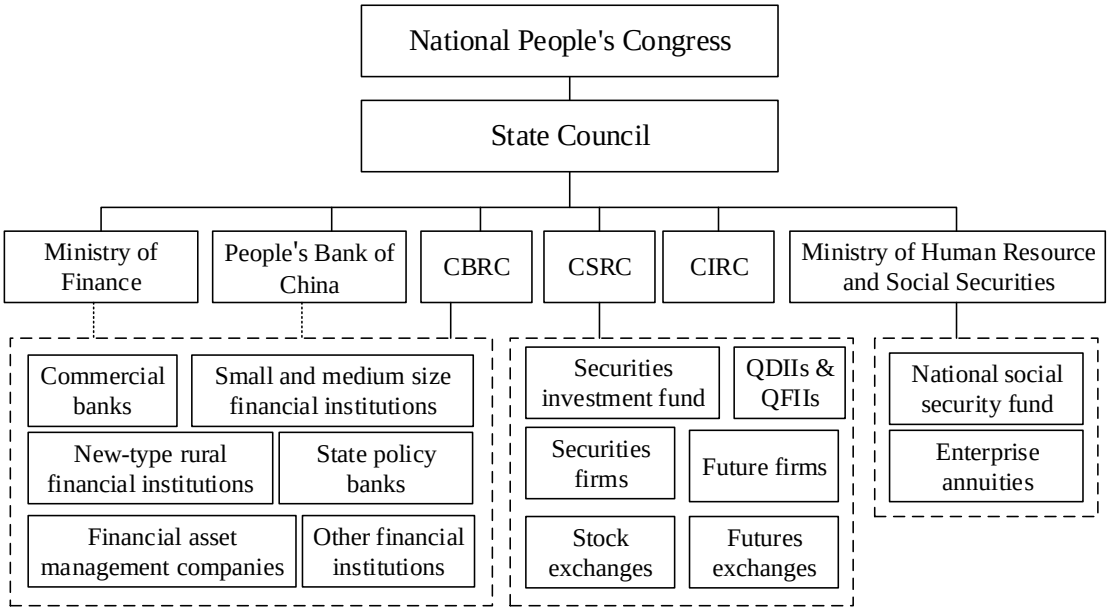


Figure 1.2 Current regulation structure for financial institutions in China. This figure is adapted from Elliott and Yan (2013: 10).

Under the current financial regulatory system, as indicated in Figure 1.2, different financial institutions are regulated and supervised by different authorities. Banks, insurance companies and securities investment funds are overseen by the China Banking Regulatory Commission (CBRC), the CSRC, and the China Insurance Regulatory Commission (CIRC) respectively. Some of the regulations relevant to institutional investors are summarised in Table 1.2.

Table 1.2

Some relevant regulations for institutional investors

Country	Regulations
South Africa	• Collective Investment Schemes Control Act (No. 45 of 2002) • Credit Rating Services Act (No. 24 of 2012) • Financial Advisory and Intermediaries Services Act (No. 37 of 2002) (FAIS Act) • Financial Institutions (Protection of Funds) Act (No. 28 of 2001) • Financial Intelligence Centre Act (No. 38 of 2001) • Financial Markets Act (No. 19 of 2012) • Financial Services Board Act (No. 97 of 1990) • Financial Services Ombud Schemes Act (No. 37 of 2004) • Financial Supervision of the Road Accident Fund Act (No. 8 of 1993) • Friendly Societies Act (No. 25 of 1956) • Inspection of Financial Institutions Act (No. 80 of 1998) • Long-term Insurance Act (No. 52 of 1998) • Pension Funds Act (No. 24 of 1956) • Securities Services Act (No. 36 of 2004) • Short-term Insurance Act (No. 53 of 1998) • Supervision of the Financial Institutions Rationalisation Act (No. 32 of 1996) • Policy Board for Financial Services and Regulation Act (No. 141 of 1993) • Securities Services Act (No. 36 of 2004)
China	• Trust Law • Securities Law • Securities Investment Fund Law • Insurance Law • Regulation on the Supervision and Administration of Securities Companies • Rules for National Social Security Fund • Measures for the Administration of Investment in Basic Pension Insurance Funds • Measures for the Administration of Securities Investment Fund Management Companies • Measures for the Administration of Information Disclosure of Securities Investment Fund • Supervisory and Administrative Measures for Futures Companies • Administrative Measures on Domestic Securities Investments by Qualified Foreign Institutional Investors • Measures for Pilot Domestic Securities Investment Made by RMB Qualified Foreign Institutional Investors of Fund Management Companies and Securities Companies • Provisions on the Administration of Insurance Companies

Source: FSB (2015) and National Treasury of RSA (2011) for South Africa; for China, the author collected the information from regulators' websites.

1.2.3 Corporate governance and responsible investment

1.2.3.1 South Africa

During the apartheid era, South Africa was virtually isolated from the global economy, and South African corporate practices and national regulations were far behind

international norms (Vaughn & Ryan, 2006). When re-entering the global economy after apartheid collapsed in 1994, South African companies began to embrace the improved standards of corporate governance in order to address some concerns, such as market pressure, shifts in corporate control structures and the emerging market crisis (UNEP, GRI, KPMG & Centre for Corporate Governance in Africa, 2013; Vaughn & Ryan, 2006). The launch of the King Committee on Corporate Governance in 1994 initiated corporate governance reform in South Africa (IoD, 2004). In the same year, the first King report was released. It was the first corporate governance code of best practice within developing markets, and was followed by the release of the second King Report in 2002 (King II) and the third King Report in 2009 (King III). King III is in line with the Companies Act (No. 71 of 2008, as amended), which came into effect in May 2011. Besides the Insider Trading Act (No.135 of 1998), the launch of the JSE SRI Index in May 2004 and the mandatory disclosure of integrated reporting are some of the important corporate governance reform initiatives that have proved crucial to improving corporate governance standards. The fourth edition of King report (King IV) will be launched in late 2016 to cope with the corporate governance and regulatory developments locally and internationally. Nowadays, South Africa is the pioneer among emerging countries in corporate governance; the King III report indicates that "South African listed companies are regarded by foreign institutional investors as being among the best governed in the world's emerging economies" (IoDSA, 2009: 6).

South African corporate governance and corporate culture are firmly rooted in the British tradition (Andreasson, 2011). Thus, the corporate governance model of South Africa aligns with the traditional Anglo-Saxon orientation, with its focus on shareholders' interests. However, it has changed with corporate governance reform, especially after the King II report was released. That is, firms adopted a feature of the Continental European (Japanese) model of corporate governance, incorporating both shareholding and stakeholding interests, and started to aim at addressing non-financial issues, such as Broad-based Black Economic Empowerment (B-BBEE), the environment,

HIV/AIDS, health and safety, and corporate governance provisions, aside from financial goals (Ntim & Soobaroyen, 2013). This makes the South African corporate governance model a hybrid and unique in the Anglo-Saxon world (Andreasson, 2011).

Furthermore, King II and III reports acknowledged the important role that institutional investors play in corporate governance best practices. Following King III, the Code for Responsible Investing in South Africa (CRISA) was released in 2011. CRISA provides a guide to institutional investors on how to execute investment and use their rights to advance governance. The release of CRISA makes South Africa only the second country (the first being the UK) to formally encourage institutional investors to integrate ESG considerations into their investment decisions. In addition, the recent amendment of Regulation 28 of the Pension Funds Act (No. 24 of 1956), which became effective in 2011, states that pension funds need to adopt a prudential and responsible investment approach. In the draft King IV where close attentions are also paid to responsibility of institutional investors, institutional investors are suggested to conform to fiduciary duties by integrating ESG considerations, and support the sustainable development of their investee companies.

Consequently, institutional investors in South Africa have gradually embraced RI. According to the IFC (2011b), the AuM for professional sustainable investment, with ESG integrated, was estimated at USD 111.2 billion in South Africa by the end of 2010. Within the ESG framework, corporate governance is well defined and disclosed in South Africa, and hence receives more attention from institutional investors than ES issues (Giamporcaro & Pretorius, 2012; Muzindutsi & Sekhampu, 2013; UNEP FI, 2007). Institutional investors have been observed to play active roles in corporate governance. Examples include the former co-operative OTK's business restructuring, the delisting plans of Energy Africa and Mutual & Federal at Comparex, and the PIC challenging executive remuneration at Dorbyl and Aveng (Survé, 2009). Nonetheless, institutional investors still seem inactive in general. King II, King III and draft King IV highlight the limited role that institutional investors have played in the

development of corporate governance in the past, and explicitly call for greater involvement in shareholder activism.

1.2.3.2 China

The development of corporate governance in China is aligned with the shift of the Chinese economy (from planned economy to market economy), and this requires the evolution of Chinese companies from government-led to market-led. The evolution of corporate governance in China can be divided into four phases (Hou, Xie & Chatterjee, 2015; OECD, 2011a), which will be discussed in this sub-section.

The focus of the first phase (1979-1983) was decentralisation, because most companies in China were stated-owned and administration-driven at the time. When entering into the second phase (1984-1992), companies were encouraged to separate their ownership from control, which is a means to adapt to the market economy, especially for state-owned enterprises (SOEs). The third phase started in 1993 with the implementation of the company law (1993), which laid a solid foundation for China's corporate governance framework, and made clear the importance of establishing a modern company system with clearly defined ownership. China's first company law is always considered to be the starting point of the country's corporate governance reform (Rajagopalan & Zhang, 2008). Later, in 1998, the first securities law was issued, and it came into effect in 1999. The Code of Corporate Governance of Listed Companies (henceforth the 2002 Code) was issued in early 2002 on the basis of the OECD Corporate Governance Principles. The 2002 Code provided references for listed companies to develop a well-structured corporate governance framework.

The corporate governance issue was actively addressed from 2004 onwards during the fourth phase of the transition. The 2004 Opinions and the completion of the NTS Reform provided a favourable regulatory environment for corporate governance development. The revised company law (2004, 2013) and the securities law (2005,

2014) highlighted the responsibility of the board of directors, the board of supervisors and management towards an advancement of corporate governance, especially for listed companies and SOEs.

Given the potential positive influence that institutional investors could have on capital market stability and corporate governance, the Chinese government places high expectations on institutional investors. The 2002 Code states that institutional investors should take responsibility for appointing and monitoring directors, and exercise their right to vote. Although in recent years, events such as rat trading[3] by fund managers have cast doubts on the fiduciary responsibility of institutional investors, they have, however, gradually shown their active attitudes towards participating in corporate governance and minority shareholders' protection. Examples include institutional investors opposing the issuing of H-shares in ZTE, intervening in a convertible bond issue of the China Merchants Bank, and rejecting the share reform program of Tsinghua Tongfang, Keda, Jinfeng and five other companies (Zhang, 2011).

Not limited to corporate governance, institutional investors have realised the importance of other ESG practices along with increased attention towards corporate social responsibility (CSR) practices by Chinese regulators and Chinese companies (especially listed companies and SOEs). By the end of October 2014, a total of 18 Chinese mutual funds were being managed according to RI approaches, with combined assets of over RMB 22 billion under management (China SIF, 2014).

1.3 Theoretical framework

Corporate governance is viewed to be an attempt to balance interests of corporations with that of shareholders and other stakeholders, i.e. to align the interests of individuals, corporations and society (Rossouw, 2008). This theme falls within the

[3] Rat trading is known as a form of insider trading, where fund managers use confidential information and personal accounts to buy shares at a lower price and sell them at a profit after funds they managed have boosted share price.

domain of institutional theory of studying organisations on control and coordination (Fiss, 2008). Institutional theory is positioned to provide unique perspectives of understanding corporate governance. Within the traditional view of institutional theory, corporate governance is defined as being concerned with a nexus of contracts, where the focus is being placed on agency problem (Fiss, 2008). In this circumstance, corporate governance is designed to deal with the relationship between shareholders and managers. Besides the contractarian view and the shareholder perspective, corporate governance has been increasingly observed to be embedded in a large institutional framework over the last decades (Jun, 2016). For instance, neo-institutional economics offers an institutional framework of corporate governance analysis with the bounded rationality model for corporations (Williamson, 1981). Furthermore, neo-institutional (NI) theory suggests to incorporate economic, political and social institutions to explain corporate governance practices. When dealing with corporate governance from a cross-country perspective (or in the case of comparative studies), it seems logical to apply the institutional theory framework (Claessens & Yurtoglu, 2003).

In the same vein, as the importance of RI and corporate governance increased, institutional investors (especially RI investors) consider both financial and social considerations when allocating investments. This phenomenon is unlikely to be fully understood purely by considering the discipline of economics, and a sociological view of the institution is suggested to explain the intention and the thinking of institutional investors supporting their RI decisions (Bell, Filatotchev & Aguilera, 2014). Institutional theory, and particularly NI in economics and sociology implies that institutional forces can interact to shape (restrict or/and facilitate) the diffusion and imposition of actors' practices (DiMaggio & Powell, 1983; Levy & Spiller, 1994; Scott, 1987).

Actors in institutional theory can be individuals, organisations (such as corporations and institutional investors in this study) or states; they pursue their interests within institutional constraints, including established laws and accepted social norms (Ingram & Clay, 2000; Meyer, Linsenmann & Wessels, 2007). Referring to

institutional theory in economics, transaction cost is the core concept (Coase, 1937; Furubotn, 2001), which is closely related to another concept, namely rationality. Rationality is typically understood as corresponding to utility maximisation (Dequech, 2006), and this notion is also accepted in agency costs theory (Fama & Jensen, 1983; Jensen & Meckling, 1976). However, it should be noted that because of incomplete information and cognitive limitations, actors are bounded rational during transactions (Barros, 2010; Furubotn, 2001; Simon, 1979). At the same time, these actors try to use decision-making processes to negotiate a transaction and attempt to be rational. Among others, institutions can be viewed as partial solutions, which can mitigate problems caused by incomplete information and alleviate the transaction costs associated with bounded rationality (Ingram & Clay, 2000; Shapiro & Glicksman, 2004). Furthermore, institutional constraints also appear to be imposed by property rights, which has been viewed as the object of maximising choice (Dequech, 2006; Hira & Hira, 2000). In this regard, to follow the laws, rules, standards and other forms of institutions when conducting economic activities could be linked to gaining economic interests. It is thus understandable that corporations and institutional investors are likely to follow these institutions.

Likewise, a variety of groups with varying identities and interests are linked together within corporate governance practices. Among others, managers and owners/shareholders (extended to stakeholders in recent years) have received significant attention, especially in the context of listed companies (Fiss, 2008). Within an economic perspective of NI, corporate governance practices and other ES activities could contribute to an alleviation of economic, social and political costs and access to crucial resources, such as business contracts (Friede, Busch & Bassen, 2015; Ortas, Álvarez & Garayar, 2015). This phenomenon is referred to as ‘economic efficiency’ (Ntim & Soobaroyen, 2013: 468). Put simply, from the efficiency (instrumental) perspective the motive for RI is to protect shareholders’ interests, and to make financial sense of RI practices with a reduction in agency conflicts through information asymmetry mitigation (Chen & Roberts, 2010). Accordingly, the impact

of institutional investors on the corporate governance of the investee companies can be assessed from efficiency (instrumental) aspects, e.g. financial aspects.

RI is not only engaged for the purpose of wealth maximisation, but also social returns. Thus, besides the efficiency (instrumental) perspective, corporate governance practices and ES activities are also largely motivated by legitimation (ethical) claims of all stakeholders from a sociological standpoint, as companies are also concerned with others' perceptions of their actions (Aguilera, Rupp, Williams & Granapathi, 2007). That is, aside from resources, companies also compete for social support and for the right to exist (Zattoni & Cuomo, 2008). In order to demonstrate the expected social behaviour, firms are likely to be driven by regulative institutional pressures, social norms, as well as the ethics of the actors in the firms (Ntim & Soobaroyen, 2013). Compliance with corporate governance and social responsibility practices can improve organisational legitimacy (Ntim & Soobaroyen, 2013). By doing this, firms can maintain and enhance good relationships with various corporate stakeholders and, more importantly, win their support (Aguilera et al., 2007). This context provides a more comprehensive understanding of firms' and institutional investors' responsible behaviour. Accordingly, the impact of institutional investors on the corporate governance of investee companies can be assessed from a social perspective, e.g. non-financial aspects.

This study explores institutional investors' behaviour towards corporate governance within the institutional theory framework and based on agency theory, property rights theory and stakeholder theory. Institutional investors have a fiduciary duty to protect their clients', as well as a diverse group of other stakeholders' interests. When they select companies to invest in, they are likely to comply with laws, rules, codes and standards for a reduction in information asymmetry and bounded rationality. Once they have built an investment relationship with a company and have become its shareholders, institutional investors have to deal with the agency problem between managers and shareholders, as well as with conflicts between majority and minority

shareholders in companies with a concentrated ownership structure, while these issues can be mitigated to some extent by sound corporate governance (Marks, 2000). Institutional investors are thus likely to participate in advancing corporate governance to achieve a reduction of agency costs and improve their interests. Given that corporate governance not only involves shareholders but also other stakeholders, and not only focus on financial concerns but also incorporates social and ethical considerations, it is necessary to consider both financial and non-financial views, i.e. efficiency (instrumental) and legitimation (ethical) perspectives, when making an assessment of the relationship between institutional investors and improved corporate governance. Similarly, institutional investors are regulated by many institutional forces which constrain their behaviour and guide them to implement RI. According to NI analysis framework, institutional investors have financial and non-financial responsibilities to improve the financial and non-financial goals of their investee companies, by doing so, they are likely to gain social support, i.e. the legitimation (ethical) motive, and financial interests, i.e. efficiency (instrumental) motive.

Furthermore, institutional investor groups feature different interests and identities that may differ in governance orientation and value maximisation (Fiss & Zajac, 2004). South Africa and China present different economic, political, legal and cultural environments, where institutional investors and their investee firms are regulated by different formal and non-formal institutions. Institutional investors and their investee firms are thus expected to have different attitudes towards corporate governance, thereby resulting in their relationship with corporate governance varying across markets and types of institutional investors.

1.4 Problem statement and research objectives

1.4.1 Research problem

The topic of institutional investors and corporate governance has been discussed within the context of developed markets for some time (without reaching generally

accepted conclusions), but is under-researched using evidence from emerging markets. Due to differences in their macro- and micro-environments, findings generated for developed markets are unlikely to fit emerging markets well. More importantly, corporate governance practice has received increased attention, and institutional investors are increasingly becoming important role-players in emerging markets. An examination of the relationship between institutional investors and corporate governance within emerging markets thus becomes essential.

South Africa and China stand out among emerging markets as particularly interesting environments in which to explore the relationship between institutional investors and improved corporate governance of their investee companies. As emerging markets and members of the BRICS countries, South Africa and China have relatively mature capital markets, well-developed corporate governance frameworks and a reasonable number of institutional investors, which provides a suitable platform to conduct this study. Important differences in terms of regulatory environments, the stages of financial liberalisation achieved on their capital markets and the development level of institutional investors and RI markets should provide opportunities to compare and contrast the influence of institutional investors on corporate governance development and implementation.

The influence of institutional investors on corporate governance could be addressed from many perspectives. After reviewing a large amount of literature, Wang and Li (2007) concluded that these include influences (1) directly on the governance mechanism, such as management compensation, takeover proposals and the board of directors; (2) on corporate strategy and operation, such as corporate innovation, research and development (R&D) expenditure, earnings management and dividend policy; and (3) on financial performance. Wang and Li (2007) added that the influence of institutional investors on corporate strategy and operational decision-making would ultimately reflect in financial performance. This action mechanism highlights the research problems, as identified in Figure 1.3.

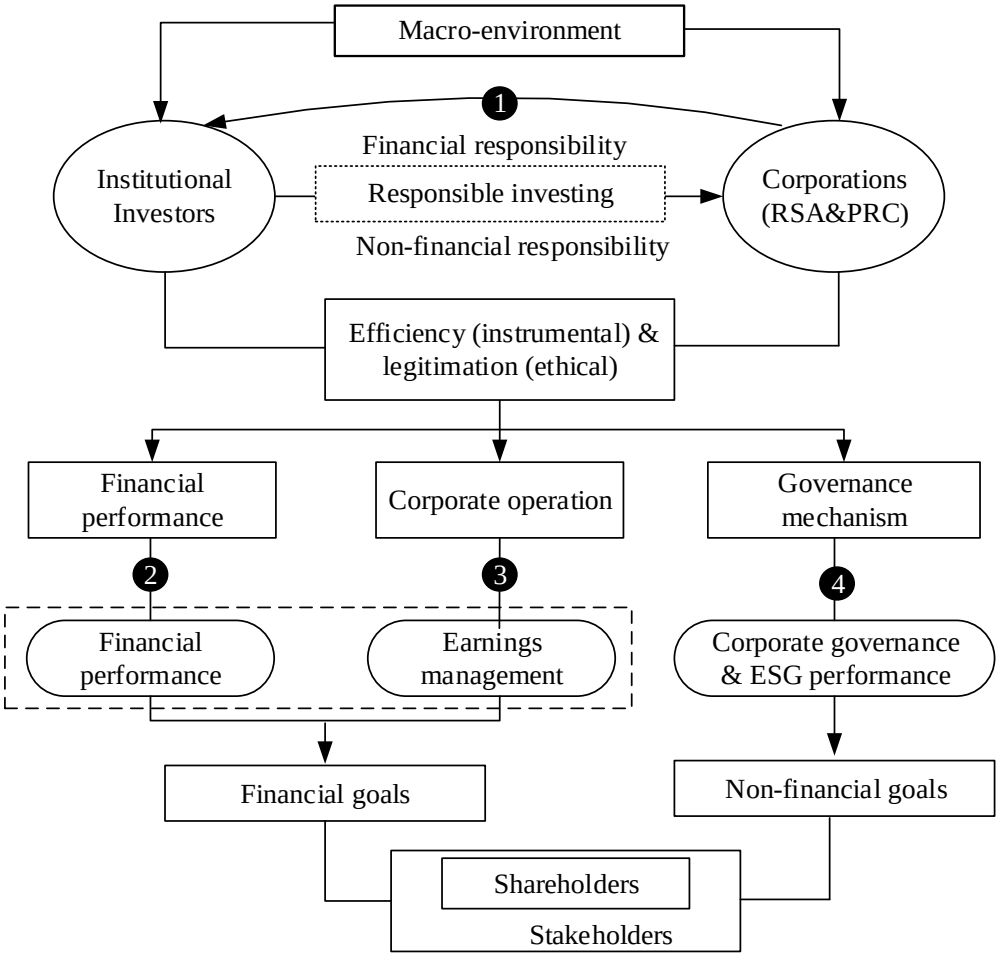


Figure 1.3 The research problem identification. Source: Author's own construction

By incorporating the theoretical framework introduced in Section 1.3 and considering the impact mechanism of institutional investors on corporate governance summarised by Wang and Li (2007), Figure 1.3 presents the identified research problems. As illustrated in Figure 1.3, it is necessary to have a better understanding of institutional investors' stockholding preferences and more importantly, to gain insight into the relationship between institutional investors and improved corporate governance of investee companies when their investment relationship has been built in the context of South Africa and China. Furthermore, the issue of heterogeneity among institutional

investors needs to be thoroughly considered, as not all types of institutional investors possess the same attitude towards corporate governance.

1.4.2 Research objectives

Given the research problems, the primary objective of this study is to investigate the role played by institutional investors in the corporate governance of South African and Chinese listed companies. More specifically, the secondary objectives of this study are in line with the observed research problems indicated in Figure 1.3, and they are described as follows: (1) To examine the stockholding behaviour of institutional investors; (2) To analyse the association between institutional investors and improved corporate governance from the perspective of financial performance; (3) To assess the association between institutional investors and improved corporate governance from the perspective of earnings management; (4) To explore the association between institutional investors and improved corporate governance from the perspective of non-financial performance (ESG performance).

1.5 Research design

This thesis utilises the 'PhD by article' structure. In order to address the above-mentioned research problems and research objectives, the main body of this thesis is composed of four individual articles represented by individual chapters (Chapters 2, 3, 4 & 5). That is, although each article follows a unique line of thought, they are interrelated in addressing the established research objectives of this study. Figure 1.4 shows the structure and logic of the four individual empirical chapters. This section is intended to clarify some important issues in terms of the methodology used throughout the whole study to avoid repetition in the subsequent chapters.

1.5.1 Measures

Based on established practices and considering the data accessibility, this sub-section briefly introduces measures that are used in this study.

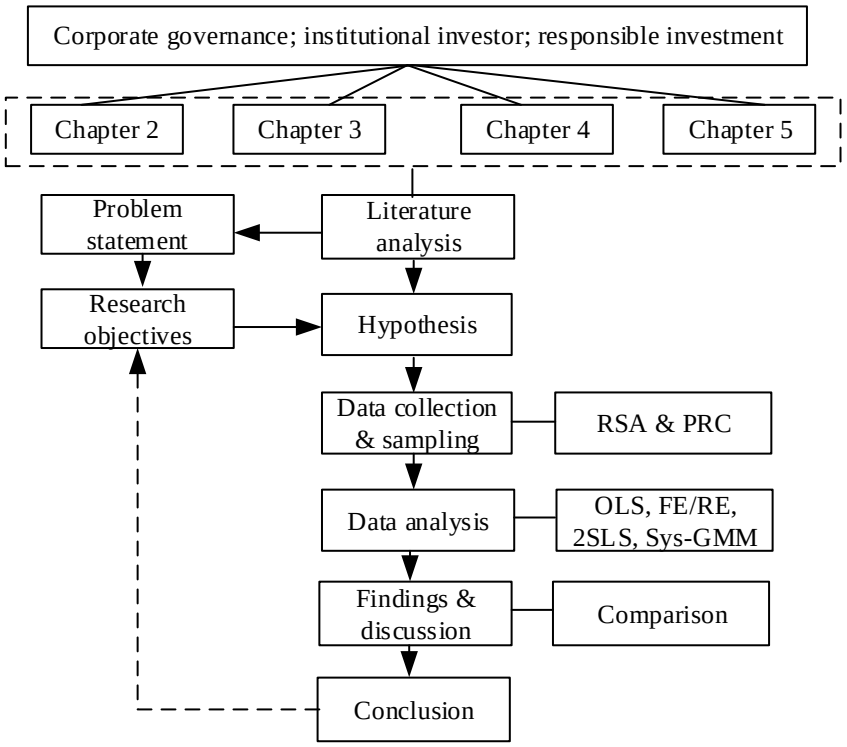


Figure 1.4 The research design. Source: Author's own construction

1.5.1.1 Institutional investors

Lacking a unified definition, institutional investors are usually considered to be professional money managers, other than physical persons, with discretionary control over assets (Binay, 2005; Çelik & Isaksson, 2014; Koh, 2007; Salehi, Hematfar & Heydari, 2012), such as mutual funds, pension funds and insurance companies (Ferreira & Matos, 2008). It should be noted that the terms 'institutional investors', 'institutional owners', 'institutional shareholders', and 'non-bank financial institutions' are used interchangeably in this study.

In South Africa, pension and provident funds, insurance companies and CIS broadly make up institutional investors (Nonhlanhla & Nombulelo, 2011; SARB, 2014; Sibanda & Holden, 2014). Investors in China are divided into two categories, namely physical persons and institutional investors. Within the institutional investors group, there are professional institutional investors and non-professional legal persons. In this study, institutional investors in the context of China conceptually refer to professional institutional investors, which mainly consist of mutual funds, social securities funds, insurance companies, securities firms and QFIIs.

Considering the heterogeneity among the institutional investor groups, this study introduces two different groups of institutional investors, namely pressure-insensitive (pressure-resistant) institutional investors (e.g. pension funds, mutual funds) and pressure-sensitive institutional investors (e.g. insurance companies, securities companies), based on the strength of potential and current business linkages between institutional investors and their investee companies. Pressure-insensitive institutional investors are more independent and free from conflicts of interest compared to their pressure-sensitive counterparts. A similar classification of institutional investors has been employed in previous studies, such as Almazan, Hartzell and Starks (2005), Brickley et al. (1988), Chung and Wang (2014), and Cornett, Marcus, Saunders and Tehranian (2007).

Institutional ownership is measured by the percentage of total shares held by institutional investors, which is also referred to as aggregated institutional ownership, overall institutional ownership, or institutional ownership as a whole within the context of this study. Another measurement for institutional ownership is disaggregated institutional ownership. Disaggregated institutional ownership distinguishes between pressure-insensitive and pressure-sensitive institutional ownership, as measured by the percentage of total shares held by pressure-insensitive and pressure-sensitive institutional investors respectively.

1.5.1.2 Financial performance

Financial performance is generally viewed as a measure of a firm's ability to generate profits. To assess profits, researchers use either market-based measures or accounting-based measures (Gentry & Shen, 2010). Although these two types of measures are widely accepted as valid indicators of financial performance, there are ongoing debates about their usage. Considering that China's stock market is not sufficiently efficient, it would be inappropriate to use market-based performance measures in this study (Liu, Huang, Tse & He, 2011). Accounting-based measures of corporate financial performance (CFP) are thus used.

1.5.1.3 Earnings management

Earnings management occurs when "managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" (Healy & Wahlen, 1999: 368). Earnings management is considered one of the important indicators of earnings quality; to some extent, a lower degree of earnings management represents higher earnings quality, financial reporting quality and reliability of indicated financial performance.

Earnings management commonly consists of accrual-based and real earnings management (Achleitner, Guenther, Kaserer & Siciliano, 2014; Kuo, Ning & Song, 2014). Accrual-based earnings management refers to a manipulation of earnings only through the exploitation of accounting discretion (Dechow, Sloan & Sweeney, 1995), while real earnings management reflects earnings manipulation by altering normal business activities (Roychowdhury, 2006). Unfortunately, data relating to levels of real earnings management is not available in South Africa, and this study consequently employs only accrual-based earnings management.

1.5.1.4 Corporate governance

There is no generally accepted definition of corporate governance (Gillan, 2006; Nix & Chen, 2013), but it is usually recognised as the system by which firms are directed and controlled (Cadbury Committee, 1992). Corporate governance encompasses a set of relationships between a firm's management, its board of directors, shareholders and other stakeholders (OECD, 2015), and it is viewed as a multi-dimensional construct that consists of many aspects (Rossouw, 2008). This study thus employs a comprehensive index, i.e. corporate governance score, as the proxy of corporate governance. The specific elements of corporate governance are, however, not extensively discussed in this study due to the data and length limitations.

1.5.1.5 ESG

ESG is a subset of non-financial performance indicators and refers to environmental, social and governance aspects. To measure ESG performance entails the measurement of a firm's performance or behaviour on ESG issues, and is related to the sustainable development of corporations and of markets. It should be noted that the terms 'ESG performance', 'non-financial performance' and 'corporate social performance (CSP)' are used interchangeably in this study. Similar to corporate governance, the overall ESG score employed in this study serves as a proxy for overall ESG performance.

1.5.1.6 Responsible investing

RI is commonly considered an investment process that combines investors' financial objectives with concerns about ESG issues (Eurosif, 2008). In practice, investors (not limited to RI investors) increasingly and widely adopt RI strategies which involve ESG information. As a result, the adoption of RI strategies was not used as a criterion to evaluate if institutional investors are responsible in this study. Instead, this study is based on the result-oriented criterion that if institutional investors are associated with the fulfilment of financial or non-financial goals of their investee companies, they are regarded as responsible in financial and non-financial aspects.

There are different ways of describing investment which take non-financial concerns into consideration (Eccles & Viviers, 2011; Scholtens, 2014). 'Responsible investing', 'ethical investing', 'socially responsible investing' and 'sustainability/sustainable investing' are used interchangeably in this study.

1.5.2 Data collection and sampling

To ensure that results would be comparable between South Africa and China, and relevant within each article, the data collection and processing needed to be thoroughly considered. The sample was selected from all companies listed on the JSE main board in South Africa, as well as those companies listed on the SSE and SZSE main boards in China. South

African data on institutional investors, ESG information and the FTSE/JSE Top 40 index constituents were collected from the Bloomberg (2015) database. The INET BFA (2015) database was also used to collect financial data. Considering that the King III report, introduced in 2009, caused many changes to corporate governance practices, the period for this study was chosen to be 2010 to 2013 for South Africa.

Chinese data relating to institutional ownership and ESG were selected from the RESSET (2015) and Bloomberg (2015) databases respectively. The CSMAR (2015) database was used to collect firms' financial data. Because the NTS Reform in China had basically been completed in 2007, the role of institutional investors started to play a prominent role in the Chinese equity market from 2008 onwards. The period 2008 to 2013 was therefore covered for China. Additionally, an attempt was made to examine the anticipated heterogeneity of institutional investors in this study. Given that the data on institutional investors' classification are not available for South African listed firms, this could unfortunately only be conducted within the Chinese context.

Within the four articles included in this study, a set of generally consistent criteria was used to screen the sample. More specifically, the screening criteria for Chapter 2 and Chapter 3 are identical, and consequently the sample size in these two chapters is the same. In order to appraise earnings management (which has specific data requirements), part of the sample was excluded in Chapter 4. Given that the Bloomberg ESG database's coverage of companies is limited, the ESG overall score and sub-scores for some of the listed companies were not available. Sample companies not covered by the ESG database were therefore excluded in Chapter 5.

1.5.3 Selected estimation methods

This study employed four estimation methods, namely pooled ordinary least squares (OLS), fixed effects (FE), two-stage least squares (2SLS) and system generalized method of moments (Sys-GMM) estimations, to ensure that regression results are robust.

Given the panel nature of the data used in this study, and in order to control for the potential endogeneity problem that may arise from unobserved heterogeneity, standard pooled OLS as well as FE estimations were used in all four articles. In addition, random effects (RE) estimations were considered where applicable, with the commonly used Hausman test employed when deciding between FE and RE estimations. Although FE estimation can deal with the endogeneity problem, it is effective only against the endogeneity problem caused by unobservable heterogeneity. As for endogeneity problems resulting from the intertemporal effect, as demonstrated in this study, FE might be not that effective. Sys-GMM estimation was therefore employed, since it is likely to improve pooled OLS and FE methods within a set of panel data. By using Sys-GMM, the endogeneity problem caused by unobservable heterogeneity as well as that caused by reverse causality could be mitigated. This method is also applicable to situations where it is difficult to find instruments for the endogenous variables (Abdallah, Goergen & O'Sullivan, 2015).

2SLS is another widely used method for addressing the endogeneity issue, but instrument variables are needed when adopting this method. The instruments for suspected endogenous variables are required to be correlated with endogenous variables, but not with the error term. Moreover, in a 2SLS regression, the *F*-statistic is estimated for testing the joint statistical significance of instrument variables. If this figure is greater than 10, it suggests that the instruments are not weak (Staiger & Stock, 1997). At the same time, a Sargan test for over-identification was also performed to examine whether or not the instruments are valid in a 2SLS regression.

Since it was challenging to find appropriate instruments for the analysis performed in Chapter 2, Sys-GMM was employed. In the case of Chapters 3, 4 and 5 where appropriate instrumental variables are able to be identified for suspected endogenous variables (i.e. institutional ownership), 2SLS was thus employed when addressing the endogeneity problem. Stata statistical software was used to run all regressions.

1.6 Orientation of the study

Given that this study applies the 'PhD by article' format, it is inevitable that there will be overlapping areas. The articles are thus written in a concise manner to only portray the essential information necessary to achieving the research objectives.

This section briefly introduces the following chapters. Figure 1.5 presents the main research questions. The preceding sections have presented why financial performance, earnings management and ESG performance were chosen as the unique perspectives to discuss the relationship between institutional ownership and improved corporate governance. The flow of Figure 1.5 clarifies the sequential development of these four articles.

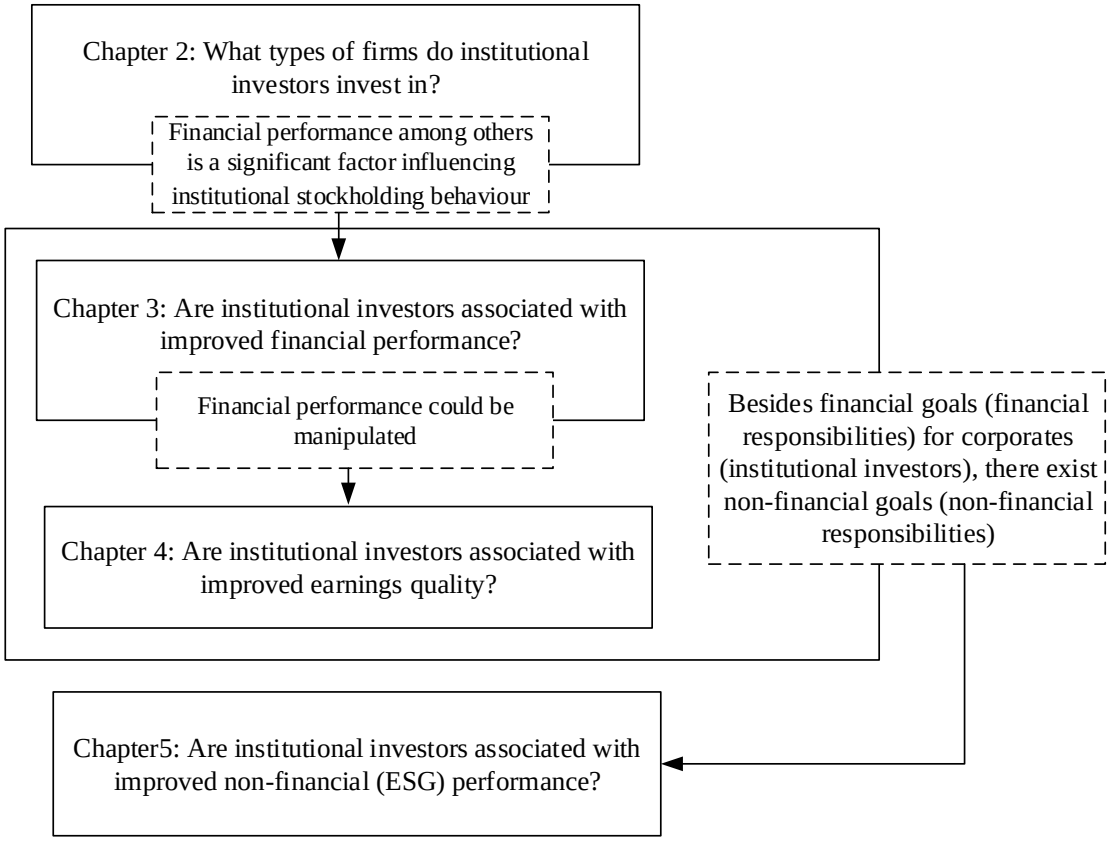


Figure 1.5 Development of initial research questions. Source: Author's own construction

As indicated in Figure 1.5, before discussing the association between institutional investors and improved corporate governance, this study explored institutional

investors' prudent stockholding behaviour in order to analyse what type of firms they tend to invest in in Chapter 2. Financial performance, among others, is observed as a prominent factor influencing institutional investors' decision-making. At the same time, institutional investors are also expected to promote CFP, which constitutes one of the major motivations behind the results presented in Chapter 3. In addition, assessing the impact of institutional investors on CFP provides a means to explore the relationship between institutional investors and improved corporate governance. To some extent, Chapters 2 and 3 can be viewed as a unit.

A prominent issue derived from Chapter 3 was that financial performance (financial reports) may be manipulated. It thus becomes necessary to consider the reliability of financial information and the quality of financial reporting when exploring the influence of institutional investors on financial performance. This laid the foundation for Chapter 4, which investigates earnings management in listed companies, as well as the relationship between institutional investors and earnings management reduction. The focus of Chapters 3 and 4 is related to the relationship between institutional investors and the financial goals of their investee companies. As previously mentioned, corporate governance in a broad sense involves shareholders as well as other stakeholders. Institutional investors' responsibility is not only reflected by financial aspects, but also by non-financial (ESG) issues. Chapter 5 evolved from the results presented in Chapters 3 and 4; its purpose being to investigate the association between institutional investors and improved ESG performance.

The remainder of this section briefly introduces the main focus and research questions of each of the chapters to follow, before concluding with a summary of the study's prospective benefits.

1.6.1 Chapter 2: Investigating prudent behaviour of institutional investors

The fiduciary duty of institutional investors requires them to manage assets in the best

interests of their clients or beneficiaries. Ensuring asset security by conforming to prudent rules is one approach to address this fiduciary duty. This could be reflected in institutional investors' stockholding preferences. Chapter 2 is therefore used to explore institutional investors' prudent stockholding behaviour.

The primary research question of Chapter 2 is: What types of firms do institutional investors tend to invest in? Considering that institutional investors are characterised by varying identities and interests, the following secondary research questions are also considered: (1) Do institutional investors represent a homogeneous group in terms of prudent investment? (2) Is prudent stockholding behaviour presented heterogeneously by institutional investors with different investment strategies?

1.6.2 Chapter 3: The impact of institutional ownership on corporate financial performance

Chapter 3 investigates the relationship between institutional investors and CFP to see if institutional investors tend to advance the financial goals of their investee companies. The objective is to gain to a deeper understanding of the fiduciary duty that institutional investors perform after an investment relationship has been built. In addition, Chapter 3 also examines the influence of index investing on the association between institutional investors and CFP.

The primary research question of Chapter 3 is: Is institutional ownership related to improved CFP? The following secondary research questions were also considered: (1) Are institutional investors a homogeneous group in terms of CFP improvement? (2) Are there differences in the effectiveness of advancing CFP between institutional investors with and without a passive strategy?

1.6.3 Chapter 4: Does institutional ownership matter? Evidence from earnings management

Chapter 4 assesses the prevalence of earnings management among public companies to have a better understanding of firms' earnings quality. In order to further address

institutional investors' impact on firm performance from a financial perspective, this chapter investigates the relationship between institutional ownership and earnings management reduction.

The primary research question of Chapter 4 is: Does investment by institutional investors reduce the problem of earnings management? The secondary research questions are: (1) How pervasive is earnings management in South Africa and China? (2) Does institutional ownership have different influences on income-increasing earnings management versus income-decreasing earnings management? (3) Are institutional investors heterogeneous towards earnings management reduction?

1.6.4 Chapter 5: Responsible investment and ESG performance: The institutional ownership effect

Chapter 5 examines if institutional investors are socially responsible by exploring their influence on ESG performance. Additionally, this chapter considers corporate governance as a distinct segment, and discusses corporate governance and its relationship with institutional ownership separately. Considering that potential financial benefits may be brought to a company by implementing ESG practices, this chapter also analyses the impact of institutional investors on financial performance in the different ESG performance contexts.

The following primary research questions are addressed in Chapter 5: (1) Is institutional ownership related to improved corporate governance and corporate ESG performance? (2) Can institutional investors address RI issues and still promote financial performance? The following secondary research questions aimed to provide deeper insight: (1) Do different types of institutional investors promote corporate governance and ESG performance in a similar way? (2) Are institutional investors a homogeneous group in promoting CFP in different ESG performance contexts?

1.6.5 Chapter 6: Conclusions and recommendations

Chapter 6 provides a summary of the four individual articles based on the findings generated from the preceding four chapters. The general and specific contributions of the preceding four empirical chapters are highlighted. In addition, the limitations to this study and suggestions for further research are also addressed.

1.6.6 Prospective benefits

The contributions of this study are manifold, as discussed in detail in Chapter 6. Firstly, this study enriches and contributes to the existing literature on institutional investors, corporate governance and RI, especially in the context of South Africa and China. This study systematically describes institutional investors' investment behaviour, and the association between institutional investors and improved corporate governance from financial and non-financial dimensions. The concerns regarding the heterogeneity of institutional investors and potential endogeneity problems, which have been deficiencies of many prior studies, are considered and addressed. Secondly, the findings of this study do not only provide academic benefits, but also novel insights for regulators, which could be used to examine current policies on institutional investors, corporate governance and RI. This research also provides reference points for practitioners' investment strategy decisions. Finally, the implications of this research could be helpful to foreign institutional investors in enhancing competitiveness, especially for those who do not have a proper understanding of these two countries' investment environments. Therefore, in addition to domestic sustainable social and economic development, the implications also shed light on international investment in sustainable development.

CHAPTER 2

INVESTIGATING PRUDENT BEHAVIOUR OF INSTITUTIONAL INVESTORS

2.1 Introduction

The increasingly important role that institutional investors are playing in equity markets can be linked to their increased responsibility towards the individuals who contribute their money to these institutions (Heineman & Davis, 2011). This responsibility is reflected in the fiduciary duty of institutional investors, namely the obligation to manage their funds in the best interests of their clients or beneficiaries (Sandberg, 2011, 2013). In such a fiduciary relationship, institutional investors are directed to act prudently to ensure their clients' and beneficiaries' capital is secure. This background gives rise to the present chapter, which explores the prudent investment behaviour of institutional investors.

The gradual shift towards the institutionalisation of equity has attracted the attention of academics and practitioners alike. The question of whether institutional investors should be considered as part of the solution or part of the problems experienced in equity markets has been the topic of heated debates (Heineman & Davis, 2011). On the one hand, it is argued that substantial stockholdings by institutional investors with long-term investment horizons could be effective in monitoring and disciplining managers (Bushee, Carter & Gerakos, 2014; Chung, Firth & Kim, 2002), lowering the liquidity risk of stocks (Bekaert & Harvey, 2000; Cao & Petrasek, 2014), and improving financial market stability and efficiency (Bohl, Gottschalk & Pal, 2006; De Haan & Kakes, 2011; Liao, Lu & Wang, 2014; Schuppli & Bohl, 2010).

On the other hand, however, it has been pointed out that the increased involvement of institutional investors also appears to introduce risks, especially those institutional investors who pursue short-term returns (Kremer & Nautz, 2013a, 2013b; Sias, 2004). During the 2007-2009 global financial crisis, the negative impact institutional investor

short-termism had on financial markets was highlighted (Claessens & Kodres, 2014; Davis, 2010). As a consequence, the active role that financial institutions play in capital markets is being questioned by regulators and researchers. In addition, their investment behaviour is also receiving considerable attention from this perspective. Following the 2007-2009 global financial crisis, regulatory authorities either have already been involved in, or are at the moment reconsidering how to reframe financial regulation and the supervision of major market participants, such as institutional investors, in order to prevent and to protect investors' interests. As part of this process, enhancing prudential standards and improving consumer protection by means of financial regulation are given priority (Allen, Goldstein, Jagtiani & Lang, 2016; Hanson, Kashyap & Stein, 2011).

Institutional investors and their investment behaviour are constrained and guided by rules. To protect their clients' interests, institutional investors try to make rational decisions and exhibit prudent investment behaviour by conforming to the relevant regulations. Although the topic pertaining to the prudent investment preferences of institutional investors has been examined in the developed market context for some time, the findings seem unlikely to directly apply to emerging markets due to differences in economic and regulatory environments, maturity of capital markets and the development level of institutional investors. In recent years, South Africa and China, as major emerging markets, have witnessed the increased involvement of institutional investors in their equity markets. Regulators and policy makers in these two countries have released a series of laws, regulations, standards and codes that urge institutional investors to behave in a prudent manner, but little is known about whether institutional investors conform to these regulations and behave prudently. It should be noted that the differences observed between developed markets and emerging markets to some extent also exist between South Africa and China (which were presented in Section 1.2). There is therefore a motive to investigate the prudent investment behaviour of institutional investors within these two countries, which is done in this chapter.

The chapter further explores the heterogeneity in the stockholding preferences of different types of institutional investors. Since their investment behaviour will be directly reflected in the composition of their investment portfolios in equity markets, an investigation of institutional investors' stockholding preferences forms the core of this chapter. Thus, the primary research question of this chapter is: What types of firms do institutional investors tend to invest in? Considering that institutional investors are characterised by varying identities and interests, the following secondary research questions are also considered: (1) Do institutional investors represent a homogeneous group in terms of prudent investment? (2) Is prudent stockholding behaviour presented heterogeneously by institutional investors with different investment strategies?

This study employed a sample consisting of 183 companies listed on the South African equity market and 1 104 companies listed on the Chinese equity market. After accounting for potential endogeneity problems, this chapter found that institutional investors do not always exhibit investment preferences that correspond to what is considered prudent; and observed similarities, but also profound differences between the investment preferences of institutional investors in South Africa and their counterparts in China. In addition, this chapter noted that institutional investors are not a homogeneous group in terms of prudent investment preferences.

The remainder of this chapter is organised as follows: Section 2.2 reviews the relevant literature related to the prudent investment preferences of institutional investors. Section 2.3 presents the source of the data required for this chapter, describes the sample, provides descriptive statistics and introduces the methodology employed in the research. Section 2.4 focuses on the results of regressions and a discussion of institutional preferences towards prudent stockholding. Section 2.5 offers concluding statements.

2.2 Literature review

2.2.1 Preferences for prudent investment

Institutional investors manage assets on behalf of their clients and beneficiaries in a trust relationship, where the institutional investors act as trustees with fiduciary duties towards their clients (Johnson, 2014). Taking into the consideration the bounded rationality of institutional investors and to prevent them from engaging in speculation, institutional investors are constrained by various rules and required to act prudently (Belghitar, Clark & Kassimatis, 2011; Del Guercio, 1996). Amongst others, the prudent man rule and prudent investor rule have been extensively discussed in prior studies on this topic.

The prudent man rule was established in the seminal case of Harvard College v. Amory (1830), and it directs trustees to "observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested" (Pickering, 1831: 461). Under the prudent man rule, the prudence of investment activities is assessed on an individual basis (Schanzenbach & Sitkoff, 2007). Hankins, Flannery and Nimalendran (2008) indicated that during the 1990s, most US states replaced the prudent man rule with the less-restrictive prudent investor rule of fiduciary responsibility. The prudent investor rule considers investment activities as a whole, focusing on risk management instead of risk avoidance when conducting fiduciary investment, in line with modern portfolio theory (MPT) (Schanzenbach & Sitkoff, 2015), and assesses investments' prudence within an MPT framework (Hankins et al., 2008).

Badrinath, Gay and Kale (1989) proposed a safety-net hypothesis of institutional investors. In their study, they indicated that institutional investors have a fiduciary duty conducted under both common law and the Employee Retirement Income Security Act, which ensures that institutional managers act cautiously. They also suggested a series of firm-specific factors (e.g. firm size, trading liquidity, market risk,

past performance, number of years listed) to examine institutional investor preferences. Using the data of listed companies from the New York Stock Exchange, their study reported that larger companies with superior past financial performance attracted more institutional investors. In addition, institutional investors were found to hold stocks with high trading liquidity and long listing histories, while investing less in stocks with high volatility.

Numerous subsequent studies report results that are consistent with the idea proposed by Badrinath et al. (1989). Del Guercio (1996) found that the prudent man rule impacted in different ways on managers' investment decision-making in the US. Bank managers tend to hold stocks with long listing histories, proven profitability and high trading liquidity, while mutual fund managers do not significantly tilt their investments towards prudent stocks. Eakins, Stansell and Wertheim (1998) adopted a prudent investment hypothesis to explain US institutional investors' stock selection behaviour. Their results indicate that institutional investors invest to avoid extremes, which is achieved by not holding stocks with very high or very low levels of financial performance, betas and debt ratios. Grinstein and Michaely (2005) also concluded that institutional investors are subject to the prudent man rule. They observe that pay-out policy affected institutional holdings in US public companies, and that institutional shareholders preferred to invest in dividend-paying firms. Furthermore, among these dividend-paying firms, institutional investors tend to hold the stock of lower-dividend-paying firms.

In Australia, evidence that institutional investors behave prudently has also been reported. Pinnuck (2004) found that Australian fund managers are attracted by large, liquid and low-volatility stocks. Brands, Gallagher and Looi (2006) investigated the investment preferences of Australian equity managers and concluded that active Australian equity managers show strong interest in low transaction costs and large market capitalisation stocks. Mishra (2013) reached a similar conclusion to Brands et al. (2006), reporting that foreigners prefer investing in large Australian firms. Based

on a survey conducted in 11 developed countries, Covrig, Lau and Ng (2006) found that mutual funds tilt their portfolios towards firms with high share turnover, sound accounting performance and return volatility. Furthermore, they reported that foreign investors and domestic investors exhibited different investment preferences.

Institutional investors have also been found to increase their holding in stocks that are included in the major market index. By including the Standard & Poor's 500 (S&P 500) index as a proxy for institutional investor prudence, Del Guercio (1996) observed that institutional investors hold large investments in stocks that form part of the S&P 500 index. This result is consistent with those reported by Bushee (2001), Bushee et al. (2014), Bushee and Noe (2000), as well as Gompers and Metrick (2001).

2.3.2 Evidence of imprudent investment

Standard finance theories, such as the efficient market hypothesis (EMH), MPT and the capital asset pricing model (CAPM), could provide an explanation for institutional investor behaviour to some extent. When confronted with market anomalies, such as the January effect, the value effect, the size effect, the dividend yield effect, and the idiosyncratic volatility puzzle, however, the standard finance theories become less convincing. The EMH, for instance, fails to offer an explanation for market anomalies, since it is based on the assumption that prices always fully reflect all available information in a market (Fama, 1970), and that investors are always rational. In reaction to these challenges and the questions standard finance theory faced, behavioural finance began to develop during the early 1990s (Shiller, 2003). With its emphasis on the behaviour and psychology of market participants, behavioural finance contends that markets are not always efficient, and assumes that investors are not always rational.

Because institutional investors do not always act rationally, their investment decisions are unlikely to be made within the confines of prudent rules all the time. Moreover, the agency problem that exists between institutional investors (trustees) and asset owners (principals) can also lead to imprudent behaviour by institutional investors. For instance, Falkenstein (1996) and Gompers and Metrick (2001) observed that some US institutional investors preferred stocks with high volatility. Furthermore, Bennett, Sias and Starks (2003) examined institutional investors' preferences over the period March 1983 to December 1997 and found that institutional investors shifted their preferences towards smaller, riskier securities during this period; in other words, institutional investors' preferences for safer stocks declined (see also Blume & Keim, 2014; Oak & Dalbor, 2010). Chen, Ho, Lai and Morales-Camargo (2012) suggested that institutional investors in Exchange Traded Funds showed a strong demand for past losers. Not only in the US, but also in other regions, there is evidence that institutional investors prefer to invest in small firms (Chen, Lin, Hung & Wang, 2009; Hussain, 2000; Khurshed, Lin & Wang, 2011), stocks with higher volatility (Brands et al., 2006), illiquid stocks (Gaspar & Massa, 2007; Khurshed et al., 2011; Liu & Yu, 2010) and past losers (De Haan & Kakes, 2012).

It should be noted that most existing studies with regard to the prudent stockholding preferences of institutional investors have been conducted in the context of developed capital markets, especially the US. Evidence from emerging markets, however, is limited. Examples of studies that have considered institutional shareholding based on samples obtained from emerging markets include Ferreira and Matos (2008) for emerging markets in general; Ashraf and Muhammad (2013) and Lai, Tan and Chong (2013) for Malaysia; and Deb, Banerjee and Banerjee (2013) for India. The weaknesses of these studies are obvious, presented as they are without considering either the endogeneity problem between institutional ownership and firm-level characteristics (e.g. financial performance) (Ashraf & Muhammad, 2013; Deb et al., 2013; Ferreira & Matos, 2008) or the heterogeneity of institutional investors (Lai et al., 2013).

In the Chinese context, like in other emerging markets, this topic is under-explored. The extant studies (e.g. Hu, 2005; Liu, Bredin, Wang & Yi, 2014; Liu & Yu, 2010; Shi & Wang, 2014; Teng & Huang, 2012; Zhai, He, Zhou & Cai, 2010) report inconclusive results, with most evidence coming from mutual funds and QFIIs before the NTS Reform. Little attention was paid to other types of institutional investors. Thus, a systematic discussion at both the aggregated and disaggregated level of institutional ownership need to be presented. Since the problem of potential endogeneity has also been overlooked or inappropriately treated in previous research on institutional investors in China (Hu, 2005; Liu et al., 2014; Liu & Yu, 2010; Zhai et al., 2010; Zhang, 2013), an improved method is required.

In terms of research on the topic in South Africa, no other studies besides those by Zhang and Erasmus (2015a, 2015b) could be found at the time the literature was reviewed for the current study. Zhang and Erasmus (2015a, 2015b) explored the preferences of institutional investors towards the board of directors of JSE-listed companies. By adopting a series of variables such as firm size, return volatility, share turnover ratio, beta, debt ratio, and listing history, they found that institutional investors are partially prudent. Although they used one-year lagged variables to control for the endogeneity problem, this does not seem sufficient. In this regard, the results of this chapter expand the existing literature on prudent investment behaviour of institutional investors in the context of South Africa and China.

To summarise, prudent institutional investors are generally expected to invest in firms characterised by large sizes, long listing histories, high dividend pay-out ratios and adequate trading liquidity, as well as firms that are included in a major market index. By contrast, prudent investors' preferences are expected to be negatively related to debt ratios, betas and volatility. Different types of institutional investors are furthermore expected to exhibit different investment behaviour.

2.3 Data and methods

This section introduces the sample used in this chapter, the variables and their definitions, and reports on the descriptive analysis of the variables. It also provides an overview of the methodology employed in this chapter.

2.3.1 Data source and sample

The sample is selected from all companies listed on the main board of the JSE in South Africa, as well as those listed on the main board of the SSE and SZSE in China. South African data for aggregated institutional ownership and the FTSE/JSE Top 40 index (henceforth Top 40 index) constituents were collected from the Bloomberg (2015) database, while other data used in this chapter were extracted from the INET BFA (2015) database. Considering that the King III report, which was released in 2009, resulted in many changes to corporate governance practices in South Africa, the research period for the current chapter was the years 2010 to 2013. Chinese data related to institutional ownership were collected from the RESSET (2015) database, and other data were obtained from the CSMAR (2015) database. Because the NTS Reform in China had basically been completed by 2007[4], this chapter covered the six-year period from 2008 to 2013 for Chinese institutional investors. The sample was screened against the following criteria: (1) Companies should have been listed for at least one year before the date of their calendar year-end for 2010 in South Africa and 2008 in China, to ensure that their ownership structure, capital structure and financial performance had not been affected by their initial public offerings (IPOs). (2) Companies in the financial sector were excluded, since those companies have limited comparability to those in other sectors. (3) Companies with incomplete data for all variables were excluded, since a balanced panel data analysis is used in this chapter.

[4]The NTS Reform, also known as the Split Share Structure Reform, started in 2005, and it provided the solution to the circulation problem of NTS. As a result of the NTS Reform, a large number of shares was released and the Chinese stock market gained market liquidity, which created increased opportunities for institutional investors to participate in the capital market. Simultaneously, it increased the value of investing in the Chinese stock market and provided wider development opportunities for institutional investors. Therefore, it would be meaningful to discuss the topic in relation to institutional investors' behaviour and engagement during the full circulation period, i.e. post the NTS Reform.

Having eliminated certain firms according to the above-mentioned criteria, the final sample consisted of 732 observations for 183 firms in South Africa covering the period 2010 to 2013, and 6 624 observations for 1 104 firms in China over the period 2008 to 2013.

2.3.2 Variables

2.3.2.1 Measurements of institutional stockholding preferences

This chapter examined the stockholding preferences of institutional investors. Institutional preference is represented by institutional ownership (IO), measured by the proportion of a firm's total shares held by institutional investors. The same measurement was employed in studies by Bennett et al. (2003) and Bushee et al. (2014), with a high level of IO reflecting greater institutional investor stockholding preference towards an investee company.

Considering the heterogeneity of institutional investors, the overall level of IO (IO_TOTAL) was further classified to distinguish between pressure-insensitive institutional investors (IO_INSEN) and pressure-sensitive institutional investors (IO_SEN) based upon differences in the current or potential business connections between institutional investors and their portfolio companies[5]. Due to data limitations, comparable information on institutional investors' classification in South Africa was not available, and this classification thus applies to the Chinese sample only. According to Liu and Ni (2015), Peng (2015), Yao and Niu (2015) and Yin, Li and Gao (2010), pressure-insensitive institutional investors in the Chinese context include mutual funds, social security funds and QFIIs; while pressure-sensitive institutional investors consist of insurance companies, trusts, and securities companies.

The descriptive statistics of institutional ownership are reported in Table 2.1. As indicated in Panel A of Table 2.1, the mean (median) aggregated institutional ownership over the period 2010 to 2013 in South Africa was 40 per cent (36.3 per

[5] The same classification of institutional investors was employed in previous studies, such as Almazan et al. (2005), Brickley et al. (1988), Chung and Wang (2014), Cornett et al. (2007), Elyasiani and Jia (2010), Ferreira and Matos (2008), Jara-Bertina, Lo´pez-Iturriaga and Lo´pez-de-Foronda (2012), and Ruiz-Mallorquí and Santana-Martín (2011).

cent). It should be noted that South African institutional ownership consistently stayed around 30 per cent during the period 2010 to 2012, but subsequently increased to 56 per cent during 2013[6]. For China, Panel A of Table 2.1 reports that the mean (median) shareholding by institutional investors was 16.8 per cent (9.8 per cent) over the period 2008 to 2013. During the period 2008 to 2010, the percentage of shares held by institutional investors declined slightly, while it increased from 2010 to 2013. Accordingly, South Africa outperformed China in the institutionalisation of their equity markets. This phenomenon is inseparable from South Africa's advanced regulatory environment and financial liberalisation compared to China's, which was discussed in Section 1.2.

Table 2.1

Descriptive statistics of institutional ownership

	Mean	SD	Min	Max	Med	Mean	SD	Min	Max	Med
Panel A Holdings of aggregated institutional ownership										
	IO_TOTAL (South Africa)					IO_TOTAL (China)				
2008	-	-	-	-	-	0.197	0.202	0.000	0.918	0.124
2009	-	-	-	-	-	0.154	0.171	0.000	0.918	0.092
2010	0.341	0.257	0.000	0.956	0.323	0.151	0.170	0.000	0.918	0.089
2011	0.376	0.256	0.000	0.956	0.358	0.162	0.180	0.000	0.919	0.095
2012	0.324	0.234	0.000	0.920	0.297	0.172	0.188	0.000	0.906	0.098
2013	0.560	0.307	0.000	0.956	0.579	0.173	0.189	0.000	0.905	0.097
Total	0.400	0.280	0.000	0.956	0.363	0.168	0.184	0.000	0.919	0.098
Panel B Holdings of pressure insensitive and sensitive institutional investors										
	IO_INSEN (China)					IO_SEN (China)				
2008	0.060	0.103	0.000	0.665	0.008	0.007	0.025	0.000	0.449	0.000
2009	0.069	0.095	0.000	0.544	0.025	0.008	0.021	0.000	0.206	0.000
2010	0.065	0.090	0.000	0.543	0.027	0.010	0.021	0.000	0.204	0.000
2011	0.056	0.084	0.000	0.566	0.020	0.012	0.022	0.000	0.196	0.003
2012	0.047	0.079	0.000	0.553	0.012	0.014	0.022	0.000	0.219	0.006
2013	0.039	0.071	0.000	0.448	0.008	0.013	0.026	0.000	0.265	0.003
Total	0.056	0.088	0.000	0.665	0.016	0.011	0.023	0.000	0.449	0.000

This table reports the descriptive statistics of aggregated and disaggregated institutional ownership. Panel A presents descriptive statistics of IO_TOTAL for 183 South African firms over the period 2010 to 2013, and 1 104 Chinese firms over the period 2008 to 2013. Panel B presents the descriptive statistics of disaggregated institutional ownership (i.e. IO_INSEN and IO_SEN) for 1 104 Chinese firms over the period 2008 to 2013. Variable definitions are reported in Appendix 1.

[6] This phenomenon is mainly attributed to the significant increase of AuM by institutional investors such as retirement funds and CIS during 2013; this year moreover saw a dramatic growth in the net flow of assets for CIS in securities, as reported in the FSB Annual Report (2013, 2014). More importantly, the Institute of International Finance (2014) reported in a research note that there was a shift in investor preferences from bonds to equities in South Africa during 2013.

Pressure-insensitive and pressure-sensitive institutional ownership in China displayed different trends during the period 2008 to 2013, as reported in Panel B of Table 2.1. In general, the average percentage of shares held by pressure-insensitive institutional investors decreased over this period, reflected by the means IO_INSEN of 6.0 per cent and 6.9 per cent in 2008 and 2009 respectively, compared to a mean of 3.9 per cent in 2013. By contrast, pressure-sensitive institutional ownership increased over the period, moving from a mean of 0.7 per cent in 2008 to levels of 1.4 per cent and 1.3 per cent in 2012 and 2013 respectively.

2.3.2.2 Prudence measurements

Based on the literature review of institutional investors' stockholding preferences provided in Section 2.2, a set of prudent stockholding variables was identified. Variables included as proxies for prudent investment are return on equity (ROE), stock return volatility (VOL), beta (BETA), financial leverage (LEV), share turnover ratio (TURN), size (SIZE), listing history (AGE) and dividend pay-out ratio (DP).

In addition to the firm-specific characteristics discussed above, this chapter also appraises investor prudence by incorporating an indicator variable that reflects whether or not a firm is a constituent of a major market index (INDEX), namely the Top 40 index (TOP40) in South Africa and the CSI 300 index (CSI300) in China[7]. The descriptive statistics for major variables used in the analysis are shown in Table 2.2.

The descriptive statistics presented in Table 2.2 show that the mean ROE for the selected South African companies is 0.026, lower than the mean value of 0.071 reported by their Chinese counterparts. While the South African ROE values demonstrate high dispersion, with a standard deviation value of 2.119, the comparable figure for China is only 0.187. The selected companies in both South Africa and China are highly dependent on debt,

[7] The Top 40 index and the CSI 300 index are employed as proxies of large-cap stock and used for indexing investing in South African and Chinese markets respectively, consistent with Zhang and Erasmus (2015c). The Top 40 index represents the 40 largest JSE companies ranked by full market capitalisation (JSE, n.d.), while the CSI 300 index is comprised of the 300 A-share listed companies on the SSE and SZSE with the largest market capitalisation and liquidity (China Securities Index Company Limited, 2015).

with mean values for LEV of 0.588 and 0.522 respectively. The descriptive statistics also reveal that compared to the South African companies, the Chinese companies are larger in size (with a mean SIZE of 22.107 compared to a value of 14.595), but younger in terms of listing history (with a mean AGE of 2.450 compared to a value of 2.755), indicating that Chinese market started late than South African counterpart, but it is featured with rapid development which is consistent with the statement made in Section 1.2.

Table 2.2

Descriptive statistics of major variables

Variable	Mean	SD	Min	Max	Med
Panel A Descriptive statistics for South Africa					
ROE	0.026	2.119	-17.561	3.610	0.179
LEV	0.588	0.453	0.002	6.754	0.536
SIZE	14.595	2.035	7.533	20.420	14.581
AGE	2.755	0.969	0.000	4.771	2.773
TURN	0.029	0.027	0.000	0.157	0.021
BETA	0.550	0.507	-0.563	2.324	0.472
VOL	0.434	0.338	0.160	2.218	0.320
DP	0.455	0.432	0.000	4.478	0.356
TOP40	0.156	0.363	0.000	1.000	0.000
Panel B Descriptive statistics for China					
ROE	0.071	0.187	-4.891	4.485	0.072
LEV	0.522	0.192	0.002	1.094	0.536
SIZE	22.107	1.342	17.467	28.482	21.976
AGE	2.450	0.394	0.000	3.135	2.485
TURN	0.392	0.288	0.002	2.586	0.322
BETA	0.999	0.194	-3.415	1.7648	1.022
VOL	0.471	0.263	0.125	18.428	0.440
DP	0.274	0.561	0.000	3.947	0.295
CSI300	0.193	0.395	0.000	1.000	0.000

This table reports the descriptive statistics of the variables included in the regressions for 183 South African firms over the period 2010 to 2013 (732 observations) in Panel A, and 1 104 Chinese firms over period 2008 to 2013 (6 624 observations) in Panel B. Variable definitions are reported in Appendix 1.

The average values of TURN and BETA are higher for the Chinese companies than for the South African ones, while the mean values reported for VOL are relatively close for the two countries (0.434 for South Africa and 0.471 for China). The South African companies exhibit substantially higher average DP values, reflecting average dividend pay-outs of 45.5 per cent compared to only 27.4 per cent for the Chinese

companies. Such evidence to some extent illustrates equity market and investors in South Africa are more mature than their peers in China. The mean value of TOP40 (CSI300) for the selected South African (Chinese) companies is 0.156 (0.193), suggesting that on average, 15.6 per cent (19.3 per cent) of the selected South African (Chinese) companies are constituents of the Top 40 index (CSI 300 index).

2.3.3 Methodology

Regressions were executed to test prudent stockholding behaviour among institutional investors, as shown in Equation 2.1.

$$IO_{k,it} = \alpha_0 + \lambda_1 ROE_{it} + \lambda_2 SIZE_{it} + \lambda_3 AGE_{it} + \lambda_4 LEV_{it} + \lambda_5 TURN_{it} + \lambda_6 BETA_{it} + \lambda_7 VOL_{it} + \lambda_8 DP_{it} + \varepsilon_{it} \quad (2.1)$$

Furthermore, in order to explore the stockholding preferences towards constituents of the market index, this chapter also included the INDEX variable (TOP40 for South Africa and CSI300 for China) in regressions, as reflected by Equation 2.2. At the same time, institutional investors' stockholding behaviour in relation to financial performance within index and non-index listed companies is examined as well, by including ROE*INDEX.

$$IO_{k,it} = \alpha_0 + \lambda_1 ROE_{it} + \lambda_2 SIZE_{it} + \lambda_3 AGE_{it} + \lambda_4 LEV_{it} + \lambda_5 TURN_{it} + \lambda_6 BETA_{it} + \lambda_7 VOL_{it} + \lambda_8 DP_{it} + \lambda_9 INDEX_{it} + \lambda_{10} ROE_{it} * INDEX_{it} + \varepsilon_{it} \quad (2.2)$$

Before conducting the regressions, a correlation analysis of the firm characteristic variables was first performed (see Table 2.3). The results in Table 2.3 suggest that the variables included in the analysis were not highly correlated within either the South African or the Chinese sample. A possible exception was the correlation between SIZE and INDEX, where the correlation coefficients exceeded 0.5 in both Panel A and Panel B (Table 2.3). However, this was not considered problematic, as the regressions would be processed for SIZE by both including and excluding INDEX.

Table 2.3

Correlation matrix

	ROE	LEV	SIZE	AGE	TURN	BETA	VOL	DP	INDEX
	1	2	3	4	5	6	7	8	9
Panel A Correlation matrix for South Africa									
1	1								
2	-0.086**	1							
3	0.057	-0.164***	1						
4	0.014	-0.089**	0.293***	1					
5	0.029	-0.005	0.339***	0.199***	1				
6	-0.064*	0.158***	0.190***	0.123***	0.230***	1			
7	0.002	-0.090**	0.008	-0.103***	-0.080**	0.022	1		
8	0.009	-0.040	0.038	-0.020	0.031	-0.029	-0.173***	1	
9	0.040	-0.031	0.543***	0.070*	0.437***	0.238***	-0.037	0.023	1
Panel B Correlation matrix for China									
1	1								
2	-0.127***	1							
3	0.162***	0.359***	1						
4	-0.018	0.036***	-0.084***	1					
5	-0.062***	-0.043***	-0.369***	-0.115***	1				
6	-0.076***	-0.009	-0.167***	-0.003	0.373***	1			
7	-0.002	-0.011	-0.165***	-0.147***	0.254***	-0.014	1		
8	-0.138***	0.006	0.009	-0.096***	-0.005	0.038**	0.063***	1	
9	0.142***	0.036***	0.589***	-0.131***	-0.223***	-0.134***	-0.038***	0.021	1

This table reports correlation matrix of the firm characteristics variables. Panel A presents the Pearson correlation matrix for 183 South African firms over the period 2010 to 2013, while Panel B reports the correlations for 1 104 Chinese firms over the period 2008 to 2013. ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

This chapter estimates the regression models with the panel data, and considers both pooled OLS and FE estimations. Considering the potential endogeneity problems caused by reverse causality, especially the fact that past values of the dependent variable (institutional ownership in this study) are likely to influence current prudence variables, Sys-GMM estimations are employed to address this endogeneity problem, in line with previous studies on dynamic panel data methods (Blundell & Bond, 1998). Unlike cross-sectional estimations, FE can deal with the endogeneity problem. It is, however, effective only for the endogeneity problem caused by unobservable heterogeneity. As for endogeneity problems resulting from an intertemporal effect, as demonstrated in this chapter, FE might not be appropriate.

Sys-GMM is likely to improve pooled OLS and FE estimation methods within the set of panel data considered in this study. By using Sys-GMM, the endogeneity problems caused by unobservable heterogeneity as well as reverse causality can be mitigated to some extent. Furthermore, this method is applicable to a situation where it is difficult to find instruments for the endogenous variables.

The following equations were constructed to execute Sys-GMM estimation. Apart from AGE, the other explanatory variables are treated as endogenous, and their lags of two and more periods as instruments were obtained.

$$IO_{k,it} = \alpha_0 + \beta_k IO_{k,t-1} + \lambda_1 ROE_{it} + \lambda_2 SIZE_{it} + \lambda_3 AGE_{it} + \lambda_4 LEV_{it} + \lambda_5 TURN_{it} + \lambda_6 BETA_{it} + \lambda_7 VOL_{it} + \lambda_8 DP_{it} + \varepsilon_{it} \quad (2.3)$$

$$IO_{k,it} = \alpha_0 + \beta_k IO_{k,t-1} + \lambda_1 ROE_{it} + \lambda_2 SIZE_{it} + \lambda_3 AGE_{it} + \lambda_4 LEV_{it} + \lambda_5 TURN_{it} + \lambda_6 BETA_{it} + \lambda_7 VOL_{it} + \lambda_8 DP_{it} + \lambda_9 INDEX + \lambda_{10} ROE_{it} * INDEX_{it} + \varepsilon_{it} \quad (2.4)$$

where $IO_{k,it}$ refers to variable k (k = TOTAL, INSEN and SEN) of institutional ownership for company i at time t. ROE_{it}, $SIZE_{it}$, AGE_{it}, LEV_{it}, $TURN_{it}$, $BETA_{it}$, VOL_{it} and DP_{it} are prudence variables, representing financial performance, size, listing history, financial leverage, share turnover, beta, return volatility and dividend pay-out level for company i at time t respectively. $INDEX_{it}$ is a dummy variable, representing the $TOP40_{it}$ for South Africa and the $CSI300_{it}$ for China. ROE_{it}*$INDEX_{it}$ is the interaction item between ROE_{it} and $INDEX_{it}$. α_0 is the intercept; β_k is the regression coefficient for $IO_{k,it-1}$; λ_j (j = number of prudence variables) is the regression coefficient for each prudence variable; and ε_{it} is the error term.

2.4 Results

This section reports and discusses the regression results obtained from the examination of the prudent stockholding behaviour of institutional investors at the aggregated and disaggregated level. Aside from looking at heterogeneous preferences

among different types of institutional investors, this section also addresses the heterogeneous preferences towards financial performance observed between institutional investors who adopt an indexing strategy and those who do not.

2.4.1 Aggregate institutional preferences for prudent investment

Table 2.4 shows the regression results on the stockholding preferences of institutional investors overall. The results, estimated by the pooled OLS (Columns 1 and 4), FE (Columns 2 and 5) and Sys-GMM (Columns 3 and 6) approaches, report that IO_TOTAL is significantly and positively related to ROE, which indicates that institutional investors in both South Africa and China concentrate their portfolios in firms with sound financial performance. In addition, IO_TOTAL is positively associated with AGE, TURN and DP at a high significance level (see Columns 1 to 3); that is, institutional investors as a whole are attracted by high dividend-paying firms with long listing histories and high trading liquidity in South Africa. In China, institutional investors show preferences toward firms with low financial leverage (LEV) and low betas (BETA) (see Columns 4 to 6). These findings are consistent with most prior studies, and institutional investors appear to be prudent from this point of view.

Nonetheless, institutional investors are interested in companies with high return volatility in both South Africa and China, with evidence that IO_TOTAL is positively and significantly related to VOL. This behaviour is not in line with what can be considered prudent. It is, however, consistent with Bennett et al. (2003), Falkenstein (1996) and Gompers and Metrick (2001), who found that US institutional investors prefer stocks with high volatility, and Ferreira and Matos (2008), who observed that institutional investors tend to hold high idiosyncratic volatility stocks based on 27 countries' evidence. Moreover, Brands et al. (2006) observed that there are stronger preferences by Australian institutional investors for higher volatility stocks; one

possible explanation being that a divergence in opinions among the market participants exists about the intrinsic price of a security.

Furthermore, Columns 4 to 6 of Table 2.4 report that IO_TOTAL is significantly and negatively related to TURN in the context of China, suggesting that in China, stocks with low trading liquidity seem more attractive to institutional investors, which is in contrast with most previous studies that support preferences by institutional investors for higher trading liquidity. However, this finding provides support to Khurshed et al. (2011) who showed that UK institutional investors prefer firms with low trading liquidity, and is similar to the Chinese evidence from Liu and Yu (2010) who suggested that institutional investors prefer illiquid stocks since the Chinese equity market is characterised by high levels of share turnover, the choice of less liquid stocks by institutional investors can be interpreted as a means against speculation. Hence, it seems inappropriate to unequivocally conclude that Chinese institutional investors exhibit imprudent investment behaviour in this case; in contrast, they appear to be cautious.

Aside from ROE, AGE, TURN, VOL and DP (ROE, LEV, BETA, TURN and VOL), the remaining firm characteristics do not play a significant role in determining stockholding preferences of institutional investors as a whole in South Africa (China). Note that although some remaining firm characteristics are significantly related to IO_TOTAL within pooled OLS estimation, their relationships become insignificant when estimated by the FE and Sys-GMM approaches. These findings illustrate the importance to address the potential endogeneity problem.

Table 2.4

Regressions of aggregate institutional preferences for stocks

	IO_TOTAL (South Africa)			IO_TOTAL (China)		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
ROE	0.003***	0.014***	0.182*	0.258***	0.082**	0.729*
	(2.73)	(4.92)	(1.90)	(5.58)	(2.39)	(1.76)
LEV	-0.028	-0.369	-0.496	-0.045**	-0.095**	-0.151*
	(-0.35)	(-1.50)	(-0.70)	(-2.55)	(-2.17)	(-1.75)
SIZE	0.042***	0.016	0.162	0.072***	0.018	0.102
	(4.22)	(0.16)	(0.16)	(3.11)	(1.45)	(0.47)
AGE	0.035**	0.275**	0.162**	0.024**	0.023	0.042
	(2.26)	(2.61)	(2.45)	(2.53)	(0.95)	(0.52)
TURN	0.248***	0.307***	0.821***	-0.143***	-0.075***	-0.033*
	(4.75)	(4.07)	(3.28)	(-8.52)	(-6.02)	(-1.96)
BETA	-0.021	-0.076	-0.536	-0.173***	-0.107***	-0.038*
	(-0.64)	(-0.49)	(-1.39)	(-7.97)	(-6.02)	(-1.94)
VOL	0.339***	0.486***	0.658***	0.368***	0.229***	0.147***
	(2.78)	(3.14)	(3.70)	(5.78)	(7.65)	(3.99)
DP	0.010*	0.008***	0.082***	-0.002	-0.002	-0.021
	(1.82)	(2.75)	(2.76)	(-1.60)	(-1.45)	(-0.39)
IO_TOTAL_{t-1}			0.593**			0.781***
			(2.21)			(10.03)
Intercept	-0.383***	-4.929***	-2.392**	0.179***	-0.209	-0.027
	(-2.89)	(-4.82)	(-2.33)	(5.33)	(-0.82)	(-0.38)
AR(1) *p*-value			0.207			0.001
AR(2) *p*-value						0.402
Sargan *p*-value			0.233			0.282

Table 2.4 (continued)

	IO_TOTAL (South Africa)			IO_TOTAL (China)		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
Hansen *p*-value			0.633			0.696
R^2 (%)	27.75	65.70		8.77	79.23	
N	732	732	549	6 624	6 624	5 520

This table presents pooled OLS, FE and Sys-GMM estimations of aggregate institutional preferences for stocks over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The dependent variable is IO_TOTAL. The results in the context of South Africa and China are reported in Columns 1 to 3, and 4 to 6 respectively. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject null hypotheses, and hence FE is more suitable compared to the pooled OLS and RE. For the Sys-GMM, AR(1) and AR(2) are tests for first-order and second-order serial correlation in the first-differenced residuals, under the null hypothesis of no serial correlation. Since only four years of data is available for South Africa, only AR(1) is reported and AR(2) is not available. The Sargan and Hansen tests of over-identification are carried out under the null hypothesis that all instruments are valid. The Sargan test is not robust to heteroscedasticity and autocorrelation; the Hansen test is also reported, which is robust (but weakened by many instruments). The regression results indicated in Columns 3 and 6 show that the Hansen test does not reject the null hypothesis, suggesting that instrument variables are valid for the Sys-GMM estimation. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

2.4.2 Prudent preferences of institutional investors: A disaggregated view

Given that data concerning disaggregated institutional ownership were not available for South Africa, the comparison of investment preferences between pressure-insensitive and pressure-sensitive institutional investors is addressed only in Chinese context, which is reported in Table 2.5. IO_INSEN as well as IO_SEN have a statistically significant negative association with TURN within pooled OLS, FE and Sys-GMM estimations, and an insignificant relationship with DP and AGE, which indicate that both pressure-insensitive and pressure-sensitive institutional investors tend to hold stocks with low trading liquidity, but care little about dividend pay-out and listing history. These observations are the same as those found among institutional investors as a whole in the previous section.

Nonetheless, there are heterogeneous preferences between pressure-insensitive and pressure-sensitive institutional investors. In terms of financial performance, IO_INSEN (IO_SEN) is significantly positively (negatively) related to ROE. Pressure-sensitive institutional investors in this case are attracted by poorly performing firms. This apparently imprudent behaviour could to some extent be the result of the potential or current business relationship between pressure-sensitive institutional investors and their portfolio companies.

At the same time, IO_INSEN is significantly and negatively related to SIZE, suggesting that pressure-insensitive institutional investors prefer investment in smaller firms to investment in large firms. Although this result contradicts the findings from the majority of prior studies (e.g. Badrinath et al., 1989; Brands et al., 2006; Mishra, 2013; Pinnuck, 2004), it is consistent with results reported by Khurshed et al. (2011), where the portion of a firm's shares held by institutional investors is negatively associated with firm size. Similarly, Bennett et al. (2003) found that institutional investors shift their preferences towards smaller capitalisation stocks. That institutional investors prefer the stocks of smaller firms is in accordance with the

earlier finding of this chapter about their preferences for stocks with lower levels of share turnover. In addition, it seems that smaller stocks provide opportunities to exploit informational advantages (Khurshed et al., 2011); as informed investors, pressure-insensitive institutional investors can take greater advantage of information in smaller stocks than would be the case for large stocks. Furthermore, institutional investors may also show greater interest in smaller stocks as they are less expensive than larger ones, given that larger capitalisation stocks are regularly over-priced (Khurshed et al., 2011). By contrast, large firm seems more attractive to pressure-sensitive institutional investors.

The heterogeneity between pressure-insensitive and pressure-sensitive institutional investors is also presented in their investment preferences towards BETA, LEV and VOL. That is, pressure-insensitive institutional investors tilt toward investing in stocks with low betas but high return volatility and high financial leverage. By contrast, pressure-sensitive institutional investors tend to hold firms with low financial leverage and low return volatility, but have weak associations with betas.

Table 2.5

Regressions of institutional preferences for stocks at the disaggregated level

	IO_INSEN			IO_SEN		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
ROE	0.430***	0.259***	0.380***	-0.023***	-0.017***	-0.032**
	(16.97)	(9.51)	(3.37)	(-4.14)	(-2.88)	(-1.96)
LEV	0.031***	0.034*	0.028**	-0.024***	-0.020***	-0.026**
	(3.14)	(1.72)	(2.57)	(-3.17)	(-3.31)	(-2.29)
SIZE	-0.048**	-0.029***	-0.009***	0.011***	0.004**	0.007***
	(-2.27)	(-4.45)	(-4.64)	(3.62)	(2.19)	(2.61)
AGE	-0.011	-0.013	-0.001	0.001	0.009	0.002
	(-1.30)	(-1.35)	(-0.11)	(1.07)	(1.12)	(0.36)
TURN	-0.058***	-0.024***	-0.050***	-0.004**	-0.005**	-0.004**
	(-7.91)	(-3.58)	(-5.01)	(-2.27)	(-2.02)	(-2.13)
BETA	-0.133***	-0.094***	-0.104**	-0.001	-0.002	-0.015
	(-11.46)	(-6.00)	(-2.29)	(-0.35)	(-0.92)	(-1.40)
VOL	0.345***	0.066***	0.256***	-0.019**	-0.013*	-0.016*
	(11.54)	(4.57)	(3.56)	(-2.39)	(-1.80)	(-1.66)
DP	-0.001	-0.001	-0.003	-0.000	-0.000	-0.001
	(-0.41)	(-0.69)	(-1.21)	(-1.06)	(-0.85)	(-0.33)
IO_INSEN_{t-1}			0.529***			
			(5.96)			
IO_SEN_{t-1}						0.619***
						(5.01)
Intercept	0.043***	0.801***	0.188***	0.021***	-0.070	-0.130**
	(4.13)	(5.77)	(3.65)	(5.63)	(-1.62)	(-2.56)
AR(1) *p*-value			0.000			0.000
AR(2) *p*-value			0.107			0.152

Table 2.5 (continued)

	IO_INSEN			IO_SEN		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
Sargan *p*-value			0.230			0.778
Hansen *p*-value			0.295			0.827
R^2 (%)	26.52	77.50		2.26	67.99	
N	6 624	6 624	5 520	6 624	6 624	5 520

This table presents pooled OLS, FE and Sys-GMM estimations of institutional preferences for stocks at the disaggregated level over the period 2008 to 2013 in China. The dependent variables are IO_INSEN and IO_SEN. The results for IO_INSEN and for IO_SEN are reported in Columns 1 to 3 and 4 to 6 respectively. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the Sys-GMM, AR(1) and AR(2) are tests for first-order and second-order serial correlation in the first-differenced residuals, under the null hypothesis of no serial correlation. The Sargan and Hansen tests of over-identification are carried out under the null hypothesis that all instruments are valid. The Sargan test is not robust to heteroscedasticity and autocorrelation; the Hansen test is also reported, which is robust (but weakened by many instruments). The regression results indicated in Columns 3 and 6 show that the Hansen test does not reject the null hypothesis, suggesting that instrument variables are valid for the Sys-GMM estimation. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

2.4.3 Attitudes towards indexing strategy

This chapter evaluates prudent investment by including an indicator variable to reflect whether or not a firm is a constituent of the Top 40 index in South Africa or the CSI 300 index in China. The results indicated in Columns 1 to 3 of Table 2.6 show that IO_TOTAL is not significantly related to INDEX, that is, whether companies are listed in the Top 40 index or not seems unlikely to influence stockholding decisions made by institutional investors in South Africa. Considering the relatively small number of stocks listed on the JSE and included in the Top 40 index, exclusively focusing on firms included in the Top 40 index may not offer optimal investment portfolio diversification. Institutional investors could, however, still be considered prudent in this sense based on the insignificant correlation observed between ROE and INDEX indicated in Panel A of Table 2.3.

Columns 1 and 3 of Table 2.6 also report that ROE*INDEX is significantly and negatively related to IO_TOTAL, indicating that compared to their non-Top 40 index counterparts, less attention is paid by institutional investors to the past financial performance of companies listed in the Top 40 index. As suggested by Filatotchev and Dotsenko (2015), the reliance on an indexing investment strategy illustrates that institutional investors believe their portfolio under this strategy is able to generate financial returns comparable to market returns. In this regard, the findings of this research to some extent demonstrate that institutional investors in South Africa believe that Top 40 index listed stocks are high quality stocks and are able to achieve sound financial returns. It should be also noted that perhaps this phenomenon occurs because the mandates of some institutional investors force them to invest only in Top 40 index listed companies, regardless of the past financial performance of these companies.

Table 2.6

Regressions of aggregate institutional preferences for stocks (including INDEX)

	IO_TOTAL (South Africa)			IO_TOTAL (China)		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
ROE	0.004***	0.013***	0.039***	0.316***	0.101*	1.103***
	(2.80)	(3.83)	(2.82)	(6.12)	(1.86)	(3.20)
LEV	-0.019	-0.339	-1.677	-0.041*	-0.082**	-0.033*
	(-0.25)	(-1.62)	(-1.51)	(-1.88)	(-2.06)	(-1.73)
SIZE	0.048***	0.022	0.735	0.004	0.009	0.018
	(4.51)	(0.21)	(1.11)	(0.72)	(0.72)	(1.60)
AGE	0.030*	0.386***	0.095**	0.021**	0.005	0.025
	(1.92)	(3.77)	(2.07)	(2.24)	(0.19)	(0.21)
TURN	0.255***	0.273***	1.021***	-0.143***	-0.081***	-0.039***
	(4.99)	(3.74)	(3.32)	(-8.15)	(-4.30)	(-2.77)
BETA	-0.021	-0.097	-0.084	-0.177***	-0.106***	-0.037*
	(-0.66)	(-1.33)	(-0.32)	(-8.16)	(-5.57)	(-1.84)
VOL	0.350***	0.500***	0.344***	0.403***	0.222***	0.087**
	(2.92)	(3.27)	(3.82)	(6.30)	(4.41)	(2.01)
DP	0.009*	0.009***	0.045***	-0.003	-0.001	-0.002
	(1.88)	(3.06)	(3.54)	(-0.24)	(-0.84)	(-0.04)
INDEX	-0.106	-0.123	-0.828	-0.007*	-0.025**	-0.076***
	(-1.36)	(-1.12)	(-1.60)	(-1.83)	(-2.49)	(-2.63)
ROE*INDEX	-0.090**	-0.005	-3.210***	-0.054	-0.148***	-0.856**
	(-2.19)	(-0.06)	(-2.90)	(-0.78)	(-2.86)	(-2.30)
IO_TOTAL_{t-1}			0.961***			0.731***
			(3.48)			(8.06)
Intercept	-0.440***	-4.722***	-1.521***	0.099	0.057	-0.440
	(-3.21)	(-4.59)	(-3.12)	(0.86)	(0.24)	(-1.39)

Table 2.6 (continued)

	IO_TOTAL (South Africa)			IO_TOTAL (China)		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
AR(1) *p*-value			0.150			0.000
AR(2) *p*-value						0.449
Sargan *p*-value			0.009			0.272
Hansen *p*-value			0.214			0.558
R^2 (%)	29.08	66.55		7.90	86.93	
N	732	732	549	6 624	6 624	5 520

This table presents pooled OLS, FE and Sys-GMM estimations of aggregate institutional preferences towards market index stocks (Top40 for South Africa and CSI300 for China) and heterogeneous institutional preferences towards the financial performance of index and non-index stocks over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The dependent variable is IO_TOTAL. The results for South Africa and China are reported in Columns 1 to 3 and 4 to 6 respectively. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the Sys-GMM, AR(1) and AR(2) are tests for first-order and second-order serial correlation in the first-differenced residuals, under the null hypothesis of no serial correlation. South Africa owns only four-year data, thus only AR(1) is reported, and AR(2) is not available. The Sargan and Hansen tests of over-identification are carried out under the null hypothesis that all instruments are valid. The Sargan test is not robust to heteroscedasticity and autocorrelation; the Hansen test is also reported, which is robust (but weakened by many instruments). The regression results indicated in Columns 3 and 6 show that the Hansen test does not reject the null hypothesis, suggesting that instrument variables are valid for the Sys-GMM estimation. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

In the Chinese context, IO_TOTAL is negatively and significantly related to INDEX, as shown in Columns 4 to 6 of Table 2.6, suggesting that institutional investors as a whole tilt towards companies that are not listed in the CSI 300 index. Furthermore, ROE*INDEX is negatively and significantly related to IO_TOTAL, suggesting that institutional investors pay less attention to financial performance when they select firms listed on the CSI 300 index compared to their non-CSI 300 index counterparts, and illustrating that they still believe that CSI 300 stocks represent high-quality stocks, consistent with the evidence from South Africa.

Table 2.7 shows stockholding preferences that pressure-insensitive and pressure-sensitive institutional investors exhibit towards CSI 300 index constituent firms and their attitudes towards financial performance when they select these stocks. As shown in Columns 1 to 3, IO_INSEN is significantly and positively related to CSI300, indicating that pressure-insensitive institutional investors adopt a passive indexing strategy, and tend to invest companies which are constituents of the CSI 300 index over companies that are not. It is therefore not entirely surprising to see that they pay less attention to financial performance when they select CSI 300 index companies, with the evidence that ROE*CSI300 is negatively and significantly associated with IO_INSEN. For pressure-sensitive institutional investors, their preference towards CSI 300 index constituent stocks is insignificant, indicating that there is no significant difference in their attitudes towards financial performance whether or not they select CSI 300 index constituent companies.

Table 2.7

Regressions of institutional preferences for stocks at a disaggregated level (including INDEX)

	IO_INSEN			IO_SEN		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
ROE	0.403***	0.224***	0.420***	-0.028***	-0.018**	-0.043*
	(15.74)	(6.86)	(3.55)	(-4.36)	(-2.31)	(-1.77)
LEV	0.022**	0.070***	0.056***	-0.025***	-0.019***	-0.005*
	(2.18)	(3.31)	(2.96)	(-3.21)	(-3.29)	(-1.73)
SIZE	-0.011***	-0.035***	-0.021***	0.012***	0.004**	0.001*
	(-5.77)	(-4.76)	(-3.62)	(3.67)	(2.18)	(1.75)
AGE	-0.010	-0.020	-0.002	0.001	0.009	0.006
	(-1.40)	(-1.64)	(-0.07)	(1.17)	(1.12)	(1.10)
TURN	-0.060***	-0.076***	-0.043***	-0.004**	-0.005**	-0.004***
	(-7.70)	(-8.43)	(-3.66)	(-2.04)	(-2.04)	(-2.78)
BETA	-0.132***	-0.090***	-0.073***	-0.001	-0.002	-0.001
	(-10.98)	(-7.70)	(-4.45)	(-0.27)	(-0.92)	(-0.63)
VOL	0.312***	0.296***	0.194***	-0.019**	-0.013*	-0.009***
	(10.65)	(9.78)	(4.45)	(-2.42)	(-1.77)	(-2.61)
DP	-0.000	-0.000	-0.014	-0.000	-0.001	-0.000
	(-0.76)	(-0.10)	(-1.60)	(-1.05)	(-0.81)	(-0.88)
CSI300	0.035***	0.010**	0.089**	-0.001	-0.000	-0.004
	(7.58)	(2.03)	(2.30)	(-0.64)	(-0.22)	(-1.14)
ROE*CSI300	-0.103*	-0.071*	-0.268*	0.018	0.001	0.056
	(-1.94)	(-1.82)	(-1.72)	(1.29)	(0.09)	(1.12)
IO_INSEN_{t-1}			0.432***			
			(3.53)			
IO_SEN_{t-1}						0.438***
						(4.75)

Table 2.7 (continued)

	IO_INSEN			IO_SEN		
	Pooled OLS	FE	Sys-GMM	Pooled OLS	FE	Sys-GMM
	1	2	3	4	5	6
Intercept	0.299***	0.839***	0.439***	0.021***	-0.069	-0.002
	(6.24)	(5.59)	(3.61)	(5.38)	(-1.61)	(-0.23)
AR(1) *p*-value			0.000			0.000
AR(2) *p*-value			0.214			0.183
Sargan *p*-value			0.217			0.376
Hansen *p*-value			0.472			0.499
R^2 (%)	27.22	81.66		2.33	67.99	
N	6 624	6 624	5 520	6 624	6 624	5 520

This table presents pooled OLS, FE and Sys-GMM estimations preferences of pressure-insensitive and pressure-sensitive institutional investors towards market index stocks (i.e. CSI300) and their heterogeneous preferences towards the financial performance of CSI 300 index and non-index stocks over the period 2008 to 2013 for China. The results for IO_INSEN and for IO_SEN are reported in Columns 1 to 3 and 4 to 6 respectively. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the Sys-GMM, AR(1) and AR(2) are tests for first-order and second-order serial correlation in the first-differenced residuals, under the null hypothesis of no serial correlation. The Sargan and Hansen tests of over-identification are carried out under the null hypothesis that all instruments are valid. The Sargan test is not robust to heteroscedasticity and autocorrelation; the Hansen test is also reported, which is robust (but weakened by many instruments). The regression results indicated in Columns 3 and 6 show that the Hansen test does not reject the null hypothesis, suggesting that instrument variables are valid for the Sys-GMM estimation. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Although adopting a passive indexing strategy restricts pressure-insensitive institutional investors' trading flexibility to a certain extent, it encourages institutional investors to get involved in shareholder activism since this strategy prevents them from selling underperforming companies in their portfolios (Wang & Li, 2007). Moreover, mutual funds represent the biggest portion of pressure-insensitive institutional investors in the Chinese equity market. Mutual fund managers may sometimes select stocks in the market indices partly to avoid a reduction in their compensation, and to maintain their reputation in response to poor performance. At the same time, the possibility that this prudent behaviour is used to please regulators and supervisors cannot be excluded.

2.5 Conclusions

Given the prominent role that institutional investors play in financial markets, their behaviour is highly relevant to a variety of stakeholders. Prudent behaviour thus becomes critical for them to address their fiduciary responsibilities. Discussions regarding the prudent behaviour of institutional investors are continuing to attract attention from regulators, policy makers, academics and practitioners. This chapter investigated whether the stockholding behaviour of institutional investors conform to prudent investment practices.

The results reported in this chapter confirmed some conclusions from prior studies conducted within developed markets, as well as extending our understanding of institutional investor preferences towards prudent investment by introducing new empirical evidence from South Africa and China. The results showed that institutional investors overall exhibit strong preferences towards sound financial performance. In addition, they tend to invest in firms with high return volatilities and do not show preferences towards large firms with low betas, suggesting that there are common preferences shared by institutional investors as a whole in both the South African and Chinese stock markets; these results however contradict much of the earlier literature for other markets. It

should be noted that besides similarities, some differences between institutional investors within these two countries were also observed. The impact that country-specific factors could have on institutional investor preferences may explain the divergent results that were reported when considering debt ratios, listing histories, share turnovers, betas, dividend pay-out levels and indexing strategies within South Africa and China.

Different kinds of institutional investors are characterised by heterogeneous investment preferences. It would be unwise to ignore these differences and generalise the preferences of institutional investors across different classifications. This chapter therefore makes a distinction between pressure-insensitive and pressure-sensitive institutional investors in the context of China. The results show that the two groups have different investment preferences in terms of their investee firms' financial performance, debt ratio, firm size, beta, return volatility, and indexing strategy, confirming that institutional investors are not homogeneous. It worth noting that the preferences for pressure-insensitive institutional investors towards small and illiquid firms with high return volatility contradict much of prior studies, which literally reveals that pressure-insensitive institutional investors are imprudent, but they seem not when considering the Chinese inefficient market.

In addition to the heterogeneous preferences resulting from the attributes of different types of institutional investors, institutional investors hold different attitudes towards financial performance by adopting different investment strategies (i.e. selecting stocks that are constituents of the market index or not). The findings suggest that an insignificant (a significantly negative) relationship is demonstrated between a company's inclusion in the Top 40 index (CSI 300 index) and being held by institutional investors in South Africa (China). However, past financial performance was observed to become a less important indicator for institutional investors who invest in index-listed companies compared to those who do not. This chapter thus to

some extent confirms that companies included in the market index are considered trustworthy from institutional investors' point of view in both South Africa and China.

In summary, this chapter indicates that although institutional investors exhibit behaviour that could be considered prudent, some evidence to the contrary is also observed. It is likely that institutional investors are affected by psychological and social issues, which aligns with ideas from behavioural finance. The anomalies in their behaviour could suggest that institutional investors are only partially prudent. Nonetheless, it should be noted that prudence is a process, not a result. Imprudent behaviour (as reflected by stockholding in firms that do not meet the requirements of prudent investment) does not necessarily represent poor performance by an institutional investor, and vice versa. Based on these findings, the management of listed companies could adjust their corporate strategies to align their financial performance with institutional investors' preferences. Furthermore, the findings could assist market authorities in South Africa and China when re-examining policies and regulations relating to institutional investors, ultimately contributing to an improved institutional investment system.

Meanwhile, responsible ownership has become a popular term in recent years (Hendry, Sanderson, Barker & Roberts, 2007; O'Rourke, 2003; Sakuma-Keck & Hensmans, 2013), and RI could be a way to address the fiduciary duty of institutional investors by considering ESG issues - the core part of RI - as criteria when required to make prudent investment decisions. From an NI perspective, socially responsible behaviour can enhance legitimacy and social acceptance, in addition to protecting shareholders' interest and corporate performance maximisation (Ntim & Soobaroyen, 2013). The inclusion of ESG concerns is of importance to have a better understanding of the prudent investment behaviour of institutional investors, which needs to be further explored.

Having understood the selection behaviour of institutional investors, it is necessary to gain further understanding of the role that institutional investors play in their investee

companies after their investment relationships are built. In the next chapter, the focus is therefore placed on the relationship between institutional ownership and improved CFP.

CHAPTER 3

THE IMPACT OF INSTITUTIONAL OWNERSHIP ON CORPORATE FINANCIAL PERFORMANCE

3.1 Introduction

The separation of ownership and control in a company results in costs because of adverse selection and moral hazard (Marks, 2000). These costs are potentially mitigated by a number of mechanisms, such as corporate governance oversight and institutional shareholder activism (Marks, 2000). At the same time, institutional investors, who are perceived to play an important role in most financial markets around the world, have gradually transformed from passive investors into activists, and are anticipated to engage in corporate governance (Aggarwal et al., 2011; Bushee et al., 2014; Mizuno, 2010). Unlike in the US and the UK, where firms are characterised by dispersed ownership, concentrated ownership is often observed in emerging markets, such as South Africa and China (Cao, Liu & Tian, 2014; Choi, Lee & Williams, 2011; Habbard, 2010; Hu et al., 2010; Ntim, Opong, Danbolt & Thomas, 2012; Steyn & Stainbank, 2013; Zhang & Erasmus, 2016). Aside from the principal-agent problem, principal-principal agency conflicts may also be prevalent in firms with concentrated ownership structures (Hu et al., 2010; Ntim, 2013). Additionally, weak legal protection of minority shareholders' interests also presents in emerging markets like South Africa and China (Chen, Ke & Yang, 2013; Elyasiani & Jia, 2010; Fosu, 2013). Thus the importance of institutional investors in corporate governance is increasing in those countries (Hu et al., 2010), and institutional investors are encouraged to engage in efficient monitoring of management as well as the majority or controlling shareholders (Yuan et al., 2008). The question arises whether institutional investors could effectively advance corporate governance under a concentrated ownership structure.

Given that CFP serves as a means to demonstrate the impact of institutional investors

on corporate governance, the answer to whether or not institutional ownership is linked to improved corporate governance could be reflected in its association with improved CFP. More importantly, as discussed in Chapter 2, institutional investors are likely to distribute more of their capital to firms with superior financial performance when they select stocks. Yet the question of whether or not they could advance CFP and their fiduciary duty after an investment relationship has been established is under-researched in South Africa and China.

The existing studies on the impact of institutional ownership on CFP have mostly been conducted outside of South Africa and China, and yielded inconclusive results. Studies reporting a positive relationship (Aggarwal et al., 2011; Alipour, 2013; Binay, 2005; Chen, Blenman & Chen, 2008; Lee & Chuang, 2009; McConnell & Servaes, 1990; Strickland, Wiles & Zenner, 1996; Thomsen & Pedersen, 2000; Tsai & Tung, 2014) are contradicted by others where negative (Charfeddine & Elmarzougui, 2010; Florou & Pope, 2008; Liang, Lin & Huang, 2011; Pathak, Ranajee & Pradhan, 2012; Phung & Le, 2013; Rose, 2007; Shen, 2015) or insignificant relationships were observed (Carvalhal & Almeida, 2014; Dong & Ozkan, 2008; Duggal & Miller, 1999; Faccio & Lasfer, 2000; Gillan & Starks, 2007; Karpoff, 2001; Karpoff, Malatesta & Walkling, 1996; Romano, 2001; Song & Szewczyk, 2003; Wahal, 1996). These mixed results could partly be ascribed to the fact that institutional investors are not a homogeneous group. Not only do organisations differ across countries, activities and over time (Almazan et al., 2005), but they also operate under different regulations and fiduciary mandates (Hankins et al., 2008). Heterogeneity amongst institutional investors is furthermore associated with the different monitoring roles they perform. Monitoring could take either an active or a passive form; alternatively, it could be abused to exploit smaller investors (Elyasiani & Jia, 2010; Pound, 1988; Ruiz-Mallorquí & Santana-Martín, 2011). The manner in which institutional investors exert their monitoring roles could influence CFP.

Whether institutional investors become involved in shareholder activism, performing

the role of an effective monitor, or pursue their own benefits against their fiduciary responsibilities, becoming a 'grabber'[8] is still unclear in South Africa and China. The limited evidence for the impact of institutional investors on CFP is in stark contrast with the increasingly important role that institutional investors have played in those two countries. Furthermore, policy makers and practitioners in these two countries foster high expectations for institutional ownership engagement as a channel for promoting better corporate governance and CFP (see Chapter 2). Thus, it is necessary to have a better understanding of the role institutional investors play in corporate governance and financial performance in South African and Chinese firms. In spite of the similarities these two countries display as emerging markets, South Africa and China demonstrate differences in their institutional investor ownership structure, in their regulatory environments for listed companies and institutional investors, and in the development levels of their financial markets and corporate governance. These differences provide an interesting background to this research.

By employing a sample of 183 South African listed companies and 1 104 Chinese listed firms, this chapter investigated the relationship between institutional ownership and CFP. More specifically, this chapter addressed the primary research question: Is institutional ownership related to improved CFP? The following secondary research questions were also considered: (1) Are institutional investors a homogeneous group in terms of CFP improvement? (2) Are there differences in the effectiveness of advancing CFP between institutional investors with and without a passive strategy?

This results reported in this chapter indicate that, in general, institutional ownership is associated with improved CFP in both South Africa and China (after controlling for potential endogeneity problems). When distinguishing between pressure-insensitive and pressure-sensitive institutional investors, however, the impact of institutional ownership on financial performance appears to differ. In particular, pressure-

[8] According to Tang and Yuan (2010), institutional investors who collude with managers to gain their own benefits by sacrificing firm value are defined as grabbers.

insensitive institutional investors appear likely to adopt an efficient monitoring role, contributing towards improved CFP. By contrast, pressure-sensitive institutional investors do not seem effective in promoting CFP, raising questions about the efficiency of their monitoring actions. In addition, it is observed that the relationship between institutional ownership and CFP is moderated by the CSI 300 index in the Chinese context, presented by the evidence that overall and pressure insensitive institutional investors in CSI 300 index companies are more likely to advance CFP than in their non-CSI 300 index counterparts.

The remainder of this chapter is organised as follows: Section 3.2 provides an overview of the literature on the relationship between institutional ownership and financial performance. Section 3.3 reports on the source of the data required, describes the sample, provides descriptive statistics and introduces the methodology employed in this chapter. Section 3.4 focuses on the results of the regressions, and a discussion of the relationship between institutional ownership and improved CFP. Section 3.5 concludes.

3.2 Literature review

Berle and Means (1932) initiated the investigation on the relationship between ownership structure and firm performance, and implied that diffused ownership adversely affects firm performance partly because of managers' opportunism. Shleifer and Vishny (1997), however, argued that large shareholders are likely to expropriate minority shareholders within a concentrated ownership structure, due to control-cash flow rights differences. Although it is argued that institutional investors could act as a mechanism to monitor and discipline managers and control a firm's shareholders, the nature of their impact on CFP is not clear from the existing literature on this topic. When considering previous studies, the role that institutional investors play in relation to corporate performance can be summarised under (1) the efficient monitoring hypothesis, (2) the negative monitoring hypothesis, and (3) the insignificant monitoring hypothesis.

3.2.1 The efficient monitoring hypothesis

The efficient monitoring hypothesis provided by Pound (1988) illustrated that "institutional investors have greater expertise and can monitor management at a lower cost than small atomistic shareholders" (McConnell & Servaes, 1990: 599). Tang and Yuan (2010) considered these types of institutional investors as efficient monitors. Not only do institutional investors enjoy information advantages (Elyasiani & Jia, 2010; Kang, Luo & Na, 2013); they are also considered to be more sophisticated than individual investors (Ding, Hou, Kuo & Lee, 2013). Institutional investors are therefore expected to play an active monitoring role in advancing corporate governance (Atiase, Mayew & Xue, 2006; Bushee, 1998; Huang & Zhu, 2015; Nix & Chen, 2013), and in reducing firm inefficiency (Chung, Fung & Hung, 2012).

Chung and Zhang (2011) found that the proportion of a company's shares held by institutional investors in the US increased in line with corporate governance quality, and at the same time it helped to minimise monitoring and exit costs. In addition, institutional investors serve as an external corporate governance mechanism (Yuan et al., 2008). Their presence also to some extent provides a solution to the free rider problem resulting from dispersed ownership (Fan, 2010); it inhibits earnings management (Chan, Ding & Hou, 2014; Chung et al., 2002; Hadani, Goranova & Khan, 2011; Koh, 2003, 2007); and it curtails managerial opportunism (Noe, 2002). Hartzell and Starks (2003) documented that the presence of institutional investors helps to mitigate the agency problem between shareholders and managers (see also Elyasiani & Jia, 2010; Ozkan, 2007), and protects minority shareholders (Bajo et al., 2013).

Furthermore, the efficient monitoring hypothesis predicts a positive relationship between institutional ownership and firm performance. Strickland et al. (1996) found that in the US, United Shareholders Association-sponsored proposals are more successful in firms with high institutional ownership, and their shareholder activism enhances shareholder value. Similarly, Aggarwal et al. (2011) stated that institutional

investment contributes to good corporate governance around the world, with evidence from 23 countries, and they suggested that the high shareholding owned by institutional investors is associated with an improvement in corporate valuation. Additionally, by controlling potential portfolio risk, institutional investors are successful in managing clients' assets, leading to greater profitability (Thomsen & Pedersen, 2000) and adding value for their portfolio firms (Binay, 2005; Chen et al., 2008; McConnell & Servaes, 1990).

The efficient monitoring role of institutional investors in corporate performance is also confirmed in some developing markets (see Alipour, 2013; Lee & Chuang, 2009; Tsai & Tung, 2014). A 2014 investor survey by the Asset Management Association of China (AMAC) showed that around 60 per cent of the 56 890 interviewees (representing individual investors) stated that fund managers in China are professional, and that their engagement could improve corporate governance and corporate performance. Yuan et al. (2008) found that equity ownership by mutual funds has a positive effect on corporate performance in the Chinese market. Li and Han (2013) and Li, Zhao, Cao and Lu (2014) observed that Chinese institutional investors in general are related to improved CFP, where stability of institutional ownership plays a vital role in such a relationship (Zhu & Xu, 2016).

To some extent, the positive impact of institutional investors on corporate performance relies on the level and stability of institutional ownership. High and stable shareholding by institutional investors appears to promote corporate governance, as well as corporate performance. Brickley et al. (1988) indicated that block holders have stronger incentives to participate in corporate governance issues than non-block holders (also see Boone, Colombage & Gunasekarage, 2011; Demiralp, D'Mello, Schlingemann & Subramaniam, 2011). Helwege, Intintoli and Zhang (2012) found that institutional investors with large stockholdings are likely to inhibit voting with their feet; they are willing to monitor managers (Ameer, 2010; Chen, Harford & Li, 2007; Dong & Ozkan, 2008; Ramalingegowda & Yu, 2012). The findings of Kang

et al. (2013) indicated that higher Q-ratios and operating performance can be achieved by firms with larger institutional shareholding compared to smaller ones. Furthermore, stable and long-term shareholding by institutional investors is positively related to corporate performance (Hsu & Wang, 2014). When distinguishing between pressure-sensitive and pressure-insensitive institutional ownership, the stability of the shareholding by the two types of institutional investors also has a vital impact on corporate performance (Elyasiani & Jia, 2010).

3.2.2 The negative monitoring hypothesis

The negative monitoring hypothesis comprises of the conflict-of-interest hypothesis and the strategic-alignment hypothesis proposed by Pound (1988). The conflict-of-interest hypothesis suggests that "in view of other profitable business relationships with the firm, institutional investors are coerced into voting their shares with management" (McConnell & Servaes, 1990: 599), and the strategic-alignment hypothesis indicates that "institutional owners and managers find it mutually advantageous to cooperate. This cooperation reduces the beneficial effects on firm value" (McConnell & Servaes, 1990: 599). Consequently, the negative monitoring hypothesis illustrates that there is a negative relationship between institutional ownership and CFP. Tang and Yuan (2010) referred to this kind of institutional investor as a 'grabber'.

Some studies (Bushee, 2001; Burns, Kedia & Lipson, 2010; OECD, 2011b; Wahal, 1996; Wohlstetter, 1993) argue that institutional investors are unable to improve long-term corporate development, partly due to their short-term focus, insufficient managerial skills and the promotion of their own interests. Short-term institutional investors are likely to be well informed about a firm's near-term future prospects (Yan & Zhang, 2009), and they may choose to benefit from the information asymmetry from outsiders and avoid the cost of activism (Noe, 2002). At the same time, many institutional investors tend to adopt a diversifying investment strategy as a way to

meet their fiduciary duty. Such a strategy requires institutional investors to diversify investments so as to minimise their risks and to achieve financial liquidity (Brossard, Lavigne & Sakinç, 2013; Johnson, 2014). Over-diversifying their portfolio, however, may weaken the incentives for institutional shareholders to get involved in shareholder activism (OECD, 2011b; Wong, 2010). Findings from the 2014 investor survey by AMAC revealed that 24 per cent of interviewees were worried about asset managers acting against their fiduciary responsibilities in order to pursue their own benefits.

Based on evidence from the UK, Florou and Pope (2008) found that larger stockholding by institutional investors could easily lead to lower stock returns and accounting performance. Danish evidence presented by Rose (2007) indicated that joint ownership by the largest two largest institutional investors of a firm is negatively associated with corporate performance. Similarly, the negative influence of institutional investors on corporate performance was also observed in France (Charfeddine & Elmarzougui, 2010). In developing markets, Liang et al. (2011), Pathak et al. (2012) and Phung and Le (2013) argued that institutional investors have a negative impact on firm performance. Shen (2015) employed a sample consisting of A-share and H-share listed Chinese companies, and found that large institutional shareholders are not efficient in monitoring corporate governance and performance. In addition, since these large institutional shareholders pursue short-term profits by employing frequent trading, they adversely influence financial performance.

3.2.3 The insignificant monitoring hypothesis

The insignificant monitoring hypothesis predicts that there is no significant relationship between institutional ownership and CFP. The studies by Mizuno (2010) and Rose (2007) showed that the overall level of institutional ownership has no statistically significant positive influence on corporate performance. Some institutional investors are unwilling to devote much attention to corporate governance at high monitoring costs, or their participation is not sufficient to influence corporate

governance. As a result, a weak relationship between institutional ownership and corporate performance is often observed (Agrawal & Knoeber, 1996; Jalil & Rahman, 2010; Mak & Li, 2001). Studies by Duggal and Miller (1999) and Karpoff (2001) found that institutional investors' participation cannot add value to firms.

More specifically, pension funds (which are considered to be more active than other kinds of institutional investors) are also found to have a negligible impact on corporate performance (Faccio & Lasfer, 2000; Romano, 2001). Karpoff et al. (1996) suggested that there is no significant evidence that a firm's operating performance is improved by pension fund proposals. Wahal (1996) also found limited evidence that pension funds contribute towards long-term improvement in stock return and firm performance (see also Gillan & Starks, 2007). Wahal (1996) further questioned the efficacy of pension fund activism (see also Carvalhal & Almeida, 2014; Dong & Ozkan, 2008; Song & Szewczyk, 2003).

3.2.4 Impact of institutional ownership heterogeneity

As indicated by Almazan et al. (2005), not all institutional investors are equally willing or able to perform a monitoring role in corporate governance, and hence the relationship between institutional ownership and corporate performance cannot be generalised. Acknowledging the heterogeneity of institutional investors should therefore contribute to addressing the nature of the association between institutional ownership and CFP.

According to Pound's (1988) intuition, Belghitar et al. (2011), Bhattacharya and Graham (2009), Brickley et al. (1988), Elyasiani and Jia (2010) and Kochhar and David (1996) suggested that institutional investors can be classified as either pressure-insensitive or pressure-sensitive. As argued by Ryan and Schneider (2002), the pressure sensitivity of institutional investors is an important influencing factor to determine whether an institutional investor could practice shareholder activism.

Pressure-insensitive institutional investors only have an investment relationship with the firms they invest in. Cornett et al. (2007) and Ferreira and Matos (2008) stated that independent institutions with fewer existing or potential business connections to firms are more likely to become involved in corporate governance and serve as monitors; consequently, these kinds of institutions stand a good chance of promoting corporate performance.

Pressure-sensitive institutional investors hold investment as well as business relationships with their investee companies. According to the conflict-of-interest hypothesis, these institutional investors are less likely to effectively monitor and discipline the management of the companies they invest in; besides, they are unlikely to act in the best interest of other shareholders. Increased ownership by this type of institutional investor is not related to improved CFP; instead, it ruins corporate value. The findings of Almazan et al. (2005), Chung and Wang (2014), Jara-Bertin et al. (2012) and Ruiz-Mallorquí and Santana-Martín (2011) showed that pressure-insensitive institutional investors are more willing and capable to improve firm value than pressure-sensitive ones.

As mentioned previously, pension funds, insurance companies and CIS together account for the majority of the South African equity market. The role these three kinds of institutional investors play towards CFP is heterogeneous, resulting in an uncertain impact on CFP when considering institutional investors as a whole (representing a mixture of pressure-insensitive and pressure-sensitive institutional investors). This chapter conjectures that from an aggregated perspective, the relationship between institutional investors and CFP is uncertain in the context of South Africa. In China, pressure-insensitive mutual funds, assumed to be efficient monitors, make up the majority of institutional investors. Being affected by mutual funds' impact, aggregated institutional ownership is thus expected to be positively related to improved CFP.

3.3 Data and methods

This sector introduces the data source and the sample used in this chapter, and describes the selected variables. Regression models are developed and estimation methods are discussed in this section as well.

3.3.1 Data source and sample

This chapter examines the relationship between institutional ownership and improved CFP in the context of South Africa and China. South African data for aggregated institutional ownership and Top 40 index constituents were collected from the Bloomberg (2015) database, while other data were extracted from the INET BFA (2015) database. Chinese data related to institutional ownership were obtained from the RESSET (2015) database, and other data were gathered from the CSMAR (2015) database. The sample screening criteria are the same as those introduced in Chapter 2 and will not be repeated here. The final sample consisted of 183 South African firms for the period 2010 to 2013, and 1 104 Chinese firms for the period 2008 to 2013.

3.3.2 Variables

3.3.2.1 Financial performance measures

Market-based performance measures such as Tobin's Q ratio are widely used in extant studies (e.g. Boone et al., 2011; Charfeddine & Elmarzougui, 2010; Hsu & Wang, 2014; Kang et al., 2013; Lee & Chuang, 2009; Ruiz-Mallorquí & Santana-Martín, 2011; Yuan et al., 2008); however they may not be suitable indicators of financial performance for Chinese companies (He, Chakrabarty & Eden, 2016; Liu et al., 2011; Wang & Xu, 2009), as market-based performance measures assume stock market efficiency which may not hold true in the Chinese case (He et al., 2016). Compared to market-based measures, accounting-based performance measures are typically more stable, less subjective to speculation and less affected by the noise of the market (Cosh & Hughes, 1995; Hengartner, 2006). Therefore, it was decided to employ

accounting-based performance measures in this chapter[9].

Return on equity (ROE), one of the most commonly used accounting-based performance measures in ownership literature (Groß, 2007), is used as a proxy for finance performance in this chapter. A similar approach was also implemented by Alipour (2013), Bhattacharya and Graham (2009), Mizuno (2010), and Tsai and Tung (2014). To test the robustness of the results obtained, earnings per share (EPS) is adopted as an alternative measure of financial performance. This indicator is also the profit figure most widely employed in South Africa[10] (Stainbank & Harrod, 2007).

3.3.2.2 Independent variables

The independent variable is institutional ownership (IO), which is represented by the proportion of a firm's shares held by institutional investors. A similar approach was employed in prior studies by Charfeddine and Elmarzougui (2010), Cornett et al. (2007) and Yuan et al. (2008).

As discussed in Section 3.2, institutional investors as a group are far from uniform, and different types of institutional investors could be heterogeneous in promoting CFP. In addition to aggregated institutional ownership (IO_TOTAL), disaggregated institutional ownership was therefore also taken into consideration in this chapter. Based on their business relationship with their investee firms, institutional investors could be classified as either pressure-insensitive or pressure-sensitive. This chapter investigates potential heterogeneity in financial performance resulting from the

[9] This chapter adopts accounting-based performance measures only. However, due to the concern that accounting-based measures are more subject to managerial manipulation than market-based measures (Chakravarthy, 1986; Gentry & Shen, 2010), Chapter 4 will assess the earnings quality of sample companies. More importantly, it will also examine if institutional investors effectively engage in earnings management reduction, thus improving our understanding of the role institutional investors play in corporate governance and corporate performance, distinguishing between efficient monitors and grabbers. To some extent, this should compensate for the potential bias of the performance measures employed in this chapter.

[10] JSE listed companies are required to disclose headline EPS (HEPS). HEPS is viewed as the most important of all financial performance measures of a company by financial managers in South Africa (Stainbank & Harrod, 2007). Therefore, this chapter uses HEPS for South African listed companies. Basic EPS (BEPS) applies to Chinese listed companies, as they are not required to publish HEPS.

engagement of pressure-insensitive institutional ownership (IO_INSEN) and pressure-sensitive institutional ownership (IO_SEN); this classification applies to the Chinese context only considering that comparable information on institutional investors' classification in South Africa was not available.

3.3.2.3 Control variables

Based on prior studies, a number of firm-level characteristics are included as control variables in the current chapter. These variables are leverage (LEV) (Alipour, 2013; Arosa, Iturralde & Maseda, 2010; Bhattacharya & Graham, 2009; Charfeddine & Elmarzougui, 2010; Elyasiani & Jia, 2010; Kang & Kim, 2012; Lee & Chuang, 2009; Yuan et al., 2008), firm size (SIZE) (Alipour, 2013; Arosa et al., 2010; Bhattacharya & Graham, 2009; Charfeddine & Elmarzougui, 2010; Chen, Kao & Lu, 2014; Elyasiani & Jia, 2010; Hsu & Wang, 2014; Jiao & Ye, 2013; Lee & Chuang, 2009; Yuan et al., 2008), listing history (AGE) (Arosa et al., 2010; Chen et al., 2014; Elyasiani & Jia, 2010; Hsu & Wang, 2014; Jiao & Ye, 2013; Kang & Kim, 2012; Ruiz-Mallorquí & Santana-Martín, 2011), and sales growth (GROW) (Arosa et al., 2010; Bhattacharya & Graham, 2009; Elyasiani & Jia, 2010; Hsu & Wang, 2014). In addition, when conducting regressions of disaggregated institutional ownership and CFP, the aggregated ownership (IO_TOTAL) is also included as a control variable to control the potential impact of the unspecified types of institutional investors on CFP.

Companies included in an index (INDEX) are often perceived to be trustworthy. As reported in Chapter 2, institutional investors may pay less attention to financial performance when they decide to invest in index-listed companies compared to investments in non-index listed companies. In this chapter, institutional investors who tilt towards investing in companies that are constituents of an index are regarded as passive investors (also referred to as passive indexers), consistent with the classification employed by Appel, Gormley and Keim (2016) and Elyasiani and Jia (2010). These kinds of institutional investors are expected to conduct passive

monitoring; Elyasiani and Jia (2010) argued that in such a scenario, institutional investors are unlikely to correlate with CFP, but ownership held by them is stable. Appel et al. (2016) and Wang and Li (2007) also reported that ownership by institutional investors with passive indexing strategies is stable. Although they provided evidence that a passive indexing strategy will restrict institutional investors' trading flexibility, they argued that it encourages institutional investors to become involved in shareholder activism, since this strategy prevents them from selling underperforming companies that are included in their portfolios. From the perspective of Appel et al. (2016) and Wang and Li (2007), it therefore seems that passive investors could contribute towards improved CFP.

To examine the impact of passive index-based institutional investors on CFP, this chapter includes an interaction item between institutional ownership and an index (IO*INDEX). More specifically, the interaction item IO_TOTAL*TOP40 is included for the South African companies, and IO_TOTAL*CSI300, as well as IO_INSEN*CSI300 and IO_SEN*CSI300 for the Chinese companies. The descriptive statistics of the major variables are displayed in Table 3.1[11].

Table 3.1
Descriptive statistics

	Mean	SD	Min	Max	Med
Panel A Descriptive statistics for South Africa					
ROE	0.026	2.119	-17.561	3.610	0.179
EPS	2.888	5.531	-1.640	35.190	0.770
IO_TOTAL	0.405	0.294	0.000	1.413	0.363
LEV	0.588	0.453	0.002	6.754	0.536
SIZE	14.595	2.035	7.533	20.420	14.581
AGE	2.755	0.969	0.000	4.771	2.773
GROW	0.145	0.442	-0.741	3.410	0.092
TOP40	0.156	0.363	0.000	1.000	0.000

[11] All the data, except EPS and GROW, were presented and discussed in Chapter 2 and will not be repeated here for brevity. The mean EPS (i.e. HEPS) of 183 South African listed companies was 2.888 over the period 2010 to 2013, while the reported relatively high standard deviation of HEPS suggests its high variation or dispersion among sample companies. The mean (median) EPS (i.e. BEPS) of the sample Chinese companies was 0.304 (0.200). The average value of GROW was 0.145 and 0.191 for the South African and Chinese sample companies within their respective research periods, suggesting that Chinese sample companies were characterised by a higher growth rate than their South African peers.

Panel B Descriptive statistics for China					
ROE	0.071	0.187	-4.891	4.485	0.072
EPS	0.304	0.446	-0.776	2.170	0.200
IO_TOTAL	0.168	0.184	0.000	0.919	0.098
IO_INSEN	0.056	0.088	0.000	0.665	0.016
IO_SEN	0.011	0.023	0.000	0.449	0.000
LEV	0.522	0.192	0.002	1.094	0.536
SIZE	22.107	1.342	17.467	28.482	21.976
AGE	2.450	0.394	0.000	3.135	2.485
GROW	0.191	0.539	-0.615	3.868	0.107
CSI300	0.193	0.395	0.000	1.000	0.000

This table reports the descriptive statistics of the variables included in the regressions for 183 South African firms over the period 2010 to 2013 (732 observations) in Panel A, and 1 104 Chinese firms over the period 2008 to 2013 (6 624 observations) in Panel B. Variable definitions are reported in Appendix 1.

3.3.3 Methodology

To assess the relationship between institutional ownership and improved CFP, the following regression model was established.

$$CFP_{m,it} = \alpha_0 + \beta_k IO_{k,it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (3.1)$$

Additionally, the interaction between institutional ownership and the market index is introduced in this chapter, as reflected in Equation 3.2 below.

$$CFP_{m,it} = \alpha_0 + \beta_k IO_{k,it} + \gamma_1 INDEX_{it} + \delta_k IO_{k,it} * INDEX_{it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (3.2)$$

where $CFP_{m,it}$ refers to one of the measures of financial performance (ROE_{it} or EPS_{it}) (m = 1, 2) for company i at time t. $IO_{k,it}$ refers to variable k (k = TOTAL, INSEN and SEN) of institutional ownership. $INDEX_{it}$ is a dummy variable, representing the $TOP40_{it}$ for South Africa and the $CSI300_{it}$ for China. $IO_{k,it}$*$INDEX_{it}$ is the interaction item between $IO_{k,it}$ and $INDEX_{it}$. $CON_{j,it}$ represents control variables j (j = 1, 2,…n). α_0 is the intercept, β_k, γ_1 and δ_k are the regression coefficients of $IO_{k,it}$, $INDEX_{it}$ and $IO_{k,it}$*$INDEX_{it}$. λ_j denotes the regression coefficients of $CON_{j,it}$, and ε_{it} is the error term.

Before conducting the regressions, a correlation analysis was first performed (see Table 3.2). The results suggest that the variables included in the analysis are not highly correlated with each other for either the South African or the Chinese sample. A possible exception is the correlation between SIZE and INDEX, where the correlation coefficients exceed 0.5 in both Panel A and Panel B of Table 3.2. However, this is not considered problematic, since the regressions will be processed for SIZE by both including and excluding INDEX.

Table 3.2

Correlation matrix

Panel A Correlation matrix for South Africa

	IO_TOTAL	LEV	SIZE	AGE	GROW	TOP40
	1	2	3	4	5	6
1	1					
2	-0.041	1				
3	0.393***	-0.164***	1			
4	0.219***	-0.089**	0.293***	1		
5	-0.023	0.018	-0.084**	-0.117***	1	
6	0.194***	-0.031	0.543***	0.070*	-0.019	1

Panel B Correlation matrix for China

	IO_TOTAL	IO_INSEN	IO_SEN	LEV	SIZE	AGE	GROW	CSI300
	1	2	3	4	5	6	7	8
1	1							
2	0.395***	1						
3	0.152***	0.052***	1					
4	-0.034***	-0.020*	0.005	1				
5	0.069***	0.220***	0.086***	0.359***	1			
6	0.009	-0.074***	0.045***	0.036***	-0.084***	1		
7	0.035***	0.058***	-0.008	0.064***	0.063***	-0.004	1	
8	0.082***	0.296***	0.046***	0.036***	0.589***	-0.131***	0.004	1

This table reports the correlation matrix for the independent and control variables included in the regressions. Panel A presents the Pearson correlation matrix for 183 South African firms over the period 2010 to 2013, while Panel B reports the correlation for 1 104 Chinese firms over the period 2008 to 2013. ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

To examine the impact of institutional ownership on CFP, regressions in which the firm's ROE or EPS in each year is a function of firm-specific and ownership variables are estimated by using pooled OLS and FE approaches. Several prior studies (e.g. Bhattacharya & Graham, 2009; Bruton, Filatotchev, Chahine & Wright, 2010; Cho, 1998; Demsetz & Villalonga, 2001; Kapopoulos & Lazaretou, 2007; Liang et al., 2011)

warn against a potential endogeneity problem when considering the relationship between ownership structure and financial performance. To address the endogeneity issue, this study also applied the 2SLS estimation method as recommended by Charfeddine and Elmarzougui (2010), Jiao and Ye (2013) and Lappalainen and Niskanen (2012). Therefore, instrument variables for institutional ownership are included in the analysis. These instruments should be correlated with institutional ownership, while not correlated with CFP, except indirectly through other independent variables. In this regard, the instrument variables employed are trading liquidity (TURN) and return volatility (VOL) for the South African as well as the Chinese data. This choice of instruments was motivated by the results reported in Chapter 2[12], as well as the findings of existing studies such as Yuan et al. (2008).

For the 2SLS regression, this chapter reported the *F*-statistic for testing the joint statistical significance of instrument variables; this figure was higher than the critical value of 10 in all cases, suggesting that the instruments are not weak (Staiger & Stock, 1997). At the same time, a Sargan test was performed. The results did not reject the null hypothesis, suggesting that the instruments are valid in all 2SLS regressions.

3.4 Results

This section presents the regression results obtained from the different estimation methods, and discusses the relationship between institutional ownership and improved CFP, as well as the role that a firm's inclusion in a market index played in this relationship.

3.4.1 Aggregated institutional ownership and financial performance

Panel A and Panel B of Table 3.3 report the regression results on relationships between institutional ownership and financial performance in the South African and Chinese contexts respectively. Columns 1 to 3 (4 to 6) of both panels show the relationship between aggregated institutional ownership and ROE (EPS).

[12] As indicated in prior studies (see Section 2.2), institutional ownership is related to return volatility (VOL) and turnover ratio (TURN); at the same time, the findings of Chapter 2 also confirmed that institutional ownership is significantly associated with VOL and TURN in both South Africa and China.

Table 3.3

Regressions of relationships between aggregated institutional ownership and financial performance

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between aggregated institutional ownership and financial performance (South Africa)						
IO_TOTAL	0.549**	0.189*	0.857***	0.693*	0.520*	1.406*
	(2.05)	(1.68)	(3.37)	(1.74)	(1.92)	(1.77)
LEV	-0.723*	-0.404	-0.543	-1.305***	-2.440**	-1.715***
	(-1.69)	(-1.61)	(-1.04)	(-2.59)	(-2.38)	(-2.66)
SIZE	0.129**	0.672***	0.312**	0.963***	0.868***	0.869***
	(2.25)	(3.81)	(2.46)	(15.44)	(2.81)	(11.84)
AGE	0.605	0.117	0.662	0.415***	0.508	0.353***
	(0.82)	(1.22)	(1.32)	(3.50)	(0.29)	(2.99)
GROW	0.472**	0.455*	0.492**	1.836**	0.959*	1.840**
	(2.04)	(1.82)	(2.51)	(2.50)	(1.83)	(2.49)
Intercept	-1.810**	-10.510***	-0.065	-12.600***	-7.490	-11.390***
	(-2.25)	(-4.31)	(-0.44)	(-13.37)	(-1.43)	(-11.37)
F-statistic			110.903			88.784
Sargan *p*-value			0.600			0.404
R^2 (%)	6.54	80.07	12.31	40.99	92.20	37.50
N	732	732	732	732	732	732
Panel B Relationship between aggregated institutional ownership and financial performance (China)						
IO_TOTAL	0.077***	0.020*	0.105***	0.377***	0.120***	0.593***
	(12.37)	(1.71)	(13.69)	(14.87)	(2.89)	(12.99)
LEV	-0.150***	-0.121***	-0.147***	-0.439***	-0.530***	-0.603***
	(-10.32)	(-10.60)	(-10.11)	(-15.96)	(-8.94)	(-6.15)
SIZE	0.011***	0.017***	0.011***	0.139***	0.225***	0.124***
	(12.71)	(5.41)	(12.10)	(34.23)	(15.00)	(15.84)

Table 3.3 (continued)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
AGE	-0.010***	-0.082***	-0.011***	-0.031**	-0.225***	-0.050**
	(-3.11)	(-10.88)	(-3.31)	(-2.47)	(-6.88)	(-2.52)
GROW	0.029***	0.027***	0.029***	0.105***	0.102***	0.104***
	(14.45)	(16.21)	(14.32)	(12.34)	(12.23)	(7.16)
Intercept	-0.143***	-0.076	-0.135***	-2.493***	-3.815***	-2.369***
	(-6.55)	(-1.29)	(-6.18)	(-26.93)	(-13.72)	(-13.74)
F-statistic			4 604.040			4 613.560
Sargan *p*-value			0.524			0.812
R^2 (%)	11.32	57.37	11.02	22.00	66.15	13.76
N	6 624	6 624	6 624	6 624	6 624	6 624

This table presents the pooled OLS, FE and 2SLS estimations of the relationship between aggregated institutional ownership and financial performance over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results in the context of South Africa and China are reported in Panel A and Panel B respectively. The dependent variables are ROE and EPS in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that instruments are not weak, and are valid. The regression results over the period 2010 to 2013 for China (see Appendix 2) are similar to those presented in Panel B. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

In the South African context, IO_TOTAL was found to be significantly and positively related to ROE and EPS within pooled OLS, FE and 2SLS estimations, suggesting that in South Africa, firms with greater aggregated institutional ownership are likely to achieve improved financial performance. Panel B of Table 3.3 displays that IO_TOTAL is statistically significant and positively related to ROE and EPS when using pooled OLS, FE and 2SLS estimations for the Chinese data. Given this evidence, institutional investors as a whole are likely to advance CFP in China. Considering the potential negative effect of the 2007-2009 global financial crisis on firm performance, this chapter also ran the same regressions by using 2010-2013 data only, and the results remained robust (see Appendix 2).

3.4.2 Pressure sensitivity and heterogeneous impact

Prior studies (e.g. Cornett et al., 2007; Ferreira & Matos, 2008) suggest that pressure-insensitive institutional investors are considered to have greater incentives to monitor management, and that they are more likely to achieve improved financial performance than pressure-sensitive institutional investors. To some extent, these findings were also confirmed in this chapter when examining the impact of pressure-insensitive and pressure-sensitive institutional ownership on financial performance. The regression results presented in Panel A and Panel B of Table 3.4 were obtained after separating the institutional investor variable into pressure-insensitive and pressure-sensitive components. Given that data concerning disaggregated institutional ownership were not available for South Africa, the heterogeneous impact on financial performance between pressure-insensitive and pressure-sensitive institutional investors is addressed only in the Chinese context.

Panel A of Table 3.4 reports that IO_INSEN is significantly and positively related to ROE, suggesting that pressure-insensitive institutional ownership is associated with improved financial performance. As discussed in Section 2.3.2, ownership by pressure-insensitive institutional investors in the Chinese stock market declined during the period 2010 to 2013, in line with the decreasing trend in the ROE of listed

companies during this period[13]. Thus, it would be more appropriate for the findings to be interpreted as a sign that firms with lower levels of pressure-insensitive institutional ownership are associated with financial performance declining. Considering that pressure-insensitive institutional investors tend to invest less in poorly performing companies (as shown in Chapter 2), the results reported in Table 3.4 could point towards a situation where their exit from a firm could be an expression of their dissatisfaction with its financial performance. This behaviour could explain the poor financial performance of the companies they divested from[14]. Similar results were found when financial performance was proxied by EPS. Pressure-insensitive institutional investors, irrespective of whether they are involved in active or passive monitoring, therefore appear to be efficient in positively impacting on financial performance; their behaviour, to some extent, can be explained by the efficient monitoring hypothesis.

Panel B of Table 3.4 shows that IO_SEN is negatively but insignificantly associated with ROE and EPS; in other words, pressure-sensitive institutional investors are unlikely to promote the financial performance of their investee companies. As illustrated in Section 3.2.4, pressure-sensitive institutional investors always pursue business relationship maintenance and enhancement due to business connections with their investee companies. This behaviour results in inefficient monitoring, or colluding with the management or controlling shareholders in some situations. Such behaviour could offer an explanation for the situation observed during the period 2010 to 2013 when, in contrast to the fact that the financial performance of Chinese listed companies was constantly decreasing, pressure-sensitive institutional investors increased their levels of ownership.

[13] The means of ROE (EPS) for the 1 104 Chinese listed companies were 0.102, 0.105, 0.119, 0.111, 0.093, 0.090 (0.332, 0.357, 0.406, 0.430, 0.376, 0.386) during the years 2008 to 2013.

[14] Although the NTS Reform had basically been completed by 2007, there are still some restrictions on trading in the original NTS. For instance, in order to maintain market stability, shareholders who own more than 5 per cent of the original NTS are only allowed to trade less than 5 per cent of the total shares outstanding within one year, and 10 per cent within two years. Since the newly released tradable shares were largely held by legal persons or corporations, the proportion of outstanding shares held by professional institutional investors decreased accordingly. That is, besides the exit, the decrease in the proportion of outstanding shares held by professional institutional investors was also because of an increase in the number of outstanding shares.

Table 3.4

Regressions of relationships between disaggregated institutional ownership and financial performance

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between pressure insensitive institutional ownership and financial performance						
IO_INSEN	0.380***	0.322***	0.437***	1.874***	1.279***	2.650***
	(28.85)	(10.63)	(26.38)	(25.53)	(9.12)	(19.40)
LEV	-0.156***	-0.151***	-0.154***	-0.474***	-0.615***	-0.645***
	(-11.57)	(-8.47)	(-11.37)	(-13.56)	(-10.15)	(-6.65)
SIZE	0.009***	0.034***	0.007***	0.132***	0.218***	0.098***
	(8.66)	(5.68)	(7.22)	(25.10)	(11.34)	(13.64)
AGE	-0.003	-0.057	-0.002	-0.005	-0.085	-0.004
	(-0.92)	(-1.37)	(-0.68)	(-0.33)	(-0.55)	(-0.24)
GROW	0.028***	0.021***	0.027***	0.109***	0.099***	0.097***
	(14.90)	(7.38)	(14.67)	(10.09)	(7.24)	(6.97)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.117***	0.091***	-0.095***	-2.423***	0.299***	-1.979***
	(-4.89)	(25.96)	(-3.92)	(-20.44)	(17.21)	(-12.33)
F-statistic			2 914.770			2 952.680
Sargan *p*-value			0.850			0.829
R^2 (%)	23.94	54.40	23.43	24.94	78.12	22.47
N	6 624	6 624	6 624	6 624	6 624	6 624
Panel B Relationship between pressure sensitive institutional ownership and financial performance						
IO_SEN	-0.272	-0.108	-0.440	-0.365	-0.237	-0.912
	(-1.60)	(-0.68)	(-0.99)	(-1.48)	(-1.19)	(-1.42)
LEV	-0.151***	-0.122***	-0.164***	-0.436***	-0.533***	-0.611***
	(-10.36)	(-10.67)	(-10.73)	(-15.92)	(-6.28)	(-6.66)

Table 3.4 (continued)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
SIZE	0.011***	0.017***	0.014***	0.139***	0.226***	0.125***
	(12.83)	(5.47)	(13.69)	(34.19)	(8.47)	(22.45)
AGE	-0.010***	-0.081***	-0.007**	-0.030**	-0.223***	-0.049***
	(-3.03)	(-10.69)	(-1.99)	(-2.39)	(-4.69)	(-2.74)
GROW	0.029***	0.027***	0.030***	0.105***	0.102***	0.103***
	(14.43)	(16.20)	(14.26)	(12.30)	(9.25)	(8.07)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.146***	-0.081	-0.183***	-2.504***	-3.852***	-2.391***
	(-6.69)	(-1.36)	(-7.76)	(-26.94)	(-7.27)	(-17.80)
F-statistic			134.729			804.425
Sargan *p*-value			0.452			0.896
R^2 (%)	11.35	57.34	10.68	21.98	66.15	13.77
N	6 624	6 624	6 624	6 624	6 624	6 624

This table presents the pooled OLS, FE and 2SLS estimations of the relationship between disaggregated institutional ownership and financial performance over the period 2008 to 2013 for China. The results of the relationship between financial performance and pressure-insensitive and pressure-sensitive institutional ownership are reported in Panel A and Panel B respectively. The dependent variables are ROE and EPS in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. The regression results over the period 2010 to 2013 (see Appendix 2) are similar to those presented in this table. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1

The findings of this chapter are in keeping with the evidence from Chapter 2 that pressure-sensitive institutional investors choose past losers when they select stocks. Thus, to some degree, the companies that pressure-sensitive institutional investors select to invest in may not be in a good financial condition. Furthermore, as stated in Section 3.2.1, institutional investors who hold concentrated ownership in their investee companies are likely to serve as effective monitors of management and the controlling shareholders. A large proportion of the pressure-sensitive institutional investors in China, however, are non-block holders, and they have few incentives to engage in costly monitoring activities. These factors make it easy to explain why pressure-sensitive institutional ownership has an insignificant relationship with CFP. Their role therefore corresponds to the insignificant monitoring hypothesis. To investigate whether the difference in research periods influenced the results, the same regressions were also conducted using only the 2010-2013 data. As reported in Appendix 2, similar results were found.

3.4.3 The effectiveness of passive institutional investors

A comparison between passive and non-passive investors and their impact on financial performance is presented in Tables 3.5 and 3.6.

Panel A of Table 3.5 shows that in South Africa, companies included in the Top 40 index are unlikely to achieve better financial performance than non-Top 40 index companies. In addition, the interaction between IO_TOTAL and TOP40 is insignificantly related to financial performance, illustrating that there is no significant difference in the impact of institutional investors on financial performance within Top 40 index constituent companies compared to that within non-Top 40 counterparts. For China, CSI 300 index companies in all cases generated better financial performance than non-CSI 300 index companies. In contrast to institutional investors in South Africa, IO_TOTAL*CSI300 reflects a significantly positive relationship with ROE and EPS (see Panel B of Table 3.5). This indicates that in China, institutional ownership of CSI 300 index companies has a more significant impact on financial performance than that of non-CSI 300 companies.

The finding generated for institutional investors as a whole also applies to pressure-insensitive institutional investors (see Panel A of Table 3.6). Panel A of Table 3.6 shows that IO_INSEN*CSI300 is positively and significantly related to ROE and EPS, suggesting that lower levels of pressure-insensitive institutional ownership lead to less favourable financial performance for CSI 300 index companies compared to non-CSI 300 companies. One possible explanation is that passive pressure-insensitive institutional investors are likely to become involved in shareholder activism, and they are stable in their stockholdings, as discussed earlier in this chapter. A decrease in passive pressure-insensitive institutional ownership is likely to lower investors' willingness to perform a monitoring role in their investee firms. Thus, firms experiencing a decline in their level of passive pressure-insensitive institutional ownership may suffer the loss of the active monitoring and the various resources that these institutional investors bring to the firm. As a result, their financial performance would decrease much more compared to companies that are not experiencing monitoring by this type of institutional shareholder. This finding is inconsistent with Elyasiani and Jia (2010), but supports Appel et al. (2016). Additionally, pressure-sensitive institutional ownership is not significantly related to CFP, no matter if the investors hold shares in index constituent firms or not (see Panel B of Table 3.6). In this respect, the impact of passive index-based institutional investors on CFP cannot be generalised; it depends on at least which type the institutional investors are.

Table 3.5

Regressions of relationships between aggregated institutional ownership and financial performance (including INDEX)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between aggregated institutional ownership and financial performance (including TOP40, South Africa)						
IO_TOTAL	0.546**	0.202*	0.881***	0.722*	0.568**	1.432***
	(2.10)	(1.72)	(3.14)	(1.78)	(2.24)	(2.91)
LEV	-0.718*	-0.399	-0.543	-1.332***	-2.374**	-1.573**
	(-1.67)	(-1.59)	(-1.04)	(-2.63)	(-2.30)	(-2.41)
SIZE	0.154**	0.674***	0.316**	0.965***	0.870***	0.826***
	(2.28)	(3.81)	(2.47)	(15.40)	(2.78)	(2.59)
AGE	0.666	0.118	0.642	0.361***	0.552	0.489***
	(0.87)	(1.24)	(1.29)	(3.09)	(0.30)	(5.90)
GROW	0.484**	0.466*	0.496**	1.788**	0.986*	1.103*
	(2.08)	(1.84)	(2.54)	(2.42)	(1.85)	(1.84)
TOP40	0.063	0.130	0.144	0.790	0.537	0.547
	(0.11)	(0.38)	(0.34)	(0.57)	(1.00)	(0.31)
IO_TOTAL*TOP40	-0.266	-0.162	-0.267	-1.314	-0.524	-0.115
	(-0.46)	(-0.39)	(-0.36)	(-0.61)	(-0.78)	(-0.03)
Intercept	0.064	-10.580***	-0.073	-12.480***	-10.520**	-0.495*
	(0.59)	(-4.31)	(-0.48)	(-13.16)	(-2.21)	(-1.79)
F-statistic			38.095			45.131
Sargan *p*-value			0.731			0.474
R^2 (%)	6.58	80.08	8.76	40.78	92.19	17.42
N	732	732	732	732	732	732
Panel B Relationship between aggregated institutional ownership and financial performance (including CSI300, China)						
IO_TOTAL	0.062***	0.032**	0.085***	0.282***	0.201**	0.413***
	(9.02)	(2.28)	(9.90)	(7.42)	(2.53)	(7.65)

Table 3.5 (continued)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
LEV	-0.148***	-0.116***	-0.145***	-0.467***	-0.450***	-0.474***
	(-10.28)	(-10.84)	(-10.10)	(-12.43)	(-6.80)	(-11.35)
SIZE	0.005***	0.016***	0.005***	0.127***	0.212***	0.125***
	(4.64)	(5.34)	(4.39)	(18.41)	(12.36)	(16.20)
AGE	-0.008**	-0.076***	-0.008***	-0.034**	-0.295***	-0.038*
	(-2.37)	(-10.69)	(-2.58)	(-2.00)	(-7.33)	(-1.72)
GROW	0.030***	0.025***	0.030***	0.120***	0.091***	0.111***
	(15.06)	(16.47)	(14.94)	(10.58)	(10.48)	(8.87)
CSI300	0.023***	0.011***	0.021***	0.068**	0.052**	0.059*
	(5.00)	(2.60)	(4.00)	(2.56)	(2.19)	(1.80)
IO_TOTAL*CSI300	0.060***	0.042*	0.071***	0.462***	0.279**	0.558***
	(3.89)	(1.73)	(3.87)	(5.37)	(2.06)	(4.79)
Intercept	-0.015	-0.066	-0.012	-2.211***	-3.413***	-2.171***
	(-0.62)	(-1.19)	(-0.46)	(-14.96)	(-10.65)	(-12.84)
F-statistic			2 147.190			2 134.510
Sargan *p*-value			0.122			0.578
R^2 (%)	13.41	59.10	13.21	18.04	71.59	17.64
N	6 624	6 624	6 624	6 624	6 624	6 624

This table presents the pooled OLS, FE and 2SLS estimations of the relationship between aggregated institutional ownership and financial performance, considering the interaction between INDEX (i.e. TOP40 for South Africa and CSI300 for China) and IO_TOTAL over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results in the context of South Africa and China are reported in Panel A and Panel B respectively. The dependent variables are ROE and EPS in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Table 3.6

Regressions of relationships between disaggregated institutional ownership and financial performance (including INDEX)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between pressure insensitive institutional ownership and financial performance (including CSI300)						
IO_INSEN	0.339***	0.304***	0.387***	1.651***	1.221***	2.266***
	(22.64)	(10.34)	(20.41)	(17.12)	(10.12)	(28.61)
LEV	-0.153***	-0.150***	-0.152***	-0.461***	-0.461***	-0.490***
	(-11.42)	(-7.70)	(-11.27)	(-11.90)	(-7.06)	(-11.96)
SIZE	0.006***	0.034***	0.005***	0.121***	0.184***	0.109***
	(6.85)	(4.53)	(5.41)	(19.48)	(12.99)	(18.74)
AGE	-0.002	-0.053	-0.002	-0.001	-0.022	-0.005
	(-0.75)	(-0.68)	(-0.58)	(-0.04)	(-0.16)	(-0.05)
GROW	0.028***	0.021***	0.028***	0.102***	0.093***	0.137***
	(15.15)	(6.80)	(14.94)	(8.59)	(10.88)	(10.55)
CSI300	0.018***	0.008**	0.015***	0.104***	0.045**	0.029*
	(3.67)	(2.08)	(3.03)	(3.24)	(2.03)	(1.76)
IO_INSEN*CSI300	0.109***	0.084*	0.121***	0.997***	0.321**	0.364*
	(5.02)	(1.73)	(4.82)	(7.04)	(2.01)	(1.89)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.057***	0.090***	-0.038*	-2.211***	-3.527***	-1.969***
	(-2.64)	(19.52)	(-1.74)	(-14.35)	(-11.51)	(-16.62)
F-statistics			1 642.240			1 599.460
Sargan *p*-value			0.643			0.626
R^2 (%)	24.70	54.49	24.30	26.11	78.26	34.14
N	6 624	6 624	6 624	6 624	6 624	6 624

Panel B Relationship between pressure sensitive institutional ownership and financial performance (including CSI300)						
IO_SEN	-0.208	-0.064	-0.370	-0.471	-0.313	-0.874
	(-1.14)	(-0.40)	(-1.59)	(-1.56)	(-1.46)	(-1.41)
LEV	-0.149***	-0.122***	-0.142***	-0.469***	-0.465***	-0.462***
	(-10.33)	(-10.63)	(-10.54)	(-12.50)	(-5.14)	(-7.17)
SIZE	0.005***	0.017***	0.005***	0.125***	0.217***	0.117***
	(4.45)	(5.40)	(4.70)	(18.15)	(6.59)	(11.80)
AGE	-0.006*	-0.080***	-0.006*	-0.026	-0.304***	-0.052*
	(-1.95)	(-10.61)	(-1.92)	(-1.56)	(-5.25)	(-1.93)
GROW	0.030***	0.027***	0.028***	0.119***	0.091***	0.110***
	(14.96)	(16.28)	(14.59)	(10.50)	(7.92)	(7.55)
CSI300	0.039***	0.016***	0.038***	0.159***	0.073***	0.173***
	(9.77)	(3.99)	(8.86)	(7.29)	(3.76)	(5.18)
IO_SEN*CSI300	-0.304	-0.154	-0.317	0.210	0.249	0.364
	(-1.64)	(-1.43)	(-1.45)	(0.31)	(0.42)	(0.21)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.015	-0.078	-0.018	-2.210***	-3.466***	-1.975***
	(-0.61)	(-1.30)	(-0.78)	(-14.88)	(-5.21)	(-10.25)
F-statistics			255.243			195.726
Sargan *p*-value			0.124			0.667
R^2 (%)	13.25	57.50	13.52	17.63	71.51	17.32
N	6 624	6 624	6 624	6 624	6 624	6 624

This table presents the pooled OLS, FE and 2SLS estimations of the relationship between disaggregated institutional ownership and financial performance considering the interaction between INDEX (i.e. CSI300) and IO_INSEN (IO_SEN) over the period 2008 to 2013 for China. The results of relationship between financial performance and pressure-insensitive and pressure-sensitive institutional ownership with interaction item are reported in Panel A and Panel B respectively. The dependent variables are ROE and EPS in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Except for listing history (AGE), the impact of the control variables on financial performance in the context of South Africa was similar to that in the Chinese setting. More specifically, large firms with low financial leverage and high sales growth were likely to achieve greater financial performance. In terms of listing history, South African firms with long listing histories are associated with sound financial performance[15], but this statement does not hold true in the context of China. This evidence could offer an explanation for the findings in Chapter 2, where it was found that institutional investors in South Africa invest more in firms with long listing histories, while in China they do not.

3.5 Conclusions

Employing a sample of 183 listed South African companies over the period 2010 to 2013 and 1 104 listed Chinese companies over the period 2008 to 2013, and after accounting for the potential endogeneity problem, this chapter explored the relationship between institutional ownership and improved CFP. The findings revealed that institutional ownership as a whole has a significant relationship with improved CFP (as measured by ROE and EPS) in both South Africa and China. Aside from a number of similarities between the results reported for the two countries, institutional investors in South Africa demonstrate differences in promoting CFP from their counterparts in China when considering the interaction between CFP and the market index. In China, institutional ownership appears likely to have a greater impact on the financial performance of the CSI 300 index listed companies compared to non-CSI 300 companies, while this finding does not hold true in South Africa.

In addition, this chapter confirmed that pressure sensitivity is an important force in determining whether institutional investors conduct monitoring or not. In the Chinese

[15] The results indicated in Panels A of Tables 3.3 and 3.5 report an insignificant (a significant) relationship between LEV and ROE (EPS), between AGE and ROE (EPS), partly suggesting that EPS (more specifically, HEPS) is more related to firm characteristics than ROE in South Africa. It is not surprising that HEPS is considered to be one of the most important financial performance measurements in South Africa.

market, monitoring and inefficient participation co-exist within institutional investor groups. More specifically, pressure-insensitive institutional ownership is positively related to CFP, as opposed to pressure-sensitive institutional ownership, which inefficiently affects CFP. These findings remain consistent when excluding the potential impact of the 2007-2009 global financial crisis by only considering 2010-2013 data. Similarly, the evidence remains consistent after taking into consideration the interaction between institutional ownership and inclusion in a market index. This chapter suggests that pressure-insensitive institutional investors could, to some extent, be performing an efficient monitoring role. However, pressure-sensitive institutional investors appear to be inefficient in monitoring. Their potential alignment with managers or controlling shareholders acts against their fiduciary interests.

Furthermore, it should be pointed out that aggregated institutional ownership is significantly and positively related to ROE and EPS in China. This relationship is inconsistent with the distribution trends observed during the study period; that is, aggregated institutional ownership (as well as pressure-sensitive institutional ownership) slightly increased from 2008 to 2013, while ROE and EPS (as well as pressure-insensitive institutional ownership) declined during this period. Given this evidence, the findings suggest that the positive relationship between institutional investors as a whole and financial performance may be largely attributed to the impact of pressure-insensitive institutional investors, which account for the largest percentage of institutional investors in the Chinese equity market.

When combined, the findings of this chapter highlight the importance of considering the heterogeneity of institutional investors. For South Africa, the question of whether different types of institutional investors play heterogeneous roles towards improving CFP was not covered in this chapter due to data limitations. Thus, within the South African setting, the impact of institutional investors at the disaggregated level on corporate performance needs to be further investigated. Additionally, prior studies

suggest that stable and long-term-focused institutional investors are more likely to promote corporate performance, but this chapter was unable to corroborate this given the limited period covered. Moreover, the question of whether or not the efficient role some institutional investors play in promoting CFP was achieved by directly influencing management with voting rights (exercising their voice) or in a more indirect way by selling their shares (voting with their feet) needs to be further explored.

Given the fact that accounting earnings are frequently manipulated, the impact of institutional investors on corporate governance from a financial perspective could perhaps be better reflected by an advancement in earnings to demonstrate the actual performance of a firm. The focus of the next chapter is thus placed on the relationship between institutional ownership and earnings management reduction.

CHAPTER 4

DOES INSTITUTIONAL OWNERSHIP MATTER? EVIDENCE FROM EARNINGS MANAGEMENT

4.1 Introduction

In modern corporations characterised by the separation of ownership and control (Berle & Means, 1932; Claessens, Djankov & Lang, 2000; Fama & Jensen, 1983), owners rely extensively on financial reports, which are used by managers to convey underlying corporate financial information to external parties that are interested in corporate performance (Hong & Andersen, 2011). The costliness of monitoring, the nature of accrual accounting as well as imperfect auditing are likely to provide managers with a great deal of discretion to manipulate the accounting earnings reported in the financial statements. This phenomenon, also known as earnings management, occurs "when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" (Healy & Wahlen, 1999: 368). Furthermore, in firms with concentrated ownership structures, besides management, controlling shareholders also become involved in financial statement preparation, and they are likely to manage reported earnings artificially (Chen & Zhang, 2014).

Earnings management is a commonly recognised practice among public companies across the globe (Dechow, Hutton, Kim & Sloan, 2012; Dechow & Skinner, 2000). It is perceived to adversely affect the quality of financial reports, accelerate information asymmetry between shareholders and managers (Ascioglu, Hegde, Krishnan & McDermott, 2012; Hadani et al., 2011), and mislead market participants, thereby decreasing market efficiency (Ascioglu et al., 2012; De Jong, Mertens, Van der Poel & Van Dijk, 2014). Prior studies have found that firms with high levels of earnings management are more likely to experience declines in subsequent earnings

performance (Alhadab, Clacher & Keasey, 2013; Cohen & Zarowin, 2010; DuCharme, Malatesta & Sefcik, 2001). Earnings management is also positively related to subsequent earnings restatement (Ettredge, Scholz, Smith & Sun, 2010; Firth, Rui & Wu, 2011; Harris & Bromiley, 2007; Richardson, Tuna & Wu, 2002). Therefore, unsurprisingly, the phenomenon of earnings management has attracted attention from academics, practitioners, policy makers and regulators alike.

Prior studies (e.g. Cormier, Houle & Ledoux, 2013; Cornett, Marcus & Tehranian, 2008; Hazarika, Karpoff & Nahata, 2012; Jiambalvo, 1996; Lo, Wong & Firth, 2010; Xie, Davidson & Dadalt, 2003) have highlighted the importance of corporate governance on mitigating earnings management. Representing an essential element of corporate governance mechanisms, institutional investors are sophisticated market participants who are generally willing to engage in shareholder activism (Aggarwal et al., 2011; Bushee et al., 2014; Dechow, Sloan & Sweeney, 1996; Gillian & Starks, 2003; Mizuno, 2010; Shleifer & Vishny, 1986). Engaging in earnings management mitigation could be a way for institutional investors to address their fiduciary responsibilities as well as a means to advance corporate governance.

The existing literature presents ambiguous views on the role institutional investors play in earnings management. Institutional investors can lower the level of earnings management (Chung et al., 2002; Cornett et al., 2008; Hadani et al., 2011; Velury & Jenkins, 2006), but they are not always able to monitor the managers or controlling shareholders. In extreme cases, institutional investors may collude with these parties and increase their incentives to engage in manipulative activities (see Burns et al., 2010; Siregar & Utama, 2008). Few studies appear to have been conducted on this topic in emerging markets, including South Africa and China.

South Africa maintains a satisfactory level of accounting transparency and disclosure (Patel, Balic & Bwakira, 2002); it was an early adopter of International Financial Reporting Standards (IFRS) (Coetzee & Schmulian, 2013), with listed companies required to fully

comply with IFRS since 2005. However, earnings quality does not appear to have significantly improved post IFRS adoption (Ames, 2013). South Africa is also considered a pioneer in corporate governance practices within Africa (see the King III Report), but whether this has contributed to an improvement in firms' earnings quality is still unclear.

Compared to South Africa, China lacks established accounting standards and an effective corporate governance framework (Kuo et al., 2014), although this situation has been improving in recent years. To achieve convergence with IFRS, for instance, the New Accounting Standard (NAS) was introduced in China in 2007, although increased earnings management has been observed since (Zhang et al., 2013). In addition to the NAS, the NTS Reform in China created conditions to advance improvements in corporate governance (Beltratti, Bortolotti & Caccavaio, 2011). According to Jiang and Habib (2012), earnings management practices are partially constrained by the NTS Reform. Nonetheless, there is not sufficient evidence to prove that the quality of firms' financial information has substantially improved in the post-reform period.

Given the paucity of research on this topic and the above-mentioned differences in regulatory environment between South Africa and China, an examination on the impact of institutional investors on earnings management in a South African and Chinese setting is essential. The primary research question this chapter tried to answer is as follows: Does investment by institutional investors reduce the problem of earnings management? The secondary research questions are: (1) How pervasive is earnings management in South Africa and China? (2) Does institutional ownership have different influences on income-increasing earnings management versus income-decreasing earnings management? (3) Are institutional investors heterogeneous towards earnings management reduction?

By employing a sample of 174 South African and 1 069 Chinese listed firms, this chapter found evidence that accrual-based earnings management widely occurred among the listed companies from both countries. The influence of institutional

investors on earnings management is context-dependent: it varies by country, by the type of institutional investor involved, by the percentage of ownership that is held by institutional investors, as well as by the nature of the earnings management. More specifically, institutional investors could play an efficient monitoring role when dealing with income-decreasing earnings management in South Africa, but seem inefficient in mitigating income-increasing earnings management. Institutional investors in China, however, have the opposite effect: they are effective in reducing income-increasing earnings management, but seem unable to deal with income-decreasing earnings management. When distinguishing between different types of institutional ownership, pressure-insensitive and pressure-sensitive institutional investors exercise similar influences on income-increasing earnings management; while they deal differently with income-decreasing earnings management.

The remainder of this chapter is organised as follows: Section 4.2 provides a review of the relevant literature on earnings thresholds and the relationship between institutional ownership and earnings management. Section 4.3 reports on the source of the data required, describes the sample, provides descriptive statistics and introduces the methodology employed in this chapter. Section 4.4 presents the earnings distribution and discretionary accruals statistics and the results of the regressions, while Section 4.5 concludes.

4.2 Literature review

4.2.1 Earnings management and earnings thresholds

Earnings management practices are considered a means to meet certain profit thresholds, especially in the literature that focuses on earnings distribution. The incentive behind earnings thresholds is referred to as the threshold mentality (Degeorge, Patel & Zeckhauser, 1999; Hsu & Koh, 2005), and is to some extent explained by prospect theory and transaction theory. This incentive reflects the psychological effect of engaging in earnings management.

Burgstahler and Dichev (1997) examined the management of earnings to meet two thresholds, namely to report a positive profit and to sustain recent performance, and indicated that companies are likely to manage their financial statements in such a way as to report small profit increases or avoid reporting losses. Degeorge et al. (1999) identified three thresholds that help drive earnings management. Aside from the two thresholds mentioned in Burgstahler and Dichev (1997), they suggested another threshold, namely to meet analysts' expectations. The threshold theory has been widely cited in studies on earnings distribution (e.g. Amar & Abaoub, 2010; Bollen & Pool, 2009; Burgstahler & Chuk, 2015; Christodoulou & Mcleay, 2009; El-Sayed Ebaid, 2012; Lahr, 2014; Li, 2014; Li et al., 2011; Yu, Du & Sun, 2006). Bollen and Pool (2009), Christodoulou and Mcleay (2009) and Lahr (2014) identified discontinuities in the distribution of the earnings of listed companies in South Africa. Similarly, Li et al. (2011) and Yu et al. (2006) found that Chinese listed companies use such techniques to meet or beat earnings thresholds set by the CSRC for regulations related to IPOs, rights issues and delisting.

Previous studies largely focused on income-increasing earnings management (which increases income in the current year at the expense of income in future years); firms with non-discretionary earnings below a certain threshold set by them are usually expected to use income-increasing earnings management (Hsu & Koh, 2005). Similarly, the type of earnings management discussed in studies investigating the relationship with institutional ownership mainly refers to income-increasing earnings management. Earnings management can also be used to decrease current earnings in order to increase future income, i.e. income-decreasing earnings management or taking an earnings bath[16], as reflected in Figure 4.1. Income-decreasing earnings management, however, is not widely discussed; the relationship between institutional ownership engagement and income-decreasing earnings management therefore remains unknown (Hsu & Koh, 2005).

[16] Taking an earnings bath refers to "reducing earnings when latent earnings are disappointing" (Degeorge et al., 1999: 11).

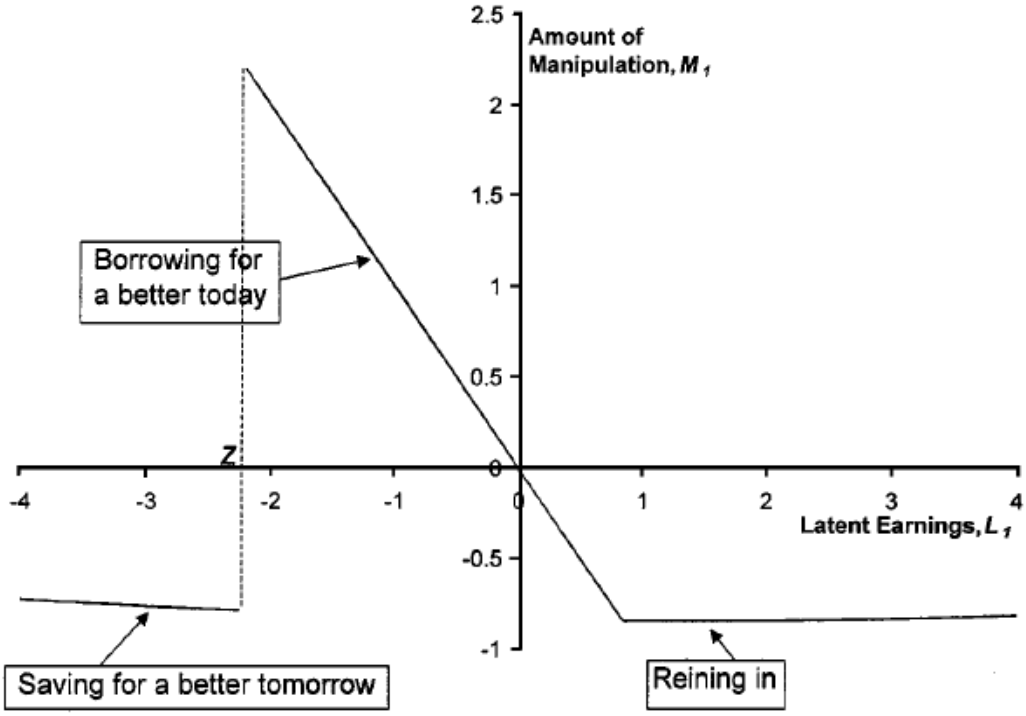


Figure 4.1 Earnings management patterns. Source: Degeorge et al. (1999: 12)

4.2.2 Institutional ownership and earnings management

Although a considerable body of research has focused on earnings management (especially within the context of the US), the impact of institutional ownership engagement on earnings management received less attention, and most references are observed in literature regarding the relationship between corporate governance and earnings management. A number of studies (e.g. Cormier et al., 2013; Cornett et al., 2008; Hazarika et al., 2012; Jiambalvo, 1996; Karamanou & Vafeas, 2005; Lo et al., 2010; Xie et al., 2003; Lakhal, 2015) have stated that improved corporate governance mechanisms (including institutional ownership) are expected to mitigate management's opportunistic behaviour, as well as tunnelling behaviour by controlling shareholders[17].

[17] Tunneling refers to "the transfer of resources out of a company to its controlling shareholders" (Johnson, La Porta, Lopez–de–Silanes & Shleifer, 2000: 22). According to Johnson et al. (2000), it could be presented in two forms: that is, controlling shareholders could transfer resources by conducting self-dealing transactions, or they could increase their shareholding of the companies to discriminate against minority shareholders.

Institutional investors (especially large ones) that have a large amount of capital and superior access to timely and relevant information have the ability and incentive to efficiently monitor management (Bajo et al., 2013; Chung & Zhang, 2011; Elyasiani & Jia, 2010; Jiambalvo, Rajgopal & Ventkatachalam, 2002; Yuan et al., 2008). According to the efficient monitoring hypothesis posited by Pound (1988), "institutional investors have greater expertise and can monitor management at a lower cost than small atomistic shareholders" (McConnell & Servaes, 1990: 599), which suggests that institutional investors are likely to engage in shareholder activism and may inhibit managers from manipulating earnings. Jung and Kwon (2002) suggested that the information content of earnings is improved with an increase in institutional ownership in Korea. Cornett et al. (2008) found that increased monitoring of accrual management by institutional investors is associated with lower levels of earnings management. Similarly, Hashim and Devi (2012) and Velury and Jenkins (2006) demonstrated a significant and positive relationship between institutional ownership and the quality of reported earnings. Evidence from Chung et al. (2002) and Hadani et al. (2011) furthermore indicated that only large institutional investors are likely to be effective in inhibiting managers from manipulating reported profits.

In contrast, some researchers argue that institutional investors are not always actively involved in the corporate governance of their portfolio companies, and instead may focus on short-term financial outcomes (e.g. Chen et al., 2008; Liang et al., 2011; Webb, Beck & Mckinnon, 2003). In accordance with the conflict-of-interest hypothesis, which documents that in view of "other profitable business relationships with the firm, institutional investors are coerced into voting their shares with management" (McConnell & Servaes, 1990: 599), and the strategic-alignment hypothesis, which states that "institutional owners and managers find it mutually advantageous to cooperate" (McConnell & Servaes, 1990: 599), institutional investors may be short-term oriented and unable to monitor management. Consequently, managers are likely to pursue short-term earnings to meet earnings expectations. In this regard, institutional ownership is not always efficient to mitigate earnings

management; in extreme cases, institutional investors may even collude with managers and controlling shareholders and increase their incentive to engage in manipulative activities (Burns et al., 2010; Siregar & Utama, 2008; Velury & Jenkins, 2006; Wang, 2014).

Siregar and Utama (2008) indicated that there is no significant relationship between institutional investors' engagement and earnings quality. Furthermore, Burns et al. (2010) found that institutional investors, especially institutional investors with short-term horizons, are positively associated with financial misreporting. Along the same line they also suggested that corporate earnings management is even worse when transient institutional investors, who are inactive and have little incentive to serve as monitors, increase their ownership holdings in a firm. In addition, the large proportion of shares held by institutional investors provides them with opportunities to access private information, which may be exploited to further their own benefits (Koh, 2003). Concentrated institutional ownership may therefore be negatively associated with earnings quality (Velury & Jenkins, 2006).

Furthermore, the association between institutional investors and earnings management may be complex (Hsu & Koh, 2005). Simply concluding that a positive or a negative relationship exists between the level of institutional ownership and earnings management is questionable. Koh (2003) explored the relationship between institutional investors and earnings management in Australian firms, and found that firms characterised by lower levels of institutional ownership are less likely to eliminate earnings management than those firms where institutional ownership levels are relatively high. That is, there is a non-linear relationship between institutional ownership and earnings management. These findings are similar to those of Burns et al. (2010), who suggested that only concentrated institutional ownership has a negative relationship with misreporting by firms. Hsu and Koh (2005) extended the work of Koh (2003) and found that long-term oriented institutional investors are able to function as a corporate governance mechanism to mitigate accrual management, while transient institutional investors are not. Wang (2014) surmised that active institutional investors

with ownership levels of 10 to 20 per cent significantly limit income-increasing abnormal accruals; however, these institutional investors enhance income-decreasing abnormal accruals. Velury and Jenkins (2006) found that there is a positive relationship between institutional ownership and earnings quality; this relationship, however, appears to be negative when institutional ownership is largely concentrated.

4.3 Data and methods

This section introduces that data source and sample used in this chapter, as well as the regression equations and the variables.

4.3.1 Data source and sample

The sample used in this chapter was selected from all companies listed on the JSE main board in South Africa, as well as companies listed on the SSE and SZSE main boards in China. South African data on institutional ownership and FTSE/JSE Top 40 index constituents were collected from the Bloomberg (2015) database, and the other data were obtained from the INET BFA (2015) database. Chinese data on institutional ownership was collected from RESSET (2015) database, while other data were gathered from the CSMAR (2015) database. The period covered in this chapter is 2010 to 2013 for the South African context and 2008 to 2013 for the Chinese context[18].

In calculating discretionary accruals, firms with fewer than 15 observations in an industry group for any specific year were excluded in order to ensure a sufficiently large pool to estimate expected core earnings, as suggested by McVay (2006) and Roychowdhury (2006), as well as firms in the financial sectors and those with missing data for any variables. In addition, all companies should have been listed for at least one year before the date of their calendar year end for 2010 in South Africa and 2008 in China in order to be included. The final sample consisted of 174 firms in South Africa over the period 2010 to 2013 and 1 069 firms in China over the period 2008 to 2013.

[18] The reasoning behind the sample was discussed in Chapter 2 and will not be repeated here.

4.3.2 Variables

4.3.2.1 Earnings management

Earnings management can be divided into accrual-based and real earnings management. Only accrual-based earnings management (the manipulation of earnings through the exploitation of accounting discretion) will be discussed in this chapter. Unlike cash flows, accruals are more subject to managerial incentives, and are thus potentially more useful for assessing the quality of earnings (Andreou, Louca & Panayides, 2014). This chapter used discretionary accruals to measure accrual-based earnings management by means of a modified Jones model (Dechow, Sloan & Sweeney, 1995), which is considered the most effective way to detect earnings management (Hadani et al., 2011), and has been widely used in prior studies (e.g. Hu, Li, Liu, Qi & Tian, 2012; Jiang, Zhu & Huang, 2013; Kuo et al., 2014; Njah & Jarboui, 2013).

The modified Jones model (1995) is defined as follows:

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1\left(\frac{1}{A_{it-1}}\right) + \alpha_2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}\right) + \alpha_3\left(\frac{PPE_{it}}{A_{it-1}}\right) + \varepsilon_{it} \quad (4.1)$$

where TA_{it} reflects total accruals (TA) of firm *i* for year *t*. TA is calculated as the difference between reported net earnings and operating cash flow. $A_{it\text{-}1}$ represents the total assets for year *t*-1. ΔREV_{it} is the change in sales revenue between year *t*-1 and year *t*, while ΔREC_{it} is the change in account receivables between year *t*-1 and year *t*. PPE_{it} refers to gross property, plant and equipment.

TA has two components, namely non-discretionary accruals (NA) and discretionary accruals (DA). The following equation was applied to estimate NA:

$$\frac{NA_{it}}{A_{it-1}} = \alpha_1\left(\frac{1}{A_{it-1}}\right) + \alpha_2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}}\right) + \alpha_3\left(\frac{PPE_{it}}{A_{it-1}}\right) \quad (4.2)$$

where the estimates for coefficients α_1, α_2 and α_3 were obtained from Model 4.1, and were estimated for cross-sectional data within each year and industry. The specific

estimate for every year was run for industrial sectors with more than 15 firms. DA was then measured as the difference between TA and NA, according to Equation 4.3.

$$DA_{it} = TA_{it} - NA_{it} \quad (4.3)$$

Thus, DA as the proxy for earnings management was considered the dependent variable, with a distinction being made between the absolute value of DA (|DA|), positive DA (DA^+) and negative DA (DA^-).

4.3.2.2 Other variables

Institutional ownership (IO) variables are employed as independent variables, which include the aggregated institutional ownership (IO_TOTAL), as well as the disaggregated institutional ownership (pressure-sensitive institutional ownership, IO_SEN, and pressure-insensitive institutional ownership, IO_INSEN)[19]. The distinction between pressure-insensitive and pressure-sensitive institutional ownership is used to detect their heterogeneous impacts on opportunistic earnings manipulation behaviour.

Based on previous studies (e.g. Chung et al., 2002; Emamgholipour, Bagheri, Mansourinia & Arabi, 2013; Hadani et al., 2011; Hsu & Koh, 2005; Hutchinson & Leung, 2007; Jalil & Rahman, 2010; Jiang & Habib, 2012; Jiang et al., 2013; Koh, 2003, 2007; Zhang et al., 2013), the following variables were included as control variables: leverage (LEV), firm size (SIZE), listing history (AGE), return on assets (ROA), cash flow from operations (CFO) and sales growth (GROW). In addition, when conducting regressions of relationships between disaggregated institutional ownership and earnings management, the aggregated institutional ownership (IO_TOTAL) was also controlled for the impact of the unspecified types of institutional investors on earnings management. The descriptive statistics of the major variables included in the chapter are presented in Table 4.1[20].

[19] This classification is applied to the Chinese context only. For the definitions of pressure-insensitive and pressure-sensitive institutional ownership, as well as the reason for adopting this classification of institutional ownership, please see Chapter 1. For brevity, this chapter will not repeat them here.

[20] All the data except for DA, ROA and CFO have been presented and discussed in Chapter 3. Although the sample used in this chapter is not exactly the same as that used in Chapter 3, the value is close. Also, the descriptive statistics of DA are provided in Section 4.4.1 of this chapter. For brevity, the descriptive statistics of those data are not repeated here. For ROA, the mean (median) is 0.086 (0.093) for the 174 South African firms, which performed better than the 1 069 Chinese companies with 0.036 (0.030). The mean (median) CFO is 0.095 (0.087) for the 174 South African firms, which is higher than the 0.045 (0.043) of the 1 069 Chinese firms.

Table 4.1

Descriptive statistics

	Mean	SD	Min	Max	Med
Panel A Descriptive statistics for South Africa					
DA	0.000	0.111	-0.322	0.361	0.001
IO_TOTAL	0.415	0.295	0.000	1.413	0.373
LEV	0.581	0.346	0.005	3.772	0.544
SIZE	14.652	1.973	7.533	20.420	14.589
AGE	2.780	0.959	0.000	4.771	2.773
ROA	0.086	0.184	-1.099	0.630	0.093
CFO	0.095	0.351	-1.818	1.590	0.087
GROW	0.145	0.442	-0.741	3.410	0.092
Panel B Descriptive statistics for China					
DA	-0.002	0.096	-0.782	0.874	-0.003
IO_TOTAL	0.166	0.183	0.000	0.919	0.096
IO_INSEN	0.055	0.088	0.000	0.665	0.015
IO_SEN	0.011	0.023	0.000	0.449	0.000
LEV	0.528	0.191	0.007	1.094	0.542
SIZE	22.140	1.331	18.367	28.482	21.979
AGE	2.448	0.392	0.000	3.135	2.485
ROA	0.036	0.055	-0.155	0.216	0.030
CFO	0.045	0.069	-0.088	0.183	0.043
GROW	0.142	0.283	-0.321	0.888	0.106

This table reports the descriptive statistics of the variables included in the regressions for 174 South African firms over the period 2010 to 2013 (696 observations) in Panel A, and 1 069 Chinese firms over the period 2008 to 2013 (6 414 observations) in Panel B. Variable definitions are reported in Appendix 1.

4.3.3 Methodology

This chapter takes the direction of DA into account. Thus, before conducting regressions to examine whether institutional ownership is associated with the absolute value of earnings management (|DA|), this chapter first assessed the associations between positive DA (DA^+) and institutional ownership, and between negative DA (DA^-) and institutional ownership, as reflected in Equation 4.4.

$$DA_{m,it} = \alpha_0 + \beta_k IO_{k,it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (4.4)$$

Since Hsu and Koh (2005) and Koh (2003) suggested that a concave relationship exists between institutional ownership and discretionary accruals, this chapter also

considered Equation 4.5, to assess whether such an association is observed.

$$\left|DA_{it}\right| = \alpha_0 + \beta_k IO_{k,it} + \gamma_k IO^2{}_{k,it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \qquad (4.5)$$

where $DA_{m,it}$ refers to DA variables m (m = positive, negative and absolute) for company i at time t. $IO_{k,it}$ refers to institutional ownership variable k (k = TOTAL, INSEN and SEN). $CON_{j,it}$ represents control variables j (j = 1, 2,…n). α_0 is the intercept; β_k and γ_k are the regression coefficients of $IO_{k,it}$ and $IO^2_{k,it}$ respectively. λ_j is the regression coefficients of $CON_{j,it}$. ε_{it} is the error term. The correlation matrix for the major variables is presented in Table 4.2. The correlation results suggest that the variables included in the analysis are not highly correlated with each other (the correlation coefficients do not exceed 0.5) within both the South African, as well as the Chinese sample.

Table 4.2

Correlation matrix

Panel A Correlation matrix for South Africa

	IO_TOTAL	LEV	SIZE	AGE	ROA	CFO	GROW
	1	2	3	4	5	6	7
1	1						
2	-0.032	1					
3	0.384***	-0.099***	1				
4	0.188***	-0.110***	0.265***	1			
5	0.063*	-0.171***	0.305***	0.063*	1		
6	0.144***	-0.036	0.306***	0.020	0.452***	1	
7	-0.023	0.018	-0.084**	-0.117***	-0.004	-0.082**	1

Panel B Correlation matrix for China

	IO_TOTAL	IO_INSEN	IO_SEN	LEV	SIZE	AGE	ROA	CFO	GROW
	1	2	3	4	5	6	7	8	9
1	1								
2	0.401***	1							
3	0.146***	0.049***	1						
4	-0.041***	-0.037***	-0.011	1					
5	0.068***	0.222***	0.070***	0.320***	1				
6	0.001	-0.083***	0.034***	0.032**	-0.086***	1			
7	0.195***	0.405***	0.036***	-0.347***	0.136***	-0.038***	1		
8	0.100***	0.225***	-0.034***	-0.161***	0.063***	-0.094***	0.367***	1	
9	0.067***	0.140***	0.002	0.088***	0.126***	-0.047***	0.277***	0.087***	1

This table reports the correlation matrix for the independent and control variables included in regressions. Panel A presents the Pearson correlation matrix for 174 South African firms over the period 2010 to 2013, while Panel B reports the correlations for 1 069 Chinese firms over the period 2008 to 2013. ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

The association between institutional ownership and earnings management is complex and context-dependent. Based upon their earnings distribution, companies can be divided into profit-making companies (non-discretionary earnings greater than zero, i.e. NNI>0) and loss-making companies (NNI<0). Furthermore, a distinction is also made between companies with NNI exceeding the prior year's (DNNI>0) and those with NNI below the prior year's (DNNI<0). This chapter conducted regressions by considering firms' earnings threshold (zero earnings and prior year's earnings) to explore the influence of institutional investors on earnings management in different settings.

In line with the methodology employed in the majority of prior studies, regressions were estimated by means of pooled OLS and FE approaches. Furthermore, to address the potential endogeneity problem between institutional ownership and earnings management, 2SLS estimations were also employed, as proposed by Chi, Yang and Young (2014). Trading liquidity (TURN) and return volatility (VOL) were used as instrument variables for institutional ownership; these instruments were correlated with institutional ownership, while not correlated with discretionary accruals except indirectly through other independent variables[21].

In case of the 2SLS regressions, the *F*-statistic for testing the joint statistical significance of the instrument variables is reported. For all regressions, this figure was greater than 10, suggesting that the instruments are not weak (Staiger & Stock, 1997). Simultaneously, a Sargan test was performed where the results did not reject the null hypothesis, indicating that the instruments are valid in all 2SLS regressions.

4.4 Results

This section reports the descriptive statistics of earnings management and the regression results in terms of the influence of institutional ownership on accrual-based earnings management.

[21] This choice of instruments for institutional ownership is consistent with the approach discussed in Chapter 3.

4.4.1 Descriptive statistics of earnings management

4.4.1.1 Earnings distribution

In earnings distribution literature, the threshold theory suggests that companies involved in earnings management are expected to observe a discontinuity in the distribution of their earnings or earnings changes around zero; if firms manage their earnings to meet or beat a threshold, there will be more than the expected number of earnings observations just above the threshold and less than the expected number just below it. Consistent with Burgstahler and Chuk (2015) and Burgstahler and Dichev (1997), who used histograms and frequencies to test for a discontinuity in the distribution of earnings and earnings changes, this chapter employs a similar method to assess whether such phenomena (i.e. avoiding negative earnings and earnings decreases) are observed among South African and Chinese listed companies.

This chapter uses ROE to display firms' earnings distribution, consistent with Li, Niu, Zhang and Largay (2011), Yao and Niu (2015) and Yu et al. (2006), and also in line with Chapters 2 and 3. Figure 4.2 demonstrates the distribution of ROE with histogram interval widths of 0.02 for the range -1 to 1. Panel A shows the distribution of ROE for South African listed firms with an irregularity near zero; such a distribution is consistent with earnings management to avoid earnings loss. Similarly, Panel B displays the distribution of ROE for Chinese listed companies, with a discontinuity in the distribution of earnings at zero. The frequency interval [0, 0.02) is much greater than in interval (-0.02, 0], suggesting that Chinese firms exhibit negative earnings avoidance behaviour.

Figure 4.3 depicts a histogram of ROE changes. Panels A and B demonstrate a single peaked, bell-shaped distribution. Panel A indicates that JSE-listed companies manage earnings to avoid decreases with the irregularity near zero, but the frequency of ROE changes above zero more than those below. In China, however, listed firms tend to manage earnings towards a small decrease, as Panel B shows that the peak frequency

is located in interval (-0.02, 0]. This phenomenon suggests that instead of income-increasing earnings management, firms are more likely to engage in income-decreasing earnings management in China.

Panel A ROE for South Africa

Panel B ROE for China

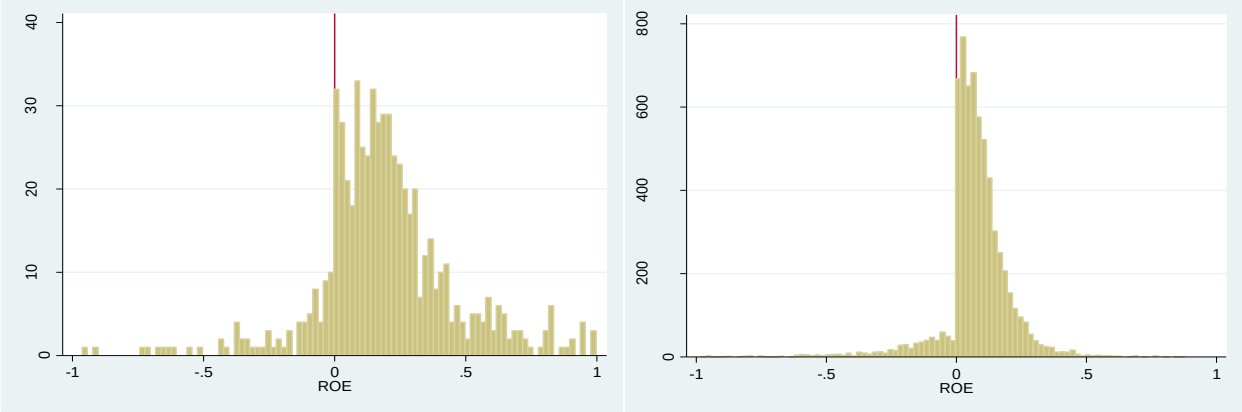


Figure 4.2 Distribution of ROE. This figure presents the ROE distribution of a sample of 174 listed companies in South Africa (Panel A) and 1 069 listed companies in China (Panel B). The distribution interval widths are 0.02, and the location of zero on the horizontal axis is marked by the solid red line. For instance, the first interval to the right of zero contains all ROE in the interval [0, 0.02), and so on. The vertical axis labelled Frequency represents the number of observations in each ROE interval. Additionally, a few observations outside the scale of [-1, 1] are not displayed in this figure.

Panel A DROE for South Africa

Panel B DROE for China

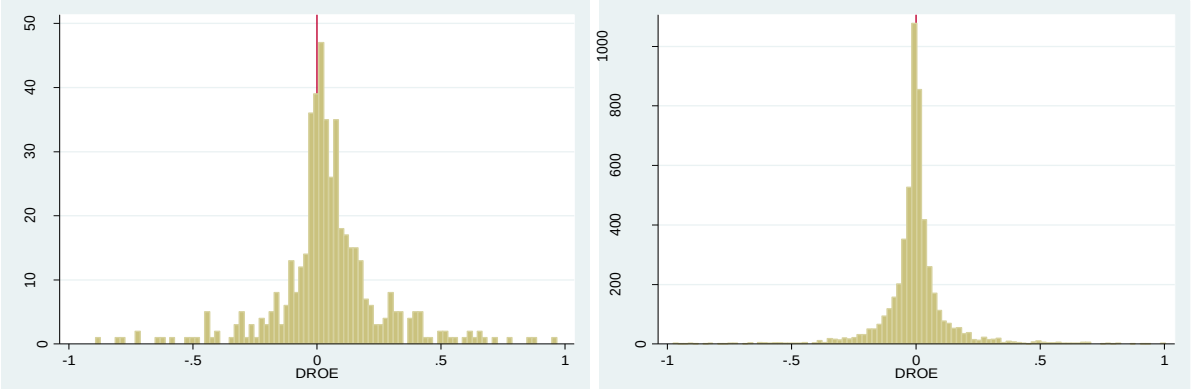


Figure 4.3 Distribution of changes in ROE (DROE). This figure presents the DROE distribution of a sample of 174 listed companies in South Africa (Panel A) and 1 069 listed companies in China (Panel B). The distribution interval widths are 0.02, and the location of zero on the horizontal axis is marked by the solid red line. For instance, the first interval to the right of zero contains all changes in ROE in the interval [0, 0.02), and so on. The vertical axis labelled Frequency represents the number of observations in each change in ROE interval. Additionally, a few observations outside the scale of [-1, 1] are not displayed in this figure.

4.4.1.2 Accrual-based earnings management

Earnings management is represented by DA. Using the modified Jones model introduced in Section 4.3.2.1, DA was computed as the difference between TA and NA. Table 4.3 and Figure 4.4 present the descriptive statistics of DA over the study period.

Table 4.3
Descriptive statistics of discretionary accruals (DA)

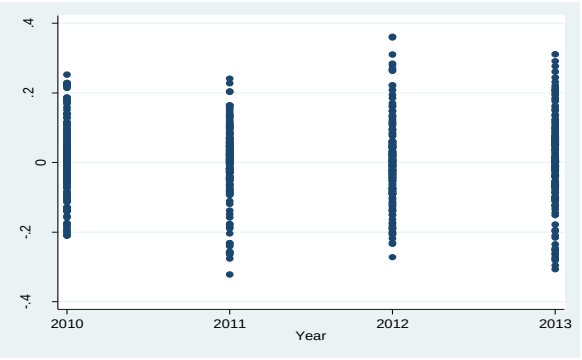
	Mean	SD	Min	Max	Med
Panel A DA for South Africa					
2010	0.000	0.102	-0.211	0.253	-0.015
2011	0.000	0.103	-0.322	0.241	0.012
2012	0.000	0.117	-0.272	0.361	-0.007
2013	0.000	0.122	-0.307	0.311	0.002
Total	0.000	0.111	-0.322	0.361	0.001
Panel B DA for China					
2008	0.001	0.110	-0.692	0.807	-0.002
2009	-0.004	0.110	-0.782	0.874	-0.002
2010	-0.001	0.096	-0.558	0.651	-0.006
2011	-0.001	0.101	-0.583	0.500	-0.002
2012	-0.002	0.076	-0.469	0.413	-0.002
2013	-0.004	0.076	-0.392	0.491	-0.004
Total	-0.002	0.096	-0.782	0.874	-0.003

This table reports the descriptive statistics of DA for 174 South African firms over the period 2010 to 2013 in Panel A, and 1 069 Chinese firms over the period 2008 to 2013 in Panel B. Variable definitions are reported in Appendix 1.

Table 4.3 reflects that the mean values of DA for the South African firms are approximately zero for each year of the study period. The range of DA values was not narrowed down during the period 2010 to 2013 (following the release of the King III report)[22], to some extent indicating that earnings quality has not been improved in this respect. The signs of the median DA values for the South African firms alternate between positive and negative during subsequent years, suggesting that South African firms are motivated to smooth earnings by altering their earnings from one period to another, which can be more directly observed in Panel A of Figure 4.4.

[22] For more details on the DA distribution, please see Appendix 3.

Panel A DA for South Africa



Panel B DA for China

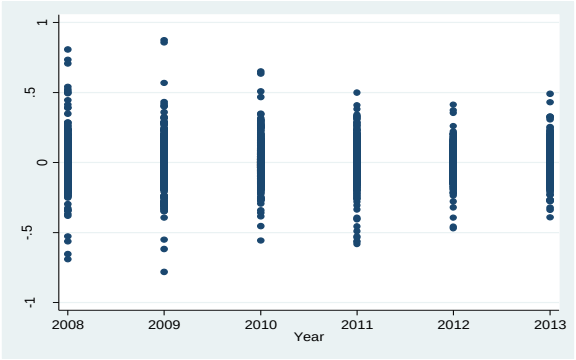


Figure 4.4 Overall distribution of discretionary accruals (DA). This figure presents the overall distribution of DA for a sample of 174 South African listed firms over the period 2010 to 2013 (Panel A) and 1 069 Chinese listed firms over the period 2008 to 2013 (Panel B).

When considering the DA distribution of the Chinese companies, Table 4.3 shows that the mean DA value is close to zero, while the median value is negative over the entire study period. Consequently, it seems as if the Chinese firms are more likely to engage in income-decreasing than income-increasing earnings management. This finding is consistent with the evidence presented in Section 4.4.1.1, where it was shown that firms manage earnings to achieve small decreases (as reflected by the peak of the ROE changes being located on the left side of zero). These results would suggest that instead of 'borrowing' money against their future earnings, Chinese listed companies prefer saving some of their current earnings for the future. These results also support the findings by Li, Selover and Stein (2011) that Chinese companies are inclined to manage their earnings towards zero. Chinese firms therefore employ income-increasing earnings management if earnings are negative, and vice versa. Given that more than 90 per cent of the Chinese firms included in the sample are profit-making firms (not reported), it is not difficult to understand why these companies appear to exhibit income-decreasing discretionary accruals, i.e. negative DA.

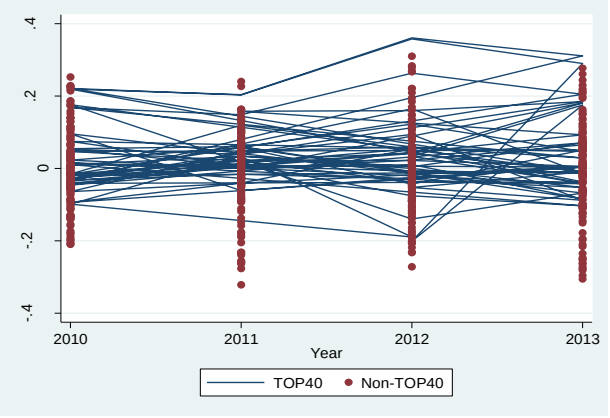
Furthermore, Figure 4.4 shows that a wider range of earnings management is observed in China (-0.782 to 0.874) compared to South Africa (-0.322 to 0.361), suggesting that accrual-based earnings management is much more pronounced in the case of the Chinese firms. This difference in the level of DA observed between South

Africa and China could be affected by institutional factors such as laws, market mechanisms and regulations. For instance, corporate earnings management seems more serious in countries with weak investor protection (Gopalan & Jayaraman, 2012; Haw, Hu, Hwang & Wu, 2004; Leuz, Nanda & Wysocki, 2003). South Africa is a common-law country, where investors are always better protected than in civil-law countries, such as China. Besides, Chinese regulations in terms of accounting standards and corporate governance are not as well established as those in South Africa. Nonetheless, it should be noted that the range of DA values among the Chinese listed companies seems to have narrowed down during the study period[23], potentially suggesting that reported earnings quality improved after the release of the NAS and the completion of the NTS Reform[24].

Figure 4.5 compares the DA distributions of companies that are included in the market index (the Top 40 index for South Africa, and the CSI 300 index for China) with non-index companies. Overall, the index companies displayed lower levels of DA than non-index ones. One possible explanation is that the index companies have superior corporate governance. This finding supports the evidence that institutional investors pay less attention to financial performance when they select index companies compared to non-index ones, as reported in Chapter 2. Nonetheless, in South Africa, the finding only applies to the income-decreasing earnings management situation; for income-increasing earnings management, it is not entirely correct, as the difference in negative DA between Top 40 index and non-Top 40 index companies is not that obvious.

[23] For more details on the DA distribution, please see Appendix 3.
[24] Note that this conclusion is drawn based on accrual-based earnings management. It cannot be denied that some companies reduce accrual-based earnings management only to turn to real earnings management, but this chapter discusses accrual-based earnings management only.

Panel A DA for South Africa



Panel B DA for China

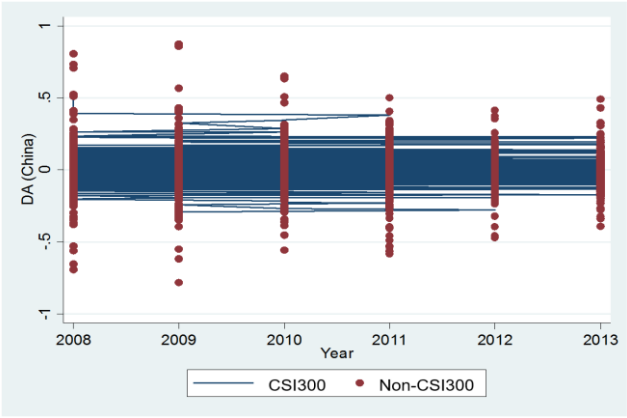


Figure 4.5 Distribution of discretionary accruals (DA) by index. This figure presents the distribution of DA of index and non-index companies in South Africa over the period 2010 to 2013 (Panel A) and in China over the period 2008 to 2013 (Panel B).

4.4.2 Regression results

Based on the equations introduced in Section 4.3.3, this section conducts the regressions and discusses the results in terms of the influence of institutional ownership on accrual-based earnings management.

4.4.2.1 Income-increasing versus income-decreasing earnings management

Table 4.4 summarises the relationships between IO_TOTAL and DA^+ and IO_TOTAL and DA^-. Panel A of Table 4.4 reports an insignificant and negative relationship between IO_TOTAL and DA^+ for the South African sample, signifying that the increased presence of institutional investors failed to mitigate income-increasing earnings management. However, Panel B of Table 4.4 shows that IO_TOTAL is negatively and significantly related to DA^+ for the sample of Chinese firms. Similarly, the results reported in Table 4.5 show that both IO_INSEN and IO_SEN exhibit negative and significant relationships with DA^+. These findings suggest that institutional investors as a whole are able to engage in monitoring, and help to inhabit managers or controlling shareholders from conducting earnings manipulation activities in Chinese listed companies. Pressure-insensitive and pressure-sensitive institutional investors to some extent perform a similar function in income-increasing earnings management reduction.

Table 4.4

Regressions of relationships between aggregated institutional ownership and earnings management

	DA^+			DA^-		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationships between aggregated institutional ownership and earnings management (South Africa)						
IO_TOTAL	-0.040	-0.036	-0.036	0.060*	0.136**	0.118**
	(-1.64)	(-1.47)	(-1.11)	(1.89)	(2.24)	(2.05)
LEV	0.044*	0.061**	0.066**	-0.014	-0.091	-0.013
	(1.66)	(2.50)	(2.44)	(-0.57)	(-0.62)	(-0.51)
SIZE	-0.006*	-0.007*	-0.008**	-0.012**	-0.083*	-0.017***
	(-1.66)	(-1.88)	(-2.21)	(-2.39)	(-1.68)	(-2.69)
AGE	-0.007	-0.007	-0.006	-0.018*	-0.668***	-0.020**
	(-1.14)	(-1.19)	(-1.00)	(-1.88)	(-6.78)	(-1.96)
ROA	0.238**	0.235***	0.263***	0.666***	0.699***	0.665***
	(2.20)	(3.21)	(2.61)	(7.54)	(3.68)	(7.02)
CFO	-0.252***	-0.254***	-0.265***	-0.466***	-0.313*	-0.429***
	(-3.53)	(-3.94)	(-3.88)	(-5.12)	(-1.78)	(-4.45)
GROW	-0.039	-0.048	-0.061	-0.117**	-0.131*	-0.132**
	(-0.91)	(-1.35)	(-1.63)	(-2.26)	(-1.73)	(-2.37)
Intercept	0.178***	0.176***	0.190***	0.055	2.945***	0.112
	(3.23)	(3.40)	(3.54)	(0.77)	(4.22)	(1.33)
F-statistic			53.847			84.050
Sargan *p*-value			0.229			0.571
R^2 (%)	19.14	15.59	17.98	15.59	7.29	15.83
N	298	298	298	398	398	398
Panel B Relationships between aggregated institutional ownership and earnings management (China)						
IO_TOTAL	-0.023*	-0.050*	-0.031**	-0.000	-0.014	-0.000
	(-1.69)	(-1.69)	(-2.16)	(-0.01)	(-0.85)	(-0.01)

Table 4.4 (continued)

	DA^+			DA^-		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
LEV	0.030*	0.059***	0.030*	-0.033***	-0.223***	-0.033***
	(1.90)	(4.74)	(1.94)	(-3.47)	(-9.12)	(-3.45)
SIZE	0.000	0.024	0.000	0.009***	0.045***	0.009***
	(0.02)	(0.51)	(0.03)	(6.81)	(6.47)	(6.72)
AGE	-0.006	-0.202***	-0.005	-0.012***	-0.069***	-0.012***
	(-0.76)	(-6.17)	(-0.91)	(-2.65)	(-4.29)	(-2.58)
ROA	1.173***	1.258***	1.180***	0.691***	0.728***	0.689***
	(15.13)	(9.52)	(11.64)	(14.72)	(10.19)	(14.53)
CFO	-1.077***	-1.186***	-1.077***	-0.730***	-0.792***	-0.728***
	(-21.84)	(-13.82)	(-12.69)	(-23.85)	(-19.64)	(-23.76)
GROW	0.039***	0.029**	0.040**	-0.052***	-0.036***	-0.051***
	(4.41)	(2.43)	(2.35)	(-9.47)	(-5.71)	(-9.31)
Intercept	0.019	-0.792***	0.017	-0.172***	-0.706***	-0.171***
	(0.36)	(-3.51)	(0.47)	(-5.60)	(-5.32)	(-5.56)
F-statistic			2 012.600			2 445.480
Sargan *p*-value			0.672			0.443
R^2 (%)	18.79	15.12	18.63	20.89	33.31	20.63
N	3 084	3 084	3 084	3 330	3 330	3 330

This table presents pooled OLS, FE and 2SLS estimations of the relationship between aggregated institutional ownership and accrual-based earnings management over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results in the context of South Africa and China are reported in Panel A and Panel B respectively. The dependent variables are DA^+ and DA^- in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Table 4.5

Regressions of relationships between disaggregated institutional ownership and earnings management

	DA^+			DA^-		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationships between pressure insensitive institutional ownership and earnings management						
IO_INSEN	-0.051*	-0.140**	-0.112***	-0.004	-0.067	-0.003
	(-1.87)	(-2.24)	(-3.38)	(-0.21)	(-1.57)	(-0.13)
LEV	0.023*	0.060***	0.027**	-0.033***	-0.222***	-0.033***
	(1.68)	(4.84)	(2.18)	(-3.75)	(-9.13)	(-3.41)
SIZE	0.001	0.022	0.000	0.009***	0.045***	0.009***
	(0.69)	(0.47)	(0.17)	(7.45)	(6.48)	(6.68)
AGE	-0.007	-0.206***	-0.007	-0.013***	-0.070***	-0.012***
	(-1.10)	(-6.27)	(-1.22)	(-3.27)	(-4.39)	(-2.59)
ROA	1.205***	1.290***	1.221***	0.690***	0.744***	0.691***
	(17.48)	(9.70)	(18.85)	(15.96)	(10.28)	(13.76)
CFO	-1.081***	-1.199***	-1.023***	-0.687***	-0.796***	-0.728***
	(-26.03)	(-13.98)	(-27.40)	(-25.20)	(-19.73)	(-23.67)
GROW	0.035***	0.031***	0.027***	-0.049***	-0.036***	-0.051***
	(4.68)	(2.62)	(4.02)	(-9.67)	(-5.66)	(-9.32)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.004	-0.809***	0.018	-0.174***	-0.699***	-0.172***
	(-0.09)	(-3.59)	(0.46)	(-6.30)	(-5.27)	(-5.54)
F-statistic			1 516.490			2 107.680
Sargan *p*-value			0.176			0.451
R^2 (%)	20.80	15.23	25.98	19.76	33.38	20.64
N	3 084	3 084	3 084	3 330	3 330	3 330

Panel B Relationships between pressure sensitive institutional ownership and earnings management						
IO_SEN	-0.154**	-0.416**	-0.333*	0.061	0.005	0.155
	(-1.99)	(-2.33)	(-1.92)	(1.10)	(0.05)	(1.49)
LEV	0.021*	0.053**	0.028*	-0.033***	-0.221***	-0.033***
	(1.76)	(2.23)	(1.76)	(-3.77)	(-9.07)	(-3.43)
SIZE	0.001	0.037	0.000	0.009***	0.044***	0.009***
	(0.50)	(0.58)	(0.07)	(7.44)	(6.41)	(6.54)
AGE	-0.005	-0.165***	-0.006	-0.013***	-0.067***	-0.012***
	(-1.17)	(-4.11)	(-0.77)	(-3.28)	(-4.20)	(-2.63)
ROA	1.164***	1.297***	1.160***	0.684***	0.724***	0.683***
	(14.07)	(7.23)	(15.10)	(16.73)	(10.15)	(14.75)
CFO	-1.086***	-1.206***	-1.088***	-0.686***	-0.792***	-0.724***
	(-14.61)	(-10.27)	(-22.03)	(-25.15)	(-19.66)	(-23.55)
GROW	0.035**	0.030*	0.040***	-0.049***	-0.036***	-0.051***
	(2.47)	(1.89)	(4.50)	(-9.61)	(-5.65)	(-9.22)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	0.006	-0.772*	0.019	-0.171***	-0.700***	-0.168***
	(0.16)	(-1.69)	(0.38)	(-6.28)	(-5.28)	(-5.45)
F-statistic			736.778			895.666
Sargan *p*-value			0.678			0.393
R^2 (%)	20.97	47.60	18.73	19.78	33.29	20.63
N	3 084	3 084	3 084	3 330	3 330	3 330

This table presents pooled OLS, FE and 2SLS estimations of the relationship between disaggregated institutional ownership and accrual-based earnings management over the period 2008 to 2013 for China. The results of the relationship between earnings management and pressure-insensitive and pressure-sensitive institutional ownership are reported in Panel A and Panel B respectively. The dependent variables are DA^+ and DA^- in both Panel A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

The regression results on the relationship between institutional ownership and earnings management with a negative direction are shown in Columns 4 to 6 of Tables 4.4 and 4.5. Panel A of Table 4.4 reports a significant positive relationship between IO_TOTAL and DA^-, suggesting that in contrast to income-increasing earnings management, institutional investors in general are linked to a reduction of income-decreasing earnings management in the South African context. In this regard, institutional investors in South Africa are unlikely to prevent their investee firms from meeting or beating the financial expectations of stakeholders. This could be linked to the larger number of positive DA and lower number of negative DA observations observed for the JSE-listed companies.

In contrast to the South African results, the Chinese evidence indicates that none of IO_TOTAL, IO_INSEN or IO_SEN is significantly related to DA^-. Institutional investors in China may therefore be ineffective in preventing income-decreasing earnings management. This could be linked to the phenomenon that more negative DA but fewer positive DA observations were observed for the Chinese companies. More importantly, this finding illustrates that Chinese firms tend to manage earnings towards zero; similar to individual investors, they may prefer to 'keep quiet and make money' ('men-sheng fa-da-cai' in Chinese), an old-fashioned Chinese maxim (Li et al., 2011).

In terms of the control variables, financial leverage (LEV) is significantly and positively related to income-increasing earnings management, but is insignificantly associated with income-decreasing earnings management in the context of South Africa; similarly, it is significantly positively (negatively) related to income-increasing (decreasing) earnings management for the Chinese sample. Listing history (AGE) is negatively and insignificantly (significantly) related to income-increasing (income-decreasing) earnings management for the South African firms, with similar associations also observed for the Chinese sample. In addition, return on assets (ROA) (cash flow (CFO)) exhibit significant positive (negative) associations with income-increasing and income-decreasing earnings management for both the South African

and the Chinese sample. Besides these similarities, the relationships between the remaining control variables and earnings management observed for the South African firms differ from those obtained in the case of China. More specifically, firm size (SIZE) demonstrates a significant negative relationship with income-decreasing as well as income-increasing earnings management for the South African firms, while the relationships are positive for the Chinese sample. Firm growth (GROW) is negatively associated with income-decreasing earnings management for the South African and Chinese firms; while it is positively and significantly associated with income-increasing earnings management within the Chinese setting.

4.4.2.2 Non-linear relationship between institutional ownership and earnings management

The regression results shown in Tables 4.6 and 4.7 display the associations between institutional ownership and the absolute value of DA. Panel A of Table 4.6 reports a significant negative relationship between IO_TOTAL and |DA|, illustrating that for the sample of South African firms, institutional ownership has a negative impact on earnings expropriation. To a large extent, this relationship can be attributed to institutional investors' impact on DA^-, which is evident from Panel A of Table 4.4.

The regression results reported in Panel B of Table 4.6 show a statistically significant negative relationship between IO_TOTAL and |DA|, that is, in China, increased stockholding by institutional investors as a whole is associated with lower levels of earnings management, predominantly attributable to their impact on DA^+. Furthermore, both IO_INSEN and IO_SEN are significantly and negatively associated with |DA|, implying that both pressure-insensitive and pressure-sensitive institutional investors are effective in detecting earnings management in general, although it was shown earlier that their monitoring role is only effective in constraining income-increasing earnings management, and fails to curb income-decreasing earnings management.

Table 4.6

Regressions of non-linear relationships between aggregated institutional ownership and earnings management

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Non-linear relationships between aggregated institutional ownership and earnings management (South Africa)						
IO_TOTAL	-0.063**	-0.113**	-0.110**	-0.139*	-0.125***	-2.171***
	(-2.50)	(-2.39)	(-2.51)	(-1.70)	(-3.01)	(-4.10)
IO_TOTAL^2				0.272***	0.229***	2.353***
				(3.17)	(7.39)	(4.34)
LEV	0.014	0.005	0.002	0.006	0.028	0.003
	(0.70)	(0.16)	(0.08)	(0.32)	(0.57)	(0.05)
SIZE	0.007*	0.107**	0.012**	0.020	0.075**	0.013*
	(1.87)	(2.54)	(2.40)	(0.66)	(2.14)	(1.91)
AGE	0.007	0.457***	0.009	0.002	0.365***	0.011
	(0.94)	(5.78)	(1.10)	(0.29)	(5.50)	(1.06)
ROA	-0.516***	-0.615***	-0.519***	-0.238***	-0.537***	-0.191***
	(-8.32)	(-4.81)	(-7.88)	(-6.07)	(-4.63)	(-3.32)
CFO	0.313***	0.233**	0.296***	0.204***	0.170*	0.179**
	(4.88)	(2.08)	(4.39)	(3.34)	(1.72)	(2.00)
GROW	0.067*	0.053	0.070*	0.018***	0.007	0.019**
	(1.70)	(0.97)	(1.67)	(3.04)	(1.06)	(2.20)
Intercept	0.051	-2.644***	0.013	0.123***	-1.988***	0.245***
	(0.93)	(-4.58)	(3.94)	(4.57)	(-4.13)	(2.96)
F-statistic			117.152			30.087
Sargan *p*-value			0.188			0.315
R^2 (%)	12.67	13.39	2.36	14.16	25.66	8.63
N	696	696	696	696	696	696

Panel B Non-linear relationships between aggregated institutional ownership and earnings management (China)						
IO_TOTAL	-0.017**	-0.023*	-0.025**	-0.028**	-0.026*	-0.061*
	(-1.97)	(-1.67)	(-2.03)	(-2.21)	(-1.78)	(-1.88)
IO_TOTAL^2				0.025	0.018	0.064
				(1.21)	(0.64)	(1.30)
LEV	0.055***	0.162***	0.054***	0.055***	0.163***	0.054***
	(5.46)	(8.73)	(5.44)	(5.49)	(8.75)	(5.46)
SIZE	-0.009***	-0.061***	-0.009***	-0.009***	-0.062***	-0.009***
	(-6.56)	(-12.84)	(-6.45)	(-6.61)	(-12.85)	(-6.38)
AGE	0.005	0.040***	0.005	0.004	0.039***	0.005
	(0.97)	(3.29)	(1.05)	(0.85)	(3.22)	(0.96)
ROA	0.238***	0.115***	0.243***	0.239***	0.115***	0.249***
	(5.43)	(3.14)	(5.48)	(5.44)	(3.13)	(5.58)
CFO	-0.128***	-0.082***	-0.128***	-0.128***	-0.082***	-0.128***
	(-5.37)	(-3.89)	(-5.39)	(-5.38)	(-3.89)	(-5.41)
GROW	0.047***	0.004***	0.048***	0.047***	0.004***	0.048***
	(8.45)	(22.22)	(8.52)	(8.41)	(22.20)	(8.56)
Intercept	0.223***	1.324***	0.220***	0.226***	1.326***	0.221***
	(6.95)	(14.35)	(6.85)	(7.03)	(14.36)	(6.87)
F-statistic			4 115.570			1 543.080
Sargan *p*-value			0.603			0.778
R^2 (%)	3.31	28.82	3.33	3.32	26.81	3.30
N	6 414	6 414	6 414	6 414	6 414	6 414

This table presents pooled OLS, FE and 2SLS estimations of the non-linear relationship between aggregated institutional ownership and aggregated accrual-based earnings management over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results in the context of South Africa and China are reported in Panel A and Panel B respectively. The dependent variable is |DA| in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions

are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Table 4.7

Regressions of non-linear relationships between disaggregated institutional ownership and earnings management

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Non-linear relationships between pressure insensitive institutional ownership and earnings management						
IO_INSEN	-0.041**	-0.074**	-0.044*	-0.067**	-0.088*	-0.299*
	(-2.20)	(-1.97)	(-1.92)	(-2.53)	(-1.76)	(-1.90)
IO_INSEN^2				0.109	0.045	1.011
				(1.38)	(0.41)	(1.55)
LEV	0.055***	0.186***	0.052***	0.054***	0.186***	0.050***
	(5.50)	(8.42)	(6.03)	(5.37)	(8.42)	(5.77)
SIZE	-0.009***	-0.089***	-0.009***	-0.008***	-0.089***	-0.008***
	(-6.03)	(-15.93)	(-7.48)	(-5.71)	(-15.87)	(-4.79)
AGE	0.004	0.077***	0.005	0.004	0.077***	0.003
	(0.84)	(5.14)	(1.10)	(0.82)	(5.14)	(0.63)
ROA	0.257***	0.285***	0.248***	0.254***	0.285***	0.269***
	(5.61)	(4.64)	(5.98)	(5.53)	(4.64)	(6.20)
CFO	-0.127***	-0.090***	-0.102***	-0.129***	-0.090***	-0.103***
	(-5.34)	(-3.72)	(-4.96)	(-5.42)	(-3.73)	(-5.03)
GROW	0.048***	0.024***	0.041***	0.048***	0.024***	0.041***
	(8.48)	(4.06)	(8.41)	(8.48)	(4.06)	(8.43)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	0.211***	1.727***	0.223***	0.205***	1.724***	0.195***
	(6.47)	(16.64)	(7.98)	(6.22)	(16.57)	(6.06)
F-statistic			3 613.890			262.341
Sargan *p*-value			0.661			0.333
R^2 (%)	3.33	17.90	3.58	3.34	17.88	3.10
N	6 414	6 414	6 414	6 414	6 414	6 414

Panel B Non-linear relationships between pressure sensitive institutional ownership and earnings management						
IO_SEN	-0.117**	-0.211*	-0.236**	-0.173**	-0.213*	-0.556*
	(-2.04)	(-1.76)	(-2.52)	(-2.13)	(-1.76)	(-1.66)
IO_SEN^2				0.144	0.080	2.396
				(0.25)	(0.13)	(1.00)
LEV	0.050***	0.079***	0.049***	0.053***	0.080***	0.048***
	(5.69)	(3.89)	(5.74)	(5.34)	(3.89)	(5.51)
SIZE	-0.009***	-0.006	-0.009***	-0.009***	-0.006	-0.009***
	(-7.04)	(-1.15)	(-7.62)	(-6.45)	(-1.15)	(-6.69)
AGE	0.006	0.055	0.006	0.005	0.055	0.006
	(1.49)	(1.01)	(1.34)	(1.05)	(1.01)	(1.48)
ROA	0.211***	0.115***	0.216***	0.225***	0.115***	0.220***
	(5.65)	(3.06)	(5.82)	(5.21)	(3.06)	(5.89)
CFO	-0.144***	-0.091***	-0.109***	-0.131***	-0.091***	-0.112***
	(-6.97)	(-4.18)	(-5.34)	(-5.51)	(-4.18)	(-5.42)
GROW	0.042***	0.005***	0.041***	0.048***	0.005***	0.041***
	(8.45)	(24.15)	(8.42)	(8.49)	(24.14)	(8.45)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	0.213***	0.142	0.225***	0.219***	0.142	0.215***
	(7.67)	(1.35)	(8.13)	(6.81)	(1.35)	(7.31)
F-statistic			1 620.090			159.432
Sargan *p*-value			0.668			0.479
R^2 (%)	3.17	21.90	3.66	3.33	21.89	3.55
N	6 414	6 414	6 414	6 414	6 414	6 414

This table presents pooled OLS, FE and 2SLS estimations of the non-linear relationship between disaggregated institutional ownership and aggregated accrual-based earnings management over the period 2008 to 2013 for China. The results of the relationship between aggregated earnings management and pressure-insensitive and pressure-sensitive institutional ownership are reported in Panel A and Panel B respectively. The dependent variable is |DA| in both Panels A and B. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and

hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

The regression results obtained from investigating whether a non-linear relationship exists between institutional ownership and earnings management are shown in Columns 4 to 6 of Tables 4.6 and 4.7. Panel A of Table 4.6 reports a significant positive relationship between IO_TOTAL^2 and |DA|, implying a U-shaped relationship instead of the anticipated inverted U-shaped relationship within the South African context. That is, within a certain level of institutional ownership concentration, earnings management declines as institutional ownership increases, whereas beyond that level, institutional ownership appears to be positively associated with earnings management. This finding is inconsistent with the inverted U-shaped relationship reported by Hsu and Koh (2005) and Koh (2003), but in line with Velury and Jenkins (2006). As suggested by Fan and Wong (2002) and Firth, Fung and Rui (2007), concentrated ownership is associated with reduced earnings information content. Thus, institutional investors with concentrated ownership are likely to lower earnings quality. According to Wang (2014), institutional investors with more than 20 per cent shareholding in a firm may become insiders and collude with management to pursue their own interests by sacrificing those of the minority shareholders. In such a situation, institutional investors no longer efficiently monitor managers or other majority shareholders. This behaviour is consistent with the negative monitoring hypothesis discussed in Chapter 3. In contrast to the South African results, no evidence that would imply a non-linear relationship between institutional ownership and earnings management is reported for the sample of Chinese firms, as reflected by the non-significant coefficients reported for IO_TOTAL^2, IO_INSEN^2 and IO_SEN^2 in Tables 4.6 and 4.7.

In terms of control variables, SIZE and CFO present a significant positive relationship with absolute value of DA (|DA|) in South Africa, and ROA is found to be negatively related to |DA|. In this regard, opposite results were observed in China. While GROW is positively associated with |DA| in both countries. Moreover, Chinese firms with high financial leverage (LEV) demonstrate high earnings management in absolute value, while this phenomenon is not significant in South Africa.

4.4.2.3 Impact on earnings management within different earnings distribution contexts

This section reports on regressions conducted to investigate the impact of institutional ownership on earnings management in companies with NN1>0 and NNI<0, and companies with DNNI>0 and DNNI<0. Because of the small sample size for South Africa, this chapter does not proceed to compare the impact of institutional ownership on income-increasing and income-decreasing earnings management for the different earnings thresholds.

Panel A of Table 4.8 displays a significant (insignificant) negative relationship between IO_TOTAL and |DA| when NNI>0 (NNI<0). Furthermore, Columns 3 and 4 of Panel A show that irrespective of whether DNNI>0 or DNNI<0, the impact of institutional ownership on earnings management reduction is significant. In Section 4.4.2.2, a significant negative relationship between institutional ownership overall and |DA| is reported for the South African sample. Based on the results reported in Table 4.8, however, this relationship only applies within profit-making companies (NNI>0) and not in loss-making companies (NNI<0).

Similarly, aggregated institutional ownership is likely to curb earnings management within profit-making companies in China, but less likely to perform such a function in loss-making companies. However, contrary to institutional investors in South Africa, institutional investors in China reduce earnings management only in companies with earnings above the prior year's earnings, i.e. when DNNI>0, as reflected in Columns 3 and 4 of Panel B, Table 4.8.

Table 4.8

Regressions of relationships between institutional ownership and earnings management (including earnings threshold consideration)

	NNI>0	NNI<0	DNNI>0	DNNI<0
	1	2	3	4
Panel A Relationships between aggregated institutional ownership and earnings management (South Africa)				
IO_TOTAL	-0.130***	-0.002	-0.096*	-0.164**
	(-2.73)	(-0.03)	(-1.86)	(-1.99)
F-statistic	96.969	19.585	71.311	39.307
Sargan *p*-value	0.377	0.704	0.919	0.212
R^2 (%)	4.68	33.34	2.42	5.25
N	605	91	319	197
Panel B Relationships between aggregated institutional ownership and earnings management (China)				
IO_TOTAL	-0.028***	0.008	-0.036***	0.009
	(-2.79)	(0.31)	(-2.71)	(0.71)
F-statistic	3 976.600	361.806	2 766.090	1 512.780
Sargan *p*-value	0.571	0.744	0.144	0.609
R^2 (%)	6.10	21.33	6.30	3.93
N	5 736	678	3 158	2 055
Panel C Relationships between pressure insensitive institutional ownership and earnings management				
IO_INSEN	-0.093***	0.090	-0.119***	0.082**
	(-3.93)	(0.85)	(-3.98)	(2.16)
F-statistic	3 173.000	197.524	2 244.760	1 055.410
Sargan *p*-value	0.656	0.896	0.194	0.708
R^2 (%)	6.06	21.18	6.28	4.10
N	5 736	678	3 158	2 055
Panel D Relationships between pressure sensitive institutional ownership and earnings management				
IO_SEN	-0.216**	-0.099	-0.254*	-0.139
	(-2.22)	(-0.38)	(-1.86)	(-1.24)

Table 4.8 (continued)

	NNI>0 1	NNI<0 2	DNNI>0 3	DNNI<0 4
F-statistic	1 545.370	88.282	974.664	593.785
Sargan *p*-value	0.772	0.771	0.267	0.704
R^2 (%)	6.18	21.17	6.40	3.87
N	5 736	678	3 158	2 055

This table presents 2SLS estimations of the relationship between institutional ownership and aggregated accrual-based earnings management by considering earnings thresholds (zero and last year's earnings) over the period 2010 to 2013 for South Africa and 2008 to 2013 for China respectively. The results of the relationship between aggregated earnings management and aggregated institutional ownership in the context of South Africa and China are reported in Panel A and Panel B respectively; the results of the relationship between aggregated earnings management and pressure-insensitive and pressure-sensitive institutional ownership are reported in Panel C and Panel D respectively. Columns 1 and 2 of each panel report the results by considering zero earnings as a threshold; Columns 3 and 4 of each panel report the results by considering the prior year's earnings as a threshold. The dependent variable is |DA| in each panel. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the relationships between earnings management and control variables are similar to those indicated in the tables above; for brevity, they are not displayed in this table. The *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

In this regard, institutional investors overall appear to be linked to reduced accrual-based earnings management in both South Africa and China. Additionally, the relationship between institutional ownership and earnings management within loss-making companies and companies with earnings below their prior year's earnings suggests that institutional investors as a whole in both countries do not engage in taking an earnings bath when firms report poor earnings. However, this finding is not applicable to disaggregated institutional ownership.

It is observed that IO_INSEN as well as IO_SEN are negatively and significantly related to |DA| when NNI>0 and DNNI>0. However, IO_INSEN has a significant positive association with |DA| when DNNI<0, indicating that for firms with earnings above the prior year's earnings, pressure-insensitive institutional ownership is unlikely to curb earnings management; on the contrary, it appears to accelerate it. More specifically, when disaggregating |DA|, it is shown that the significant positive relationship between IO_INSEN and |DA| is the result of the impact IO_INSEN has on negative DA (i.e. DA^-) [25] . This finding suggests that pressure-insensitive institutional investors may have incentives to take an earnings bath.

4.5 Conclusions

By employing a sample of 174 South African and 1 069 Chinese listed firms, the research reported in this chapter found that earnings management is a pervasive practice among the sample firms, and that it is more pronounced for the Chinese firms than the South African firms. Furthermore, the South African companies appear more likely to smooth earnings than their Chinese counterparts. The regression results show that the relationship between institutional ownership and earnings management is complex and appears to be context-dependent, varying by country, the types of institutional investors involved, the percentage of ownership that is held by

[25] This chapter ran OLS and 2SLS regressions between IO_INSEN and DA^- in DNNI<0 firms by controlling all the control variables, and found that IO_INSEN is negatively and significantly related to DA^- at the 5 per cent significance level (but not report here).

institutional investors, as well as the nature of the earnings management. Overall, institutional investors are confirmed to have a positive relationship with aggregated earnings management mitigation. More specifically, when considering earnings management in different scenarios, this chapter found that in the South African context, institutional investors are more likely to restrain income-decreasing earnings manipulation than income-increasing earnings management. In China, institutional ownership is associated with reduced earnings management that takes place in the form of income-increasing earnings management, while this relationship becomes insignificant when dealing with income-decreasing earnings management.

When distinguishing between different types of Chinese institutional investors, increased ownership concentration by pressure-insensitive institutional investors was found to be significantly and negatively related to income-increasing earnings management, while they do not comply with the efficient monitoring hypothesis when considering income-decreasing earnings management. They appear to accelerate management incentives to engage in income-decreasing earnings management, especially in firms with current earnings below the prior year's earnings. Pressure-sensitive institutional investors seem to be active in mitigating manipulation behaviour as well; they have a significant relationship with income-increasing earnings management. Thus, the Chinese evidence suggests that institutional investors are not strictly homogeneous in terms of their reactions to earnings management. In addition, institutional investors exhibit a U-shaped relationship with earnings management in the South African setting, while a similar relationship is not observed in the Chinese context. The results remain robust when adopting different estimation methods.

Considering that real earnings management is increasingly being used by firms since it is not so easily detected, investigating the impact of institutional ownership engagement on this alternative form of earnings management becomes important to improve our understanding of the impact that institutional ownership has on

mitigating earnings management. Unfortunately, data relating to levels of real earnings management was not available for South Africa, limiting this study to an investigation of accrual-based earnings management.

Together with Chapter 3, this chapter provides a better understanding of the relationship between institutional investors and improved corporate governance from a financial perspective. However, this relationship is not only demonstrated in financial aspects, but also in non-financial practices. The focus of Chapter 5 will therefore be on whether institutional investors can provide an advancement towards ESG performance.

CHAPTER 5

RESPONSIBLE INVESTMENT AND ESG PERFORMANCE: THE INSTITUTIONAL OWNERSHIP EFFECT

5.1 Introduction

Non-financial factors, such as ESG issues, have been brought to the forefront of institutional investors' consideration when making investment decisions. Investment by incorporating ESG concerns is labelled socially responsible investing (SRI), or RI as it is more commonly known, and is becoming part of the mainstream investment landscape (Cerin & Scholtens, 2011; Eurosif, 2014; US SIF, 2014). The development of ESG practices and RI can be explained within an NI theory context (Ntim & Soobaroyen, 2013). For listed companies, the legitimation (ethical) view of NI theory suggests that regulative institutional pressures compel companies to conform to social norms and ESG standards so as to enhance their social acceptance, and to win support from stakeholders. From its efficiency (instrumental) perspective, regulative institutional forces also encourage companies to compete for critical resources to protect shareholders' interests and maximise CFP. Likewise, legitimation (ethical) and efficiency (instrumental) motives also apply to institutional investors' RI behaviour. In this regard, it is not surprising to observe that companies and institutional investors are likely to conform to regulations, norms, codes and standards to engage in ESG practices.

South Africa and China are no exception to the phenomenon that a growing number of institutional investors have been embracing the concept of RI. Like most emerging markets, South Africa and China attract numerous investors through their high potential for growth; these investors at the same time have to bear higher risks (e.g. political, currency and liquidity risks) than in developed markets. It is furthermore necessary to consider the additional risks regarding the ESG disclosure of their investee companies (Rosenthal, 2014). An emerging markets report conducted by

EIRIS found that poor corporate ESG disclosure is one of the biggest challenges to investment in emerging markets (EIRIS, 2012). Thus, there is no doubt that the materiality of ESG considerations in South Africa and China needs to be improved. Whether it is environmental pollution and labour conflicts in China, or HIV/AIDS and B-BBEE in South Africa, it is clear that corporate ESG issues are related to shareholders' and other stakeholders' benefits. In this regard, South Africa and China are expected to improve ESG performance (e.g. ESG disclosure), as well as increase participation by market participants such as institutional investors, to positively affect ESG performance and mitigate the negative impact of corporate operations, in line with the legitimation (ethical) and efficiency (instrumental) purposes set out in NI theory.

In the context of listed companies, the RI practices of institutional investors can to some extent be assessed by their impact on the ESG performance of their investee companies. This impact is unclear, however, in the context of South Africa and China, since limited previous research has been conducted. Therefore, this chapter attempts to advance the literature on this topic by exploring the relationship between institutional investors and improved corporate ESG performance in these two countries. In addition, corporate governance in emerging markets, just as in developed markets, is given priority over other responsibility concerns (EIRIS, 2012). The quality of reporting on corporate governance considerations is currently much better than that of reporting on ES criteria - a situation which becomes evident when considering companies' annual reports, sustainability reports or integrated reports. Accordingly, this chapter considers corporate governance as a distinct segment of a company's overall ESG considerations, and discusses corporate governance and its relationship with institutional ownership separately.

Apart from ESG performance, institutional investors also pursue the economic returns of their RI practices, given that one of the RI focus areas entails the financial materiality of ESG issues. Chapter 3 examined the impact of institutional investors on

CFP, and found that increased levels of institutional ownership are linked to improved CFP (except among pressure-sensitive institutional investors in China). This chapter extends this analysis by investigating if institutional investors are more effective in advancing CFP through their contribution towards improved corporate ESG performance. The primary research questions addressed in this chapter are: (1) Is institutional ownership related to improved corporate governance and corporate ESG performance? (2) Can institutional investors address RI issues and still promote financial performance? The following secondary research questions are aimed at providing deeper insight to these questions: (1) Do different types of institutional investors promote corporate governance and ESG performance in a similar way? (2) Are institutional investors a homogeneous group in promoting CFP in different ESG performance contexts?

By employing a sample of 81 and 435 listed firms from South Africa and China respectively, the results reported in this chapter reveal that, contrary to their positive association with improved CFP, institutional investors are unlikely to advance overall ESG performance. In addition, only institutional investors in South Africa were found to be associated with improved corporate governance. Furthermore, in China good overall ESG performance and corporate governance are likely to positively moderate institutional investors' (i.e. pressure-insensitive institutional investors) effectiveness in promoting financial performance; while the opposite results were detected in South Africa. These results are robust to different estimations.

The remainder of this chapter is organised as follows: Section 5.2 offers an overview of RI in South Africa and China, after which Section 5.3 reviews the relevant literature on RI and ESG performance. Section 5.4 presents the source of the data required, describes the sample, provides descriptive statistics and explains the methodology employed in this chapter. This is followed by the regression results analysis and discussion in Section 5.5, and conclusions in Section 5.6.

5.2 Overview of RI in South Africa and China

RI in emerging markets has gained momentum in recent years (MERCER & IFC, 2009), which can in part be attributed to increased concerns over CSR on stock markets (Managi, Okimoto & Matsuda, 2012; Ortas, Moneva & Salvador, 2012), as well as the development of SRI equity indices (Muzindutsi & Sekhampu, 2013; Ortas et al., 2012). This section reviews the literature on RI in South Africa and China, with special focus on corporate governance practices within the two countries.

5.2.1 RI in South Africa

South Africa was the first country to mandate the disclosure of integrated reporting (starting from the 2011 financial year). This was done as part of the principles recommended by the King III report (Chapter 9: Integrated reporting and disclosure) in 2009. An integrated report is a single document that presents the financial and non-financial performance of a company. The JSE has made integrated reporting mandatory for all JSE-listed companies on an 'apply or explain' basis (i.e. either disclose or explain why it could not provide any disclosure) (see JSE Listings Requirements, Section 8.63 (a)). South Africa has gone one step further, with companies also being required to submit sustainability information in a separate document or as part of their annual reports during the past few years. Despite having developed a good corporate governance enforcement and disclosure framework, the South African situation is still considered insufficient in terms of disclosure on environmental aspects (Giamporcaro & Pretorius, 2012), and there is no uniform implementation made by companies towards integrated reporting - something which may improve with the forthcoming King IV report. The facts indicate that the levels of disclosure provided by integrated reports still need to be further improved, and it is thus not surprising to see that in practice, institutional investors' attitudes towards integrated reporting to a large extent have not been transformed, and that they still predominantly rely on financial information (Atkins & Maroun, 2014). Table 5.1 presents a list of selected regulations on ESG issues in South Africa.

Table 5.1

Selected regulations relevant to ESG issues in South Africa

Environment	Society	Governance
• National Environmental Management Act (1998) • Environmental Conservation Act (1989) • National Water Act (1998) • National Environmental Management: Protected Areas Act (2003) • Air Quality Act (2004) • The Constitution: Section 24 • Polluter Pays Principle • National Energy Regulator of South Africa feed-in tariffs	• Broad-based Black Economic Empowerment Act (2003) • Labour Relations Act (1995) • Skills Development Act (1998) • Housing Protection Measures Act (1998) • Unemployment Insurance Act (2001) • Basic Conditions of Employment Act (1997) • Promotion of Equity and Prevention of Unfair Discrimination Act (2000) • Preferential Procurement Policy Framework Act (2000)	• Companies Act (2008) • National Credit Act (2005) • Insider Trading Act (1998) • Consumer Protection Act (2008)

Source: Mans-Kemp and Viviers (2016: 106)

The origins of RI practices in South Africa can be traced back to the 1980s (Giamporcaro, Pretorius & Visser, 2010). As only the second country (the first being the UK) to formally encourage institutional investors to integrate ESG considerations into their investment decisions, South Africa had its first RI fund launched in 1992. Although the RI sector was not attractive to investors for some time, it increasingly attracted attention with initiatives such as the UNPRI and the JSE SRI Index. According to Viviers (2014a), RI funds in South Africa have experienced four phases, namely an establishment phase (1992-1998), decline phase (1999-2003), resurgence phase (2004-2008) and strong growth phase (2009-present).

Since the launch of the UNPRI in 2006, there has been increasing awareness of RI in South Africa. South African signatories of the UNPRI (by July 2016) include seven asset owners, 37 asset managers and 10 professional service partners. It should be however noted that the market has seen limited growth in the number of RI funds and their AuM, according to an examination of 21 years of RI practice in South Africa by Viviers (2014b).

The JSE SRI Index was first released in 2004, and represented the first emerging market sustainability index. It started with 51 companies, and had developed to

include 82 constituents by the end of 2014. The JSE SRI Index is becoming a useful tool for institutional investors to increase their involvement in RI (Muzindutsi & Sekhampu, 2013). Some of the latest developments in support of RI include the amendment of Regulation 28 of the Pension Funds Act (No. 24 of 1956) (in 2011), the introduction of CRISA in 2011 and the announcement of the ESG partnership with FTSE Russell from 2015 and the launch of the FTSE/JSE Responsible Investment Index Series in 2015, as well as PIC Corporate Governance Rating Matrix released in 2010. The forthcoming King IV report is also believed to strengthen the support of institutional investors implementing RI.

5.2.2 RI in China

In China, companies historically had low levels of sustainability reporting prior to the release of regulations on RI (Ioannou & Serafeim, 2014). These regulations include (but are not limited to) the *Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies*, released by the SZSE in 2006; the *Guide on Environmental Information Disclosure for Companies Listed on the Shanghai Stock Exchange*, and the *Notice on Strengthening Social Responsibility of Listed Companies* released by the SSE in 2008. At the end of 2008, the SSE further mandated three types of companies to disclose ESG issues, namely those companies included in the SSE Corporate Governance Index, companies listing their shares overseas, and financial companies. Table 5.2 presents selected regulations that are relevant to ESG considerations in China.

Consequently, CSR practices are developing and have achieved some levels of success, as observed by the growing number of CSR reports being released. The 2015 Chinese CSR White Paper (henceforth the White Paper) reported that 1 703 CSR reports were released in addition to financial reports in 2015, while the number was only 32 in 2006. Three quarters of these reports were released by state-owned and listed companies. However, this is far from enough. CSR reports covering more than 50 pages only accounted for 26 per cent of the total number of reports, while more than 60 per cent of the CSR reports consisted of less than 30 pages and provided limited information. According to the White Paper, CSR reports are becoming more comprehensive, but

their disclosure coverage and depth are still inadequate.

Table 5.2

Selected regulations relevant to ESG issues in China

Environment	Society	Governance
• Article 26 of the Constitution (2004) • Environmental Protection Law (2014) • Cleaner Production Promotion Law (2012) • Water Pollution Prevention and Control Law (2008) • Atmospheric Pollution Prevention and Control Law (2015) • Renewable Energy Law (2009) • Energy Conservation Law (2007) • Circular Economy Promotion Law (2008)	• Labour Law of the People's Republic of China • Labour Contract Law • Social Insurance Law • Law on the Protection of Rights and Interests of Women • Production Safety Law • Law on Prevention and Control of Occupational Diseases	• Company Law • Securities Law • Criminal Law Amendment Act (Specific provisions, Chapter 3) • Law on the State-Owned Assets of Enterprises • Provisions on Strengthening the Protection of the Rights and Interests of Public Shareholders • Code of Corporate Governance of Listed Companies • Regulations on Information Disclosure of Listed Companies

Source: Author's own construction

Regarding SRI indices, there have also been some developments in recent years. The Taida Environmental Index (including 40 companies listed on either the SSE or the SZSE), which was released in 2008, is considered the first themed SRI index focusing on Chinese companies. In 2008, the SSE Corporate Governance Index and the SSE 180 Corporate Governance Index, with their focus on corporate governance, were released by the SSE. In 2009, the SSE and the SZSE also launched the SSE Social Responsibility Index and the SZSE CSR Index. During the same year, the CNI-CBN-AEGON-INDUSTRIAL CSR Index was released, containing listed companies from both the SSE and the SZSE. In addition, some carbon-related SRI indices, such as the CNINFO LOW-CARBON 50 index, have subsequently been established. A comparison between the South African JSE SRI Index and the Chinese SSE Social Responsibility Index can be found in Table 5.3[26].

[26] Among the established RI-related indices in China, only the SSE Social Responsibility Index has been used as an investment target by institutional investors. In South Africa, the JSE SRI Index was replaced by the FTSE/JSE Responsible Investment Index Series in 2015; and the FTSE/JSE Responsible Investment Top 30 Index was launched in October 2015; while the basic foundation and some indicators of its rating methodology overlap with the JSE SRI Index, its overall theme and indicators are more comprehensive compared to the JSE SRI Index (Trialogue, 2016). For more details on the FTSE/JSE Responsible Investment Index Series, please refer to the JSE website.

Table 5.3

Comparison of the JSE SRI Index and the SSE Social Responsibility Index

	South Africa- JSE SRI Index	China- SSE Social Responsibility Index
Launch date	2004	2009
Original constituents	51	100
Constituents (Dec 2013)	72	100
Commitment	Automatic evaluation	Voluntary application
Cap	All qualifying	All qualifying
Evaluator	EIRIS and University of Stellenbosch Business School's Unit for Corporate Governance in Africa	SSE and China Securities Index Co., Ltd.
Evaluation process	Prior to 2013, publicly available information and company feedback; only publicly available information for now	Publicly available information
Benchmark criteria	90 ESG indicators	Social contribution value per share
Qualifying threshold	50 percent of all indicators, 1/3 of core indicators	Ranking Top 100
Rating disclosure	Index constituents include best performers	Only index constituents
Compliance monitoring frequency	Annual	Annual
Exclusion procedure	Annual review and immediate for grave criteria violation	Annual review and immediate for grave criteria violation

This table provides general information on the JSE SRI Index in South Africa and the SSE Social Responsibility Index in China. The information was collected from the JSE website, the SSE website and a report titled *Raising the bar on corporate governance: A study of eight stock exchange indices* by IFC in 2013. It should be noted that the constituents of SSE Social Responsibility Index are selected from the SSE Corporate Governance Index, which discloses the social responsibility report, and are ranked under the Top 100 by social contribution value per share. At the same time, the constituents of the SSE Corporate Governance Index are the all stocks listed on the SSE Corporate Governance Board (the Board). The Board accepts voluntary application. There are 20 questions for self-evaluation, and the final sample included in the Board also needs to be examined by the public and the SSE. The idea of using the social contribution value per share was put forward by the SSE in 2008, and is calculated by "adding the tax revenues paid to the state, salaries paid to employees, loan interest paid to creditors (including banks), and donations to and other value for stakeholders, minus any social costs that arise from environmental pollution and other negative factors" (Eccles & Krzus, 2014: 298).

In line with the considerable attention that CSR has been receiving and the development of the Chinese SRI indices, RI is evolving as an exciting new area for investors in China. Although RI practices in China started relatively late compared to South Africa and some other markets, it was followed by rapid growth, which is observed especially for mutual funds. In 2006, the Bank of China Sustainable Growth Equity Fund, which is considered to be the first quasi-SRI fund in China, was launched. The Industrial Social Responsibility Securities Investment Fund, founded in 2008 by the AEGON-Industrial Fund Management Company (henceforth the AEGON-Industrial Fund), is considered to be the first truly authentic Chinese RI fund. This fund takes sustainability and ethics into consideration; besides economic performance, it aims to promote the fulfilment of enterprises' social responsibility as well. Following the AEGON-Industrial Fund, the China Construction Bank Principal Asset Management Company and China Universal Asset Management also issued SRI funds in 2010 and 2011 respectively. In 2011, the first green equity fund, the Industrial Green Investment Securities Investment Fund, was launched by the AEGON-Industrial Fund; this fund focuses exclusively on green technology industries.

By the end of October 2014, 18 Chinese mutual funds were being managed according to RI approaches, with combined assets of over RMB 22 billion under management (China SIF, 2014). However, the number of RI funds and their AuM compared to the overall investment industry remain low. In total, only five signatories of the UNPRI are from China, consisting of three asset managers and two professional service partner (by July 2016).

Against the background of China undergoing an economic transformation, moving from a resource- and labour-based economy to a knowledge-based economy, the Chinese SIF proposes that fund managers are now less likely to attribute assets to high energy consumption and high pollution industries; in future, investment in emerging industries that are beneficial to China's economic transition will most probably receive priority (China SIF, 2014).

5.2.3 Good practices in corporate governance in South Africa and China

South Africa is considered to be the pioneer among emerging market countries with regard to corporate governance. This achievement is inseparable from the implementation of the three King reports, especially the King III report, which promotes great opportunities for companies that embrace good corporate governance practices. Compared to South Africa, the regulatory environment for corporate governance development in China has not been well established. China had its first corporate governance code released in 2002 (i.e. the 2002 Code). Unlike the King III report, which focuses on corporate governance from the board of directors' perspective, the 2002 Code attributes two of its seven sections to the board of directors as well as the supervisory board, and takes note of the controlling shareholders' interests – an aspect not reflected in the King III report. Additionally, both the King III report and the 2002 Code acknowledge the important role that institutional investors play in corporate governance.

In order to have a better understanding of corporate governance practices in South Africa and China, as well as to facilitate further analysis, a summary of corporate governance good practices for these two countries is provided in Table 5.4.

Table 5.4

Corporate governance best practices for South Africa and China

	King III report (South Africa)	The 2002 Code (China)
Content	• Ethical leadership and corporate citizenship • Boards and directors • Audit committees • The governance of risk • The governance of information technology • Compliance with laws, rules, codes and standards • Internal audit • Governing stakeholder relationships • Integrated reporting and disclosure	• Shareholders and shareholders' meetings • Listed company and its controlling shareholders • Directors and board of directors • The supervisors and the supervisory board • Performance assessments and Incentive and disciplinary systems • Stakeholders • Information disclosure and transparency
Issuing body	Institute of Directors in Southern Africa	The China Securities Regulatory Commission and the State Economic and Trade Commission (the State Economic and Trade Commission merged with Ministry of Foreign Trade and Economic Cooperation to become the Ministry of Commerce in 2003)
Scope	Listed companies, banks, financial and insurance entities, and public sector enterprises and agencies; all other companies expected to consider applying the principles of this code as appropriate in their particular circumstances	Listed companies
Board of directors		
Board structure	Unitary	Two-tier Note: Chinese listed companies feature a two-tier board system, that is, listed companies should establish a board of directors, as well as a supervisory board. However, the supervisory board plays a very limited role. The Chinese system is not two-tier in a real sense.
Board size	Not covered directly. King III report indicates that every board should have a minimum of two executive directors. The board	The number of directors and the structure of the board of directors shall be in compliance with laws and regulations and

	should comprise a balance of power, with a majority of non-executive directors. Thus, the board should have no less than two executive directors and three non-executive directors.	shall ensure the effective discussion and efficient, timely and prudent decision-making process of the board of directors. Note: A company limited by shares shall have a board of directors of five to nineteen members (Company Law, 2013 Amendment).
Non-executive directors	The board should comprise a balance of power, with a majority of non-executive directors. The majority of non-executive directors should be independent.	Not covered
Board independence	The board should elect the chairman of the board, who is an independent non-executive director. The majority of the non-executive directors should also be independent.	A listed company shall introduce independent directors to its board of directors in accordance with relevant regulations. Note: At least one third of the board shall be independent directors (Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies, 2001).
CEO duality	The CEO of the company should not fulfil the role of chairman of the board.	Not covered
Board meetings	At least four times per year.	Not covered Note: The board of directors shall convene at least two meetings each year (Company Law, 2013 Amendment).
Board committee	Public and state-owned companies must appoint an audit committee; all other companies should establish an audit committee. Companies should also establish risk, nomination and remuneration committees.	The board of directors may establish a corporate strategy committee, an audit committee, a nomination committee, a remuneration and appraisal committee and other special committees in accordance with the resolutions of the shareholders' meetings.
Audit committee		
Size of the committee	The audit committee should consist of at least three members.	Not covered Note: The audit committee should consist of at least three members (SSE Guidance on Operation of Audit Committee of Listed Company's Directorate, 2013).

Independence of the committee	All members of the audit committee should be independent non-executive directors.	The committee shall be chaired by an independent director, and independent directors shall constitute the majority of the committees.
Resources of the committee	The committee collectively should have sufficient qualifications and experience to fulfil its duties.	At least one independent director from the audit committee shall be an accounting professional.
Meetings of the committee	The audit committee should meet as often as is necessary to fulfil its functions but at least twice a year.	Not covered Note: The audit committee should meet as often as is necessary to fulfil its functions but at least four times a year. (SSE Guidance on Operation of Audit Committee of Listed Co mpany's Directorate, 2013)
Responsibilities of the committee	The audit committee should oversee integrated reporting, and should be responsible for overseeing of the internal and external audit processes.	The audit committee should inspect the company's financial information and its disclosure, and should be responsible for overseeing of internal audit and the external audit process.
Shareholder, stakeholder & disclosure		
Investor protection & controlling shareholder	Board of Directors. The board should ensure that minority shareholders are protected. Controlling shareholders. Not covered	Board of Directors. The board of directors shall treat all the shareholders equally. Controlling shareholders. The controlling shareholders have a duty of good faith towards the listed company and other shareholders. The controlling shareholder shall not directly or indirectly interfere with the company's decisions or business activities conducted in accordance with laws; nor shall they impair the listed company's other shareholders' rights and interests.
Institutional ownership	Institutional investors should be encouraged to vote and engage with companies, or require their agents through mandates to vote and engage.	Institutional investors shall play a role in the appointment of company directors, the compensation and supervision of management and major decision-making processes.
Stakeholders	Stakeholders such as the community in which the company operates, its customers, its employers and its suppliers need to be considered when developing the strategy of a company. The board should ensure that the company is and is seen to be a responsible	A listed company shall respect the legal rights of banks and other creditors, employees, consumers, suppliers, the community and other stakeholders. While maintaining the listed company's development and maximising the benefits of

	corporate citizen. Furthermore, the board should not only consider financial performance but also the impact of the company's operations on society and the environment.	shareholders, the company shall be concerned with the welfare, environmental protection and public interests of the community in which it resides, and shall pay attention to the company's social responsibilities.
Disclosure	Integrated reporting	Financial report & Silo reporting-sustainability reporting an 'add-on'
Enforcement	Apply or explain	Comply or explain

This table summarises the corporate governance best practices for South Africa and China. The information is collected from the King III report (2009), the 2002 Code, and the report *International comparison of selected corporate governance guidelines and codes of best practice* by Weil, Gotshal & Manges LLP (2002, 2014)

5.3 Literature review

RI has not only evolved into a trend to be reckoned with on global financial markets (Crifo & Forget, 2013), but is also attracting considerable attention from academics. Prior studies focusing on RI were predominantly conducted in the context of developed markets, and consisted of two primary focus areas: the financial performance of RI, and the effectiveness of RI in corporate ESG performance. The two focus areas are linked to the two main motives behind RI and ESG practices, namely efficiency (instrumental) and legitimation (ethical). This section summarises the prior research on these two areas.

5.3.1 Financial performance of RI

Most studies on RI focus on financial performance (Capelle-Blancard & Monjon, 2012; Dorfleitner, Halbritter & Nguyen, 2015). Literature on the financial performance of RI can be divided into two main topics: the financial performance of RI funds, and the performance of SRI indices.

In many cases, RI funds are observed to have no significant differences from their conventional counterparts in terms of the financial returns they provide (Bauer, Koedijk & Otten, 2005; Cortez, Silva & Areal, 2012; Hamilton, Jo & Statman, 1993; Renneboog, Horst & Zhang, 2011; Revelli & Viviani, 2015). Humphrey and Lee (2011), however, found that RI funds may underperform relative to their conventional peers (Capelle-Blancard & Monjon, 2014; Hong & Kacperczyk, 2009; Mănescu, 2011), or outperform comparable conventional investors (Edmans, 2011; Kempf & Osthoff, 2007; Nofsinger & Varma, 2014).

In addition, the financial performance of RI funds is highly related to that of SRI index companies, as RI funds are their major investors. In this regard, the investigation of RI funds' financial performance can be extended to examine the relationship between corporate ESG performance and CFP, while this relationship

seems ambiguous by presenting as positive (Cai, Jo & Pan, 2012; Statman, 2006; Statman & Glushkov, 2009), insignificant (Fernando, Sharfman & Uysal, 2010; Gladysek & Chipeta, 2012; Halbritter & Dorfleitner, 2015; Humphrey, Lee & Shen, 2011; Managi et al., 2012), or negative (Bird, Momenté & Reggiani, 2012; Lee & Faff, 2009). In addition, the relationship between responsible activities and CFP varies over different periods and across markets (Bird et al., 2012; Demetriades & Auret, 2014; Eccles, Ioannou & Serafeim, 2014; Lee & Faff, 2009).

Prior studies illustrate that superior financial returns might not represent the main incentive for RI, but that institutional investors are mostly motivated by their fiduciary duty, regulations and other non-financial concerns (Ernst & Young, 2014; PwC, 2015). At the same time, it should be noted that financial performance is the critical factor in determining whether RI funds will be accepted into the mainstream investment area (Bauer et al., 2005; Duan, 2010). Renneboog, Horst and Zhang (2008) found that RI investors are unlikely to accept suboptimal financial returns to pursue non-financial aims. To date, the debate over the financial performance of RI has been inconclusive, to some extent providing an explanation for the absence of a global shift towards greater sustainability in finance (Dumas & Louche, 2016).

5.3.2 Effectiveness of RI in corporate ESG performance

One of the core goals of responsible investors is to use their influence as shareholders to positively affect corporate ESG behaviour (Hudson & Wehrell, 2005; Sparkes, 2001). Prior studies are summarised from two perspectives based on investment strategies[27].

5.3.2.1 The influences of screening

Screening practices are widely used among RI investors. Starr (2008) found that

[27] Institutional investors can influence corporate behaviour via various strategies - commonly screening, shareholder activism (also called advocacy or engagement), and community investing. Community investing only accounts for a marginal portion of RI and is not always considered as RI outside the US (Louche & Lydenberg, 2006). This section therefore only discusses screening and shareholder activism.

through negative and positive screening, RI creates opportunities for corporations to improve CSP. At the same time, it also provides some scope for pro-social changes. On the other hand, Hudson and Wehrell (2005) found that socially responsible investors have no significant impact on corporate behaviour.

The one important reason for RI investors to influence corporate ESG behaviour is that responsible investors purchase stocks of responsible firms and avoid irresponsible stocks, lowering the cost of capital of responsible firms compared to irresponsible ones. If firms adjusted their behaviour to lower their cost of capital, "the rates of return on socially responsible stocks would be different, … returns seem not to be different" (Hudson & Wehrell, 2005: 282). Furthermore, if they are not satisfied with the corporate behaviour of an investee firm, institutional investors can exit; unfortunately, their positions are easily replaced by other investors (Hudson & Wehrell, 2005). Overall, it seems as if it would be difficult to have a substantial impact on corporate ESG behaviour by means of an investment screening strategy. Hellsten and Mallin (2006) suggested that perhaps RI is only a rhetorical tool for businesses. Schwartz (2003) argued that it is important to determine if RI is truly responsible, or if screening is merely social, political, or religious. Kumar, Lamb and Wokutch (2002) stated that only combined actions by institutional investors could possibly affect stock prices, but that RI funds do not always demonstrate consistent behaviour.

5.3.2.2 The influence of shareholder activism

Shareholder activism seeks to improve corporate ESG behaviour (Sparkes, 2001), and is a more direct approach than screening (McLaren, 2004; Ransome & Sampford, 2016).

Neubaum and Zahra (2006) collected data from Fortune 500 companies over the period 1995 to 2000, and found that long-term institutional investors with activism interaction have a positive effect on CSP. Williams (2010) observed that RI fund managers, especially for pension funds, are becoming more active; they can

effectively improve the ESG performance of their investee companies via their engagement. Cotter and Najah (2012) argued that institutional investors have the ability to influence corporate reporting by means of powerful stakeholder coalitions.

RI investors often encourage their portfolio companies to improve their practices on ESG issues. No longer limited to RI investors only, sustainability is becoming a mainstream investment practice that is also being adopted by conventional investors globally (Xiao, Faff & Gharghori, 2013). Some studies have explored the impact of institutional investors on ESG performance (not distinguishing between RI institutional investors and conventional institutional investors). For instance, an earlier study by Graves and Waddock (1994) suggested that pension funds are positively associated with some of the dimensions of CSP. Similarly, Rubio and Vázquez (2016) found that an increase in shareholding by institutional investors leads to improved CSP. Cox, Brammer and Millington (2004) used a sample of 500 UK companies and found that long-term institutional investors contribute to improved CSP. Chang, Kabongo and Li (2015) studied S&P 500 firms over the period 1995 to 2009, and observed that local long-term institutional ownership is related to high CSP, while the same relationship was not observed for non-local institutional investors.

Some studies have found that the impact of RI on corporate ESG performance is marginal. Haigh and Hazelton (2004) argued that shareholder advocacy lacks the power to substantially change corporate behaviour. Vandekerckhove, Leys and Braeckel (2007) found that although managers are willing to discuss cases with RI investors, they also deny allegations of corporate misbehaviour by claiming that the story concerning the allegations are not a true reflection of what happened. Fauzi, Mahoney and Rahman (2007) observed limited effects of institutional ownership on CSP, providing support to a study by Johnson and Greening (1999), who found that mutual funds and investment bank funds have no direct relationship with CSP.

The prior literature provides a better understanding of institutional investors, RI and ESG performance. However, relatively little is known about the impact of institutional investors on ESG performance in the context of South Africa and China. Thus, this chapter tries to fill this gap in the existing knowledge by examining the impact of institutional investors on ESG performance (and corporate governance individually), as well as the role that ESG performance plays in the relationship between institutional ownership and improved CFP in these two countries.

This chapter assumes that if an increase in institutional ownership leads to improved ESG performance, the institutional investors of a company could be considered responsible. As was mentioned before, it should also be noted that sustainability is evolving into a mainstream investment practice being adopted by conventional investors globally as well (Xiao et al., 2013). This chapter therefore includes all types of institutional investors, not only those funds that follow an RI strategy, which is consistent with Cahan, Chen and Chen (2015). Additionally, based on the information provided in Section 5.2, it is plausible that South Africa provides a favourable regulatory environment for institutional investors to conduct RI (especially in terms of corporate governance). As a result, institutional investors and companies may have reached consensus on the importance of promoting sound corporate governance. It is therefore predicted that a significant positive relationship should exist between institutional investors and corporate governance in South Africa. Yet it is unclear whether institutional investors could encourage their investee companies to improve their ESG performance, since the social and in particular environmental dimensions are not emphasised in the three King reports. Unlike South Africa, China has not established a suitable environment to cultivate RI. Institutional investors' attitudes towards RI is under-explored, and their impact on corporate ESG behaviour remains ambiguous.

5.4 Data and methods

This section describes the data source, sample and variables included in this chapter, and introduces the methods and regression models employed for further analysis.

5.4.1 Data source and sample

This chapter mainly examines whether institutional investors are effective in promoting corporate ESG performance, with special focus on the corporate governance dimension. The data relating to corporate ESG performance for both South African and Chinese firms were gathered from the Bloomberg (2015) database. The data on institutional ownership were collected from the Bloomberg (2015) and RESSET (2015) databases for South Africa and China respectively; while financial performance data were obtained from the INET BFA database for South African and the CSMAR (2015) database for Chinese companies.

The total number of companies covered by the Bloomberg ESG database amounted to 116 for South Africa and 943 for China by May 2015, representing 28.3 per cent and 32.4 per cent of the total number of listed companies in the two countries respectively. After excluding companies that are not eligible based on the screening criteria[28], the sample used in this chapter consisted of 81 South African firms over the period 2010 to 2013, and 435 Chinese firms for the years 2008 to 2013.

5.4.2 Variables

5.4.2.1 ESG performance

It is challenging to measure ESG performance (including corporate governance). Consistent with Ioannou and Serafeim (2012) and Humphrey et al. (2011), this chapter adopted an ESG disclosure score (ESG_SCORE) as the proxy for corporate ESG performance. Although a company's ESG disclosure score cannot precisely track

[28] The screening criteria are consistent with that set out in Chapters 2 and 3. For details, please refer to Chapters 2.

its real-world ESG performance (especially in terms of its environmental and social performance), these measures provide a standardised estimate based on a set of consistent criteria. Given the absence of alternative proxies for ESG performance, the ESG disclosure scores were therefore used in this study to investigate the impact of institutional investors on ESG. In addition, a company's corporate governance was estimated by its corporate governance disclosure score (G_SCORE). In the Bloomberg database, the ESG disclosure score and its three sub-components, i.e. the environmental (E), social (S) and governance (G) scores, range from 0 for companies that do not disclose any ESG data to 100 for those companies that disclose every data point that Bloomberg collected[29].

Table 5.5 reports the differences in the mean of ESG_SCORE and G_SCORE over the study period. The average ESG disclosure score for South Africa is 34.302, which is much higher than the comparative score of 17.149 reported for China. This indicates that JSE-listed companies have much better performance in ESG issues than their counterparts in China. In addition, companies seem to have better corporate governance practices than overall ESG practices in both South Africa and China, as a higher score is achieved in corporate governance than in ESG. The listed South African companies outperformed the Chinese companies in terms of corporate governance with an average G_SCORE of 56.208 for South Africa and 42.939 for China. This finding corresponds to expectations, since the facts presented in Section 5.2 point towards a higher level of ESG compliance achieved in South Africa than in China.

Additionally, the test results indicated in Table 5.5 show that ESG disclosure (including governance disclosure) in China improved significantly during the study period. South Africa, however, has experienced only the growth in corporate governance, while stagnating in ESG.

[29] Notably, according to Dorfleitner et al. (2015), the G disclosure score is the least related to the E and S disclosure scores, but the total ESG disclosure score is significantly positively related with the E and S scores in the Bloomberg database, as well as the ASSET4 and the KLD database. This offers an additional explanation as to why this chapter explores the relationship between institutional investors and corporate governance separately. Also, the relationship between institutional investors and the aggregated ESG score would largely reflect their relationship with E and S.

Table 5.5
Differences in the mean of ESG_SCORE and G_SCORE

	ESG_SCORE		G_SCORE	
	South Africa	China	South Africa	China
2008	-	13.865	-	38.934
2009	-	15.512	-	42.972
2010	33.069	16.051	54.127	43.243
2011	34.654	18.423	57.099	44.282
2012	34.618	19.742	56.636	44.364
2013	34.761	19.272	56.790	43.801
Total	34.302	17.149	56.208	42.939
F-statistic	0.300	63.820	3.060	90.590
p-value	0.829	0.000	0.028	0.000

This table reports the average ESG and corporate governance disclosure scores for the 81 South African firms over the period 2010 to 2013, and the 435 Chinese firms over the period 2008 to 2013 respectively. Variable definitions are reported in Appendix 1.

5.4.2.2 Other variables

This chapter also examines if institutional investors could satisfactorily address their financial responsibility when investing in responsible firms; financial performance thus acts as a dependent variable when conducting this examination. Consistent with Chapter 3, which discussed the relationship between institutional ownership and financial performance, financial performance is also proxied by return on equity (ROE) in this chapter. Chapter 3 explained why this study considered accounting-based performance instead of market-based financial performance; this chapter only intends to extend the conclusions drawn from Chapter 3, and not to examine market efficiency towards ESG as well.

As mentioned before, this chapter is not limited to institutional investors who follow an RI strategy, but instead considers all types of institutional investors. Thus, institutional ownership (IO) is considered as the independent variable to measure the effectiveness of institutional investors in promoting ESG and G disclosure. More specifically, aggregated institutional ownership (IO_TOTAL), as well as pressure-insensitive institutional ownership (IO_INSEN) and pressure-sensitive institutional ownership (IO_SEN), are included[30].

[30] For more details about this classification, please refer to Chapter 1.

ESG disclosure scores and corporate governance scores were ranked and divided into two quantiles, where the second quantile represents relatively better ESG performance than the first quantile. Dummy variables for ESG_SCORE and G_SCORE (i.e. ESG_DUMMY and G_DUMMY) were then defined based on these quantiles. If an ESG_SCORE or a G_SCORE was located in the second quantile, the value of its dummy variable would equal 1; otherwise, it was 0. The interactions between ESG_DUMMY and G_DUMMY with IO (i.e. IO_TOTAL, IO_INSEN and IO_SEN) were used to examine institutional investors' effectiveness within different ESG performance contexts.

Based on prior studies (e.g. Ahmed, Islam, Mahtab & Hasan, 2014; Chang et al., 2015; Cotter & Najah, 2012; Rubio & Vázquez, 2016), financial leverage (LEV), firm size (SIZE) and listing history (AGE) were included as control variables when examining the relationship between institutional ownership and improved corporate governance and overall ESG performance. When exploring the impact of institutional investors on CFP within the different ESG performance contexts, LEV, SIZE, AGE and firm growth (GROW) were included as control variables, similar to the approach employed in Chapter 3. Table 5.6 presents the descriptive statistics for the major variables employed in this chapter. These statistics show that the mean (median) aggregated institutional ownership over the period 2010 to 2013 for the 81 South African firms was 50 per cent (45.4 per cent); the comparable figure for China was 19.7 per cent (13.6 per cent) over the period 2008 to 2013. The average percentages of shares held by pressure-insensitive and pressure-sensitive institutional investors were 9 per cent and 1.2 per cent respectively.

Table 5.6 also reports that the mean ROE for the South African companies was 0.243, more than double the value of 0.105 reported by their Chinese counterparts. The selected companies in both South Africa and China appear highly dependent on debt, with mean LEV of 0.557 and 0.530 respectively. Also, the statistics reveal that the Chinese companies are larger in terms of firm size, reflecting a mean SIZE of 22.764 compared to a value of 16.155 for the South African companies, but younger in terms

of listing history, with a mean AGE of 2.403 compared to the South African value of 3.110. The Chinese companies also experienced higher growth, with average growth of 21.4 per cent exceeding the South African average of 11.3 per cent.

Table 5.6
Descriptive statistics

Variable	Mean	SD	Min	Max	Med
Panel A Descriptive statistics for South Africa					
G_SCORE	56.208	6.885	23.214	71.429	57.143
ESG_SCORE	34.302	12.861	9.917	64.115	35.124
IO_TOTAL	0.500	0.289	0.000	1.272	0.454
ROE	0.243	1.442	-17.561	3.610	0.226
LEV	0.557	0.227	0.019	1.259	0.554
AGE	3.110	0.868	0.000	4.771	3.135
SIZE	16.155	1.247	13.021	20.420	16.078
GROW	0.113	0.277	-0.428	3.410	0.088
Panel B Descriptive statistics for China					
G_SCORE	42.939	4.811	28.571	62.500	44.643
ESG_SCORE	17.149	6.472	6.612	45.041	18.182
IO_TOTAL	0.197	0.187	0.000	0.906	0.136
IO_INSEN	0.090	0.102	0.000	0.665	0.053
IO_SEN	0.012	0.021	0.000	0.241	0.003
ROE	0.105	0.177	-4.891	1.600	0.100
LEV	0.530	0.184	0.014	1.056	0.543
AGE	2.403	0.408	0.000	3.135	2.485
SIZE	22.764	1.214	19.267	26.999	22.715
GROW	0.214	0.478	-0.615	3.869	0.141

This table reports the descriptive statistics of the variables included in the regressions for 81 South African firms over the period 2010 to 2013 (324 observations) in Panel A, and 435 Chinese firms over the period 2008 to 2013 (2 610 observations) in Panel B. Variable definitions are reported in Appendix 1.

5.4.3 Methodology

To assess if institutional ownership is effective in promoting the corporate ESG performance and corporate governance of their portfolio companies, Equations 5.1 and 5.2 were established.

$$ESG\_SCORE_{it} = \alpha_0 + \beta_k IO_{k,it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (5.1)$$

$$G\_SCORE_{it} = \alpha_0 + \beta_k IO_{k,it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (5.2)$$

In Chapter 3, institutional ownership was found to be positively related to improved CFP (except in the case of pressure-sensitive institutional ownership). By adopting this reasoning, and considering the potential economic efficiency of RI practices, this chapter examined the relationship between institutional ownership and CFP in different ESG performance contexts to determine if this relationship is moderated by ESG performance. For this purpose, Equations 5.3 and 5.4 were developed.

$$ROE_{it} = \alpha_0 + \beta_k IO_{k,it} + \delta_k ESG\_DUMMY_{it} * IO_{k,it} + \gamma_1 ESG\_DUMMY_{it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (5.3)$$

$$ROE_{it} = \alpha_0 + \beta_k IO_{k,it} + \delta_k G\_DUMMY_{it} * IO_{k,it} + \gamma_1 G\_DUMMY_{it} + \sum_{j=1}^{n} \lambda_j CON_{j,it} + \varepsilon_{it} \quad (5.4)$$

where ESG_SCORE_{it} and G_SCORE_{it} measure corporate ESG performance and corporate governance for company i at time t. ROE_{it} measures CFP. $IO_{k,it}$ refers to institutional ownership variable k (k = TOTAL, INSEN and SEN). ESG_DUMMY_{it} and G_DUMMY_{it} are the dummy variables. $CON_{j,it}$ represents control variables j (j = 1, 2,…n). α_0 is the intercept; β_k and λ_j are the regression coefficients of $IO_{k,it}$ and $CON_{j,it}$ respectively. γ_1 is the regression coefficient of ESG_DUMMY_{it} and G_DUMMY_{it}, while δ_k is for their interaction item with $IO_{k,it}$. ε_{it} is the error term.

Apart from pooled OLS and FE estimations, this chapter also employs 2SLS estimation to address endogeneity issues. The instrument variables for institutional ownership are introduced by using trading liquidity (TURN) and return volatility (VOL) for both South Africa and China[31]. For the 2SLS regressions, the *F*-statistic for testing the joint statistical significance of the instrument variables is reported; this figure in all cases is higher than the value of 10, suggesting that the instruments are not weak (Staiger & Stock, 1997). At the same time, a Sargan test was performed and the results did not result in the rejection of the null hypothesis, suggesting that the instruments are valid in all 2SLS regressions.

[31] This choice for instrumental variables is consistent with Chapters 3 and 4. For the reason, please refer to Chapter 3.

5.5 Results

This section reports and discusses the results of whether institutional investors are effective in encouraging overall ESG behaviour (as well as corporate governance), and if corporate ESG performance (as well as corporate governance) moderate the relationship between institutional ownership and CFP.

5.5.1 Institutional ownership and ESG performance

Panel A of Table 5.7 reports the relationship between aggregated institutional ownership and corporate ESG performance. IO_TOTAL is positively but insignificantly associated with ESG_SCORE in both South Africa and China. It seems that institutional investors as a whole are observed to have an insignificant relationship with advanced ESG performance. Panel A of Table 5.8 shows similar results for disaggregated institutional ownership, with IO_INSEN and IO_SEN also being positively but insignificantly related to ESG_SCORE. The results suggest that the relationship between institutional ownership and ESG performance does not differ between South Africa and China; neither does it between aggregated and disaggregated institutional ownership.

These results are consistent with most prior studies, where it was reported that institutional ownership is unlikely to contribute to improved corporate ESG performance. A report by the UNEP FI in 2007, titled *The State of Responsible Investment in South Africa*, indicates that the lack of satisfactory measurement tools is regarded as the most important factor for not incorporating ESG concerns into investment decision-making. In South Africa, disclosure of the G element of ESG enjoys relatively clear policy guidelines to follow, while it is still difficult to judge what exactly the E and S elements are. Because of ambiguous measurement, institutional investors find it difficult to set ESG goals, and thus it is not surprising to see that there is no significant relationship between institutional ownership and ESG performance. Moreover, the absence of a link with return is considered a major motivation for disregarding ESG issues (UNEP FI, 2007). Table 5.9 shows an insignificant relationship between the ESG dummy variable and ROE; this lack of financial incentive reduces the motivation for institutional investors to pursue improved ESG performance by their investee companies. These possible explanations also apply to China.

Table 5.7

Regressions of relationships between aggregated institutional ownership and ESG performance

	South Africa			China		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between aggregated institutional ownership and aggregated ESG performance						
IO_TOTAL	1.218	0.388	0.878	0.133	0.123	0.151
	(0.52)	(0.35)	(0.20)	(0.21)	(0.11)	(0.09)
LEV	-1.412***	-0.712*	-2.066***	-5.295***	-5.464***	-5.216***
	(-4.83)	(-1.69)	(-5.69)	(-7.67)	(-5.68)	(-6.82)
SIZE	3.099***	2.309***	3.408***	2.332***	2.048***	2.188***
	(5.79)	(2.92)	(5.17)	(22.34)	(12.14)	(18.64)
AGE	1.465*	2.715**	1.910*	1.493***	0.797***	0.975***
	(1.90)	(2.19)	(1.65)	(5.25)	(10.27)	(2.78)
Intercept	-13.050	-7.822	-14.560	-36.730***	-37.880***	-31.860***
	(-1.43)	(-0.59)	(-1.33)	(-15.93)	(-10.80)	(-12.06)
F-statistic			38.988			1 128.440
Sargan *p*-value			0.356			0.549
R^2 (%)	17.22	17.08	21.91	17.31	68.92	14.35
N	324	324	324	2 610	2 610	2 610
Panel B Relationship between aggregated institutional ownership and corporate governance						
IO_TOTAL	2.438*	0.602*	4.659*	-0.371	-0.877	-0.417
	(1.88)	(1.79)	(1.84)	(-0.72)	(-1.52)	(-0.64)
LEV	-0.608***	-0.430**	-0.729***	-1.736***	-1.670**	-1.753***
	(-3.75)	(-1.99)	(-3.97)	(-3.02)	(-2.25)	(-3.04)
SIZE	1.356***	1.314***	1.200***	0.793***	0.728***	0.796***
	(4.57)	(2.94)	(3.61)	(8.98)	(6.15)	(8.99)
AGE	-0.068	-0.018	-0.029	-0.542**	-0.364	-0.619**
	(-0.16)	(-0.03)	(-0.06)	(-2.35)	(-0.16)	(-2.35)

Table 5.7 (continued)

	South Africa			China		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Intercept	36.690***	35.690***	39.140***	27.900***	28.310***	28.070***
	(7.24)	(4.74)	(6.93)	(14.21)	(10.78)	(14.13)
F-statistic			34.521			1 965.610
Sargan *p*-value			0.164			0.151
R^2 (%)	11.15	54.43	11.54	3.62	58.05	3.75
N	324	324	324	2 610	2 610	2 610

This table presents pooled OLS, FE and 2SLS estimations of the relationship between aggregated institutional ownership and ESG performance over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results regarding aggregated institutional ownership and aggregated ESG performance are reported in Panel A, and Panel B reports the relationship between aggregated institutional ownership and corporate governance. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of the instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Table 5.8

Regressions of relationships between disaggregated institutional ownership and ESG performance

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Relationship between disaggregated institutional ownership and aggregated ESG performance						
IO_INSEN	0.779	0.638	2.957			
	(0.61)	(0.45)	(1.60)			
IO_SEN				2.416	6.242	9.334
				(0.43)	(0.41)	(0.91)
LEV	-5.265***	-3.929***	-5.144***	-5.293***	-4.359***	-5.218***
	(-7.61)	(-3.78)	(-6.68)	(-7.66)	(-3.61)	(-6.80)
SIZE	2.327***	1.050***	2.180***	2.326***	0.689**	2.170***
	(22.23)	(4.90)	(18.47)	(22.15)	(2.54)	(18.15)
AGE	1.498***	0.899***	0.994***	1.486***	0.990***	0.953***
	(5.27)	(7.98)	(2.83)	(5.22)	(4.26)	(2.71)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-36.680***	-26.040***	-31.850***	-36.620***	-19.960***	-31.450***
	(-15.90)	(-6.30)	(-12.04)	(-15.79)	(-3.85)	(-11.75)
F-statistic			1 245.480			411.149
Sargan *p*-value			0.749			0.581
R^2 (%)	17.29	68.25	14.17	17.29	68.92	14.30
N	2 610	2 610	2 610	2 610	2 610	2 610
Panel B Relationship between disaggregated institutional ownership and corporate governance						
IO_INSEN	-1.384	-1.788	-1.022			
	(-1.29)	(-1.21)	(-0.74)			
IO_SEN				-0.250	-0.785	-0.260
				(-0.05)	(-0.16)	(-0.03)
LEV	-1.788***	-1.831*	-1.776***	-1.710***	-1.936*	-1.434**
	(-3.10)	(-1.84)	(-3.07)	(-2.97)	(-1.95)	(-2.38)

Table 5.8 (continued)

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
SIZE	0.800***	0.742***	0.799***	0.791***	0.818***	0.755***
	(9.05)	(3.93)	(9.01)	(8.89)	(4.53)	(8.09)
AGE	-0.628**	-0.614	-0.626**	-0.620**	-0.766	-0.633**
	(-2.38)	(-0.26)	(-2.37)	(-2.34)	(-0.32)	(-2.38)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	28.080***	27.890***	28.070***	28.090***	26.140***	28.320***
	(14.13)	(6.64)	(14.14)	(14.05)	(6.53)	(13.87)
F-statistic			1 245.480			83.056
Sargan *p*-value			0.111			0.491
R^2 (%)	3.65	58.06	3.85	3.55	58.03	2.79
N	2 610	2 610	2 610	2 610	2 610	2 610

This table presents pooled OLS, FE and 2SLS estimations of the relationship between disaggregated institutional ownership and ESG performance over the period 2008 to 2013 for China. The results regarding disaggregated institutional ownership and aggregated ESG performance are reported in Panel A, and Panel B reports the relationship between disaggregated institutional ownership and corporate governance. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of the instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Aside from the dubious measurement of ESG dimensions, political rent seeking could also be an important reason to explain Chinese institutional investors' responsible behaviour. Furthermore, responsible behaviour for institutional investors in China is symbolic in many cases. This attribute clarifies their insignificant relationship with improved corporate ESG performance. Even for responsible investors, the insignificant association between ESG performance and financial performance does not motivate them to actively encourage ESG practices.

Considering the control variables, the results of Tables 5.7 and 5.8 show that in both South Africa and China, financial leverage is significantly and negatively associated with ESG performance, while large firms with long listing histories are more likely to achieve high ESG performance.

5.5.2 Institutional ownership and corporate governance

Panel B of Table 5.7 shows that IO_TOTAL is significantly and positively related to G_SCORE in the context of South Africa, while the relationship is not significant in the Chinese context. In this regard, institutional investors as a whole in South Africa appear to have a positive association with the corporate governance of their portfolio companies, while this seems untenable in China. When considering disaggregating institutional ownership, both pressure-insensitive and pressure-sensitive institutional ownership in China are negatively but insignificantly related to the G_SCORE, as reflected in Panel B of Table 5.8.

Corporate governance is considered to be the most important component of ESG in the South African context (UNEP FI, 2007) and dominates integrated reporting, which is the main tool for institutional investors to access the ESG information of a company. This phenomenon could be influenced by the series of corporate governance scandals globally and locally. In addition, the King III report provides clear corporate governance compliance guidelines, making corporate governance the most

standardised dimension among the ESG issues in South Africa. As mentioned in Section 5.5.1, clear measurement motivates institutional investors to engage in responsible activities. More importantly, the board of directors has a relatively clear picture regarding corporate governance as it falls more directly into their understanding of fiduciary duty (Viviers, 2015). Therefore, it is understandable that institutional investors are effective in promoting corporate governance, and behave responsibly in terms of corporate governance in South Africa, and in this respect, institutional investors in South Africa are likely to conduct effective monitoring.

Unlike in South Africa, the presence of institutional investors is not beneficial to improved corporate governance (from both an aggregated and a disaggregated perspective) within the Chinese context. This finding suggests that in this sense, institutional investors perform an inefficient monitoring role. It seems that even though Chinese institutional investors have gained much momentum in recent years, the percentage of shares they hold is still small, making it unlikely for them to constrain majority shareholders. Ownership serves as the fundamental reason for institutional investors to engage in corporate governance; their small ownership holding therefore explains their weak impact on improved corporate governance. Furthermore, the attributes of Chinese institutional investors hinder them from participating in corporate governance. Unlike in South Africa and many developed markets, where pension funds play a prominent role, the major institutional investors in China are mutual funds. Mutual funds experience pressure for rankings, which results in short-term behaviour, and hinders their corporate governance engagement. Besides, as opposed to South Africa, where the regulatory environment for corporate governance is superior not only between emerging markets but also compared to developed markets (Van Dijk et al., 2012), Chinese regulations do not provide a suitable mechanism that encourages institutional investors to engage in shareholder activism, and to participate in corporate governance.

When considering the control variables, the results of Tables 5.7 and 5.8 show that in both South Africa and China, large firms with low degrees of financial leverage are more likely to achieve sound corporate governance. Listing history does not display a significant relationship with corporate governance in the South African context. In China, however, recently listed companies display better corporate governance than companies with longer listing histories. A possible explanation for this is presented by Liu and Yu (2010), who suggested that in China, some firms with long listing histories have problems with accounting manipulation, or lose focus of their primary business strategies. By contrast, younger firms with shorter listing histories appear to be characterised by healthy financial structures and performance, and to be focused on their core business.

5.5.3 Moderating effects of ESG

Tables 5.9 and 5.10 present the relationship between institutional investors and CFP moderated by overall ESG performance (and corporate governance). Without including the influence by ESG performance (and corporate governance), institutional ownership (except for pressure-sensitive institutional ownership) presented a significant and positive relationship with financial performance.

Considering the influence by ESG performance, Panels A of Tables 5.9 and 5.10 report that ESG_DUMMY is insignificantly associated with ROE in South Africa and China, suggesting that ESG performance is not related to CFP. The interaction item IO_TOTAL*ESG_DUMMY is not significantly associated with ROE, indicating that it is unlikely for institutional investors as a whole to improve financial performance in better ESG performance companies. When disaggregating institutional ownership, pressure-insensitive institutional investors seem to be more effective in promoting the financial performance of a company with superior ESG disclosure, while pressure-sensitive ones do not. These findings suggest that ESG plays a moderating role in the relationship between pressure-insensitive institutional investors and CFP.

Table 5.9

Moderating effects of ESG performance on the relationship between aggregated institutional ownership and financial performance (ROE)

	South Africa			China		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Moderating effect of aggregated ESG performance						
IO_TOTAL	0.296*	0.211**	0.372*	0.076**	0.041**	0.086*
	(1.72)	(2.10)	(1.73)	(2.00)	(2.33)	(1.68)
IO_TOTAL*ESG_DUMMY	-0.237**	-0.086	-0.203	0.038	0.015	0.040
	(-2.23)	(-1.09)	(-1.58)	(1.53)	(1.09)	(1.29)
ESG_DUMMY	0.050	0.050	0.032	-0.001	-0.004	-0.003
	(0.73)	(0.92)	(0.43)	(-0.15)	(-0.69)	(-0.38)
LEV	-0.151	-0.383***	-0.202	-0.121***	-0.227***	-0.052***
	(-0.42)	(-2.73)	(-0.56)	(-9.66)	(-8.99)	(-3.85)
SIZE	0.112***	0.243***	0.110***	0.014***	0.054***	0.009***
	(6.09)	(6.28)	(5.97)	(7.24)	(9.15)	(4.08)
AGE	0.632*	0.200**	0.690**	-0.017***	-0.149***	-0.017***
	(1.97)	(2.48)	(2.14)	(-3.22)	(-9.86)	(-2.80)
GROW	0.253**	0.060	0.261**	0.057***	0.041***	0.051***
	(2.21)	(1.06)	(2.30)	(12.99)	(10.52)	(10.81)
Intercept	-2.377***	-5.847***	-2.369***	-0.151***	-0.654***	-0.052
	(-5.59)	(-6.47)	(-5.54)	(-3.50)	(-5.80)	(-1.11)
F-statistic			49.360			440.825
Sargan *p*-value			0.596			0.137
R^2 (%)	20.06	86.30	19.35	14.22	52.92	10.52
N	324	324	324	2 610	2 610	2 610
Panel B Moderating effect of corporate governance						
IO_TOTAL	0.823***	0.268***	1.411**	0.053***	0.039**	0.073*
	(3.08)	(2.71)	(2.47)	(2.82)	(2.17)	(1.65)

Table 5.9 (continued)

	South Africa			China		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
IO_TOTAL*G_DUMMY	-0.591***	-0.150*	-1.008**	0.050***	0.029*	0.071*
	(-3.21)	(-1.78)	(-2.28)	(3.52)	(1.78)	(1.71)
G_DUMMY	0.245**	0.091*	0.497*	-0.021***	-0.011*	-0.023***
	(2.14)	(1.75)	(1.86)	(-3.67)	(-1.66)	(-2.67)
LEV	-0.294	-0.398***	-0.194	-0.111***	-0.208***	-0.109***
	(-1.01)	(-2.84)	(-0.38)	(-8.50)	(-8.06)	(-8.26)
SIZE	0.247***	0.235***	0.100***	0.014***	0.052***	0.014***
	(3.12)	(5.95)	(5.34)	(7.04)	(8.84)	(6.90)
AGE	0.667**	0.210***	0.703**	-0.016***	-0.147***	-0.016***
	(2.00)	(2.64)	(2.04)	(-2.64)	(-9.96)	(-2.69)
GROW	0.325***	0.115	0.281***	0.054***	0.041***	0.053***
	(2.75)	(1.23)	(3.40)	(11.47)	(10.36)	(11.25)
Intercept	-0.085	-5.727***	-2.744***	-0.129***	-0.626***	-0.128***
	(-0.50)	(-6.15)	(-5.98)	(-2.86)	(-5.54)	(-2.85)
F-statistic			64.476			406.971
Sargan *p*-value			0.324			0.128
R^2 (%)	11.40	86.52	15.01	13.30	62.24	13.61
N	324	324	324	2 610	2 610	2 610

This table presents pooled OLS, FE and 2SLS estimations of the moderating effects of ESG performance in the relationship between aggregated institutional ownership and ROE over the period 2010 to 2013 for South Africa, and 2008 to 2013 for China. The results regarding the moderating effect of aggregated ESG performance are reported in Panel A, and Panel B reports the moderating effects of corporate governance. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of the instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Table 5.10

Moderating effects of ESG performance on the relationship between disaggregated institutional ownership and financial performance (ROE)

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Panel A Moderating effect of aggregated ESG performance						
IO_INSEN	0.243***	0.127**	0.356***			
	(4.02)	(2.02)	(4.22)			
IO_SEN				-0.469	-0.559	-1.051
				(-1.37)	(-1.55)	(-1.57)
IO_INSEN*ESG_DUMMY	0.097**	0.081*	0.116**			
	(2.50)	(1.83)	(2.11)			
IO_SEN*ESG_DUMMY				0.171	0.022	0.309
				(0.84)	(0.32)	(0.98)
ESG_DUMMY	-0.006	-0.010	-0.008	-0.006	-0.001	-0.007
	(-1.04)	(-1.58)	(-1.41)	(-1.18)	(-0.25)	(-1.21)
LEV	-0.107***	-0.214***	-0.090***	-0.112***	-0.230***	-0.108***
	(-8.97)	(-8.56)	(-7.22)	(-8.43)	(-9.13)	(-8.08)
SIZE	0.012***	0.052***	0.011***	0.014***	0.055***	0.014***
	(6.54)	(8.86)	(5.37)	(6.75)	(9.31)	(6.61)
AGE	-0.014***	-0.128***	-0.013**	-0.015**	-0.143***	-0.014**
	(-2.79)	(-8.45)	(-2.33)	(-2.47)	(-9.31)	(-2.23)
GROW	0.053***	0.039***	0.048***	0.054***	0.042***	0.053***
	(12.80)	(10.05)	(10.81)	(11.36)	(10.54)	(11.08)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.125***	-0.666***	-0.102**	-0.144***	-0.685***	-0.149***
	(-3.08)	(-5.98)	(-2.31)	(-3.11)	(-6.04)	(-3.18)
F-statistic			247.85			73.791
Sargan *p*-value			0.349			0.118

Table 5.10 (continued)

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
R^2 (%)	23.07	54.25	23.76	12.75	52.96	11.72
N	2 610	2 610	2 610	2 610	2 610	2 610
Panel B Moderating effect of corporate governance						
IO_INSEN	0.268***	0.157***	0.280***			
	(5.03)	(3.38)	(3.00)			
IO_SEN				-0.322	-0.442	-0.748
				(-0.98)	(-1.32)	(-1.24)
IO_INSEN*G_DUMMY	0.111**	0.086*	0.171**			
	(2.39)	(1.73)	(2.26)			
IO_SEN*G_DUMMY				0.097	0.089	0.275
				(0.40)	(0.35)	(0.59)
G_DUMMY	-0.017***	-0.012*	-0.023***	-0.013**	-0.006	-0.015*
	(-2.64)	(-1.80)	(-2.86)	(-2.19)	(-0.97)	(-1.95)
LEV	-0.108***	-0.218***	-0.093***	-0.111***	-0.232***	-0.107***
	(-9.07)	(-8.71)	(-7.47)	(-8.46)	(-9.19)	(-8.07)
SIZE	0.013***	0.052***	0.012***	0.015***	0.055***	0.015***
	(7.21)	(8.99)	(6.31)	(7.10)	(9.36)	(6.97)
AGE	-0.013***	-0.132***	-0.013**	-0.016**	-0.144***	-0.015**
	(-2.65)	(-8.97)	(-2.29)	(-2.57)	(-9.70)	(-2.49)
GROW	0.053***	0.039***	0.047***	0.053***	0.041***	0.052***
	(12.61)	(9.98)	(10.67)	(11.30)	(10.52)	(11.03)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.136***	-0.665***	-0.117***	-0.141***	-0.681***	-0.145***
	(-3.41)	(-5.95)	(-2.72)	(-3.10)	(-6.03)	(-3.14)
F-statistic			447.953			122.705

Table 5.10 (continued)

	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
	1	2	3	4	5	6
Sargan *p*-value			0.129			0.133
R^2 (%)	23.10	63.44	23.28	12.91	53.05	12.15
N	2 610	2 610	2 610	2 610	2 610	2 610

This table presents pooled OLS, FE and 2SLS estimations of the moderating effects of ESG performance in the relationship between disaggregated institutional ownership and ROE over the period 2008 to 2013 for China. The results regarding the moderating effect of aggregated ESG performance are reported in Panel A, and Panel B reports the moderating effects of corporate governance. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of the instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that the instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

Panel B of Table 5.9 shows that G_DUMMY is significantly and positively related to ROE in South Africa, while the relationship is negative in China. This suggests that well-governed companies may contribute to good returns in South Africa, thereby providing support for the findings from Section 5.2, where institutional investors are considered effective in promoting the corporate governance of their investee companies. However, the interaction item between IO_TOTAL and G_DUMMY is significantly and negatively associated with ROE in South Africa; this means that institutional investors are less effective in promoting financial performance in well-governed companies. A possible explanation for this is that institutional investors pay more attention to improved corporate governance, engendering diversion of their resources away from financial performance; the benefit brought from good corporate governance, however, exceeds the cost.

In China, even though well-governed companies are not likely to promote financial performance, institutional investors in well-governed companies seem more effective in advancing financial performance than those invested in companies characterised by poor governance. The results are similar to those presented in Panel B of Table 5.10, where pressure-insensitive and pressure-sensitive institutional investors are likely to be more effective in promoting financial performance within well-governed companies. It can be interpreted as meaning that companies extract resources to improve corporate governance away from financial performance, resulting in well-governed companies not being related to strong financial performance. Institutional investors contribute little to improved corporate governance, whereas they might enjoy the welfare brought by sound corporate governance and use it to advance financial performance. Additionally, South Africa enjoys a well-established corporate governance framework; that is why institutional investors find it difficult to earn extra benefits because of good corporate governance. The same, however, cannot be said for China.

5.6 Conclusions

RI has been evolving from a marginal activity to a mainstream investment strategy. This chapter examined if institutional investors are able to influence companies to act in a more responsible way, thereby evaluating the responsibility of institutional investors. By employing a sample of 81 South African firms over the period 2010 to 2013, and 435 Chinese firms over the period 2008 to 2013, this chapter failed to find significant evidence that institutional investors are able to advance overall ESG performance in both South Africa and China. In this regard, institutional investors do not appear to be fully executing their fiduciary duty. Combined with the findings from Chapter 3, institutional investors may be less willing and successful to encourage non-financial performance compared to financial performance. Furthermore, it could not be refuted with certainty that RI may just be a label to soothe institutional investors' conscience or serve as mere window-dressing to appease stakeholders.

Nonetheless, there is evidence that institutional ownership is associated with improved corporate governance in the context of South Africa, while this finding was not observed in China. This positive relationship benefits from the favourable regulatory environment for RI and corporate governance in South Africa, and demonstrates the success of corporate governance reform in South Africa. In terms of corporate governance, institutional investors as a whole therefore appear to effectively address their responsibilities. It must be noted that institutional investors in South Africa seem unlikely to have greater influence on the improved financial performance of companies with better ESG practices; similar results were found for aggregated institutional ownership and pressure sensitive institutional investors in China, although the opposite was observed for pressure insensitive institutional investors.

Given the actual state of affairs on South African and Chinese markets and the situation being faced by market participants, the findings of this chapter appear to attribute the ineffective role that institutional investors play in corporate ESG

performance to (among other factors): (1) the small share of RI in the market; (2) the lack of effective links between financial performance and non-financial performance; (3) the low level of awareness of RI (especially in China); (4) poorly established regulatory and legal systems; (5) inadequate non-financial information disclosure. More importantly, the participants in RI markets not only consist of institutional investors, corporations, and governments, but also include market intermediaries, the public and a number of other stakeholders. Improving RI and sustainable development requires the joint efforts of all parties involved in RI. The results thus provide some guidelines on RI for current and potential local and international investors, policymakers and other related parties.

This chapter investigated whether institutional investors are effective in encouraging ESG performance in their investee companies. The question on how they generate their influence could unfortunately not be discussed as it is out of this study's scope. When considering the results reported in this chapter, it should be noted that the ESG scores and sub-scores are comprehensive, and that their relationships with institutional ownership are unlikely to fully reflect the impact of institutional investors on each of the dimensions that constitute the scores. Exploring the relationship between institutional ownership and the different dimensions of the ESG issues would contribute to an improved understanding of the topic. Furthermore, corporate ESG performance involves two contradictory facets, namely responsibility and irresponsibility. This chapter, similar to most prior studies, focused on institutional investors' impact on promoting the responsible side of ESG, neglecting that they could also attempt to mitigate the irresponsible side. Given the insignificant relationship found between institutional ownership and ESG performance in many cases, it would be worthwhile to further explore the relationship between institutional investors and corporate irresponsibility reduction, in order to have an improved understanding of institutional investors' fiduciary duty from another angle.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

Institutional investors are typically viewed as sophisticated investors that are more likely to play an active monitoring role in corporate governance compared to individual investors. From the NI context, institutional investors bear a fiduciary duty; their investment behaviour is largely regulated and guided by a series of rules. Their fiduciary duty and the relevant rules imply their financial and non-financial responsibilities towards both shareholders and stakeholders. This is consistent with the definitions of corporate governance in a broad sense.

By taking South Africa and China as cases and employing pooled OLS, FE, 2SLS and Sys-GMM estimations, this study investigated the role of institutional investors in corporate governance by examining their impact on CFP, earnings management and corporate ESG performance, constituting Chapters 3, 4 and 5 respectively. Given that the fiduciary duty of institutional investors is largely demonstrated in their stockholding behaviour, this study also placed focus on which stocks institutional investors tend to invest in, as discussed in Chapter 2.

The remainder of this chapter is organised as follows: Section 6.1 provides the overarching conclusions drawn from the preceding four chapters, and highlights implications for enabling institutional investors to engage with their investee companies on advancing corporate governance. The contributions of the study are presented in Section 6.2, while the study's limitations are summarised and recommendations for future research are made in Section 6.3.

6.1 Overarching conclusions and implications

This section draws overarching conclusions by organising and summarising the results reported in the preceding four chapters, thereby providing a more intuitive and

comprehensive understanding of this study. At the same time, some implications relevant to engagement by institutional ownership in corporate governance are also presented in this section.

6.1.1 Overarching conclusions

According to the results reported in Chapter 2, institutional investors in both South Africa and China do not always appear prudent when making stockholding decisions. After an investment relationship has been established with a firm, institutional ownership is reported to be significantly related to improved CFP and a reduction of earnings management, but insignificantly to corporate ESG performance in Chapters 3, 4 and 5 respectively. These findings suggest that institutional investors are more conventional than socially responsible. Furthermore, far from being homogeneous, institutional investors are heterogeneous in stock selection and in shaping firms' corporate governance across markets and types.

6.1.1.1 Not always prudent

The fiduciary duty assigned to institutional investors implies that they have to protect their clients' interests; among their most important duties, they are expected to be prudent during their investment decision making. Institutional investors are therefore required to follow a range of formal and non-formal institutions that constrain and guide them in this regard. To examine whether institutional investors exhibited prudent investment decision-making, this study investigated their stockholding behaviour. The findings suggest that institutional investors in both South Africa and China largely tend to select safe stocks, such as stocks with sound financial performance. South African institutional investors also appear to show preferences towards stockholdings of large firms with high trading liquidity and large dividend payments, while Chinese institutional investors hold investments in firms with low degrees of financial leverage and small betas. However, they do not always exhibit prudent behaviour, with the evidence also presenting their investment preference

towards stocks with high return volatilities. Nonetheless, it should be noted that prudence is a process, not a result. A breach of fiduciary duty by imprudence does not fully determine the ultimate benefits to shareholders and other stakeholders. It is thus not surprising to find that overall institutional ownership is associated with improved CFP and earnings management reduction.

6.1.1.2 Still conventional

Not limited to stockholding behaviour, the fiduciary duty of institutional investors to their clients is also reflected in their practices after becoming shareholders in their portfolio companies. To address this issue, this study assessed the relationship between institutional ownership and improved corporate governance from both financial and non-financial perspectives.

From the financial perspective, this study found that institutional ownership in both South Africa and China is associated with improved CFP as well as earnings management alleviation (a reduction in income-decreasing and income-increasing earnings management in South Africa and China respectively). In this regard, institutional ownership is positively related to advancing the financial goals of their investee companies. However, in contrast with its significant impact on fulfilling financial goals, institutional ownership was not observed to have a significant relationship with improved corporate ESG performance in these two countries. These findings illustrate that it remains questionable whether institutional investors fully address their responsibility in terms of non-financial aspects. An exception is that institutional ownership in South Africa were found to have a positive impact on corporate governance improvement, while this was not observed in China.

In summary, although the development of the RI market is increasingly being recognised, institutional investors still appear to be more conventional than socially responsible in South Africa and China. Based on the findings of this study, the

missing link between CFP and corporate ESG performance could be considered an explanation for this; in other words, investors' efficiency (instrumental) motive for engaging in ESG practices is not fully stimulated. Institutional investors are unlikely to accept suboptimal financial performance to pursue ESG aims.

6.1.1.3 Heterogeneous

Institutional investors in South Africa show some similarities with their counterparts in China. For instance, institutional investors in both countries show investment preferences for companies with sound past financial performance, and both are related to advanced CFP and a reduction in earnings management. Additionally, there is no significant relationship between institutional ownership and improved ESG performance in either South Africa or China.

Nonetheless, institutional investors are far from homogeneous; their characteristics vary between countries (South Africa versus China), groups (pressure-insensitive versus pressure-sensitive) and investment strategies (index-investing versus non-index-investing). More specifically, differences in the aggregate stockholding preferences of institutional investors in terms of leverage, listing histories, share turnover ratios, betas and dividend payments were found between South Africa and China. In addition, the significant association of institutional investors with a reduction in earnings management pointed more towards the income-decreasing scenario in South Africa, but towards income-increasing activities in China. A non-linear relationship was observed between institutional ownership and earnings management reduction in South Africa, while no such relationship was noted in China.

Investment behaviour is also determined by the type of institutional investor. Pressure-insensitive institutional investors demonstrate different stockholding preferences in many aspects (e.g. leverage, firm size, beta and return volatility) compared to their pressure-sensitive counterparts; the former are also related to

improved CFP, while the latter are not. Furthermore, the heterogeneous stockholding behaviour of institutional investors is presented under different index strategies. When considering stockholding, sound past financial performance seems to be less important to passive institutional investors than to their non-passive counterparts in both South Africa and China. Institutional investors who select index-listed companies are more likely to advance CFP in China.

6.1.2 Implications for institutional ownership engagement in corporate governance

This study mainly investigated the responsible investment of institutional investors and their relationship with corporate governance. To advance the effective role institutional investors could perform in corporate governance calls for efforts not only from institutional investors, but also from corporations, governments as well as a variety of other stakeholders. Based on the findings from this study, as well as the actual conditions faced by institutional investors, corporations and the regulative environment in South Africa and China, this sub-section provides some suggestions relevant to institutional ownership engagement in corporate governance from the perspectives of institutional investors, corporations and governments.

6.1.2.1 For institutional investors: To establish sound mechanisms to improve their ability to engage in corporate governance

Institutional investors have important responsibilities towards their clients and beneficiaries. The internal mechanisms of institutional investors determine the role they can play in corporate governance. Thus, firstly, the internal control mechanisms of institutional investors need to be strengthened in order to improve their implementation of their fiduciary duty, where protecting clients' interests should be considered as the fundamental principle. Secondly, the prudence of institutional investors is associated with investment risk reduction; and it is suggested that institutional investors establish and improve their risk management mechanisms to ensure that their fiduciary duty is sufficiently addressed. Thirdly, optimising the

agency contract between institutional investors and their clients or beneficiaries is of importance. Clients or beneficiaries should be encouraged to take corporate governance seriously, which will likely encourage institutional investors to consider corporate governance issues in their agency contracts to fulfil their investors' preferences. Furthermore, corporate governance engagement could be designed as a criterion to evaluate the performance of institutional shareholders, in order to strengthen their engagement in the corporate governance of investee companies.

6.1.2.2 For corporations: To standardise information transfer to enhance the effectiveness of institutional investor engagement

Only when sufficient information is acquired are institutional investors more likely to evaluate the intrinsic value of the investee companies, and to make their decisions in favour of monitoring and engaging in corporate governance and ESG activities. Given that earnings management is prevalent and that non-financial (ESG) information is not adequately disclosed among South African and Chinese firms, it is necessary to initiate an improvement of both financial and non-financial information disclosure, and to enhance the quality of the information disclosure, thereby reducing information asymmetry. International organisations such as Bloomberg and MSCI provide in-depth research, ratings and other services relating to ESG practices, but the South African and Chinese company coverage is limited in these service providers, and the evaluation criteria are more international than local. It would be beneficial for South African and Chinese corporations to build their own corporate governance and ESG disclosure/evaluation systems by incorporating international standards as well as the local context.

6.1.2.3 For government and regulators: To reduce external barriers to institutional investors' engagement in corporate governance

A sound regulatory environment is of importance for institutional investors to engage in corporate governance. Firstly, the governments in both South Africa and China

should further promote the development of institutional investors, and pay particular attention to pressure-insensitive and long-term institutional investors, who may be more willing to engage in corporate governance. Secondly, equity allocation restrictions make institutional investors unlikely to conduct diversified investment, which is against prudent investor requirements. At the same time, limited ownership held by institutional investors makes them unwilling and unable to effectively engage in corporate governance. Thus, less restricted ownership limits should be imposed on institutional investors, with the prerequisite of controllable risks. Last but not least, governments and regulators should improve the relevant legislation in order to clarify and strengthen the rights and obligations of institutional investors, and at the same time, to ensure the effectiveness of supervision and enforcement. Furthermore, governments and regulators need to ensure the operability of the mechanisms, systems and rules they establish, and avoid making them a mere formality.

The advanced capability of institutional ownership engagement in corporate governance is located in the improved corporate performance of their investee companies. The above-mentioned suggestions are intended to enable institutional investors to promote CFP and corporate ESG performance by fulfilling their legitimation (ethical) and efficiency (instrumental) motives.

6.2 Contributions

The contributions of the present study are manifold, and are summarised below from the research perspective, research content and research methodology employed in this study respectively.

6.2.1 Research perspective

Most prior research on this study's topic has been conducted in the context of developed markets, and paid less attention to emerging markets. With the rapid development of institutional investors and listed companies in emerging markets, this

study shifted the angle from developed markets to emerging markets, and took South Africa and China as examples to explore the role of institutional investors in corporate governance. Therefore, this study contributes to the advancement of the South African and Chinese literature on institutional investors and corporate governance.

In addition, unlike companies in the US and the UK (with a diffused corporate ownership structure), companies in South Africa and China are usually characterised by concentrated ownership. Concentrated ownership structures mean that the agency problem originates not only from a conflict between managers and shareholders, but also between majority and minority shareholders. Thus, it provides multiple backgrounds for the relationship between institutional investors and improved corporate governance, enriching the existing literature on institutional ownership and corporate governance engagement in the context of the double agency problem. Moreover, South Africa and China are both undergoing corporate governance reforms. This study is presented as a periodical test to examine the corporate governance development and RI implementation by institutional investors in the two countries, and also provides related evidence that could be used to re-evaluate their activism in corporate governance.

Furthermore, the impact of institutional investors on corporate governance is demonstrated in various dimensions, summarised into financial and non-financial aspects. Unlike most extant studies from South Africa and China, which have emphasised financial performance, this study adopted both financial and non-financial perspectives, incorporating financial performance, earnings management and corporate ESG performance.

Institutional investors are a far-from-homogeneous group in their attitudes towards corporate governance. As opposed to many prior studies from South Africa and China, which considered institutional investors as a group and only focused on the homogeneity among institutional investors, this study tested not only the similarities

but also the differences between institutional investors in terms of their preferences and the influence that they have on corporate governance and performance.

6.2.2 Research content

The present study contributes to the body of knowledge on the relationship between institutional ownership and corporate governance in a number of ways from the research content perspectives, and the specific contributions per chapter are presented in this sub-section.

The questions of whether institutional investors choose companies with sound financial performance to invest in, or if CFP improves as a result of institutional investors' participation, are still being debated. Relatively little is known about either side of this debate in the context of South Africa; though some Chinese evidence exists, most is from the period before the NTS Reform. Moreover, most previous research only focused on one of the above-mentioned perspectives, and evaded the issue on the interaction between institutional ownership and CFP. Given this limitation in prior studies, both perspectives were considered in this study, and the findings are presented in Chapters 2 and 3 respectively. Additionally, an index investing strategy is widely used by institutional investors, but little is known about the heterogeneity in terms of stock selection and the impact on CFP between index-investing and non-index-investing institutional investors. This concern was taken account in Chapters 2 and 3, which contributed towards an improved understanding of index-investing institutional investors' investment behaviour.

In terms of the relationship between institutional investors and earnings management reduction, there is little evidence relating to this issue either in South Africa or in China. Moreover, institutional investors' impact on income-increasing and income-decreasing earnings management is rarely studied separately in either country. Chapter 4 therefore took earnings management in absolute values, as well as in

different scenarios into account, allowing for a more detailed examination of institutional investors' impact on earnings manipulation. At the same time, Chapter 4 contributes to a more comprehensive understanding of the relationship between institutional ownership and earnings management reduction under different earnings distributions, for which relatively little is known in South Africa and China. In South Africa, the King III report was released in 2009, followed by the implementation of integrated reporting since 2010. In China, the NTS Reform was basically completed in 2007, and NAS became mandatory for listed firms from the same year. Given the limited research that has been conducted to date on institutional investors' influence on earnings management subsequent to these important events, this chapter thus fills this gap in the existing body of knowledge.

Chapter 5 provides empirical evidence of the relationship between institutional ownership and improved overall ESG performance as well as corporate governance improvement, which is seldom found in the South African or Chinese context. Another contribution is that this research built linkages between institutional ownership, CFP and corporate ESG performance. It was found that there is no significant relationship between overall ESG performance and CFP, and institutional investors are not more effective in advancing the financial performance in companies with superior ESG performance. This finding offers an innovative explanation to the fact that no significant relationship between institutional ownership and improved overall ESG performance is observed.

6.2.3 Research methodology

In order to reach more reliable and comprehensive results, and considering the nature of the data, this study adopted a panel data methodology for the period 2010 to 2013 for South Africa and 2008 to 2013 for China, as opposed to most existing studies from South Africa and China, which have been limited to cross-sectional data.

This study not only used FE models to deal with endogeneity problems, but also introduced instrument variables to ensure improved insights into the relationship between institutional ownership and corporate governance from the perspectives of financial performance, earnings management and ESG performance, as estimated by 2SLS regressions in Chapters 3, 4 and 5. Considering that appropriate instrumental variables were difficult to be identified in Chapter 2, Sys-GMM was employed to deal with potential endogeneity problems.

6.3 Limitations and suggestions for future study

This study experienced limitations due to data restrictions and scope, as presented in this section. Based on these limitations, suggestions for further study are provided.

6.3.1 Limitations

The limitations of this study were mainly due to data restrictions. More specifically, data were not available for different types of institutional investors and the extent of real earnings management calculation for South African listed companies during the study period. In this regard, the heterogeneity between pressure-insensitive and pressure-sensitive institutional investors in terms of their stockholding preferences and their impact on CFP, as well as earnings management and corporate ESG performance could not be investigated within the South African context. In addition, the relationship between institutional ownership and earnings management was assessed with the focus on accrual-based earnings management only. Controlling ownership data during the study period were not available in South Africa, which means that the influence of controlling shareholders on the relationship between institutional investors and corporate governance could not be directly detected. Given the limited period covered in this study, the long-term impact of institutional investors on corporate governance and performance is not well addressed.

This study also explored whether or not institutional investors are effective in promoting financial and non-financial performance; as for how they generate their influence and complement their monitoring (by voting with their hands or with their feet), is not discussed in this study for either South Africa or China. In addition, the study investigated institutional investors and overall corporate governance improvement, the relationship between institutional ownership and corporate governance was not covered in extensive detail because it fell outside the scope of the present study.

6.3.2 Future research

Building on the limitations identified in the preceding four chapters, this study suggests the following areas for future research:

(1) a detailed investigation of the different types of institutional investors in South Africa;

(2) controlling shareholders' impact on relationships between institutional ownership and improved CFP (as well as advanced corporate ESG performance);

(3) the long-term effect of institutional ownership on CFP and on corporate ESG performance;

Furthermore, this study opens the possibility to extend to following areas (from institutional investors' perspective):

In terms of financial aspects,

(4) institutional investors' impact on real earnings management in both South Africa and China;

(5) a comparison between institutional investors' impact on earnings management reduction before and after NAS was released in China;

(6) institutional investors' impact on controlling shareholders' tunnelling;

(7) financial efficiency of ESG integration for institutional investors;

In terms of non-financial aspects,

(8) stockholding preferences towards corporate governance and ES issues;

(9) institutional investors' impact on corporate ES practices;

(10) relationships between institutional ownership and corporate irresponsibility reduction;

(11) a comparison between institutional investors' impact on corporate governance before and after the King III report was released in South Africa;

(12) a comparison between institutional investors' impact on corporate ESG performance before and after CRISA was released in South Africa;

(13) a comparison between institutional investors' impact on corporate governance before, during and after the NTS reform in China;

(14) barriers to and enablers of institutional ownership engagement in ESG practices.

This study shed valuable light on prudent investment behaviour of institutional investors and their impact on financial performance, earnings management and ESG performance of their investee companies. The aforementioned research areas can provide further insights into issues concerning corporate governance, institutional investors and firm performance.

REFERENCES

Abdallah, W., Goergen, M. & O'Sullivan, N. 2015. Endogeneity: How failure to correct for it can cause wrong inferences and some remedies. *British Journal of Management*, 26(4):791-804.

Achleitner, A. K., Guenther, N., Kaserer, C. & Siciliano, G. 2014. Real earnings management and accrual-based earnings management in family firms. *European Accounting Review*, 23(3):431-461.

Aggarwal, R., Erel, I., Ferreira, M. & Matos, P. 2011. Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1):154-181.

Agrawal, A. & Knoeber, C. R. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3):377-397.

Aguilera, R. V. & Jackson, G. 2010. Comparative and international corporate governance. *Academy of Management Annals*, 4(1):485-556.

Aguilera, R. V., Rupp, D. E., Williams, C. & Granapathi, J. 2007. Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3):836-863.

Ahmed, S. U., Islam, M. Z., Mahtab, H. & Hasan, I. 2014. Institutional investment and corporate social performance: Linkage towards sustainable development. *Corporate Social Responsibility and Environmental Management*, 21(1):1-13.

Alchian, A. A. & Demsetz, H. 1972. Production, information costs, and economic organization. *American Economic Review*, 62(5):777-795.

Alhadab, M., Clacher, I. & Keasey, K. 2013. Effects of audit quality on real and accrual earnings management and subsequent return performance: Evidence from IPOs [Online]. Available: http://ssrn.com/abstract=2225409 [2015, November 12].

Alipour, M. 2013. An investigation of the association between ownership structure and corporate performance: Empirical evidence from Tehran Stock Exchange (TSE). *Management Research Review*, 36(11):1137-1166.

Allen, F. 2005. Corporate governance in emerging economies. *Oxford Review of Economic Policy*, 21(2):164-177.

Allen, F., Goldstein, I., Jagtiani, J. & Lang, W. W. 2016. Enhancing prudential standards in financial regulations. *Journal of Financial Services Research*, forthcoming.

Almazan, A., Hartzell, J. C. & Starks, L. T. 2005. Active institutional shareholders and costs of monitoring: Evidence from executive compensation. *Financial Management*, 34(4):5-34.

AMAC. 2015. Investing report of fund investors (2014) [Online]. Available: http://www.amac.org.cn/cms/contentcore/resource/download?ID=4345 [2015, October 20]. (in Chinese)

Amar, A. B. & Abaoub, E. 2010. Earnings management thresholds: The case in Tunisia. *Asian Academy of Management Journal of Accounting and Finance*, 6(2):35-56.

Ameer, R. 2010. The role of institutional investors in the inventory and cash management practices of firms in Asia. *Journal of Multinational Financial Management*, 20(2-3):126-143.

Ames, D. 2013. IFRS adoption and accounting quality: The case of South Africa. *Journal of Applied Economics and Business Research*, 3(3):154-165.

Andreasson, S. 2011. Understanding corporate governance reform in South Africa: Anglo-American divergence, the King reports, and hybridization. *Business & Society*, 50(4):647-673.

Andreou, P. C., Louca, C. & Panayides, P. M. 2014. Corporate governance, financial management decisions and firm performance: Evidence from the maritime industry. *Transportation Research Part E: Logistics and Transportation Review*, 63:59-78.

Andriosopoulos, D. & Yang, S. 2015. The impact of institutional investors on mergers and acquisitions in the United Kingdom. *Journal of Banking & Finance*, 50:547-561.

Aon. 2007. Sustainability: Beyond enterprise risk management [Online]. Available: http://www.aon.com/about-aon/intellectual-capital/attachments/risk-services/sustainability_beyond_enterprise_risk_management.pdf [2015, July 30].

Appel, I. R., Gormley, T. A. & Keim, D. B. 2016. Passive investors, not passive owners. *Journal of Financial Economics*, forthcoming.

Arosa, B., Iturralde, T. & Maseda, A. 2010. Ownership structure and firm performance in non-listed firms: Evidence from Spain. *Journal of Family Business Strategy*, 1(2):88-96.

Ascioglu, A., Hegde, S. P., Krishnan, G. V. & McDermott, J. B. 2012. Earnings management and market liquidity. *Review of Quantitative Finance and Accounting*, 38(2):257-274.

Ashraf, M. & Muhammad, J. 2013. The preferences of Malaysian institutional investors: Do they change their preferences. *International Journal of Business and Society*, 14(3):444-459.

Atiase, R., Mayew, W. J. & Xue, Y. 2006. Institutional monitoring and corporate restructurings. University of Texas at Austin Working Paper [Online]. Available: http://ssrn.com/abstract=930156 [2015, October 16].

Atkins, J. & Maroun, W. 2014. South African institutional investors' perceptions of integrated reporting [Online]. Available: http://www.accaglobal.com/ab109 [2016, February 20].

Ayuso, S., Rodríguez, M. A., García-Castro, R. & Ariño, M. A. 2014. Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business & Society*, 53(3):414-439.

Badrinath, S. G., Gay, G. D. & Kale, J. R. 1989. Patterns of institutional investment, prudence, and the managerial 'safety-net' hypothesis. *Journal of Risk and Insurance*, 56(4):605-629.

Bajo, E., Barbi, M., Bigelli, M. & Hillier, D. 2013. The role of institutional investors in public-to-private transactions. *Journal of Banking & Finance*, 37(11):4327-4336.

Barreda-Tarrazona, I, Matallín-Sáez, J. C. & Balaguer-Franch, M. R. 2011. Measuring investors' socially responsible preferences in mutual funds. *Journal of Business Ethics*, 103(2):305-330.

Barros, G. 2010. Herbert A. Simon and the concept of rationality: Boundaries and procedures. *Brazilian Journal of Political Economy*, 30(3):455-472.

Bar-Yosef, S. & Prencipe, A. 2013. The impact of corporate governance and earnings management on stock market liquidity in a highly concentrated ownership capital Market. *Journal of Accounting, Auditing & Finance*, 28(3):292-316.

Bauer, R., Koedijk, K. & Otten, R. 2005. International evidence on ethical mutual fund performance and investment style. *Journal of Banking & Finance*, 29(7):1751-1767.

Bekaert, G. & Harvey, C. R. 2000. Foreign speculators and emerging markets. *Journal of Finance*, 55(2):565-613.

Belghitar, Y., Clark, E. & Kassimatis, K. 2011. The prudential effect of strategic institutional ownership on stock performance. *International Review of Financial Analysis*, 20(4):191-199.

Bell, R. G., Filatotchev, I. & Aguilera, R. V. 2014. Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective. *Academy of Management Journal*, 57(1):301-320.

Beltratti, A., Bortolotti, B. & Caccavaio, M. 2011. The stock market reaction to the 2005 Non-tradable Share Reform in China. European Central Bank Working Paper, no. 1339 [Online]. Available: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1339.pdf [2015, November 12].

Bennett, J. A., Sias, R. W. & Starks, L. T. 2003. Greener pastures and the impact of dynamic institutional preferences. *Review of Financial Studies*, 16(4):1203-1238.

Berle A. A. & Means G. C. 1932. *Modern corporation and private property*. New Brunswick: Transaction Publishers.

Berry, C. 2011. Protecting our best interests: Rediscovering fiduciary obligation. FairPensions [Online]. Available: http://www.shareaction.org/sites/default/files/uploaded_files/fidduty/FPProtectingOurBestInterests.pdf [2015, July 28].

Bhattacharya, P. S. & Graham, M. A. 2009. On institutional ownership and firm performance: A disaggregated view. *Journal of Multinational Financial Management*, 19(5):370-394.

Binay, M. 2005. Performance attribution of US institutional investors. *Financial Management*, 34(2):127-152.

Bird, R., Momenté, F. & Reggiani, F. 2012. The market acceptance of corporate social responsibility: A comparison across six countries regions. *Australian Journal of Management*, 37(2):153-168.

Blume, M. E. & Keim, D. B. 2014. The changing preferences of institutional investors for common stocks [Online]. Available: http://ssrn.com/abstract=2416900 [2015, September 1].

Blundell, R. & Bond, S. 1998. Initial conditions and moment restrictions in dynamic

panel data models. *Journal of Econometrics*, 87(1):115-143.

Bohl, M. T., Gottschalk, K. & Pal, R. 2006. Institutional investors and stock market efficiency: The case of the January anomaly. European University Viadrina Postgraduate Research Programme Working Paper [Online]. Available: http://ssrn.com/abstract=892144 [2015, September 1].

Bollen, N. P. B. & Pool, V. K. 2009. Do hedge fund managers misreport returns? Evidence from the pooled distribution. *Journal of Finance*, 64(5):2257-2288.

Boone, N., Colombage, S. & Gunasekarage, A. 2011. Block shareholder identity and firm performance in New Zealand. *Pacific Accounting Review*, 23(2):185-210.

Boulle, L. & Chella, J. 2014. Joining the BRICs: The case of South Africa, in V. I. Lo & M. Hiscock (eds.). *The rise of the BRICS in the global political economy: Changing paradigms?* Cheltenham: Edward Elgar Publishing. 99-122.

Brands, S., Gallagher, D. R. & Looi, A. 2006. Active investment manager portfolios and preferences for stock characteristics. *Accounting and Finance*, 46(2):169-190.

Brickley, J. A., Lease, R. C. & Smith, C. W. 1988. Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics*, 20(1-2):267-291.

Brossard, O., Lavigne, S. & Sakinç, M. E. 2013. Ownership structures and R&D in Europe: The good institutional investors, the bad and ugly impatient shareholders. *Industrial and Corporate Change*, 22(4):1031-1068.

Bruton, G. D., Filatotchev, I., Chahine, S. & Wright, M. 2010. Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. *Strategic Management Journal*, 31(5):491-509.

Burgstahler, D. & Chuk, E. 2015. Do scaling and selection explain earnings discontinuities. *Journal of Accounting and Economics*, 60(1):168-186.

Burgstahler, D. & Dichev, I. D. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24(1):99-126.

Burns, N., Kedia, S. & Lipson, M. 2010. Institutional ownership and monitoring: Evidence from financial misreporting. *Journal of Corporate Finance*, 16(4):443-455.

Bushee, B. J. & Noe, C. 2000. Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of Accounting Research*, 38 (Supplement): 171-202.

Bushee, B. J. 1998. The influence of institutional investors on myopic R&D investment behaviour. *Accounting Review*, 73(3):305-333.

Bushee, B. J. 2001. Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research*, 18(2):207-246.

Bushee, B. J., Carter, M. E. & Gerakos, J. 2014. Institutional investor preferences for corporate governance mechanisms. *Journal of Management Accounting Research*, 26(2):123-149.

Cadbury Committee. 1992. *Report of the committee on the financial aspects of corporate governance*. London: Gee.

Cadbury, A. 2003. Foreword, in S. Claessens & B. Yurtoglu, *Corporate governance*

and development. Washington: IFC. [Online]. Available: http://www.ifc.org/wps/wcm/connect/7fc17c0048a7e6dda8b7ef6060ad5911/Focus_1_Corp_Governance_and_Development.pdf?MOD=AJPERES [2016, June 13].

Cahan, S. F., Chen, C. & Chen, L. 2015. Social norms and CSR performance. *Journal of Business Ethics*, forthcoming.

Cai, Y., Jo, H. & Pan, C. 2012. Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, 108(4):467-480.

Cao, C. & Petrasek. L. 2014. Liquidity risk and institutional ownership. *Journal of Financial Markets*, 21:76-97.

Cao, J., Liu, Q. & Tian, G. G. 2014. Do venture capitalists play a monitoring role in an emerging market? Evidence from the pay–performance relationship of Chinese entrepreneurial firm. *Pacific-Basin Finance Journal*, 29:121-145.

Capelle-Blancard, G. & Monjon, S. 2012. Trends in the literature on socially responsible investment: Looking for the keys under the lamppost. *Business Ethics: A European Review*, 21(3):239-250.

Capelle-Blancard, G. & Monjon, S. 2014. The performance of socially responsible funds: Does the screening process matter? *European Financial Management*, 20(3):494-520.

Carroll, K. 2004. *Property rights and managerial decisions in for-profit, non-profit and public organizations: Comparative theory and policy*. London: Palgrave Macmillan.

Carvalhal, A. & Almeida, C. 2014. Do pension funds improve the governance of investee companies? Evidence from the Brazilian market, in S, Boubaker & D. K. Nguyen (eds.). *Corporate governance in emerging markets: Theories, practices and cases*. Berlin: Springer Berlin Heidelberg. 485-497.

Çelik, S. & Isaksso, M. 2014. Institutional investors and ownership engagement. *OECD Journal: Financial Market Trends*, 2013(2):93-114.

Cerin, P. & Scholtens, B. 2011. Linking responsible investment to social influence: Motives, assessment and risks. *Sustainable Development*, 19(2):71-76.

Chakravarthy, B. S. 1986. Measuring strategic performance. *Strategic Management Journal*, 7(5):437-458.

Chan, A. L. C., Ding, R. & Hou, W. 2014. Does mutual fund ownership affect financial reporting quality for Chinese privately-owned enterprises? *International Review of Financial Analysis*, 36:131-140.

Chang, K., Kabongo, J. D. & Li, Y. 2015. Institutional ownership and corporate social responsibility: The moderating effect of geographic proximity [Online]. Available: http://ssrn.com/abstract=2657881 [2016, February 20].

Charfeddine, L. & Elmarzougui, A. 2010. Institutional ownership and firm performance: Evidence from France. *The IUP Journal of Behavioral Finance*, VII(4):35-46.

Chen, A., Kao, L. & Lu, C. S. 2014. Controlling ownership and firm performance in Taiwan: The role of external competition and internal governance. *Pacific-Basin Finance Journal*, 29:219-238.

Chen, D. 2013. *Corporate governance, enforcement and financial development: The Chinese experience*. Cheltenham: Edward Elgar.

Chen, H. C., Ho, J. K., Lai, C. W. & Morales-Camargo, E. 2012. Institutional trading behavior in the ETF market. Midwest Finance Association 2012 Annual Meetings Paper [Online]. Available: http://ssrn.com/abstract=1934056 [2015, September 1].

Chen, J. C. & Roberts, R. W. 2010. Toward a more coherent understanding of the organization-society relationship: A theoretical consideration for social and environmental accounting research. *Journal of Business Ethics*, 97(4):651-665.

Chen, J. J. & Zhang, H. 2014. The impact of the corporate governance code on earnings management: Evidence from Chinese listed companies. *European Financial Management*, 20(3):596-632.

Chen, J., Blenman, L. & Chen, D. 2008. Does institutional ownership create values? The New Zealand case. *Quarterly Journal of Finance and Accounting*, 47(4):109-127.

Chen, M. L., Lin, F. L., Hung, M. C. & Wang, K. L. 2009. Investment preference and strategies of foreign institutional investors across different industries in Taiwan. *Review of Pacific Basin Financial Markets and Policies*, 12(4):675-694.

Chen, X., Harford, J. & Li, K. 2007. Monitoring: Which institutions matter? *Journal of Financial Economics*, 86(2):279-305.

Chen, Z., Ke, B. & Yang, Z. 2013. Minority shareholders' control rights and the quality of corporate decisions in weak investor protection countries: A natural experiment from China. *Accounting Review*, 88(4):1211-1238.

Chi, J., Yang, J. & Young, M. 2014. Mutual funds' holdings and listed firms' earnings management: Evidence from China. *Journal of Multinational Financial Management*, 28:62-78.

Child, C. 2015. Mainstreaming and its discontents: Fair trade, socially responsible investing, and industry trajectories. *Journal of Business Ethics*, 130 (3): 601-618.

China Securities Index Company Limited (CSI). 2015. CSI300 index methodology. [Online]. Available: http://www.csindex.com.cn/sseportal_en/csiportal/xzzx/file/000300hbook.pdf. [2016, June 28]. (in Chinese)

China SIF. 2014. Report on Chinese mutual funds responsible investment. Available: http://syntao.com/Uploads/%7BFEC73DC5-EF49-444A-B885-A754A348373F%7D_SRI%20report%202014.pdf [2015, August 25]. (in Chinese)

Chinese CSR White Paper (2015) released in Beijing. 2015. Xinhuan Net News, 22 December. Available: http://news.xinhuanet.com/tech/2015-12/22/c_128556629.htm. [2016, February 18]. (in Chinese)

Cho, M. H. 1998. Ownership structure, investment, and the corporate value: An empirical analysis. *Journal of Financial Economics*, 47(1):103-121.

Choi, S. B., Lee, S. H. & Williams, C. 2011. Ownership and firm innovation in a transition economy: Evidence from China. *Research Policy*, 40(3):441-452.

Christodoulou, D. & McLeay, S. 2009. Bounded variation and the asymmetric

distribution of scaled earnings. *Accounting and Business Research*, 39(4):347-372.

Chung, C. Y. & Wang, K. 2014. Do institutional investors monitor management? Evidence from the relationship between institutional ownership and capital structure. *North American Journal of Economics and Finance*, 30:203-233.

Chung, K. H. & Zhang, H. 2011. Corporate governance and institutional ownership. *Journal of Financial and Quantitative Analysis*, 46(1):247-273.

Chung, R., Firth, M. & Kim, J. 2002. Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, 8(1):29-48.

Chung, R., Fung, S. & Hung, S. K. 2012. Institutional investors and firm efficiency of real estate investment Trusts. *The Journal of Real Estate Finance and Economics*, 45(1):171-211.

Claessens, S. & Fan, J. 2002. Corporate governance in Asia: A survey. *International Review of Finance*, 3(2):71-103.

Claessens, S. & Kodres, L. 2014. The regulatory responses to the global financial crisis: Some uncomfortable questions. IMF Working Paper, no. 14/46 [Online]. Available: http://www.imf.org/external/pubs/ft/wp/2014/wp1446.pdf [2015, September 1].

Claessens, S. & Yurtoglu, B. B. 2013. Corporate governance in emerging markets: A survey. *Emerging Markets Review*, 15:1-33.

Claessens, S. & Yurtoglu, B. B. 2003. Corporate governance and development. Washington: IFC. [Online]. Available: http://www.ifc.org/wps/wcm/connect/7fc17c0048a7e6dda8b7ef6060ad5911/Focus_1_Corp_Governance_and_Development.pdf?MOD=AJPERES [2016, June 13].

Claessens, S. 2006. Corporate governance and development. *World Bank Research Observer*, 21(1):91-122.

Claessens, S., Djankov, S. & Lang, L. H. P. 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1-2):81-112.

Coase, R. H. 1937. The nature of the firm. *Economica*, 4(16):386-405.

Coetzee, S. A. & Schmulian, A. 2013. The effect of IFRS adoption on financial reporting pedagogy in South Africa. *Issues in Accounting Education*, 28(2):243-251.

Cohen, D. A. & Zarowin, P. 2010. Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1):2-19.

Cormier, D., Houle, S. & Ledoux, M. J. 2013. The incidence of earnings management on information asymmetry in an uncertain environment: Some Canadian evidence. *Journal of International Accounting, Auditing and Taxation*, 22(1):26-38.

Cornett, M. M., Marcus, A. J. & Tehranian, H. 2008. Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics*, 87(2):357-373.

Cornett, M. M., Marcus, A. J., Saunders, A. & Tehranian, H. 2007. The impact of institutional ownership on corporate operating performance. *Journal of Banking & Finance*, 31(6):1771-1794.

Cortez, M. C., Silva, F. & Areal, N. 2012. Socially responsible investing in the global market: The performance of us and European funds. *International Journal of Finance and Economics*, 17(3):254-271.

Cosh, A. & Hughes, A. 1995. Executive remuneration, executive dismissal and institutional shareholdings. ESRC Centre for Business Research Working Paper, no.19 [Online]. Available: http://core.ac.uk/download/pdf/7151258.pdf [2015, October 28].

Cotter, J. & Najah, M. M. 2012. Institutional investor influence on global climate change disclosure practices. *Australian Journal of Management*, 37(2):169-187.

Covrig, V., Lau, S. & Ng, L. 2006. Do domestic and foreign fund managers have similar preferences for stock characteristics? A cross-country analysis. *Journal of International Business Studies*, 37(3):407-429.

Cox, P., Brammer, S. & Millington, A. 2004. An empirical examination of institutional investor preferences for corporate social performance. *Journal of Business Ethics*, 52(1):27-43.

Crifo, P. & Forget, V. D. 2013. Think global, invest responsible: Why the private equity industry goes green. *Journal of Business Ethics*, 116(1):21-48.

CSRC. 2001. *Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies*. Beijing: CSRC.

CSRC. 2002. *Code of Corporate Governance for Listed Companies in China*. Beijing: CSRC & State Economic Trade Commission.

CSRC. 2014. Press conference on June 13, 2014 [Online]. Available: http://www.csrc.gov.cn/pub/csrc_en/newsfacts/PressConference/201406/t20140620_256417.html [2016, April 3].

Davis, K. 2010. Regulatory responses to the financial sector crisis. *Griffith Law Review*, 19(1):117-138.

De Haan, L. & Kakes, J. 2011. Momentum or contrarian investment strategies: Evidence from Dutch institutional investors. *Journal of Banking & Finance*, 35(9):2245-2251.

De Haan, L. & Kakes, J. 2012. Investment strategies of institutional investors: Evidence from Dutch flow-of-funds data. *Applied Economics Letters*, 19(2):155-159.

De Jong, A., Mertens, G., Van der Poel, M. & Van Dijk, R. 2014. How does earnings management influence investor's perceptions of firm value? Survey evidence from financial analysts. *Review of Accounting Studies*, 19(2):606-627.

De Waal, M. J. 2004. Law of succession, in C. J. Van der Merwe & J. E. Du Plessis (eds.). *Introduction to the law of South Africa (Introduction to the laws of series)*. The Hague: Kluwer Law International. 169-199.

Deb, S. G., Banerjee, P. S. & Banerjee, P. 2013. Institutional preference for firm attributes: Evidence from India. *The IUP Journal of Applied Finance*, 19(2):27-44.

Dechow, P. M., Sloan, R. G. & Sweeney, A. P. 1995. Detecting earnings management. *The Accounting Review*, 70(2):193-225.

Dechow, P. M. & Skinner, D. J. 2000. Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, 14(2):232-250.

Dechow, P. M., Hutton, A. P., Kim, J. H. & Sloan, R. G. 2012. Detecting earnings management: A new approach. *Journal of Accounting Research*, 50(2):275-334.

Dechow, P. M., Sloan, R. G. & Sweeney, A. P. 1995. Detecting earnings management. *The Accounting Review*, 70(2):193-225.

Dechow, P. M., Sloan, R. G. & Sweeney, A. P. 1996. Causes and consequences of earnings manipulations: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1):1-36.

Degeorge, F., Patel, J. & Zeckhauser, R. 1999. Earnings management to exceed thresholds. *The Journal of Business*, 72(1):1-33.

Del Guercio, D.1996. The distorting effect of the prudent-man laws on institutional equity investments. *Journal of Financial Economics*, 40(1):31-62.

Demetriades, K. & Auret, C. J. 2014. Corporate social responsibility and firm performance in South Africa. *South African Journal of Business Management*, 45(1):1-12.

Demiralp, I., D'Mello, R., Schlingemann, F. P. & Subramaniam, V. 2011. Are there monitoring benefits to institutional ownership? Evidence from seasoned equity offerings. *Journal of Corporate Finance*, 17(5):1340-1359.

Demsetz, H. & Villalonga, B. 2001. Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3):209-233.

Dequech, D. 2006. The new institutional economics and the theory of behaviour under uncertainty. *Journal of Economic Behavior & Organization*, 59(1):109-131.

DiMaggio, P. J. & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2):147-160.

Ding, R., Hou, W., Kuo, J. M. & Lee, E. 2013. Fund ownership and stock price informativeness of Chinese listed firms. *Journal of Multinational Financial Management*, 23(3):166-185.

Donaldson, T. & Preston, L. E. 1995. The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1):65-91.

Dong, M. & Ozkan, A. 2008. Institutional investors and director pay: An empirical study of UK companies. *Journal of Multinational Financial Management*, 18(1):16-29.

Dorfleitner, G., Halbritter, G. & Nguyen, M. 2015. Measuring the level and risk of corporate responsibility: An empirical comparison of different ESG rating approaches. *Journal of Asset Management*, 16(7):450-466.

Duan, J. S. 2010. Is socially responsible investment contrary to value investment? A comparison based on international experience. *Journal of Shanghai Lixin University of Commerce*, 5:63-70. (in Chinese)

DuCharme, L. L., Malatesta, P. H. & Sefcik, S. E. 2001. Earnings management: IPO valuation and subsequent performance. *Journal of Accounting, Auditing and Finance*, 16(4):369-396.

Duggal, R. & Millar, J. A.1999. Institutional ownership and firm performance: The case of bidder returns. *Journal of Corporate Finance*, 5(2):103-117.

Dumas, C. & Louche, C. 2016. Collective beliefs on responsible investment. *Business & Society*, 55(3):427-457.

Eakins, S. G., Stansell, S. R. & Wertheim, P. E. 1998. Institutional portfolio composition: An examination of the prudent investment hypothesis. *Quarterly Review of Economics and Finance*, 38(1):93-109.

Eccles, N. S. & Viviers, S. 2011. The origins and meanings of names describing investment practices that integrate a consideration of ESG issues in the academic literature. *Journal of Business Ethics*, 104(3):389-402.

Eccles, R. G. & Krzus, M. P. 2014. *The Integrated reporting movement: Meaning, momentum, motives, and materiality.* Hoboken, New Jersey: Wiley.

Eccles, R. G., Ioannou, I. & Serafeim, G. 2014. The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11):2835-2857.

Edmans, A. 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3):621-640.

EIRIS. 2012. Evolving markets: What's driving ESG in emerging economies? [Online]. Available: http://www.eiris.org/files/research%20publications/EIRISEmergingMarketsReport2012.pdf [2016, February 20].

Eisenhardt, K. M. 1989. Agency theory: An assessment and review. *The Academy of Management Review*, 14(1):57-74.

Elliott, D. J. & Yan, K. 2013. The Chinese financial system: An introduction and overview [Online]. Available: http://www.brookings.edu/~/media/research/files/papers/2013/07/01-chinese-financial-system-elliott-yan/chinese-financial-system-elliott-yan.pdf [2016, June 13].

El-Sayed Ebaid, I. 2012. Earnings management to meet or beat earnings thresholds: Evidence from the emerging capital market of Egypt. *African Journal of Economic and Management Studies*, 3(2):240-257.

Elsayed, K. & Wahba, H. 2013. Reinvestigating the relationship between ownership structure and inventory management: A corporate governance perspective. *International Journal of Production Economics*, 143(1):207-218.

Elyasiani, E. & Jia, J. 2010. Distribution of institutional ownership and corporate firm performance. *Journal of Banking & Finance*, 34(3):606-620.

Emamgholipour, M., Bagheri, S. M. B., Mansourinia, E. & Arabi, A. M. 2013. A study on relationship between institutional investors and earnings management: Evidence from the Tehran Stock Exchange. *Management Science Letters*, 3(4): 1105-1112.

Ernst & Young. 2014. Tomorrow's investment rules：Global survey of institutional

investors on non-financial performance [Online]. Available: http://www.ey.com/Publication/vwLUAssets/EY-tomorrows-investment-rules-2/$FILE/EY-tomorrows-investment-rules-2.0.pdf [2016, February 20].

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 and Accounting*, 37(3-4):332-355.

Eurosif. 2008. 2008 European SRI study [Online]. Available: http://www.eurosif.org/publication/view/european-sri-study-2008/ [2015, July 30].

Eurosif. 2014. 2014 European SRI study [Online]. Available: http://www.eurosif.org/wp-content/uploads/2014/09/Eurosif-SRI-Study-20142.pdf [2015, April 3].

Faccio, M. & Lasfer, M. 2000. Do occupational pension funds monitor companies in which they hold large stakes? *Journal of Corporate Finance*, 6(1):71-110.

Faias, J. A. & Ferreira, M. A. 2016. Does institutional ownership matter for international stock return comovement? European Corporate Governance Institute (ECGI)-Finance Working Paper, no. 465/2016 [Online]. Available: http://ssrn.com/abstract=2617240 [2016, April 4].

Falkenstein, E. G. 1996. Preferences for stock characteristics as revealed by mutual fund portfolio holdings. *Journal of Finance*, 51(1):111-135.

Fama, E. F. & Jensen, M. 1983. Separation of ownership and control. *Journal of Law and Economics*, 26(2):301-325.

Fama, E. F. 1970. Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2):383-417.

Fan, H. F. 2010. *Institutional investor's shareholding and corporate preference - A theoretic and empirical research of China's security market*. Published doctoral dissertation. Guangzhou: CNKI. (in Chinese)

Fan, J. P. H. & Wong, T. J. 2002. Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3):401-425.

Fauzi, H., Mahoney, L. & Rahman, A. A. 2007. Institutional ownership and corporate social performance: Empirical evidence from Indonesian companies. *Issues in Social and Environmental Accounting*, 1(2):334-347.

fDi Intelligence. 2016. The fDi report 2016: Global greenfield investment trends [Online]. Available: http://forms.fdiintelligence.com/report2016/files/The_fDi_Report_2016.pdf [2016, August 5].

Federal Reserve Bank of St. Louis Database. 2016. [Online]. Available: http://research.stlouisfed.org/fred2/series/DDDI03ZAA156NWDB [2016, March 3].

Fernando, C. S., Sharfman, M. P. & Uysal, V. B. 2010. Does greenness matter? Environmental performance, ownership structure and analyst coverage [Online]. Available: http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=D11CC91D277127369

92D39881191ADC0?doi=10.1.1.183.8778&rep=rep1&type=pdf [2016, February 20].

Ferreira, M. A. & Matos, P. 2008. The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3):499-533.

Filatotchev, I. & Dotsenko, O. 2015. Shareholder activism in the UK: Types of activists, forms of activism, and their impact on a target's performance. *Journal of Management & Governance*, 19(1):5-24.

Firth, M., Fung, P. M. Y. & Rui, O. M. 2007. Ownership, two-tier board structure, and the informativeness of earnings: Evidence from China. *Journal of Accounting and Public Policy*, 26(4):463-496.

Firth, M., Rui, O. M. & Wu, W. 2011. Cooking the books: Recipes and costs of falsified financial statements in China. *Journal of Corporate Finance*, 17(2):371-390.

Fiss, P. C. & Zajac, E. J. 2004. The diffusion of ideas over contested terrain: The (non) adoption of a shareholder value orientation among German firms. *Administrative Science Quarterly*, 49:501-534.

Fiss, P. C. 2008. Institutions and corporate governance, in R. Greenwood, O. Christine, R. Suddaby & K. Sahlin-Andersson (eds.). *The SAGE handbook of organizational institutionalism*. London: SAGE. 389-410.

Florou, A. & Pope, P. 2008. Are boards and institutional investors active monitors? Evidence from CEO dismissal. *Managerial Auditing Journal*, 23(9):862-872.

Fosu, S. 2013. Capital structure, product market competition and firm performance: Evidence from South Africa. *The Quarterly Review of Economics and Finance*, 53(2):140-151.

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L. & De Colle, S. 2010. *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.

Freshfields Bruckhaus Deringer. 2005. A legal framework for the integration of environmental, social and governance issues into institutional investment. UNEP FI [Online]. Available: http://www.unepfi.org/psi/wp-content/uploads/2012/06/freshfields_legal_resp_20051123.pdf [2015, July 30].

Friede, G., Busch, T. & Bassen, A. 2015. ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4):210-233.

FSB. 2014. 2013 Financial Service Board integrated annual report. Menlo Park: FSB.

FSB. 2015. 2014 Financial Service Board integrated annual report. Menlo Park: FSB.

FSB. 2016. 2015 Financial Service Board integrated annual report. Menlo Park: FSB.

Furubotn, E. G. 2001. The new institutional economics and the theory of the firm. *Journal of Economic Behavior & Organization*, 45(2):133-153.

Gaspar, J. & Massa, M. 2007. Local ownership and private information: Evidence on the monitoring-liquidity trade-off. *Journal of Financial Economics*, 83(3):751-792.

Gentry, R. J. & Shen, W. 2010. The relationship between accounting and market measures of firm financial performance: How strong is it? *Journal of Managerial*

Issues, 22(4):514-530.

GEPF. 2016. 2015 GEPF annual report. Pretoria: GEPF.

Giamporcaro, S. & Pretorius, L. 2012. Sustainable and responsible investment (SRI) in South Africa: A limited adoption of environmental criteria. *Investment Analysts Journal*, 41(75):1-19.

Giamporcaro, S., Pretorius, L. & Visser, M. 2010. Responsible investment: A vehicle for environmentally sustainable economic growth in South Africa. Environment for Development Discussion Paper, no. 10-17 [Online]. Available: http://ssrn.com/abstract=1648868 [2016, February 20].

Gillan, S. L. & Starks, L. T. 2000. Corporate governance proposals and shareholder activism: The role of institutional investors? *Journal of Financial Economics*, 57(2):275-305.

Gillan, S. L. & Starks, L. T. 2003. Corporate governance, corporate ownership, and the role of institutional investors: A global perspective. *Journal of Applied Finance*, 13(2):4-22.

Gillan, S. L. & Starks, L. T. 2007. Evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19(1):55-73.

Gillan, S. L. 2006. Recent developments in corporate governance: An overview. *Journal of Corporate Finance*, 12(3):381-402.

Glac, K. 2009. Understanding socially responsible investing: The effect of decision frames and trade-off options. *Journal of Business Ethics*, 87:41-55.

Gladysek, O. & Chipeta, C. 2012. The impact of socially responsible investment index constituent announcements on firm price: Evidence from the JSE. *South African Journal of Economic and Management Sciences*, 15(4):429-439.

Gnan, L., Hinna, A., Monteduro, F. & Scarozza, D. 2013. Corporate governance and management practices: Stakeholder involvement, quality and sustainability tools adoption: Evidences in local public utilities. *Journal of Management & Governance*, 17(4):907-937.

Gompers, P. & Metrick, A. 2001. Institutional investors and equity prices. *Quarterly Journal of Economics*, 116(1):229-259.

Gong, B. 2014. *Understanding institutional shareholder activism: A comparative study of the UK and China*. Abingdon & New York: Routledge.

Goodspeed, I. 2013. Twin peaks [Online]. Available: http://financialmarketsjournal.co.za/oldsite/17thedition/twinpeaks.htm [2016, May 5].

Gopalan, R. & Jayaraman, S. 2012. Private control benefits and earnings management: Evidence from insider controlled firms. *Journal of Accounting Research*, 50(1):117-157.

Graves, S. B. & Waddock, S. A. 1994. Institutional investors and corporate social performance. *Academy of Management Journal*, 37(4):1034-1046.

Grinstein, Y. & Michaely, R. 2005. Institutional holdings and payout policy. *Journal of Finance*, 60(3):1389-1426.

Groß, K. 2007. *Equity ownership and performance: An empirical study of German traded companies*. Heidelberg: Physica-Verlag Heidelberg.

Gstraunthaler, T. 2010. Corporate governance in South Africa: The introduction of King III and reporting practices at the JSE Alt-X. *Corporate Ownership & Control*, 7(3):146-154.

Habbard, P. 2010. Corporate governance in South Africa [Online]. Available: http://www.tuac.org/en/public/e-docs/00/00/08/60/telecharger.phtml?cle_doc_attach=2775 [2015, June 8].

Hadani, M., Goranova, M. & Khan, R. 2011. Institutional investors, shareholder activism, and earnings management. *Journal of Business Research*, 64(12):1352-1360.

Haigh, M. & Hazelton, J. 2004. Financial markets: A tool for social responsibility? *Journal of Business Ethics*, 52(1):59-71.

Halbritter, G. & Dorfleitner, G. 2015. The wages of social responsibility-where are they? A critical review of ESG investing. *Review of Financial Economics*, 26:25-35.

Hamilton, S., Jo, H. & Statman, M. 1993. Doing well while doing good: The investment performance of socially responsible mutual funds. *Financial Analysts Journal*, 49(6):62-66.

Hankins, K. W., Flannery, M. J. & Nimalendran, M. 2008. The effect of fiduciary standards on institutions' preference for dividend-paying stocks. *Financial Management*, 37(4):647-671.

Hanson, S. G., Kashyap, A. K. & Stein, J. C. 2011. A macroprudential approach to financial regulation. *Journal of Economic Perspectives*, 25(1):3-28.

Harris, J. & Bromiley, P. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. *Organization Science*, 18(3):350-370.

Hartzell, J. C. & Starks, L. T. 2003. Institutional investors and executive compensation. *Journal of Finance*, 58(6):2351-2374.

Hashima, H. A. & Devi, S. S. 2012. Institutional monitoring and earnings quality in Malaysia. *Procedia - Social and Behavioral Sciences*, 65(3):419-426.

Haw, I., Hu, B., Hwang, L. & Wu, W. 2004. Ultimate ownership, income management, and legal and extra-legal institutions. *Journal of Accounting Research*, 42(2):423-462.

Hazarika, S. J., Karpoff, M. & Nahata, R. 2012. International corporate governance, CEO turnover and earnings management. *Journal of Financial Economics*, 104(1):44-69.

He, J., Mao, X., Rui, O. M. & Zha, X. 2013. Business groups in China. *Journal of Corporate Finance*, 22:166-192.

He, X. 2003. *Research on the development of Chinese securities investment fund*. Beijing: Tsinghua University Press. (in Chinese)

He, X., Chakrabarty, S. & Eden, L. 2016. The global emergence of Chinese multinationals: A resource-based view of ownership and performance. *Asian Business & Management*, 15(1):1-31.

Healy, P. M. & Wahlen, J. M. 1999. A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4):365-383.

Heineman, B. W. & Davis, S. 2011. Are institutional investors part of the problem or part of the solution? The Committee for Economic Development (CED) and the Millstein Center at the Yale School of Management Working Paper [Online]. Available: http://www.shareholderforum.com/access/Library/2011930_CED-Yale.pdf [2015, September 1].

Hellsten, S. & Mallin, C. 2006. Are 'ethical' or 'socially responsible' investments socially responsible? *Journal of Business Ethics*, 66(4):393-406.

Helwege, J., Intintoli, V. J. & Zhang, A. 2012. Voting with their feet or activism? Institutional investors' impact on CEO turnover. *Journal of Corporate Finance*, 18(1):22-37.

Hendry, J., Sanderson, P., Barker, R. & Roberts, J. 2007. Responsible ownership, shareholder value and the new shareholder activism. *Competition & Change*, 11(3):223-240.

Hengartner, L. 2006. *Explaining executive pay: The roles of managerial power and complexity*. Published doctoral dissertation. Wiesbaden: Deutscher Universitätsverlag.

Hira, A. & Hira, R. 2000. The new institutionalism: Contradictory notions of change. *American Journal of Economics and Sociology*, 59(2):267-282.

Hirschman, A. O. 1970. *Exit, voice, and loyalty? Responses to decline in firms, organizations and states*. Cambridge: Harvard University Press.

Hong, H. G. & Kacperczyk, M. T. 2009. The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, 93(1):15-36.

Hong, Y. & Andersen, M. L. 2011. The relationship between corporate social responsibility and earnings management: An exploratory study. *Journal of Business Ethics*, 104(4):461-471.

Hou, S., Xie, C. & Chatterjee, A. 2015. Corporate governance and corporate social responsibilities in China, in A. Banik, A. D. Gupta & P. K. Bhaumik (eds.). *Corporate governance, responsibility and sustainability: Initiatives in emerging economies*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan. 9-23.

Hsu, G. C. M. & Koh, P. S. 2005. Does the presence of institutional investors influence accruals management? Evidence from Australia. *Corporate Governance: An International Review*, 13(6):809-823.

Hsu, M. F. & Wang, K. 2014. The level and stability of institutional ownership and firm performance: Evidence from Taiwan. *Emerging Markets Finance and Trade*, 50(2):159-173.

Hu, H. W., Tam, O. K. & Tan, M. G. 2010. Internal governance mechanisms and firm performance in China. *Asia Pacific Journal of Management*, 27(4):727-749.

Hu, N., Li, X., Liu, L., Qi, B. & Tian, G. 2012. Can government policies induce earnings management behavior? Evidence from Chinese public listed firms. *Journal of International Financial Management and Accounting*, 23(3):187-207.

Hu, Q. 2005. Empirical research on stock-holding preferences of Chinese mutual funds. *Research on Financial and Economic Issues*, 5:50-55. (in Chinese)

Huang, B. & Jiang, X. 2010. A review of Chinse institutional investors. *Science & Wealth*, 3:83. (in Chinese)

Huang, H. 2010. Institutional structure of financial regulation in China: Lessons from the global financial crisis. *Journal of Corporate Law Studies*, 10(1):219-254.

Huang, W. & Zhu, T. 2015. Foreign institutional investors and corporate governance in emerging markets: Evidence of a split-share structure reform in China. *Journal of Corporate Finance*, 32:312-326.

Hudson, R. & Wehrell, R. 2005. Socially responsible investors and the microentrepreneur: A Canadian case. *Journal of Business Ethics*, 60(3):281-292.

Hugill, A. & Siegel, J. 2014. Which does more to determine the quality of corporate governance in emerging economies, firms or countries? Harvard Business School Strategy Unit Working Paper, no. 13-055 [Online]. Available: http://ssrn.com/abstract=2192460 [2016, April 5].

Humphrey, J. E. & Lee, D. D. 2011. Australian socially responsible funds: Performance, risk and screening intensity. *Journal of Business Ethics*,102(4):519-535.

Humphrey, J. E., Lee, D. D. & Shen, Y. 2011. The independent effects of environmental, social and governance initiatives on the performance of UK firms. *Australian Journal of Management*, 37(2):135-151.

Hussain, S. 2000. Simultaneous determination of UK analyst following and institutional ownership. *Accounting and Business Research*, 30(2):111-124.

Hutchinson, M. & Leung, S. 2007. An investigation of factors influencing the association between top management ownership and earnings management. *Journal of Contemporary Accounting and Economics*, 3(2):130-153.

IFC. 2011a. The state of sustainable investment in key emerging markets [Online]. Available: http://www.ifc.org/wps/wcm/connect/f0dd0c8048855cd88cfcde6a6515bb18/IFC_Brief_DoingSI.pdf?MOD=AJPERES&CACHEID=f0dd0c8048855cd88cfcde6a6515bb18 [2016, April 4].

IFC. 2011b. Sustainable investment in Sub-Saharan Africa [Online]. Available: http://www.ifc.org/wps/wcm/connect/88c8808049a74459b44cf6a8c6a8312a/IFC_Brief_Africa_WEB.pdf?MOD=AJPERES [2016, February 20].

IFC. 2013. Raising the bar on corporate governance a study of eight stock exchange indices [Online]. Available: http://www.ifc.org/wps/wcm/connect/a6724900400aca13af3aff23ff966f85/Raising_the_bar_on_CG.pdf?MOD=AJPERES [2016, August 1].

IMF. 2011. Financial system stability assessment [Online]. Available: https://www.imf.org/external/pubs/ft/scr/2011/cr11321.pdf [2016, June 13].

Ingram, P. & Clay, K. 2000. The choice-within-constraints new institutionalism and implications for sociology. *Annual Review of Sociology*, 26:525-546.

Institute of International Finance. 2014. Capital flows to emerging market economies [Online]. Available: https://www.iif.com/file/6055/download?token=7Epcbw0s [2015, September 28].

Ioannou, I. & Serafeim, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9):834-864.

Ioannou, I. & Serafeim, G. 2014. The consequences of mandatory corporate sustainability reporting: Evidence from four countries. Harvard Business School Research Working Paper, no. 11-100 [Online]. Available: http://www.hbs.edu/faculty/Publication%20Files/11-100_7f383b79-8dad-462d-90df-324e298acb49.pdf [2016, February 20].

IoD. 2004. *The handbook of international corporate governance: A definitive guide*. Sterling VA: Kogan Page.

IoDSA. 2002. *King Report on Corporate Governance for South Africa 2002*. Johannesburg: IoDSA.

IoDSA. 2009. *King Report on Corporate Governance for South Africa 2009*. Johannesburg: IoDSA.

IoDSA. 2016. Draft King IV Report [Online]. Available: http://www.adamsadamsip.com/wp-content/uploads/2016/05/King_IV_Report_draft.pdf [2016, October 2].

IoDSA. 2011. *Code for Responsible Investing in South Africa*. Johannesburg: IoDSA.

IOSCO. 2012. Development and regulation of institutional investors in emerging markets [Online]. Available: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD384.pdf [2016, April 4].

Jalil, A. A. & Rahman, R. A. 2010. Institutional investors and earnings management: Malaysian evidence. *Journal of Financial Reporting and Accounting*, 8(2): 110-127.

Jara-Bertina, M., Lo´pez-Iturriaga, F. J. & Lo´pez-de-Foronda, O. 2012. Does the influence of institutional investors depend on the institutional framework? An international analysis. *Applied Economics*, 44(3):265-278.

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.

Jiambalvo, J. 1996. Discussion of "Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC". *Contemporary Accounting Research*, 13(1):37-40.

Jiambalvo, J., Rajgopal, S. & Ventkatachalam, M. 2002. Institutional ownership and the extent to which stock prices reflect future earnings. *Contemporary Accounting Research*, 19(1):117-144.

Jiang, F., Zhu, B. & Huang, J. 2013. CEO's financial experience and earnings management. *Journal of Multinational Financial Management*, 23(3):134-145.

Jiang, H. & Habib, A. 2012. Split-share Reform and earnings management: Evidence from China. *Advances in Accounting*, 28(1):120-127.

Jiao, Y. & Ye, P. 2013. Public pension fund ownership and firm performance. *Review of Quantitative Finance and Accounting*, 40(3):571-590.

Johnson, K. L. 2014. Introduction to institutional investor fiduciary duties. International Institute for Sustainable Development [Online]. Available: https://www.iisd.org/sites/default/files/pdf/2014/fiduciary_duties_en.pdf [2015, June 8].

Johnson, R. D. & Greening, D. W. 1999. The effects of corporate governance and institutional ownership types on corporate social performance. *Academy of*

Management Journal, 42(5):564-576.

Johnson, S., La Porta, R., Lopez-de-Silanes, R. & Shleifer, A. 2000. Tunnelling. *American Economic Review*, 90(2):22-27.

JSE. [n.d.]. *Top 40 (J200)*. [Online]. Available: https://www.jse.co.za/services/market-data/indices/ftse-jse-africa-index-series/headline [2016, June 28].

JSE. 2015. Black South Africans hold at least 23% of the Top 100 companies listed on the Johannesburg Stock Exchange [Online]. Available: https://www.jse.co.za/articles/black-south-africans-top-100-companies-listed-on-the-johannesburg-stock-exchange [2016, April 3].

JSE. 2016. Setting a strong enabling framework [Online]. Available: https://www.jse.co.za/about/sustainability/regulator-influencer-advocate [2015, April 3].

Jun, H. 2016. Corporate governance and the institutionalization of socially responsible investing (SRI) in Korea. *Asia Pacific Business Review*, 22(3):487-501.

Jung, K. & Kwon, S. Y. 2002. Ownership structure and earnings informativeness: Evidence from Korea. *The International Journal of Accounting*, 37(3):301-325.

Kang, J. K., Luo, J. & Na, Y. S. 2013. Are institutional investors with multiple blockholdings effective monitors? AFA 2013 San Diego Meetings Paper [Online]. Available: http://ssrn.com/abstract=2024700 [2015, October 22].

Kang, Y. S. & Kim, B. Y. 2012. Ownership structure and firm performance: Evidence from the Chinese corporate reform. *China Economic Review*, 23(2):471-481.

Kapopoulos, P. & Lazaretou, S. 2007. Corporate ownership structure and firm performance: Evidence from Greek firm. *Corporate Governance: An International Review*, 15(2):144-158.

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.

Karpoff, J. M. 2001. The impact of shareholder activism on target companies: A survey of empirical findings. University of Washington Working Paper [Online]. Available: http://ssrn.com/abstract=885365 [2015, October 20].

Karpoff, J. M., Malatesta, P. & Walkling, R. 1996. Corporate governance and shareholder initiatives: Empirical evidence. *Journal of Financial Economics*, 42(3):365-395.

Kempf, A. & Osthoff, P. 2007. The effect of socially responsible investing on portfolio performance. *European Financial Management*, 13(5):908-922.

Khurshed, A., Lin, S. & Wang, M. Z. 2011. Institutional block-holdings of UK firms: Do corporate governance mechanisms matter? *European Journal of Finance*, 17(2):133-152.

Kochhar, R. & David, P. 1996. Institutional investors and firm innovation: A test of competing hypotheses. *Strategic Management Journal*, 17(1):73-84.

Koh, P. S. 2003. On the association between institutional ownership and aggressive corporate earnings management in Australia. *British Accounting Review*, 35(2):105-128.

Koh, P. S. 2007. Institutional investor type, earnings management and benchmark

beaters. *Journal of Accounting and Public Policy*, 26(3):267-299.

Kremer, S. & Nautz, D. 2013a. Causes and consequences of short-term institutional herding. *Journal of Banking & Finance*, 37(5):1676-1686.

Kremer, S. & Nautz, D. 2013b. Short-term herding of institutional traders: New evidence from the German stock market. *European Financial Management*, 19(4):730-746.

Kumar, R., Lamb W. B. & Wokutch, R. E. 2002. The end of South African sanctions, institutional ownership and the stock price performance of boycotted firms: Evidence on the impact of social- ethical investing. *Business & Society*, 41(2):133-165.

Kuo, J. M., Ning, L. & Song, X. 2014. The real and accrual-based earnings management behaviors: Evidence from the Split Share Structure Reform in China. *The International Journal of Accounting*, 49(1):101-136.

La Porta, R., Lopez-de-Salines, F. & Shleifer, A. 1999. Corporate ownership around the world. *Journal of Finance*, 54(2):471-517.

Lahr, H. 2014. An improved test for earnings management using kernel density estimation. *European Accounting Review*, 23(4):559-591.

Lai, M. M., Tan, S. H. & Chong, L. L. 2013. The behavior of institutional and retail investors in Bursa Malaysia during the Bulls and Bears. *Journal of Behavioral Finance*, 14(2):104-115.

Lakhal, N. 2015. Corporate disclosure, ownership structure and earnings management: The case of French-listed firms. *The Journal of Applied Business Research*, 31(4):1493-1504.

Lappalainen, J. & Niskanen, M. 2012. Financial performance of SMEs: Impact of ownership structure and board composition. *Management Research Review*, 35(11):1088-1108.

Lee, D. D. & Faff, R. W. 2009. Corporate sustainability performance and idiosyncratic risk: A global perspective. *The Financial Review*, 44(2):213-237.

Lee, S. P. & Chuang, T. H. 2009. The determinants of corporate performance: A viewpoint from insider ownership and institutional ownership. *Managerial Auditing Journal*, 24(3):233-247.

Leng, J. 2009. *Corporate governance and financial reform in China's transition economy*. Hong Kong: Hong Kong University Press.

Leuz, C., Nanda, D. & Wysocki, P. D. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3):505-528.

Levy, B. & Spiller, P. T. 1994. The institutional foundations of regulatory commitment: A comparative analysis of telecommunications regulation. *Journal of Law, Economics, & Organization*, 10(2):201-246.

Lewellen, J. 2011. Institutional investors and the limits of arbitrage. *Journal of Financial Economics*, 102(1):62-80.

Li, L. & Han, L. 2013. Value investing or value creating? A comparative study between foreign and domestic institutional investor. *China Economic Quarterly*, 13(1):351-372. (in Chinese)

Li, Q. 2016. Responsible investment in China, in T. Hebb, J. P. Hawley, A. G. F. Hoepner, A. L. Neher & Wood, D. (eds.). *The Routledge handbook of responsible investment*. Abingdon: Routledge. 166-181.

Li, S., Selover, D. D. & Stein, M. 2011. ‘‘Keep silent and make money’’: Institutional patterns of earnings management in China. *Journal of Asian Economics*, 22(5):369-382.

Li, W. 2014. A theory on the discontinuity in earnings distributions. *Contemporary Accounting Research*, 31(2):469-497.

Li, X. 2016. China will reform financial regulatory framework. China Daily, 16 March. Available: http://www.chinadaily.com.cn/business/2016-03/16/content_23892170.htm [2016, June 13].

Li, Y. 2005. *Securities investment fund*. Beijing: Tsinghua University Press. (in Chinese)

Li, Y., Niu, J., Zhang, R. & Largay III, J. A. 2011. Earnings management and the accrual anomaly: Evidence from China. *Journal of International Financial Management and Accounting*, 22(3):205-245.

Li, Z., Zhao, X., Cao, F. & Lu, X. 2014. Institutional investors heterogeneity and firm performance: Empirical evidence from Chinese listed companies. *Audit & Economy Research*, 29(5):77-87. (in Chinese)

Liang, C. J., Lin, Y. L. & Huang, T. T. 2011. Does endogenously determined ownership matter on performance? Dynamic evidence from the emerging Taiwan market. *Emerging Markets Finance and Trade*, 47(6):120-133.

Liao, W. M., Lu, C. C. & Wang, H. 2014. Venture capital, corporate governance, and financial stability of IPO firms. *Emerging Markets Review*, 18:19-33.

Lin, F., Wu, C. M., Fang, T. Y. & Wun, J. C. 2014. The relations among accounting conservatism, institutional investors and earnings manipulation. *Economic Modelling*, 37:164-174.

Liu, B. 2013. Institutional investors still do not sensitive to dividend pay-out. China Business News, 28 May. Available: http://finance.eastmoney.com/news/1353,20130528294301092.html [2015, September 15].

Liu, L. & Yu, J. 2010. Evolution and impacts of transition of preferences for stock investment by mutual funds. *Journal of Shanxi Finance and Economics University*, 4:14-22. (in Chinese)

Liu, N., Bredin, D., Wang, L. & Yi, Z. 2014. Domestic and foreign institutional investors’ behavior in China. *European Journal of Finance*, 20(7-8):728-751.

Liu, Y. & Ni, Y. 2015. The impact of heterogeneous institutional ownership on firm performance: A test from cross perspective of independence and stability. *Modern Finance and Economics-Journal of Tianjin University of Finance and Economics*, 8:57-69. (in Chinese)

Liu, Y., Huang, Z., Tse, E. & He, X. 2011. Empirical study on shareholding structure and corporate performance of Chinese listed companies. *Research on Economics and Management*, 2:24-32. (in Chinese)

Lo, A. W. Y., Wong, R. M. K. & Firth, M. 2010. Can corporate governance deter

management from manipulating earnings? Evidence from related-party sales transactions in China. *Journal of Corporate Finance*, 16(2):225-235.

Louche, C. & Lydenberg, S. 2006. Socially responsible investment: Differences between Europe and United States. Vlerick Leuven Gent Management School Working Paper [Online]. Available: https://public.vlerick.com/Publications/67642c0d-6aa9-e011-8a89-005056a635ed.pdf [2016, February 20].

Madhani, P. M. 2014. Corporate governance: Compliance or competitive advantage? *Vision Research - A National Research Journal*, 4(1):96-104.

Mak, Y. T. & Li, Y. 2001. Determinants of corporate ownership and board structure: Evidence from Singapore. *Journal of Corporate Finance*, 7(3):236-256.

Mallin, C. 2012. Institutional investors: The vote as a tool of governance. *Journal of Management and Governance*, 16(2):177-196.

Managi, S., Okimoto, T. & Matsuda, A. 2012. Do socially responsible investment indexes outperform conventional indexes? *Applied Financial Economics*, 22(18):1511-1527.

Mănescu, C. 2011. Stock returns in relation to environmental, social and governance performance: Mispricing or compensation for risk? *Sustainable Development*, 19(2):95-118.

Mans-Kemp, N. & Viviers, S. 2016. Responsible investing in South Africa, in T. Hebb, J. P. Hawley, A. G. F. Hoepner, A. L. Neher & D. Wood (eds.). *The Routledge handbook of responsible investment*. Abingdon: Routledge. 99-114.

Marks, S. G. 2000. The separation of ownership and control, in B. Bouckaert & D. G. Geest (eds.) *Encyclopedia of law & economics, Volume III. The regulation of contracts*. Cheltenham: Edward Elgar Publishing. 692-724.

McCahery, J. A., Sautner, Z. & Starks, L. T. 2016. Behind the scenes: The corporate governance preferences of institutional investors. *Journal of Finance*, forthcoming.

McConnell, J. J. & Servaes, H. 1990. Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2):595-612.

McGee, R. W. 2009. Corporate governance in developing economies, in R. W. McGee (ed.). *Corporate governance in developing economies: Country studies of Africa, Asia and Latin America*. New York: Springer. 3-22.

McKinsey. 2002. Global investor opinion survey on corporate governance [Online]. Available: http://www.eiod.org/uploads/Publications/Pdf/II-Rp-4-1.pdf [2015, March 3].

McLaren, D. 2004. Global stakeholders: Corporate accountability and investor engagement. *Corporate Governance: An International Review*, 12(2):191-201.

MERCER & IFC. 2009. Gaining ground integrating environmental, social and governance (ESG) factors into investment processes in emerging markets [Online]. Available http://www.ifc.org/wps/wcm/connect/a3edd6004885589380acd26a6515bb18/270309MIC9080_IFC%2BReport_WEB%2Bsecured.pdf?MOD=AJPERES&CACHEID=a3edd6004885589380acd26a6515bb18 [2016, February 20].

Meyer, C. O., Linsenmann, I. & Wessels, W. T. 2007. Evolution towards a European economic government? Research design and theoretical expectations, in C. O. Meyer, I. Linsenmann & W. T. Wessels (eds.). *Economic government of the EU: A balance sheet of new modes of policy coordination*. London: Palgrave Macmillan. 11-36.

Mishra, A. V. 2013. Foreign ownership in Australian firms. *Research in International Business and Finance*, 28(1):1-18.

Mizuno, M. 2010. Institutional investors, corporate governance and firm performance in Japan. *Pacific Economic Review*, 15(5):653-665.

Mu, X. 2007. Investment funds in China, in S. N. Neftci & M. Y. Ménager-Xu (eds.). *China's financial markets: An insider's guide to how the markets work*. North Holland: Elsevier. 337-379.

Munisi, G. & Randøy, T. 2013. Corporate governance and company performance across Sub-Saharan African countries. *Journal of Economics and Business*, 70:92-110.

Munisi, G., Hermes, N. & Randøy, T. 2014. Corporate boards and ownership structure: Evidence from Sub-Saharan Africa. *International Business Review*, 23(4):785-796.

Muzindutsi, P. F. & Sekhampu, T. J. 2013. Socially responsible investment and macroeconomic stability in South Africa: An application of vector error correction model. *The Journal of Applied Business Research*, 29(6):1623-1630.

National Treasury of RSA. 2011. A safer financial sector to serve South Africa better [Online]. Available: http://www.treasury.gov.za/documents/national%20budget/2011/A%20safer%20financial%20sector%20to%20serve%20South%20Africa%20better.pdf [2015, September 15].

National Treasury of RSA. 2013. Charges in South African retirement funds [Online]. Available: http://www.treasury.gov.za/public%20comments/Charges%20in%20South%20African%20Retirement%20Funds.pdf [2016, April 3].

Neubaum, D. O. & Zahra, S. A. 2006. Institutional ownership and corporate social performance: The moderating effects of investment horizon, activism, and coordination. *Journal of Management*, 32(1):108-131.

Nix, P. & Chen, J. J. 2013. *The role of institutional investors in corporate governance-An empirical study*. London: Palgrave Macmillan.

Njah, M. & Jarboui, A. 2013. Institutional investors, corporate governance, and earnings management around merger: Evidence from French absorbing firms. *Journal of Economics, Finance and Administrative Science*, 18(35):89-96.

Noe, T. H. 2002. Investor activism and financial market structure. *Review of Financial Studies*, 15(1):289-318.

Nofsinger, J. & Varma, A. 2014. Socially responsible funds and market crises. *Journal of Banking & Finance*, 48:180-193.

Nonhlanhla, N. & Nombulelo, G. 2011. Non-bank institutional investment behaviour in the South African market [Online]. Available:

https://www.bis.org/ifc/events/2011_dublin_61_05_gumata.pdf [2015, March 3].

Ntim, C. G. & Soobaroyen, T. 2013. Corporate governance and performance in socially responsible corporations: New empirical insights from a neo-institutional framework. *Corporate Governance: An International Review*, 21(5):468-494.

Ntim, C. G. 2013. Corporate ownership and market valuation in South Africa: Uncovering the effects of shareholdings by different groups of corporate insiders and outsiders. *International Journal of Business Governance and Ethics*, 8(3):242-264.

Ntim, C. G., Opong, K. K., Danbolt, J. & Thomas, D. A. 2012. Voluntary corporate governance disclosure by post-apartheid South African corporations. *Journal of Applied Accounting Research*, 13(2):122-144.

Oak, S. & Dalbor, M. C. 2010. Do institutional investors favor firms with greater brand equity? An empirical investigation of investments in US lodging firms. *International Journal of Contemporary Hospitality Management*, 22(1):24-40.

OECD & IFC. 2011. Strengthening Latin American corporate governance: The role of institutional investors [Online]. Available: http://www.oecd-ilibrary.org/docserver/download/2611061e.pdf?expires=1459954021&id=id&accname=oid014204&checksum=7A106691E048F9D7A94BB89E3D7D010F [2016, April 5].

OECD. 2011a. Corporate governance of listed companies in China: Self-assessment by the China securities regulatory commission. Available: http://www.oecd.org/corporate/ca/corporategovernanceprinciples/48444985.pdf [2016, March 30].

OECD. 2011b. The role of institutional investors in promoting good corporate governance [Online]. Available: http://www.oecd.org/daf/ca/49081553.pdf [2015, June 8].

OECD. 2015. G20/OECD principles of corporate governance [Online]. Available: https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf [2016, April 3].

O'Rourke, A. 2003. A new politics of engagement: Shareholder activism for corporate social responsibility. *Business Strategy and the Environment*, 12(4):227-239.

Ortas, E., Álvarez, I. & Garayar, A. 2015. The environmental, social, governance, and financial performance effects on companies that adopt the United Nations Global Compact. *Sustainability*, 7:1932-1956.

Ortas, E., Moneva, J. M. & Salvador, M. 2012. Does socially responsible investment equity indexes in emerging markets pay off? Evidence from Brazil. *Emerging Markets Review*, 13(4):581-597.

Ozkan, N. 2007. Do corporate governance mechanisms influence CEO compensation? An empirical investigation of UK companies. *Journal of Multinational Financial Management*, 17(5):349-364.

Patel, S. A., Balic, A. & Bwakira, L. 2002. Measuring transparency and disclosure at firm-level in emerging markets. *Emerging Markets Review*, 3(4):325-337.

Patel, Z., McKay, D., Van Rensburg, N. J. & Bhagwan, N. 2013. Investing in Africa:

A practical perspective for the South African institutional investor [Online]. Available: http://www.savca.co.za/wp-content/uploads/2014/04/Investing-in-Africa-Investment-Solutions.pdf [2016, June 13].

Pathak, R., Ranajee & Pradhan, S. 2012. The role of ownership structure in firm performance: A study of Indian manufacturing firms. *The IUP Journal of Corporate Governance*, XI(3):36-47.

Peng, L. 2015. Heterogeneous institutional investors and financial performance: The mediating effects of cash dividend. *Research on Financial and Economic Issues*, 8:50-55. (in Chinese)

Peni, E. & Vähämaa, S. 2012. Did good corporate governance improve bank performance during the financial crisis. *Journal of Financial Services Research*, 41(1):19-35.

Phung, D. N. & Le, T. P. V. 2013. Foreign ownership, capital structure and firm performance: Empirical evidence from Vietnamese listed firms. *The IUP Journal of Corporate Governance*, XII(2):40-58.

Pickering, O. 1831. Harvard College and Massachusetts General v. Francis Amory (1830). *Reports of cases argued and determined in the Supreme Judicial Court of Massachusetts*. Vol. IX. Boston: Hilliard, Gray, Little and Wilkins. 446-465.

Pinnuck, M. 2004. Stock preferences and derivative activities of Australian fund managers. *Accounting and Finance*, 44:97-120.

Pound, J. 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*, 20(1-2):237-265.

PRC. 2014. *The Company Law of the People's Republic of China (Revised in 2013)*. Beijing: Government Printer.

PwC. 2015. Bridging the gap: Aligning the responsible investment interests of limited partners and general partners [Online]. Available: https://www.pwc.com/gx/en/sustainability/publications/assets/bridging-the-gap.pdf [2016, February 20].

PwC. 2014. Sustainability goes mainstream: Insights into investor views [Online]. Available: https://www.pwc.com/us/en/governance-insights-center/publications/assets/pwc-sustainability-goes-mainstream-investor-views.pdf [2016, April 5].

Rajagopalan, N. & Zhang, Y. 2008. Corporate governance reforms in China and India: Challenges and opportunities. *Business Horizons*, 51(1):55-64.

Ramalingegowda, S. & Yu, Y. 2012. Institutional ownership and conservatism. *Journal of Accounting and Economics*, 53(1):98-114.

Ransome, W. & Sampford, C. 2016. *Ethics and socially responsible investment: A philosophical approach*. New York: Routledge.

Reed, D. 2002. Corporate governance reforms in developing countries. *Journal of Business Ethics*, 37(3):223-247.

Renders, A. & Gaeremynck, A. 2012. Corporate governance, principal-principal agency conflicts, and firm value in European listed companies. *Corporate Governance: An International Review*, 20(2):125-143.

Renneboog, L., Horst, J. T. & Zhang, C. 2008. Socially responsible investments:

Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance*, 32(9):1723-1742.

Renneboog, L., Horst, J. T. & Zhang, C. 2011. Is ethical money financially smart? Nonfinancial attributes and money flows of socially responsible investment funds. *Journal of Financial Intermediation*, 20(4):562-588.

Revelli, C. & Viviani, J. L. 2015. Financial performance of socially responsible investing (SRI): What have we learned? A meta-analysis. *Business Ethics: A European Review*, 24(2):158-185.

Richardson, S., Tuna, I. & Wu, M. 2002. Predicting earnings management: The case of earnings restatements [Online]. Available: http://ssrn.com/abstract=338681 [2015, November 12].

Roland, G. 2016. *Development economics*. Abingdon & New York: Routledge.

Romano, R. 1993. Public pension fund activism in corporate governance reconsidered. *Columbia Law Review*, 93(4):795-853.

Romano, R. 2001. Less is more: Making institutional investor activism a valuable mechanism of corporate governance. *Yale Journal of Regulation*, 18(2):174-251.

Rose, C. 2007. Can institutional investors fix the corporate governance problem? Some Danish evidence. *Journal of Management Governance*, 11(4):405-428.

Rosenthal, R. 2014. 'Ethical' investing in emerging markets? Wall Street Journal, 5 October. Available: http://www.wsj.com/articles/emerging-markets-options-for-socially-responsible-investors-1412540134 [2016, February 20].

Rossouw, G. J. 2002. Business ethics and corporate governance in the second King report: Farsighted or futile? *Koers*, 67(4):405-419.

Rossouw, G. J. 2008. Balancing corporate and social interests: Corporate governance theory and practice. *African Journal of Business Ethics*, 3(1):28-37.

Roychowdhury, S. 2006. Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3):335-370.

Rubio, S. & Vázquez, A. B. 2016. Do institutional investors influence firm social performance? [Online]. Available: http://ssrn.com/abstract=2716056 [2016, February 20].

Ruiz-Mallorquí, M. V. & Santana-Martín, D. J. 2011. Dominant institutional owners and firm value. *Journal of Banking & Finance*, 35(1):118-129.

Ryan, L. V. & Schneider M. 2002. The antecedents of institutional investor activism. *Academy of Management Review*, 27(4):554-573.

SAFE. 2016. The approval of investment quotas for qualified foreign institutional investors (by end March 2016) [Online]. Available: http://www.safe.gov.cn/resources/image/5de310804dc4fdaea779a7a46e1b18c9/1459413704763.pdf?MOD=AJPERES&name=合格境外机构投资者（QFII）投资额度审批情况表（截至 2016 年 3 月 30 日）.pdf [2015, April 3]. (in Chinese)

SAFE. 2016. The approval of investment quotas for Renminbi qualified foreign institutional investors (by end March 2016) [Online]. Available: http://www.safe.gov.cn/resources/image/4579870049dc701d9d11bfed8ff4845d/1459413704104.pdf?MOD=AJPERES&name=人民币合格境外机构投资者

（RQFII）投资额度审批情况表（截至 2016 年 3 月 30 日）.pdf [2015, April 3]. (in Chinese)

Sakuma-Keck, K. & Hensmans, M. 2013. A motivation puzzle: Can investors change corporate behavior by conforming to ESG pressures? in S. Young & S. Gates (eds.). *Institutional Investors' Power to Change Corporate Behavior: International Perspectives (Critical Studies on Corporate Responsibility, Governance and Sustainability*, Volume 5). Bingley: Emerald. 367-393.

Salehi, M., Hematfar, M. & Heydari, A. 2012. Institutional investors and corporate value: An emerging market scenario. *African Journal of Business Management*, 6(1):45-50.

Sandberg, J. 2011. Socially responsible investment and fiduciary duty: Putting the Freshfields Report into perspective. *Journal of Business Ethics*, 101(1):143-162.

Sandberg, J. 2013. (Re-)Interpreting fiduciary duty to justify socially responsible investment for pension funds? *Corporate Governance: An International Review*, 21(5):436-446.

SARB. 2014. Guidelines: South African institutional investors [Online]. Available: https://www.resbank.co.za/RegulationAndSupervision/FinancialSurveillanceAndExchangeControl/Guidelines/Guidelines%20and%20public%20awareness/Guidelines%20South%20African%20Institutional%20Investors.pdf [2016, April 3].

Schaefer, H. & Hertrich, C. 2013. Shareholder activism in Germany: An empirical study. *IUP Journal of Corporate Governance*, 7(2):28-39.

Schanzenbach, M. M. & Sitkoff, R. H. 2007. Did reform of prudent trust investment laws change trust portfolio allocation? *Journal of Law and Economics*, 50(4):681-711.

Schanzenbach, M. M. & Sitkoff, R. H. 2015. The prudent investor rule and market risk: An empirical analysis. The Harvard John M. Olin Discussion Paper, no. 816 [Online]. Available: http://www.law.harvard.edu/programs/olin_center/papers/pdf/Sitkoff_816.pdf [2015, September 15].

Schmiegelow, M. 2014. Interdisciplinary issues in comparing common law and civil law, in M. Schmiegelow & H. Schmiegelow (eds.). *Institutional competition between common law and civil law*. Berlin: Springer-Verlag Berlin Heidelberg. 3-21.

Scholtens, B. 2014. Indicators of responsible investing. *Ecological Indicators*, 36:382-385.

Schuppli, M. & Bohl, M. T. 2010. Do foreign institutional investors destabilize China's A-share markets? *Journal of International Financial Markets, Institutions and Money*, 20(1):36-50.

Schwartz, M. S. 2003. The "ethics" of ethical investing. *Journal of Business Ethics*, 43(3):195-213.

Scott, W. R. 1987. The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4):493-511.

Shapiro, S. A. & Glicksman, R. L. 2004. *Risk regulation at risk: Restoring a pragmatic approach*. Stanford, CA: Stanford University Press.

Shen, L. 2015. The influence of institutional investors on firm performance of Chinese listed companies: Based on the natural experiment of A-H shares. *Finance Forum*, 9:60-68. (in Chinese)

Shi, Y. D. & Wang, J. L. 2014. Do Chinese institutional investors improve market stability? *Economic Research Journal*, 12:100-112. (in Chinese)

Shiller, R. 2003. From efficient markets theory to behavioral finance. *Journal of Economic Perspectives*, 17(1):83-104.

Shleifer, A. & Vishny, R. W. 1986. Large shareholders and corporate control. J*ournal of Political Economy*, 94(3):461-488.

Shleifer, A. & Vishny, R. W. 1997. A survey of corporate governance. *Journal of Finance*, 52(2):737-783.

Sias, R. W. 2004. Institutional herding. *Review of Financial Studies*, 17(1):165-206.

Sibanda, M. & Holden, M. 2014. Institutional investors and the finance growth nexus: Evidence from South Africa. *The Journal of Applied Business Research*, 30(1):149-160.

Simon, H. A. 1979. Rational decision making in business organizations. *American Economic Review*, 69(4):493-513.

Siregar, S. & Utama, S. 2008. Type of earnings management and the effect of ownership structure, firm size, and corporate governance practices: Evidence from Indonesia. *The International Journal of Accounting*, 43(1):1-27.

Song, W. L. & Szewczyk, S. H. 2003. Does coordinated institutional investor activism reverse the fortunes of underperforming firms? *Journal of Financial and Quantitative Analysis*, 38(2):317-336.

Sparkes, R. & Cowton, C. 2004. The maturing of socially responsible investment: A review of the developing link with corporate social responsibility. *Journal of Business Ethics*, 52(1):45-57.

Sparkes, R. 2001. Ethical investment: Whose ethics, which investment? *Business Ethics: A European Review*, 10(3):194-205.

SSE. 2013. SSE *Guidance on Operation of Audit Committee of Listed Company's Directorate*. Shanghai: SSE.

SSE. 2015. Shanghai stock exchange statistics annual 2015 [Online]. Available: http://www.sse.com.cn/aboutus/publication/yearly/documents/c/tjnj_2015.pdf [2015, April 3].

Staiger, D. & Stock, J. H. 1997. Instrumental variables regression with weak instruments. *Econometrica*, 65(3):557-586.

Stainbank, L. & Harrod, K. 2007. Headline earnings per share: Financial managers' perceptions and actual disclosure practices in South Africa. *Meditari Accountancy Research*, 15(1):91-113.

Starr, M. A. 2008. Socially responsible investment and pro-social change. *Journal of Economic Issues*, 62(1):52-73.

Statman, M. & Glushkov, D. 2009. The wages of social responsibility. *Financial Analysts Journal*, 65(4):33-46.

Statman, M. 2006. Socially responsible indexes: Composition, performance, and tracking error. *The Journal of Portfolio Management*, 32(3):100-109.

Steyn, B. & Stainbank, L. 2013. Separation of ownership and control in South African-listed companies. *South African Journal of Economic and Management Sciences*, 16(3):316-328.

Strickland, D., Wiles, K. W. & Zenner, M. 1996. A requiem for the USA is small shareholder monitoring effective? *Journal of Financial Economics*, 40(2):319-338.

Survé, Y. 2009. The effect of institutional shareholders on the level and mix of South African chief executive officers' compensation [Online]. Available: http://wiredspace.wits.ac.za/bitstream/handle/10539/7420/MCom%20Research%20Report%20-%20Y%20Surve%20(Student%20no.%20295105).pdf;jsessionid=340379D8CA999068887A02F51473D90A?sequence=1 [2015, April 3].

Suto, M. & Takehara, H. 2012. Stock ownership structure and corporate social performance: Evidence from Japan [Online]. Available: http://www.waseda.jp/wnfs/pdf/labo3_2012/WIF-12-005.pdf [2016, April 5].

SZSE. 2012. Shenzhen stock exchange market performance report of 2012 [Online]. Available: http://www.szse.cn/main/images/2013/02/28/20130228092917823.pdf [2015, April 3].

Tang, S. L. & Yuan, C. S. 2010. Monitor or grabber: The role of institutional investors in corporate governance: Evidence from China's capital market. *Management Review*, 22(8):19-29. (in Chinese)

Teng, L. & Huang, C. 2012. The study on stock-holding behaviour of Chinese QFIIs: Based on stock-holding preferences and holding period. *Review of Investment Studies*, 31(10):84-97. (in Chinese)

Teoh, S. H., Welch, I. & Wazzan, C. P. 1999. The effect of socially activist investment policies on the financial markets: Evidence from the South African boycott. *The Journal of Business*, 72(1):35-89.

Thomsen, S. & Pedersen, T. 2000. Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6):689-705.

Towers Watson. 2015. P&I/TW300 analysis. Towers Watson [Online]. Available: https://www.towerswatson.com/DownloadMedia.aspx?media={98141041-01AE-483F-9B20-3D0E3964A9A2} [2015, April 3].

Trialogue. 2016. The Trialogue annual sustainability review 2016 [Online]. Available: http://www.gsb.uct.ac.za/files/TRISustainabilityReview2016.pdf [2016, August 5].

Tsai, M. T. & Tung, W. H. 2014. Corporate governance, resources, FDI commitment and firm performance: Empirical analyses of Taiwanese high-tech firms. *Chinese Management Studies*, 8(3):313-332.

UNEP, GRI, KPMG & Centre for Corporate Governance in Africa. 2013. Carrots and sticks: Global trends in sustainability reporting regulation and policy [Online]. Available: https://www.globalreporting.org/resourcelibrary/Carrots-and-Sticks.pdf [2016, October 2].

UNEP FI. 2007. The state of responsible investment in South Africa [Online]. Available:http://www.unepfi.org/fileadmin/documents/The_State_of_Responsibl

e_Investment_01.pdf [2016, February 20].

UNPRI. [n.d.]. *What is PRI* [Online]. Available: https://www.unpri.org/page/pri_website_base.join-pri [2016, May 5].

UNPRI, UNEP FI, UNEP Inquiry & UN Global Compact. 2015. Fiduciary duty in the 21st century [Online]. Available: http://www.unepfi.org/fileadmin/documents/fiduciary_duty_21st_century.pdf [2016, April 5].

US SIF. 2014. Report on US sustainable, responsible and impact investing trends [Online]. Available: http://www.ussif.org/files/publications/SIF_Trends_14.F.ES.pdf [2015, July 30].

Useem, M. 1996. *Investor capitalism: How money managers are changing the face of corporate America*. New York: Basic Books.

Van Dijk, A., Griek, L. & Jansen, C. 2012. Bridging the gaps: Effectively addressing ESG risks in emerging markets [Online]. Available: http://www.sustainalytics.com/sites/default/files/sustainalytics_emergingmarkets_june2012.pdf [2016, February 20].

Vandekerckhove, W., Leys, J. & Van Braeckel, D. 2007. That's not what happened and it's not my fault anyway! An exploration of management attitudes towards SRI-shareholder engagement. *Business Ethics: A European Review*, 16(4):403-418.

Vaughn, M. & Ryan, L. V. 2006. Corporate governance in South Africa: A bellwether for the continent? *Corporate Governance: An International Review*, 14(5):504-512.

Velury, U. & Jenkins, D. S. 2006. Institutional ownership and the quality of earnings. *Journal of Business Research*, 59(9):1043-1051.

Viviers, S. 2014a. 21 years of responsible investing in South Africa. *Collective insight*, 50-51(Autumn):50.

Viviers, S. 2014b. 21 years of responsible investing in South Africa: Key investment strategies and criteria. *Journal of Economic and Financial Sciences*, 7(3):737-774.

Viviers, S. 2015. ESG reporting in SA: Where are the gaps. Fin24, 31 July. Available: http://www.fin24.com/Opinion/ESG-reporting-in-SA-where-are-the-gaps-20150731 [2016, February 20].

Wahal, S. 1996. Pension fund activism and firm performance. *Journal of Financial and Quantitative Analysis*, 31(1):1-23.

Wang, C. & Li, S. 2007. Research on the effects of institutional investors on corporate governance. *Economic Theory and Business Management*, 8:34-39. (in Chinese)

Wang, M. Z. 2014. Which types of institutional investors constrain abnormal accruals? *Corporate Governance: An International Review*, 22(1):43-67.

Wang, X. & Xu, J. 2009. Listed companies' ownership structure, capital structure and corporate performance under different growth opportunities: An empirical study based on China listed companies in distribution industry. *Journal of Business Economics*, 7:20-28. (in Chinese)

Webb, R., Beck, M. & McKinnon, R. 2003. Problems and limitations of institutional

investor participation in corporate governance. *Corporate Governance: An International Review*, 11(1):65-73.

Weil, Gotshal & Manges LLP. 2003. International comparison of selected corporate governance guidelines and codes of best practice [Online]. Available: http://www.weil.com/~/media/files/pdfs/CorpGovGuide_Latin_Am.pdf [2016, June 5].

Weil, Gotshal & Manges LLP. 2014. International comparison of selected corporate governance guidelines and codes of best practice [Online]. Available:http://www.weil.com/~/media/files/pdfs/us_active_international%20matrix%20june%202014_44503343_2.pdf [2016, June 5].

Williams, G. 2010. Socially responsible investment in Asia [Online]. Available: https://centres.smu.edu.sg/lien/files/2013/10/SocialSpace2010-GeoffreyWilliams.pdf [2016, February 20].

Williamson, O. 1981. The modern corporation: Origins, evolution, attributes. *Journal of Economic Literatur*e, 19 (4):1537-1568.

Wohlstetter, C. 1993. Pension fund socialism: Can bureaucrats run the blue chips? *Harvard Business Review*, 71:78.

Wong, S. C. Y. 2010. Why stewardship is proving elusive for institutional investors. *Butterworths Journal of International Banking and Financial Law*, July/August: 406-411.

Wu, X., Zhao, R. & Tang, W. 2014. Optimal contracts for the agency problem with multiple uncertain information. *Knowledge-Based Systems*, 59:161-172.

Xiao, Y., Faff, R. & Gharghori, P. 2013. An empirical study of the world price of sustainability. *Journal of Business Ethics*, 114(2):297-310.

Xie, B., Davidson, W. N. & Dadalt, P. J. 2003. Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3):295-316.

Yan, X. S. & Zhang, Z. 2009. Institutional investors and equity returns: Are short-term institutions better informed? *Review of Financial Studies*, 22(2):893-924.

Yang, H. & Zhou, J. 2014. *Reform and breakthrough: An study on Chinese capital market development.* Beijing: China Financial & Economic Publishing House. (in Chinese)

Yao, L. & Niu, J. 2015. Existence of market threshold of earnings management in listed companies from the perspective of the heterogeneity of institutional investors. *Journal of Hefei University of technology (Social Sciences)*, 4:1-7. (in Chinese)

Yin, Z., Li, Y. & Gao, W. 2010. The effect of heterogeneous institutional investors on governance: From the perspective of executive compensation. *Statistics and Decision*, 5:122-125. (in Chinese)

Yu, Q., Du, B. & Sun, Q. 2006. Earnings management at rights issues thresholds: Evidence from China. *Journal of Banking & Finance*, 30(12):3453-3468.

Yuan, R., Xiao, J. & Zou, H. 2008. Mutual funds' ownership and firm performance: Evidence from China. *Journal of Banking & Finance*, 32(8):1552-1565.

Zarbafi, E. M. 2011. *Responsible investment and the claim of corporate change: A*

sensemaking perspective on how institutional investors may drive corporate social responsibility. Wiesbaden: Gabler Verlag.

Zattoni, A. & Cuomo, F. 2008. Why adopt codes of good governance? A comparison of institutional and efficiency perspectives. *Corporate Governance: An International Review*, 16(1):1-15.

Zeidan, R. 2011. A theoretical framework for voluntary corporate governance, in A. Jalilvand & T. Malliaris (eds.). *Risk management and corporate governance*. New York: Routledge. 60-68.

Zhang, M. 2010. The socialist legal system with Chinese characteristics: China's discourse for the rule of law and a bitter experience. *Temple International & Comparative Law Journal*, 24(1):1-64.

Zhang, Q. & Erasmus, P. 2015a. Do women on boards matter? A view from institutional investors. Unpublished paper delivered at Social Science for Development conference. 10 September, Stellenbosch.

Zhang, Q. & Erasmus, P. 2015b. Do institutional investors care about board structure? The South African evidence. Unpublished paper delivered at 2nd Young Finance Scholars' Conference. 25 June, Brighton.

Zhang, Q. & Erasmus, P. 2015c. The effectiveness of institutional investors' engagement: A perspective of earnings management. Unpublished paper delivered at oikos PRI Young Scholars Finance Academy 2015. 3 June, Reading.

Zhang, Q. & Erasmus, P. 2016. Study on the relationship between ownership structure and corporate performance: Evidence from Chinese companies listed on the gem board. *International Business and Economics Research Journal*, 15(2):27-39.

Zhang, W. J. 2011. *Effects of listed company's institutional investors on corporate governance*. Published doctorate dissertation. Chongqing: CNKI. (in Chinese)

Zhang, X. 2013. An empirical study on stock-holding preferences of insurance companies. *Insurance Studies*, 7:34-41. (in Chinese)

Zhang, Y., Uchida, K. & Bu, H. 2013. How do accounting standards and insiders' incentives affect earnings management? Evidence from China. *Emerging Markets Review*, 16:78-99.

Zhai, W., He, J., Zhou, Z. & Cai, J. 2010. Trading preference of Chinese investors and its impact on stock volatility. *Chinese Review of Financial Studies*, 3:53-64. (in Chinese)

Zhi, X., Hu, C., Wu, W. & Liu, Y. 2014. Do cash dividends cater for investors? Evidence from trading behaviors. *Journal of Financial Research*, 5:143-161. (in Chinese)

Zhu, X. & Xu, X. 2016. Property rights, institutional investors heterogeneity and investment efficiency: Evidence from China's agricultural listed companies. *Journal of Suzhou University (Philosophy & Social Science)*, 1:95-101. (in Chinese)

Zuo, D. & Lu, R. 2013. Rationality and investors' behaviour: Based on the behaviour of institutional and individual fund investors. *Finance & Trade Economics*, 10:59-69. (in Chinese)

APPENDIX 1 VARIABLE DEFINITION

Table 1

Variable definition

Variable	Definition
IO	Proportion of shares held by the institutional investors for the end of year
IO_TOTAL	Proportion of shares held by the institutional investors as a whole for the end of year
IO_INSEN	Proportion of shares held by pressure-insensitive institutional investors for the end of year
IO_SEN	Proportion of shares held by pressure-sensitive institutional investors for the end of year
ROE	Net income/ average equity
DROE	Changes in ROE from the beginning to the end of year
EPS (Basic)	(Net income-preferred dividends)/ average common shares outstanding
ROA	Net income/ average assets
LEV	Total debt/ total assets
AGE	Natural log of listing years
SIZE	Natural log of total assets for the end of year
TURN	Average monthly trading volume relative to total shares outstanding for the preceding twelve months
BETA	Calculated by means of a market model using daily stock returns for the preceding twelve months
VOL	Standard deviation of daily stock returns over the preceding twelve months
DP	Dividends/ net income
TOP40	If the firm is a constituent of the FTSE/JSE Top 40 index, the value equals 1, otherwise 0
CSI300	If the firm is a constituent of the Shanghai Shenzhen CSI 300 index, the value equals 1, otherwise 0
INDEX	If the firm is a constituent of the TOP40 or CSI300, the value equals 1, otherwise 0
GROW	Growth rate in sales from the beginning to the end of year
CFO	Cash flows from operations divided by total assets
DA	Obtained using the modified Jones model (Dechow et al. 1995)
|DA|	Absolute value of DA
DA^+	Income-increasing discretionary accruals; positive value of DA
DA^-	Income-decreasing discretionary accruals; negative value of DA
NNI	Non-discretionary earnings; earnings less discretionary accruals
DNNI	Changes in NNI from the beginning to the end of year
ESG_SCORE	ESG disclosure scores, ranging between 0 (no disclosure) to 100 (full disclosure)
G_SCORE	Corporate governance scores, ranging between 0 (no disclosure) to 100 (full disclosure)
ESG_DUMMY	A dummy variable for ESG score that takes the value 1 if ESG_SCORE is located in the second quantile and 0 otherwise
G_DUMMY	A dummy variable for corporate governance score that takes the value 1 if G_SCORE is located in the second quantile and 0 otherwise

APPENDIX 2 INSTITUTIONAL OWNERSHIP AND FINANCIAL PERFORMANCE (CHINA, 2010-2013)

Table 1

Regression of relationship between institutional ownership and financial performance (China, 2010-2013)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
Panel A Relationship between aggregated institutional ownership and financial performance						
IO_TOTAL	0.067***	0.024*	0.096***	0.387***	0.128**	0.583***
	(8.89)	(1.70)	(10.93)	(7.16)	(2.32)	(9.97)
LEV	-0.133***	-0.138***	-0.129***	-0.562***	-0.579***	-0.535***
	(-7.33)	(-9.31)	(-7.10)	(-4.32)	(-5.28)	(-3.85)
SIZE	0.011***	0.033***	0.010***	0.129***	0.167***	0.126***
	(9.65)	(8.16)	(9.14)	(16.56)	(10.45)	(11.50)
AGE	-0.002	-0.123***	-0.002	-0.012	-0.360***	-0.015
	(-0.32)	(-11.59)	(-0.43)	(-0.37)	(-8.47)	(-0.53)
GROW	0.030***	0.030***	0.030***	0.128***	0.137***	0.126***
	(11.65)	(15.50)	(11.52)	(6.73)	(11.86)	(5.38)
Intercept	-0.156***	-0.270***	-0.148***	-2.562***	-2.161***	-2.515***
	(-5.40)	(-3.51)	(-5.11)	(-12.77)	(-7.14)	(-10.52)
F-statistic			3 884.820			3 896.580
Sargan *p*-value			0.836			0.435
R^2 (%)	10.62	55.58	10.35	11.91	74.31	11.67
N	4 416	4 416	4 416	4 416	4 416	4 416
Panel B Relationship between pressure insensitive institutional ownership and financial performance						
IO_INSEN	0.405***	0.284***	0.454***	2.493***	1.047***	3.032***
	(23.60)	(11.33)	(22.19)	(16.39)	(4.63)	(14.99)
LEV	-0.131***	-0.090***	-0.127***	-0.550***	-0.597***	-0.528***
	(-7.83)	(-8.82)	(-7.60)	(-4.04)	(-5.19)	(-3.88)

Table 1 (continued)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
SIZE	0.008***	0.022***	0.006***	0.104***	0.077**	0.096***
	(5.87)	(4.80)	(4.92)	(10.04)	(2.17)	(9.64)
AGE	-0.004	-0.005	-0.006	-0.079	-0.373	-0.089
	(-0.10)	(-0.34)	(-0.15)	(-0.26)	(-0.88)	(-0.29)
GROW	0.029***	0.023***	0.028***	0.119***	0.178***	0.115***
	(11.95)	(12.38)	(11.77)	(5.28)	(6.78)	(5.13)
IO_TOTAL	YES	YES	YES	YES	YES	YES
Intercept	-0.098***	-0.174*	-0.077***	-2.075***	-1.028	-1.936***
	(-3.48)	(-1.91)	(-2.71)	(-9.23)	(-1.29)	(-8.88)
F-statistic			2 300.470			2 317.180
Sargan *p*-value			0.564			0.281
R^2 (%)	24.71	72.33	24.27	21.91	81.35	21.26
N	4 416	4 416	4 416	4 416	4 416	4 416
Panel C Relationship between pressure sensitive institutional ownership and financial performance						
IO_SEN	-0.328	-0.098	-0.426	-0.288	-0.269	-0.783
	(-1.56)	(-0.77)	(-0.41)	(-0.57)	(-1.06)	(-0.85)
LEV	-0.134***	-0.100***	-0.129***	-0.563***	-0.529***	-0.538***
	(-7.34)	(-3.94)	(-7.10)	(-4.33)	(-4.51)	(-4.13)
SIZE	0.011***	0.010*	0.010***	0.129***	0.208***	0.127***
	(9.77)	(1.67)	(9.06)	(16.57)	(6.01)	(16.08)
AGE	-0.002	-0.129***	-0.002	-0.012	-0.426***	-0.016
	(-0.37)	(-8.18)	(-0.34)	(-0.39)	(-5.54)	(-0.53)
GROW	0.030***	0.024***	0.030***	0.128***	0.092***	0.125***
	(11.62)	(11.04)	(11.40)	(6.71)	(6.64)	(6.56)
IO_TOTAL	YES	YES	YES	YES	YES	YES

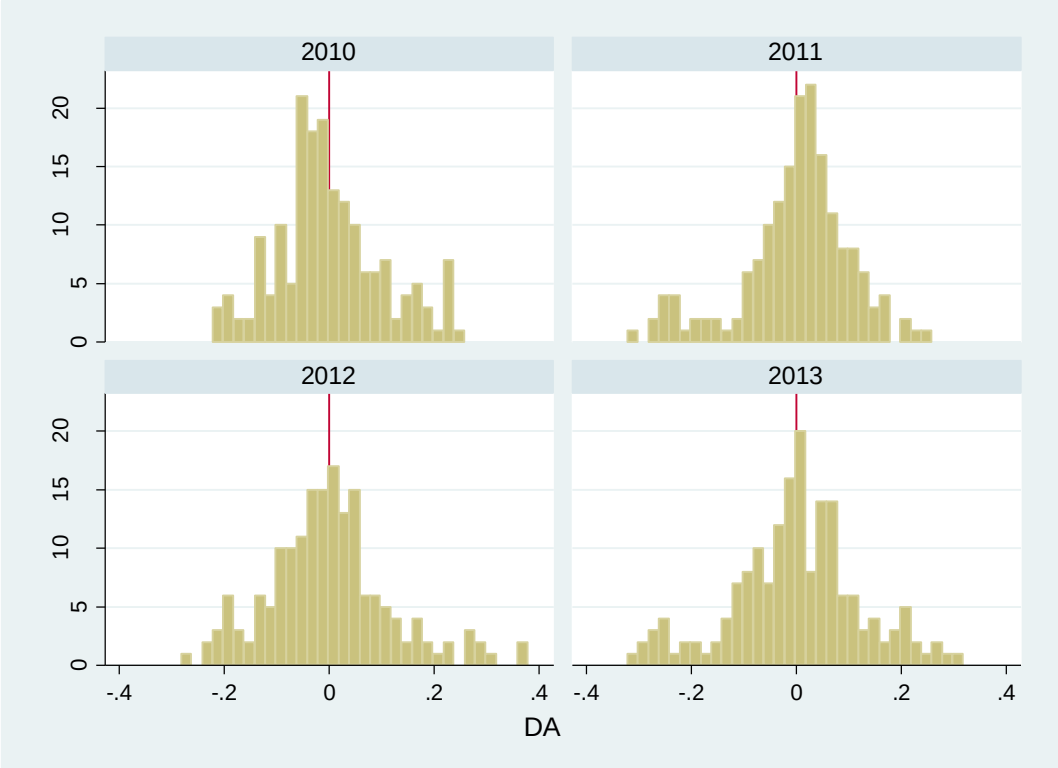
Table 1 (continued)

	ROE			EPS		
	Pooled OLS	FE	2SLS	Pooled OLS	FE	2SLS
Intercept	-0.157***	0.197*	-0.156***	-2.563***	-2.906***	-2.518***
	(-5.44)	(1.66)	(-5.43)	(-12.77)	(-4.05)	(-12.52)
F-statistic			136.055			435.599
Sargan *p*-value			0.913			0.462
R^2 (%)	10.71	64.86	11.05	11.89	74.75	11.65
N	4 416	4 416	4 416	4 416	4 416	4 416

This table presents the pooled OLS, FE and 2SLS estimations of the relationship between aggregated institutional ownership and financial performance and disaggregated institutional ownership and financial performance over the period 2010 to 2013. The results regarding aggregated, pressure insensitive and pressure sensitive institutional ownership are reported in Panels A, B and C respectively. The dependent variables are ROE and EPS in all panels. All variables included in the regressions are winsorised at the 1% and 99% level. The *F*-test and Hausman test reject the null hypothesis, and hence FE is more suitable compared to pooled OLS and RE. For the 2SLS, the *F*-statistic for testing the joint statistical significance of instrument variables and the Sargan statistic for testing overidentifying restrictions are also reported, and the results show that instruments are not weak, and are valid. Year and industry effects are controlled in all regressions. *T*-statistics are reported in parentheses; ***, **, * represent significance at 1%, 5% and 10% respectively. Variable definitions are reported in Appendix 1.

APPENDIX 3 DISCRETIONARY ACCRUALS DISTRIBUTION

Panel A Distribution of DA (South Africa)



Panel B Distribution of DA (China)

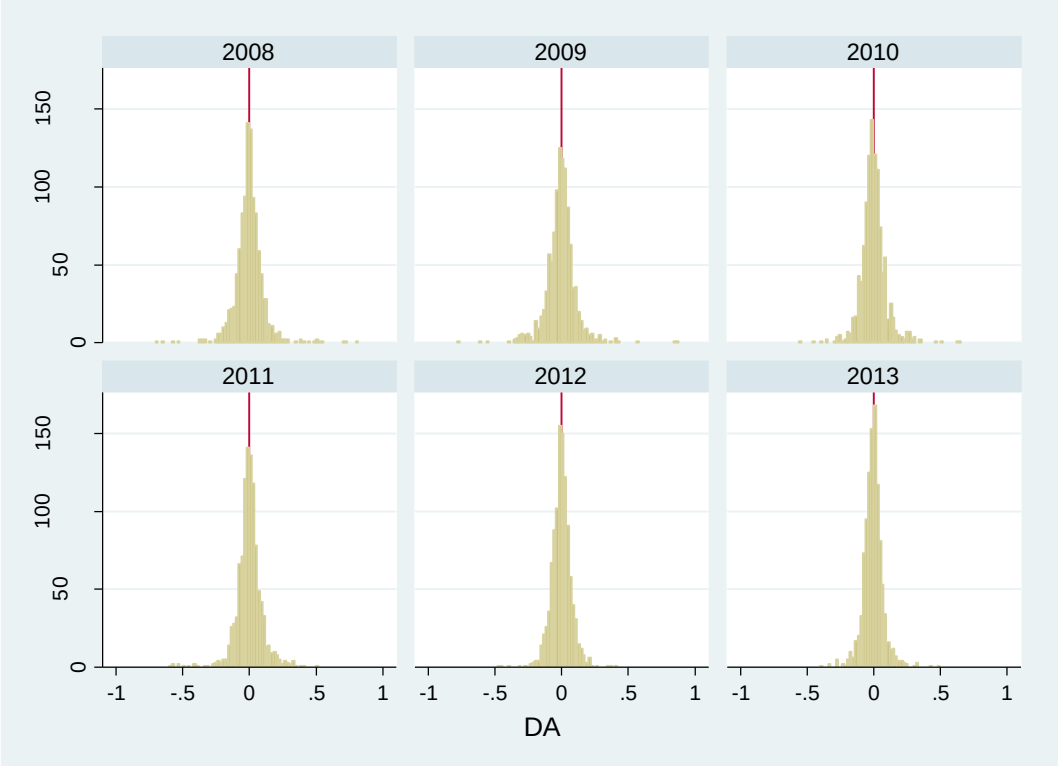


Figure 1 Histogram of discretionary accruals (DA) by year**.** This figure presents the DA distribution of a sample of 174 listed companies in South Africa (Panel A) and 1 069 listed

companies in China (Panel B). The distribution interval widths are 0.02, and the location of zero on the horizontal axis is marked by the solid red line. The vertical axis labelled Frequency represents the number of observations in each DA interval.