UNIVERSITY OF SOUTHAMPTON

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An investigation of accounting, governance and executive compensation practices in non-profit organizations: The case of UK charities

by

Huy Tam Nguyen

Thesis for the degree of Doctor of Philosophy

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ABSTRACT

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AN INVESTIGATION OF ACCOUNTING, GOVERNANCE AND EXECUTIVE COMPENSATION PRACTICES IN NON-PROFIT ORGANIZATIONS: THE CASE OF UK CHARITIES

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This thesis seeks to investigate the accounting, governance and executive compensation practices of non-profit organizations (NPOs). Specifically, this thesis explores whether UK charities engage in earnings management practices, how they implement governance practice and its effectiveness on financial accountability, and the determinants of CEO compensation in the UK charitable sector. Informed by several theoretical perspectives, namely stakeholder theory (ST), resource dependence theory (RDT) and the social theory of agency (STA), this thesis partially relies on a sample of UK charities (1414 charities in the second chapter and the 250 largest charities in the third and fourth chapters). This study finds that: (i) UK charities use accrual accounting to manage their financial results (earnings management) to a zero level; (ii) the presence of UK charity governance (notably board diversity and the presence of experts on the audit committee) are positively associated with financial accountability; and (iii) while organizational performance is not found to be associated with CEO compensation, elements of the governance structure and CEO characteristics have a significant influence on CEO compensation. As a result, this thesis claims several contributions to the literature, theory and practice. Specifically, this thesis not only documents the practice of earnings management in UK charities, but also asserts the significance of several governance factors to organization accountability, such as the diversity of the board and the presence of experts on audit committees, and suggests several determinants influencing charity CEO compensation (for instance, governance elements, government funding, charity age, size and sectoral factors). The thesis also demonstrates the applicability of ST, RDT and STA in a non-profit context. Lastly, this thesis provides several important implications for academia and practice towards developing theories and regulations/guidelines in relation to accrual accounting practice, governance and CEO compensation in non-profit organisations.

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Declaration of Authorship

I, HUY TAM NGUYEN,

declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research.

An investigation of accounting, governance and executive compensation practices in non-profit organizations: The case of UK charities

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission. However, three chapters have been presented at several conferences, details as below.

   Chapter 2 (paper 1), was accepted and presented at:

   - *38th European Accounting Association Annual Congress 2015, 28th–30th April 2015, Glasgow, Scotland, UK;*
   - *BAFA South West Area Group Annual Regional Conference, September 2014, Cardiff, Wales, UK;*

- *Centre of Excellence in Accounting, Finance and International Banking, Southampton Business School, University of Southampton, July 2014, Southampton, UK.*

Chapter 3 (paper 2), was accepted and presented at:

- *Government and Non-profit Section Midyear Meeting, American Accounting Association, 11th–12th March 2016, Arlington, VA, USA* ***(Travelling Paper Award)****;*
- *BAFA South West Area Group Annual Regional Conference, September 2015, Bath, UK;*
- *Centre of Excellence in Accounting, Finance and International Banking, Southampton Business School, University of Southampton, June 2015, Southampton, UK;*

Chapter 4 (paper 3), was accepted and presented at:

- *6th Social and Environmental Accounting Conference (CSEAR Italy), July, 2016;*
- *Southampton Business School 2016 PhD Conference, March 2016, Southampton, UK (****Best Paper Award****);*

Signed: *TAM NGUYEN* .....

Date: 30/12/2016.....

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- *Centre of Excellence in Accounting, Finance and International Banking, Southampton Business School, University of Southampton, July 2014, Southampton, UK.*

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With the oversight of my main supervisor, editorial advice has been sought. No changes of intellectual content were made as a result of this advice.

Needless to say, none of the special people mentioned here share any responsibility for errors of fact or judgement that may have occurred in this work.

DEDICATION

This thesis is dedicated to the memory of my Father who passed away when I was a child, and my beloved Mother who shares this dream with me.

Abbreviations and Definitions

Abbreviation	Definition
NPOs	Non-profit organizations
NCVO	The National Council for Voluntary Organizations
OECD	The Organization for Economic Co-operation and Development
EM	Earnings management
SORP	Statement of Recommend Practice
UK	The United Kingdom
US(A)	The United States (of America)
CC	The Charity Commission for England and Wales
OSCR	The Office of the Scottish Charity Regulator
FRS	Financial Reporting Standard
ASC	Accounting Standard Committee
NHS	The National Health Service
CEOs	Chief executive officers
ST	Stakeholder theory
RDT	Resource dependence theory
STA	Social theory of agency
CSR	Corporate social responsibility
GDP	Gross domestic product
DA	Discretionary accruals

OLS	Ordinary least squares
2SLS	Two-stage least squares
VIF	Variance inflation factors
FTSE 250	Top 250 largest companies (from the 101st to the 350th) listed on the London Stock Exchange
IRS	The Internal Revenue Service

Chapter 1: Introduction

1.1 Introduction

1.1.1 Background to the research

Non-profit organizations (NPOs) have the important characteristic of operating without distributing profits to stakeholders – the so-called 'non-distribution constraint' (Frumkin, 2002, p. 4). These organizations have been acknowledged as important actors from an economic, political and social standpoint (Clotfelter, 1992). In many countries non-profit organizations have been recognized as important providers of health, social, educational and cultural services of many kinds. According to Anheier (2005), the non-profit sector accounts for 6% of total employment in the Organization for Economic Co-operation and Development (OECD) countries, or nearly 10% with volunteer work factored in. In developed countries, for example the US, the non-profit community makes a notable contribution to the economy by providing 5.5% of America's entire gross domestic product (GDP) or $805 billion of output in 2010. The sector also employed 13.7 million individuals or approximately 10% of the country's workforce.[1]

In the UK, the National Council for Voluntary Organizations (NCVO) reported that the voluntary sector contributed about £12.2 billion gross value added in the year 2013/14, equivalent to almost 0.7% of the total GDP of all industries in the UK. It is comparable to the gross value added of the agricultural sector in 2014 (£8 billion, or 0.6% of GDP). The voluntary sector was reported to employ about 827,000 people in the UK in June 2015, accounting for 2.7% of the total UK workforce.[2] In addition, according to the Charity Commission, at the end of 2015 there were more than 165 thousand charities in the UK with a total annual income of over £71.1 billion, in which more than £58.8 billion was spent on charitable activities, for example enhancing the prevention or relief of poverty, encouraging the protection of the environment, conservation and heritage, as well as improving the lives of animals and people with disabilities.[3]

[1] http://www.independentsector.org/economic_role
[2] https://data.ncvo.org.uk/a/almanac16/economic-value-2/
[3] http://www.charitycommission.gov.uk/find-charities/

With these crucial contributions to the economy and society, the non-profit sector has received a lot of attention from donors, regulators, government, researchers, the media and other stakeholders. Various studies have been concerned with multiple aspects of NPOs, including accountability (Dhanani, 2009; Dhanani and Connolly, 2012; Connolly and Hyndman, 2013a; Connolly *et al.*, 2013b), financial disclosure and earnings management (Hyndman, 1990; Verbruggen and Christiaens, 2012; Hofmann and McSwain, 2013; Jegers, 2013; Palmer, 2013; Reheul *et al.*, 2014), and accounting practice in specific sectors, for example hospitals (Leone and Van Horn, 2005; Ballantine *et al.*, 2007) and mainly in the context of US non-profits (Yetman, 2001; Khumawala *et al.*, 2005; Jones and Roberts, 2006; Krishnan *et al.*, 2006; Keating *et al.*, 2008; Yetman and Yetman, 2012), governance practice and its impact on accounting and compensation (Cornforth, 2001, 2003b; Jobome, 2006a; Jegers, 2009; Newton, 2015; Perego and Verbeeten, 2015; Van Puyvelde *et al.*, 2016) and other factors influencing executive compensation (Frumkin and Keating, 2010; Aggarwal *et al.*, 2012; Grasse *et al.*, 2014).

In the UK context, a number of studies have been carried out in order to examine the issues of accountability (Connolly and Hyndman, 2013a, 2013b; Morgan and Fletcher, 2013; Yasmin *et al.*, 2014), accounting and reporting practice (Connolly and Hyndman, 2000, 2001; Connolly *et al.*, 2012; Hyndman and McConville, 2015), some themes of governance (Hyndman and McDonnell, 2009; Jetty and Beattie, 2012) and executive compensation (Jobome, 2006a). These studies have revealed a wider picture of various aspects of charities, such as to whom charities should be or have been accountable, what form of accounting should charities adopt or what have they actually adopted, how stakeholders can shape changes in accounting and governance practice, and the measurement of charity effectiveness. However, there has been scant study of the specific practice of earnings management (EM) in the UK context; it was hinted in several prior studies that many NPOs in a non-UK context have been found to be involved in EM in order to highlight a higher efficiency ratio to attract donations or avoid tax (Yetman, 2001; Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012; Jegers, 2013). Similar to US NPOs, UK charities with a total income of over £250,000 during the financial year are required to prepare their accounts on an accrual basis (Charity Commission, 2013b), which may consequently allow some room for UK charities to manage their accrual accounts. Moreover, this practice has also been found

in UK NHS hospital trusts (Ballantine *et al.*, 2007) and in English local government (Pellicer *et al.*, 2014).

In addition, even after 'Good Governance: A code for the UK voluntary and community sector' was published in 2005 (hereafter the Good Governance Code), studies about the extent of charity governance implementation and how it may influence charity accountability are very limited. Prior US studies find contradictory results in examining the effectiveness of governance in relation to organizational performance (Aggarwal *et al.*, 2012; Garner and Harrison, 2013; Newton, 2015), and a recent study in the Netherlands recognised the significance of governance structure to non-profit accountability as measured by CEO compensation. In particular, the recent collapse of a big charity (Kids Company) raises questions about the role of charity governance in monitoring and steering charitable organizations (The Public Administration and Constitutional Affairs Committee, 2016).

Furthermore, there has been relatively little study of chief executive compensation in the UK charity context. To the best of my knowledge, to date there has been only one paper examining CEO compensation in UK charities using 2001/02 data (Jobome, 2006a), and a second one investigating UK hospital trusts (Ballantine *et al.*, 2008a). These studies adopt the traditional conception of agency theory (Jensen and Meckling, 1976), but it should be noted there is significant inconsistency in results; for instance, several studies in the US argued that organizational performance is positively associated with CEO compensation (Brickley and Van Horn, 2002; Carroll *et al.*, 2005; Frumkin and Keating, 2010; Grasse *et al.*, 2014), while the studies in the UK context could not find any relationship between performance and CEO pay (Jobome, 2006a; Ballantine *et al.*, 2008a). This is similar to the case of governance; while Newton (2015) and Perego and Verbeeten (2015) agreed that the quality of governance or the adaptation of governance could restrain payment to CEOs, Jobome (2006a) found that most governance variables are not significantly related to CEO compensation. This motivated my interest in examining the accounting practices of UK charities in relation to earnings management, exploring the role of charity governance on financial accountability and investigating the determinants of executive compensation in the context of UK charities. This thesis consequently addresses these gaps.

1.1.2 Research aims and objectives

The aim of this thesis is to explore the accountability of UK charities by investigating financial reporting practice, identifying the role of governance in relation to charity financial accountability and examining the determinants of chief executive compensation. In order to achieve this aim, this thesis has adopted several theories during the investigation. Informed by stakeholder theory and resource dependence theory, this thesis firstly studies whether UK charities take advantage of accrual accounting to manage their financial reporting, in order to influence the perception of various stakeholders about the charity's financial performance and accountability for the purpose of resource acquisition and retention. Relying on the same theoretical strand, the contributions of the board of trustees, its audit committee and other governance mechanisms are considered in relation to the level of charity accountability. Secondly, a wider perspective on agency theory, namely the 'social theory of agency' (Wiseman *et al.*, 2012) has been utilised to understand the multiple 'principal-agent' relationships in a non-profit context (Van Puyvelde *et al.*, 2011), thereby informing about how organizational, governance and individual factors are associated with the level of chief executive officer (CEO) compensation.

This thesis is constructed following the three papers basis (three-paper PhD). The objectives of these papers are to seek answers to the following research questions:

1. Do UK charities engage in earnings management[4] practices? (Paper 1)
2. Following the development of the 2010 Good Governance Code, what have been the key characteristics of trustee boards in large UK charities? (Paper 2)
3. What, if any, is the influence of governance practice on financial accountability and, in particular, on earnings management? (Paper 2)
4. What are the determinants of CEO compensation in UK charities? (Paper 3)

[4] The term of earnings management in non-profit context will be discussed further in chapter 2 and 3

1.1.3 Motivation for the research

There are numbers of reasons supporting the notion that UK charities provide a valuable context in which to study accounting practice, governance implementation and executive compensation. These are outlined below.

First, in respect of accounting practice, many recent studies in the non-profit sector provide evidence that EM practice has been found to be associated with a number of motivations, such as reporting higher efficiency ratios to attract donations, re-allocating income/expenses to avoid taxable liability or responding to pressures from regulators and monitoring organizations (Yetman, 2001; Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Hofmann and McSwain, 2013; Jegers, 2013). Although the regulation framework for charity accounting has undergone significant developments with a number of revised Statements of Recommended Practice (SORP) from 1988 (Connolly and Hyndman, 2001) to recent changes in 2015 (Charity Commission, 2015), the Charity Commission reported more than three thousand compliance cases over a period of two years (2013–14), in which accounting issues were one of the most common problems dealt with by the regulator.

Second, in terms of the study of governance development in NPOs, some studies have explored the contribution of non-profit governance in relation to organizational performance and executive compensation (Jobome, 2006b; Wellens and Jegers, 2014; Newton, 2015; Perego and Verbeeten, 2015). However, evidence of the significance of governance mechanisms on NPO accounting and accountability is still limited. By implication this limits understanding as to how and why non-profit board characteristics matter, and potentially precludes the development of more informed sectoral guidance for non-profit governance in the UK.[5]

Lastly, the issue of identifying the main determinants of NPO executive compensation is still controversial. Prior studies in the non-profit context are supported by a traditional agency viewpoint, suggesting that the conflict of interests between agent and principal always predominates and compensation is effectively a means to align those interests.

[5] The recent case of Kids Company, which filed for insolvency on 12 August 2015, has raised concerns about the governance and financial management of UK charities *(*source: Charity Commission, annual reports and accounts 2015 to 2016).

Therefore, the principles underlying CEO compensation in the non-profit sector were presumed to be similar to those in for-profit organizations. However, previous evidence reports different findings in relation to the impact of organizational performance, governance quality, CEO characteristics and other factors (i.e. income source, organization size and age) on compensation levels (Jobome, 2006a; Frumkin and Keating, 2010; Grasse *et al.*, 2014; Newton, 2015; Perego and Verbeeten, 2015). It is doubtful that such principles could exclusively or comprehensively apply to the non-profit sector as a whole, given the different (potentially non-pecuniary) motivations underlying the behaviour of leaders (agents) in this sector, the multiple privileged roles of governance actors rather than merely acting as a control mechanism, and the ambiguity of this sector in terms of the (multiple) identities, forms and interests of the 'principal(s)' (if any). These reasons motivate this thesis to further investigate accounting practice, governance implementation and executive compensation in the UK charitable context.

1.2 Literature review

In the for-profit context, the study of accounting, governance and CEO compensation practices is not a new trend. Specifically, earnings management (EM) is a topical issue attracting significant attention from researchers. After Schipper (1989) published an initial paper on EM, a notable number of studies (Jones, 1991; Burgstahler and Dichev, 1997; Healy and Wahlen, 1999; Dechow and Skinner, 2000; Roychowdhury, 2006; Walker, 2013) have analysed the extent of EM, techniques used to manage earnings, motivations for managing earnings and the consequences of EM,[6] as well as policy recommendations aimed at curbing EM activities. Consequently, many studies have attempted to test the significance of corporate governance for accountability and earnings quality through its impact on EM (Peasnell *et al.*, 2000; Klein, 2002; Xie *et al.*, 2003; Peasnell *et al.*, 2005). Details of corporate governance has been examined in terms of board composition including the independence of the board, board size, the independence of the chairman, board diversity and some subordinate committees such as audit committees, nomination committees and remuneration committees (Klein,

[6] Although earnings are not strictly a term applicable to NPOs, the label also covers wider accounting issues which may affect the quality of the financial information.

2002; Xie *et al.*, 2003; Park and Shin, 2004; Kang *et al.*, 2007). The characteristics of audit committees, ownership structures and external auditors are also of much interest (Bédard *et al.*, 2004; Davidson *et al.*, 2005; Defond *et al.*, 2005; Bergstresser and Philippon, 2006; Lin *et al.*, 2006; Chia *et al.*, 2007; Baxter and Cotter, 2009). However, the findings appear to vary significantly in terms of the contexts and environments within which organizations operate.

In addition, studies on earnings management and corporate governance are also interested in the topic of executive compensation, viewed from the perspective of agency theory which suggests that executive officers, as agents in principal-agent relations, may manage accounting figures in order to benefit themselves by achieving higher levels of remuneration (Healy, 1985; Gaver *et al.*, 1995; Guidry *et al.*, 1999; Myung Seok and Taewoo, 2004; Bergstresser and Philippon, 2006; Kuang, 2008; Chava and Purnanandam, 2010; Jiang *et al.*, 2010). Principals are assumed to align the interests of agents and constrain opportunistic behaviour by adopting an appropriate compensation system and developing a high quality of governance mechanism (Xie *et al.*, 2003; Park and Shin, 2004; Peasnell *et al.*, 2005; Chen and Zhang, 2014). However, prior literature shows several contradictory findings, such as evidence that CEO compensation is not always positively associated with organizational performance (Jensen and Murphy, 1990; Tosi *et al.*, 2004), and that governance may not have any impact on CEO compensation (Jobome, 2006a).

Interestingly, research on executive compensation has suggested that numerous factors influence CEO compensation. This includes corporate governance factors, for example board composition (i.e. the percentage of independent directors on the board), CEO power (the dual function of CEO and chairman), CEO characteristics (e.g. age, length of tenure), other corporate governance features (the existence of remuneration committees or nomination committees), organizational characteristics (such as size, ownership structure) and organizational performance (financial and non-financial ratios) (Conyon and Peck, 1998; Sandersm and Carpenter, 1998; Menozzi *et al.*, 2014; van Essen *et al.*, 2015).

Attention on accounting, corporate governance and executive compensation practices has been overwhelmingly focused on the corporate for-profit sector worldwide (Teoh *et al.*, 1998; Jaggi and Picheng, 2002; Xie *et al.*, 2003; Park and Shin, 2004; Peasnell *et*

al., 2005; Bergstresser and Philippon, 2006; Iqbal *et al.*, 2009; Wilson, 2011; Shubita, 2012; Chen and Zhang, 2014; Menozzi *et al.*, 2014; Miloud, 2014; van Essen *et al.*, 2015) but quite limited when it comes to non-profit organizations[7] (NPOs) (Yetman, 2001; Leone and Van Horn, 2005; Jobome, 2006a; Ballantine *et al.*, 2007; Jegers, 2010b; Verbruggen and Christiaens, 2012; Jegers, 2013; Newton, 2015; Perego and Verbeeten, 2015). The following discussion will provide an overview of accounting, governance and executive compensation practices in the non-profit sector.

1.2.1 Earnings management by non-profit organizations

EM is analysed and measured from different perspectives, resulting in diverse definitions. According to Schipper (1989), EM can be considered as an intentional action to interfere in the financial reporting process with the purpose of gaining some private benefits. Healy and Wahlen (1999) support this view by stating that '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 and Wahlen, 1999, p. 368). This definition sets the tone for significant number of studies on earnings management, and is relied upon by numerous authors exploring EM in profit and non-profit settings (Dechow and Skinner, 2000; Dechow and Dichev, 2002; Klein, 2002; Leuz *et al.*, 2003; Ballantine *et al.*, 2007; Xu *et al.*, 2007; Verbruggen *et al.*, 2008; Verbruggen and Christiaens, 2012).[8]

Prior studies in the non-profit context support the view that the purpose of EM could be to mislead stakeholders who use financial information to assess an organization's performance and/or to make grant decisions. Consequently, a number of studies argue that the motivations for engaging in EM among NPOs may be related to the need to report higher efficiency ratios to improve public accountability in the use of funds and

[7] The definition of NPO is discussed in the following section; NPO is a generic term and is used synonymously with charities, non-profit, third sector or voluntary organizations.

[8] In addition, the terminology of EM can be associated with real manipulation activities, which are defined as 'departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations' (Roychowdhury 2006, p. 337). However, real earnings management in charities is beyond the scope of this thesis.

thereby encourage further donation, re-allocating income/expenses to avoid tax liability, pressure from regulators and monitoring organizations (political costs), pressure to achieve operational targets, and financial incentives (the cost of debt, compensation) (Khumawala *et al.*, 2005; Jones and Roberts, 2006; Krishnan *et al.*, 2006; Ballantine *et al.*, 2007; Keating *et al.*, 2008; Verbruggen and Christiaens, 2012; Hofmann and McSwain, 2013; Jegers, 2013; Yetman and Yetman, 2013; Boterenbrood, 2014; Vermeer *et al.*, 2014; Vansant, 2015; Garven *et al.*, 2016). A summary of findings from previous papers is provided in Appendix A.1, and broadly indicates that large numbers of NPOs are found to be involved in managing accounting figures (earnings, expenditure or income) in order to achieve several outcomes as discussed above.

In order to identify the phenomenon of EM in the non-profit context, different measurement techniques have been applied, such as cost allocation to report zero fundraising costs despite reporting substantial contributions or zero administrative expenses (Yetman, 2001; Krishnan *et al.*, 2006; Yetman and Yetman, 2012), cost shifting to improve programme ratios (Jones and Roberts, 2006; Keating *et al.*, 2008; Tinkelman, 2009), and discretionary accruals and the distribution of earnings around zero (Omer and Yetman, 2003; Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013; Kuroki, 2016). Previous studies have shown that NPOs may engage in EM with different incentives, although there is scarce study of EM practices in the wider constituency of UK charities.

1.2.2 Governance practice and accountability in non-profit organizations

There are numerous definitions of governance. According to the Financial Reporting Council (2014), governance is defined as a system to direct and control organizations, in which boards of directors are responsible for the governance of their companies. Meanwhile, from the stakeholders' perspective 'corporate governance is the process by which corporations are responsible to the rights and wishes of stakeholders' (Demb and Neubauer, 1992). Even if there are a number of different definitions of corporate governance, they all seem to reflect similar objectives of controlling and directing management activities in order to pursue stakeholders' interests, such as obtaining a

reasonable return on capital or constraining the misappropriation of assets (Shleifer and Vishny, 1997; La Porta *et al.*, 2000).

In the context of the non-profit sector, Hyndman and McDonnell (2009) considered charity governance as:

> Relating to the distribution of rights and responsibilities among and within the various stakeholder groups involved, including the way in which they are accountable to one another; and also relating to the performance of the organization, in terms of setting objectives or goals and the means of attaining them. (Hyndman and McDonnell, 2009, p. 9)

This definition draws on the wider relationship between stakeholders and charities, and therefore governance plays a crucial role in ensuring that organizations operate effectively in order to achieve their objectives.

Several studies have explored the role of governance in relation to non-profit organizational performance (i.e. financial and non-financial indicators) (Brown and Caylor, 2006; Jobome, 2006b; Gherghina, 2015), executive compensation (Newton, 2015; Perego and Verbeeten, 2015) and reporting quality (Krishnan and Yetman, 2011; Yetman and Yetman, 2012). However, there is limited study of UK charity governance implementation and its impact on financial accountability via its influence on earnings management.

Previous studies have suggested various findings related to the significance of non-profit governance. Perego and Verbeeten (2015) argued that the adoption of the Good Governance Code is associated with NPO accountability by lessening the payment level to managers and increasing the disclosure of managerial pay. Newton (2015) agreed that a strong governance mechanism plays a significant role in mitigating high levels of pay to executives. However, some studies could not find support for this conclusion with regard to the monitoring function of non-profit governance (Jobome, 2006a, 2006b).

Although a considerable body of literature investigates the association between governance and accounting practice in for-profit organizations (Davidson *et al.*, 2005; Adams and Ferreira, 2009; Srinidhi *et al.*, 2011; Mahadeo *et al.*, 2012; Chen and Zhang, 2014; Ntim, 2015; Post and Byron, 2015; Terjesen *et al.*, 2016), there are limited studies examining this topic in a non-profit setting (Yetman and Yetman, 2012; Hofmann and McSwain, 2013). To the best of my knowledge there has been no study of the

relationship between governance and financial accountability in the context of UK charities. The previous studies pay more attention to defining accountability in the non-profit context (Connolly and Hyndman, 2013a, 2013b), discussing the general governance structure of UK charities (Hyndman and McDonnell, 2009; Hyndman and Jones, 2011) or exploring the development of accounting standards and practice in UK charities (Hyndman and McMahon, 2010, 2011; Connolly *et al.*, 2012). This prompts my thesis to further investigate the importance of non-profit governance in relation to financial accountability in the context of UK charities.

1.2.3 Executive compensation practice in non-profit organizations

The study of executive compensation is a vibrant area of research in the for-profit sector (Deckop, 1988; Banghoj *et al.*, 2010; Nakazato *et al.*, 2011; Vieito and Khan, 2012; Wang *et al.*, 2013; Menozzi *et al.*, 2014; van Essen *et al.*, 2015). However, it is still limited in the non-profit context. Prior studies have been mainly conducted in the US (Aggarwal *et al.*, 2012; Balsam and Harris, 2014; Grasse *et al.*, 2014; Newton, 2015), with some in European countries (Cardinaels, 2009; Perego and Verbeeten, 2015) but only a few in the UK (Jobome, 2006a; Ballantine *et al.*, 2008a).

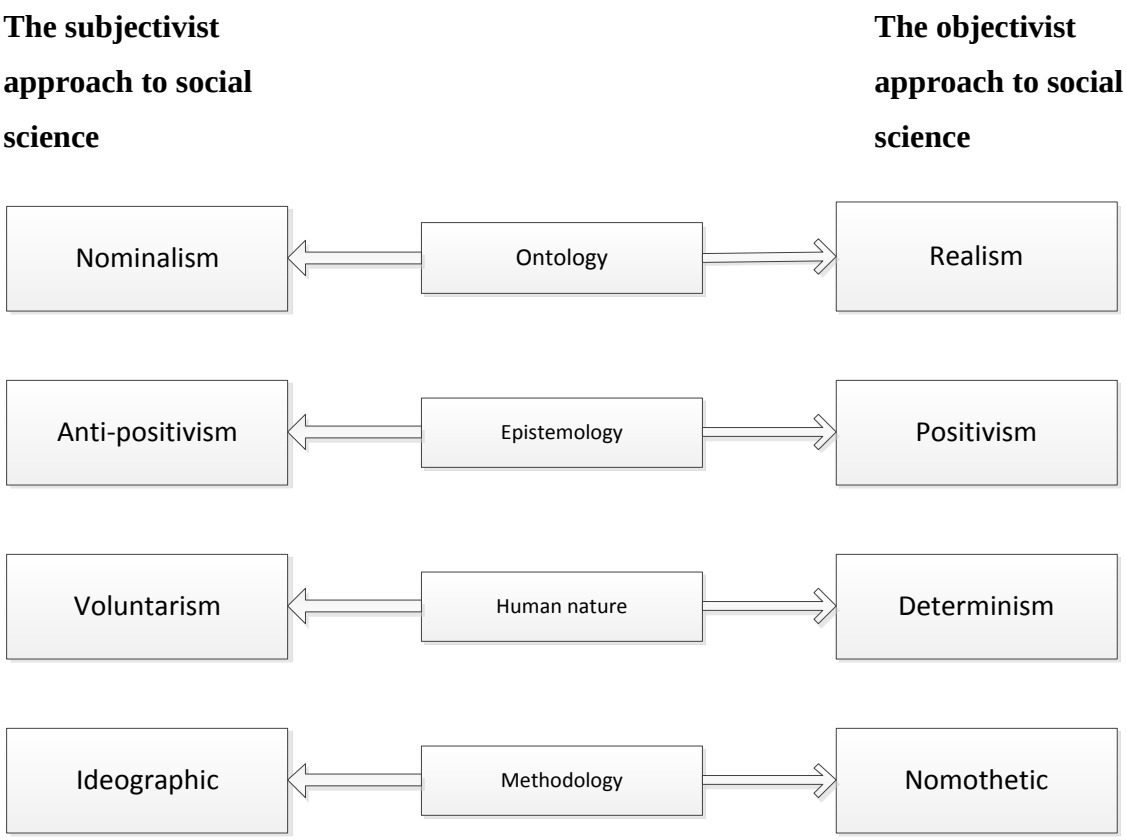
Various factors influencing executive compensation have been considered in the context of NPOs. Empirically, this thesis condenses three main groups of factors impacting on chief executive compensation in NPOs, namely organizational level factors, governance structure, and individual level factors. First, at the organizational level, non-profit organizational performance is found to have an association with CEO compensation (Eldenburg and Krishnan, 2003; Barros and Nunes, 2007; Frumkin and Keating, 2010). In addition, other features of organizations, such as organization age, size and sectoral factors, are also found to have an impact on CEO compensation (Jobome, 2006a; Perego and Verbeeten, 2015). Second, the implementation of non-profit governance has different impacts on CEO compensation (Jobome, 2006a; Newton, 2015; Perego and Verbeeten, 2015). Finally, individual level factors suggest that CEO experience, competence and skills may influence their compensation in the non-profit sector (Jobome, 2006a; Barros and Nunes, 2007; Brickley *et al.*, 2010).

In addition, prior studies largely rely on agency theory (Jensen and Meckling, 1976) with a presumption that an 'agent', represented by executives, always has a contradictory agenda that is in conflict with that of the principal. Therefore, compensation is considered as a means to align the interests of the agent with those of the principal. However, within the context of non-profit organizations, the definitions of agents and principals are varied and not as specific as in the for-profit sector (Van Puyvelde *et al.*, 2011; Hofmann and McSwain, 2013). This leads this thesis to explore and examine the determinants of chief executive compensation in UK charities using the tenets of the social theory of agency.

1.3 Research philosophy

Burrell and Morgan (1979) discuss the nature of social science, assuming that the social science dimension consists of four distinct elements: ontology, epistemology, human nature, and methodology. From their research, the nature of social science may be examined from various positions. All assumptions may then be approached from different aspects related to their objective or subjective dimensions; details of these paradigms are illustrated in Figure 1.1.

Figure 1.1: Assumptions related to the nature of social science



Source: A scheme for analysing assumptions about the nature of social science (Burrell and Morgan, 1979, p. 3)

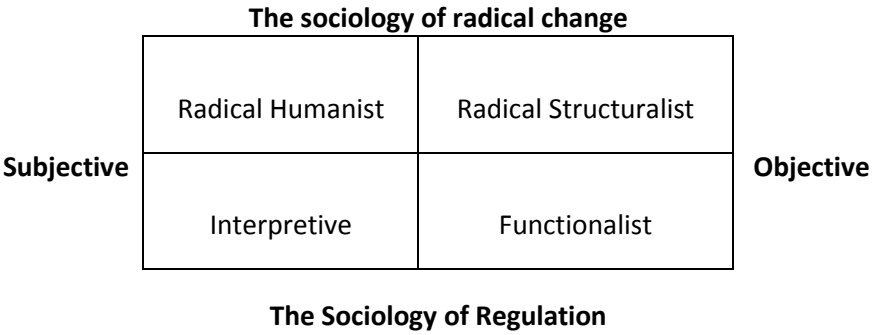
On the one hand, ontology is concerned with 'the nature of reality', with a view that the world exists independently and externally to any individual perception (Burrell and Morgan, 1979; Saunders *et al.*, 2012). This assumption describes the world as totally objective from any researcher's view. What society can do is create labels to understand and recognise the world (Hopper and Powell, 1985). On the other hand, epistemology focuses on the nature of knowledge. The nature of science is absorbed and transmitted by the viewer's consciousness. From this position, researchers seek to explain and predict what happens in the social world by searching for regularities, causal relationships between constituent elements, or by participating in activities to get a deep understanding of what is happening (Burrell and Morgan, 1979; Chua, 1986; Lukka, 1990).

In addition, human nature refers to the relationship between human beings and the environment. It is considered that people are at the centre of their universe, and human

beings might react objectively or subjectively to the environment. The reaction of human beings might be free-willed or under implicit influences. Hopper and Powell (1985) state that people's behaviour and experiences can be regarded as being completely determined and constrained by their environment. The three sets of assumptions outlined above have direct methodological implications. If researchers try to understand the social nature of the world, which method of study should be exploited to discover and obtain knowledge about society? The methodology dimension may have more or less theoretical implications for the 'set of spectacles' that informs the choice of methods for empirical investigations, which also has implicit implications for the role of the human agent in the process (Laughlin, 1995).

Burrell and Morgan (1979) also combine theories about society (regulation and radical change) with two dimensions of social science, namely the objective and the subjective, to see how they relate to each other. From this combination, four paradigms for the analysis of social theory have been constructed. These are the interpretive, functionalist, radical humanist and radical structuralist paradigms (Figure 1.2).

Figure 1.2: Social research paradigms



Source: Adapted from Burrell and Morgan (1979, p. 17)

While radical change adopts a critical perspective on organizational life, which concerns a judgement of an organization in relation to their affairs, the regulation is a less judgemental and critical perspective. Rather, it seeks to explain the way in which organizational affairs are regulated and suggest guidelines for how those affairs should be conducted (Burrell and Morgan, 1979; Saunders *et al.*, 2012).

On the one hand, the interpretive paradigm is defined by Burrell and Morgan (1979) as a concern to understand the world as it is, to understand the fundamental nature of the

social world at the level of subjective experience. This paradigm focuses on explanations in the realm of individual consciousness and subjectivity, within the frame of reference of participants rather than observers. Interpretivism is applied in accounting theories by many authors with an emphasis on understanding and interpreting the meanings of activities in accounting field (Brown, 2010; Bettner and Sowinski, 2013). On the other hand, the functionalist paradigm has supplied the dominant framework for the conduct of academic sociology and the study of organizations. It represents a perspective which is firmly rooted in the sociology of regulation, and approaches its subject matter from an objectivist point of view (Burrell and Morgan, 1979). A review by Goddard (2010) suggests that functionalism is a dominant research paradigm in US public sector accounting research, while studies in the rest of the world prefer interpretive and radical paradigms. This view may influence the research philosophy in the non-profit sector in respect of accounting, governance and executive compensation since the dominant studies have been conducted in the US (Hallock, 2002; Leone and Van Horn, 2005; Yetman and Yetman, 2013; Newton, 2015).

This thesis follows the dimension of epistemological philosophy. Specifically, my research stands on the positivist belief that there exists a theory-independent set of observation statements that could be used to verify the truth of a theory (Hempel, 1966; Chua, 1986). Consequently, the three papers adopt the 'hypothetico-deductive' model of scientific explanation to search for regularities and causal relationships (Hempel, 1966; Chua, 1986). Although there are still many controversial ideas about the best fit philosophy for research, the 'hypothetico-deductive' model of scientific explanation has widely applied in accounting research (Abdel-Khalik and Ajinkya, 1979; Chua, 1986). The details of how the research is constructed to investigate different relationships relating to charity accounting and accountability are discussed in the methodology section.

1.4 Research theories

A review of the literature indicates that several theories (for example, agency theory, institutional theory, legitimacy theory, stakeholder theory, resource dependence theory, and positive accounting theory) have been adopted to investigate the practices of accounting, governance and executive compensation in for-profit and non-profit

organizations. Particularly, agency theory (Jensen and Meckling, 1976) is a dominant framework adopted by a number of studies in order to examine the opportunistic behaviour of agents in relation to principals, the monitoring function of governance mechanisms, and the role of the board in constraining excessive payments to agents (Davidson *et al.*, 2004a; Peasnell *et al.*, 2005; Hofmann and McSwain, 2013; Jegers, 2013; Chen and Zhang, 2014; Newton, 2015; Perego and Verbeeten, 2015). Moreover, resource dependence theory (Pfeffer and Salancik, 1978) is another framework that may be adopted by scholars to examine the role of the board in the provision of resources, and to understand organizational behaviour related to the stability of resources (Carpenter and Feroz, 2001; Hillman and Dalziel, 2003; Hodge and Piccolo, 2005; Nicholson and Kiel, 2007; Verbruggen *et al.*, 2011; Zona *et al.*, 2015). In addition, stakeholder theory, institutional theory, stewardship theory, tournaments theory and managerial power theory have also been applied in different studies (Covaleski and Dirsmith, 1988; Donaldson and Davis, 1991; Geoffrey and Gavin, 2003; Christopher, 2010; Hyndman and McMahon, 2010; Chen *et al.*, 2011; Hyndman and McMahon, 2011; van Essen *et al.*, 2015). Some studies highlight the dual and social nature of organizational practice, but this is rarely the case (Tosi and Greckhamer, 2004; Bryan *et al.*, 2015). However, in this thesis, some theories seem not to be applicable to apply in studying accounting and governance practice of UK charity context since the prior studies show some contradict findings. For instance, agency theory presumes that there is an existence of conflict of interest between principal and agent due to the self-interest characteristics of an agent, while a study by (Jobome, 2006a) found that UK charity managers seems to be altruistic and therefore the monitoring function of governance is not necessary (Jobome, 2006a).

This thesis thus relies on three sets of theories at different levels of precision: stakeholder theory (ST), resource dependence theory (RDT) and the social theory of agency (STA). The justification of selecting these theories is discussed in detail in each particular paper. The following section provides a general discussion of what these theories are and how they are applied in this study.

First, ST was proposed by Freeman (1984) with a suggested definition of a stakeholder as ‘group or individual who can affect or is affected by the achievement of the organization's objectives’ (Freeman, 1984, p. 46). This means that all groups or

individuals who belong to the organization, and outsiders with inter-relationships to the organization (i.e. who impact on or are impacted by the organization), can be considered as stakeholders. These include employees, customers, suppliers, banks, regulators, volunteers and beneficiaries.

In the non-profit context, ST has been applied widely by a number of studies with respect to several topics: accounting (Hyndman and McMahon, 2010, 2011; Connolly *et al.*, 2013b), accountability (Candler and Dumont, 2010; Connolly and Hyndman, 2013a, 2013b), and governance practices (Van Puyvelde *et al.*, 2011; Wellens and Jegers, 2014). Van Puyvelde *et al.* (2011) argued that although there is a non-existence of shareholders and owners in NPOs, there is a variety of actors who may be involved in the activities of such organizations, such as donors, beneficiaries, volunteers and employees. In the context of UK charities, Connolly and Hyndman (2013b) adopted ST to identify the key stakeholders to whom charities should be accountable, and the type of information that should be provided to these key stakeholders.

However, there has been a limited application of ST in the investigation of earnings management and governance practice in a non-profit context, leading my thesis to aim to fill that gap in order to demonstrate the appropriateness of ST in studying accounting and governance practices. This thesis also relies on several studies using different perspectives on ST, such as Mitchell *et al.* (1997) who classified alternative groups of stakeholders, and Donaldson and Preston (1995) who used an instrumental perspective on ST to explain what would happen if managers or organizations behaved in certain ways towards stakeholders.

Second, RDT is introduced by Pfeffer and Salancik (1978) with emphasis on the ability to attain and maintain resources as key for organizations to survive. From this perspective, organizations intentionally behave in specific ways which are based ‘on the demands of interest groups upon which the organizations depend for resources and support’, in order to reduce environmental uncertainty and dependence (Pfeffer and Salancik, 1978, p. 2). In the not-for-profit context, Heimovics and Herman (1993) suggest that NPOs exist and operate in interdependent relationships with the surrounding environment as they are largely dependent upon the flow of resources from outsiders.

Consequently, RDT has been applied in a number of studies to examine non-profit organizational and managerial behaviour (Carpenter and Feroz, 2001; Hodge and Piccolo, 2005; Verbruggen *et al.*, 2011). Verbruggen *et al.* (2011) argued that NPOs might increase their compliance to accounting regulations if they rely on governmental resources and financial loans, with a view to safeguarding the flow of resources from government. Therefore, certain accounting practices are selected due to the motivation to stabilise access to public resources (Carpenter and Feroz, 2001). In the UK, due to the impact of public funding cuts a number of charities face the challenge of reducing operational funding while increasing the public service demand (National Council for Voluntary Organizations, 2012). Therefore, their accounting practice may be impacted by managers due to an increase in funding competition in the non-profit sector, in order to retain the inflow of resources. Prior studies in the US have suggested that donors and funding providers are sensitive to NPO performance by giving more donations to non-profit organizations displaying a higher programme ratio (Tinkelman, 1999; Tinkelman and Mankaney, 2007; Yetman and Yetman, 2013). Consequently, governance as a monitoring mechanism for non-profit organizations is expected to have a positive impact on the quality of accounting information and organizational accountability, the same as in the for-profit sector (Forker, 1992; Niu, 2006; Doyle *et al.*, 2007; Oh *et al.*, 2014). However, the study of this topic in the non-profit sector from a resource dependence point of view is quite limited. A few studies have investigated the role of governance as a monitoring function (agency-led) rather than as a resource provider (Newton, 2015; Perego and Verbeeten, 2015). This prompted an investigation in this thesis of the contribution of governance to non-profit accountability from a (partial) resource dependence theory perspective.

Third, the social theory of agency (STA) was proposed by Archer (1988) and Wiseman *et al.* (2012), allowing a wider consideration of the impact of social and cultural factors (institutional features) on principal-agent relationships. Traditional agency theory (Jensen and Meckling, 1976) was developed based on the core assumption of conflicts of interest between principals and agents due to the separation of ownership from management. According to agency theory, agents (managers) are motivated by their own personal gains and work to exploit their own interests rather than considering principals' (shareholders') interests and maximising shareholder value (Jensen and Meckling, 1976; Eisenhardt, 1989). However, traditional agency theory has been

criticised by several studies in respect of the narrow assumption that agents are always seeking to maximize their self-interests at the expense of the principal (Lubatkin *et al.*, 2007; Wiseman *et al.*, 2012). These studies suggested that the principal-agent relationship may be changed depending on the social and cultural environment. In other words, agency theory may be adopted from a wider perspective to understand the behaviour of principal(s) and agent(s) as a result of their interaction with the social environment; this is therefore referred to as the 'social theory of agency' (Wiseman *et al.*, 2012).

The application of STA in the study of accounting and accountability practices is still limited. Although a number of studies of non-profit accounting practice have adopted traditional agency theory to examine the behaviour of agents in principal-agent relationships (Ballantine *et al.*, 2008a; Van Puyvelde *et al.*, 2011; Newton, 2015; Perego and Verbeeten, 2015), there is a lack of consideration of institutional features in explaining principal-agent relations (Lubatkin *et al.*, 2007; Heracleous and Lan, 2012; Wiseman *et al.*, 2012). This thesis therefore implements STA to shed light on the influence of institutional factors on the behaviour of agents.

In conclusion, due to differences in nature, operation and institution, the practices of accounting, governance and executive compensation in NPOs would be expected to be different from the for-profit setting. Consequently, several theoretical stances have been put forward in consideration of the non-profit context and its differences from the corporate for-profit sector. This research is developed in the context of UK charities and is underpinned by stakeholder theory, resource dependence theory and the social theory of agency to explore various practices of earnings management, governance and CEO compensation in UK NPOs.

1.5 Research methodology

As discussed in the research philosophy section, this thesis is underpinned by the epistemological philosophy, following the view of positivism and adopting the 'hypothetico-deductive' model. In consideration of radical change and objectivity, this study sheds light via the functionalist paradigm. In order to investigate regularities and causalities in practices of accounting, governance and executive compensation in NPOs,

this thesis adopts a 'deductive approach' (Saunders *et al.*, 2012, p. 144) whereby a number of hypotheses is proposed after reviewing prior literature and theoretical propositions. This approach has been widely applied in studies of accounting, governance and compensation due to the use of highly structured methodologies to facilitate replication (Devine, 1960; Gill *et al.*, 2010; Saunders *et al.*, 2012).

1.5.1 Choice of methodology

According to Schneider (2006), studies in the non-profit sector have adopted multiple methods, including quantitative, qualitative and mixed methods. On the one hand, 'qualitative research is concerned with the meaning people attached to things in their lives and to understand people from their own frames of reference' (Taylor and Bogdan, 1998, p. 7). Qualitative research is generally associated with an interpretative philosophy due to the need to capture a picture of the scene involved with the original teacher (Denzin and Lincoln, 2011; Saunders *et al.*, 2012). Therefore, qualitative researchers normally adopt an 'inductive approach' to 'develop concepts, insights and understandings from patterns in the data rather than collecting data to assess preconceived models, hypotheses or theories' (Taylor and Bogdan, 1998, p. 8). On the other hand, quantitative research methods are derived from a positivistic paradigm, which suggests that social science should be carried out based on the same 'objective' principles as the natural or physical sciences (Bielefeld, 2006, p. 398). According to Saunders *et al.* (2012, p. 162), a 'quantitative research method is usually associated with a deductive approach, where the focus is on using data to test theory'.

As discussed above, this research is underpinned by a positivist point of view and adopts a deductive approach, using a large dataset related to accounting practice, governance implementation and executive compensation to investigate the relevance of a number of theories (ST, RDT and STA) in a non-profit context. Consequently, this research applies a quantitative research method in order to explore the practices of accounting, governance and executive compensation underpinned by ST, RDT and STA.

Furthermore, Saunders *et al.* (2012) suggest that quantitative research methods have a characteristic of focusing on examining relationships between variables, which are measured numerically and analysed using a range of statistical techniques. In this thesis,

each paper investigates the relationship between a dependent variable and several determinants using various statistical methods. Specifically, the first paper applies quantitative research methods to explore whether UK charities are involved in earnings management, which is measured by the level of discretionary accruals as suggested by Jones (1991). A large sample of data was used to examine the relationship between discretionary accruals (DA) and relevant factors such as current year earnings, prior year earnings and different sources of charity income. Panel data regression with fixed effects, two-stage least squares (2SLS) and methods of distribution analysis have been applied to examine the phenomenon of earnings management by NPOs. In addition, the second and third papers also rely on quantitative methods with several numerical variables representing various governance factors, CEO characteristics and CEO compensation. These papers thus adopt different statistical practices such as OLS regression, stepwise regression, logit regression and two-stage least squares (2SLS), applying them to a sample of the top 250 UK charities to investigate the impact of governance on earnings management, as well as to identify the determinants of CEO compensation.

1.5.2 Data collection

The literature review section shows that most studies on accounting, governance and executive compensation practices have been conducted in the US non-profit context due to the availability of data and information. US charities are required to submit more detailed information on financial performance, governance practice and top management compensation (Internal Revenue Service, 2015). In addition, data is managed and made publicly available by the Internal Revenue Service Statistics of Income and the National Centre for Charitable Statistics, or provided on request by some special organizations (i.e. GuideStar and Charity Navigator) (Yetman and Yetman, 2012; Newton, 2015). In contrast, UK charities are only required to submit an annual report, including financial accounts but with little information about governance and top management compensation (Charity Commission, 2013b). Specifically, it is not compulsory to disclose detailed information about the board of trustees (beyond the trustees' names) and executive compensation. Although some organizations (i.e. the Charity Commission, GuideStar UK, NCVO and CaritasData Limited) are involved in gathering and providing information on UK charities, they mainly focus on financial

information.[9] As a result, research of governance and executive compensation in the UK has been quite limited (Jobome, 2006a, 2006b). In this study, I use secondary data about financial performance (total assets, total earnings and leverage, cash flow, income and expenses), governance practices (board size, trustee members, individual trustee information such as gender, ethnicity, qualification and experience, audit committees, nomination committees, remuneration committees, internal auditor and external auditor) and CEO information (total compensation, gender, ethnicity, qualification and experience). This information is collected from different sources including direct contact with the Charity Commission for England and Wales to gather financial accounting information, and accessing charity annual reports, charity websites and the Charity Commission website to collect information about boards of trustees and CEOs/top management. The data relates to all charitable sectors based on a given sample such as culture and recreation, education and research, health, and social service.

The data for the first paper comprises 1,414 charities over a five-year period from 2008 to 2012 (the latest year with available data) making up 7,070 organization-year observations. This data has the advantage of relating to a relatively large dataset in comparison to similar non-US studies (Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). The available financial information is sufficient to apply the Jones (1991) model for determining DA, which has been extensively adopted in prior studies in both the for-profit and non-profit sectors (DeFond and Jiambalvo, 1994; Dechow *et al.*, 1995; Peasnell *et al.*, 2000; Leone and Van Horn, 2005; Atieh and Hussain, 2012; Verbruggen and Christiaens, 2012). However, the data contains mainly of basic financial information from balance sheets and statements of financial activities. This consequently impacts on the availability of alternative measurements of earnings management in my first paper.

The data for the second and third papers was manually collected from 250 top UK charities in 2012 (the latest year with available data). Although there was a difficulty in data collection due to the availability of information, as it is usually overwritten over time, the hand-collected data comprises enriched information about governance composition and CEO characteristics. This information is sufficient to investigate the

[9] See detail at http://data.charitycommission.gov.uk/, https://data.ncvo.org.uk/ and http://www.guidestar.org.uk/guidestaruk.aspx

relationship between charity governance and earnings management, as well as to explore a number of factors influencing CEO compensation, which has been previously studied by several papers in a non-profit context (Jobome, 2006a; Aggarwal *et al.*, 2012; Newton, 2015; Perego and Verbeeten, 2015). The summary of data used in each paper is noted in Table 1.1 below.

Table 1.1: Summary of used data

Paper	Number of sample	Number of observation	Data sources	In comparison to some prior relevant studies
1	1414 charities	7070 charity-years	Provided by Charity Commission on request.	844 observations by Jegers (2013); 841 observations by Verbruggen and Christiaens (2012); 1372 observations by Ballantine *et al.* (2007) 432 observations by Eldenburg *et al.* (2011)
2	250 charities	250 charity-years	Manually collected from charity annual reports, charity websites and Charity Commission website	100 observations by Jobome (2006a); 80 observations by Cardinaels (2009); 516 observations by Perego and Verbeeten (2015) 648 observations by Barros and Nunes (2007)
3	250 charities	250 charity-years		

1.5.3 Data analysis

In this research, several statistical techniques have been adopted to analyse the relationships between numerous factors and earnings management, governance quality and CEO compensation. Specifically, the first paper uses a correlation matrix, descriptive statistics and OLS regression, distribution analysis and two-stage least square (2SLS) to examine the impact of earnings level, leverage and different sources of income and other control variables on DA (a proxy for earnings management). Some other statistical checks such as Breusch-Pagan/Cook-Weisberg's test, Huber/White estimators and variance inflation factors (VIF) are also considered to ensure the validity of statistical results. Besides these tests used in the first paper, paper two adds stepwise regression, while paper three uses a logistic regression to test the influence of governance and CEO characteristics on earnings management and CEO compensation.

Details of how those statistical techniques are used to analyse the data are discussed further in each individual paper.

1.6 Contributions of the research

This thesis makes a significant contribution to literature, theory and methodology with regard to financial reporting, governance and executive compensation practice in a non-profit context.

First, to the best of my knowledge this thesis is the first study documenting how UK charities in general apply accrual accounting to manage their financial reports in order to influence users and their perceptions about charity accountability, image and achievements. This thesis is a substantial development of previous papers studying the financial accounting practice of English NHS hospital trusts (Ballantine *et al.*, 2007) by providing evidence from a relatively large sample to suggest that UK charities apply discretionary accruals to manage their accounting results. Although there is no specific requirement to achieve a break-even position, charities prefer to report surpluses around the zero level. Moreover, the finding about using discretionary accrual to manage financial performance by UK charities also contributes to the literature studying EM by NPOs in the US, where significant prior studies focused on expense allocation techniques (Jones and Roberts, 2006; Krishnan *et al.*, 2006; Omer and Yetman, 2007; Keating *et al.*, 2008; Jacobs and Marudas, 2012) or a specific sector (i.e. hospitals) (Leone and Van Horn, 2005; Eldenburg *et al.*, 2011).

In addition, the thesis provides an overview of UK charity governance implementation after the revision of the Good Governance Code in 2010 (Code Steering Group, 2010), which had yet to be explored. This thesis significantly improves on an earlier study by Jobome (2006b), which relied on limited data from 100 top UK charities in 2003, prior to the publication of the Good Governance Code for the voluntary sector in 2005 (ACEVO *et al.*, 2005). This thesis also provides more detailed insights regarding the board characteristics of charities in comparison to Grant Thornton's annual reports (Grant Thornton, 2013), especially in terms of board trustee diversity, expertise in audit committees, the existence of internal audit functions and the type of external auditors. Particularly, following the Good Governance Code guidance on board diversity, UK

charities' boards of trustees show a high rate of diversity in respect of gender, education, experience and business orientation. For example, the results indicate an impressive proportion of females on boards (31.9%) – significantly higher than the proportion of female directors in FTSE 250 companies (Vinnicombe *et al.*, 2015). The data analysis also shows a high rate of charities with audit committees (80.8%), and the presence of internal audit functions (64.8%). However, the proportion of audit committee members with accounting and finance expertise is only 28%. In particular, my study supports previous arguments in favour of board heterogeneity in non-profit settings (Andrés-Alonso *et al.*, 2010; Wellens and Jegers, 2014), but with a new emphasis on gender and ethnic diversity and the role of specialist knowledge in audit committees on accountability, arising respectively from stakeholder management and resource dependence perspectives.

Furthermore, the thesis provides a more detailed analysis of CEO compensation in UK charities, and highlights the heterogeneous effects of organizational, governance and individual factors on CEO compensation. Particularly, UK charities may be less likely to consider applying a performance-based system to decide CEO compensation. This result is consistent with previous findings that 'non-profit managers are at least partially altruistic, which might again suggest a weak pay-performance link' (Jobome, 2006a, p. 331), and supports the STA in suggesting that in the case of a greater number of different principals, criteria where pay is linked to performance are less likely to be used (Wiseman *et al.*, 2012). Moreover, the implementation of governance has a mixed effect on CEO compensation. While a higher degree of board diversity in terms of gender and education and the existence of a remuneration or nomination committee are positively associated with CEO compensation, the presence of experts in accounting and finance on the audit committee has a significant negative influence on CEO compensation. The thesis shows a negative association between a charity's reliance on government funding and CEO compensation, which may suggest the influence of a specific principal-driven dynamic (by government) in monitoring executive compensation. Finally, this thesis finds that that CEO compensation is also influenced by charity age, size and sectoral factors.

Second, in terms of a theoretical contribution, prior NPO-related studies have typically applied agency theory (Krishnan *et al.*, 2006; Jegers, 2010b, 2013) to understand the

motivations underlying EM practices. My thesis contributes to the theoretical perspective on EM practices and argues for the inclusion of ST and RDT to study the factors and reasons underlying the extent of these practices in NPOs, because the ST might shed light on determining the stakeholders of NPOs, who have different levels of interactions but collectively impact on organizational operation (Van Puyvelde *et al.*, 2011). In addition, the instrumental notion of stakeholder theory privileges the explanation that organizational leaders are acutely aware of the need to prioritize and maintain an alignment of interests with more influential or powerful stakeholders to ensure continued support, while at the same time placating and strategically 'managing' (Dhanani and Connolly, 2012) the perceptions of other stakeholders to maintain the legitimacy of the charity, inclusive of how its finances are used and controlled. The combination of RDT can clarify some behaviours of NPOs in relation to the inside and outside environment, which includes the number of stakeholders who have an impact on organization resources. Consequently, the selection of specific accounting practices may not come about because they are the rational way to account for public money, but rather because those methods are socially accepted as a proper way to account for public resources (Carpenter and Feroz, 2001). Therefore, NPOs have broader motivations at play in terms of the role accounting information plays in delivering accountability, transparency and confidence to a wide array of stakeholders. Also, NPOs' access to funds in the form of voluntary income, charitable income and non-financial resources (e.g. donations in kind, volunteer labour) is notoriously volatile, implying continuous and significant efforts aimed at managing external relationships and dependencies (Connolly and Hyndman, 2013a).

Although ST and RDT have been applied in the study of NPO governance (Verbruggen *et al.*, 2011; Wellens and Jegers, 2014), there is relatively little application in the study of NPO governance and its links with earnings management. The contributions of ST and RDT are demonstrated through understanding the behaviour of the board as a governance body in relation to earnings management and accountability. Trustee boards and their sub-committees are expected to ensure the accountability of charities to stakeholders (Cornforth, 2003a). This view is reflected in the Good Governance Code, which suggests that 'the board will lead the organization in being open and accountable, both internally and externally' (Code Steering Group, 2010, p. 11). This means that the board has responsibility for communicating and informing wider stakeholders about the

organization and its practices. They are expected to be accountable to all insiders and outsiders, listening and responding to the views of supporters, funders, beneficiaries, service users and others with an interest in the organization's operation (Code Steering Group, 2010). Additionally, ST and RDT reflect the concern about managing access to key resources (arguably financial ones, but also reputational ones), whereby board members can provide more directed and instrumental support while at the same time being responsive to the expectations of key resource providers with regards to managerial, organizational and financial efficiency. In this respect, this thesis argues that governance mechanisms, such as those reflected in the board, will influence accounting-led outcomes and, for instance, mitigates the potential for charity managers to engage in a process of earnings management.

Especially, from the analysis of determinants of CEO compensation, this thesis suggests a new application of STA in the non-profit context which has not been considered by any studies in the past. The study suggests that social and cultural conditions should be considered to understand the 'principal-agent' relationship in non-profit organizations. Specifically, the diversity of principals from the STA perspective can help to explain the non-association between CEO compensation and organizational performance due to the conflicting objectives among principals. This view of point also suggests a reason for a positive association between CEO compensation and the diversity of the board. Moreover, the transparent intermediation of STA justifies a negative association between the presence of experts on audit committees and CEO compensation, since experts on the audit committee enhance the effectiveness of the committee's monitoring function and increase the transparency of the organization. The cognitive framework of STA may give an explanation for a positive relationship between CEO compensation and managerial experience as an impact of a culture which emphasizes monetary rewards. Furthermore, this thesis proposes a suggestion for a further development of STA in the non-profit context, where some principals are not owners of organizations and they do not have financial residuals from non-profit organizations. Still, they may impact and steer the agent in principal-agent relationships (Van Puyvelde *et al.*, 2011). Specifically, Wiseman *et al.* (2012, p. 212) advises that 'high ownership concentration tends to be associated with lower agent compensation, a closer linkage between agent pay and firm performance, and more vigilant monitoring of the agent's decision'. In the non-profit context, although the government may not be an owner or a shareholder in

NPOs, it should be considered as a 'salient stakeholder' having legitimate impact on the development of the non-profit sector (Mitchell *et al.*, 1997; Hyndman and McMahon, 2010, 2011), and therefore it may possibly influence the principal-agent relations. In particular, findings from this thesis suggest that in the non-profit context, significant funding from government tends to be associated with lower agent compensation and more attentive monitoring of the agent, but may not result in concern about pay-for-performance systems.

Lastly, with regard to methodological contributions, this thesis is based on the epistemological philosophy and follows the functionalist research paradigm. The results of this thesis demonstrate the appropriateness of a positivist view and a deductive approach in the non-profit sector in order to understand the motivations underpinning EM practice in NPOs, to explore the significance of governance in relation to organizational accountability, and to examine the determinants of CEO compensation in UK charities. In addition, due to the challenges of data availability in UK charities, the completion of this thesis provides insightful information about EM practice in a relatively large sample of UK charities, comprising multiple charitable sectors and based on a given sample which is more extensive in terms of sample size in comparison to several prior studies (Ballantine *et al.*, 2007; Eldenburg *et al.*, 2011; Verbruggen and Christiaens, 2012; Jegers, 2013). Specifically, the hand-collected data used in the second and third papers provides many detailed insights about boards of trustees and other governance mechanisms such as audit committees, internal audit functions and types of external auditors, CEO characteristics and CEO compensation in UK charities in comparison to prior studies such as Grant Thornton reports (Grant Thornton, 2013, 2014) and Jobome (2006a), as well as in other countries (Hallock, 2002; Garner and Harrison, 2013; Perego and Verbeeten, 2015).

1.7 Structure of the thesis

This thesis consists of five chapters. The current chapter has presented an overview of the study including the aims and objectives of the research, the motivations for conducting the study and the contributions of this research. This first chapter provides a general review of the literature in respect of accounting, governance and executive compensation practices. An overall discussion of the research philosophy, theory and

methodology are also introduced in this chapter. Details of the study of accounting, governance and CEO compensation practices in UK charities are explored in later chapters.

Specifically, the second chapter focuses on a popular topic in accounting practice, the issue of earnings management, which has been found in corporate profit sector and some non-profit sectors (e.g. hospitals) but not yet in UK charities. This chapter is based on data samples from 1414 charities over a five-year period (2008–2012), and suggests several possible motivations which encourage charities to become involved in earnings management.

The main focus of the third chapter is charity governance quality. This chapter is underpinned by ST and RDT to investigate how board diversity, the characteristics of audit committees, internal audit functions and external auditors impact on charity accountability by constraining earnings management. In this chapter, a modified Jones model is used to test for the existence of earnings management by UK charities, and several statistical models are applied to test the relationships between governance factors and financial accountability.

The fourth chapter adopts a wider view of agency theory, the social theory of agency (STA), in order to explore the determinants of CEO compensation in a non-profit context, particularly in the case of UK charities. This chapter demonstrates the relevance of STA in the non-profit sector, and proposes several factors that may have an impact on determining CEO compensation in the context of UK charities.

The last chapter presents a summary of the research in this thesis and draws conclusions and implications. This chapter also highlights some potential limitations and provides recommendations for future research.

Chapter 2: Earnings Management by Non-Profit Organizations: Evidence from UK Charities

2.1 Abstract

Informed by stakeholder theory and resource dependence theory, this paper investigates for the first time whether UK charities are engaged in earnings management (EM) practices. The study relies on data from a large sample of 1414 charities over a five-year period (2008–2012), selected on a stratified basis in relation to size (total incoming resources) and classified according to eleven different sectors of activity. The results first suggest that UK charities use discretionary accruals to drive their financial results toward a zero surplus/deficit; this result also reveals that the distribution of reported earnings around zero is a preferable result for UK charities. Second, the empirical results point to a significant association between leverage and EM behaviour engaged in by charities; specifically, charities with a high level of leverage tend to be more involved in managing earnings. Third, EM behaviour appears to significantly differ between charitable sectors, and in particular, some sectors (Law, Advocacy and Politics, and International Organizations) are more aggressively involved in EM than others. The findings have important implications for standard-setters, policy-makers and users of accounting information in the charitable sector.

Keywords: earnings management, non-profit organizations, charities, leverage, stakeholder theory, resource dependence theory

2.2 Introduction

This paper focuses on the financial accounting practices of NPOs in the UK, with specific attention to the practice of earnings management (EM). In spite of nearly three decades of research amid major developments in financial reporting theory, practice and standards, EM remains a topical issue attracting significant attention from academics, practitioners and regulators. Much of the work has analysed the extent of EM, techniques used to manage earnings, motivations for managing earnings, and the consequences of EM, as well as policy recommendations aimed at curbing EM activities (Schipper, 1989; Jones, 1991; Burgstahler and Dichev, 1997; Healy and Wahlen, 1999; Dechow and Skinner, 2000; Roychowdhury, 2006; Walker, 2013). Legitimately, attention has been overwhelmingly focused on the corporate for-profit sector worldwide because of its stark consequences for markets and providers of finance (Teoh *et al.*, 1998; Jaggi and Picheng, 2002; Bergstresser and Philippon, 2006; Iqbal *et al.*, 2009; Shubita, 2012; Miloud, 2014), and there has been relatively less scrutiny in the case of non-profit organizations (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013).

A limited number of empirical studies (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013) in the US, UK and Belgium have found evidence of EM in non-profit settings, which has been associated with various motivations such as reporting higher efficiency ratios to attract donations, re-allocating income/expenses to avoid tax liability, responding to pressures from regulators and monitoring organizations (a form of political cost-driven and/or legitimacy-seeking behaviour), executives responding to pressures to achieve operational targets, and the existence of financial incentives (compensation) (Yetman, 2001; Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). In the specific case of the UK, there has been no major study of EM in UK charities, and the closest relevant study (Ballantine *et al.* (2007), which focused on quasi-public bodies (English NHS Trusts), found that organizations intentionally applied aggregate discretionary accruals to achieve a statutory financial breakeven (zero surplus/deficit). However, as in the case of several EM studies in other countries (Yetman, 2001; Leone and Van Horn, 2005), the focus was on idiosyncratic settings (e.g. hospitals, or the impact of specific tax policies) rather than on the broader

constituency of NPOs that have adopted accruals-based accounting conventions. The case of the UK is of particular relevance in terms of its extensive attempts in developing and implementing a robust regulatory framework and a common set of accounting practices, typified by the numerous iterations of the Statement of Recommended Practice (SORP) (Charity Commission, 2005), resulting from concerns about accountability, transparency and confidence in the activities of the charitable sector (Hyndman and McMahon, 2010).

While UK charities are highly appreciated in terms of public trust and confidence (Ipsos MORI, 2014), ensuring 'a reasonable proportion of donations make it to the end cause' is considered to be one the most important components of this trust and confidence (Ipsos MORI, 2014, p. 15). Notwithstanding, the UK Charity Commission (2013a, 2014) reports that there were more than 3,000 compliance cases over a period of two years, in which accounting issues were one of the most common problems dealt with by the regulator.[10] This contextual information motivates the main research question for this paper, namely: *Do UK charities engage in earnings management practices?*

From a theoretical standpoint, prior NPO-related studies have typically applied agency theory (Krishnan *et al.*, 2006; Jegers, 2010b, 2013) to investigate the extent of EM practices in such settings. However, this paper argues that broader motivations are at play in terms of the role accounting information plays in delivering accountability, transparency and confidence to a wide array of stakeholders. Furthermore, NPOs' access to funds in the form of voluntary income, charitable income and non-financial resources (e.g. donations in kind, volunteer labour) is notoriously volatile, implying continuous and significant efforts in managing external relationships and dependencies (Connolly and Hyndman, 2013a). In this regard, stakeholder theory and resource dependence theory are adopted as the framework underpinning the likely motivation and determinants of EM by charities. Empirically, this study relies on data from 1414 charities selected on a stratified basis in relation to size (total incoming resources) and classified in term of eleven subsectors of activity (based on the International

[10] For example, in August 2012 a charity named 'Fund for the Blind and Partially Sighted' was convicted of theft and misleading information to the Commission under the Charities Act, and in another case AA Hamilton College Limited, a higher education college, was found to employ poor financial controls and unauthorised benefits due to the fact that two trustees were employed as staff members *(Source: Charity Commission: Annual reports and Account 2012–13, p.11).*

Classification of Non-Profit Organizations) over a five-year period (2008–2012). The results first suggest that UK charities use discretionary accruals in order to drive their financial results toward a zero surplus/deficit. This result is consistent with the frequency distribution of reported earnings, which shows that a number of charities with negative unmanaged deficits have reported few surpluses after applying discretionary accruals. Second, the empirical results demonstrate a negative association between leverage and EM behaviour. Third, the results show a significant difference among sub-sectors in managing earnings. Some groups (such as Law, Advocacy and Politics, or International Organizations) are more aggressively involved in EM than others. In particular, several groups (for example, Education and Research, Social Services and Religion) are found to use depreciation as a tool for managing earnings. This paper also studies the impact of the type of income on EM practice, but the results are not significant enough to draw clear conclusions.

This research contributes to the literature in three ways. First, it provides evidence from a relatively large sample that UK charities apply discretionary accruals to manage their accounting results. Although there is no specific requirement to achieve a break-even position, charities prefer to report surpluses around the zero level. This finding is important because potential donors and funders rely partly on accounting information to underpin their decision to provide financial and/or non-financial support to charities. Relatedly, central government and local authorities may be led into misallocating their service contracts to charities due to a reliance on accounting information to gauge the sustainability of the service provider. In addition, this finding is important for the main UK regulator (the Charity Commission) in the monitoring of charities and to enhance their level of public accountability. Second, while the academic and practitioner literature has debated extensively on the development and implementation of appropriate accounting standards in the UK charitable sector (e.g. the Statement of Recommend Practice – SORP) with a view to improving accountability, transparency, efficiency and effectiveness (Connolly and Hyndman, 2001; Hyndman and McMahon, 2010), the findings from this study have an important policy implication in that the introduction of accruals-based accounting regulation, as in the case of private sector settings, does provide a catalyst for opportunistic behaviour. Third, the paper contributes to the theoretical perspective on EM practices and argues for the inclusion

of stakeholder theory and resource dependence theory to study the factors and reasons underlying the extent of such practices in non-profit organizations.

The paper is structured as follows. The next section (Section 2.3) outlines the institutional settings relating to UK charity accounting and reviews the literature on EM in for-profit and non-profit organizations. Section 2.4 sets out the theoretical framework and hypotheses. The data and models used to measure EM are presented in Section 2.5. The following section describes and analyses the empirical results. Lastly, the paper concludes with a discussion of the implications of the findings for policy-makers and charity stakeholders, the limitations of the study and propositions for further studies of EM practices by NPOs.

2.3 Institutional settings and review of prior literature

2.3.1 UK charity settings and regulatory framework

Charities have a long history in the UK, with charitable status historically being conferred by Royal Assent; the first definition of Charitable Uses was drawn up in 1601 (House of Commons, 2013). By 2013 there were over 186,000 registered charities in the UK with a total annual income of approximately £69 billion. This sector contributed about £11.8 billion in terms of gross value added in 2011/12, equivalent to almost 0.9% of the gross value added of all industries in the UK. The voluntary sector employed about 800,000 people by the end of 2012, accounting for 2.7% of the total UK workforce.[11] The case of England and Wales is of particular interest given their large proportion of the UK charity 'population', i.e. 163,000 charities reporting a total annual income of £61 billion.[12] As a result, this paper focuses on the specific case of England and Wales, which are regulated by the Charity Commission (CC). The Commission's statutory objectives, functions and duties are set out in the Charities Act, and include a specific duty to request charities with total income over £25,000 to file accounts and annual reports; further, accruals accounting is mandatory for charities with gross income exceeding £250,000 (Charity Commission, 2013b). This legislation has been

[11] According to 'What is the sector's contribution to the economy?', published by NCVO at http://data.ncvo.org.uk/a/almanac14/what-is-the-sectors-contribution-to-the-economy/

[12] According to the Charity Commission (CC) and the Office of the Scottish Charity Regulator (OSCR)'s annual reports and accounts 2012–13.

implemented with a broad purpose aimed at helping charities demonstrate accountability and transparency in order to increase the information available to stakeholders. In addition, the CC is empowered to take corrective action if it finds that a charity's solvency is at risk, by requiring more financial and administrative information in order to identify whether the charity has taken appropriate control procedures and has a clear plan to address the insolvency risk. In the case of suspicious mismanagement or maladministration, the CC may open an enquiry under section 8 of the Charities Act 1993. In this situation, the CC has the power to appoint a receiver and manager to take over the role of charity trustee in the interest of creditors and other stakeholders (Charity Commission, 2009).

The regulatory framework for charity accounting and reporting regulation has experienced significant development, notably since the study by Bird and Morgan-Jones (1981) who found a number of inconsistencies and unclear policies in accounting by charities. Consequently, a number of Statements of Recommended Practice (SORP) have been published and revised in 1988, 1995, 2000 (Connolly and Hyndman, 2001), in 2005 and more recently in 2014,[13] to supplement the accounting and reporting requirements by the Charities Act (1960, 1993, 2006, and 2011). The current SORP was published in July 2014 to accompany the newly applicable Financial Reporting Standard (FRS) 102 in the UK. As stated by the Charity Commission (2014), the SORP aims to improve the quality of financial reporting by charities and increase the transparency of information about the charity's financial performance and financial position, which will impact on a wide range of stakeholders. Since this study will focus on the most recent data over a period of five years (2008–2012), SORP 2005 is the underlying framework applying to the charities in the sample. The applicable framework which requires charities to prepare accounts and annual reports came into effect in April 2009 and can be summarised as follows (Table 2.1).

[13] SORP for charity accounting was initially prepared and issued by the Accounting Standard Committee (ASC) in 1988 with a 'Statement of Recommended Practice No 2 (Accounting by Charities)' – SORP 2.

Table 2.1: Summary of accounting regulations for charities[14]

Accounting principles	No Audit or Examination requirements	Examined by independent examination or registered auditor	Statutory audit carried out by a registered auditor
Receipts and payments	Non-company charities with gross income <= £25,000	Non-company charities with gross income from £25,000 to £250,000	Optional
Accruals basis	(1) Optional for non-company charities with gross income <= £25,000 (2) Compulsory for charitable companies with gross income <= £25,000	(1) Non-company charities with gross income from £250,000 to £500,000 and total assets <= £3,260,000. (2) Charitable companies with gross income from £25,000 to £500,000 **OR** gross income > £250,000 **AND** gross assets <= £3,260,000	All charities with gross income > £500,000 **OR** gross income > £250,000 **AND** gross assets > £3,260,000
SORP is recommended for excepted charities and exempt charities			

'All charities' means non-company charities, group charities, or charitable companies and group charitable companies. (Source: Charity Accounting and Reporting: The essentials, Charity Commission, 2013)

One of the major developments within SORP has been the adoption of accruals-based accounting, which requires charities to report their income and expenditure on the basis of occurred transactions, rather than when charities receive and/or spend cash (Charity Commission, 2005). However, at the same time the application of accrual accounting could arguably be considered as one main factor providing an opportunity for reporting organizations to benefit from the inherent flexibility of discretionary accruals. The following section provides evidence for this in the context of non-profit organizations.

2.3.2 Earnings management by non-profit organizations

EM is analysed and measured from different perspectives with diverse definitions. According to Schipper (1989), EM can be considered as an intentional action to

[14] For financial years before 1 April 2009, the threshold for requiring non-company charities to prepare annual reports was £10,000, and accrual accounting was compulsory for charities with gross income exceeding £100,000. The annual report is mandatorily audited by a registered auditor when charities have gross income exceeding £500,000 or gross income exceeding £100,000 and gross assets exceeding £2.8m.

interfere in the financial reporting process with the purpose of gaining some private benefits. Healy and Wahlen (1999) support this by stating that:

> 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 and Wahlen, 1999, p. 368)

This definition seems to set the tone for a significant number of studies on earnings management, and is relied upon by numerous authors exploring EM in both for-profit and non-profit settings (Dechow and Skinner, 2000; Dechow and Dichev, 2002; Klein, 2002; Leuz *et al.*, 2003; Xu *et al.*, 2007; Verbruggen *et al.*, 2008).

Some researchers (Healy, 1985; Jones, 1991; Friedlan, 1994; Godfrey and Koh, 2003; Jiang *et al.*, 2010) have identified that there are numerous reasons for companies to manage earnings, which might be classified as follows; executives' compensation and reputation (Healy, 1985; Gaver *et al.*, 1995; Guidry *et al.*, 1999; Myung Seok and Taewoo, 2004; Bergstresser and Philippon, 2006; Kuang, 2008; Chava and Purnanandam, 2010; Jiang *et al.*, 2010); debt covenants (Jaggi and Picheng, 2002; Saleh and Ahmed, 2005); capital market motives (Friedlan, 1994; Teoh *et al.*, 1998; Godfrey and Koh, 2003; DuCharme *et al.*, 2004; Morsfield and Tan, 2006; Kyoko, 2013; Miloud, 2014); and political costs (Jones, 1991; Sivakumar and Waymire, 2003; Wilson and Shailer, 2007).

In contrast, the definition of EM in the non-profit sector has not been explicitly defined. Healy and Wahlen (1999) definition of EM is generally cited in NPO studies (Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012). These authors support the view that the purpose of EM could be to mislead stakeholders who use financial information to assess the organization's performance and/or to make grant decisions. These motivations may be related to the need to report higher efficiency ratios to improve public accountability in the use of funds and thereby encourage a larger amount of donation, re-allocating income/expense to avoid taxable liability, pressure from regulators and monitoring organizations (political costs), pressure to achieve operational targets, and financial incentives (the costs of debt or compensation). Rather than using the term 'earnings

management' Hofmann and McSwain (2013) used a new terminology of 'financial disclosure management' to describe EM practices in the non-profit sector. Therefore, combining the ideas of Healy and Wahlen (1999) and Walker (2013), this paper suggests a definition of EM in NPOs as: *intentional adjustment or manipulation in the recording, measuring and/or reporting of accounting numbers in order to influence the decisions of stakeholders and resource providers.*

A number of studies (Khumawala *et al.*, 2005; Jones and Roberts, 2006; Krishnan *et al.*, 2006; Keating *et al.*, 2008; Tinkelman, 2009; Yetman and Yetman, 2013; Garven *et al.*, 2016) argue that NPO executives adjust accounting numbers or alter the reporting process with a view to improving the efficiency ratio, since a higher reported efficiency is generally associated with higher subsequent donations (Tinkelman, 1999). Jones and Roberts (2006) investigated 155 US charities (708 organization-year observations) from 1992 to 2000 and found that charities make substantial changes to programme ratios by using joint cost allocations, and by presenting a high programme ratio charities implicitly inform donors that their money has been used worthily. This finding is also supported by Krishnan *et al*. (2006) in a study of 4,995 US organizations between 1985 and 2001; this study's results revealed that a number of non-profits undertake fundraising activities but report zero fundraising expenses, thereby hiding the potential inefficiencies in fundraising activities. The research evidence also indicates that there is a positive relationship between such misreporting behaviour and managerial incentives in order to acquire larger amounts of managerial pay and donations. Furthermore, Keating *et al*. (2008) relied on data from telemarketing campaigns on behalf of 4,248 non-profit organizations to show that NPOs failed to properly report telemarketing expenses, misreported revenues and misclassified fundraising expenses, with a significant impact on reported programme and fundraising ratios. Finally, a wide range of studies in the USA contend that the motivation for NPOs to modify reported earnings may come from tax avoidance. In this respect, cost allocation and cost 'shifting' are two main methods that have been used by a number of organizations for misreporting expenditures and adjusting earnings. According to Yetman (2001) and although NPOs (in the USA) are generally not subject to income tax, they may be liable for income tax for activities which are not related to their primary tax-exempt purpose. This has been demonstrated by Yetman's (2001) research based on a pooled, cross-sectional sample of 703 US NPOs over a three-year period, which found that medical and educational NPOs

allocated expenses from their tax-exempt activities to the taxable activities to reduce their tax liabilities. This finding was supported by Omer and Yetman (2007), Hofmann (2007) and Omer and Yetman (2003).

Instead of adopting a programme ratio or fundraising efficiency metrics, Verbruggen and Christiaens (2012) applied the discretionary accrual technique from the Jones (1991) model with a longitudinal data set of 841 Belgian non-profit organizations over a three-year period and found that a high level of governmental subsidies has an influence on the level of downwards earnings management. Jegers (2013) also explored EM by Belgian NPOs, and found that larger non-profit organizations are more likely to be manipulating accounting earnings to approach zero level. In addition, the author stated that the presence of a debt in non-profit organizations potentially influences the probability of managing accounting earnings to zero when pre-managed earnings differ from zero. Jegers (2013) also suggested that the size of non-profit organizations and their types of activity impact on accounting earnings.

Political costs are also of relevance in the case of NPOs, since they might face serious pressure from regulators and monitoring organizations depending on their level of reported surpluses (Ballantine *et al.*, 2007; Eldenburg *et al.*, 2011; Boterenbrood, 2014). Ballantine *et al.* (2007) applied the frequency distribution procedures advocated by Burgstahler and Dichev (1997) to study the case of 211 English NHS Hospital Trusts over a seven-year period. It was noted that the Trusts reported continuously small surpluses and deficits around zero. Furthermore, there was an association between discretionary accruals and the reporting of earnings in a narrow range just above zero. The findings supported the view that the main incentives for those organizations to adjust aggregate discretionary accruals were caused by statutory obligation and government accounting regulations. In addition, Eldenburg *et al.* (2011) investigated real EM activities manipulation in US non-profit hospitals based on a longitudinal data set of 95 organizations over a six-year period. They concluded that the managers of non-profit hospitals managed income upward by decreasing expenditure or increasing asset sales when the organization's accounting performance was likely to be below a benchmark. However, these managers would manage earnings downwards in cases of a high level of accounting performance to avoid the risk of scrutiny (Eldenburg *et al.*, 2011). Relatedly, qualitative studies of accounting practices within the non-profit sector

(Goddard and Assad, 2006; Soobaroyen and Sannassee, 2007) have highlighted that organizational leaders were very aware of the legitimating value of charity financial statements in conveying an image of professionalism and competency to external stakeholders, although at the same time there was little indication of the use of accounting information within the organization.

A final motivation relates to executive remuneration. Baber *et al.* (2002) studied 331 US NPOs and showed that changes in the compensation of executives were positively related to changes in programme spending. Leone and Van Horn (2005) adopted Burgstahler and Dichev's (1997) frequency distribution method to study a large data set from 1,204 US hospitals, comprising 8,179 hospital year observations from 1990 to 2002. They concluded that CEOs used discretionary spending and accounting accrual management to manage earnings toward just above zero to avoid losses, because a loss report may lead to a termination of the CEOs' contracts. CEOs are also criticised on the grounds that they might face reputation losses on the managerial labour market in cases of reported losses (Jegers, 2013). This idea was also assessed by Eldenburg *et al.* (2011), with evidence from 432 non-profit observations suggesting that hospital CEOs with significant pay-for-performance incentives manage earnings upward through the reduction of non-revenue-generating and non-operating expenditures.

This review indicates that there is some empirical evidence for NPOs to engage in EM but the evidence is limited to very few countries, some specific sectors, and using different measurement techniques (cost allocation, cost shifting, distribution of earnings and discretionary accruals). In particular, the analysis of frequency distribution of earnings around zero is applied by a number of authors (Omer and Yetman, 2003; Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). The zero target may come from the statutory requirement, which is the case in English NHS Hospital Trusts (Ballantine *et al.*, 2007), or because non-profits may face costs associated with either reporting losses (the likelihood of a CEO's termination) or profit reporting (tax-exempt consideration, a decline in donations) (Leone and Van Horn, 2005). The 'zero profit' arguably acts as a means for NPOs to imply that they have spent all their incoming resources in order to fulfil their charitable purpose, as well as a signal that they require further resources (Verbruggen and Christiaens, 2012). However, evidence of this behaviour has not been considered for the

wider constituency of UK charities. Similarly, discretionary accruals is another technique applied in the US, the UK and Belgium, respectively by Leone and Van Horn (2005), Ballantine *et al.* (2007) and Verbruggen and Christiaens (2012). Discretionary accruals suggest that NPOs engage in EM practices by including 'abnormal' accruals in order to intentionally change total accruals, with a consequent impact on the bottom line item (surpluses/deficits) and in order to achieve a desired outcome. Since UK charities with a total income in excess of £250,000 are required to adopt accrual-based accounting, there is the possibility that some items, such as depreciation or current assets, could be altered or manipulated (Jegers, 2013). A so-called 'aggressive' application of accrual accounting may thus result in an upwards or downwards movement in surplus/deficit depending upon the managerial or organizational intentions or characteristics, but this also has yet to be examined in the UK charitable sector. In this regard, this study considers the various theoretical perspectives pertaining to NPO behaviour in relation to EM practices and formulates hypotheses therefrom.

2.4 Theoretical background and hypotheses development

Following a review of the prior research, agency theory emerges as the most cited perspective to explain or hypothesise the incidence of EM activities in NPOs (Baber *et al.*, 2002; Krishnan *et al.*, 2006; Jegers, 2010b, 2013; Yetman and Yetman, 2013). According to Eisenhardt (1989), agency theory as proposed by Jensen and Meckling (1976) is concerned with the contractual problem arising between principal and agent. The model relies on several assumptions relating to human behaviour, the organization and information. For instance, the agent is assumed to display key characteristics such as self-interest, bounded rationality and risk aversion, while participants in the organization have partial goal conflicts and there is an information asymmetry between principal and agent. However, such assumptions may not applicable to NPOs, where it is often difficult to clearly identify the ultimate owner(s) (Newton, 2015) or beneficiaries of the organization's activities, to whom the accounting information is aimed at (Connolly and Hyndman, 2013b). Such organizations also operate ostensibly to meet charitable objectives rather than to maximise shareholder wealth. Moreover, funders, donors and other grant-making bodies are people (or organizations) who

provide financial resources to NPOs to ensure the charitable objectives are achieved and that the stated beneficiaries receive the required support. In other words, there are multiple parties (donors, trustees and beneficiaries) who are involved in several contractual and non-contractual arrangements with the organization and its executives. Therefore, accounting reports and information serve different accountability and monitoring arrangements that are not substantively linked to the maximisation of the principal's (however defined) financial wealth. This paper therefore argues that stakeholder theory and resource dependence theory may be able to encompass the different relationships and motivations underlying the use (and production) of financial accounting information by NPOs.

2.4.1 Stakeholder theory (ST)

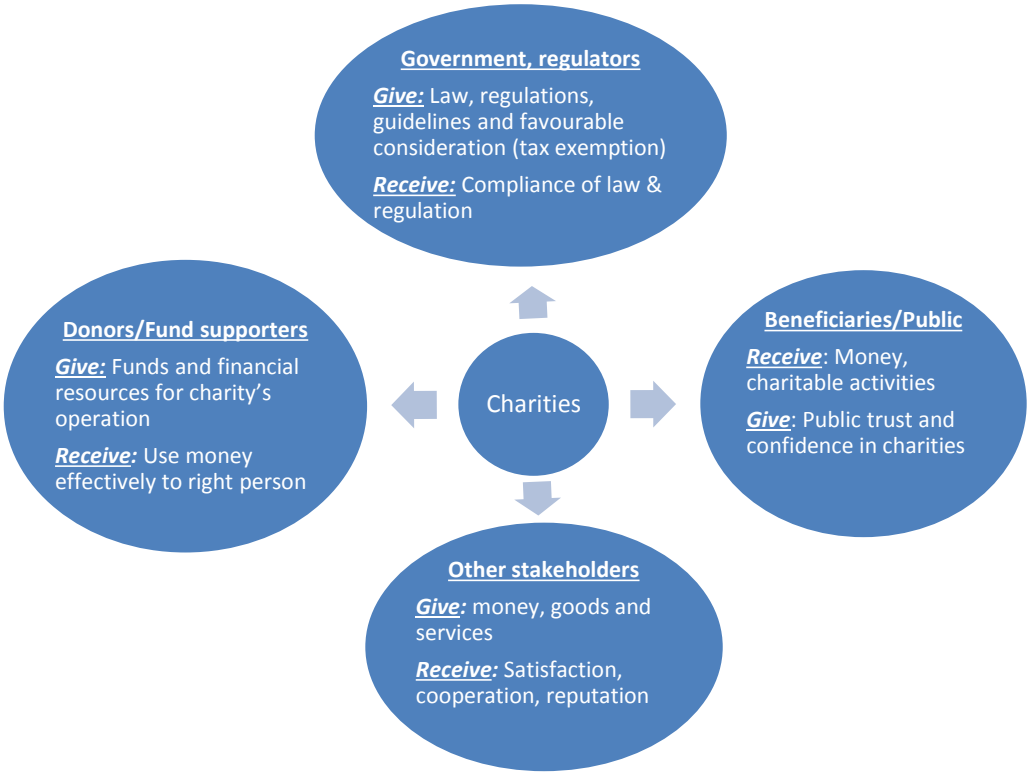
A stakeholder is defined by Freeman (2010, p. 46) as 'a group or individual who can affect or is affected by the achievement of the organization's objectives'. This means that all groups or individuals who belong to the organization and outsiders with inter-relationships to the organization (who impact on or are impacted by the organization) can be considered stakeholders, such as employees, customers, suppliers, banks, regulators, volunteers and beneficiaries. However, these stakeholders have different impacts on/from the organization, and therefore to classify alternative groups of stakeholders, Mitchell *et al.* (1997) proposed three stakeholder attributes: (1) the power to influence the firm, (2) the legitimacy of relationship with the firm, and (3) the urgency of their claim on the firm. Depending on one, two or three attributes, the organization can identify who are the most salient stakeholders and can aim to satisfy the expectations of the key stakeholder(s).

According to Donaldson and Preston (1995), stakeholder theory can be seen from three different aspects, namely descriptive/empirical, instrumental, and normative. On the one hand, the descriptive model of stakeholder theory focused on describing and explaining the corporation characteristics and behaviours, such as the nature of firm and the perception of manager about managing organizations (Donaldson and Preston, 1995). In addition, the normative perspective 'attempts to interpret the function of, and offer the guidance about, the investor-owned corporation on the basis of some underlying moral or philosophical principles' Donaldson and Preston (1995, p. 72). On the other hand,

instrumental theory explains what would happen if managers or organizations behaved in certain ways. The instrumental stakeholder theory is used to identify the links between stakeholder management and the achievement of organizational objectives. In the context of corporate social responsibility (CSR), for example, some authors apply instrumental stakeholder theory to explain that corporations use CSR as a tool to manipulate the disclosed information with a view to securing support and/or to benefit from powerful stakeholders (Orij, 2010; Ntim and Soobaroyen, 2013). The instrumental stakeholder theory is supported by many authors (Hillman and Keim, 2001; Kaler, 2003) since the attention to a specific stakeholder impacts on the achievement of the organization's goals. This theory could be applied to explain EM practices in the non-profit sector, whereby NPOs operate in tandem with different stakeholders (such as donors, regulators, government, volunteers and beneficiaries) to meet stakeholder expectations, including the need to comply with regulations (Connolly *et al.*, 2013b).

However, this paper is underlying by instrumental perspective of stakeholder theory. Because instrumental stakeholder theory states that 'if you want to maximize shareholder value, you should pay attention to key stakeholders' (Freeman, 1999, p. 233). Although there is no existence of shareholder in non-profit organizations, there are a number of stakeholders who are engaging or related to NPO operation. Since those stakeholders engage with NPOs to satisfy different interests, management might intentionally manage accounting policies in order to satisfy the expectations of specific stakeholders. For example, donors are interested in the NPO's efficiency performance since a high efficiency ratio may signal that the donated funds have been used appropriately, thereby leading to more donations (Tinkelman, 1999). In a similar vein, governments or regulators may be interested in the NPO's level of compliance as a result of increased political scrutiny and accountability towards the taxpayer (Ballantine *et al.*, 2007). In the UK context, charities have a number of stakeholders who are able to impact on or who are impacted by their operations, including government, regulators, donors, fund supporters, beneficiaries, trustees and others. Consequently, charities are expected or even required to communicate their actions and operations to stakeholders. The relationships are summarized in the following figure (Figure 2.1).

Figure 2.1: Charities and stakeholders



Interestingly, in recent research by Beattie and Jetty (2009) based on a content analysis of reporting documents and interviews with UK charity finance directors, charities appear to prioritise some stakeholders (e.g. potential funders and regulators) during the process of preparing financial reports, because these stakeholders have power, legitimacy and urgent claims on charities and charity activities are reliant upon them (Beattie and Jetty, 2009). An emphasis on salient stakeholders can imply a relationship between those who can offer actual resources to organizations that may be vulnerable or susceptible to uncertainties in the environment.

2.4.2 Resource dependence theory (RDT)

Pfeffer and Salancik (1978) introduced RDT with a statement that the ability to attain and maintain resources is key for organizations to survive. According to RDT, organizations intentionally behave in specific ways which are based 'on the demands of interest groups upon which the organizations depend for resources and support' in order to reduce environmental uncertainty and dependence' (Pfeffer and Salancik, 1978, p. 2). Since NPOs 'are dependent upon continuing exchanges with the environments in which they operate' (Heimovics and Herman, 1993, p. 425), they are not isolated from their

environment, and their operation is largely dependent upon the flow of resources from outside (Heimovics and Herman, 1993). The resource dependence framework has notably been applied by a number of scholars in studying organizational or managerial behaviour. Hodge and Piccolo (2005) explored the different behaviour of NPO executives in relation to funding sources (government grants, private contributions and commercial activity), which consequently impacts on the financial performance of NPOs. The research showed that the CEO's strategic management partly depends on the nature and concentration of the organization's resources (Hodge and Piccolo, 2005).

In term of accounting practices, Carpenter and Feroz (2001) suggest that organizations choose certain accounting practices not because those applications are the rational way to account for public money, but rather because those methods are socially accepted as a proper way to account for public resources. More specifically, according to Verbruggen *et al.* (2011), NPOs increase their compliance with accounting regulations if they rely on governmental resources and financial loans, with a view to safeguarding the flow of resources from government. However, these authors also state that a dependence on public donation does not significantly influence reporting compliance in NPOs. This statement may be debatable for countries with a significant amount of public donation to charities, such as the US and the UK. From a report published by NCVO,[15] half of all voluntary sector organizations in the UK receive the majority of their funding from individuals, and only 10% of voluntary organizations rely heavily on income from statutory bodies. This can be analysed in the context of RDT, whereby in addition to the need for compliance to legitimate regulations, NPOs are also concerned about their performance being scrutinised by individual donors.

Due to increasing competition in the non-profit sector, coupled with a decline in government funding and a negative impact on fundraising, the non-profit sector may make changes in organizational culture, structures and routines, which could consequently compromise a NPO's mission (Dolnicar *et al.*, 2008). In the UK, according to NCVO[16] (2012), UK charities lost over £1.3 billion in income from government as spending cuts (around 8.8%) were implemented during the financial year 2011/2012 in comparison to 2010/2011. This spending cut has severely impacted on

[15] http://www.ncvo.org.uk/images/documents/about_us/media-centre/ncvo_briefing_funding.pdf
[16] http://data.ncvo.org.uk/a/almanac14/how-have-government-spending-cuts-affected-voluntary-sector-income/

charity operation while the demand for public service continues to grow. In other words, 'many charities face the very real challenge of having to do more with less, and in some cases nothing' (National Council for Voluntary Organizations, 2012, p.4). This requires charities to search for other types of resources in order to maintain their operation. This brings us to a critical view that in order to cope with these challenges and to target the inflow funds for operation, charity executives may over- or understate accounting figures in order to influence users of financial reports (Callen, 1994; Gordon and Khumawala, 1999; Tinkelman, 1999; Wing *et al.*, 2004; Buchheit and Parsons, 2006). This can be done partly due to the flexibility of accounting standards, and also because of the ambiguity of accounting items (accrual accounting or cost allocation, for instance). Additionally, in many cases the donors do not pay attention to detailed items disclosed in financial statements. For example, Khumawala *et al.* (2005) conducted an experiment on 125 participants to evaluate donors' perceptions of giving donations to two entities with different efficiency ratios (programme expense ratio and fund-raising ratio). The results show that individual donors make decisions based entirely on a high rate of programme expenses and ignore cost allocation information, and in turn this can be used by NPO managers to manage ratios and influence donors.

Therefore, RDT can work in combination with stakeholder theory (from the instrumental perspective) in order to explain the behaviour of non-profit organizations in general, and specifically UK charities, in managing accounting information to survive in a competitive world of scarce resources, and in responding to requirements from stakeholders. Depending on the significant proportion of incoming resources, or based on the substantial reliance on specific stakeholders, charities may undertake different actions or strategies to meet the expectations of their salient stakeholders. In relation to donors and fund providers, charities receive money and financial support from them to undertake charitable activities on their behalf, and these resource providers expect their funds to be effectively channelled to beneficiaries (Connolly *et al.*, 2013b). Furthermore, regulators would like to see a high level of compliance from charities. Another type of salient stakeholder that charities may consider is beneficiaries and the public who benefit from charitable activities.

In summary, satisfying these different primary stakeholders may ensure charities avoid uncertainties in term of material resources and retain a high level of trust and confidence

from the public and regulators. In this regard, financial reports are one of the main means to communicate with stakeholders and inform them about achievements as well as the future development of charities. Therefore, seeking a favourable reporting picture may motivate trustees and managers to select particular accounting policies and engage in EM.

2.4.3 Hypotheses development

According to recent research commissioned by the Charity Commission (Charity Commission, 2009), many charities find that ensuring funds for their operations as well as attracting and retaining support is a key issue. Following the government's decision to reduce public sector spending, charities which depend on such funding have faced more challenges in maintaining their operations while often dealing with an increasing demand for their services (National Council for Voluntary Organizations, 2012). Moreover, many charities have been affected by the global economic recession as a result of the fall in individual donations by nearly £1 billion between 2008 and 2009, while the demand for services increased by over 17%.[17] An article published by the Guardian said that more than eight out of ten charities believe their sector is facing a crisis, and 40% of charities fear they will close down unless there is an economic improvement.[18] This has meant that charities have faced or are facing significant difficulties with an almost concurrent decline in their two main income resources (donations and governmental grants/contracts). Therefore, in line with the implications of ST and RDT, this context can lead to increased pressures upon charity trustees and managers to avoid or lessen the uncertainties induced by the shortage of resources while still attempting to fulfil the charitable services expected by society and stakeholders. This may require charities to perform more effectively or demonstrate more convincingly that their performance is sufficient to satisfy the requirements from different stakeholders such as donors, funders, regulators and beneficiaries. One potential implication is the need to show an appropriate level of accounting performance, as highlighted in the recent Charity Commission reports (2013a; 2014). Informed by findings from previous studies (Yetman, 2001; Leone and Van Horn, 2005;

[17] http://data.ncvo.org.uk/a/almanac12/what-impact-did-the-recession-have-upon-the-voluntary-sector/
[18] http://www.theguardian.com/society/2012/dec/09/one-in-six-charities-close

Jones and Roberts, 2006; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013) and the theoretical framework, this study therefore formulates five specific hypotheses to investigate the extent to which UK charities are involved in EM.

Hypothesis 1 is drawn from Burgstahler and Dichev (1997) study to investigate the reporting behaviour of UK charities on a longitudinal basis. As with other NPOs, charities are primarily concerned about charitable services and assisting beneficiaries, and less about profit maximization. In particular, charity stakeholders expect that the contributed funds from donors, government and other funders are delivered to the end users (beneficiaries) with a high rate of utilisation. In general, this implies that all the resources should be used for the charitable activities, and this therefore leads to a reported bottom line of close to zero. This hypothesis has been studied by several researchers (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Jegers, 2013) with the conclusion that a number of US hospitals, Belgian NPOs and English Hospital Trusts prefer to report their financial results close to the zero level.

On the one hand, if charities conclude the financial year with a large surplus, this is consequently transferred to an accumulated fund and brought forward to subsequent years as required by SORP 2005. This might negatively impact on the level of donations and the amount of fundraising in subsequent years as stakeholders realise that those charities do not need further support (Beattie and Jetty, 2009). Moreover, UK charities are given tax exemptions and tax relief advantages for their charitable activities, but surplus reporting might draw the attention of tax and other regulatory authorities. On the other hand, the reporting of a large deficit may impact on the going concern status of charities because incoming resources are not enough to cover resources expended, and trustees may experience difficulties in retaining the level of existing operations. This may in turn have an impact on the profile and reputation of the trustees, leading in some cases to the termination of executive contracts (Leone and Van Horn, 2005). Therefore, the instrumental variant of stakeholder theory suggests that charities are motivated to report accounting information that may be interpreted in a favourable light by key stakeholders, such as the zero earnings level benchmark required by legal regulators and sponsors (Ballantine *et al.*, 2007). In a similar vein, RDT posits that the charities may be engaged in such practices to address uncertainties about future support and pre-empt a reduction in future income. Therefore, H1 is as follows:

H1: Reported earnings[19] of UK charities (surpluses/deficits) are distributed around zero.

However, a zero bottom line may seem to be a desirable operational position for many charities, since this figure could reflect that charities have utilised all their donated funds and grants provided by stakeholders. From a statutory perspective, charities are founded not for the purpose of profit distribution to owners and shareholders; rather, they exist for the aim of charitable purposes (Charities Act, 2011). This means that they are expected to perform charitable projects, works and activities as much as possible based on their available resources. To the best of my knowledge, however, there is no statutory requirement for UK charities to achieve a break-even, except for a regulation applicable to English NHS Hospital Trusts for performance assessment purposes (Ballantine *et al.*, 2007). Similar cases have been explored in a non-profit context (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012) and in the public sector (Ferreira *et al.*, 2013). On the one hand, in practice charities may face pressure to achieve a 'dream break-even', because if organizations operate under severe resource deficits, this not only obstructs their ability to maintain ongoing operations for the future, but also brings the risk of being forced to close down (Dodd, 2014). On the other hand, charities with excessive surpluses might be reconsidered by stakeholders in term of financial support, managerial performance evaluation and regulatory intervention (Leone and Van Horn, 2005). Consistent with previous work (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012), the question is whether charities intentionally manage the bottom line (earnings) upwards or downwards in order to achieve the zero profit level. Therefore, H2 is as follows:

H2: UK charities manage earnings toward zero when pre-managed earnings are negative or positive.

Numerous studies in the for-profit sector suggest that leverage (and the covenant underlying the debt) is one of the main reasons leading businesses to be involved in EM (Sweeney, 1994; Jaggi and Picheng, 2002; Saleh and Ahmed, 2005), due to the financial

[19] 'Earnings' is a general term indicating the operational result of charities, according to SORP 2005, defined as 'Net incoming/outgoing resources before transfers'. It is determined by total incoming resources minus total resources expended.

and reputational costs of debt defaults or due to the opportunity to enhance service/activities to minimise negative perceptions of the organization. However, the relationship between leverage and EM practice has not been yet convincingly examined in a non-profit setting. The results from recent studies are not convincingly consistent and/or significant in order to be able draw conclusions about this. On the one hand, Verbruggen and Christiaens (2012) studied the impact of new loans on EM practice in Belgian NPOs through discretionary accruals. With the assumption that a new loan has a positive impact on discretionary accruals, this meant that NPOs manage earnings upwards (downwards) when there is more (less) presence of a new loan. However, the statistical coefficient was not significant. This issue was also examined by Jegers (2013) among a different sample of Belgian NPOs, but there was no finding supporting an association between NPO indebtedness and their level of earnings manipulation. On the other hand, Vermeer *et al.* (2014) found that US non-profits with high financial leverage appear to manage actuarial assumptions in order to reduce reported liabilities and expenses.

In terms of the UK charity context, James (2014) reported that more than one in eight of the UK's largest charities have negative working capital (current liabilities exceeding current assets). In such circumstances the CC requires charities to provide an explanation in their annual reports, along with likely solutions to address the situation. These charities may also be investigated by the CC. In the worst cases, charities might be forced to liquidate or close down because of their inability to cover their liabilities. Charities with a higher level of liabilities will therefore face a higher burden of regulatory scrutiny. Consistent with RDT and ST, charities aim to deflect any regulatory intervention and preserve their positive image with funders and other resource providers. Trustees and managers may consequently adjust or intentionally manage accounting figures in order to meet expectations. To diminish the negative impact resulting from a high leverage ratio, charities may increase assets or reduce liabilities. For example, a judgement in the recording of payables can lessen the level of creditors and leverage. However, this type of adjustment does lead to an upward trend in the bottom line, because of lower expenses. Therefore, an attempt to manage leverage or creditors may have an effect on reported surplus/deficits. Alternatively, a high proportion of debts may be interpreted another way, in that UK charities are in a difficult period in terms of fundraising. In many cases charities use debt and credit

facilities to support their operation due to the lack of sufficient income and reserves. Consequently, it is plausible that charities with higher indebtedness may seek to improve the charity's public performance (Boterenbrood, 2014).

In light of these different reasons and the limited empirical evidence, this study formulates a non-directional hypothesis that the association between leverage and the extent of earnings management may be positive (when charities want to control the proportion of debts in financial statements) or negative (when charities want to reveal the level of difficulty they are facing). Therefore, H3 is as follows:

H3: Charity leverage is significantly associated with the extent of earnings management.

According to Pfeffer and Salancik (1978), the extent to which an organization depends on others can be determined by the significance and concentration of resources provided. The fewer sources of income or the greater the dominance of few funders, the more organizations become highly dependent on, and are beholden to those providers for survival (Froelich, 1999). This idea can be applied in the UK charity context, where charity operations are significantly dependent on two main sources of income: income from charitable activities (charitable income), and voluntary income.[20] In order to avoid uncertainties arising from these resources, charities should aim to satisfy their resource providers (Froelich, 1999).

The impact of different sources of funds on the financial reporting behaviour of NPOs has been studied by several authors. Verbruggen and Christiaens (2012) analysed the influence of donations and governmental subsidies on EM practice and found that the effect of donated funds from individuals and organizations on EM is not significant, whilst the level of government grant income has a partially negative association with EM practice (Verbruggen and Christiaens, 2012). However, this relationship remains debatable because Jegers (2013) recently studied the impact of government subsidies on EM and his results are not significant. Therefore, this paper attempts to test the impact of income sources in the UK charity context.

[20] Other sources of charity income include investment income and other incoming resources. However, they are generally less significant than two main income sources (charitable income and voluntary income). (Source: http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/SectorData/CharitiesByIncomeCategory.aspx)

According to SORP 2005 (Charity Commission, 2005), voluntary income comprises incoming resources generated from gifts, donations, legacies provided by the founders, patrons, supporters, the general public and business as well as grants from government, membership subscriptions and sponsorships with donation substance. Voluntary income is normally given for free from donors, supporters and grant-makers with the purpose of enhancing the charitable activities performed by charities. Voluntary income is targeted based on the reputation of charities, where charities generally highlight their high efficiency in the use of funds. According to recent work by the Centre for Charitable Giving and Philanthropy (CCGP) (Breeze, 2010), which studied donor perceptions in choosing charities for donation decisions, it was found that in addition to the reasons subsumed within donors' personal tastes and backgrounds, donation decisions were impacted by perceptions of charity competence and charity performance. This may be indicated by efficiency ratios (lower administrative and overhead costs) or the achievement of charitable objectives and making a worthwhile contribution to society (Breeze, 2010). Therefore, in order to retain a high level of donations, charities with a considerable level of voluntary income may have motivations to highlight their capability by showing a high utilisation of donated funds, and reporting close to zero surpluses, as a strong signal of their achievement. Consequently, charities with a high proportion of voluntary income over total income tend to manage earnings downward. Therefore, hypothesis H4a is as follows:

H4a: Charities with a significant proportion of voluntary income tend to manage earnings downward.

Charitable income, the generally most significant resource category,[21] contains payments for goods and services provided for the benefit of charity's beneficiaries, the sale of goods or services as part of direct charitable activities, contractual payment from government or public authorities in the normal course of trading, as well as grants for the provision of goods and services. Therefore, charitable income can be considered akin to the notion of 'commercial income'. Accrual accounting allows charities to recognize income and equivalent expenses 'based on the performance under a long-term contract when, and to the extent that, it obtains entitlement to consideration' (Charity

[21] http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/SectorData/HistoricalData.aspx

Commission, 2005, p. 17). In cases of providing services, charities may estimate income based on the time spent as a proportion of the total estimated spending time to fulfil the contract (Charity Commission, 2005). However, income recognition policies are based on accrual principles, which create more opportunity for charities to manage their surplus/deficit results. The reason is that the performance of charities impacts on their reputation and prestige, which in turn have a consequential influence on the continuance of contractual arrangements or the development of new contracts. Charities with larger amounts of charitable income have an incentive to manage financial information in a favourable way, not only to demonstrate their managerial ability but also to convince stakeholders that funds are being spent for charitable purposes.

In addition, the implementation of spending cut policies by central government resulted in a severe reduction of funding to the voluntary sector, and it has been estimated that the UK voluntary and community sector will lose around £911 million a year in public funding by 2015–16 (Kane and Allen, 2011). An operational result which reports a high surplus may be detrimental to the organization and may lead to scrutiny by contract providers (e.g. local or central government). As a result, managing earnings towards zero may be a possible incentive for charities with a significant proportion of charitable income during this period. Hypothesis H4b addressed this:

H4b: Charities with a significant proportion of charitable income tend to manage earnings downward.

2.5 Research methodology

2.5.1 Model and variables

This study relies on secondary data obtained from a database managed by the Charity Commission. A multivariate regression was applied to examine the relationship between discretionary accruals (DA) and influencing factors, such as break-even target, significance of funding sources, leverage level, and the types of charitable activities. DA is considered as a proxy for EM (Jones, 1991; Dechow *et al.*, 1995; Teoh *et al.*, 1998; Verbruggen and Christiaens, 2012). According to these authors, DA represents managerial interventions in financial reporting policies in order to change the reported

financial results. DA is therefore used to examine the relationship between the EM phenomenon and likely managerial incentives.

To test for the first hypothesis, an earnings frequency distribution was carried out based on Burgstahler and Dichev (1997) procedures, where the authors analysed histograms of the scaled earnings change variable with histogram interval widths of 0.0025 for the range -0.15 to +0.15. A bell-shaped distribution with an irregularity near zero, with the distribution of slightly positive reported earnings beyond normal expectations while small losses are abnormally low relative to adjacent regions of distribution, tends to indicate the practice of earnings management (Burgstahler and Dichev, 1997; Indjejikian *et al.*, 2014). Earnings are determined from total resource incomes minus (-) total resources expended. However, since UK charities are varied in term of income and asset magnitude, the earnings ratio (earnings divided by total assets) will be used to eliminate the impact of organizational size.

In order to test hypotheses 2, 3 and 4, the Jones (1991) model was used to estimate discretionary accruals (DA), which are residuals from the following model (model 1). This model has been extensively used in both the for-profit and the non-profit sectors (DeFond and Jiambalvo, 1994; Dechow *et al.*, 1995; Peasnell *et al.*, 2000; Leone and Van Horn, 2005; Atieh and Hussain, 2012; Verbruggen and Christiaens, 2012).

$$\frac{AC_{it}}{TA_{it-1}} = a\frac{1}{TA_{it-1}} + b_1\left(\frac{\Delta REV_{it}}{TA_{it-1}}\right) + b_2\left(\frac{PPE_{it}}{TA_{it-1}}\right) + \varepsilon_{it} \qquad (1)$$

Where: AC_{it} is charity i's total accruals calculated by the change in non-cash current assets minus the change in current liabilities from year t-1 to year t, minus depreciation expense for year t (AC_{it} = △[Current asset - Cash] - △[Current liability] - Depreciation & Amortization expenses).

$\triangle REV_{it}$ is the change in total income resources from year t-1 to year t by charity i.

PPE_{it} is gross depreciable assets in year t for charity i.

TA_{it-1} is total asset year t-1 [determined by total fixed asset + (plus) total current assets]

Admittedly, there have been several other models suggested to estimate discretionary accruals, such as the Modified Jones model (Dechow *et al.*, 1995), the Dechow and

Dichev approach (Dechow and Dichev, 2002) or the Francis model (Francis *et al.*, 2005). However, the information derived from the database was not sufficient to apply those models. Notwithstanding, the Jones (1991) model was applied by Leone and Van Horn (2005) and Verbruggen and Christiaens (2012) in the non-profit and profit context (Peasnell *et al.*, 2000; Atieh and Hussain, 2012).

To test hypotheses 2, 3 and 4, this paper uses the following model (model 2) which was developed from Leone and Van Horn (2005) and Verbruggen and Christiaens (2012).

$$\mathbf{DA_{it} = a_0 + a_1EBDA_{it} + a_2EARNINGS_{i\,t-1} + a_3DA_{it-1} + a_4CHAR\_INC_{it} + a_5VOL\_INC_{it} + a_6LEV_{it} + a_7Size_{it} + e} \quad \mathbf{(2)}$$

A summary of the variables from models 1 and 2 is presented in Table 2.2 as follows.

Table 2.2: Variable descriptions

Symbol	Variable name	Descriptions & measures in UK charities
AC_{it}	Total accruals	Total accruals are aggregate accruals, calculated by the change in non-cash current assets minus the change in current liabilities from year t-1 to year t, minus depreciation expense for year t AC_{it} = △(Current asset – Cash) - △ (Current liability) - Depreciation & Amortization expenses
$\triangle REV_{it}$	Changes in total income	The change in total income from year t-1 to year t by charity i
PPE_{it}	Gross depreciable assets	Gross depreciable assets in year t for charity i
TA_{it-1}	Total assets (beginning of the year)	Determined by total fixed assets plus total current assets at the beginning of the year
DA_{it}	Discretionary accruals	Residuals from model 1
$EBDA_{it}$	Earnings before discretionary accrual	EBDA is determined by net incoming/outgoing resources scaled by total assets in period t-1 minus Discretionary accruals. In other words, EBDA is pre-managed earnings
$EARNINGS_{i\,t-1}$	Prior year net income	Net incoming/outgoing resources in period t-1 scaled by total assets in t-2
DA_{it-1}	Prior year discretionary accrual	The discretionary accrual of charity i in period t-1

$CHAR\_INC_{it}$	Charitable income	Ratio of charitable income/total income in year t
VOL_INC_{it}	Voluntary income	Ratio of voluntary income/total income in year t
LEV_{it}	Leverage	Determined by total short-term and long-term creditors in year t scaled by total assets in year t-1
$Size_{it}$	Charity size	Natural logarithm of Total assets of charity i in year t

The purpose of model 2 is to inspect the impact of several factors on earnings management behaviour, including the financial operational result for the current year (earnings before discretionary accruals), the level of credit and borrowings (leverage), and the significance of the two main sources of income. The relationship between these factors and discretionary accrual seeks to proxy for the charity managers' incentives with regard to earnings management (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012). More specifically, the relationship between DA and pre-managed earnings will determine the intention of managers in using accrual to manage earnings upwards or downwards. Since Hypothesis 2 suggests that charities manage earnings upwards (downwards) to a zero level when pre-managed earnings are negative (positive), therefore the coefficient of this relation is expected to be negative. This adverse relationship between DA and EBDA has been examined and supported by Leone and Van Horn (2005) and Verbruggen and Christiaens (2012). This is a key consideration from this model to recognize the intentional behaviour of charities in managing earnings toward zero.

Furthermore, previous studies suggest that past performance has an impact on the current year's EM level. Specifically, Kothari *et al.* (2005), Leone and Van Horn (2005) and Verbruggen and Christiaens (2012) found a positive association between preceding earnings and current year discretionary accrual. However, this paper argues that this relationship may not be applicable in the context of charities, because if last year's earnings result was positive, this implies that incoming resources exceeded outgoing resources, and the residual would be carried forward as an accumulated fund. If charities keep managing earnings upwards this year, the residual will lead to a higher level of accumulated funds and reserves, and in turn this may negatively affect charities since donors, funders and other supporters might conclude that they are not in need of new funds (Beattie and Jetty, 2009). Therefore, the relationship between last year's

income and the current year's DA is arguably not the focus of the paper. Furthermore, following previous authors (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012), this paper includes lagged DA (discretionary accrual from last year) to control for the likely autocorrelation in the level of discretionary accruals.

This model also allows for the tests of hypotheses 3 and 4 to identify the impact of various income sources and leverage on EM behaviour in UK charities. SORP 2005 requires charities to report incomes by activity categories, including voluntary income, investment income, charitable activities income, trading income and other income. Income from charitable activities (called 'charitable income' hereinafter) accounted for more than 50% and voluntary income was reckoned at over 30% of total charitable income.[22] These two income sources are significant in the total incoming resources of UK charities (approximately over 80%). Based on the RDT framework, and when charities are largely dependent on those two sources of income for their operation and existence, it is proposed that charities may have more incentive to engage in EM to satisfy these critical stakeholders.

Furthermore, a ratio determined by the total of creditors, including amounts falling due within one year and amounts falling due after more than one year, divided by total assets is the proxy for charity leverage. As defined by SORP 2005, short- and long-term creditors include loans and overdrafts, trade creditors, amounts due to subsidiary and associated undertakings and other creditors, as well as accruals and deferred income. External funding is seen to be important to many charities since recent reports (e.g. James (2014) indicates that a large number of UK charities reported net current liabilities (where short-term liabilities exceeded current assets).

Insofar as organizational size is concerned, Jegers (2013) contends that 'larger organizations seem to be more inclined to manipulate earnings to reach earnings levels close(r) to zero' (Jegers, 2013, p. 953). Therefore, this paper also reviews the effect of charity size as a control variable for the earnings management behaviour of charities. The size variable is measured by natural logarithm of total assets.

[22] Charities by income band, 31 December 2013 at http://www.charitycommission.gov.uk/find-charities/

Lastly, similar to Jegers (2013), model 2 will be analysed by sector data to explore whether UK charities operating in different sectors have different attitudes towards EM practice. In summary, the hypothesised and expected relationships between dependent and independent variables are outlined in Table 2.3 below.

Table 2.3: Summary of expected relationships between dependent and independent variables

Variable	Predicted relationship	Description	Reference to previous work
Dependent variable			
DA_{it}		Discretionary accrual, which is a residual from the Jones model (equation 1), is a proxy for earnings management	Jones (1991); Leone and Van Horn (2005); Verbruggen and Christiaens (2012)
Independent variables			
$EBDA_{it}$	-	Earnings before discretionary accruals. Reported earnings = EBDA + DA, if DA and EBDA is negative association, reported earnings is closed to zero	Leone and Van Horn (2005); Verbruggen and Christiaens (2012)
$CHAR\_INC_{it}$	-	Charities with a significance reliance on charitable income or voluntary income tend to manage earnings downwards.	Verbruggen and Christiaens (2012) studied the impact of government subsidies and donations on EM. Jegers (2013) studied the impact of subsidies on earnings manipulation.
VOL_INC_{it}	-		
LEV_{it}	-	Charities will manage earnings downward as a result of an increase in leverage (borrowing/liability)	Verbruggen and Christiaens (2012); Jegers (2013).
Size	+/-	The size of charities may have a positive/negative impact on earnings management behaviour	Jegers (2013).

2.5.2 Data

As required by the Charities Act,[23] charities with a gross income exceeding £25,000 in any financial year have to submit annual reports to the Charity Commission within ten months of the last day of the relevant financial year. The data for this paper is directly sourced from the Charity Commission following a request to the regulator. The database

[23] Charities Act 2011: http://www.legislation.gov.uk/ukpga/2011/25/contents

included financial information from 59,504 annual reports for seven years, and the full longitudinal data set (2007–2013) applies to about 10,000 charities. This database only included financial reports with a minimum incoming resource of £0.5 million, which is also the threshold for charities to have independent auditors. As a whole, the database covers approximately 84% of all charities' income. However, at the time of collecting data the financial reports for the financial year 2013 had not been completed, and hence this paper uses a five-year time frame from 2008 to 2012. The financial data includes information from statements of financial activities and balance sheets. This paper uses panel data as recommended by Wooldridge (2001) and Hsiao (2003), since panel data with a large number of data points will increase the degrees of freedom and reduce the collinearity among explanatory variables, hence improving the efficiency of econometric estimates. Moreover, panel data can control for omitted (unobserved or mis-measured) variables. Previous papers (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012) also relied on panel data to capture the limitations of cross-section data and time-series data.

While the target population for this paper was all the registered charities in England and Wales for the period from 2008 to 2012, the study's population is about 9,800 charities, as available in the database gathered by the Charity Commission. Before implementing the sampling technique a number of charities were excluded in the study population because: (i) there was a lack of information for the period from 2008 to 2012; (ii) some organizations just raise funds and transfer all funds to a parent organization, such as the Cancer Research Campaign (charity number: 225838), which has transferred all achieved resources income to Cancer Research UK (charity number: 1089464). Consequently, the item 'net incoming resources' (total income – total expenses) is reported as zero. The reduction in the sample size brought the new study population to 6,637 charities, accounting for an average of 78.71% of all total charity income in England and Wales from 2008 to 2012. To ensure the validity of the collected financial information, selected annual reports available on the Charity Commission website were collected and the figures tracked back to the accounting information contained in the database.

2.5.3 Sampling technique

A stratified sampling technique is applied in this paper based on the income size of charities. Charities are classified into three strata by income range: (i) more than £50m; (ii) from £10m to £50m; and (iii) from £0.5m to £10m. The sample was then selected from the stratified population, specifically: (i) all charities with income greater than £50m are selected; (ii) all charities with income from £10m to £50m are selected; and (iii) systematic random sampling is applied to select 10% of the charities with income from £0.5m to £10 m (579 charities), as this meets the requirement for a minimum sample size for random sampling at a 95% confidence level (Saunders *et al.*, 2012). These processes resulted in a total of 1,414 charities or 7,070 organization-year observations being selected. The total income of the selected sample covers about 70% of the study population's income, or about 55% of the reported income of all charities in England and Wales. The result of the stratified sampling is summarized in Table 2.4 below.

Table 2.4: Summary of stratified sample data

Charity with income	Study population	Sampling	Selected charity	Number of observations
>= £50m	126	100%	126	630
£10m–£50m	709	100%	709	3,545
£0.5–£10m	5802	10%	579	2,895
Total	**6637**		**1,414**	**7,070**

(Each observation is a charity-year from the five-year period from 2008 to 2012)

The reason for selecting all charities with very large (greater than £50 million) and large (greater than £10 million) income size is supported by previous work suggesting that firms with larger size are more likely to be involved in earnings management (Watts and Zimmerman, 1990; Barton and Simko, 2002; Nelson *et al.*, 2002) because of their higher levels of accounting sophistication and greater bargaining power. In the context of non-profit organizations, Jegers (2013) suggests that organization size and level of earnings manipulation are positively associated. Besides that, although only 10% of smaller charities is selected, it accounts for 38% of total selected sample. In addition, a sample of smaller charities is intentionally designed less than 50% of whole sample since smaller charities may be limited in resources (finance and human) in order to

prepare informative financial statements, which consequently might impact on the reliability of gathered information.

Charities are classified by sectors based on the International Classification of Non-Profit Organizations (ICNPO), which was designed by the US Centre for Civil Society Studies at Johns Hopkins University and has been adopted by the NCVO for UK charity classification. The sample's classification by sector is provided in the following table (Table 2.5).

Table 2.5: Summary of classification of UK charities by sectors

Group	Group Name	Examples	Charity	Observ-ations
Sector 1	Culture and Recreation	The Arts Council of England (1036733); The British Film Institute (287780)	131	655
Sector 2	Education and Research	Cancer Research UK (1089464); United Church Schools Foundation Ltd (313999)	341	1705
Sector 3	Health	Nuffield Health (205533); St Andrew's Healthcare (1104951)	124	620
Sector 4	Social Services	The British Red Cross Society (220949); Action For Children (1097940).	211	1055
Sector 5	Environment	WWF – UK (1081247)	64	320
Sector 6	Development and Housing	Anchor Trust (1052183); The City and Guilds of London Institute (312832)	170	850
Sector 7	Law, Advocacy and Politics	Consumers' Association (296072)	40	200
Sector 8	Philanthropic intermediaries and voluntarism promotion	Charity Projects (326568); The Children's Investment Fund Foundation (UK) (1091043)	90	450
Sector 9	International	Oxfam (202918); The British Council (209131)	54	270
Sector 10	Religion	Oasis Charitable Trust (1026487); The London Diocesan Fund (241083)	140	700
Sector 11	Business and professional associations, unions	General Medical Council (1089278); British Accounting and Finance Association (299527)	49	245
	Total		**1414**	**7070**

Table 2.5 shows variable numbers of organizations per sector, but the number of observations per sector was deemed sufficient for a more detailed empirical analysis.

2.6 Empirical results and analysis

2.6.1 Descriptive statistics

The descriptive statistics for the five-year pooled data from 2008 to 2012 are summarized in Table 2.6. The mean total assets and mean total income of the charities were £57.032 million and £20.719 million respectively. It is notable that the leverage ratio accounted for nearly 30%, while charitable and voluntary income were the main sources of income for UK charities, accounting respectively for approximately 58% and 26% of total income. This reflects the significant dependence on, and financial support from, a range of external stakeholders (sponsors, donors and creditors). The dependence on these two main sources of income was generally stable over the period from 2008 to 2012. Furthermore, the results showed a mean surplus for 2008 to 2012, while the mean percentage of earnings over total assets was approximately 2%. This suggests that charities report small positive financial results.

Table 2.6: Descriptive statistics (pooled data, 2008 to 2012)

Items (in GBP)	Mean	Standard deviation	Perc.25	Median	Perc.75
Total Asset	57,032,080	433,405,636	3,206,022	12,256,266	35,462,014
Total Liability	14,146,786	82,844,491	388,603	2,213,000	7,005,074
Leverage	29.64%	29.72%	8.31%	22.10%	42.27%
Total Income	20,719,039	47,244,579	2,143,567	10,558,425	19,965,408
Charitable Income	11,979,547	31,966,269	431,490	2,875,614	13,055,562
Voluntary Income	5,903,279	24,787,801	11,000	324,523	2,685,093
Earnings (Surplus/Deficits)	546,054	16,562,740	- 54,680	172,649	977,001
Charitable Income/Total Income	58.10%	40.36%	8.87%	76.08%	96.09%
Voluntary income/Total income	26.02%	33.92%	0.21%	5.32%	50.17%
Earnings/Total assets	2.2%	44.16%	-0.98%	2.49%	6.84%
N = 1414 charities (7,070 observations)					

Table 2.7 provides a breakdown of the descriptive statistics by sector. Notable variations are as follows: Law, Advocacy and Politics is the sector with the lowest mean of total assets, while Education and Research, Development and Housing, Philanthropic Intermediaries and Voluntarism Promotion, and Religion have the largest total assets

(mean). Law, Advocacy and Politics also has the lowest mean income. In contrast, charities involved in International activities have the highest mean income, in which voluntary income is significant (accounting for more than 63%). According to ST and RDT, organizations behave differently when there are changes in external environments related to disparities among stakeholders and variance of expectations. Therefore, it is noted that there are considerable differences in terms of the size of assets, income and the main components of income between charity sectors, which may in turn have an effect on EM practices within particular sectors.

More than half of those sectors (six out of eleven) have a mean charitable income of 50% (or above) of total income, namely Culture and Recreation, Education and Research, Social Services, Development and Housing; Law, Advocacy and Politics, and Business and Professional Associations/Unions. Meanwhile, only two other sectors are largely dependent on voluntary funds, namely the International and Religion sectors. As previously mentioned, charitable income is received on the basis of exchange for goods and services, whereas voluntary income is normally donated, albeit often with conditions. Charitable incomes have a similar nature to commercial revenue, which is obtained from the provision of goods and services (this is considered in this paper as 'commercial activities' conducted by charities). This reflects a new trend in the operation of charities, whereby they place greater emphasis on improving their own financial ability. At the same time, an increasing proportion of income from 'commercial activities', coupled with the adoption of accrual accounting, may create more opportunities for charities to manage their accruals. Noticeably, Development and Housing is the sector with the highest charitable income ratio (81.03%) and also one with a top leverage ratio (50%). This may signal that charities with a high proportion of income from the provision of goods and services and with a significant rate of debt may experience higher pressure from creditors, contract providers and beneficiaries, with potential implications for their reported accounting figures.

Table 2.7: Descriptive statistics per charity sector (2008 to 2012)

Items	Statistics	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Group 11
	N	655	1705	620	1055	320	850	200	450	270	700	245
Total Asset (£'000)	*Mean*	24,100	76,800	34,200	29,600	41,900	58,000	8,315	191,000	29,500	56,000	26,100
	Std. Deviation	55,100	819,000	80,800	68,200	136,000	116,000	20,700	559,000	68,900	74,900	37,800
	Median	5,674	16,900	8,732	5,695	8,762	16,000	762	20,600	11,100	27,900	13,600
Total Liability (£'000)	*Mean*	7,565	16,200	11,400	4,911	5,694	38,600	2,074	27,600	8,997	5,257	6,748
	Std. Deviation	33,200	137,000	45,300	10,500	15,600	81,300	5,411	129,000	30,200	14,300	10,400
	Median	1,537	4,367	967	1,161	910	4,545	217	1,595	2,669	1,593	3,496
Leverage (%)	*Mean*	37%	32%	20%	27%	22%	50%	29%	22%	30%	13%	31%
	Std. Deviation	31%	22%	20%	25%	28%	45%	19%	26%	24%	17%	43%
	Median	30%	28%	13%	20%	11%	40%	27%	10%	24%	6%	23%
Total Income (£'000)	*Mean*	17,800	19,100	24,500	21,400	22,500	23,000	10,000	18,900	52,900	12,700	16,600
	Std. Deviation	54,500	39,500	65,900	38,800	55,700	37,400	18,900	49,900	104,000	15,300	18,200
	Median	8,555	11,700	6,215	9,476	4,900	13,100	1,247	6,025	23,200	10,300	11,900
Charitable Income (£'000)	*Mean*	6,644	13,200	15,100	13,500	8,111	20,100	6,798	5,343	19,000	3,722	12,200
	Std. Deviation	9,912	22,600	56,600	25,700	30,900	33,800	15,600	33,800	74,300	8,500	15,700
	Median	2,549	10,000	1,601	2,660	805	11,600	895	-	1,174	704	9,390
Voluntary Income (£'000)	*Mean*	7,603	3,059	7,238	5,630	10,300	1,291	1,435	7,722	29,800	6,934	324
	Std. Deviation	38,400	20,700	34,400	18,300	22,300	7,691	4,325	32,100	46,600	11,700	851
	Median	546	116	1,025	276	962	2	67	688	11,100	3,055	6
Earnings (Surplus/Deficits) (£'000)	*Mean*	761	-409	971	637	889	778	425	2,200	845	483	813
	Std. Deviation	4,120	29,600	6,182	4,639	4,191	5,841	1,945	26,200	7,801	5,315	3,055
	Median	56	438	208	80	124	198	31	78	373	67	242
Charitable Income/Total Income	*Mean*	51.57%	78.67%	47.60%	64.79%	35.39%	81.03%	70.49%	21.88%	27.91%	22.64%	71.20%
	Std. Deviation	32.35%	32.46%	38.69%	38.35%	34.49%	30.13%	37.34%	37.84%	37.24%	29.63%	30.96%

(%)	*Median*	52.58%	93.96%	37.05%	84.60%	28.05%	95.78%	91.99%	0.00%	2.99%	7.81%	87.25%
Voluntary Income/Total Income (%)	*Mean*	28.70%	11.91%	31.36%	22.43%	41.07%	8.14%	21.19%	38.58%	63.29%	59.61%	5.27%
	Std. Deviation	29.83%	24.80%	30.24%	30.35%	35.23%	19.91%	32.70%	39.68%	40.04%	32.99%	15.04%
	Median	18.28%	1.18%	24.94%	5.86%	35.86%	0.07%	2.24%	21.36%	85.90%	70.11%	0.17%

Sector: 1. Culture and Recreation; 2. Education and Research; 3. Health; 4. Social Services; 5. Environment; 6. Development and Housing; 7. Law, Advocacy and Politics; 8. Philanthropic intermediaries and voluntarism promotion; 9. International; 10. Religion; 11. Business and professional associations, unions.

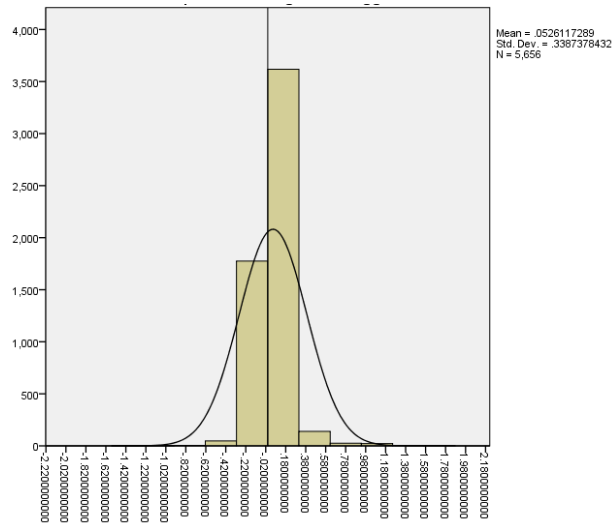
2.6.2 Earnings distribution

This paper first analyses the earnings frequency distribution by plotting histograms of reported earnings (which have been scaled by total assets to eliminate the variance in charity size). To make these comparable to pre-managed earnings, which are calculated by reported earnings minus discretionary accrual, the data for the distribution analysis is conducted for four years from 2009 to 2012. Consistent with the Jones (1991) model of using lagged total assets to determine discretionary accrual, the rate of reported earnings and pre-managed earnings also uses lagged total assets.

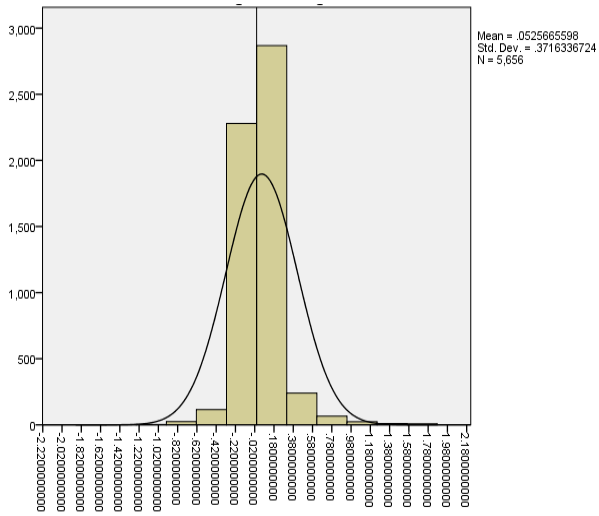
The reported earnings frequency distribution for 1,414 charities from 2009 to 2012 (5,656 observations) before and after applying discretionary accrual is illustrated in Figure 2.2. Overall, the result shows that reported earnings have slight positive mean value at 0.0526 (5.26%) and a mode value of exactly zero (0). In particular, there are more than 3,500 observations reporting small surpluses (around 0.18), while there are slightly fewer than 2,000 observations with very small deficits (approximately -0.22). The results are consistent with Leone and Van Horn (2005) and Jegers (2013) in that large numbers of non-profits with earnings are distributed around zero (the mean of US hospital operating income and Belgian NPO earnings were 2.4% and 2.6% respectively), and more of the earnings are on the positive side than on the negative side.

Figure 2.2: Frequency distribution of reported earnings and pre-managed earnings (2009 to 2012, N = 5656)

Frequency distribution of reported earnings over lagged total assets



Frequency distribution of pre-managed earnings over lagged total assets



An F-test with null hypothesis was performed to test the differences between means and variances for reported earnings and pre-managed earnings. The results show that the means of reported earnings and un-managed earnings are not significantly different (p-value > 0.05), but the variances of those values are different at a significance level of less than 0.05.

A comparison between the frequency distributions of post-managed and pre-managed earnings reveals that the means are not significantly different (at the 5% level).

However, the number of observations with deficits is lower than the number of those with pre-managed figures (approximately 1,800 vs. 2,300), and the number with reported surpluses is more than pre-managed data (around 3,600 vs. 2,800). This may imply that many charities rely on discretionary accruals to manage earnings upward to achieve a slightly positive result. This result supports Hypothesis 1, namely that a significant number of UK charities record earnings around zero.

Small surpluses or deficits may present a good image for charities. First, this could confirm the competence of managers and trustees in operating charities, since on the one hand a small surplus means that charities have sufficient funds for their activities and to achieve their stated objectives, while on the other hand, if the results are slightly negative this suggests that charities have spent their budgeted allocations and may be considered to have met the requirements of sponsors and donors. Second, the surpluses and deficits will be added to (or reduced from) the charity reserves. According to paragraph 55 of SORP 2005 (Charity Commission, 2005), and Charities and Reserves (CC19) (Charity Commission, 2010), charities are required to disclose their reserve policy, as well as consider and explain when they have an excess or a shortfall in reserves. Therefore, this may motivate charities to use the reported figures to manage their reserve levels. A result close to zero net income may thus keep reserves at a stable level, and make it easier for charities to explain their financial situation compared to unusual increases or decreases in reserves.

Third, from the perspective of stakeholders who support charities, there is an expectation that the financial support given to charities will be directed to beneficiaries (Breeze, 2010). Therefore, a charity with a large surplus may prompt questions from donors about its efficiency, as well as its capability to fully achieve its charitable objectives. This may have a negative impact on future resources. Therefore, the managing of surpluses/deficits may be a strategy to avoid uncertainties in future projects.

2.6.3 Earnings management towards zero level

2.6.3.1 Discretionary accrual analysis

As explained previously, discretionary accruals are estimated from model 1. Since each charitable sector has its own features and operates in a particular environment, the extent of earnings management may be different, and discretionary accruals are hence calculated by sector. Table 2.8 provides the descriptive statistics for DA per sector for the period from 2009 to 2012.

Table 2.8: Summary of descriptive statistics for DA for a four-year period (2009 to 2012) by charity sector

Sector	N	Mean	Median	Stand. Dev.	% upwards	% downwards
1	524	0.000000	0.010521	0.1434544	56.5%	43.5%
2	1364	0.000000	0.004817	0.0699357	54.6%	45.4%
3	496	0.000000	0.003205	0.0878224	52.2%	47.8%
4	844	0.000000	0.000562	0.123304	50.5%	49.5%
5	256	0.000000	0.007151	0.1085792	54.7%	45.3%
6	680	0.000000	0.007464	0.0946734	54.7%	45.3%
7	160	0.000000	0.010870	0.2443129	53.1%	46.9%
8	360	0.000000	0.007143	0.1176875	60.0%	40.0%
9	216	0.000000	0.008542	0.1990917	52.3%	47.7%
10	560	0.000000	0.004549	0.051508	54.5%	45.5%
11	196	0.000000	0.006179	0.0832009	57.1%	42.9%
Total	**5656**	**0.000000**	**0.005377**	**0.11044**	**54.3%**	**45.7%**

Group: 1. Culture and Recreation; 2. Education and Research; 3. Health; 4. Social Services; 5. Environment; 6. Development and Housing; 7. Law, Advocacy and Politics; 8. Philanthropic intermediaries and voluntarism promotion; 9. International; 10. Religion; 11. Business and professional associations, unions.

In general, the results show that the mean of DA from all charity sectors is close to zero, but this is caused by the summation of all positive and negative DA figures. However, the median value is slightly positive, suggesting that more charities prefer to manage earnings upwards rather than downwards. This supports the frequency distribution analysis above, as the upwards trend in earnings management is dominant in several charity sectors. Overall, 54% of the observations reveal a trend to manage DA upwards, while about 46% indicate a downwards management of DA.

The second hypothesis argues that charities manage earnings up or down towards zero when pre-managed earnings are negative or positive. In other words, the practice of EM by charity managers influences the deficits and surpluses to reach a break-even position. This hypotheses was tested by a regression model (model 2), which measures the impact of the independent variable (earnings before discretionary accrual or pre-managed earnings) on DA. Before performing the regression procedures, it was necessary to analyse multivariate data and implement the regression diagnostics with regards to normality, linearity, homoscedasticity and multicollinearity issues. The initial analysis of the multivariate data showed that the skewness and kurtosis were extremely high because of outlier values caused by two variables, $EBDA_{it}$ and $EARNINGS_{i,t-1}$ (Earnings before discretionary accrual and Prior year earnings), which are related to variability in the size of charity earnings and assets within the selected sample. This issue was not a significant problem with the other two variables DA_{it} and $DA_{i,t-1}$ (Current year discretionary accrual and Prior year discretionary accrual) as they were winsorized from model 1 (the Jones model). Because of the extreme kurtosis and significant skewness problems, a winsorizing of the two variables ($EBDA_{it}$ and $EARNINGS_{it-1}$) at 5% was performed to resolve these issues (Bettis *et al.*, 2005; Glaser and Weber, 2007; Verbruggen and Christiaens, 2012).

Furthermore, following Godfrey and Orme (1999), this paper uses Breusch-Pagan/Cook-Weisberg's test to reveal the presence of heteroskedasticity. The result indicated an occurrence of heteroskedasticity, and hence an application of robust standard errors (Huber/White estimators) was carried out to avoid the impact of heteroskedasticity on the OLS model (Piperakis, 2011). The summary of descriptive statistics for all independent variables (current year pre-managed earnings, previous year earnings as well as previous discretionary accruals, leverage and two types of income) and the dependent variable (discretionary accrual) for 1414 charities over three years from 2010 to 2012 is presented in Table 2.9.

Table 2.9: Descriptive statistics, 2010 to 2012 (1,414 UK charities) – Model 2

Variable	Description	N	Mean	Std. dev.	Min	Median	Max
DA_{it}	Discretionary accruals in year t	4242	0.000000	0.108505	-0.875694	0.003989	0.477413
$EBDA_{it}$	Earnings before discretionary accruals (scaled by total assets)	4242	0.036929	0.114020	-0.161457	0.019982	0.310464
$EARNINGS_{i,t-1}$	Earnings in year t-1 (scaled by total assets)	4242	0.037679	0.088504	-0.115804	0.024619	0.264029
$DA_{i,t-1}$	Discretionary accruals in year t-1	4242	0.000000	0.112011	-0.875694	0.006449	0.604326
LEV_{it}	Total short-term and long-term creditor in year t (scaled by total assets)	4242	0.292466	0.286316	0	0.219712	4.443969
VOL_INC_{it}	Proportion of voluntary income in year t	4242	0.2614498	0.342187	0	0.051851	1
$CHAR\_INC_{it}$	Proportion of charitable income in year t	4242	0.5841176	0.404393	0	0.7613199	1
$Size_{it}$	Natural logarithm of total assets in year t	4242	16.15339	1.811005	10.58266	16.32477	23.45875

DA_{it} is the residual from the Jones model (equation 1). $EBDA_{it}$ is earnings before discretionary accruals = $Earnings_{it}$/$Total\ assets_{i,,t-1}$ – Discretionary accruals. $EARNINGS_{i,,t-1}$ is earnings in year t-1 scaled by lagged total assets. $DA_{i,,t-1}$ is discretionary accruals in year t-1. LEV_{it} is total short-term and long-term creditor in year t scaled by total assets in year t-1. $CHAR\_INC_{it}$ is a proportion of charitable income over total income in year t. VOL_INC_{it} is a proportion of voluntary income over total income in year t. $Size_{it}$ is the natural logarithm of the total assets of charity i in year t. The data for model 2 is limited to 4242 observations (1414 charities across 3 years) as DA_{it} is available for 2010 to 2012 and $DA_{i,t-1}$ is available for 2009 to 2011 (lagged assets).

The summary information shows that the charities' financial results before DA varied from a -16% deficit to a 31% surplus. Discretionary accruals also vary widely from -0.876 to +0.477. This suggests that a number of charities engage in EM upwards or downwards in order to achieve their intentional targets. However, in order to determine the specific behaviour of charities' managers in relation to EM, an OLS regression is implemented. Before the regression was conducted, a Pearson correlation matrix was applied to identify multicollinearity issues (Chen and Zhang, 2014). As shown in Table 2.10, except for the correlation between the voluntary income (VOL_INC) and charitable income (CHAR_INC), the other independent variables show a modest correlation. The correlation between voluntary income (VOL_INC) and charitable income (CHAR_INC) is quite high (-0.798), because they represent the two main components of charity income. To ensure that multicollinearity will not impact on the multivariate analysis, an additional test using variance inflation factors (VIF) was conducted to assess whether multicollinearity was a matter of concern (Vu, 2008; Chen and Zhang, 2014). The result of the VIF test indicated that multicollinearity was not a problem since the maximum value of VIF was 2.97 (Kennedy, 2003; Reheul *et al.*, 2013).

Table 2.10: Pearson Correlation (2010 to 2012, N= 4242)

Pearson	**DA_{it}**	**$EBDA_{it}$**	**$EARNING_{i,t-1}$**	**$DA_{i,t-1}$**	**LEV_{it}**	**VOL_INC_{it}**	**$CHAR\_INC_{it}$**	**$Size_{it}$**
DA_{it}	1							
$EBDA_{it}$	-0.549***	1						
$EARNINGS_{i,t-1}$	-0.015	0.199***	1					
$DA_{i,t-1}$	-0.181***	0.103***	0.130***	1				
$LEVERAGE_{it}$	-0.119***	0.023	-0.074***	-0.089***	1			
VOL_INC_{it}	0.02	0.01	-0.003	0.018	-0.196***	1		
$CHAR\_INC_{it}$	-0.029	0.036**	0.04***	-0.009	0.272***	-0.798***	1	
$Size_{it}$	0.008	-0.057***	-0.067***	-0.009	-0.063***	-0.013	-0.100***	1
VIF (Max)	2.97	2.96	2.97	2.97	2.86	1.52	1.52	2.89

***,**: Correlation is significant at the 1% * 5% level (2-tailed).

DA_{it} is the residual from the Jones model (equation 1). $EBDA_{it}$ is earnings before discretionary accruals. $EARNINGS_{i,t-1}$ is earnings in year t-1 scaled by lagged total assets. $DA_{i,t-1}$ is discretionary accruals in year t-1. LEV_{it} is total short-term and long-term creditor in year t scaled by total assets in year t-1. $CHAR\_INC_{it}$ is proportion of charitable income over total income in year t. VOL_INC_{it} is proportion of voluntary income over total income in year t. $Size_{it}$ is the natural logarithm of total assets of charity i in year t.

In addition, an omitted variable test was also performed to determine whether there was any excluded variable which might have impacted on the accuracy of the regression model. Ramsey's regression specification error test was used to implement this test (Vu, 2008), and the result indicated that the model likely has omitted variables which may have an impact on the accuracy of the regression result. Consequently, this paper used panel data regression with fixed effect to eliminate the impact of omitted variables (Hsiao, 2006). In order to support for the choice of fixed effect, the Hausman test (Hausman, 1978) has been performed and the result suggested that fixed effect model is more suitable than random effect one (as Chi-2 is less than 5%), which has been applied by a prior study (Jiambalvo *et al.*, 2002).

2.6.3.2 Discretionary accruals and pre-managed earnings

The results of the regression analysis for the 4242 observations are shown in Table 2.11. However, to identify the particular relationship between pre-managed earnings and discretionary accruals, the regression was additionally performed for the two categories of negative and positive pre-managed earnings. The division of two pre-managed earnings groups (positive and negative) can specifically reveal the reaction of charities depending on the financial results (Verbruggen and Christiaens, 2012).

Table 2.11: Regression results on entire sample (2010 to 2012)

Regression DA		**All EBDA**		**Positive EBDA**		**Negative EBDA**	
Variables	Exp.n	Coef.	T-value	Coef.	T-value	Coef.	T-value
INTERCEPT		1.01	3.24	1.28	8.55	-0.03	-0.12
$EBDA_{it}$	-	-0.64	-23.63***	-0.58	-20.76***	-0.89	-12.96***
$EARNINGS_{i,t-1}$		-0.16	-5.33***	-0.11	-3.71***	-0.06	-1.59
$DA_{i,t-1}$		-0.24	-11.87***	-0.22	-11.49***	-0.15	-7.15***
LEV_{it}	-	-0.25	-4.42***	-0.17	-9.93***	-0.37	-10.22***
VOL_INC_{it}	-	0.07	2.25***	0.06	2.36**	0.08	1.98**
$CHAR\_INC_{it}$	-	0.003	0.17	-0.01	-0.68	0.024	0.86
Size		-0.06	-3.03***	-0.07	-7.05***	0.006	0.36
N		4242		2551		1691	
R square		0.1312		0.0249		0.0215	
F-value		139.46		115.74		46.06	
VIF maximum		2.97		2.76		2.73	

***, **,*: Significance at 1%, 5% and 10% level.

DA_{it} is discretionary accruals in year t. $EBDA_{it}$ is earnings before discretionary accruals. $EARNINGS_{i,t-1}$ is earnings in year t-1 scaled by lagged total assets. $DA_{i,t-1}$ is discretionary accruals in year t-1. LEV_{it} is total short-term and long-term creditor in year t scaled by total assets in year t-1. $CHAR\_INC_{it}$ is proportion of charitable income over total income in year t. VOL_INC_{it} is proportion of voluntary income over total income in year t. $Size_{it}$ is the natural logarithm of total assets of charity i in year t.

The relationship between DA and earnings before discretionary accruals was negative for the whole sample, and also for the case of negative and positive pre-managed earnings. In accordance with previous findings and conclusions about the negative relationship between DA and earnings before DA (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012), charities appear to pay close attention to the disclosure of the financial bottom line. If there is a high likelihood that the financial statements will report surpluses (deficits), charities appear to adjust discretionary accruals downwards (upwards) to ensure a result that is equal or close to zero. These results support the zero hypothesis (H2) that charities manage earnings upwards when pre-managed earnings are negative and downwards when pre-managed earnings are positive. The coefficient for this relationship is higher when pre-managed earnings are negative in comparison with positive pre-managed earnings (-0.89 vs. -0.58), implying that in years with deficit results charities are a little more aggressive in applying accruals to manage earnings upwards than in years with positive results.

The results of this paper are consistent with Leone and Van Horn (2005)'s results from 8,179 observations in US hospitals, which suggested that earnings before discretionary accrual are in a negative relation with discretionary accruals, leading the reported earnings (the sum of earnings before discretionary accrual and discretionary accruals) to be closed to zero. This means that discretionary accruals were applied to adjust earnings towards zero depending on the positive or negative pre-managed earnings. This paper's results are also compatible with Verbruggen and Christiaens (2012) in the context of Belgian non-profit organizations. These authors also found that Belgian NPOs exercised discretionary accruals to drive the bottom line item (earnings) in favour of zero reporting. The coefficients of EBDA (earnings before discretionary accruals) are negatively related to discretionary accruals in the case of both negative and positive EBDA, and this value is higher in the case of negative EBDA. The previous papers found that non-profit organizations are engaged in EM by managing earnings toward zero, and this finding can now be extended to the UK context. This indicates a systemic managerial concern with the bottom-line result and the underlying message and image it

might convey to external stakeholders, particularly sponsors, donors, beneficiaries and regulators. This results demonstrate the relevance of instrumental stakeholder theory since charities may intentionally behave in a specific manner (managing the bottom-line items) in order to satisfy particular stakeholders, such as sponsors, donors and regulators. Also, this practice can be explained by motivations to retain resources for operation and evade intervention from regulatory bodies. A more detailed analysis is presented in relation to the different sectors in a subsequent section.

In comparison to prior studies, the results from this study appear to be consistent with prior findings indicating that NPOs might re-allocate expenditure (Khumawala *et al.*, 2005; Jones and Roberts, 2006; Krishnan *et al.*, 2006; Keating *et al.*, 2008), manage specific expenditure items (for example, actuarial assumption and depreciation) (Vermeer *et al.*, 2006; Pellicer *et al.*, 2014), manage discretionary accruals (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012) or even smooth their income (Boterenbrood, 2014).

Moreover, previous year earnings and past discretionary accruals also have an effect on discretionary accruals in the current year. The results are consistent with previous papers (Leone and Van Horn, 2005; Verbruggen and Christiaens, 2012), but this is not the key consideration of this paper.

2.6.3.3 Leverage and DA

The statistical analysis suggests that leverage has a negative relationship with discretionary accruals. The results are homogeneous for both positive and negative unmanaged earnings. This implies that charities with an increasing level of leverage consider managing earnings downwards in cases of operational surpluses, and when unmanaged earnings are negative charities would seek to manage deficits upwards. The reaction of charities in the presence of leverage not only support Hypothesis 3, but also lends credence to the second hypothesis in that ensuring zero level earnings is the preferred intention of charities. Hence, charities again show a trend of managing earnings toward zero, but one that is more robust in the presence of higher financial obligations. In this respect, Hypothesis 3 is supported.

In order to test the relationship between leverage and earnings management, another analysis was conducted using absolute value of discretionary accruals as the dependent

variable (Davidson *et al.*, 2005; Baxter and Cotter, 2009; Chen and Zhang, 2014). The detailed results are presented in Appendix A.2, which shows a significantly positive association between absolute value of discretionary accruals and leverage. This indicates that the more leverage a charity has, the more it uses discretionary accruals to manage financial performance to a favourable level (probably zero earnings).

This finding clarifies the unanswered question in prior studies concerning the relationship between leverage and EM (Verbruggen and Christiaens, 2012; Jegers, 2013), and supports the finding by Vermeer *et al.* (2014) that managers of NPOs with higher leverage have incentives to manage income upward.

On the one hand, the negative association between leverage and earnings management may be explained by the fact that large surpluses signal to creditors that charities do not need to use debts or creditors for their operation. In particular, charities may have several preferential debt servicing or credit arrangements, and excessive surpluses may signal to creditors and bankers that charities do not need preferential treatment. On the other hand, if a charity reports a large deficit, this will raise questions as to the ability of managers and trustees to ensure the charity is a going concern. Therefore, the trend of managing earnings toward zero is safer for charities as it seeks to avoid the impact of reported large surpluses or deficits (Leone and Van Horn, 2005). The findings thus once more suggest that the trend of managing earnings towards zero is a favourable tactic for UK charities in response to the demands of external stakeholders, and to manage perceptions of uncertainty about the organization among its resource providers.

2.6.3.4 Significance of different sources of income and DA

The results in Table 2.11 only find support for a positive association between a reliance on voluntary income and DA, and this finding applies to both negative and positive unmanaged earnings. It can be argued that a reliance on voluntary income signals a dependence on numerous, and potentially fickle, sources of income, and the providers of such income may be prone to review donation decisions in the presence of accounting information which signals either a positive situation (e.g. a large surplus) or bad news (e.g. a large deficit). Arguably, a similar reaction can be expected of the providers of charitable income, but charities may be more able to manage such stakeholders even in the presence of large surpluses or deficits. Admittedly, it is

difficult to draw stronger conclusions for the whole sample since there are numerous sources of voluntary and charitable income, with different stakeholders and resource providers, thereby implying different accountabilities, relationships and arrangements. For instance, Verbruggen and Christiaens (2012) specifically consider the effects of government subsidies in their research, and further studies should therefore break down voluntary and charitable income sources in more identifiable providers. Therefore, the results do not support Hypothesis 4.

2.6.3.5 Impact of size on earnings management

The impact of charities' size on earnings management behaviour was also reviewed to see whether larger charities are more involved in EM, as suggested by Jegers (2013). The results from Table 2.11 indicate that size is negatively and significantly associated with discretionary accruals, and this relationship is similar to the specific case of pre-managed surpluses, but not for charities reporting pre-managed deficits. In order to confirm this relationship, an alternative test of the absolute value of discretionary accruals was conducted as suggested by prior studies (Davidson *et al.*, 2005; Baxter and Cotter, 2009; Chen and Zhang, 2014). The results in Appendix A.2 show a negative association between size and absolute value of discretionary accruals. This result suggests that larger charities are less likely to be involved in earnings management.

Larger charities usually have a considerable number of stakeholders including donors, funders, creditors and beneficiaries, and they have a broad expectation that charitable organizations exist to help needy people and to undertake valuable work (Breeze, 2010). Larger charities have the advantage of operating with a good reputation and firm loyalty from donors and beneficiaries, and the retention of this prestige is important. Large charities are also able to recruit more qualified executives and employees and build up an effective internal control system. They may also work under the strict supervision of different stakeholders. This may help larger organizations to reduce the opportunities for managers to exercise EM.

2.6.3.6 Charity sectors and DA

In order to identify the impact of sectoral factors on regression results, a regression using dummy variables representing eleven sectors is implemented. The results displayed at table 2.12 suggest that in consideration the influences of sectoral factors,

the relationship between dependent variable (discretionary accruals) and several independent variables is consistent with results proposed at table 2.11 and sectoral factor might have different impacts on this relationship.

Table 2.12: Regression results on entire sample in consideration of sectoral impact

Variables	**Coef.**	**t**	**P>t**
$EBDA_{it}$	-0.5289	-43.45	0.000
$EARNINGS_{i,t-1}$	0.1223	7.71	0.000
$DA_{i,t-1}$	-0.1443	-11.79	0.000
LEV_{it}	-0.0501	-9.69	0.000
VOL_INC_{it}	0.0177	2.54	0.0110
$CHAR\_INC_{it}$	0.0088	1.44	0.1500
Size	-0.0012	-1.49	0.1360
dm1	0.0049	0.57	0.5670
dm2	0.0052	0.66	0.5080
dm3	-0.0060	-0.69	0.4910
dm4	-0.0010	-0.12	0.9050
dm5	-0.0057	-0.58	0.5610
dm6	0.0083	0.99	0.3210
dm7	-0.0004	-0.04	0.9720
dm8	-0.0109	-1.18	0.2360
dm9	-0.0017	-0.17	0.8670
dm10	-0.0151	-1.70	0.0880
_cons	0.0395	2.42	0.0150
N	4242		
F(17, 4224)	131.51		
Prob > F	0		
R-squared	0.3461		
Adj R-squared	0.3435		

Furthermore, to determine how charities behave differently in each sector, a regression analysis on a per sector basis was implemented to identify indications of different EM behaviour on a sectoral basis, and the results are reported in Table 2.13 below.

Table 2.13: Regression results by sector (2010 to 2012)

Group	1	2	3	4	5	6	7	8	9	10	11
$EBDA_{it}$	-0.68***	-0.43***	-0.58***	-0.64***	-0.73***	-0.64***	-1.13***	-0.62***	-0.89***	-0.30***	-0.71***
$EARNINGS_{i,t-1}$	-0.23***	-0.15***	-0.11**	-0.03	-0.07	-0.10	-0.15	-0.18**	-0.34**	-0.02	-0.29***
$DA_{i,t-1}$	-0.19***	-0.23***	-0.24***	-0.26***	-0.17***	-0.15***	-0.24***	-0.29***	-0.30***	-0.29***	-0.22***
LEV_{it}	-0.41***	-0.22***	-0.65***	-0.44***	-0.80***	-0.07***	-0.53***	-0.39***	-0.50***	-0.19***	-0.15***
VOL_INC_{it}	0.05	0.03	0.18**	0.03	0.19	0.12**	0.15	0.07	0.13	0.06**	0.00
$CHAR\_INC_{it}$	-0.06	-0.01	0.04	-0.09	0.08	0.00	0.17	0.10	0.02	0.01	-0.01
Size	-0.05	-0.02	-0.14***	-0.08***	-0.21***	-0.02	-0.02	0.02	-0.23***	-0.02	-0.02
INTERCEPT	0.96	0.46	2.25	1.42	3.56	0.43	0.31	-0.34	3.91	0.32	0.45
N	393	1023	372	633	192	510	120	270	162	420	147
R-square	0.244	0.17	0.04	0.1023	0.0196	0.244	0.616	0.149	0.11	0.34	0.337

***, **, *: Significance at 1%, 5% and 10% level

DA_{it} is the current year's discretionary accrual. $EBDA_{it}$ is earnings before discretionary accruals. $EARNINGS_{i,t-1}$ is earnings in year t-1 scaled by lagged total assets. $DA_{i,t-1}$ is discretionary accruals in year t-1. LEV_{it} is total short-term and long-term creditor in year t scaled by total assets in year t-1. $CHAR\_INC_{it}$ is the proportion of charitable income over total income in year t. VOL_INC_{it} is proportion of voluntary income over total income in year t. $Size_{it}$ is the natural logarithm of total assets of charity i in year t.

Charity sectors: 1. Culture and Recreation; 2. Education and Research; 3. Health; 4. Social Services; 5. Environment; 6. Development and Housing; 7. Law, Advocacy and Politics; 8. Philanthropic intermediaries and voluntarism promotion; 9. International; 10. Religion; 11. Business and professional associations, unions.

The results reveal that earnings before discretionary accruals are negatively associated with discretionary accrual for different sectors. These results are robust for Hypotheses 1 and 2 in that charities prefer to report earnings around zero, and discretionary accruals have been applied in order to manage earnings to this favourable level. However, the coefficients which reflect the magnitude of the relationship between DA and EBDA vary across sectors. While group 10. Religion and group 2. Education have lower coefficients, other groups show much larger factors, especially group 7. Law, Advocacy and Politics which showed a significant coefficient (-1.13). The relationship between DA and EBDA impacted by sectors has been robustly demonstrated by running a regression of model 2 with eleven dummy variables representing eleven sectors and their interaction with EBDA. The statistical coefficients are relatively similar to the results above.

In addition, leverage has a negative association with earnings management for all groups of charities; the result is consistent with the findings above.[24] However, the impact of leverage on earnings management is different among these groups. The regression suggests that Health, Environment and International are three groups with higher coefficients, and this implies that leverage is one of the main factors influencing EM behaviour for these sectors. The results indicate that the motivations for charity managers to engage in EM are different among these groups, e.g. although Development and Housing has the highest leverage (around 50%), the coefficient is the smallest in comparison with the others. The small coefficient indicates that the effect of leverage on earnings management practice seems not to be so significant in this charity sector (Development and Housing).

As mentioned previously, there is inconclusive evidence as to the association between a reliance on specific sources of income and DA. Again, the regressions on a per sector basis do not highlight such an association, except for the case of voluntary income in the Health, Development and housing and Religion sectors, where a positive association with discretionary accruals was reported. While this result is not entirely supportive of the hypotheses, there is sufficient evidence to argue for a more detailed study of the

[24] Another test using absolute value of DA as the dependent variable was conducted by sector. Except for groups 7 and 11, the results showed a significantly positive association between leverage and absolute value of DA among the other groups (Appendix A.3).

association between types of donors, sponsors and other income sources (by accessing more detailed data from charity annual reports).

Finally, the effect of charity size is not consistent in all sectors. The results indicate that four out of the eleven groups show a negative association between charity size and discretionary accruals (Health, Social services, Environment and International), while these relationships are not significant for the other seven sectors.[25] One likely reason is that the larger charities in these highlighted sectors may attract more public attention from stakeholders and/or may be more concerned about resource providers, and as a result they are less likely to engage in earnings management.

2.6.4 Sensitivity analysis and robustness tests

In order to ensure the validity of the empirical results determined from the various regression models, this paper conducted several sensitivity analyses and robustness tests, which included applying the two-stage least square (2SLS) method to minimise the impact of endogeneity, changing the independent variables measuring the source of income, and implementing an additional test of specific accrual (depreciation) rather than relying on overall discretionary accruals.

In order to implement the 2SLS method, this paper suggests that an explanatory variable (Earnings before discretionary accruals – EBDA) may be considered as a potential endogenous variable which may be influenced by other factors such as growth in the total income of charities (the change of total income from this year compared to last year, divided by last year's total income). The growth in total income is hence considered as an instrumental variable. The results of running a 2SLS regression (detailed results shown in Table 2.14) show that earnings before discretionary accruals (EBDA) and leverage (LEV) are negatively associated with discretionary accruals (DA), while the relationship of the other three variables (Voluntary income, Charitable income and Size) with DA cannot be confirmed. These results are robust for the second and third hypotheses, namely that charities manage earnings towards zero and leverage is associated with earnings management.

[25] Similar to leverage, another test using absolute value of DA as a dependent variable was conducted by sector. Except for group 3, the results showed a significantly negative association between size and absolute value of DA of all other groups (Appendix A.3).

Table 2.14: Sensitivity analysis 1 and 2

Variables	Description	2SLS	Vol > 50%	Char >50%
		Coef.	Coef.	Coef.
Dependent variable				
DA_{it}	Discretionary accruals			
Independent variables				
$EBDA_{it}$	Earnings before discretionary accruals	-0.238***	-0.580***	-0.721***
$EARNINGS_{i,t-1}$	Earnings in year t-1	0.056**	-0.103**	-0.149***
$DA_{i,t-1}$	Discretionary accruals in year t-1	-0.167***	-0.312***	-0.203***
LEV_{it}	Leverage	-0.049***	-0.412***	-0.153***
VOL_INC_{it}	Proportion of voluntary income	0.007	0.000	-0.037
$CHAR\_INC_{it}$	Proportion of charitable income	0.008	-0.113	-0.297***
Size	Natural log of total assets of charity i in year t.	-0.001	-0.089***	-0.056***
Intercept		0.024	1.567	1.256

***, **, *: Significance at 1%, 5% and 10% level

Because the results do not support Hypothesis 4 the paper extends the analysis, in line with the stakeholder and RDT perspectives, by arguing that the proportion of voluntary or charitable income may not be related to DA on a linear basis, and instead that DA behaviour may develop after a given level of dependence and salience associated with the resource provider and stakeholder. This study therefore assumed that a threshold of 50% of total income would reflect a sufficiently high reliance to justify a higher incidence of DA. The regression analysis indicates a negative association between a heavy reliance on charitable or voluntary income and DA, but the association is only significant for the case of charitable income. In other words, organizations whose income is principally derived from the supply of goods and services manage their reported bottom line downwards to reduce the level of stakeholder attention. The reason for this behaviour can be seen in the context of the recent economic downturn, with the global financial crisis and the impact of reducing public spending policies from central government. Therefore, goods and services provided by charities can provide an important source of income to weather funding uncertainties. At the same time, the results from these activities may draw the attention of other stakeholders. Therefore, akin to the case where US companies seek to manage earnings downwards during import relief investigations (Jones, 1991), charities that rely heavily on charitable income appear to downplay their financial results.

In addition, it was suggested by Leone and Van Horn (2005) that there may be a mechanical correlation between DA and EBDA from model 2. This study therefore proposes a new proxy for EBDA (namely NEW_EBDA_{it}) which is equal to 1 if earnings before the discretionary accrual of charity i in period t scaled by Total Assets in period t-1 is greater than zero, and zero otherwise. The results (Table 2.15) also show a negative association between discretionary accruals and NEW_EBDA, as well as a negative relationship between leverage and discretionary accruals. While significance in different income sources shows the same results as the main test, size is not significantly related to EM. These results once again show robust support for the second and third hypotheses.

Table 2.15: Sensitivity analysis 3

Variables	Description	Coefficients
NEW_EBDA_{it}	New earnings before discretionary accruals equal 1 if EBDA >0, and 0 otherwise	-0.156***
$EARNINGS_{i,t-1}$	Earnings in year t-1	0.0213**
$DA_{i,t-1}$	Discretionary accruals in year t-1	-0.3359***
LEV_{it}	Leverage	-0.3675***
VOL_INC_{it}	Proportion of voluntary income	0.0849*
$CHAR\_INC_{it}$	Proportion of charitable income	-0.0371
Size	Natural log of total assets of charity i in year t.	0.0088
Intercept		0.20041***

***, **, *: Significance at 1%, 5% and 10% level

Lastly, this study considers the specific case of 'abnormal depreciation' as a specific accrual to examine whether charities use depreciation as a tool for earnings management. A reading of the relevant provisions of the SORP (2005) suggests that charities have some element of flexibility in deciding upon the useful life of assets as well as their residual value. This may consequently impact on the depreciation figure reported in the accounts, and in turn on the reported surplus/deficit. Marquardt and Wiedman (2004) argued that firms use depreciation expense to exercise discretion in order to reach their earnings objectives. More specifically, a recent working paper by Pellicer *et al.* (2014) in UK public sector bodies reports that depreciation is the main

method by which local government entities manage accounting numbers. These findings may be considered in the context of UK charities since depreciation is a part of total resources expended. Abnormal depreciation is determined based on the assumption that the proportion of depreciation over gross property, plant and equipment is constant. In consequence, the over- or under-depreciated amount represents an abnormal depreciation. This figure is used to test the relationship between unexpected depreciation and earnings before unexpected depreciation; similar to discretionary accrual, the charities may over- or under-record depreciation for the purpose of managing earnings downward or upward.

The results (detailed statistics shown in Table 2.16) are consistent with and provide support for the main results from model 2. Depreciation appears to be one of the accounting tools charities use to adjust outgoing resources.

Table 2.16: Sensitivity analysis 4

Variables	Description	EBAbDEP	Positive EBAbDEP	Negative EBAbDEP
Dependent variable				
$AbDEP_{it}$	Abnormal depreciation year t			
Independent variables				
$EBAbDEP_{it}$	Earnings before abnormal depreciation year t	0.014**	-0.005	0.202***
$AbDEP_{it-1}$	Abnormal depreciation year t-1	0.015	-0.181***	-0.105**
$EARNINGS_{it-1}$	Reported Earnings year t-1	-0.252***	0.004	0.048
Intercept		-0.005	-0.000	0.006
R-square		1.42%	1.03%	17.58%
N	Number of charity-year	4242	2878	1364

***, **, *: Significance at 1%, 5% and 10% level

2.7 Discussion and conclusion

This paper sought to investigate whether UK charities engage in earnings management practices, and if so, what are the key organizational determinants influencing the extent of EM practices. By relying on stakeholder theory and resource dependence theory, mainstream measures of earnings management (distribution of reported earnings, discretionary accruals) and a relatively large data set from 1,414 charities over a five-year period, this study finds clear evidence that the reported bottom lines of UK charities are: (i) distributed around the zero level, but with a trend to display positive (surplus) rather than negative (deficit) results; and (ii) subject to discretionary accrual tactics of an upwards or downwards nature in order to manage earnings towards a zero level. Furthermore, the extent of DA is found to fluctuate on the basis of leverage, size, charity dependence on income sources (charitable vs. voluntary income) and type of activity (sector). This is the first UK study which considers a relatively large and diversified sample of charities and as such provides evidence of systemic behaviour in the reporting of the accounting bottom line.

The findings are consistent with prior research claiming that non-profit organizations have incentives to manage accounting figures by different techniques such as misclassifying functional expenditures to improve programme ratio and/or lower fundraising costs and lessen administrative expenses (Yetman, 2001; Jones and Roberts, 2006; Krishnan *et al.*, 2006; Keating *et al.*, 2008; Tinkelman, 2009; Yetman and Yetman, 2012), using discretionary accruals to manage earnings towards the zero level (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). This paper finds that reporting small positive earnings (surplus) is a preferable result for a number of UK charities. When the results show a significant surplus or considerable deficits, discretionary accrual may be applied in order to direct earnings toward zero. This level is not a statutory benchmark, but it provides a way for charity trustees to balance resources and expenditure as well as demonstrate efficiency in their operations. Moreover, this study suggests that leverage has an association with discretionary accruals. This finding thus posits that charities with a large amount of debt and credit obligations seem to be more likely involved in EM. This is a significant result in that previous NPO studies did not find support for the effect of leverage on EM

behaviour. These findings were found to be robust by testing for abnormal depreciation as a specific accrual, considering the use of alternative independent variables and relying on the two-stage least square (2SLS) method.

In spite of their economic importance and valuable findings from an emerging literature, little is known about the financial reporting practices of non-profit organizations in the UK. This study attributes this to the absence of a comprehensive financial database for UK charities. As a result, the findings and analysis of this study have important implications. First, ST and RDT provide a very useful theoretical framework to understand the motivations behind earnings management in NPOs in a non-profit context and to analyse the results thereof. In particular, the combination of an instrumental perspective on ST and RDT can substitute for agency theory in explaining the particular behaviour of non-profit executives. For example, the preferable reporting 'benchmark' of zero earnings in UK charities might be motivated by consideration of key stakeholders and future resource uncertainties.

Second, while the UK context can be characterised as one where the regulatory framework of accounting for charities is highly developed (indeed, it has inspired reforms in other countries), the evidence reveals that the inherent pitfall of accrual accounting (discretionary behaviour by organizations) is very noticeable and has not been well documented so far in the literature. This finding will be of interest to several stakeholders, including government, regulators, donors and beneficiaries, in relation to the reliability of the reported financial information presented by charities. For example, the Charity Commission may strengthen its monitoring activities and take into account the extent of discretionary accrual practices adopted by charities when carrying out its regime of risk-based inspections. Lastly, this research enriches the burgeoning literature on the practice of earnings management by NPOs.

However, there are some limitations in terms of the data relied upon in this paper. There is insufficient information on the specific providers of income, which, if provided, would have allowed for a more rigorous analysis of the impact of different stakeholders and resource providers on EM behaviour. Also, the empirical results from this study would be more informative if cash flow data could be collected, thereby enabling the use of other DA metrics and models such as the Modified Jones model, the Dechow and Dichev approach or the Francis model. Nonetheless, the results provide sufficient

evidence to spur the debate on the reliability of SORP-based accounting information in the UK charitable context.

Chapter 3: Governance and Earnings Management in the Non-profit Sector: Evidence from UK Charities

3.1 Abstract

This paper investigates the features and role of governance mechanisms on the level of financial accountability in the context of UK charities. Informed by the stakeholder and resource dependence perspectives, this study assesses whether UK trustees are able to mitigate earnings management practices by examining the influence of governance mechanisms on earnings management, measured in this case by the proxy of discretionary accruals. Based on a hand-collected sample of 250 top charities, the study first shows that trustee board diversity, specifically with respect to gender, business orientation, experience and educational background are extensive, while a majority of organizations have audit committees and internal audit functions. Second, gender, ethnicity, educational background and the presence of financial experts on the audit committee have a positive impact on financial accountability by restricting/lowering earnings management. The results assert the role of specific stakeholder-driven (trustee diversity) and resource dependence-led (expertise of audit committee) characteristics of trustee boards in ensuring that charities reliably fulfil their financial accountability to various stakeholders. The findings contribute to the scant knowledge on the composition of UK trustee boards and their role in the charity accountability process, and have significant implications for various stakeholders such as (i) donors and funders in terms of how they assess the governance 'risk' of their funding/grant decisions, and (ii) charity policy-makers in terms of the development of relevant guidance for the sector.

Keywords: Charity accountability; earnings management; trustee boards; charity governance

3.2 Introduction

Over the last decade there has been a relatively small but growing level of interest in the role of charity governing boards and their constituent members (trustees), and the extent to which (if at all) they contribute to organizational strategy, performance, decision making and accountability (Jobome, 2006a; Andrés-Alonso *et al.*, 2010; Yetman and Yetman, 2012; Wellens and Jegers, 2014; Newton, 2015; Perego and Verbeeten, 2015). In the UK in 2005, a network of policy, professional and regulatory bodies[26] developed a Good Governance Code for the voluntary and community sector (revised in 2010) which sets out six key principles for an effective board of trustees. While highlighting that a board of trustees' effectiveness is associated with an understanding of their role, ensuring the delivery of organizational purposes, working effectively as a team, exercising effective control, behaving with integrity and being open and accountable (Code Steering Group, 2010), the code does allow for considerable leeway in terms of how these principles can be implemented, with some legitimate regard to the diverse nature, size and activities of UK charities and the multiple parties they have to be accountable to. However, at the same time the typically unpaid status of trustees, the prominence of subjectively-defined goals and outcomes and the (quasi) absence of an 'ultimate owner' (Newton, 2015) generates uncertainty, complexity and – potentially – an 'expectations gap' in terms of how a board of trustees is actually constituted, operated and delivers good governance and leadership (if at all) – and if so, should trustee boards be more stakeholder- or resource-dependence driven? However, as revealed in a recent review of non-profit organization (NPO) governance studies (Wellens and Jegers, 2014; Newton, 2015; Perego and Verbeeten, 2015), there is a dearth of research on the composition, related features and effectiveness of trustee boards. The evidence is particularly lacking in the UK, a context where the largest 2,015 charities generate a combined income of £46.8 billion, accounting for about 70% of the total income received by the charitable sector (Charity Commission, 2013), and where there is an explicit expectation that trustee boards have to ensure sufficient diversity skills, representativeness and experience. The first research question is, therefore:

[26] The Association of Chief Executives of Voluntary Organizations (ACVO), the Charity Trustee Networks, the Institute of Chartered Secretaries and Administrators, and the National Council for Voluntary Organizations (NCVO), supported by the Charity Commission of England and Wales.

Following the development of the 2010 Good Governance Code, what have been the key characteristics of trustee boards in large UK charities?

According to the Charity Commission, transparency and accountability in the charity context are interpreted as 'providing relevant and reliable information to stakeholders in a way that is free from bias, comparable, understandable and focused on stakeholders' legitimate needs' (Charity Commission, 2004, p. 1). While there are various dimensions and proxies used to measure the accountability of non-profit organizations, this study pays specific attention to the reliability and quality of reported financial information for the following two reasons. First, in the UK context there have been numerous reforms contained within the Statement of Recommended Practice (SORP) project to improve the quality of charity accounting, since it was argued (e.g. Hyndman and McDonnell, 2009; Connolly and Hyndman, 2013a) that poor accounting and financial reporting practices threatened public confidence and trust in the charitable sector. While there have been significant attempts to improve the implementation of charity accounting and financial reporting practices in the UK and abroad (including the use of accrual accounting), a recent review of the non-profit accounting literature (Hofmann and McSwain, 2013) suggests that different forms of accounting manipulations (generically known as 'financial disclosure management') exist in the non-profit sector. Despite this, there has been very little empirical research in the UK context, with the exception of a few studies in the health sector (e.g. (Ballantine *et al.*, 2008a) and a study of 100 large UK charities with data from their 2002 annual reports (Jobome, 2006b), before the Good Governance Code was published in 2005. More recently, evidence has emerged as to the opportunistic use of accountability narratives by large UK charities in their annual reports (Dhanani and Connolly, 2012) and of attempts to present their financial bottom line in a favourable light (see Chapter 2). Since some of the key principles of the Good Governance Code require boards to monitor compliance, exercise control over financial matters, and ensure that the annual reports and accounts present a balanced and accurate assessment of the organization's performance, this paper raises a second research question:

What, if any, is the influence of governance practice on financial accountability and, in particular, on earnings management?

Much of the work examining the role of boards originates from corporate governance reforms and developments in the for-profit sector. These reforms arose from questions about the effectiveness of boards and non-executive directors in contributing to organizational performance (Kang *et al.*, 2007; Mahadeo *et al.*, 2012; Ntim, 2015) and/or ensuring the quality of accounting information and disclosure (Klein, 2002; Davidson *et al.*, 2005; Chen and Zhang, 2014). To a large extent, these studies are informed by agency shareholder-led or equity market perspectives, where the focus of governance reforms and efforts are inherently aimed at preserving ownership rights, thereby enhancing shareholder value and investor returns. However, there are broader and more complex relationships at play between a charity, its executives, trustees (board members) and a diverse set of constituencies, such as government, beneficiaries, private donors, and volunteers (referred to as multiple principals by Wellens and Jegers (2014). Many of these stakeholders provide financial and non-financial support to a charity in the expectation that the organization will deliver social outcomes and benefits to a range of beneficiaries, while also expecting that charity governance mechanisms will ensure the integrity, and sustainability, of the organization. In this respect, it is argued that charity accounting and reporting practices play an important part in that the communication of accounting information involves two accountability roles: a *symbolic* one aimed at projecting a general image of professionalism and good management to a varied audience of stakeholders, and a *performance* one targeted at specific providers of resources, aimed at securing support and mitigating uncertainty in future access to resources. Informed by the stakeholder and resource-dependence perspectives, this study contends that trustee boards, by virtue of their independence (non-executives) and their own relationships with outside audiences (Hillman and Dalziel, 2003), are seen to mediate this communication process, but the extent to which boards actually play such a role is unclear. Evidence from the US (Newton, 2015) and Spain (Andrés-Alonso *et al.*, 2009, 2010) highlighted the effects of governance on executive pay and organizational performance, and Yetman and Yetman (2012) also found that governance mechanisms improved the accuracy of reporting by US non-profits. However, as highlighted in recent assessments of the literature (Hofmann and McSwain, 2013; Wellens and Jegers, 2014; Newton, 2015), very little is known about the role of charity governance in accounting and accountability. By implication, this limits understanding of which board

characteristics matter, and thereby precludes the development of more informed sectoral guidance on non-profit governance. This is a key motivation for this study.

Consequently, the aim of this study is to explore the extant governing structures and characteristics in large UK charities and investigate which of these characteristics influences earnings management. Based on hand-collected 2012 data from the top 250 UK charities, the evidence first suggests that, in general, charities perform well in terms of board diversity, the presence of an audit committee and other monitoring mechanisms such as an internal audit function and/or using one of the Big Four auditors. Second, charities are found to practice earnings management through the application of discretionary accruals to manage their bottom line items, although there is no specific requirement about break-even position or a suitable financial benchmark. Third, the diversity of the trustee board with regard to gender, ethnicity and educational background has a positive influence on charity financial accountability by constraining earnings management. Finally, the existence of an audit committee does not have a statistically significant impact on mitigating earnings management and improving charity accountability unless its composition includes members with accounting and finance backgrounds.

This research contributes to the literature in three ways. First, this paper provides a more detailed analysis of UK charity governance characteristics compared to the Grant Thornton reports (2013; 2014). Following the governance code relating to the diversity of the board, UK charities' boards of trustees have recorded a high diversity rate in respect of education, experience and business orientation. Although the results show a somewhat low proportion of females on boards (31.9%), this rate is much higher than the FTSE 250's proportion of female directors (18%) (Vinnicombe *et al.*, 2015). The data analysis also shows a high rate of charities with audit committees (80.8%), and the presence of an internal audit function (64.8%). At the same time, however, the proportion of audit committee members with accounting and finance expertise is only 28%. Second, this study provides evidence from a sample of large UK charities that have engaged in earnings management by applying discretionary accruals to manage their bottom line items. Although it is not compulsory for charities to meet a break-even target, charities appear to manage their financial result as a mean to signal various

stakeholders about their image, competence and achievement. Third, the results support previous arguments in favour of board heterogeneity in non-profit settings (Andrés-Alonso *et al.*, 2010; Wellens and Jegers, 2014), but with a new emphasis on gender and ethnic diversity and the role of specialist knowledge in audit committees on accountability, arising respectively from stakeholder management and resource dependence perspectives. The latter finding is of relevance since the presence of an audit committee does not make a significant contribution to reducing earnings management except when it is composed of members with expertise in accounting and finance.

The rest of the paper is structured as follows. Section 3.3 briefly outlines the institutional settings relating to the UK charity governance framework, and reviews the literature on corporate governance and its association to accounting and financial accountability. Section 3.4 sets out the theoretical framework and hypotheses. The data and models used to measure the impact of governance on charity accountability are presented in Section 3.5. The subsequent sections (3.6 and 3.7) analyse the empirical results, and discuss the implications of the findings and the limitations of the study. Suggestions for further research are also made.

3.3 Institutional settings and review of prior literature

3.3.1 UK charity settings and regulatory accounting and governance frameworks

It has long been recognized that UK charities make a significant contribution to the UK's social and economic development. By the end of March 2016 there were over 165,000 registered charities in England and Wales with a total annual income of approximately £71 billion.[27] The sector contributed about £12.2 billion in terms of gross value added in 2013/14, equivalent to almost 0.7% of the gross domestic product (GDP) of all industries in the UK. In June 2015 the voluntary sector had around 827,000 employees, accounting for 2.7% of the total UK workforce.[28] Concerns about the

[27] http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/SectorData/HistoricalData.aspx
[28] https://data.ncvo.org.uk/a/almanac16/economic-value-2/

appropriate use of increasing charity funds and assets (e.g. Charity Commission (2014) and the negative impact on public confidence of mismanagement in the sector have been key motivations behind the development of accounting and governance regulations (Hyndman and McMahon, 2010; Hyndman and Jones, 2011). With respect to charity governance, it is recommended that charities apply 'Good Governance: A Code for the Voluntary and Community Sectors' (Code Steering Group, 2010) (hereinafter the Good Governance Code). These recommendations focus on the roles of the board of trustees as well as their sub-committees and other governance mechanisms involved in controlling and steering management and organizations. Principle 3 of the Code suggests that the board should provide a mix of skills, experiences, qualities and knowledge by taking an active and intelligent approach towards diversity (Code Steering Group, 2010, p.17). This principle also proposes that the board should be big enough to provide the skills and experience needed. Principle 4 advises the board of trustees to delegate their power and functions to specialized committees, together with designing and operating an effective control system (Code Steering Group, 2010, p.19). At the same time the code does not set out detailed requirements (only principles) for the diverse nature of UK charities, thereby leaving a degree of flexibility in how it is implemented by charities.

Admittedly, UK charities include a number of organizations operating in different sectors, some of which have their own code of governance, such as the National Housing Federation (National Housing Federation, 2015), and the Higher Education Funding Council for England (Committee of University Chairmen, 2008). However, these codes contain a number of similar points with reference to board composition and sub-committee functions, with an emphasis on board diversity in skills and experience, the role of audit committees, and suggestions for the skill set and experience of audit committee members. Those codes aim to assert the role of boards, delegated committees and other governance mechanisms to increase the transparency of financial information, enhance the organization's accountability to various stakeholders, and thereby retain public trust in UK charities. In conclusion, the focus of the paper remains on the generic governance principles common to all organizations within the charitable sector, how

these might be translated in practice, and how they could influence the level of organizational accountability.

3.3.2 Accountability and earnings management

The notion of accountability in the non-profit sector and UK charities have attracted numerous quantitative and qualitative studies (Ebrahim, 2003; Dhanani, 2009; Dhanani and Connolly, 2012; Connolly and Hyndman, 2013a), leading to different conceptualizations of accountability. Edwards and Hulme (1996) postulated that accountability can be seen as a means by which individuals and organizations report to a recognized authority, or as a process by which agents are held responsible for their actions by principals. However, under the stakeholder theory framework, Ebrahim (2003) suggested that the success of an organization requires the support of all its stakeholders, and therefore, in order to achieve this support the organization needs to account to all its stakeholder groups. In the UK context, charitable organizations are expected to be accountable to various stakeholders including funders, donors and regulators who fund and supervise charity operations, and also downwards to beneficiary and user groups who may lack the power to demand accountability but nevertheless have the right to a voice (Dhanani, 2009; Unerman and O'Dwyer, 2010; Dhanani and Connolly, 2012; Unerman and O'Dwyer, 2012; Connolly and Hyndman, 2013b).

Recently, Dhanani and Connolly (2012) developed stakeholder theory in the charitable context and suggested different models for analysing charity accountability. This paper relies on their 'positive model of stakeholder theory' which is concerned with organizational behaviour in relation to long-term survival and success (Dhanani and Connolly, 2012, p. 1143) From this perspective, in order to maintain support from stakeholders management needs to legitimize their activities to these groups by deploying different accountability mechanisms to demonstrate that the values, beliefs and successes of the organization adequately meet with stakeholder expectations and demands. Intrinsically, 'the model characterizes accountability as a purposive means with which organizations seek constituent support to protect their own self-interest' (Dhanani and Connolly, 2012, p. 1143). In addition, Wellens and Jegers (2014) reviewed governance practice in non-profit organizations based on a multiple

stakeholder stance and revealed that many stakeholders consider the effectiveness of NPOs as a form of outcome accountability, referring to the demonstrable achievements of measurable goals and keeping promises to stakeholders. In this regard, the financial statement is an effective, albeit partial, channel for charities to communicate with various stakeholders to demonstrate their ability, achievements and accountability (Brennan and Merkl-Davies, 2013). Dhanani and Connolly (2012) identified four key types of NPO accountability: strategic, fiduciary, financial and procedural. While each theme focuses on different constituency groups, collectively they are all concerned with the willingness to account to and preserve public trust.

This paper particularly considers the notions of fiduciary accountability and financial accountability to examine how management use accounting information to present financial accountability, how governance is performed to express fiduciary accountability, and what the impact of governance performance is on financial accountability. As suggested by Tuckman and Chang (1991) and Global Reporting Initiative (2010), non-profit management needs to account for the organization's financial position to ensure its operational continuity, stability and viability. In particular, in a non-profit context links has been identified between financial performance and donation (Tinkelman, 1999) or effects on executive reputation (Leone and Van Horn, 2005). This suggests the crucial role of financial information in representing organization accountability to various stakeholders. This might motivate non-profit organizations to use financial accountability as a tool to manage their constituencies in order to secure their approval and endorsement. This behaviour is looked at through the lens of impression management as an indirect way to examine the organization's level of financial accountability. This study contends that the more involved one is with impression management, the lower the level of 'substantive' accountability displayed by the organization will be.

Due to the limit of the term 'earnings' as it purely links with the financial performance of an organization, this study suggests that earnings management should be studied in consideration of a broader behaviour, impression management. Impression management is widely considered as 'any behaviour by a person that has the purpose of controlling or manipulating the attributions and impressions formed of that person by others'

(Tedeschi and Riess, 1981, p. 3), or the 'conscious or unconscious attempt to control images that are projected in real or imagined social interactions' (Schlenker, 1980). This paper supports the views of Bozeman and Kacmar (1997) and Bolino *et al.* (2008, p. 1080) that impression management is 'efforts by an actor to create, maintain, protect, or otherwise alter an image held by a target audience', and at the organizational level, impression management is an intentional action taken to influence an audience's perception of the organization. This can be achieved through a direct or indirect attempt to manage information about an organization's activities or achievement and enhance the organization's image in some particular way (Yuthas *et al.*, 2002; Bolino *et al.*, 2008; Tauringana and Mangena, 2014). Because of its significant but symbolic importance to various users, financial information is particularly considered by organizations in impression management. Therefore, this paper suggests another definition of earnings management in non-profit context *as an attempt by charities to express financial probity and competence with the purpose of affecting users of financial statements, typically donors, funding agencies, social investors and other resource providers, and retaining access to resources.*

This new definition of non-profit earnings management is also informed by the ideas of Brennan and Merkl-Davies (2013) since impression management can be viewed from different perspectives. On the one hand, from an economic perspective managers exercise opportunistic behaviour arising from information asymmetries between managers and external stakeholders in order to manipulate the outsiders' perceptions of the organization's financial performance and prospects. Accordingly, from an economic viewpoint, earnings management practice can be considered as a part of impression management to alter financial information in order to emphasize positive organizational outcomes or obfuscate negative ones. On the other hand, the sociological standpoint suggests that organizations appear to respond to stakeholder concerns or appear to be congruent with society's norms and expectations (symbolic management) (Brennan and Merkl-Davies, 2013).

UK charities are accountable for their primary objectives of creating and delivering charitable activities and services to beneficiaries and society (stakeholders) rather than maximizing shareholders' investments. In return, charities are assured benefits in terms of tax exemption, grants from donors and funding for their operations. Charities are

expected to fulfil their accountability to stakeholders by providing adequate information to allow them to assess the overall performance of the charity (Connolly and Hyndman, 2013b). This may result in pressure for charities to prepare financial reporting where the stakeholders, such as fund providers and social investors, might be influenced in their grant decisions based on the charity's financial performance evaluation. From an impression management perspective and the positive model of stakeholder theory, charity managers are encouraged to manage financial information about charities' operations and achievements. This involves avoiding reporting a large surplus or a significant deficit in order to assure donors and grant providers that charities are effective and that all resources have been used to achieve charitable objectives. 'Self-promotion' is emphasized in an attempt to appear competent. Several papers (Tinkelman, 1999; Bolino *et al.*, 2008; Keating *et al.*, 2008) also report that practices such as misreporting fundraising expenses and influencing efficiency ratios appear to have been undertaken to achieve higher subsequent donations. Lastly, Belgian NPOs with high levels of governmental subsidies or the presence of a debt appear to manage earnings downwards to zero in order to influence the resource providers' perceptions of their performance and to secure future incoming resources (Verbruggen and Christiaens, 2012; Jegers, 2013).

Earnings management as a purposive tool to influence accountability by non-profit organizations has been found in several contexts for different reasons. Political cost seems to be one of the main reasons for NPOs to avoid scrutiny from regulators. For instance, Ballantine *et al.* (2007) studied English hospitals and found that the organizations intentionally reported small surpluses and deficits around zero by adjusting aggregate discretionary accruals in response to statutory service obligations and government accounting regulations. In a similar context, Eldenburg *et al.* (2011) found that when organizations' accounting performances were likely to be below benchmark, non-profit hospitals managed income upwards by decreasing expenditure or increasing asset sales, while managing earnings downwards to avoid the risk of scrutiny. Another motivation for earnings management at individual level is related to executive remuneration (Baber *et al.*, 2002); for instance, Leone and Van Horn (2005) found that CEOs used discretionary spending and accounting accrual management to manage

earnings toward just above zero to avoid losses, since this may lead to the termination of CEO contracts and/or reputational issues within the managerial labour market (Jegers, 2013). Interestingly, a recent study conducted with a larger sample of UK charities found that the UK charitable sector is involved in earnings management in order to achieve zero or little surplus, with the possible intention to give stakeholders the impression that they are achieving effective performance and the organization's stated objectives (Chapter 2). However, the role of governance in this behaviour was not specifically considered.

This review indicates that earnings management might be a tool for NPOs to achieve their aims of being 'positively' accountable to various stakeholders. Specifically, 'zero profit' arguably acts as a means for NPOs to portray an impressive picture that they have appropriately spent all incoming resources in order to fulfil their charitable accountability, as well as a positive signal that further resources are required (Verbruggen and Christiaens, 2012). However, evidence of this behaviour has not been considered for the wider constituency of UK organizations. Since UK charities with a total income in excess of £250,000 are required to adopt accrual-based accounting (i.e. SORP 2005), there is the possibility that some items, such as depreciation or current assets, could be manipulated (Jegers, 2013). A so-called 'aggressive' application of accrual accounting may result in an upwards or downwards movement at the bottom line, depending upon managerial or organizational intentions to enhance accountable image and sustain public confidence; however, this has yet to be examined in the UK context.

3.3.3 Governance and financial accountability in a non-profit context

There are numerous definitions of governance. According to the Financial Reporting Council (2014), in the context of business, governance is defined as a system to direct and control organizations in which boards of directors are responsible for the governance of their companies, while from the stakeholders' perspective, 'corporate governance is the process by which corporations are responsible to the rights and wishes of stakeholders' (Demb and Neubauer, 1992). Even if there are a number of different definitions of corporate governance, they seem to reflect similar objectives of

controlling and directing management activities in order to pursue stakeholders' interests such as obtaining a reasonable return on capital or constraining the misappropriation of assets (Shleifer and Vishny, 1997; La Porta *et al.*, 2000).

In the context of the non-profit sector, Hyndman and McDonnell (2009) considered charity governance as:

> Relating to the distribution of rights and responsibilities among and within the various stakeholder groups involved, including the way in which they are accountable to one another; and also relating to the performance of the organization, in terms of setting objectives or goals and the means of attaining them. (Hyndman and McDonnell, 2009, p. 9)

This definition draws on the wider relationship between stakeholders and charities, and therefore governance has a crucial role in ensuring that organizations operate effectively in order to achieve their targets.

Perego and Verbeeten (2015) studied the role of good governance in relation to managerial pay, which has been used as a key aspect of discharging the financial accountability of NPOs. They found that a strengthened governance structure is associated with higher levels of disclosure relating to executive remuneration, thereby eventually reducing managerial compensation levels. In addition, by focusing on specialized non-profit environmental non-governmental organizations (NGOs), Jepson (2005) noted that a key purpose of governance is to ensure that an organization's assets are managed and developed in order to achieve its mission. Therefore, governance has a role to maintain and strengthen environmental NGOs' accountability in order to build up and sustain public trust.

Various studies have sought to explore the role of corporate governance and its impacts on organization value and performance (i.e. financial and non-financial indicators) (Brown and Caylor, 2006; Afrifa and Tauringana, 2015; Gherghina, 2015). However, the influence of corporate governance on improving accountability through reducing earnings management practices is a specific consideration of this paper. This section reviews the role of the board of directors (its composition and diversity), audit committees and governance mechanisms (internal and external audits) and their impacts

on organization performance, accounting quality and, more specifically, on earnings management.

First, the board of directors is seen as a central component of governance structure, with ultimate responsibility for the long-term success of the company (Financial Reporting Council, 2014). Boards perform strategic functions such as monitoring, advising and compensating managers, as well as ensuring sufficient resources for organization operation (Adams *et al.*, 2010; Liu *et al.*, 2014; Afrifa and Tauringana, 2015). The diversity of the board of directors has been defined and studied from different views, according to Kang *et al.* (2007), Mahadeo *et al.* (2012) and Adams *et al.* (2015). Such diversity includes observable features such as ethnicity, nationality, gender and age, and less visible diversity comprising educational or occupational background and industry experience.

The influence of board diversity on organization performance is still a matter of debate. With regard to gender diversity, a number of studies suggest that female directors make a positive contribution to board input and have a significant impact on corporate performance, as well as having an association with higher earnings quality (Adams and Ferreira, 2009; Srinidhi *et al.*, 2011; Mahadeo *et al.*, 2012; Liu *et al.*, 2014; Ntim, 2015; Post and Byron, 2015; Terjesen *et al.*, 2016). Those results support the view that women can bring a fresh perspective to complex issues, and this can help to correct informational biases in strategy formulation and problem solving (Francoeur *et al.*, 2008, p. 84). It is also acknowledged that female directors frequently raise questions, are more likely to debate about business matters, and actively participate in the leadership functions of the board. Notably, it is acknowledged that they hold their organizations to higher ethical standards (Bilimoria, 2006; Pan and Sparks, 2012; Virtanen, 2012), arguably in line with broader societal values and expectations. In addition, trustee gender diversity is recognized as ‘an important corporate governance mechanism to mitigate agency problems in charitable organizations’ (Reddy *et al.*, 2013, p. 110). However, Carter *et al.* (2010) did not find this relationship between board gender and financial performance from a sample of US companies, while Abdullah *et al.* (2016) found the contribution of female directors to be varied, whereby their presence on the board creates better economic value for some businesses but decreases it in other cases.

In relation to the role of ethnic diversity and its impact on business performance and market valuation, Erhardt *et al.* (2003) found a positive association between a firm's financial performance and demographic diversity on the board of directors, as measured by the mix of gender and ethnicity. Ntim (2015) recently stated that board ethnic diversity and market valuation are positively associated, contending that 'ethnic diversity is more valued highly by the South African stock market than gender diversity' (Ntim, 2015, p. 187). This argument is based on the resource dependence perspective, suggesting that board diversity fosters the connection of an organization to its external environment to secure future resources (human and capital resources) (Arnegger *et al.*, 2014; Liu *et al.*, 2014). Nevertheless, research done in the US context found no significant relationship between board ethnic diversity and organization financial performance (Carter *et al.*, 2010). The diversity of the board in non-profit organizations could be considered as representative of a broad diversity of needs and objectives among NPO's multiple stakeholders (Wellens and Jegers, 2014).

Compared to visible diversity factors (e.g. gender, ethnicity), there are fewer studies about less observable diversity factors such as educational level, occupational background and industry-orientation. Although resource dependence theory suggests that the extensive knowledge and experiences of directors bring more human capital to businesses (Hillman and Dalziel, 2003), the empirical results do not conclusively point to the impact of these unobservable diversity factors on organization performance. Siciliano (1996) suggested that boards of organizations with higher occupational diversity show a higher level of social performance and fundraising results. However, recent research conducted in an emerging market by Mahadeo *et al.* (2012) could not conclude that diversity in educational background has a positive impact on business performance. In terms of the non-profit sector, Andrés-Alonso *et al.* (2010) stated that the diversity of the directors' knowledge and their level of activity make a significant contribution to the best allocation of the organization's resources. Findings also showed that those factors (the diversity of trustees' knowledge and trustees' levels of activity) had a positive effect on the efficiency of a Spanish foundation. However, their study could not find evidence of the influence of the board's cumulative knowledge on the organization's efficiency (Andrés-Alonso *et al.*, 2010).

In conclusion, it is still unclear how board diversity impacts on earnings management and other organizational outcomes. The literature review shows that board independence tends to have a negative relation with abnormal accruals (Klein, 2002; Peasnell *et al.*, 2005; Chen and Zhang, 2014). With regard to gender diversity, the jury is still out; Gavious *et al.* (2012) found a negative relation between the presence of female directors and discretionary accruals, while Sun *et al.* (2011) were unable to identify this relationship in the context of the US market.

Second, the audit committee has been recognized as a crucial component of corporate governance structure. Its main roles are to monitor the integrity of financial statements, and to review and supervise the business's internal financial control system and internal and external audit function, in order to ensure the financial transparency of organizations (Financial Reporting Council, 2012). Therefore, the literature includes a significant number of studies focusing on the influence of the audit committee and its characteristics on earnings quality and accountability (Davidson *et al.*, 2005; Baxter and Cotter, 2009; Chen and Zhang, 2014; De Vlaminck and Sarens, 2015). Many studies have found that the presence of the audit committee has a significant influence in improving earning quality and organizational accountability by reducing earnings management (Klein, 2002; Baxter and Cotter, 2009; De Vlaminck and Sarens, 2015).

Most codes of corporate governance require the audit committee to have at least one member with relevant financial experience (i.e. the UK Corporate Governance Code, Sarbanes-Oxley Act). Consequently, a number of studies have been conducted to test the relevance and extent of financial expertise within the audit committee on earnings quality, accountability and financial disclosures (Davidson *et al.*, 2004b; Defond *et al.*, 2005; Mangena and Pike, 2005; Aldamen *et al.*, 2012). Overall, the empirical results are inconsistent. On the one hand, several authors have found that the existence of financial expertise on the audit committee has positive effects on earnings quality and constrains earnings management (Xie *et al.*, 2003; Bédard *et al.*, 2004; Chen and Zhang, 2014). On the other hand, Van der Zahn and Tower (2004) could not find any association between magnitude of earnings quality and the audit committee's financial expertise, while Baxter and Cotter (2009) found a reverse impact of financial experts on the audit committee on earnings quality. Their research showed that firms with higher proportion of accounting expertise have higher abnormal accruals, which implies that a firm with

an accounting specialist on the audit committee is likely to be involved in earnings management practice and lower accounting quality (Baxter and Cotter, 2009).

Lastly, the roles of other governance mechanisms such as the internal audit function and external auditors have also attracted a number of studies. However, the results seem to be inconclusive and context-dependent. Prawitt *et al.* (2009) stated that the quality of the internal audit function has a significant negative relation with absolute abnormal accruals. In contrast, Davidson *et al.* (2005, p. 241) argued that 'the voluntary establishment of an internal audit function and the choice of auditor are not significantly related to a reduction in the level of discretionary accruals'. Their research also did not find support for the relationship between the choice of big audit firms (big6[29]) and earnings quality. However, Chia *et al.* (2007) and Rusmin (2010) found that auditor quality has a negative association with abnormal accounting accruals, and the use of specialist auditors (big4 or big6) is associated with the constraining of earnings management.

In the context of non-profit organizations, studies on the role of governance mechanisms on financial accountability have been very scarce. However, recent papers started exploring different perspectives on financial disclosure management in relation to non-profit governance. Yetman and Yetman (2012) found that the accuracy of charitable expense is positively associated with some elements of governance (such as large auditing firms, independent board members and audit committees), or the use of an outside accountant may lower the cost shifting of NPOs (Krishnan and Yetman, 2011). Moreover, US charities are also found to use high-quality auditors to signal the credibility of their financial reports in order to foster their reputation and influence donation decisions (Kitching, 2009). Other studies focus on the role of governance in influencing non-profit organizational performance (Brown, 2005; Harris *et al.*, 2015), and find that the strategic contributions of the board are positively associated with financial performance (Brown, 2005), organizational efficiency (Andrés-Alonso *et al.*, 2010), public accountability and transparency (Ntim *et al.*, 2015b), and transparency in the disclosure of executive remuneration (Perego and Verbeeten, 2015). A good level of

[29] The big6 now are the big4 - KPMG, PwC, E&Y and Deloitte.

governance is also positively associated with higher levels of donations (Harris *et al.*, 2015).

This review indicates that corporate governance and its composition and characteristics (boards of directors, audit committees, internal and external audit functions) may have a significant impact on a firm's performance and accountability. Even if the relationships vary in terms of different countries and country-specific companies, corporate governance appears to have a positive influence on organizational accountability (such as improving financial performance, enhancing creditability and transparency). However, in the non-profit context there is scant research on the roles of governance on organizational financial accountability. This is the motivation to examine the role of different governance players, including boards of directors, audit committees and auditors (internal and external), in terms of their specific influence on earnings management in the UK charitable context.

3.4 Theories and hypotheses development

3.4.1 Stakeholder theory (ST) and resource dependence theory (RDT)

It is argued that charities are not able to exist without support from different stakeholders, and according to Van Puyvelde *et al.* (2011), non-profit organizations have various internal and external stakeholders, such as board members, employees, funders, beneficiaries and regulators. Those stakeholders have different levels of interactions but collectively impact on organizational operation. In this regard, it is argued that the effectiveness of a charitable organization is influenced by the way in which its relationships with diverse stakeholders are managed (Wellens and Jegers, 2014). At one end of the spectrum there is an ethical variant of the stakeholder perspective which emphasizes that the moral imperatives and responsibilities of a charitable organization towards its diverse audiences (e.g. Donaldson and Preston (1995) and accountability practices (such as accounting and narrative statements in annual reports) should fully and fairly reflect actual organizational performance, thereby enabling stakeholders to hold the organization and its management to account (Ntim *et al.*, 2015b). At the other end of the continuum, the instrumental notion of stakeholder

theory privileges the explanation that organizational leaders are acutely aware of the need to prioritize and maintain an alignment of interests with more influential or powerful stakeholders to ensure continued support, while at the same time placating and strategically 'managing' (Dhanani and Connolly, 2012) the perceptions of other stakeholders to maintain the legitimacy of the charity, inclusive of how its finances are used and controlled. Given the role of communication in conveying signals of aligned interests and managerial competence, charity managers may therefore attempt to signal a positive view to their stakeholders by publishing favourable information. Arguably, trustee boards and their sub-committees are expected to ensure the accountability of charities to stakeholders (Cornforth, 2003a). This view is reflected in the Good Governance Code which suggests that 'the board will lead the organization in being open and accountable, both internally and externally' (Code Steering Group, 2010, p. 11). This means that the board has responsibility for communicating and informing the wider stakeholders about the organization and its practices. They are expected to be accountable to all insiders and outsiders, listening and responding to the views of supporters, funders, beneficiaries, service users and others with an interest in the organization's operation (Code Steering Group, 2010). Consistent with the arguments made by Wellens and Jegers (2014), the composition of the trustee board (particularly in terms of heterogeneity) can have an impact on how it can ensure organizational alignment to stakeholder interests and responsiveness to a wider section of society (Hyndman and McDonnell, 2009). However, empirical evidence as to the 'stakeholder' effects' of trustee boards on various organizational outcomes (including accounting or reporting ones) is very limited.

A second and arguably overlapping perspective is resource dependence theory (RDT). However, unlike stakeholder theory, RDT takes a deeper view of the relationship between external bodies and the organization, and the power dynamics underlying the nature of these relationships (Ntim *et al.*, 2015b). According to RDT, organizations exist interdependently with their environment; their survival is significantly dependent on other organizations and actors for resources. As a result they need to find ways of managing this dependence and ensuring they get the resources and information they need (Cornforth, 2003b). From this perspective, the board of trustees has the crucial

function of securing the flow of resources and reducing uncertainty by maintaining good relations with key external stakeholders. Pfeffer and Salancik (1978) contended that members appointed to the board are expected to bring benefit and add value to organizations. The board therefore contributes to the organization by offering advice, counsel, legitimacy, communication with external stakeholders, and access to outside resources (Hillman and Dalziel, 2003; Liu *et al.*, 2014; Afrifa and Tauringana, 2015). At the same time, these powerful resource providers would seek to ensure that the board members and other governance mechanisms can adequately monitor the organization and ensure that resources are used in ways that are commensurate with their interests. In the not-for-profit sector, Callen *et al.* (2010) suggested that by placing directors on its board in proportion to the directors' abilities to influence the outside world, the non-profit organization can manage its external environment to secure the advantages. For example, by appointing representatives of major donors on boards, charities may send a signal to potential donors that these charities will run efficiently, thus increasing the ability of charities to raise funds (Hyndman and McDonnell, 2009). The discussions on the role of accounting and reporting within an RDT framework are less common in the accounting literature (Ntim *et al.*, 2015b), but one could argue that financial performance and other accounting measures may be part of funding conditions and other contractual arrangements.

In conclusion, this study adopts an overlapping theoretical framework, ST and RDT, which recognizes that governance in the charitable sector, reflects two key concerns. The first is a general concern about the representativeness of different societal audiences within a board, such that a form of democratic accountability can be demonstrated by the organization which thereby gains and maintains support, albeit mainly on a symbolic basis. The second is a more specific and strategic concern about managing access to key resources (arguably financial but also reputational), whereby board members can provide more directed and instrumental support, while at the same time being responsive to the expectations of key resource providers with regards to managerial, organizational and financial efficiency. Within this theoretical framework, this paper sees accounting (whether in terms of financial statements, narratives and specific accounting-led metrics such as reported surplus/deficit) as having: (i) legitimating value (Goddard and Assad, 2006; Soobaroyen and Sannassee, 2007) in the identification of a 'well performing' organization (even for a non-financial audience),

akin to a form of signalling to stakeholders; and (ii) at the same time, having concrete value in the formal assessment of a management's ability to operate and control an organization (to report and reassure resource providers). In this respect, this paper argues that governance mechanisms, such as those reflected in the board, will influence accounting-led outcomes and, for instance, mitigates the potential for charity managers to engage in a process of earnings management. In adopting this perspective, I do not dispute the contention that non-financial measures and narratives, such as, relating to strategy and operations; see for example, Connolly and Hyndman (2004); Dhanani and Connolly (2012) may be as important (if not more so) in the assessment of a charity's level of accountability and performance. However, the emphasis adopted in this study on financial aspects reflects a continuing concern about the financial sustainability of charities in general.

3.4.2 Hypotheses development

From a stakeholder viewpoint, the key roles of the board are to represent the democratic involvement of different key stakeholders, facilitate negotiation, resolve potential conflicting interest, and ensure that management acts in the interests of these stakeholders (Rehli and Jäger, 2011). In addition, there is an inherent recognition of the diversity and representativeness of a board within the ST perspective. Conceptually, it is argued that the composition of the board needs to be diversified with the involvement of various stakeholders in order to be able to manage the external environment, to improve the organizations' outside image, and to fulfil charity accountability (Hyndman and McDonnell, 2009; Callen *et al.*, 2010). The diversification of stakeholders implies a diversity of gender, ethnicity, educational background, industrial experiences and skills (Mahadeo *et al.*, 2012; Adams *et al.*, 2015).

In the non-profit context, it has been argued that board member heterogeneity has an influence on board policies and organizational performance since heterogeneity encourages creativity and increases the decision-making capabilities of the group (Olson, 2000; Andrés-Alonso *et al.*, 2010; Wellens and Jegers, 2014) or supports organizations in connection with the external environment, including powerful stakeholders that may have a positive impact on the organization's performance (Ntim

et al., 2015b). For instance, Aggarwal *et al.* (2012) suggested that in the US non-profit board size is positively related to overall organization performance. However, in the context of Spanish NPOs, Andrés-Alonso *et al.* (2010) reported inverse findings that board size and independence do not ultimately impact on an organization's efficiency, although the knowledge diversity, cumulative knowledge and level of activity of board of trustees do make a positive contribution to the foundation's efficiency.

In the UK charity context, as stated in the Good Governance Code (Code Steering Group, 2010), the board of trustees is central and has a crucial role in providing good governance to organizations. This code suggests that the board should 'take an active and intelligent approach towards diversity', which collectively includes a mixture of skills, experience, qualities and appropriate knowledge (Code Steering Group, 2010, p. 17). In addition, the empirical study conducted by Cornforth (2001) found evidence in UK charities that the right mix of skills and experience is significantly correlated with board effectiveness.

To identify the impact of board diversity on charity accountability, this paper examines the association between board diversity (in terms of gender, ethnicity, directorship working experiences, educational background and business orientation) and earnings management. Thus, the first hypothesis is:

H1: Board diversity is negatively associated with earnings management.

From a resource dependence theory viewpoint, organizations are not autonomous, but are rather constrained by a network of interdependencies with other organizations as they seek to access the relevant resources such as financial, human, information and legitimacy to continue operating (Ntim *et al.*, 2015b, p. 11). The audit committee may be considered as one type of human resource, specializing in the overseeing of accounting, auditing, reporting and risk practices (Goh and Gupta, 2015; Ntim *et al.*, 2015b), and may provide a linkage to the external environment (Jetty and Beattie, 2012). Therefore, the role and contribution of the audit committee and its characteristics could be analysed from the view of resource dependency theory to understand whether the structure and activities of non-profit organizations are driven by the nature and level of the resources they require (Vermeer *et al.*, 2006; Jetty and Beattie, 2012).

After the collapse of many big corporations caused by scandals related to accounting and auditing issues, the audit committee is viewed as an important monitoring mechanism that is able to provide assurance as to shareholders/stakeholders (Ntim *et al.*, 2015b). The importance of the audit committee has been significantly recognized in practice and academia in relation to improving accountability, transparency and accounting quality (Klein, 2002; Davidson *et al.*, 2005; Piot and Janin, 2007; Baxter and Cotter, 2009; Rich and Zhang, 2014). Those studies support the fact that the existence of an audit committee helps the board of directors to oversee the organization's internal control system, risk management and financial reporting. As a result of the additional scrutiny, it is argued that executives have less opportunity to manipulate and alter financial information. This practice consequently fosters financial credibility and transparency and increases the accountability of organizations, albeit primarily for the benefit of financial resource providers.

In relation to the case of non-profit organizations, audit committees and their functions have attracted the attention of several authors (Callen *et al.*, 2003; Vermeer *et al.*, 2006; Wen-Wen *et al.*, 2010; Jetty and Beattie, 2012; Ntim *et al.*, 2015b). In particular, Wen-Wen *et al.* (2010) examined the role and quality of audit committees in US public hospitals and found that the presence of an audit committee, and its qualitative characteristics (financial expertise), was positively correlated with a reduced frequency of internal control problems. This argument was supported by Rich and Zhang (2014) in the investigation of US municipalities experiencing fewer internal control problems and future financial reporting failures (Rich and Zhang, 2014). In the case of UK higher educational institutions, Ntim *et al.* (2015b) suggested that audit committee quality, in terms of composition, expertise, diligence and monitoring capacity, has a positive influence on the extent of voluntary disclosure.

Within the UK institutional setting, the setting up of an audit committee is not compulsory in all charities, albeit that the 'Internal financial controls for charities (CC8)' advice on the role of the audit committee is:

> to help the trustees meet their responsibilities for risk management, having effective internal controls and the efficient and effective use of funds. An audit committee is therefore part of the financial governance arrangements of a

> charity. An audit committee acts on the authority delegated to it by the trustees and should therefore have appropriate terms of reference and a clear reporting line to the trustee body. (Charity Commission, 2012, p. 7)

However, there has been little examination of the prevalence of the audit committee structure in the UK charitable sector and the extent of its effectiveness. Hence, informed by resource dependence theory, this study hypothesizes that:

H2a: The existence of the audit committee is negatively associated with earnings management.

In order to fulfil the role of reviewing, examining and monitoring accounting and internal control systems, the audit committee needs to include members with sufficient knowledge and experience in accounting and finance – for example, at least one member of the audit committee should have recent and relevant financial experience (Financial Reporting Council, 2012). Nevertheless, the literature review shows inconsistent results as to the implications of expertise in the constraining of earnings management practices. On the one hand, the presence of qualified accountants or experts in accounting and finance can make a significant contribution to improving earnings quality, monitoring the financial reporting process and constraining earnings management because of their ability to understand the complexity of accrual accounting practice (Xie *et al.*, 2003; Abbott *et al.*, 2004; Bédard *et al.*, 2004; Mangena and Pike, 2005; Baxter and Cotter, 2009; Chen and Zhang, 2014) or to mitigate internal control problems (Wen-Wen *et al.*, 2010; Rich and Zhang, 2014). On the other hand, the role of expertise is not conclusive in past studies (Yang and Krishnan, 2005; Lin *et al.*, 2006). In the UK charitable context, a key issue is the availability of sufficiently qualified and willing experts who are motivated to contribute to trustee boards on an unpaid basis (Wellens and Jegers, 2014). In light of the resource dependence perspective, this paper hypothesizes that:

H2b: An audit committee with a higher proportion of experts in accounting and finance is negatively associated with earnings management.

From the perspective of resource dependency theory, the organizational structure and activities of a non-profit organization will vary with the type and composition of funding (Vermeer *et al.*, 2006). The setting of monitoring mechanisms, such as audit committees, internal audit functions and external auditor requirements inform and

reassure funding providers on the adequacy of non-profit internal control systems (Kitching, 2009; Petrovits *et al.*, 2011). Specifically with regards to the importance of the internal audit function, in a non-profit context internal auditors technically act as the enforcers of the charity's rules and regulations and report on weaknesses and issues to management and trustee boards. In a similar vein, audit committees or trustee boards provide key inputs in the terms of reference of the internal audit function, and also in relation to its audit plan. In other words, trustee boards heavily rely on the operational activities and reports (e.g. efficiency, internal control procedures, value for money) of internal audits to be able to meet their governance mandate. The consequences of internal control problems in NPOs have been considered by Petrovits *et al.* (2011), whereby government funding and donor support are negatively associated with internal control problems.

Empirically, the role of the internal auditor in enhancing an organization's accountability and transparency has been studied by a number of authors (Davidson *et al.*, 2005; Chia *et al.*, 2007; Prawitt *et al.*, 2009; Rusmin, 2010; Jaggi *et al.*, 2015). Despite this, the contribution of the internal audit function to the improvement of accounting quality remains controversial. Prawitt *et al.* (2009) and Jaggi *et al.* (2015) argued that an effective internal audit function may not address all the potential intentional and unintentional accounting errors and adjustments that result from weak internal controls, while strong internal controls can limit a manager's ability to manage earnings. However, this finding was not supported by Davidson *et al.* (2005) in the case of listed Australian firms.

With regard to the case of UK charities, the Charity Commission recommends that the internal audit function is part of the internal control arrangement to look at the effectiveness of a charity's financial controls and to help the trustees and managers identify and assess risks to the charity (i.e. reputation risk, operation risk or strategic risk) (Charity Commission, 2012). Informed by the above, this study formulates a non-directional hypothesis:

H3a: The presence of an internal audit function is associated with earnings management.

The external auditor is part of the monitoring system that addresses specific requirements in relation to the annual and financial reporting aspects, and provides an opinion on whether the financial statements are prepared in line with applicable legislation and accounting standards (e.g. SORP). In the charitable sector, external auditors are also seen as independent external governance mechanisms that can provide reassurance to resource providers on the financial situation of a charity (Kitching, 2009). According to the (Charity Commission, 2012), external audit is a regulated activity and refers to the statutory audit of the accounts.

Evidence on the influence of the external auditor on financial accountability and accounting quality is, however, not conclusive. While several authors found evidence of a negative association between auditor quality (e.g. a big4 or big6 specialist audit firm) and the earnings management indicator (Chia *et al.*, 2007; Rusmin, 2010; Jaggi *et al.*, 2015), this is not supported by some studies in the corporate (Davidson *et al.*, 2005) and non-profit sectors (Ballantine *et al.*, 2008b). This may be explained from a signalling and resource dependency perspective in that organizations (e.g. charities) may benefit from engaging a high-quality auditor, not because of a better controlling and monitoring financial control system but because resource providers are more interested when charities are aligned with a quality auditor (Kitching, 2009). Consequently, a non-pre-directional hypothesis is proposed that:

H3b: External auditors are associated with earnings management.

3.5 Methodology

3.5.1 Data

As reported by Hofmann and McSwain (2013), the majority of quantitative studies investigating non-profit financial accounting and reporting practices focus on US data. The authors highlighted the practical difficulties in gathering data from organizations, since there is no regulatory mechanism for the dissemination of audited annual reports to the public; instead there is a reliance on summary forms submitted to the US tax authorities (IRS990 forms). Unlike the case of companies, there is also no detailed database of financial accounting numbers, which may explain the paucity of empirical research in the US and other countries (e.g. Andres-Alonso *et al.*, 2010). The same

could be said of governance data. In the UK, audited annual accounts can be obtained from the Charity Commission website, while most large charities would publish annual reports and annual reviews on their own websites. While there is a UK database managed by the Charity Commission[30] providing financial information about UK charities, the information is summarized and not sufficient enough to address the research questions of this study. As a result, the accounting and governance data for this paper were manually collected from annual reports, charity websites, and the Charity Commission's website with a focus on the top 250 charities (on the basis of reported total income for 2012). All information about the boards of trustees (including trustee size, gender, ethnicity, and directorship experiences, industrial experience, educational background, and audit committee membership and expertise), as well as information about internal and external auditors were gathered from multiple documentary and online resources. Due to the fact that detailed governance data would only be available (and regularly overwritten) on the websites of charities, a longitudinal (panel) data approach to the analysis was not possible. The explanatory analysis therefore focusses on one year, 2012. This sample covers all charitable sectors[31] classified into seven main sectors, and summarized in Table 3.1.

Table 3.1: Sample of charities by sector

Group	Name of Sector	Number
Sector 1	Culture and Recreation	18
Sector 2	Education and Research	44
Sector 3	Health	20
Sector 4	Social Services	38
Sector 5	Development and Housing	44
Sector 6	International	27
Sector 7	Others	59
	Total	**250**[32]

[30] These data are now available online at http://data.charitycommission.gov.uk/default.aspx

[31] Charity sectors are defined and classified based on the International Classification of Non-Profit Organization (ICNPO), which was designed by the US Centre for Civil Society Studies at Johns Hopkins University, and this has been adopted by the NCVO for UK charity classification.

[32] In spite of an extensive search of the characteristics of the charity audit committees, this paper could not find detailed information in the case of 43 organizations. Therefore, this study only reported on 207 charities with full information about audit committee expertise.

The sample of the top 250 UK charities (representative of the different sectors) reported a total income of more than £20 billion at the end of 2012, which comprises more than a third of the total resources spent by charities in England and Wales (Charity Commission, 2013a). Although the number of charities in my sample is limited, this sample is sufficiently representative of the UK charitable sector in comparison with previous non-US studies: for example, Jobome (2006a) used a sample of the top 100 UK charities for his study on the impact of charity performance and governance mechanism on management pay in one year, while Andrés-Alonso *et al.* (2010) analysed information from 119 Spanish foundations to examine the role of governance in relation to organizational efficiency.

3.5.2 Model and variables

This paper adopts OLS multivariate regressions to examine the relationship between earnings management (as a proxy for financial charity accountability) and diverse charity governance mechanisms including board diversity, audit committees and internal/external audit functions. According to Brennan and Merkl-Davies (2013), the adjusting of accounting figures, with a view to creating a reporting bias and thereby manipulating outsiders' perceptions about organization's performance and achievement, is a form of impression management from an economic perspective. However, my contention is that even if the adjusting of accounting figures can be seen to have an influence from a narrow economic perspective, at the same time the reporting of financial performance is a powerful and broader symbol of managerial ability and competence. This paper therefore relies on the concept of earnings management to underpin the multiple interpretations of organizational and managerial competence conveyed by reported accounting numbers. In contrast, Hofmann and McSwain (2013) focused on the term 'financial disclosure management' to review studies that rely on a variety of metrics related to earnings management, accounting manipulations (the misclassification of costs and the over- or under-allocation of joint costs to programmes or fundraising) in the non-profit context. This paper focuses instead on the discretionary accrual models (the Modified Jones model) as a tool of earnings management. In the for-profit sector several models and approaches have been used to test for earnings management practices, such as aggregate accruals models (Healy, 1985; Jones, 1991; Dechow *et al.*, 1995), specific accruals models (Marquardt and Wiedman, 2004;

Stubben, 2010) and the frequency distribution approach (Burgstahler and Dichev, 1997; Degeorge *et al.,* 1999). Previous studies already suggest that non-profit organizations use discretionary accrual as a tool to intentionally manage bottom line items upward or downward in order to achieve break-even targets (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). For example, Verbruggen and Christiaens (2012) used an aggregate accruals model based on the Jones (1991) model in Belgian charities, while Leone and Van Horn (2005) adopted specific accruals and Burgstahler and Dichev's distribution approach in US hospitals. In the UK hospital context, Ballantine *et al.* (2007) combined both aggregate accruals model and a distribution approach with different methods to estimate discretionary accruals (Dechow and Dichev, 2002). In the UK context, my first paper (Chapter 2) extensively studied a large number of charities using both approaches (distribution analysis and discretionary accrual estimation) and confirmed that UK charities manage their financial results toward a zero level.

This study considered the view that the UK charitable sector has adopted accruals-based accounting for many years, with the implication that opportunistic behaviour and managerial discretion in the application of accounting policies are possible, and have been observed. In this respect, this paper relies on the modified Jones model to estimate discretionary accrual. Dechow *et al.* (1995) compared several models of accruals management and concluded that the so-called 'modified Jones (1991) model' provided the most power for detecting discretionary management behaviours. Bartov *et al.* (2000) also supported the use of the modified Jones model. Typically, discretionary accruals are the difference between actual and normal accruals, and are determined as residual values from the following regression formula (model 1). In addition, this paper adopts a cash-flow method to identify total accruals, as this is considered to be superior to the balance sheet approach (Hribar and Collins, 2002).

$$\mathbf{TACC_t/TA_{t-1} = a_1*1/TA_{t-1} + a_2*(\triangle REV_t - \triangle AR_t)/TA_{t-1} + a_3*PPE_t/TA_{t-1} + e_t} \quad \mathbf{(1)}$$

Details of variables are summarized in the following table (Table 3.2).

Table 3.2: Description of variables

Variables	Description
$TACC_t$	Total accruals, equal to reported earnings minus (-) operating cash flows, in year t (2012).
TA_{t-1}	Lagged total assets (beginning total assets).
$\triangle REV_t$	The changes in total income for this year in comparison to last year, equal to total income year t minus (-) total income year t-1.
$\triangle AR_t$	The changes in accounts receivable, equal to accounts receivable year t minus (-) accounts receivable year t-1.
PPE_t	Plant, property and equipment in year t.
e_t	Residual from above regression representing discretionary accruals. Discretionary accruals are calculated by charity sectors.

Consequently, discretionary accruals (DA) from this regression were used as a dependent variable to test the relationship between DA and charity governance factors. The governance factors include board diversity (H1), audit committee (H2a), audit committee characteristics (H2b), internal audit functions (H3a) and external auditors (H3b). The diversity of board of trustees is measured by diversity in gender (percentage of female trustees on board), ethnicity (defined as non-white trustees on board), and trustees' professional experience (whether the board includes a variety of directorship experience), educational background (board members with different educational backgrounds) and business orientation (percentage of trustees working in businesses or industries rather than in the NPOs and public sector). Since the setting up of an audit committee is not compulsory for all charities, the importance of the audit committee is tested by the existence of the audit committee's function on the board (H2a) and the expertise of the audit committee members in accounting and finance (H2b). To test the roles of other governance mechanisms, this paper examines whether earnings management is different among charities with or without an internal audit function, and whether the external auditor is a specialist in the voluntary sector.

In addition, other factors (as control variables) were considered in terms of their potential impact on a charity's earnings management. They are board of trustee size (Andrés-Alonso *et al.*, 2010; Newton, 2015; Ntim *et al.*, 2015b), charity size (Andrés-Alonso *et al.*, 2010; Perego and Verbeeten, 2015), leverage (Verbruggen and Christiaens, 2012; Jegers, 2013), the extent of government funding (Kitching, 2009;

Verbruggen and Christiaens, 2012) and non-audit fees (Frankel *et al.*, 2002; Antle *et al.*, 2006).

Model 2 is the primary model used to test those relationships; however, this study separates this main model into three sub-models (2a, 2b, 2c), which differ according to board diversity variables and the expertise in audit committee variable. Specifically, model 2a only includes observable diversity variables (gender, ethnicity), while model 2b only includes unobservable diversity variables (directorship experience, business orientation, and educational background) (Ntim, 2015). Other than avoiding the impact of heteroscedasticity, this separation reflects the prevailing debate about the relevance of observable diversity and non-observable diversity in board studies (Ntim *et al.*, 2015b; Terjesen *et al.*, 2016). Model 2c changes audit committee expertise to a dummy variable, which is equal to 1 if at least one member of the audit committee has an accounting/finance background, and 0 otherwise.

$$\mathbf{DA_{it} = a_0 + a_i\sum_{n=1}^{6}(Board\ diversity) + a_2{*}AC_{it} + a_3{*}AC\_EXPERT_{it} + a_4{*}INT\_AUD_{it} + a_5{*}AUD\_TOP4_{it} + a_6{*}NON\text{-}AUDIT\_FEE_{it} + a_7{*}BOARD\_SIZE_{it} + a_7{*}CHARITY\_SIZE_{it} + a_7{*}LEV_{it} + a_7{*}GOV\_FUND_{it} + e} \quad \mathbf{(2)}$$

This paper suggests some additional models, which are modified from the primary model (model 2) by changing some variables or using stepwise regression (models 3, 4, 5, 6) in order to reduce the impact of multi-collinearity issues among independent variables. A summary of all independent and control variables is presented in Table 3.3, below.

Table 3.3: Summary of independent and control variables

Variables	Expected relationship	Description	Previous studies
BOARD_FEM	Negative (-)	Percentage of female trustees on board.	Reddy *et al.* (2013), Pan and Sparks (2012), Virtanen (2012), (Terjesen *et al.*, 2016), Ntim *et al.* (2015b)
BOARD_FEM_SIG	Negative (-)	Equals 1 if more than 50% of trustees on board are female, 0 otherwise.	
BOARD_ETH	Negative (-)	Equals 1 if there is at least one non-white trustee on board, 0	Erhardt *et al.* (2003), Ntim (2015), Ntim

		otherwise.	*et al.* (2015b).
BOARD_EXPE	Negative (-)	Equals 1 or 2, 3, 4 if there is only 1 or 2, 3, 4 experience bands. Band 1: 1–5 years working experience; Band 2: 6–10 years working experience; Band 3: 11–15 years working experience; Band 4: over 15 years working experience	Siciliano (1996), Mahadeo *et al.* (2012).
BIZ_ORIENT	Negative (-)	Percentage of trustees working in businesses or industries rather than in the public sector	Mahadeo *et al.* (2012)
BOARD_EDU	Negative (-)	Equals 1, 2, 3, 4, 5 if there is/are 1, 2, 3, 4, 5 educational background band(s). Band 1: Business and law; Band 2: Accounting and finance; Band 3: Engineering & science; Band 4: Medical, healthcare, physician; Band 5: Other (art, humanities, etc.).	Mahadeo *et al.* (2012)
AC	Negative (-)	Equals 1 if charity has an audit committee, 0 otherwise.	(Klein, 2002; Baxter and Cotter, 2009; De Vlaminck and Sarens, 2015)
AC_EXPERT	Negative (-)	Percentage of audit committee members with background and/or experience in accounting and/or finance	(Xie *et al.*, 2003; Bédard *et al.*, 2004; Chen and Zhang, 2014)
INT_AUD	Negative (-)	Equals 1 if charity has an internal audit function, 0 otherwise.	Prawitt *et al.* (2009), Davidson *et al.* (2005).
AUD_TOP4	Negative (-)	Equals 1 if external auditor is from the top 4 specialist auditors[33] (BT: Baker Tilly UK Audit LLP, CCW: Crowe Clark Whitehill, BDO: BDO LLP, Hay: Haysmacintyre), 0 otherwise	Chia *et al.* (2007), Rusmin (2010).
NON-AUDIT_FEE	-/+	Percentage of non-audit service/total fee charged by	Frankel *et al.* (2002); Antle *et al.*

[33] Top 4 specialist auditors are auditors who are in the top 4 rankings based on number of charity clients from 2009 to 2013, as recorded by Charity Financials at http://secure.charityfinancials.com/reports.aspx

		auditor	(2006)
BOARD_SIZE	-/+	Number of trustees on board	Andrés-Alonso *et al.* (2010); Newton (2015); Ntim *et al.* (2015b)
CHARITY_SIZE	-/+	Natural logarithm of total assets	Andrés-Alonso *et al.* (2010); Perego and Verbeeten (2015)
LEV	-/+	Total of liabilities over total assets	Verbruggen and Christiaens (2012); Jegers (2013)
GOV_FUND	-/+	Percentage of governmental funding over total income	Kitching (2009); Verbruggen and Christiaens (2012)

3.6 Empirical results and analysis

3.6.1 Descriptive statistics

The descriptive statistics of the sample are summarized in Table 3.4. These results show that the top 250 charities have a relatively large board size of approximately thirteen trustees, of which 31.9% are female. This rate is much higher than the number of females serving on the boards of FTSE 350 companies (10.8%) (Grant Thornton, 2013) and almost the same as the numbers of female members in American universities (29%) (Harris, 2014). However, only 14.0% of charities have a significant proportion of females on the board (i.e. 50% or more). This figure is higher in the case of some religious charities. With respect to ethnic diversity, the figure is comparatively low (only 5.5% of trustees are non-white). In comparison to US charities, it was shown in a study by Newton (2015) that the boards of US charities have a mean and median of about twenty-one and seventeen members. This finding suggests the board size of UK charities appears to be smaller than US charities, but it is larger than Dutch charities which have a mean board size of around 7.48 (Perego and Verbeeten, 2015).

The diversity of the board of trustees in terms of non-observable factors indicates that the UK charity boards include a wide range of trustees with significant trusteeship experience. The average of mix of trustee experience scale is 3.28. This figure implies that the board of trustees includes a mixture of more than three bands, with varied

directorship experience from less than five years to more than fifteen years. With regards to the sectorial orientation of boards, on average, about 47% of trustees come from the business sector, and in some cases charities have more than 90% of trustees from a business background compared to the public or non-profit sectors. In comparison, Mahadeo *et al.* (2012) found that boards of directors in an emerging economy (Mauritius) comprise a mixed of experience and multiple educational backgrounds. This is similar to the case of Australian firms, with more than 50% of the top 100 Australian companies in 2003 including a wide range mixture of age and industrial experience (Kang *et al.*, 2007). In addition, a study by Harris (2014) suggests that 16% of the board members of American universities were previously employed in the higher education industry, and up to 64% of the board members serve on the boards of other NPOs.

Table 3.4: Descriptive statistics

Statistics	Mean	Min	Max	Standard deviation	N
DA	0.0387	-0.6047	0.9875	0.1342	250
BOARD_SIZE	13.02	2	48	5.6251	250
BOARD_FEM	0.319	0	1	0.1712	250
BOARD_FEM_SIG	0.140	0	1	0.3477	250
BOARD_ETH	0.055	0	1	0.1197	250
BOARD_EXPE	3.280	1	4	0.649	193
BIZ_ORIENT	0.471	0	0.93	0.1797	193
BOARD_EDU	3.482	2	5	0.737	193
AC	0.808	0	1	0.3947	250
AC_EXPERT	0.279	0	1	0.2470	207
INT_AUD	0.648	0	1	0.4786	250
AUD_TOP4	0.316	0	1	0.4649	250
CHARITY SIZE	18.148	12.615	23.499	1.294	250
LEV	0.3292	0.0007	1.5014	0.2513	250
GOV_FUND	0.1323	0	0.9945	0.2505	207
NON-AUDIT_FEE	0.3603	0	11.583	0.9536	250

DA: Discretionary accruals, a proxy for earnings management, which is calculated by a modified Jones model. **BOARD_SIZE**: number of trustees on board; **BOARD_FEM**: percentage of female trustees on board; **BOARD_FEM_SIG**: equals 1 if more than 50% of the trustees on board are female, 0 otherwise; **BOARD_ETH**: equals 1 if there is at least one non-white trustee on the board, 0 otherwise; **AC:** equals 1 if the charity has an audit committee, 0 otherwise; **AC_EXPERT:** percentage of audit committee members with background/experience in accounting/finance; **INT_AUD:** equals 1 if charity has an internal audit function, 0 otherwise**; AUD_TOP4:** equals 1 if external auditor is from the top 4 auditors (BT, CCW, BDO, Hay) by number of clients worked with, 0 otherwise; **NON-AUDIT_FEE:** percentage of non-audit service over total fee charged by external auditor; **Charity size**: natural logarithm of total asset; **LEV**: total of liabilities over total assets; **GOV_FUND**: percentage of governmental funding over

total income. **BOARD_EXPE:** equals 1 or 2, 3, 4 if there is/are only 1 or 2, 3, 4 experience bands; **BIZ_ORIENT:** percentage of trustees working in businesses or industries rather than in public sector; **BOARD_EDU:** equal 1, 2, 3, 4, 5 if there is/are 1, 2, 3, 4, 5 educational background band(s).

In addition, the boards of the top 250 UK charities also comprise various occupational backgrounds. On average, each board incorporates three occupational groups, for example, group 1: business and law; group 2: accounting and finance; group 3: medical, healthcare and physicians; group 4: engineering and science; and group 5: others. This suggests that there is a rather extensive balance of skills, experience and knowledge of the charity, as recommended by the Good Governance Code. While the setting up of an audit committee is not mandatory, about 81% of the large charities have implemented this governance structure. However, only around 28% of the members of audit committees have a background or experience in accounting/finance. This does raise a concern about the quality and financial monitoring function of an audit committee.

In addition, 64.8% of charities in this study have an internal audit function and 31.6% are audited by the top 4 specialist auditors. The ranking of the top 4 auditors in the charitable market is based on the number of clients audited by these firms. According to Charity Financials[34], Baker Tilly UK Audit LLP (BT), Crowe Clark Whitehill (CCW), BDO LLP (BDO), and Hays Macintyre (Hay) are ranked as the top audit firms over the period 2009 to 2013. It may be important to note that the non-audit fees accounted for about 16% of the total service fee charged by the auditor.

Finally, discretionary accruals as a proxy of earnings management, estimated using the modified Jones model, varied from -0.6 to 0.9 and had a mean value of 0.0401. A t-test confirmed that the mean of discretionary accruals was different from zero. These results imply that charities are involved in earnings management by using accounting accruals to adjust the bottom line item. The results further suggest that earnings management may be in place when financial performance is adjusted upwards (in case of positive discretionary accruals) or downwards (with negative discretionary accruals). On average, the adjustment of accruals appears to be a prevalent behaviour. These results

[34] From: http://secure.charityfinancials.com/reports.aspx

are consistent with Ballantine *et al.* (2007), Leone and Van Horn (2005) and Verbruggen and Christiaens (2012), suggesting that non-profit organizations manage their earnings results intentionally in order to achieve a break-even target. Although charities are not legally required to meet the break-even target, balancing the income and expenses for each year is an indirect way to inform all related stakeholders that money has been used completely and further donations and/or funding are necessary for future charitable operations.

To sum up, the results discussed above reveal the key characteristics of trustee boards in large UK charities following the development of the 2010 Good Governance Code, with notable diversity within boards of trustees (in terms of gender, trusteeship experience and education background). The performance of other governance mechanisms is also notable with regards to setting up an audit committee, internal audit functions, and being audited by specialist external auditors. These figures are more extensive relating to governance performance in comparison to previous studies of UK charities (Jobome, 2006a). Interestingly, the average board size of large charities in the UK seems to be smaller in comparison to the UK higher-education sector (13 vs. 24) (Ntim *et al.*, 2015b). This result demonstrates a trend towards reducing board size in the UK charitable sector (since the average board size of the top 100 UK charities in 2000/01 was 17 (Jobome, 2006a).

3.6.2 Results analysis

The correlation matrix among variables (Table 3.5) highlights several interesting results. First, the size of the board of trustees is positively associated with the presence of an audit committee, indicating that larger boards of trustees need to be supported by audit committees. The proportion of females on the board has a positive correlation with ethnic diversity and the existence of internal audit functions within charities. This suggests that the significance of females on the board may enhance board diversity and strengthen the internal control system by facilitating internal audit functions. In addition, the audit committee and the existence of financial expertise within the committee are positively correlated with internal audit functions. This infers the role of the audit committee and the financial background of the audit committee members in fostering the operations of the internal control systems of charities. In terms of non-observable board diversity factors (Table 3.6), the correlation matrix indicates that

board size has positive associations with trustee experience, trustee educational background and the existence of an audit committee. This may suggest that a larger number of trustees brings more diversity of experience and qualifications to the board.

Before implementing multivariable regression, it is necessary to conduct several statistical diagnostics to check normality, linearity, heteroscedasticity and multi-collinearity issues. The frequency distribution of the dependent variable (Discretionary accruals) shows a high kurtosis (17.461) caused by the large number of charities with discretionary accruals close to zero. The mean and median of discretionary accruals are positive at 0.04014 and 0.01943 respectively, indicating an outweighed upward trend in bottom line management. There are some charities with significant discretionary accruals; however, following Park and Shin (2004), it is not necessary to exclude those values from the data in order to identify the real managing behaviour of charity managers. In addition, the correlation among the variables above shows that some variables are significantly correlated. Therefore, the variance inflation factors (VIF) is examined for the different regression models are all less than 5, implying that multi-collinearity is not an issue (Kennedy, 2003; Reheul *et al.*, 2013).

Table 3.5: Correlation matrix: model 2a (observable diversity variables)

	DA	BOARD_SIZE	BOARD_FEM	BOARD_FEM_SIG	BOARD_ETH	AC	AC_EXPERT	INT_AUD	AUD_TOP4	NON-AUDIT_FEE	CHARITYSIZE	LEV	GOV_FUND
DA	1												
BOARD_SIZE	-0.0157	1											
BOARD_FEM	-0.1242	0.0275	1										
BOARD_FEM_SIG	-0.1460*	-0.0963	0.7106*	1									
BOARD_ETH	-0.0927	0.0543	0.1742*	0.1377*	1								
AC	0.0706	0.2386*	0.1341	0.0133	0.0689	1							
AC_EXPERT	-0.0632	-0.0308	0.1135	-0.0536	0.0308	0.6067*	1						
INT_AUD	-0.0285	0.0781	0.2074*	-0.0007	0.2015*	0.5193*	0.2884*	1					
AUD_TOP4	-0.0631	0.1097	0.0142	0.0094	-0.0475	0.0243	0.0408	-0.072	1				
NON-AUDIT_FEE	-0.0664	-0.0064	0.0406	0.0104	0.0509	0.0468	0.003	0.0919	-0.0387	1			
CHARITY SIZE	-0.1765*	0.0173	0.0001	0.1068	-0.0047	-0.0058	-0.0403	0.0691	-0.109	0.2146*	1		
LEV	0.0043	-0.1832*	0.0335	0.0215	0.0566	0.105	0.1323	0.0851	-0.2279*	0.1166	-0.1622*	1	
GOV_FUND	0.061	0.1650*	0.0456	-0.1057	0.2852*	0.1172	0.0699	0.1181	0.0127	-0.0491	-0.2524*	-0.0479	1
N	207	207	207	207	207	207	207	207	207	207	207	207	207
VIF	2.41	2.35	2.34	2.3	2.4	2.37	2.32	2.3	2.43	2.42	2.39	2.43	2.38

*: Significant at 5% level

Table 3.6: Correlation matrix: model 2b (un-observable diversity variables)

	DA	BOARD_SIZE	BOAD_EXPE	BIZ_ORIENT	BOARD_EDU	AC	AC_EXPERT	INT_AUD	AUD_TOP4	CHARITY SIZE	LEV	GOV_FUND
DA	1											
BOARD_SIZE	-0.0556	1										
BOAD_EXPE	-0.0515	0.5252*	1									
BIZ_ORIENT	-0.063	-0.0975	0.0595	1								
BOARD_EDU	-0.1589*	0.5157*	0.4573*	-0.0074	1							
AC	0.0036	0.2468*	0.2572*	0.1176	0.2924*	1						
AC_EXPERT	0.0047	0.139	0.2245*	0.1866*	0.2889*	0.8584*	1					
INT_AUD	0.036	0.12	0.2622*	0.1107	0.1773*	0.4443*	0.4690*	1				
AUD_TOP4	-0.0132	0.1157	-0.0231	0.023	0.0472	0.0382	0.0046	0.0319	1			
Charity size	-0.1003	-0.0424	0.115	0.1680*	-0.0165	0.0072	-0.0405	0.1275	-0.0586	1		
LEV	-0.0922	-0.1251	0.0176	-0.0786	-0.0875	0.1712*	0.1714*	0.125	-0.2243*	-0.0934	1	
GOV_FUND	-0.0131	0.0542	0.1034	-0.0897	0.1251	0.0372	0.0473	0.0561	0.022	-0.2664*	-0.0407	1
N	193	193	193	193	193	193	193	193	193	193	193	193
VIF	4.35	4.21	4.35	4.24	4.25	1.71	1.74	4.19	4.34	4.25	4.35	4.35

* Significant at 5% level

The relationship between earnings management, which is proxied by discretionary accruals, and charity governance factors is summarized in Table 3.7. In general, the results demonstrate that several governance factors have a significant association with discretionary accruals. First, diversity, in terms of gender and educational background, has a negative impact on discretionary accruals. Specifically, charities with a significant proportion of female trustees are less likely to be involved in earnings management. This can be explained from the view that women are seen to behave with higher moral and ethical standards, as well as being more active and critical in raising questions about organizational matters (Pan and Sparks, 2012; Virtanen, 2012). The result support the findings from a previous study in the profit sector that gender-diverse boards and audit committees are associated with higher earnings quality, since including female directors on the board and the audit committee are plausible ways of improving the firm's reporting discipline and increasing investor confidence in financial statements (Srinidhi *et al.*, 2011). The findings also lend support to a recent study in non-profit organizations which reported that the diversity of gender on the board has a positive association with public accountability by improving voluntary disclosure (Ntim *et al.*, 2015b). This suggests that the participation of women on trustee boards in the charitable sector increases accountability.

Table 3.7: Regression of governance variables on earnings management

Variables	Predicted sign	Model 2	Model 2a	Model 2b	Model 2c	Model 3	Model 4	Model 5	Model 6
Intercept		0.3712	0.3907	0.3982	0.3030	0.0318	0.1286	0.3492	0.2678
		*2.57***	*2.65****	*2.75****	*2.97****	*1.57*	*1.57****	*2.68****	*2.13***
BOARD_FEM	-	-0.0980			-0.0841				
		-1.58			*-2.11***				
BOARD_FEM_SIG	-	-0.0517	-0.0527			-0.0611		-0.05435	
		*-1.8**	*-1.94**			*-2.3***		*-2.06***	
BOARD_ETH	-	-0.1532	-0.1021		-0.0370				
		-1.45	*-1.02*		*-0.66*				
BOAD_EXPE	-	0.0207		0.0086					
		1.12		*0.48*					
BIZ_ORIENT	-	-0.0751		-0.0574					
		-1.38		*-1.07*					
BOARD_EDU	-	-0.035		-0.0365			-0.0274		
		*-2.27***		*-2.36***			*-2.22***		
BOARD_SIZE		-0.002	-0.0023	-0.0006	-0.0012				
		-0.73	*-1.21*	*-0.21*	*-0.93*				
AC	-	0.0176	0.0903	0.0169	0.0622	0.0608		0.0620	0.1456
		0.34	*2.68****	*0.34*	*1.91**	*2.13***		*2.2***	*2.55***
AC_EXPERT	-	0.003	-0.1209	0.0058	-0.0401	-0.1037		-0.1083	
		0.06	*-2.41***	*0.12*	*-1.39*	*-2.12***		*-2.24***	
INT_AUD	-	0.03	-0.0233	0.0239	0.0032				
		1.23	*-0.96*	*1.02*	*0.19*				
AUD_TOP4	-	-0.0141	-0.0260	-0.0133	0.01893				
		-0.7	*-1.23*	*-0.66*	*1.2*				

Variables (cont'd)	Predicted sign	Model 2	Model 2a	Model 2b	Model 2c	Model 3	Model 4	Model 5	Model 6
NON-AUDIT_FEE		-0.02	-0.0195	-0.0033	-0.0014				
		-0.44	*-0.4*	*-0.35*	*-0.2*				
Charity size		-0.0114	-0.0171	-0.0127	-0.0130			-0.0175	-0.0121
		-1.5	*-2.19*	*-1.68**	*-2.43***			*-2.47***	*-1.78**
LEV		-0.0816	-0.0233	-0.0810	-0.0263				-0.0677
		*-2.15***	*-0.55*	*-2.12***	*-0.94*				*-1.89**
GOV_FUND		-0.0190	0.0177	-0.0234					
		-0.49	*0.42*	*-0.61*					
N		192	207	193	250	207	193	207	193
F		1.45	2	1.17	1.46	3.39	4.95	4.13	2.83
Prob > F		0.1332	0.0298	0.3076	0.1655	0.019	0.0273	0.0031	0.0261
R-square		0.1031	0.1016	0.0724	0.0518	0.0477	0.0252	0.0756	0.0567
***, **, *** significant at 10%, 5% and 1%**									

With regard to the non-observable factors, the results suggest that a wider mix of educational backgrounds has a negative impact on earnings management. From a stakeholder perspective, a multi-educational background strengthens the effectiveness of trustee boards since a diversity of educational backgrounds will bring more appropriate knowledge to the board and its committees, and enhance the board's ability to devote more consideration to organizational issues (Tuggle *et al.*, 2010). Furthermore, a wide array of knowledge and occupations is important since boards need to grapple with the multiple dimensions of a business decision – e.g. financial, human resource, legal, taxation, ethical, environmental, media and operational implications (Mahadeo *et al.*, 2012). For instance, a board comprising trustees with an accounting and business background might have a better understanding of accounting principles and accounting application (Bédard *et al.*, 2004). This will foster their role of reviewing and monitoring charity managers in applying accounting regulations in practice. Xie *et al.* (2003) suggested that a director with a financial background may be more familiar with the ways that earnings can be managed and may better understand the implications of accounting manipulation, while a director with a non-financial background may be a well-intentioned monitor but may not have the financial sophistication to fully understand earnings management. Although other diversity factors such as ethnicity, experience and business orientation are not found to be significantly associated with discretionary accruals, the results regarding gender and educational background support the first hypothesis and highlight the relevance of some key board diversity dimensions on accountability and earnings management.

Second, the role of the audit committee and the importance of expertise in accounting and/or finance reveal some results that are open to debate. The statistical results show a positive association between audit committees and discretionary accruals, but the presence of accounting and finance specialists has a negative association with discretionary accruals. This implies that the existence of audit committees by themselves may not constrain earnings management unless they are composed of individuals with sufficient relevant expertise. In the UK charity context, many audit committees include various members from different sectors rather than members who are chosen for their accounting and finance experience (the number of audit committee members with an accounting and finance background only accounts for 28% of the

total). These results are consistent with several studies, such as Peasnell *et al.* (2005), who did not find evidence that the existence of an audit committee directly impacts the extent of income manipulation to meet thresholds, while Chen and Zhang (2014) and Bédard *et al.* (2004) agreed that the presence of at least one member with financial expertise is associated with a lower likelihood of aggressive application of discretionary accruals. This result is consistent with a finding by Mangena and Pike (2005) that the size of the audit committee is not significantly related to the extent of financial disclosure, whereas the existence of an audit committee with financial expertise has a positive relationship with financial quality (in terms of financial disclosure). In the UK higher education context Ntim *et al.* (2015b) also found that the existence of an audit committee may not be efficient to implement the financial monitoring function; instead, the quality of the audit committee in terms of its composition, expertise, diligence and monitoring capacity contributed positively to the organization's public accountability. From a resource dependence perspective, this suggests that in a period of severe competition in the charitable market in relation to funding resources, the presence of the audit committee may provide a signal to key resource providers regarding the adequacy of the charity's monitoring system, since donors and fund providers are sensitive to weak internal control systems over financial reporting (Vermeer *et al.*, 2006). In contrast, the involvement of expertise in accounting and finance in the audit committee increases the capability of the committee, reducing the frequency of internal control problems and avoiding material weaknesses in terms of financial reporting process (Abbott *et al.*, 2004; Wen-Wen *et al.*, 2010); this consequently improves the financial accountability of NPOs. These results partly support hypothesis H2b in terms of a negative association between audit committee expertise and earnings management.

Lastly, the statistical results do not indicate a relationship between earnings management and other governance mechanisms (internal audit functions and specialist auditors). In the for-profit sector, the internal audit function is seen as one of the cornerstones of governance and is acknowledged to have a significant role in constraining abnormal accruals management exercised by management (Coram *et al.*, 2008; Prawitt *et al.*, 2009). However, in the non-profit sector my results are not conclusive in terms of the importance of an internal audit function in mediating earnings management. Plausibly, however, the internal audit function is more concerned about internal controls, procedures and risk management than the preparation of financial

statements. This result may raise an issue about the quality of the internal audit function in the non-profit sector, since a study of for-profit organizations found that the significance of internal audits in relation to material weakness disclosure depends on the education level of the internal auditors and the audit techniques performed by internal auditor (Lin *et al.*, 2011).

In contrast, external auditors focus more on the risk of a material error or misstatement in the published accounts (Charity Commission, 2012), and the use of larger auditing firms may increase the accuracy of charitable expense reporting (Yetman and Yetman, 2012). Nevertheless, while prior studies suggest that industry-specialist auditors may improve earnings quality (Krishnan, 2003; Jaggi *et al.*, 2015) and be able to constrain earnings management in for-profit organizations (Krishnan, 2003; Chia *et al.*, 2007), my results are not statistically robust enough to support this view. Therefore, the results do not support the third hypothesis. This is consistent with a study by Ballantine *et al.* (2008b) in English NHS Trusts, which found that abnormal accruals differed across different types of auditor. However, they could not draw firm conclusions about the negative relationship between specialist auditors and abnormal accruals.

Finally, with respect to the other control variables, this paper found that charity size and leverage are negatively associated with earnings management. However, in order to draw a conclusion about the impact of those factors, an alternative test using the absolute value of DA was conducted (as discussed in the sensitivity test – Table 3.8). The results only confirm a significantly negative association between charity size and DA. This implies that the larger charities are less likely to be involved in earnings management. The reason for this may be that from the ST and RDT perspectives, larger charities' operations and achievements attract the attention of various stakeholders, and managers are less likely to engage in earnings management. Consequently, the board of trustees and its sub-committees are better appreciated in terms of their monitoring and controlling roles to enhance financial transparency and accountability. Furthermore, larger charities normally attract higher levels of supervision from funding agencies. This helps to ensure that charities are tightly monitored and controlled.

3.6.3 Sensitivity analysis and robustness tests

This study examines the robustness of the discretionary accruals measure. First, the absolute value of discretionary accruals was used to measure the extent of earnings management without consideration of the direction of the adjustments, as widely used in empirical research (Klein, 2002; Chen and Zhang, 2014). The results of the OLS regression are shown in Table 3.8 (models Sen1a and Sen1b). These results strengthen the negative relationship between accounting and finance expertise in audit committees and earnings management (Hypothesis 2b). The negative association between charity size and discretionary accruals is also restated with a significant statistical coefficient.

Table 3.8: Sensitivity analysis

Variables	**Model Sen1a**	**Model Sen1b**	**Model Sen2a-Positive DA**	**Model Sen2b-Negative DA**
Intercept	0.490		0.641	-0.190
	*5.8***		*3.89****	*-1.11*
BOARD_FEM	-0.036			
	-0.76			
BOARD_FEM_SIG			-0.048	-0.061
			-1.51	*-2.32***
BOARD_ETH	0.070		0.056	-0.253
	1.25		*0.45*	*-2.41***
BOAD_EXPE		-0.013		
		-0.36		
BIZ_ORIENT		0.024		
		0.28		
BOARD_EDU		0.022		
		0.6		
BOARD_SIZE	-0.002	-0.003	-0.003	0.001
	*-2.25***	*-1.44*	*-1.46*	*0.51*
AC	0.051	0.011	0.091	-0.020
	1.48	*0.1*	*2.4***	*-0.56*
AC_EXPERT	-0.167	0.037	-0.137	0.010
	*-3.02****	*0.99*	*-2.4***	*0.21*
INT_AUD	-0.045	-0.010	-0.042	0.052
	-1.56	*-0.53*	*-1.57*	*2.01***
AUD_TOP4	-0.025	-0.011	-0.036	0.013
	-0.99	*-0.67*	*-1.54*	*0.63*
NON-AUDIT_FEE	0.016	0.002	0.019	-0.039
	0.59	*0.28*	*0.33*	*-0.82*
CHARITY SIZE	-0.020	-0.020	-0.028	0.008

	*-4.62****	*-3.29****	*-3.16****	*0.93*
LEV	0.018	0.002	0.037	-0.082
	0.74	*0.08*	*0.75*	*-1.86**
GOV_FUND	0.024	0.016	0.017	-0.029
	1.01	*0.51*	*0.37*	*-0.57*
Inter_1: AC & INT_AUD	-0.016			
	-0.39			
Inter_2: AC & AUD_TOP4	-0.049			
	-1.39			
Inter_3: AC_EXPERT & INT_AUD	0.126			
	*2.1***			
Inter_4: AC_EXPERT & AUD_TOP4	0.141			
	*2.43***			
Inter_5: BOARD_FEM & AC	0.033			
	0.52			
Inter_6: BOAD_EXPE & AC		0.033		
		0.89		
Inter_7: BIZ_ORIENT & AC		-0.079		
		-0.79		
Inter_8: BOARD_EDU & AC		-0.034		
		-0.89		
N	207	193	137	70
F	3.47	1.44	2.82	2.43
Prob > F	0	0.1342	0.0026	0.0143
R-square	0.2263	0.1086	0.1987	0.3159
*, **, *** significant at 10%, 5% and 1%				

Second, the dependent variable of discretionary accruals was classified into two scenarios, positive and negative discretionary accruals, to see how charities' governance reacts with executive intention to manage their financial impression. The results are shown in Table 3.8 above (models Sen2a and Sen2b). On the one hand, when charities intentionally manage their financial results upward (positive discretionary accruals), again the audit committee is positively associated with discretionary accruals, while the presence of an accounting specialist on the audit committee is negatively associated with discretionary accruals. These relationships restate the importance and necessity of having members with accounting and financial backgrounds on the audit committee in order to constrain charity managers from using accounting figures to manage their financial performance (H2b). On the other hand, when charity managers tried to manage net income downward, the diversity of the board as regards gender and ethnicity has a negative impact on earnings management. These results emphasize the important roles

of trustee diversity; with the presence of significant females or non-white trustees on the board, charities are more successful in controlling and monitoring their executive body from becoming involved in earnings management (H1). This study also tried running regression with positive and negative discretionary accruals when the board diversity factors are unobservable (education, experience and business orientation). However, the regression model was not significant enough (probability was more than 5%) to confirm the relationships between governance factors and earnings management. In addition, the results from model Sen2a again suggest that the existence of the audit committee may not be beneficial, and conversely induces the extent of earnings management as a result of a lack of expertise in the monitoring of financial accountability.

Lastly, the sensitivity results raise the issue of effective collaboration between diverse governance mechanisms, since the presence of experts on the audit committee together with the existence of an internal audit function or auditing by one of the top 4 specialist auditors, may not effectively constrain earnings management. However, to clarify this issue, further research is recommended in this sector.

3.7 Overall discussion and conclusions

This paper sought to examine the characteristics of UK charity governance and its effectiveness in relation to financial accountability. Stakeholder theory and resource dependence theory were used as underlying perspectives on the role of governance in the non-profit sector. Furthermore, this paper focusses on the quality of financial accounting practice as a measure of non-profit organization financial accountability, based on the hypothesis that UK charities may attempt to influence the perceptions of various stakeholders (earnings management). Based on hand-collected data from the top 250 charities, this study addresses two research questions. First, in terms of governance structure and characteristics, UK charities have relatively large boards of trustees with significant diversity relating to gender, ethnicity, education and experience. Although approximately 80% of my sample had an audit committee, the members of these committees with relevant accounting and finance expertise only amounted to roughly 28%. Second, in connection with financial accountability, charity governance characteristics have a significant impact on improving the accountability of the organization by constraining any earnings management that may be employed by

charity managers. More specifically, the diversity of the board in relation to gender, ethnicity and educational background has a negative association with earnings management. In addition, the presence of expertise in accounting and finance on the audit committee also mitigates the level of earnings management.

This study's findings contribute to the limited knowledge on the behaviour of non-profit organizations and their use of accrual accounting to manage their image and impression of financial ability and competence, in order to influence stakeholders and resource providers, strengthen public trust and confidence, and retain access to resource providers (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012; Jegers, 2013). Recent studies in the non-profit context have argued that governance structures and characteristics have a significant impact on organizational efficiency, performance and some aspects of organization accountability (e.g. disclosure, compensation and information accuracy) (Andrés-Alonso *et al.*, 2010; Yetman and Yetman, 2012; Hofmann and McSwain, 2013; Wellens and Jegers, 2014; Newton, 2015; Ntim *et al.*, 2015b; Perego and Verbeeten, 2015). This research highlights the importance of some trustee characteristics, specifically gender and ethnic and educational diversity.

Moreover, this paper raises a concern about the apparently 'symbolic' use of audit committees in the UK charitable sector unless actual specialists join the committees. Theoretically, audit committees with a specialising function in financial monitoring would be expected to enhance the transparency and credibility of organizations. The existence of an audit committee within an organization has therefore been widely considered to have a positive impact on accountability and accounting quality (Klein, 2002; Davidson *et al.*, 2005; Piot and Janin, 2007; Baxter and Cotter, 2009; Wen-Wen *et al.*, 2010; Rich and Zhang, 2014). This might motivate large numbers of UK charities (more than 80% in my sample) to set up audit committees with the aim of sending a positive signal to various stakeholders and resource providers about the charity's governance structure. This might consequently enhance the reliance of key stakeholders and resource providers regarding the effectiveness of charitable organizations. However, in order to ensure the effectiveness of an audit committee, the charitable organization needs to consider the quality of the audit committee in terms of its composition, expertise, diligence and monitoring capacity (Ntim *et al.*, 2015b).

This study consequently has several important implications for academia and practice. First, the development of the UK charity governance code is still in progress. Results have indicated a noticeable improvement in the governance performance of the top 250 UK charities since the implementation of the 2010 Good Governance Code in the voluntary sector. Compared to reports published by Grant Thornton (2013, 2014), this research presents more detailed information with respect to several types of board diversity and audit committee characteristics. Second, although the levels of non-white directors, female trustees on the board and specialist expertise in audit committees appear relatively low, the findings confirm the importance of those factors as necessary elements of the governance structure. This finding will be of interest to several stakeholders including government, regulators, donors, beneficiaries and sectorial representatives (e.g. the NCVO), and help to determine whether more detailed governance requirements need to be set out. Lastly, this paper outlines the relevance of stakeholder theory and resource dependence theory in studying the role of charity governance and accounting in the enhancement of charity accountability.

Notwithstanding, there are some limitations in terms of the data used in this paper. There is a limit in terms of the sample size and available governance information. There is no systematic information resource on charity governance, and an element of bias may arise if one relies on organizations that provide publicly available data (which in itself may be an indication of accountability and transparency). Nonetheless, the results provide sufficient evidence to demonstrate the extent of governance and its effectiveness. The results also suggest that further research should be undertaken to evaluate the role of the audit committee and other governance mechanisms (particularly internal and external auditors) in connection with charity accountability.

Chapter 4: What are the Determinants of Chief Executive Compensation in the Non-profit Sector? The Case of UK Charities

4.1 Abstract

Based on a wider perspective of agency theory, namely the social theory of agency (Archer, 1988; Wiseman et al., 2012), this paper investigates whether organizational performance, charity governance, CEO characteristics and sectoral differences are associated with charity CEO compensation. On the basis of a hand-collected sample from the top 250 charities in 2012, the results first suggest that charity performance (using different measures) is not associated with CEO compensation, suggesting that charities may not be applying a performance-based system to set CEO compensation. This result is consistent with the social theory of agency, which suggests that in the case of a greater number of different principals, pay criteria linked to performance are less likely to be used (Wiseman et al., 2012). Second, this study reveals that a higher extent of board diversity in terms of gender and education and the existence of a remuneration or nomination committee are positively associated with CEO compensation, while the presence of experts in accounting and finance on the audit committee has a significantly negative influence on CEO compensation. These mixed relationships are also in line with the social theory of agency. Third, the results show a negative association between the charity's reliance on government funding and CEO compensation, which may suggest the influence of a specific principal-driven dynamic (by government) in monitoring executive compensation. Finally, this paper finds that CEO compensation is also impacted by charity age, size and sectoral factors. The results are broadly stable when relying on different compensation variables (charities with excess compensation above median) and other sensitivity analysis. The findings contribute to the scant knowledge on the factors determining CEO compensation in the non-profit sector and seek to inform policy and practice in the sector.

Key words: CEO compensation, governance quality, organizational performance, CEO characteristics, social theory of agency

4.2 Introduction

For decades there has been interest in chief executive officers' (CEOs') compensation from a number of practitioners, researchers and especially the public media. There have been a large number of studies on executive compensation in for-profit organisations (Finkelstein and Hambrick, 1988; Gomez-Mejia and Wiseman, 1997; Coombs and Gilley, 2005; Devers *et al.*, 2007; Ntim *et al.*, 2015a), while numerous debates and discussions have criticised the impact of excessive CEO pay on organizations and society, such as the arguments cited in Whelton (2006). 'Alan Greenspan, past Chairman of the Board of Governors of the Federal Reserve from 1987 to 2006, has expressed concern over excessive pay-outs to CEOs contributing to inflation and reducing the corporate focus on long-term profitability', and 'the lack of awareness of the gap in CEO to unskilled worker pay – which in the US people estimate to be thirty to one but is in fact 350 to one – likely reduces citizens' desire to take action to decrease that gap' (Gavett, 2014).[35]

In the case of the non-profit sector, 'like religion, politics, and sports, non-profit executive compensation often evokes strong emotion. Donors, journalists, state officials, and members of Congress frequently express outrage at the salaries non-profit CEOs receive, especially if the organizations they head are public charities that rely on donations from the public' (GuideStar, 2015, p. 2). Accordingly, there have been increasing calls for greater accountability in terms of the funds donated or raised in pursuit of social objectives. While accountability concerns initially focused on accounting and reporting practices (Dhanani, 2009; Connolly and Hyndman, 2013a, 2013b; Morgan and Fletcher, 2013), the governance of non-profit organizations, and particularly the basis upon which non-profit leaders are remunerated, is attracting more attention. Similar to for-profit studies, it is argued that compensation may be determined by organizational performance (however defined, i.e. financial or non-financial), organizational characteristics (e.g. size, governance structure) and individual profiles (e.g. experience, qualification). However, the reported findings so far are inconsistent with different factors that have been found to be either empirically significant or not. For example, several studies in the US have argued that organizational performance

[35] https://hbr.org/2014/09/ceos-get-paid-too-much-according-to-pretty-much-everyone-in-the-world

(measured mainly by financial indicators) is positively associated with CEO compensation (Brickley and Van Horn, 2002; Carroll *et al.*, 2005; Frumkin and Keating, 2010; Grasse *et al.*, 2014), while studies in the UK context could not find any relationship between performance and CEO pay (Jobome, 2006a; Ballantine *et al.*, 2008a). In terms of governance structure, few studies have attempted to test the effectiveness of governance in relation to CEO compensation. On the one hand, Newton (2015) and Perego and Verbeeten (2015) agreed that the quality of governance or the adaptation of governance could restrain payment to CEOs, but this is not the case in the UK, where Jobome (2006a) found that most governance variables are not significantly related to CEO compensation. Other factors, such as CEO power, organizational size and board size, have also been considered by prior studies, but the findings have been contradictory (Oster, 1998; Barros and Nunes, 2007). In the UK context, only two studies have investigated this issue, with an emphasis on UK hospitals (Ballantine *et al.*, 2008a) and a relatively small sample of UK charities (Jobome, 2006a). Thus, very little has been done recently to examine the effects of organizational governance on compensation in UK non-profits, particularly in the light of the charity governance reforms initiated in 2005 (and reviewed in 2010) and the heightening of societal concerns about charity accountability and governance (Dhanani, 2009; Candler and Dumont, 2010; Connolly and Hyndman, 2013b). This leads to the research question: *What are the determinants of CEO remuneration in UK charities?*

In addition, there is a limited number of official regulations on charity executive compensation. To the best of my knowledge, up to the time this research was conducted there has been no specific guidance on executive compensation except a statement in the Good Governance Code for the voluntary and community sector, suggesting that if a voluntary organization has a chief executive it should practice and follow a formal arrangement, where the supervision, support, appraisal and remuneration of executives are implemented formally (Code Steering Group, 2010).[36] In comparison to the UK context, US NPOs are required to submit information on compensation policies and the quantity of compensation paid to their CEOs and other executive staff (Internal Revenue

[36] Currently, guidance on UK charity executive compensation has been published by the Association of Chief Executives of Voluntary Organizations (ACEVO) and the National Council for Voluntary Organizations (NCVO). However, those guidelines came in after the data for this study was collected; they are therefore beyond the scope of this paper.

Service, 2015). Furthermore, US non-profit organizations may be fined and levied for excessive payments to CEOs (Frumkin and Keating, 2010).

Theoretically, this study also highlights a key concern with a reliance on the classical principal-agency perspective to study the determinants of compensation in non-profit organizations. Typically, compensation is seen as a way to align the interests of the principal and agent, and in consideration of the opportunistic wealth-maximising behaviour that is assumed of managers, governance structures are traditionally seen as mechanisms that would constrain the level of CEO compensation and/or curb excessive payments (Ballantine *et al.*, 2008a; Grasse *et al.*, 2014; Newton, 2015; Perego and Verbeeten, 2015). Paradoxically, however, it is doubtful that such characterisation could apply to the non-profit sector as a whole given the different (potentially non-pecuniary) motivations underlying the behaviour of leaders (agents) in this sector, the multiple roles of governance structures and actors that may privilege rather than merely act as a control mechanism, and the ambiguity of this sector in terms of the (multiple) identities, forms and interests of the 'principal(s)' (if any). Admittedly, while some of these aspects are acknowledged in the above-mentioned studies, these are loosely and somewhat selectively articulated as 'contextual' differences to explain the findings or motivate research, with little potential for their conceptual contribution to the field of compensation in the non-profit context.

This paper aims to contribute to this gap by drawing from the *social theory of agency* (Archer, 1988; Wiseman et al., 2012). Put simply, the social theory of agency (STA) conceptualises and proposes how agential behaviour may vary in the principal-agent setting, with an explicit consideration of the social and contextual environment in which he/she operates and which is characterised by four aspects, namely power relations, the institutional environment, networks, and cognitive frameworks. As such, it allows this study to explore the role of governance, organizational and individual-level determinants of CEO compensation in the UK charitable sector. Based on hand-collected data from the top 250 UK charities, the evidence first suggests that at the organizational level, on the one hand organizational performance is not significantly related to CEO compensation. On the other hand, different facets of charity governance reflect a blend of negative, positive and non-significant relationships with CEO compensation. Specifically, while the diversity of the board (in respect of gender and

education) and the existence of a remuneration and/or nomination committee is positively related to CEO compensation, the presence of specialists in accounting and finance on the audit committee is negatively associated with CEO compensation. Second, several organizational characteristics (size, government funding and sector) influence the levels of CEO compensation. Lastly, at the individual level, the CEO's managerial experience is positively related to compensation, whereas the extent to which CEOs have worked in the non-profit sector is negatively associated to their compensation.

This research contributes to the literature in the following ways. First, the paper provides a more detailed analysis of CEO compensation in UK charities and highlights the heterogeneous effects of organizational, governance and individual factors on CEO compensation, in contradiction to the narrow tenets of classical agency theory. Second, rather than seeing these results as idiosyncratic in nature, this paper employs STA to show the role played by social and cultural conditions underlying the 'principal-agent' relationship in non-profit organizations. Specifically, the compensation system for the non-profit CEO can be explained by three aspects, namely power relations, the institutional environment and the cognitive framework of the social theory of agency. The power relation perspective suggests that a charity with higher diversity on the board (seen here as a form of 'principal') is less likely to be involved in using organizational performance-related pay, and instead the CEO is rewarded according to their ability to balance conflicting objectives among principals. Moreover, the power relations can be analysed through an ownership concentration. Although the ownership concept is not strictly relevant to the non-profit context, funding from government (as a type of principal) has an impact on constraining CEO compensation. In terms of the institutional environment, STA contends that a higher level of intermediation and transparency, which is represented by the presence of outside experts on the audit committee, can lessen the potential for opportunistic behaviours by the agent by reducing CEO compensation. With regard to the cognitive framework, for a charity leadership style which emphasises pecuniary rewards, it is more likely that the agent's pay will be associated with individual's reputation (managerial experience). In addition, sectoral differences in CEO compensation also highlight an indication of the varying importance attached to pecuniary rewards, whereby some charitable sectors, such as healthcare or education and research, are characterised by higher average pay to their

CEOs. Lastly, this study also raises a question about the role of nomination and remuneration committees in UK charities, because the existence of nomination and remuneration committees as an intermediation specialising in selecting and setting proper compensation to CEOs would act to 'increase the transparency and foster more stewardship behaviours among agents' (Wiseman *et al.*, 2012, p. 208), and therefore constrain the excessive payment to CEOs.

The remainder of this paper is structured as follows. The next section reviews the literature on the determinants of non-profit CEO compensation. The following section expands on the tenets of STA and develops hypotheses to examine the determinants of CEO compensation in the UK charitable sector. In the fourth section this paper focuses on the methodology. The last two sections present and analyse the empirical results, following by a discussion of the implications of the findings and the limitations of the study.

4.3 Review of prior literature

Research on executive remuneration has attracted a large number of studies in the for-profit sector (Deckop, 1988; Banghoj *et al.*, 2010; Nakazato *et al.*, 2011; Vieito and Khan, 2012; Wang *et al.*, 2013; Menozzi *et al.*, 2014; van Essen *et al.*, 2015). This body of work suggests that various organizational, governance and individual level factors impact on the level of remuneration, such as board composition (i.e. percentage of independent directors on the board), CEO power (the duality function of CEO and chairman), CEO characteristics (i.e. age, tenure), corporate governance features (the existence of remuneration committees, nomination committees), organizational characteristics (such as size, ownership structure) and organizational performance (financial and non-financial ratios) (Conyon and Peck, 1998; Sandersm and Carpenter, 1998; Menozzi *et al.*, 2014; van Essen *et al.*, 2015). A review of the limited studies in the non-profit sector indicates that those factors have been selectively considered and examined in the non-profit context in different operating environments and jurisdictions (Jobome, 2006a; Frumkin and Keating, 2010; Newton, 2015; Perego and Verbeeten, 2015) such as the US, the Netherlands and the UK, and/or in specific types of organizations (e.g. hospitals) (Brickley and Van Horn, 2002; Eldenburg and Krishnan, 2003; Ballantine *et al.*, 2008a).

Those studies typically argue that several factors impact on chief executive compensation in non-profit organizations, such as, at the organizational level, the implementation of governance mechanisms (Jobome, 2006a; Newton, 2015; Perego and Verbeeten, 2015), non-profit organization performance (Eldenburg and Krishnan, 2003; Barros and Nunes, 2007; Frumkin and Keating, 2010), and other features of organizations (for instance, organization age, size and sectoral factors) (Jobome, 2006a; Perego and Verbeeten, 2015). In addition, studies have focused on individual level factor suggesting that the experience, competence and skills of CEOs may influence their compensation in the non-profit sector (Jobome, 2006a; Barros and Nunes, 2007; Brickley *et al.*, 2010). A list of reviewed articles is given in Appendix A.4.

While a key concern of the executive remuneration literature in the for-profit sector relates to the link between profitability (or shareholder value) and executive compensation, the issue is arguably somewhat different in the non-profit sector due to the multitude of ways in which 'performance' may be understood (Baber *et al.*, 2002; Frumkin and Keating, 2010; Grasse *et al.*, 2014). Studies in the non-profit context recommend the use of different ways of assessing non-profit organizational performance, and among those measures, effectiveness and efficiency can be seen to be the most appropriate measures since profitability (i.e. the shareholder returns generated) would seem to be irrelevant in appraising or rewarding managerial performance (Frumkin and Keating, 2010; Grasse *et al.*, 2014). Specifically, a number of ratios can be used to measure the effectiveness, efficiency and performance of non-profit organizations – for example, programme spending to total income, fundraising efficiency, administration cost ratio, or revenue growth (Frumkin and Keating, 2010; Hyndman and McConville, 2015; Newton, 2015; Perego and Verbeeten, 2015; Boateng *et al.*, 2016). However, empirical findings relating to the relationship between non-profit organizational performance and CEO compensation are still mixed. Some papers found a positive association between organizational efficiency (measured by programme spending ratio) and executive director compensation. Those studies suggest that executive directors of non-profit organizations are rewarded for their ability to monitor the organization's resources efficiently (Frumkin and Keating, 2010; Grasse *et al.*, 2014). However, using the same measures of performance (such as programme spending ratio and fundraising ratio), Newton (2015) found a negative relationship between these measures of organizational performance and CEO-to-employee relative

pay ratio, concluding that non-profits with lower organizational performance paid their CEO higher levels of compensation. Newton contends that this may be explained by weak governance and the ineffectiveness of monitoring mechanisms, such as board independence, governing policies or audit committees (Newton, 2015).

In the UK non-profit sector, the relationship between organizational performance and CEO compensation has been examined by Jobome (2006a) and Ballantine *et al.* (2008a) with contradictory findings. While Jobome (2006a) found that CEO compensation is negatively associated with non-profit performance – measured by the ratio of voluntary income raised to total income – Ballantine *et al.* (2008a) found no evidence of a relationship between CEO pay and performance (measured by the absolute value of the annual surplus/deficit) These findings raise a question about the presence of the pay-for-performance system in the UK non-profit context, and urge further investigation of this issue. In addition, the study on UK charities (Jobome, 2006a) is limited by only using a financial performance indicator of voluntary income growth. Relatedly, according to a recent study of UK charities, this particular performance indicator is not a key measure that is widely used for assessing UK charity performance (Boateng *et al.*, 2016). This partly motivates an examination of other proxies of non-profit performance as proposed by Boateng *et al.* (2016), namely programme ratio, fundraising efficiency and income growth.

In terms of governance mechanisms, a significant number of studies adopt the classical viewpoint of agency theory to investigate the influence of governance on charity executive compensation, with the dominant argument that governance acts as a controlling mechanism to monitor and eliminate excessive compensation (Aggarwal *et al.*, 2012; Newton, 2015; Perego and Verbeeten, 2015). These studies found that the adoption of the Good Governance Code or another strong governance mechanism have a negative association with CEO compensation (Aggarwal *et al.*, 2012; Newton, 2015; Perego and Verbeeten, 2015). However, these findings are inconclusive with a contradictory finding from Jobome (2006a) in the context of UK charities. Jobome (2006a) found that governance, modelled as a monitoring function, is not related to executive compensation, and concludes that non-profit executives seem to act in an altruistic way – a behaviour that would seem to be more in line with a stewardship perspective and contrary to traditional agency thinking.

In addition, the prior literature also considers sectoral and other organizational factors in examining the determinants of non-profit CEO compensation, such as organization size, age and funding structure, location and operating sector. Although the findings are variable depending on the research scope and non-profit regulatory environment, several papers found that such factors impact on CEO compensation. For instance, Perego and Verbeeten (2015) found that older non-profit organizations tend to pay more to their executive directors. They also suggested that health care charities offer higher managerial pay levels. Newton (2015) also found, similar to other studies, that CEO pay is positively associated with organizational size (Hallock, 2002; Frumkin and Keating, 2010; Aggarwal *et al.*, 2012). Lastly, Newton (2015) found that CEO compensation is negatively related to government funding, and argued that greater reliance on the government for resources corresponds to closer monitoring of spending on CEO compensation. However, these aspects have not yet been considered in the UK context.

At the individual level, several studies relied on agency theory and/or the resource-based view of the firm to examine the features and profile of CEOs and whether these could influence the level of compensation. The agency-led view suggests that a longer CEO tenure or higher CEO power might have a greater and positive impact on compensation (Brickley and Van Horn, 2002; Brickley *et al.*, 2010). The resource-based view pays more attention to personal competence and skills such as CEO education, gender and age (Brickley and Van Horn, 2002; Jobome, 2006a; Barros and Nunes, 2007). However, the association between CEO characteristics and their compensation is empirically ambiguous. On one hand, Jobome (2006a) and Brickley *et al.* (2010) found that CEO age and gender are not significantly associated with CEO compensation. On the other hand, Newton (2015) found a negative association between gender and CEO compensation, suggesting that 'women are more willing to accept lower paying positions when operating in a charitable environment' (Newton, 2015, p. 208).

This review indicates that non-profit CEO compensation may be influenced by several factors, such as variations in governance practice, organization performance, individual CEO characteristics and some other organization features. However, these relationships vary in relation to different countries, sectors and institutional environments. The differences in institutional environment may have divergent impacts on principal-agent relationships; for example, differences between boards and management should not lead

to agency costs, and may even be enriching for the governance process (Wellens and Jegers, 2014). According to Lubatkin *et al.* (2007) and Zahra (2007), the social constraints outside the principal-agent relation may limit agent opportunism or influence mechanisms used in controlling agent behaviour, and these are particularistic to the institutional environment in which the organization find itself.

In the UK context in particular, except for one piece of research implemented almost a decade ago (Jobome, 2006a) and one study specialising in hospital organizations (Ballantine *et al.*, 2008a), there is scant research on the determinants of CEO compensation. Furthermore, on a conceptual note, the mixed findings in the charitable context pose an important question as to whether traditional agency theory is able to reflect the dynamics underlying the social, economic and cultural relationships within the charitable sector. The differences between the findings of previous studies may be explained by differences in the non-profit context and the dynamics underlying the institutional, social, economic, cultural and political relationships between the non-profit organisation and its various 'stakeholders'. It is in this regard that this paper turns its attention to the social theory of agency (Wiseman *et al.*, 2012) to examine executive compensation, even though more concern has been raised by the public and the media about the payment levels awarded to the top executive officers,[37] as well as increasing voluntary guidance in terms of executive remuneration. This is the motivation for this paper to examine different possible determinants influencing the executive compensation of UK charity chiefs.

4.4 Theory and hypothesis development

Although it is notable that several theories (agency theory, managerial power theory, tournament theory and stewardship theory) have been employed to study the influence of different factors on executive remuneration in a non-profit context (Hallock, 2002; Jobome, 2006a; Grasse *et al.*, 2014; Newton, 2015), the traditional conception of agency theory remains a dominant view in key studies (Balsam and Harris, 2014; Newton, 2015; Perego and Verbeeten, 2015). Agency theory, as proposed by Jensen and Meckling (1976), is a ubiquitous perspective in mainstream accounting, finance and

[37] http://www.theguardian.com/voluntary-sector-network/2013/aug/06/charity-fat-cats-paid-too-much

business research and reflects the classical role of executive compensation in for-profit organizations (Devers *et al.*, 2007; Wang *et al.*, 2013; Menozzi *et al.*, 2014). In a nutshell, incentive pay and compensation are used as a means to align the interests of the 'agent' (e.g. the chief executive officer) and the principals (e.g. the shareholders) and hence reduce the agency cost. To a large extent, this view has been transposed to the non-profit context (Ballantine *et al.*, 2008a; Grasse *et al.*, 2014; Newton, 2015; Perego and Verbeeten, 2015), and agency theory-led scholars support the view that non-profit organizations with stronger monitoring functions help to reduce the excessive compensation paid to CEOs (Newton, 2015). However, traditional agency theory has been challenged by a number of authors in respect of the narrow assumption that agents *always* seek to maximize their self-interest at the expense of the principal (Lubatkin *et al.*, 2007; Wiseman *et al.*, 2012). Contrastingly, it is argued that the agent's behaviour *may* not always be self-interested, and may be altered as a result of changes in a social environment. An understanding of how agents (and principals) behave and interact in a given social environment is thus referred to as a 'social theory of agency (STA)' (Wiseman *et al.*, 2012).

Furthermore, according to Wiseman *et al.* (2012), the egoist notion of self-interest can be relaxed in economic models, whereby 'both agent and principals have socially derived interests that may or may not coincide, nor must they automatically reflect wealth maximization' (Wiseman *et al.*, 2012, p. 204). These authors suggest that the adoption of agency theory needs to be a more flexible one in that principal and agent interests may differ, but they do not necessarily conflict with each other. The differences in interest are not solely caused by a universally selfish characteristic of the agent, 'but because agents may interpret what is best for the organization in a manner that differs from that of principals' (Wiseman *et al.*, 2012, p. 205). However, due to the differences between agent and principal caused by information asymmetry, it may not be easy for the principals to recognise when an agent's interests differ from their own. Wiseman *et al.* (2012) suggest that a governance mechanism is necessary for the principal to recognise when there is a difference and when there is not.

In the non-profit context, many studies often explicitly acknowledge the uniqueness of the relationships between the organisation and its internal/external stakeholders, but at the same time they appear to continue to rely on the narrow tenets of agency theory to

examine the role of governance mechanisms in relation to executive compensation as a part of the agency cost problem (Balsam and Harris, 2014; Grasse *et al.*, 2014; Newton, 2015; Perego and Verbeeten, 2015). In doing so, such studies do not consider or explain the impact of the social environment on the principal-agent relationship. Agency problems such as information asymmetry, conflict of interest and opportunistic agent behaviour will vary according to the (non-profit) institutional setting. For example, 'opportunistic agent behaviour may not involve personal financial gains at all, but rather the desire to acquire more power or to pursue a particularistic agenda' (Wiseman *et al.*, 2012, p. 207). In addition, non-profit managers have already been seen as altruistic and may have intrinsic motivations when working for charitable organizations (Jobome, 2006a). However, such empirical insights have so far been piecemeal in nature and not linked to a theoretical framework. My contention is that STA (Archer, 1988; Wiseman *et al.*, 2012) can provide a useful perspective in understanding 'agency problems' that exist between various principals and agents (Van Puyvelde *et al.*, 2011; Wiseman *et al.*, 2012). Specifically, in the absence of shareholders (Olson, 2000), there are multiple stakeholders who can be classified as principals and agents in the principal-agent relationship. Paid-up members and supporters may contribute financial and material resources but have no residual claims. Furthermore, donors and funders who delegate decision-making authority to the organization when using the received funds may be considered as an 'external' principal. In a similar vein, the board of unpaid non-executive trustees is effectively a body of 'principals' who trust managers to act in line with the organisational objectives and plans (Steinberg, 2010; Van Puyvelde *et al.*, 2011).

The adaptation of the social theory of agency in a social environment (namely the UK charitable sector) could be analysed from a consideration of four factors, including the institutional environment, cognitive frameworks, social networks and power relations, which may potentially impact on the 'principal'-agent relations. The first of these relates to the institutional environment, which emphasizes the contribution of government in promoting and controlling economic exchanges. According to Wiseman *et al.* (2012), the involvement of government can indirectly increase the transparency of financial information and reduce opportunistic agent behaviour. Governmental intervention can be recognised in terms of setting and enforcing standards for independent institutional players and non-profit organizations. Non-profit organizations

are required to follow the national reporting standards; for example, UK charities preparing accrual accounts are required to follow 'Statements of Recommended Practice' (Charity Commission, 2005) while US non-governmental entities (including charities) adopt financial reporting standards published by the Financial Accounting Standard Board (Crawford *et al.*, 2014). The improvement of financial reporting standards has consequently contributed positively to compliance among non-profit organizations (Connolly and Hyndman, 2001). Therefore, the increased transparency arising from the institutional environment may lessen agential opportunism (Wiseman *et al.*, 2012). In addition, the influence of the institutional environment on the principal-agent relationship could be seen through transparency and intermediation mechanisms, which include internal and external participants who can influence the agent's behaviour. For instance, the Good Governance Code for the UK community and voluntary sectors expects charities to follow best practice in governance, with the aim of increasing the transparency of financial information and enhancing public trust and support. Different players in charity governance mechanisms, such as boards of directors and audit committees, are thus expected to contribute to the transparency of organizations, and by extension potentially mitigate the agent's behaviour (charity CEO).

Second, STA identifies the cognitive framework as a way to understand the behaviour of the agent in relation to their compensation. Executive officers act as agents in the agency relationship, and have been recognised as having a significant impact on organizational performance (Carpenter *et al.*, 2001; Jacobson and House, 2001). Traditional agency-led authors focus on CEO compensation in terms of monetary metrics, with the argument that compensation can align the interests of agent and principal. Admittedly, a consideration of social factors in CEO compensation has been recognised by Belliveau *et al.* (1996) in respect of the social networks of CEOs and the chairs of remuneration committees. However, Wiseman *et al.* (2012) provides a broader consideration of the impact of social culture, which relates to the social value of different regions and societies. In some cultures, pecuniary rewards are important and CEOs make social comparisons of their achievements by devoting close attention to comparing their compensation against that of other CEOs (Henderson and Fredrickson, 2001; Ezzamel and Watson, 2002; Wiseman *et al.*, 2012), while in other cultural contexts, monetary compensation metrics may not be an appropriate measure to

determine one's value and success (Wiseman *et al.*, 2012). For example, Frocham (2005) found that high payments to executives in several Latin and Asian countries may not represent personal success, instead signalling the excessive use of organizational resources and/or involvement in corrupt practices. In this respect, the finding that CEO compensation in the UK and the US is significantly higher than compensation in other countries (Gomez-Mejia and Wiseman, 1997) suggests that a social value argument is at play. Outside the economic scope, some studies have investigated the influence of non-economic factors on CEO compensation, such as human capital and social influence, regulations, organizational culture, and CEO personality (Hambrick and Finkelstein, 1987; Finkelstein and Boyd, 1998). However, those factors have not been widely considered or remain unverified in terms of their influences on CEO compensation in a non-profit context (Brickley *et al.*, 2010). Although prior non-profit focused papers have found different results in terms of CEO compensation in the different contexts of the US (Grasse *et al.*, 2014; Newton, 2015), the UK (Jobome, 2006a; Ballantine *et al.*, 2008a) and European countries (Barros and Nunes, 2007; Cardinaels, 2009), the influence of different social cultures on CEO compensation in NPOs has not been clearly recognised. Thus, the impact of social factors on executive compensation in respect of CEO characteristics and charisma should be further investigated in the non-profit context.

Third, STA pays attention to the social networks of the boards as the 'principal' body involved in leading the agent, since the network ties of organizational members may enable them to gain access to information and resources that may benefit the organizations (Guo and Acar, 2005; Wiseman *et al.*, 2012). Several studies have recognised the contribution of interlocking board memberships in accessing knowledge from various sources that can provide support to address organizational contingencies, or provide specific experiences about strategy development (Galaskiewicz and Wasserman, 1989; Westphal *et al.*, 2001), very much akin to resource dependence theory. Thus, the social networks of board members could play a role in reducing information asymmetry and increasing social pressures on agents and principals to limit opportunistic behaviours (Nielsen and Nielsen, 2009; Fjeldstad and Sasson, 2010; Wiseman *et al.*, 2012). Similar to the for-profit sector, boards of directors in non-profit organizations can use their networks to link with resource providers and gain access to various sources of information to enhance their knowledge and leadership abilities

(Brown, 2005; Guo and Acar, 2005). However, the significance of the social networks of boards in UK charities is an open question due to the voluntary participation in trustee monitoring bodies. This involvement in non-profit organizations' boards of directors, (typically) on a volunteer basis without economic benefit, may on one side increase the independence of the directors and foster their scrutiny function in relation to the agent (Preston and Brown, 2004; Stephens *et al.*, 2004), but from another perspective it may also cause the reverse consequence due to a lack of financial commitment.[38]

Lastly, the social theory of agency considers the impact of conflicts of interest between numerous stakeholders and how this could influence multiple principal-agent relationships. In the presence of diverging interest among principals, the behaviour of the agent is likely to change with a view to managing/remedying such differences. As a consequence, the divergence of principals may have an influence on the effectiveness of governance since agents try to satisfy multiple and diverse demands, and paradoxically, the criteria of performance become more ambiguous (Wiseman *et al.*, 2012). The divergence of principals also exists in a non-profit context where a prior study has suggested that non-profit organizations operate in connection with various stakeholders (Van Puyvelde *et al.*, 2011). Those stakeholders may exercise different levels of power and have a heterogeneous impact on non-profit organizations (Hyndman and McMahon, 2011; Connolly *et al.*, 2013b). Thus, they may have a consequent influence on the actions of agents in behaving differently with the numbers of principals. Such reasons and arguments suggest that STA may be appropriate to examine how the CEO remuneration is determined.

At the organizational level, organizational performance is one of the key factors that has been traditionally examined to understand the monitoring and interest alignment function of compensation. In many ways, this underlies the core research interest in studying pay-performance sensitivity and how such a link can demonstrate that the agency problem has been mitigated; this is an issue which has been widely tested in for-profit organizations (Core *et al.*, 1999; Brick *et al.*, 2006; Shaw and Zhang, 2010; Matolcsy and Wright, 2011; Ozkan, 2011) and the non-profit context (Frumkin and

[38] https://www.theguardian.com/careers/trustee-to-pay-or-not-to-pay

Keating, 2010; Garner and Harrison, 2013; Grasse *et al.*, 2014; Newton, 2015; Perego and Verbeeten, 2015). Traditional agency theory suggests that executive directors should be rewarded for their performance, such that those who lead more effective organizations should be appropriately compensated for their efforts. This has been evidenced by Frumkin and Keating (2010), Grasse *et al.* (2014) and Baber *et al.* (2002) in the US non-profit context with the finding of a positive relationship between CEO compensation and various measures of performance (such as programme service expense and administrative efficiency). A recent study of 35,428 firm-year observations from US NPOs by Balsam and Harris (2015) also found several instances of a relationship between different performance measures and CEO compensation; for example, they found that net income is positively associated with CEO bonuses, and programme service expenses are positively related to CEO salary. However, Newton (2015) found that CEO-to-employee relative pay and multiple measures of non-profit performance were negatively associated. These contradictory findings from prior studies seem not to be fully explained under the view of traditional agency theory, where compensation is viewed as means to enhance organizational performance.

Pay-for-performance is still a new concept for UK charities. Previous studies have investigated but could not find a link between executive pay and charity performance (Jobome, 2006a; Ballantine *et al.*, 2008a). Furthermore, it is suggested that managers in the UK charitable sector may focus more on intrinsic incentives rather than resorting to monetary incentives (Jobome, 2006a). Recent guidance on charity senior executive pay suggests that to make a decision on reward and compensation levels for top executives, 'trustees should consider the assessment of the charity's performance and the senior staff's performance against expectations, in both the short and long term' (National Council for Voluntary Organizations, 2014, p. 7). Although several measures of performance have been recently suggested, e.g. by (Boateng *et al.*, 2016) and including both financial and non-financial measures (i.e. client satisfaction, management effectiveness, stakeholder involvement and benchmarking), it is still a challenging issue to figure out a single measure of organizational performance which is suitable for all stakeholders in UK charities (Connolly *et al.*, 2013a; Hyndman and McConville, 2015). The findings from prior studies suggest that a divergence of interest among principals may have an influence on agent behaviour, and therefore pay-for-performance may not work in the charitable context.

Thus, the first hypothesis focuses on examining the impacts of organizational performance on CEO compensation. From a theoretical standpoint, this paper hypothesizes that:

H1: Organizational performance is not associated with charity CEO compensation.

As discussed above, the review of existing research in the US, the UK and on the European continent shows inconsistency in the findings relating to the role(s) of governance mechanisms in relation to CEO compensation in non-profit organisations. On one hand, the traditional agency-led view argues that the monitoring function of governance leads to a reduction in excessive payments to non-profit executives; therefore, the quality of governance is negatively associated with CEO compensation (Aggarwal *et al.*, 2012; Newton, 2015; Perego and Verbeeten, 2015). On the other hand, it is argued that in setting the compensation level of the CEOs, governance mechanisms may not be necessary due to the altruistic characteristics of non-profit executives (Jobome, 2006a), which is akin to a stewardship form of managerial behaviour. Hence, in both cases there appear to be deterministic views implied in the relationship between pecuniary rewards and non-profit managers. From an STA perspective, this paper considers the institutional factors underlying the impact of governance on charity CEO compensation. According to STA (Wiseman *et al.*, 2012), in the presence of a diverse and wide social network of principals, agents are less likely to act opportunistically and they may be rewarded in accordance with their ability to reduce the conflict objectives among principals. Therefore, governance mechanisms may not necessarily have a mitigating impact on CEO compensation. This suggests that the impact of charity governance on CEO remuneration may depend on the nature of the governance mechanism (e.g. the diversity of the board, the existence of an audit committee or the existence of a remuneration committee), which may be positively or negatively associated with CEO compensation. Thus, this study proposes a non-directional hypothesis:

H2: The quality of governance is associated with CEO compensation.

At the individual level, the prior literature has adopted several theories (i.e. traditional agency theory, resource-based viewpoints) in studying the impact of non-profit CEO characteristics on their compensation level (Brickley and Van Horn, 2002; Jobome,

2006a; Barros and Nunes, 2007; Brickley *et al.*, 2010). However, the findings are debatable, with inconclusive findings for various CEO individual factors (e.g. tenure, gender, education and experience). Some studies document the impact of different CEO specifications on compensation level, such as CEO tenure (Cardinaels, 2009; Brickley *et al.*, 2010; Newton, 2015) and educational level (Barros and Nunes, 2007). At the same time, other studies could not find evidence to support those relationships (Oster, 1998; Jobome, 2006a).

With regard to the case of UK charities, argument on the fairness of CEO compensation is unremitting.[39] While the public has criticized the issue of overpayment to several charity CEOs, some have noted that a charity CEO earns about a twentieth of an equivalent executive in the private sector.[40] Payment to charitable sector staff may be one of the reasons for the high rate of staff turnover (16%) in comparison to the UK average (13%).[41] However, there is a lack of studies of CEO compensation in UK charities, especially the influence of CEO personality and perception on their pay.

A limited number of studies in the for-profit sector has considered the non-economic factors influencing CEO perception and compensation – for example, human capital and social influences (Devers *et al.*, 2007), managerial discretion (task environment, regulation, organizational specification and the CEO him/herself) (Hambrick and Finkelstein, 1987; Finkelstein and Boyd, 1998). These studies partly recognised the impact of personal specification and social factors on CEO compensation (Hambrick and Finkelstein, 1987; Devers *et al.*, 2007). In the context of STA, CEO compensation may be impacted by social factors and personal perceptions; for example, pecuniary rewards are perceived as an important factor in some cultures, but they may be not in other countries (Henderson and Fredrickson, 2001; Ezzamel and Watson, 2002). This study then stands with STA attempts to test whether CEO cognition, represented by different personal characteristics in terms of gender, ethnicity and experience (managerial and sectoral factors) impact on their compensation levels. Hence, a non-directional hypothesis is proposed:

H3: CEO characteristics are associated with CEO compensation.

[39] http://nfpsynergy.net/public-give-their-opinions-charity-staff-pay
[40] http://www.theguardian.com/commentisfree/2013/dec/19/problems-charity-sector-executive-pay-bosses
[41] http://www.hrmagazine.co.uk/article-details/higher-than-average-staff-turnover-in-the-charity-sector-puts-pressure-on-hr-departments-according-to-agenda-consulting

4.5 Methodology

4.5.1 Data and sample selection

Similar to other non-US studies (Jobome, 2006a; Perego and Verbeeten, 2015), access to data is one of the most challenging issues in studying non-profit executive compensation. In the context of UK charities, the disclosure of chief executive compensation is not mandatory. Charities are merely required to disclose the name of the chief executive officer in the annual report (Charity Commission, 2005) and the total charity staff cost (Statement of Recommended Practice, SORP, 2005). However, it is recommended that in the notes to their financial statements charities provide the number of employees whose emoluments for the year fell within each band, from £60,000 upwards. Since the payment to the CEO is not specifically disclosed, this study uses the total compensation of the highest-paid staff as an assumption of the payment to the CEO (Jobome, 2006a; Aggarwal *et al.*, 2012; Garner and Harrison, 2013). Therefore, data relating to the highest-paid staff was manually collected from charity annual reports as a proxy for CEO pay. Furthermore, information relating to CEO characteristics and boards of trustees, such as educational background, directorship experience and gender, were also gathered from other reliable sources such as charity websites, available minutes of board meetings, and the Charity Commission website. In addition, accounting information regarding to charity performance, for example, programme ratio, income growth ratio and supporting cost ratio, were calculated from a database provided by the Charity Commission following a request by the author.

This paper relies on a sample of the top 250 charities (on the basis of reported total income for 2012), which represented a third of the total income of charities in England and Wales in 2012. Due to the limited availability of information about charity CEOs and trustees and the fact that information is frequently overwritten on websites, a panel data approach was not possible. In comparison to previous non-US studies, several studies on executive compensation and governance have also used a relatively small sample size. For example, Jobome (2006a) studied management compensation among 100 UK charities, Andrés-Alonso *et al.* (2010) examined the governance performance of 119 Spanish foundations, and Cardinaels (2009) investigated executive compensation in 80 Dutch non-profit hospitals. Although the number of charities in my sample is

limited, this sample is sufficiently representative of the UK charitable sector in that the sample represented a total income of more than £20 billion at the end of 2012 – which comprises more than 33 percent of the total resources spent by charities in England and Wales.[42]

The explanatory analysis therefore focusses on one year (2012). This sample covers all charitable sectors classified into seven main sectors, and is summarized in Table 4.1.

Table 4.1: Sample of charities by sector

Group	Name of Sector	Number
Sector 1	Culture and Recreation	18
Sector 2	Education and Research	44
Sector 3	Health	19
Sector 4	Social Services	37
Sector 5	Development and Housing	43
Sector 6	International	27
Sector 7	Others	52
	Total	**240**[43]

4.5.2 Model and variables

To address the research question of the determinants of CEO compensation in UK charities, this paper adopts OLS multivariate regression and logistic regression approaches to examine the relationship between CEO compensation and several factors at the organizational level (including governance structure) and at the individual level (CEO specific characteristics). The main model is as follows:

$$\mathbf{CEO\_COMP_{it} = a_1 + a_2 * PERFORMANCE_{it-1} + a_3 * GOVERNANCE_{it} + a_4 * CEO\_CHARACTERS_{it} + a_4 * CONTROL\ VARIABLES_{it} + \varepsilon} \quad \mathbf{(1)}^{44}$$

Consistent with previous literature, total compensation, which comprises total salary and benefit in kinds (such as bonuses) will be the dependent variable (Carroll *et al.*, 2005; Brickley *et al.*, 2010; Grasse *et al.*, 2014; Newton, 2015; Ntim *et al.*, 2015a). The dependent variable (CEO compensation) is divided into two cases: (i) a normal payment

[42] http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/SectorData/HistoricalData.aspx
[43] The final sample comprises 240 charities since 10 charities did not report any information relating to CEO compensation or employee payment.
[44] Some prior studies also examined the endogenous impact of CEO compensation on non-profit performance; however, it is not focus of this study.

(measured by the natural logarithm of total CEO compensation) (***model 1a***); and (ii) excess payment (as a binary variable, which is equal to 1 if CEO compensation is higher than the median of charitable sector, 0 otherwise) (Jobome, 2006a) (***model 1b***). The rationale for using an additional dependent variable (excess payment) is to examine differences among organizations who grant higher pay to their CEOswhether these organizations use different determinants in setting up CEO compensation – for example, a compensation policy emphasizing the importance of pecuniary rewards.

In terms of independent variables, four main groups of variables representing organizational (including governance) and individual factors were used. The first organizational factors are related to charity performance. Although measuring organizational performance in a non-profit context is challenging (Rojas, 2000; Brown, 2005), this paper considers several measures which have been applied by previous studies: (i) programme ratio, determined by total charitable expenses divided by total charity expenditure, (ii) fundraising efficiency, determined by net fundraising income (total fundraising income minus fundraising cost) divided by total fundraising income; and (iii) income growth (Carroll *et al.*, 2005; Frumkin and Keating, 2010; Aggarwal *et al.*, 2012; Newton, 2015; Perego and Verbeeten, 2015; Boateng *et al.*, 2016). Those measures reflect the effectiveness and efficiency of UK charities in using resources to achieve charity objectives, and are considered the most appropriate measures of performance in UK charities (Boateng *et al.*, 2016).

Second, the influence of governance was modelled in terms of a charity governance index. The governance index was based on various principles suggested by the Good Governance Code (Code Steering Group, 2010). Details of the self-constructed governance index are summarized in Table 4.2:

Table 4.2: Governance index

Governance index	Score	The Good Governance Code
Board diversity: Gender (whether there is at least one female on the board)	1 or 0	**Principle 3**: The board will have a range of appropriate policies and procedures, knowledge, attitudes and behaviours to enable both individuals and the board to work effectively. These will include finding and recruiting new board members to meet the organisation's changing needs in relation to skills, experience and diversity.
Board diversity: Ethnicity (whether there is at least one non-white on the board)	1 or 0	
Board diversity: Education (whether there are at least three educational background bands)	1 or 0	
Board diversity: Experience (whether there are at least three experience bands)	1 or 0	
Board diversity: Business (whether there are at least 30% of trustees with a business orientation)	1 or 0	
Existence of an audit committee	1 or 0	**Principle 4**: An effective board will provide good governance and leadership by exercising effective control. These include: the organisation continues to have good internal financial and management controls; delegation to committees, staff and volunteers (as applicable) works effectively; and the use of delegated authority is properly supervised.
Existence of a remuneration committee and/or a nomination committee	1 or 0	
Presence of financial expertise on the audit committee	1 or 0	
Audited by Big4 specialist	1 or 0	
Internal audit function	1 or 0	
Total score	10 (100%)	

Based on the governance index, the quality of charity governance will be evaluated against this index. If a perspective on charity governance meets a criterion on the index, it will score 1, otherwise 0. The total score is 10, equivalent to 100%. This index was developed following previous studies (Ntim *et al.*, 2012; Newton, 2015) to assess how charity governance mechanisms influence CEO compensation.

The third group of independent variables relate to CEO characteristics in order to capture the individual capabilities, experience and skills of chief executive officers. In line with prior literature, this paper examines gender and ethnicity factors, the number of years working in a managerial position, and experience of working in the non-profit sector (Barros and Nunes, 2007; Cardinaels, 2009; Brickley *et al.*, 2010; Grasse *et al.*, 2014; Newton, 2015). Those factors are used to test the idea, from the social perspective on agency theory, that charities may reward their CEOs based on their abilities to solve conflicts of interest among principals, or when the pecuniary rewards are important in compensating the charity CEO. It is likely that CEO compensation will be associated

with impression formation criteria such as the individual's reputation (Wiseman *et al.*, 2012).

The last group of variables comprises multiple organizational factors such as control variables, which may potentially impact on the process of setting chief executive payment (Barros and Nunes, 2007; Newton, 2015; Perego and Verbeeten, 2015). These are board size (the number of trustees on the board), charity size (measured by total charity income), and government funding (the percentage of governmental funding over total income), and the age of the charity (number of years since the charity was established). To test the impact of these sectoral factors, this study uses sector as a dummy variable, representing seven sectors in the sample. A detailed explanation of all dependent and independent variables is shown in Table 4.3.

From the main model, several sub-models (including step-wise regression) will be developed as a result of changing independent variables to reduce the impact of multi-collinearity issues among independent variables.

Table 4.3: Description of variables

Variables	**Definition/measures**	**Prior studies**
Dependent 1 CEO_COMP	Natural logarithm of CEO compensation. In which, CEO compensation = salary + bonus.	Grasse *et al.* (2014); Newton (2015); Brickley *et al.* (2010); Carroll *et al.* (2005); Ntim *et al.* (2015a)
Dependent 2 Excess CEO_COMP	Excess CEO_COMP = 1 if CEO compensation is higher than average payment of charitable sector, 0 otherwise	Jobome (2006a)
Independent variables		
GOVERNANCE	Using governance index (as table 4.2)	Newton (2015); Ntim *et al.* (2012)
PERFORMANCE Programme ratio	Total charitable expenses year t-1 [B2][45]/Total charity expenditures year t-1 [B]	Boateng *et al.* (2016), Newton (2015), Perego and Verbeeten (2015), Frumkin and Keating (2010)
Fundraising efficiency	(Activities for generating funds	Newton (2015), Perego

[45] The letters A, A1a, A1b, A1b, B, B1a, B1b, and B2 represent items on the statement of financial activities in accordance with SORP, 2005.

	year t -1[A1b] - Fundraising trading cost year t [B1b])/Activities for generating funds year t-1 [A1b]	and Verbeeten (2015), (Carroll *et al.*, 2005)
Income growth	(Total incoming resources year t-1 minus [A] (-) Total income year t-2 [A])/ Total incoming resources year t-1 [A]	Aggarwal *et al.* (2012), Frumkin and Keating (2010)
CEO_CHARACTERS		
CEO Gender	Equal 1 if CEO is female, 0 otherwise	Newton (2015), Grasse *et al.* (2014), Brickley *et al.* (2010).
CEO Managerial Experience	Equal 1, 2, 3, or 4 if CEO has 0-5, 6-10, 11-15, or more than 15 years working experience at managerial position.	Brickley *et al.* (2010), Barros and Nunes (2007).
CEO Industrial background	Equal 1 if CEO has background in non-profit organization, 0 otherwise	Cardinaels (2009).
Control variables		
Board size	Natural logarithm of number of trustees on the board	Perego and Verbeeten (2015), Newton (2015), Barros and Nunes (2007).
Charity size	Natural logarithm of total charity income	Newton (2015).
Government funding	Percentage of governmental funding/Total charity income	Perego and Verbeeten (2015), Newton (2015).
Age of charity	Natural logarithm of charity age. Charity age is determined by number of years until 2012 since a charity was established.	Perego and Verbeeten (2015)
Charity sector (dummy variables)	Dummy variables representing 7 sectors: (1)- Culture and Recreation, (2)- Education and Research, (3)- Health, (4)- Social Services, (5)- Development and Housing, (6)- International and (7)- Others	Perego and Verbeeten (2015).

4.6 Empirical results and analysis

4.6.1 Descriptive statistics

Table 4.4 provides descriptive statistics related to the variables used in this study. The description shows that the average compensation of the top 250 UK charities amounted to approximately £152,000 in 2012. The median payment for UK CEOs was far less than in US non-profit organizations (US$327.212, or the equivalent of £201.436[46]) (Newton, 2015). In comparison to the median amount of money remunerated to FTSE 250 CEOs, the payment to charity CEOs is much lower (the median total salary, total cash bonus and total remuneration of FTSE 250 CEOs are £1,873,333, £1,186,750 and £4,508,453 respectively) (Pearl Meyer & Partners, 2014). However, the public still criticises charity CEO compensation, particularly on the basis of claims made by some politicians and sections within the media (Third Sector, 2015). In addition, the highest compensation paid to a charity CEO reached £855,000 in 2012, and nearly a million pound in 2011. Comparing among UK charitable sectors, health care charities have the highest median compensation, while international charities offered the lowest payment to their CEOs.

Table 4.4: Descriptive statistics

Variables	Mean	Min	Max	SD	N
CEO compensation 2012 (£000)	152.210	41.635	855.000	83.030	240
CEO compensation 2011 (£000)	150.170	47.000	995.000	96.619	240
Governance Index	0.6775	0.1	1	0.2283	240
Governance Score	6.775	1	10	2.2831	240
Programme Ratio	0.8975	0.0251	1.00	0.1442	240
Fundraising efficiency	0.4617	-2.2708	1.00	0.4953	156
Income Growth	0.0583	-0.3281	1.2647	0.1509	239
CEO Gender	0.7625	0	1	0.4264	240
CEO Ethnicity	0.0250	0	1	0.1565	240
CEO Experience	2.8958	1	4	0.7330	240
CEO Non-profit experience	0.6750	0	1	0.4694	240
Governmental funding	0.1388	0	0.9945	0.2615	240
Total assets (£000)	149,880	301	2,313,674	271,602	240
Total income (£000)	82,956	26,693	738,502	96,432	240

[46] Using the exchange rate at 31/12/2012 obtained from http://www.exchangerates.org.uk/historical/GBP/31_12_2012

Charity age	33.18	8	54	16.20	240
Board size	13.38	4	48	5.55	240
CEO compensation – Group 1	*151.452*	*65*	*354.398*	*66.847*	*18*
CEO compensation – Group 2	*167.406*	*65*	*265*	*49.760*	*44*
CEO compensation – Group 3	*219.053*	*75*	*855*	*195.229*	*19*
CEO compensation – Group 4	*131.09*	*85*	*195*	*26.491*	*37*
CEO compensation – Group 5	*145.893*	*41.635*	*445*	*66.660*	*43*
CEO compensation – Group 6	*118.126*	*65*	*345*	*57.546*	*27*
CEO compensation – Group 7	*153.141*	*65*	*485*	*81.225*	*52*

Group (1)- Culture and Recreation, (2)- Education and Research, (3)- Health, (4)- Social Services, (5)- Development and Housing, (6)- International and (7)-Others

In terms of the governance metrics, the descriptive figures demonstrate a relatively satisfactory level of performance for these top UK charities. The median governance score is 6.775 out of 10, suggesting that major charities did set up governance mechanisms as described by the criteria in the governance index.

The statistics related to organizational performance show that the programme ratio of UK charities in 2011 was about 0.8975. This means that 89.75% of their total spending was devoted to charitable activities, implying that 10.25% of charity resources were spent on supporting and administrative activities. The efficiency of fundraising activities in 2011 was 0.4617, indicating that in order to raise a pound, charities need to spend more than 53 pence on fundraising activities. In respect of growth in total charity income, the growth rate was only 5.83% in 2011. This reflects the huge reduction in government spending on the voluntary sector in 2011 (National Council for Voluntary Organizations, 2012).

With regard to CEO characteristics, there was an inequality in CEO gender with a dominance of male CEOs (accounting for 76.25% of the sample). The disparity in CEO ethnicity was significant with only 2.5% of the CEOs in the sample identifying as non-white. Regarding the managerial experience of charity CEOs, on average they had more than ten years' experience at the managerial level, and 67.5% had prior experience in the non-profit sector.

Lastly, in relation to control variables, the median funding from government was roughly 13.9%. Several charities received significant grants from the UK government

for their operation, indicating that a number of charities were working closely with the government in order to deliver public services.[47] In addition, charities had a median age of thirty-three years old, and the average size of the board was thirteen members. The figures detailed by sector suggest that there was a significant difference in CEO compensation among charitable sectors. Charities in the healthcare sector provide the highest pay to their CEOs, followed by the education and research sectors.

4.6.2 Results analysis

The correlation matrix among the variables is shown in Table 4.5. On one hand it indicates that executive compensation is positively and significantly correlated with governance index and charity size, suggesting that charities with higher governance performance or of a larger size are willing to pay more for their executive officers. On the other hand, CEO remuneration is negatively and significantly correlated with government funding. This may indicate that charities with significant dependence on the government are likely to pay less to their CEOs, perhaps because of significant public funding cuts and higher supervision by public agencies (National Council for Voluntary Organizations, 2012). In terms of charity operational performance, programme ratio and income growth are positively correlated with experience of CEOs in the non-profit sector and governmental funding; these correlations probably indicate the importance of CEO capabilities and experience in effectively managing charities, and the impact of government as one of the active principals.

[47] https://www.ncvo.org.uk/about-us/media-centre/briefings/220-the-charity-sector-and-public-services

Table 4.5: Correlation matrix

Variable correlation	1	2	3	4	5	6	7	8	9	10	11	12	**Spearman correlation**
1. Ln(CEO remuneration)	1	0.1851**	0.0127	-0.0492	0.0908	-0.0148	0.0979	0.0396	0.1174	0.1299*	0.4121**	-0.1167	
2. Governance Index	0.2059**	1	-0.1154	-0.1552*	-0.0842	-0.0743	0.1373*	-0.0449	-0.0323	0.1085	0.2691**	0.1626*	
3. Programme ratio (2011)	-0.0381	-0.0825	1	0.0205	0.013	-0.0436	0.0092	0.1103	-0.2410**	-0.1538*	-0.1226	-0.0184	
4. Income growth (2011/10)	-0.0752	-0.1255	0.0792	1	0.1357*	0.0414	0.007	0.0751	-0.051	-0.032	0.0338	0.1188	
5. CEO Gender	0.0896	-0.1067	-0.042	0.096	1	0.1094	0.124	-0.0383	0.0366	0.0093	-0.0521	-0.0806	
6. CEO Ethnicity	-0.0041	-0.096	0.0192	0.0175	0.1102	1	-0.1344*	0.0879	-0.0147	0.0062	0.0315	-0.0384	
7. CEO Managerial experience	0.0929	0.1378*	0.0272	0.0406	0.1153	-0.1680**	1	-0.1053	0.0334	0.0375	0.0034	0.0238	
8. CEO Industrial background	0.0089	-0.0672	0.1593*	0.0729	-0.0431	0.0872	-0.1007	1	0.0336	0.0424	0.0768	0.0707	
9. Ln(Charity age)	0.0759	-0.0679	-0.0804	0.0164	0.0612	0.0092	0.0182	0.0292	1	0.2813**	0.0809	0.0519	
10. Ln(Board size)	0.0791	0.1392*	-0.063	-0.0938	0.0343	-0.016	0.0447	0.0113	0.2301**	1	-0.0313	0.1488*	
11. Ln(Charity size)	0.4377**	0.2352**	-0.057	0.0105	-0.0701	0.0311	-0.0256	0.0679	0.0865	-0.0555	1	0.0739	
12. Gov_fund	-0.1310*	0.068	0.1329*	0.1359*	-0.066	0.0147	0.0171	0.1053	0.0512	0.1021	-0.051	1	
VIF (maximum)	1.18	1.31	1.34	1.33	1.33	1.34	1.33	1.33	1.33	1.32	1.15	1.34	
Pearson correlation													

*Note: **, *: significant at 1% and 5%*

See Table 4.3 for definitions of the variables

To identify the factors influencing charity CEO compensation, the OLS regression[48] from model 1 with the dependent variable of natural logarithm of the total CEO compensation was executed. To lessen the impact of multicollinearity among variables, some sub-regressions (models 1a1, 1a2, 1a3) were implemented, together with a consideration of the impact of sectoral factors. The results are summarized in Table 4.6.

Table 4.6: Regression results

Independent variable: Ln(CEO_COMP)	**Model 1a1**		**Model 1a2**		**Model 1a3**	
	Coef.	**t**	**Coef.**	**t**	**Coef.**	**t**
Governance Index	0.320	**2.92*** **	0.309	**2.79*** **	0.371	**3.21*** **
Programme ratio (2011)	0.141	0.62				
Income growth (2011/10)			-0.060	-0.44		
Fundraising efficiency (2011)					-0.006	-0.13
CEO Gender	0.056	1.23	0.064	1.42	0.033	0.59
CEO Ethnicity	0.022	0.13	0.026	0.15	-0.089	-0.64
CEO Managerial experience	0.043	1.4	0.044	1.41	-0.015	-0.43
CEO background in non-profit sector	-0.025	-0.46	-0.021	-0.39	-0.101	**-1.89***
Ln(Charity age)	0.024	0.55	0.028	0.66	0.002	0.03
Ln(Board size)	0.048	0.73	0.037	0.55	0.123	**1.73***
Ln(Charity size)	0.242	**6.37*** **	0.237	**6.21*** **	0.182	**5.18*** **
Governmental funding	-0.175	**-1.68***	-0.145	-1.4	-0.100	-1.06
Group_1	-0.013	-0.14	-0.012	-0.13	0.069	0.74
Group_2	0.133	1.63	0.139	**1.72***	0.115	1.46
Group_3	0.111	0.86	0.103	0.78	-0.084	-0.86
Group_4	-0.159	**-2.25** **	-0.151	**-2.14** **	-0.11	-1.5
Group_5	-0.067	-0.72	-0.051	-0.54	0.104	1.23
Group_6	-0.296	**-3.12*** **	-0.308	**-3.31*** **	-0.406	**-4.31*** **
Cons	6.875	**9.06*** **	7.093	**10.09*** **	8.119	**12.06*** **
N	240		239		156	
F	7.63		7.18		5.56	
Prob > F	0.0000		0.0000		0.0000	
Adj R-squared	34.11%		29.35%		32%	

*Note: ***, **, *: significant at 1%, 5% and 10%. See table 4.3 for definition of variables*
Group 1: Culture and Recreation; Group 2: Education and Research; Group 3: Health; Group 4: Social Services; Group 5: Development and Housing; Group 6: International; Group 7: Others

[48] Statistic diagnostics comprising normality, linearity, and heteroscedasticity test have been tested; the results are summarized in appendix B.

With regard to the first hypothesis, the results suggest that charity performance as measured by programme ratio, fundraising efficiency and income growth is not significantly associated with CEO compensation. This result indicates that the usage of variable pay linked to performance may have not been adopted by UK charities. The results support the first hypothesis and seem to be consistent with the social theory of agency, which suggests that in the case of diversity among principals, the use of adjustable pay linked to performance is less likely. This is because the more diverse the group of principals is, the harder it is for them to find suitable performance measurement criteria. This result is also consistent with the findings of a previous study on UK charities (Jobome, 2006a) that monetary incentives may not be the most important motivation for UK charity managers. In order to test these results, this study replaced the dependent variable of normal compensation by an 'excess compensation' variable. The excess payment is a dummy variable, which is equal to one if CEO compensation is higher than the sectoral average and zero otherwise. The purpose of this model is to understand whether a charity with a higher compensation level adopts the pay-for-performance system which has been widely used by for-profit organizations (Core *et al.*, 1999; Brick *et al.*, 2006; Shaw and Zhang, 2010; Matolcsy and Wright, 2011; Ozkan, 2011) and the US non-profit sector (Frumkin and Keating, 2010; Garner and Harrison, 2013; Newton, 2015). The results are shown in Table 4.7, and again they do not indicate any significant association between CEO compensation and charity performance as measured by different metrics. These results support the first hypothesis.

Table 4.7: Logistic regression results

Independent variable: Excess CEO_COMP	**Model 1b1**		**Model 1b2**		**Model 1b3**	
	Coef.	**z**	**Coef.**	**z**	**Coef.**	**z**
Governance Index	1.554	**2.17****	1.404	**1.95***	2.022	**2.21****
Programme ratio (2011)	0.767	0.67				
Income growth (2011/10)			-1.241	-1.05		
Fundraising efficiency (2011)					-0.582	-1.42
CEO Gender	0.211	0.58	0.266	0.72	0.029	0.07
CEO Ethnicity	-0.395	-0.47	-0.359	-0.42	-1.997	-1.38
CEO Managerial experience	0.144	0.64	0.157	0.7	-0.020	-0.07
CEO Industrial background	0.156	0.47	0.202	0.61	0.050	0.12

Ln(Charity age)	0.486	**1.75***	0.471	**1.71***	0.247	0.66
Ln(Board size)	0.315	0.72	0.23	0.53	0.261	0.44
Ln(Charity size)	1.41	**5.28*****	1.4	**5.22*****	1.29	**4.05*****
Governmental funding	-1.18	**-1.88***	-0.99	-1.55	-0.96	-1.21
Cons	-30.29	-5.68***	-29.10	-5.73***	-25.89	-4.19***
N	240		239		156	
LR chi2(10)	59.01		58.4		39.73	
Prob > chi2	0.0000		0.0000		0.0000	
Pseudo R2	0.1818		0.1809		0.1869	

*Note: ***, **, *: significant at 1%, 5% and 10%*

See table 4.3 for definition of variables

In terms of testing the influence of governance mechanism on CEO compensation, the results show a positive association between CEO compensation and governance index, indicating that better governed charities are willing to pay more to their chief executive officers. The direction of the relationship between governance mechanism and CEO compensation appears to be contrary to the traditional principal-agent association, since the governance function aims to reduce the agency cost and control over-payment to the agent. However, according to the social theory of agency, differences in institutional context may have a significant impact on the principal-agent relation. This means that in some circumstances the principal may not always concentrate on controlling. For example, in the case of a greater number of different principals, the agents will be likely to be compensated according to their ability to satisfy the principals' interests (Wiseman *et al.*, 2012). This idea implies that diversity among the principals may not necessarily lead to a negative association with CEO compensation. In order to identify the impact of specific governance factors, additional regressions have been conducted. The results are shown in Table 4.8, with detailed findings suggesting that a diversity of principals has a positive impact on CEO compensation in relation to the gender and educational background of charity trustees. This finding indicates that charities with a diverse board of trustees in terms of gender and educational background may have different views of CEO compensation. Some trustees may focus on budgetary control, while others may be more concerned about organizational performance. This has been acknowledged by previous studies on the disadvantages of board heterogeneity (Hambrick *et al.*, 1996; Knight *et al.*, 1999; Frijns *et al.*, 2016). Therefore, in some instances charity CEOs may be rewarded based on their ability to satisfy multiple interests on the supervisory board.

In addition, Table 4.8 shows that an audit committee that includes experts in accounting and finance is negatively associated with CEO compensation. This relationship suggests that the audit committee acts as an intermediary in charity governance mechanisms, to increase the credibility and transparency of financial information. The committee will only work effectively in its primary function with the involvement of financial specialists. This result supports the traditional role of the audit committee in budget monitoring and is in line with the social theory of agency which emphasizes the importance of transparent intermediation, suggesting that 'the higher the level of intermediation and transparency, the less likely agents will act opportunistically' (Wiseman *et al.*, 2012, p. 215). In the context of UK charities, setting up an audit committee is not compulsory, but it is recommended by the Good Governance Code, depending on the size of a charity and its activities (Charity Commission, 2012). As suggest by the Charity Commission (2012), an audit committee is expected to support the trustees in managing effective internal controls and the efficient and effective use of funds.

However, this paper does not find similar results in terms of the involvement of remuneration committees and nomination committees in relation to constraining CEO compensation. In contrast, the existence of a remuneration and/or a nomination committee has a positive association with CEO compensation. It could be argued that the primary role of the remuneration and/or nomination committee may not be to focus on minimizing payments to CEOs, but rather recruiting the most suitable executives for the organization. To attract a high quality CEO, the remuneration and/or nomination committees may consider different benchmarks in determining the compensation level (for example, the average market salary of chief executives) (Keating and Frumkin, 2011; Charity Navigator, 2014).

Table 4.8: Regression results of testing component factors of governance index

Dependent variables	**LN_CEO_COMP[a]**		**Excess_CEO_COMP[b]**	
Independent variables	**Coef.**	**t**	**Coef.**	**z**
Gender diversity	0.317	**1.96***	0.075	0.08
Ethnicity diversity	0.012	0.23	-0.293	-0.85
Education diversity	0.168	**2.05****	1.089	**1.84***
Experience diversity	-0.012	-0.15	0.160	0.29
Business diversity	-0.036	-0.65	-0.358	-0.74
Existence of audit committee	0.120	1.35	0.397	0.62
Existence of Remuneration and/or Nomination committee	0.148	**2.55****	1.057	**2.48****
Presence of experts in audit committee	-0.206	**-2.52****	-0.870	-1.56
Audited by Big4 specialist	-0.002	-0.04	0.259	0.78
Internal audit function	0.053	0.95	0.002	0
Program ratio (2011)	0.134	0.65	0.764	0.68
CEO Gender	0.041	0.91	0.130	0.34
CEO Ethnicity	0.055	0.33	-0.244	-0.27
CEO Managerial experience	0.054	**1.74***	0.203	0.86
CEO industrial experience	-0.043	-0.78	-0.011	-0.03
Ln(Charity age)	0.030	0.69	0.525	**1.79***
Ln(Board size)	-0.011	-0.16	0.089	0.18
Ln(Charity Income size)	0.233	**6.39*****	1.494	**5.31*****
Governmental funding	-0.223	**-2.23****	-1.115	**-1.72***
Group_1	0.031	0.3		
Group_2	0.127	1.59		
Group_3	0.134	1.03		
Group_4	-0.169	-2.26**		
Group_5	-0.075	-0.79		
Group_6	-0.257	-2.58**		
Constant	6.877	9.44***	-31.580	-5.67***
N	240		240	
F/LR chi2(19)	5.74		71.08	
Prob > F/Prob > chi2	0.0000		0.0000	
Adj R-squared/Pseudo R2	0.393		0.219	

Note: a: OLS regression and b: Logistic regression
****, **, *: significant at 1%, 5% and 10%. See table 4.3 for definition of variables*
Group 1: Culture and Recreation; Group 2: Education and Research; Group 3: Health; Group 4: Social Services; Group 5: Development and Housing; Group 6: International; Group 7: Others

With regards to the individual level factors, this paper considers whether CEO characteristics in terms of gender, ethnicity, managerial experience and non-profit sector

experience have any influence on compensation. The results in Table 4.8 show that managerial experience of CEOs is positively associated with compensation. This finding supports STA, in that under the cognitive framework 'the higher the importance attached to pecuniary rewards, the more likely that agent pay will be associated with impression formation such as individual's reputation' (Wiseman *et al.*, 2012, p. 215). This result appears to be consistent with the previous finding that UK charity remuneration or/and nomination committees are willing to set a higher compensation level for CEOs in order to recruit more managerially experienced CEOs (Jobome, 2006a). In contrast, the figures in Table 4.6 demonstrate that experience in the non-profit sector has a negative association with CEO compensation, suggesting that the longer an individual has been working in non-profit sector, the lower the consideration of pecuniary rewards for a CEO. This result clarifies the finding by Jobome (2006a) that UK charity CEOs may act with altruism and intrinsic motivations when they spend a longer time working in the charitable sector.

In consideration of other organizational factors and macro determinants, the results from Tables 4.6, 4.7 and 4.8 suggest that charity size, charitable sector and funding from government have a significant impact on CEO compensation. While charity size has a positive relationship with CEO compensation, government funding is negatively associated with CEO payment. On the one hand, this indicates that the larger charities pay more for their CEOs in order to reflect the complexity of managing big organizations with a diversity of stakeholders, where executives appear to have responsibility over a larger number of people and more resources (Hallock, 2002; Eldenburg and Krishnan, 2003; Frumkin and Keating, 2010; Aggarwal *et al.*, 2012; Newton, 2015).

On the other hand, however, charities with more dominant funding from government are more likely to constrain the level of payment to their CEO. Although the STA does not suggest the impact of governmental factors on principal-agent relationships, this study relies on the idea of 'ownership concentration' where 'the higher the ownership concentration, the lower overall agent compensation in relative terms' (Wiseman *et al.*, 2012, p. 215). The terminology of ownership is arguably not appropriate in the non-profit sector in the absence of shareholders. However, studies in the for-profit sector have argued that state ownership based on the number of shares owned by government

has an association with CEO compensation (Khan *et al.*, 2005; Firth *et al.*, 2007; Conyon and He, 2011). This paper therefore draws from the idea that organizations with a higher concentration of funding from government reduce CEO compensation (Firth *et al.*, 2007; Conyon and He, 2011). UK charities receive government funding from two main sources, namely grants and service contracts; as of August 2011, about 38,000 voluntary organisations had a direct financial relationship with government through a grant or contract.[49] Accordingly, charities are required to comply with grant clauses and service contract conditions.[50] Spending on CEO compensation is considered as a part of administration expenses, and there have been calls for further reductions in non-charitable expenses (Balsam and Harris, 2014; National Council for Voluntary Organizations, 2014; GuideStar, 2015). Therefore, from the STA's standpoint, government may be acting as a principal in its relationship with charities and thereby influencing agential behaviour (Van Puyvelde *et al.*, 2011).

Lastly, the regression results are robust in terms of the differences in CEO compensation among charitable sectors. Results from Tables 4.6 and 4.8 suggest that CEOs of two charitable sectors (group 4 – social service charities and group 6 – international charities) on average receive lower compensation levels than CEOs from other charitable sectors. A possible reason could be linked with the reduction in budgets for public services by the UK government. A second reason, according to STA under the cognitive framework, may be that different leadership styles have diverse aspirations in terms of their managerial careers (Wagner *et al.*, 1997; Dulewicz and Higgs, 2005), which consequently influences organizational performance (O'Reilly *et al.*, 2010; Bhargavi and Shehhi, 2016) and compensation (Rotemberg and Saloner, 1993).

4.6.3 Sensitivity analysis and robustness tests

In order to ensure the reliability and robustness of the results above, this paper performed several sensitivity analyses, firstly by reclassifying the governance index into two functioning variable groups, representing: (i) the diversity of the board, and (ii) the controlling mechanism of governance. Each group of variables comprises five specific factors. The board diversity variable consists of a selection of gender, ethnicity,

[49] https://www.ncvo.org.uk/policy-and-research/funding/what-the-research-tells-us#thecostofthecuts
[50] https://knowhownonprofit.org/leadership/governance/board-responsibilities/raisingmoney

educational background, directorship experience and industrial experience. The mechanism of governance is made up of the existence of an audit committee, the existence of a remuneration or/and nomination committee, the presence of financial experts on the audit committee, the existence of an internal audit function and being audited by a Big4 specialist auditor. In addition, in terms of the controlling variable, this study considers the impact of altruistic factors as suggested by Jobome (2006a), noting that charity managers seem to work with more altruistic motivations rather than monetary ones by adding a new variable (faith_charity). This is a dummy variable, which is equal to one if the charity is considered as a faith- or religion-based charity and zero otherwise. The addition of this variable comes from a finding by Oster (1998) that religious non-profit organizations hold down executive compensation across US charitable sectors. Details of the regression results are summarized in Table 4.9.

Table 4.9: Sensitivity analysis

Dependent variable	**LN_CEO_COMP[a]**		**Excess_CEO_COMP[b]**	
Independent variables	Coef.	t	Coef.	z
Gov_Diversity	0.2060	2.15**	0.7435	1.13
Gov_Mechanism	0.0800	0.88	0.7244	1.23
Program ratio (2011)	0.1991	1.2	0.8244	0.72
CEO Gender	0.0626	1.15	0.2190	0.6
CEO Ethnicity	0.0464	0.38	-0.3490	-0.41
CEO Managerial experience	0.0276	0.81	0.1213	0.53
CEO industrial experience	-0.0211	-0.42	0.1493	0.44
Ln(Charity age)	0.0191	0.46	0.4842	1.74*
Ln(Board size)	0.0426	0.65	0.3106	0.7
Ln(Charity Income size)	0.2437	7.27***	1.4157	5.28***
Governmental funding	-0.1963	-2.13**	-1.1892	-1.89*
Group_1	-0.0528	-0.53		
Group_2	0.1026	1.36		
Group_3	0.0785	0.79		
Group_4	-0.1961	-2.48**		
Group_5	-0.1138	-1.38		
Group_6	-0.3201	-3.68***		
Faith_charity	-0.1941	-2.18**	-0.3200	-0.55
Constant	6.9200	10.73***	-30.329	-5.66***
N	240		240	
F/LR chi2(12)	6.86		59.32	
Prob > F/Prob > chi2	0.0000		0.0000	

Adj R-squared/Pseudo R2	0.306	0.1827

Note: a: OLS regression and b: Logistic regression

****, **, *: significant at 1%, 5% and 10%. See Table 4.3 for definition of variables*

The sensitivity analysis results confirm the absence of a significant relationship between charity CEO compensation and charity performance if there is a diversity of principals. It is less likely that pay will be linked to organizational performance as a consequence of a lack of harmony among principals. Another test to verify the impact of organizational performance on CEO compensation in the case of board diversity was conducted with an interaction variable involving board diversity and organizational performance. The results again show a nonsignificant relationship between CEO compensation and charity performance (detailed results are presented in Appendix A.5). Moreover, the sensitivity test results also confirm that larger charities pay more for their CEOs as larger charities may have more resources to attract more qualified CEOs, while government funding is negatively associated with CEO compensation. This is also consistent with the main findings suggested in Table 4.6.

Furthermore, the results confirm that the sectoral factor has an impact on charity CEO compensation. Especially in terms of the altruistic features of charity managers, the results show a negative association between faith-based charities and CEO compensation. This finding suggests that the CEOs of faith-based charities have lower compensation in comparison to others. The finding partially supports Jobome (2006a) contention that some charity CEOs may have an intrinsic motivation to perform their tasks in the non-profit sector, rather than being motivated by monetary incentives (Jobome, 2006a).

However, the first sensitivity analysis results do not find any significant relation between the controlling function of governance variable and CEO compensation. This may be explained by the contradictory results found during the main test with the different impact of the monitoring function of governance on charity CEO compensation. Therefore, the combination of several monitoring functions of governance in one variable may not an appropriately representative test. This drawback is overcome by the second sensitivity test.

Secondly, this paper considers the impact of a potential endogeneity problem on the consistency of the main results, as noted by a number of prior studies on CEO compensation and governance (Newton, 2015; Ntim, 2015; Ntim *et al.*, 2015a). This paper therefore applied a two-stage least squares (2SLS) technique (Beiner *et al.*, 2006; Carter *et al.*, 2010; Ntim, 2015) to deal with the endogeneity issue. Before performing the 2SLS method, a Durbin-Wu-Hausman exogeneity test (Davidson and MacKinnon, 1993; Beiner *et al.*, 2006; Ntim, 2015) was conducted to examine whether the charity performance variable (Programme ratio) is endogenously associated with some variables, such as board size (Aggarwal *et al.*, 2012; Newton, 2015), organizational size (Brown, 2005; Newton, 2015) or CEO industrial experience (Nadkarni and Herrmann, 2010). The Durbin-Wu-Hausman test rejects the null hypothesis of no endogeneity at the 10% level (but not at the 5% confident level). Therefore, 2SLS was appropriate in this case (Beiner *et al.*, 2006). The detailed results of the 2SLS test are presented in Appendix A.6. These results support the first hypothesis that charity performance measured by programme ratio is not significantly associated with CEO compensation. In addition, the 2SLS results also highlight the positive association between CEO compensation and governance index. Particularly, the relationship between CEO compensation and some specific factors, such as the diversity of gender on the board, the existence of a nomination and/or remuneration committee and the presence of financial experts on the audit committee, are consistent with the main test results. This supports the second hypothesis.

4.7 Overall discussion and conclusions

This study has sought to explore the factors influencing the level of CEO compensation in UK charities. A crowded literature in the for-profit sector and emerging studies of non-profit organizations rely on traditional agency theory to examine the role of compensation in managing conflicts of interest between principals and agents, and the monitoring role of governance mechanisms. However, due to differences in the operations, structure, social and institutional environment of non-profit organizations, this study argues that the relationship between principal and agent should be studied with consideration of the social or institutional context surrounding the principal-agent relationship (Wiseman *et al.*, 2012). This paper is thus underpinned by the social theory

of agency to address the main research question of how CEO compensation is determined in UK charities.

The determinants of CEO compensation are analysed from an organizational (including governance) and an individual level. The results suggest that at the organizational level there are several factors with a diverging impact on CEO compensation. First, as explained by the social theory of agency, CEO payment is not found to be associated with organizational performance. Second, in contrast with the traditional monitoring function of governance mechanisms in principal-agent relations, this study finds that CEO compensation is positively associated with governance, as represented by a self-constructed index. Specifically, charity CEO compensation is positively related with the diversity of the board but negatively associated with the presence of financial specialists on the audit committee. Interestingly, both results are consistent from the viewpoint of STA. On the one hand, the CEO as an agent can be compensated based on their ability to settle conflicts of interest among diverse principals; therefore, CEOs may receive higher payments in the case of a diversity of principals. On the other hand, the presence of experts on the audit committee fosters the effectiveness of an audit committee as a financial monitoring structure, which increases the transparency of the organization, hampers the agent from acting opportunistically and reduces the likelihood of higher levels of administrative expenses. Third, other factors including organizational size, sector and funding source (by government) also influence CEO compensation.

At the individual level, CEO compensation is positively related with managerial experience but negatively associated with the time span of working in the non-profit sector. These results are supported by STA's conception of a cognitive framework (Wiseman *et al.*, 2012); i.e. for a leader in a culture which emphasizes monetary rewards, his/her payment is likely to be in line with personal reputation, measured by such factors as managerial experience. At the same time, length of experience within the sector appears to lessen the CEO's motivation for pecuniary reward. This appears to be in line with the view of STA that 'in some cultural contexts, metrics other than money, such as honorary appointments, may be used to determine one's value' (Wiseman *et al.*, 2012, p. 210), as well as the fact that perceptions of a leader are constantly impacted by the culture where they are working; for example, 'managers in former socialist countries have been instilled with a spirit of cooperation and benevolence towards the enterprises

for which they work' (Wiseman *et al.*, 2012, p. 210). This can be linked with the features of the UK charitable sector, where legally primary objects must be 'exclusively charitable'.[51] This suggesting that the longer an individual has worked in non-profit organizations, the less importance they place on pecuniary rewards.

The findings from this study contribute to the limited knowledge on principal-agent relations in non-profit organizations with a consideration of the social and institutional environment. Prior studies revealed inconsistent findings in terms of how CEO compensation is determined in the non-profit sector (Jobome, 2006a; Barros and Nunes, 2007; Balsam and Harris, 2014; Newton, 2015; Perego and Verbeeten, 2015). However, from an STA perspective it is argued that such results can be interpreted to suggest that various behaviours and relationships have often been ignored or downplayed in a traditional principal-agent setting. For the first time this paper also highlights several additional factors with an impact on CEO compensation in UK charities, including the diversity of the board, the presence of financial specialists on the audit committee, organizational size, government funding, and sectoral differences. Moreover, this paper provides evidence of the role of remuneration and nomination committees in the UK charitable sector, in that their presence appears to raise levels of CEO compensation.

This study consequently has several important implications for academia and practice. First, this paper reveals that while studies on CEO compensation are scarce in the non-profit sector, there is also a lack of regulation and guidance in terms of setting up compensation policies in UK charities. This may raise awareness of numbers of stakeholders, such as government, regulators, donors and sectorial representatives (e.g. NCVO), to actively foster the development of guidance on compensation in UK charities. This has been recently initiated by the publication of an enquiry into charity senior executive pay and guidance for trustees on setting remunerations (National Council for Voluntary Organizations, 2014).

Second, given my empirical findings, there would be scope for policy-makers and regulators to improve the guidance on remuneration and the governance of charities. Finally, this paper outlines the relevance of the social theory of agency in studying principal-agent relations in a non-profit context by considering the impact of social and

[51] https://www.gov.uk/government/publications/example-charitable-objects

institutional environment factors on various agent behaviours, and the interaction of a principal through the compensation system. More specifically, the diversity of principals from an STA perspective may explain the non-association between CEO compensation and organizational performance, due to the conflicting objectives among principals. This point of view also provides a reason for the positive association between CEO compensation and the diversity of the board. Moreover, the transparency intermediation of STA justifies a negative association between the presence of financial experts on the audit committee and CEO compensation, since financial experts on the audit committee will enhance the effectiveness of monitoring functions and increase the transparency of the organization. In respect of the cognitive framework (STA), for a leader in a culture which emphasizes monetary rewards, his/her payment is likely to be in line with personal reputation, explaining the positive relationship between CEO compensation and managerial experience. Furthermore, this paper also suggests a further development of STA in the non-profit context, where some principals are not the owners of organizations and they do not seen financial residuals from non-profit organizations. Still, they may impact on and steer agents in principal-agent relationships (Van Puyvelde *et al.,* 2011). Specifically, Wiseman *et al.* (2012, p. 212) suggest that 'high ownership concentration tends to be associated with lower agent compensation, a closer linkage between agent pay and firm performance, and more vigilant monitoring of the agent's decision'. In the non-profit context, although the government is not an owner or shareholder of NPOs, it should be considered a 'salient stakeholder' with a legitimate impact on the development of the non-profit sector (Mitchell *et al.*, 1997; Hyndman and McMahon, 2010, 2011), and therefore possibly influencing principal-agent relations. In particular, the findings from this thesis suggest that in a non-profit context, significant funding from government tends to be associated with lower agent compensation and more attentive monitoring of the agent, but it may not lead to concern about a pay-for-performance system.

Finally, although this study is sufficiently robust to explore several determinants of CEO compensation in UK charities, there are some limitations in terms of the data used in this paper. There is a limit in respect of the sample size and available information about the chief executive compensation and governance of UK charities. Due to the fact that disclosure of information on charity CEO compensation is not compulsory, this paper has relied on the assumption that CEO compensation equates to the highest paid

employee in the organization. In addition, there is no systematic information resource on charity governance as charities are not required to disclose such information in their annual reports and financial statements, and therefore, an element of bias may arise because of a reliance on organizations that do provide this data. Furthermore, due to the lack of data, this study is unable to consider other factors such as board interlocks, the network density of the board and the detailed composition of remuneration and nomination committees. Therefore, future research could be undertaken to consider the impact of such factors on CEO and other top management compensation.

Chapter 5: Conclusion and Recommendations

5.1 Overall summary

This thesis consists of three separate papers with the main purpose of conducting an investigation of accounting, governance and executive compensation practices in NPOs. Due to a recent debate and emerging research on accrual accounting practice in NPOs, the effectiveness of governance and excessive payments to executives in a non-profit context, this thesis seeks to explore whether UK charities engage in EM practices, and if so, what are the key organizational determinants influencing the extent of EM practices. This thesis also aims to intensively examine the implementation of governance in UK charities, and its effectiveness in relation to financial accountability. Lastly, the thesis focuses on investigating the determinants of CEO compensation in the UK charitable sector.

In order to achieve these aims, this thesis follows the epistemological philosophy and adopts a positivist viewpoint. In terms of selecting a research paradigm, the three papers were designed within the functionalist paradigm and adopt a deductive research approach. Data was collected from multiple sources and used to evaluate a number of hypotheses related to accounting, governance and executive compensation practices, and to examine the relevance of certain theories, namely ST, RDT and STA. In particular, the instrumental ST perspective is combined with RDT in order to explain various organisational behaviours in selecting certain accounting practices to manage their operational ability (resource sustainability) and to respond to requirements from diverse stakeholders in NPOs (Van Puyvelde *et al.*, 2011; Wellens and Jegers, 2014). In addition, ST and RDT also allow me to understand the governance structure of NPOs and its roles in relation to organizational accountability. The terminology of ownership is arguably not appropriate for application in the non-profit sector because of the absence of shareholders; rather, the success of NPOs depends on managing relationships with diverse stakeholders (Van Puyvelde *et al.*, 2011; Wellens and Jegers, 2014). Consequently, the composition of the trustee board (particularly in terms of

heterogeneity) can have an impact on ensuring the alignment of the organization with stakeholder interests, and its responsiveness to a wider section of society (Hyndman and McDonnell, 2009). Particularly from the RDT perspective, board composition is affected by the abilities of directors to manage the external environment and secure advantages for their organizations (Hodge and Piccolo, 2005; Callen *et al.*, 2010).

In addition, this thesis relies on STA for a consideration of the social and cultural factors underlying principal-agent relations in the non-profit context. Specifically, four features of STA, namely institutional environment, cognitive framework, social network and power relations, are considered to examine the possible determinants of CEO compensation in the UK charitable sector. For example, the cognitive framework feature of STA is a way to understand the behaviour of the agent in relation to their compensation in different regions and societies. In some cultures pecuniary rewards are important, and CEOs evaluate their achievements by paying close attention to their compensation in comparison with that of other CEOs (Henderson and Fredrickson, 2001; Ezzamel and Watson, 2002; Wiseman *et al.*, 2012). Meanwhile in other cultural contexts, monetary compensation metrics may not be an appropriate measure to determine one's value and success (Wiseman *et al.*, 2012).

In comparison to prior studies in a non-profit context, ST and RDT have been applied widely to understand the relationships between NPOs and various stakeholders (Van Puyvelde *et al.*, 2011; Connolly *et al.*, 2013b; Wellens and Jegers, 2014), and to recognize the impact of different resource providers on NPOs (Miller-Millesen, 2003; Hodge and Piccolo, 2005; Callen *et al.*, 2010; Wellens and Jegers, 2011). However, previous studies have not understood the rationale of selecting a specific accounting practice (such as managing discretionary accrual) or the contribution of governance structure in relation to financial accountability, due to the dominance of traditional agency theory (Jegers, 2013; Newton, 2015). Using a combination of ST, RDT and STA, this research investigated the motivations of NPOs in the selection of particular accounting practices, and was also able to identify the effectiveness of governance mechanisms in relation to financial accountability and the determinants of CEO compensation in the UK charitable sector.

Finally, this thesis applies a quantitative research method and relies on secondary data to examine multiple relationships between dependent variables (DA, CEO

compensation) and numbers of related factors (financial performance, governance structure and CEO characteristics) in the consideration of several control variables (i.e. organizational size, age, and sectoral factors). The data for this study has been collected from different sources (the Charity Commission, charity annual reports and charity websites). Numerous statistical models, techniques and software (Stata and SPSS) were used to implement the data analysis.

5.2 Summary of research findings

The thesis has achieved the aim of exploring the accountability of UK charities by investigating financial reporting practice, identifying the role of governance in relation to charity financial accountability, and examining the determinants of chief executive compensation. Specifically, all the research questions have been answered with several interesting findings.

First, to answer the first research question, this thesis is based on a large data sample (7,070 charity years) and finds evidence that the reported bottom-lines of UK charities are distributed around the zero level, but with a trend to display positive (surplus) rather than negative (deficit) results. In addition, the reported earnings are also subject to discretionary accrual tactics of an upwards or downwards nature in order to manage earnings towards the zero level. Although there is no specific requirement to achieve a break-even position, charities prefer to report surpluses around the zero level. One of the possible reasons for the use of EM by UK charities is to reduce political costs caused by reporting a huge surplus or a large deficit.

Second, this thesis uses hand-collected data from the top 250 UK charities and finds answers to the second research questions about whether UK charities have an identifiable governance structure with a relatively high rate of diversity in board, the existence of audit committees, as well as the presence of internal audit functions and auditing by specialist auditors. In relation to the third question, this thesis reveals a positive relationship between board diversity in respect of gender, ethnicity, educational background and charity accountability by restricting earnings management. In particular, the findings suggest the necessity of specialists in accounting and finance on

audit committees in order to have a negative impact on earnings management and enhance financial accountability.

Finally, the thesis identifies some determinants of CEO compensation in the context of UK charities (research question four). The findings indicate that while charities seem not to rely on organizational performance to determine CEO compensation, charity governance composition shows a significant impact on CEO compensation, particularly features such as board diversity, the existence of a remuneration committee and the presence of a financial specialist on the audit committee. In addition, the experience of the CEO, funding from government and several organizational factors (such as organization size, age, and charitable sector) also influence charity CEO compensation.

The following table (Table 5.1) summarizes all the hypotheses and main results of this thesis.

To sum up, this thesis has explored the accountability of non-profit organizations, specifically UK charities, from different perspectives comprising accounting practice, governance structure and executive compensation practice. This thesis reports a number of findings in relation to accounting, governance and executive compensation practices. For example, this thesis demonstrates the practice of earnings management by UK charities in order to avoid criticism from the public, increase public trust and maintain different funding sources for their operation. Moreover, in support of the implementation of the Good Governance Code in the voluntary and community sectors, this thesis suggests the positive impact of several governance factors on charity accountability. Finally, a number of determinants of executive compensation in UK charities have been revealed, some of which seem to contradict findings from the for-profit sector or different non-profit contexts. This thesis has shed light on the rationale for executive compensation practice in UK charities from the point of view of the social theory of agency.

Table 5.1: Summary of research hypotheses and results

No.	Hypotheses	Results	Prior studies	Additional contributions
Chapter 2 (Paper 1)				
1	Reported earnings of UK charities (surpluses/deficits) are distributed around zero.	Supported	*Found evidence of EM by NPOs:* Leone and Van Horn (2005); Ballantine *et al.* (2007); Verbruggen and Christiaens (2012); (Jegers, 2013)	This chapter finds extensive evidence of managing accrual accounting in UK charities, and identifies that financial resources (such as borrowing) may have an impact on this accounting practice.
2	UK charities manage earnings toward zero when pre-managed earnings are negative or positive.	Supported		
3	Charity leverage is significantly associated with the extent of earnings management.	Supported		
4	Charities with a significant proportion of voluntary income tend to manage earnings downward.	Not supported		
5	Charities with a significant proportion of charitable income tend to manage earnings downward.	Not supported		
Chapter 3 (Paper 2)				
6	Board diversity is negatively associated with earnings management.	Supported	To the best of my knowledge, there has not been any study of this topic in the non-profit context. However, numbers of studies in the for-profit context have recognized the significance of governance composition for organizational performance and accounting quality (Xie *et al.*, 2003; Davidson *et al.*, 2005; Mangena and Pike, 2005; Mahadeo *et al.*, 2012; Chen and Zhang, 2014; Tauringana and Mangena, 2014).	This chapter notes the significance of board diversity in NPOs and emphasizes the necessity of a specialist in accounting and finance on the audit committee in order to enhance the accountability of NPOs.
7	The existence of the audit committee is negatively associated with earnings management.	Not supported		
8	An audit committee with a higher proportion of experts in accounting and finance is negatively associated with earnings management.	Supported		
9	The presence of an internal audit function is associated with earnings management.	Not supported		
10	External auditors are associated with earnings management.	Not supported		

Chapter 4 (Paper 3)				
11	Organizational performance is not associated with charity CEO compensation.	Supported	*Found a positive relationship:* Frumkin and Keating (2010); Grasse *et al.* (2014); Baber *et al.* (2002); Balsam and Harris (2015) *Found a negative relationship:* Newton (2015) *Found no relationship:* Jobome (2006a); Ballantine *et al.* (2008a)	This chapter clarifies that pay-for-performance seems not to be adopted in UK charities yet.
12	The quality of governance is associated with CEO compensation.	Supported	*Found a negative association:* Aggarwal *et al.* (2012); Newton (2015); Perego and Verbeeten (2015) *Found no relationship:* Jobome (2006a)	This chapter contributes to the literature that governance has an influence on CEO compensation; the relationship may be positive or negative depending on the elements of governance.
13	CEO characteristics are associated with CEO compensation.	Supported	*Support for an association* CEO tenure: Cardinaels (2009); Brickley *et al.* (2010); Newton (2015) Educational level: Barros and Nunes (2007) *Did not find an association* Oster (1998); Jobome (2006a)	This chapter finds an association between CEO characteristics and compensation in UK charities. However, this relationship is impacted by social factors.

5.3 Research implications

This thesis has several important implications for academia and practice. First, with regard to accounting practice by non-profit organizations, stakeholder theory and resource dependence theory in the non-profit context provide a very useful theoretical framework to understand the motivations behind earnings management in NPOs and to analyse the results thereof. Although the theories (ST, RDT) are not new, they have rarely been applied by the prior literature to investigate earnings management in either the for-profit or non-profit sectors due to the dominance of traditional agency theory. In addition, while the UK context can be characterised as one where the regulatory framework of accounting for charities is very well developed and has inspired reforms in other countries, the evidence reveals that the inherent pitfall of accrual accounting (discretionary behaviour by organisations) is noticeable, although it has not been well documented so far in the literature. The findings from this thesis will be of interest to several stakeholders including government, regulators, donors and beneficiaries as to the stated reliability of the reported financial information presented by charities. For example, the Charity Commission may strengthen its monitoring activities and take into account the extent of discretionary accrual practices adopted by charities when carrying out its regime of risk-based inspections. Furthermore, the study enriches the burgeoning literature on the practice of earnings management by NPOs.

Second, in relation to governance practice by UK charities, this thesis reveals a noticeable improvement in governance practice among the top 250 UK charities after the implementation of the 2010 Good Governance Code in the voluntary sector. Compared to reports published by Grant Thornton (2013, 2014), this study presents more detailed information with respect to several types of board diversity and audit committee characteristics. Moreover, although the ratio of non-white directors, female trustees on the board and specialist financial expertise on audit committees appear relatively low, the findings confirm the importance of those factors as necessary elements of the governance structure. This finding will be of interest to several stakeholders including government, regulators, donors, beneficiaries and sectorial representatives (e.g. NCVO and ACEVO), and may help determine whether more detailed governance requirements need to be set out. Although the Good Governance

Code and guidance by sectorial representatives (NCVO and ACEVO) have recognised and recommended the employment of board diversity in UK charities, it will be more meaningful to develop more details in relation to board diversity. For example, the guidance might suggest a minimum proportion of female and minority group members on the board depending on the size of charities and the size of the boards. In addition, in order to enhance the effectiveness of sub-board committees such as audit committees, remuneration committees and nomination committees, a special requirement in respect of qualifications, experience and expertise should be recommended. For instance, the members of the audit committee should comprise (at least) one qualified accountant or a specialist in accounting and/or finance to strengthen the financial monitoring function of the audit committee. In addition to practice, this thesis also outlines the relevance of stakeholder theory and resource dependence theory in studying the effectiveness of charity governance in the enhancement of charity accountability.

Third, in respect of executive compensation practice, this thesis reveals that while studies on CEO compensation are scarce in the non-profit sector, there is also a lack of regulation and guidance on setting up compensation policy in UK charities. This may raise awareness of numbers of stakeholders, such as government, regulators, donors and sectorial representatives (e.g. NCVO), to actively foster the development of guidance on compensation in UK charities. Consequently, ACEVO and NCVO have recently published guidance on executive compensation in UK charities (ACEVO, 2013; National Council for Voluntary Organizations, 2014). These guidelines recommend the application of pay-for-performance, and suggest increasing transparency and proportionality in setting remuneration policies in the charitable sector. This thesis could therefore provide foundation evidence to support the development of those guidelines. In addition, given my empirical findings, there would be scope for policy-makers and regulators to improve the guidance on remuneration and the governance of charities. On top of that, the thesis highlights the relevance of the social theory of agency in studying the principal-agent relations in a non-profit context by considering the impact of social and institutional environmental factors on various behaviours of an agent and the interaction with principals through the compensation system. Furthermore, this thesis also suggests a further development of STA, especially in a non-profit context, where the ‘agent’ works in multiple relationships with numbers of principals (stakeholders), where some principals are not owners of organizations and

they do not have financial residuals from non-profit organizations. Nevertheless, they may still impact and steer the agent in principal-agent relationships (Van Puyvelde *et al.*, 2011). Specifically, Wiseman *et al.* (2012, p. 212) suggest that 'high ownership concentration tends to be associated with lower agent compensation, a closer linkage between agent pay and firm performance, and more vigilant monitoring of the agent's decision', and this thesis highlights a consideration of the role of government. In the non-profit context, although the government may not be an owner or shareholder in individual NPOs, they should be considered as a 'salient stakeholder' having legitimate impact on the development of the non-profit sector (Mitchell *et al.*, 1997; Hyndman and McMahon, 2010, 2011), and therefore possibly influencing principal-agent relations. In particular, findings from this thesis suggest that in the non-profit context, significant funding from government tends to be associated with lower agent compensation and more attentive monitoring of the agent, but may not lead to concern about a pay-for-performance system.

5.4 Limitations and directions for further research

5.4.1 Research limitations

Although this thesis is robust enough to examine the accounting, governance and executive compensation practices in UK charities, there are two main limitations in terms of the data availability and the measurements relied upon in this thesis.

First, in respect of data availability, there is no systematic and comprehensive information resource on charity governance or executive compensation, and an element of bias may arise if one relies on organizations that provide publicly available data. In addition, since the information published on charity websites is frequently overwritten, it has not been possible to collect more than one year's data and thus enable a combination of time-series and cross-sectional data for a more meaningful analysis. Furthermore, the disclosure of key information, such as charity cash flow statements, CEO compensation and detailed information about boards of trustees is not compulsory; this thesis has relied on: (i) the reliability of collected information; and (ii) the assumption that CEO compensation equates to the highest paid employee in the organization. Lastly, due to the lack of data, this thesis is unable to consider other

factors such as small charity size, board interlocks, the network density of the board, and the detailed composition of remuneration and nomination committees, or adopt alternative models (rather than Jones model) in an extensive sample of UK charities.

Second, in relation to the measure of earnings management applied in the second and third chapters, this thesis mainly relies on discretionary accrual tactics, which have been widely applied by studies in a for-profit context (Jones, 1991; Xie *et al.*, 2003; Davidson *et al.*, 2005; Chen and Zhang, 2014) and some papers examining non-profit organizations (Leone and Van Horn, 2005; Ballantine *et al.*, 2007; Verbruggen and Christiaens, 2012). However, this measure may not be the most suitable indicators in a non-profit context, and several alternative measurements should be considered as a proxy for earnings management.

5.4.2 Directions for further research

Although this thesis has provided a numbers of significant finding in relation to accounting, governance and executive compensation practices in UK charities, there are several areas that are not covered by this research and where it would be valuable to conduct further investigations.

First, a limitation caused by sample size and data availability suggests that further research could be undertaken with a consideration of various types of NPOs, extending the factors that potentially impact on NPO accountability. For example, smaller charities, the role of audit committees, other governance mechanisms (internal and external auditors), board interlocks, the network density of the board, and the detailed compositions of remuneration and nomination committees could be re-evaluated in different non-profit contexts. Moreover, further study on executive compensation in UK charities should be undertaken since the new guidance on executive remuneration setting was introduced by ACEVO and NCVO in 2014 (ACEVO, 2013; National Council for Voluntary Organizations, 2014).

Second, due to the limitation of using discretionary accrual as a proxy for earnings management, further studies could develop measures in relation to the effectiveness and efficiency of non-profit organizational performance, since donors have been found to be sensitive to the efficiency of NPOs (Tinkelman, 1999; Khumawala *et al.*, 2005). Several

studies in the US have considered the cost allocation technique, used by NPOs to increase their programme ratio (measured by total charitable cost divided by total income) or reduce their fundraising costs (Jones and Roberts, 2006; Krishnan *et al.*, 2006; Keating *et al.*, 2008). In addition, income and expenses smoothing is another metric which could be considered in future research, since NPOs are found to be motivated by the stabilization of income resources (Jones *et al.*, 2013; Boterenbrood, 2014).

Appendix A

A.1 Summary of findings from previous studies

No.	Author (year)	Country	Applied Theories	Methodology	Findings
1	Jegers (2013)	Belgium	Agency theory	Quantitative method. Using OLS regression based on cross-sessional dataset of 844 Belgian non-profit organizations in 2007	Larger organizations report more easily manipulated costs and revenues through around zero earnings reported; and Potential agency gaps between management and board and between the organization and debt-holders impact on organizational characteristics.
2	Verbruggen and Christiaens (2012)	Belgium	None mentioned	Quantitative method. Using OLS regression based on longitudinal dataset of 841 Belgian non-profit organizations over a three-year period (2006–2008)	The organizations manage earnings closer to zero. Earnings are managed downwards or upwards when pre-managed earnings are positive or negative. The high levels of subsidization have an influence on the level of downwards earnings management in the case where unmanaged earnings is positive. The level of subsidization only influences the level of earnings management when accumulated reserves are high.
3	Ballantine *et al.* (2007)	UK	None mentioned	Quantitative method. Using OLS regression and frequency distribution based on longitudinal dataset of 211 English NHS	Trusts reported small surpluses and deficits around zero. The paper supports the association between discretionary accruals and the reporting of earnings in a narrow range just above zero.

				Hospital Trusts (1372 Trust years) over a seven-year period from 1998–2004	
4	Leone and Van Horn (2005)	USA	None mentioned	Quantitative method. Using OLS regression based on longitudinal data set of 1,204 US hospitals or 8,179 hospital year observations from 1990–2002	CEOs manage earnings toward zero and earnings are managed upward to just above zero to avoid losses. However, this paper finds no evidence of managing earnings to avoid earnings decrease.
5	Jones and Roberts (2006)	USA	None mentioned	Quantitative method. Using OLS regression based on a data set of 155 US charities or 708 organization-year observations from 1992 to 2000	Charitable organizations use joint cost allocation to manage their reported results. Moreover, charities try to mitigate decreases and increases in their programme ratios.
6	Krishnan *et al.* (2006)	USA	Agency theory	Quantitative method. Using OLS regression based on different data sets of 4995 US organizations between 1985 and 2001	Many non-profits undertake fundraising activities but report zero fundraising expenses. The expense misreporting is associated with managerial incentives to acquire larger amounts of managerial pay and donations.
7	Eldenburg *et al.* (2011)	USA	None mentioned	Quantitative method. Using OLS regression based on longitudinal data set of 95 US non-profit hospitals or 432 observations from 1998–2003	Non-core operational expenditures are managed to achieve positive income, and disposition of assets is managed to avoid large positive net incomes. Hospitals with stronger performance incentives exhibit a significant incremental decrease in expenditures

8	Keating *et al.* (2008)	USA	None mentioned	Quantitative method. OLS regression based on data from 8 US states on 20,203 telemarketing campaigns undertaken by 635 professional fundraisers on behalf of 4,248 non-profits for 10 years from 1995–2004	Non-profit organizations fail to properly report telemarketing expenses, misreport revenues and misclassify fundraising expenses.
9	Omer and Yetman (2007)	USA	No mentioned	Quantitative method. OLS regression based on data 689 US non-profits with a sample of 1,667 organization-year observations.	Non-profit organizations shift join expenses from taxable to tax-exempt activities to minimize overall tax liabilities. The misreporting of expenditure is impacted by tax rates, tax return complexity, and accounting flexibility.
10	Omer and Yetman (2003)	USA	None mentioned	Quantitative method. OLS regression and frequency distribution based on data of 1,367 US observations.	An abnormal number of non-profits report near zero taxable income, which is interpreted as consistent with intentional managerial manipulation. When the taxable activity has a tax-exempt status, the size of a non-profit report near zero taxable income is decreasing. The probability of reporting near zero taxable income is tied to the use of a paid accounting firm in preparing accounts.
11	Hofmann (2007)	USA	None mentioned	Quantitative method. Using panel regression based on 4-year data from 126 US	Organizations are estimated to shift expenses from non-taxable to taxable activities in order to reduce the unrelated

				organizations for a total of 399 organization-year observations.	business income tax.
12	Yetman (2001)	USA	None mentioned	Quantitative method. Using OLS regression based on a pooled, cross-sectional sample of 703 US non-profits or 1,824 organization-year observations over a 3-year from 1995–1997.	Medical and educational non-profits allocate expenses from tax-exempt to taxable activities to reduce their tax liabilities
13	Jegers (2010b)	None	Agency theory	Using formula model to explain the impact of agency problems on earnings manipulation	Agency problems exacerbate accounting manipulation levels in NPOs
14	Jones *et al.* (2013)	USA	None mentioned	Quantitative method. Using OLS regression based on a data sets of 8,200 US charities or 57,172 charity-year observations between 1985 and 2007	Charities smooth spending substantially; this means that spending does not change as much as revenues. The charities use net assets and past savings in order to influence spending.
15	Baber *et al.* (2002)	USA	None mentioned	Quantitative method. Using OLS regression based on a data sets of 331 US charities or 664 observations	Changes in compensation are significantly positively associated with changes in spending on programmes which advance organization objectives.
16	Roberts (2005)	USA	None mentioned	Quantitative method. Using t-statistic based on a data set of 48,349 US charities	The managers may allocate joint costs in order to achieve desirable financial reporting outcomes.
17	Thornton and Belski (2010)	USA	None mentioned	Quantitative method. Using OLS regression based on a data sets of	Donors reward non-profit organizations for investments in more accurate financial reporting

				352 812 US firm/year observations	information. In addition, the degree of competition in non-profit market seems to significantly impact non-profit expenditure decision.
18	Van der Heijden (2013)	USA	None mentioned	Experimental method. The experiment was implemented using tailor-made online experimental software with 226 participants	Donors attempt to rank charities and adjust donation attention based on the accounting information.
19	Jacobs and Marudas (2012)	USA	None mentioned	Quantitative method. Using OLS regression based on a data set of 8700 US observations	Reported zero fundraising expenses does not impact on donor market perception in the fields of arts, health, human services and philanthropy NPOs, but for education NPOs, reporting zero fundraising expense seems to be less reliable than disclosure of positive fundraising expenses.
20	Yetman and Yetman (2013)	USA	None mentioned	Quantitative method. Using OLS regression based on a data set of 37,349 US observations	Average donors discount for lower quality of programme ratio (zero fundraising expenses) reported by nonprofits. More sophisticated donors are more able to unravel complex signals of low-quality reporting.
21	Tinkelman (1998)	USA	None mentioned	Quantitative method, using 191 large national non-profit organizations with public education programmes for 3 years from 1990–1992	Larger donors are more sensitive to quality or efficiency variables. They act as if they penalize organizations for bad ratings and adjust price variables for joint costs.

22	Tinkelman (1999)	USA	None mentioned	Quantitative method. Using OLS regression based on a data set of 6,559 US non-profit organizations from 1992–1994	Greater reported efficiency is generally associated with higher subsequent donations.
23	Khumawala *et al.* (2005)	USA	None mentioned	An experimental with 125 participants including financial officers of NPOs, foundation executives and students.	Donors have a strong preference for organizations that provide more programme services and spend less on fund-raising, but they seem to ignore the effects of allocating joint cost on fund-raising expenses.
24	Trussel (2003)	USA	None mentioned	Quantitative method. Using OLS regression based on cross-sessional data sets for 2-year period, 1997 and 1998, for approximately 8496 large US charities.	Model with six indicators can be used to compute the probability of accounting manipulation by charities.
25	Krishnan and Yetman (2011)	USA	Institutional theory	Quantitative method. Using multi regressions based on cross-sectional data of 620 hospital-year observations	Non-profit hospitals with high normative pressures or high donation revenue are more involved in cost-shifting.
26	Vermeer *et al.* (2014)	USA	Agency theory	Quantitative method. Using OLS regression based on cross-sectional data of 187 non-profits and 187 for-profit organizations	Non-profits manage pension assumptions when incentives and less monitoring exist. The paper suggests that non-profits are more aggressive in managing discretionary accounting choices than for-profit organizations.
27	Boterenbrood (2014)	Netherlands	None mentioned	Quantitative method. Using	Dutch hospitals use postponing revenue

				Multi regressions based on data from 453 hospital-year observations	recognition to smooth their income.
28	Vansant (2015)	USA	Institutional theory	Quantitative method. Using multi regressions based on data from 1,063 firm-years	Non-profit hospital managers use discretionary accruals to manage earnings results
29	Jegers (2010a)	Review paper focusing on accounting manipulation by non-profit organizations			
30	Hofmann and McSwain (2013)	Review paper focusing on financial disclosure management in the non-profit sector			
31	(Garven *et al.*), (2016)	Review paper focusing on programme ratio management in the non-profit sector			

A.2 Regression results with absolute value of discretionary accruals as the dependent variable – Chapter 1

Variables	Coef.	t
$EBDA_{it}$	0.094	8.07***
$EARNING_{i,t-1}$	0.045	2.79***
$DA_{i,t-1}$	0.016	1.51
VOL_INC_{it}	-0.010	-0.69
$CHAR\_INC_{it}$	-0.010	-0.8
LEV_{it}	0.048	4.44***
Size	-0.024	-3.71***
Constant	0.443	4.27***
N	4242	
F(7,2821)	19.12	
Prob > F	0.0000	
R square	0.1447	

Note: ***, **, *: Significant at 1%, 5% and 10% level.

Dependent variable is absolute value of discretionary accruals in year t. $EBDA_{it}$ is earnings before discretionary accruals = $Earnings_{it}$/$Total\ assets_{i,t-1}$ - Discretionary accruals. $EARNINGS_{i,t-1}$ is earnings in year t-1 scaled by lagged total assets. $DA_{i,t-1}$ is discretionary accruals in year t-1. LEV_{it} is total short-term and long-term creditor in year t scaled by total assets in year t-1. $CHAR\_INC_{it}$ is proportion of charitable income over total income in year t. VOL_INC_{it} is proportion of voluntary income over total income in year t. $Size_{it}$ is natural logarithm of total assets of charity i in year t.

A.3 Regression results by sector with absolute value of discretionary accruals as the dependent variable –Chapter 1

	1	2	3	4	5	6	7	8	9	10	11
$EBDA_{it}$	0.129***	0.069***	0.084**	0.052	0.208***	0.081**	0.143	0.109**	0.167**	0.003	0.152**
$EARNING_{i,t-1}$	0.074	0.038	0.002	0.030	0.120	-0.017	0.104	0.010	0.155*	0.012	0.056
$DA_{i,t-1}$	0.007	-0.021	-0.012	0.012	-0.009	-0.087	0.110	-0.074	-0.019	0.003	-0.016
LEV_{it}	0.079***	0.051***	0.060***	0.101***	0.043***	0.037***	0.131	0.067***	0.214***	0.057***	0.025
VOL_INC_{it}	0.016	-0.004	0.041	0.058	-0.003	0.022	0.054	0.049	-0.010	-0.004	0.009
$CHAR\_INC_{it}$	-0.039**	-0.030***	0.009	0.025**	-0.023	-0.004	0.082**	0.026*	-0.033	-0.002	0.023
Size	-0.02***	-0.007***	-0.002	-0.01***	-0.01***	-0.01***	-0.03***	-0.006**	-0.02**	-0.005***	-0.01**
INTERCEPT	0.359	0.167	0.067	0.220	0.222	0.201	0.460	0.135	0.349	0.111	0.210
N	393	1023	372	633	192	510	120	270	162	420	147
Prob > F	0.000	0.000	0.0003	0.000	0.000	0.000	0.000	0.000	0.0007	0.000	0.0001
R square	0.2979	0.1829	0.0873	0.1933	0.2049	0.1323	0.2378	0.2036	0.2132	0.2028	0.2183

Note: ***, **, *: Significant at 1%, 5% and 10% level.

A.4 List of reviewed papers – Chapter 4

Author (year)	Country	Study focus	Findings
Boateng *et al.* (2016)	UK	The paper examined the measures of performance in large UK charities.	The study suggested 20 indicators best capture the overall performance of charities, classified into 5 main groups: (i) financial measures; (ii) client satisfaction; (iii) management effectiveness; (iv) stakeholder involvement; and (v) benchmarking.
Newton (2015)	USA	The paper studied the relationship between chief executive compensation, organizational performance, and governance quality in large US non-profits.	The study found that non-profit governance quality is negatively associated with CEO-to-employee relative pay ratio. However, the results show a negative relationship between CEO-to-employee relative pay and multiple measures of non-profit performance.
Perego and Verbeeten (2015)	Netherlands	The study examined the impact of the adoption of a 'good governance' code on charity governance structure, managerial pay disclosure and managerial pay level.	The paper showed evidence that the adoption of a good governance code is associated with an increase in the disclosure of managerial payments and lower managerial pay levels.
Grasse *et al.* (2014)	USA	The paper determined the influence on executive compensation by various factors, such as organizational size, market, subsector, organizational type, staffing level, and organizational performance.	The results suggested that non-profit executive compensation is impacted by organizational efficiency, the executive director's ability to raise funds, and the size of the organization (in terms of total expenditure, number of employees and number of expert staff).
Balsam and Harris (2014)	USA	The paper investigated the impact of CEO compensation disclosure on non-profit donations.	The paper found that the disclosure of CEO compensation impacts on donors' decisions. This relationship is sensitively varied with the type of non-profit.
Garner and Harrison (2013)	USA	The study explored how executives, the board, and excess compensation jointly affect the performance of non-profit organizations.	The study found that excess compensation for executives is associated with poor firm performance, and a powerful CEO can harm firm performance in the case of isolation.
Aggarwal *et al.*	USA	The paper inspected relations between board size,	The paper discovered that board size is associated negatively

(2012)		managerial incentives and organizational performance in non-profits.	with managerial incentives, but is positively related to number of programmes and programme spending.
Brickley *et al.* (2010)	USA	This study investigated whether management representation on non-profit boards leads to excessive payments to CEOs.	The study found an association between hospital CEO compensation and CEO power on the board.
Frumkin and Keating (2010)	USA	The study explored the determinants of non-profit executive compensation in the US.	The results suggest that non-profit executive compensation is positively associated with CEO performance and has a significantly positive association with the 'free cash flows' of an organization.
Cardinaels (2009)	Netherlands	The paper investigated the impact of governance structures of hospitals on chief executive pay.	The study found that the chief executive of a hospital gets a higher payment when supervisory board members receive more remuneration or when supervisory board members have a lower level of expertise
Ballantine *et al.* (2008a)	UK	The paper investigated the role of remuneration committees and the association between performance and CEO incentives in UK National Health Service Trusts.	The paper explored a significant relationship between Trust performance and CEO turnover. However, they did not find evidence of a relationship between performance and CEO pay.
Barros and Nunes (2007)	Portugal	The study examined the association between CEO pay and various factors including organizational performance, governance structure and individual characteristics of managers.	The study found a significant association between CEO pay and numbers of factors including organizational performance, governance structure and individual characteristics of the managers.
Jobome (2006a)	UK	The paper discovered the potential impacts of CEO pay such as the importance of performance-based and control-driven mechanisms.	The evidence suggested that most of the governance variables and performance-based mechanisms are not significantly related to the pay of CEOs.
Carroll *et al.* (2005)	USA	The study explored the effect of performance on the compensation of non-profit executives	The study found that executive compensation and organizational performance are simultaneously determined.
Eldenburg and Krishnan (2003)	USA	The paper examined incentives and performance in organizations governed by publicly elected boards of directors and subsidized by taxes (district hospitals and non-profit hospitals).	The paper suggested that higher CEO compensation is associated with better operating performance.
Ballou and	USA	The paper explored the differences in behaviour	The paper found that the CEO incentive structure in religious

Weisbrod (2003)		among governmental, religious non-profit, and secular non-profit organizations in respect of compensation.	non-profit, secular non-profit and governmental hospitals reflects substantive differences in the behaviour of these organizations.
Baber *et al.* (2002)	USA	The study examined how unique features of charities affect the manner in which they compensate their executives.	The results found relations between changes in CEO compensation and changes in program spending.
Brickley and Van Horn (2002)	USA	The paper investigated the incentives of chief executive officers in US non-profit hospitals.	The paper indicated that both turnover and compensation of non-profit hospital CEOs are significantly related to financial performance. They also found a positive association between CEO pay and insider boards that include the CEO and other employees as members.
Hallock (2002)	USA	The article explored the compensation of top managers of non-profits in the US.	The article found a link between organization size and managerial pay, and the pay of managers is positively associated with the proportion of outside fundraising.
Oster (1998)	USA	The study examined executive compensation in the US non-profit sector.	The study suggested that executive compensation is affected by organizational size, the form of the organization and sectoral factors.

A.5 Sensitivity analysis results – Chapter 4

Dependent variable	**LN_CEO_COMP[a]**		**Excess_CEO_COMP[b]**	
Independent variables	Coef.	T	Coef.	z
Gov_Diversity	0.691	1.15	6.480	1.19
Gov_Mechanism	0.086	0.94	0.758	1.28
Program ratio (2011)	0.584	1.17	5.657	1.18
CEO Gender	0.058	1.06	0.147	0.40
CEO Ethnicity	0.050	0.42	-0.293	-0.34
CEO Managerial experience	0.024	0.71	0.106	0.46
CEO industrial experience	-0.022	-0.45	0.133	0.39
Ln(Charity age)	0.017	0.39	0.482	1.73*
Ln(Board size)	0.043	0.66	0.328	0.73
Ln(Charity Income size)	0.242	7.2***	1.411	5.24***
Governmental funding	-0.198	-2.14**	-1.206	-1.92*
Group_1	-0.053	-0.53		
Group_2	0.094	1.24		
Group_3	0.078	0.78		
Group_4	-0.201	-2.54**		
Group_5	-0.117	-1.42		
Group_6	-0.324	-3.71***		
Faith_charity	-0.203	-2.27*	-0.401	-0.68
Interaction variable	-0.537	-0.82	-6.285	-1.07
Constant	6.624	8.96***	-34.6244	-4.97
N	240		240	
F/LR chi2(12)	6.52		60.6	
Prob > F/Prob > chi2	0.0000		0.0000	
Adj R-squared/Pseudo R2	0.305		0.1867	

Note: a: OLS regression and b: Logistic regression

****, **, *: significant at 1%, 5% and 10%*

See Table 4.3 for definition of variables.

A.6 2SLS analysis results – Chapter 4

Instrumented: Programme ratio (2011)

Dependent variable	**LN_CEO_COMP[a]**		**Dependent variable**	**LN_CEO_COMP[a]**	
Independent variables	Coef.	t	Independent variables	Coef.	t
Programme ratio (2011)	0.168	0.16	Programme ratio (2011)	0.296	0.27
Gender diversity	0.415	2.36**	Governance Index	0.377	2.9***
Ethnicity diversity	-0.044	-0.87	CEO Gender	0.065	1.09
Education diversity	0.081	0.93	CEO Ethnicity	0.037	0.28
Experience diversity	0.029	0.38	CEO Managerial experience	0.036	0.95
Business diversity	0.006	0.07	Ln(Charity age)	0.044	0.92
Existence of audit committee	0.068	0.66	Ln(Charity asset size)	0.128	5.95***
Existence of Remuneration and/or Nomination committee	0.204	3.44***	Governmental funding	-0.100	-0.81
Presence of experts in audit committee	-0.165	-1.83*	Constant	8.715	7.05
Audited by Big4 specialist	0.038	0.74	N	239	
Internal audit function	0.051	0.78	F	7.62	
CEO Gender	0.055	0.94	Prob > F	0.0000	
CEO Ethnicity	0.089	0.7	Adj R-squared	0.177	
CEO Managerial experience	0.054	1.44			
Ln(Charity age)	0.031	0.62			
Ln(Charity asset size)	0.129	6.12***			
Governmental funding	-0.100	-0.81			
Constant	8.470	8.18			
N	239				
F	5.25				
Prob > F	0.0000				
Adj R-squared	0.2308				

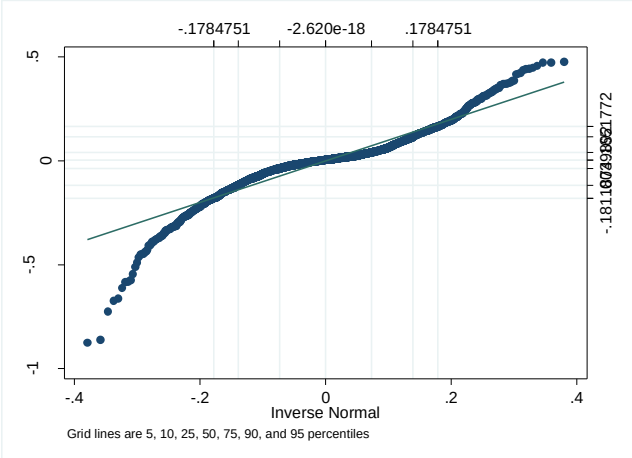
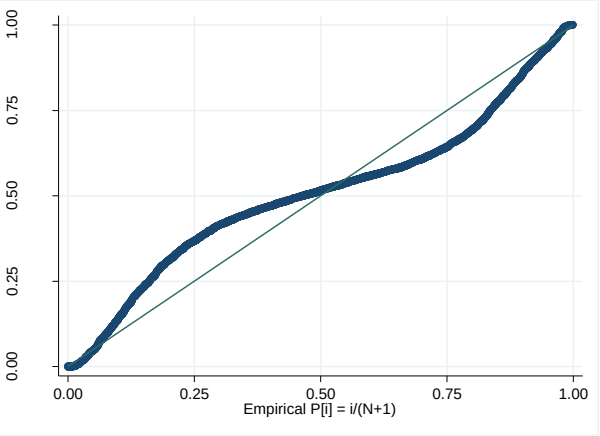
Note: a: 2SLS regression (in order to ensure the consistency of the regression, two of the three variables used as instrumental variables in the first stage (CEO non-profit sector experience, board size) are not included in the second stage of regression).

****, **, *: significant at 1%, 5% and 10%*
See Table 4.3 for definition of variables

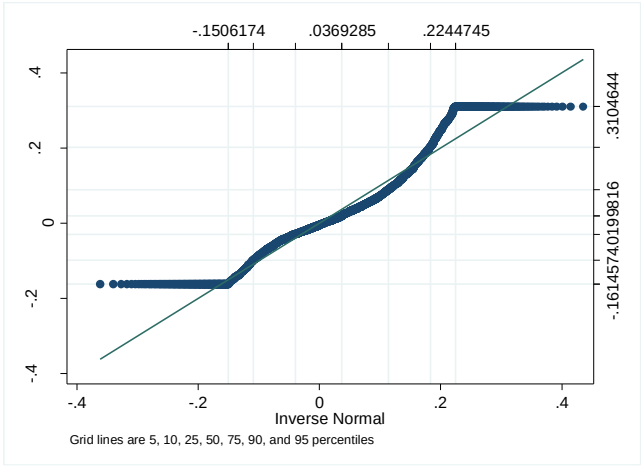
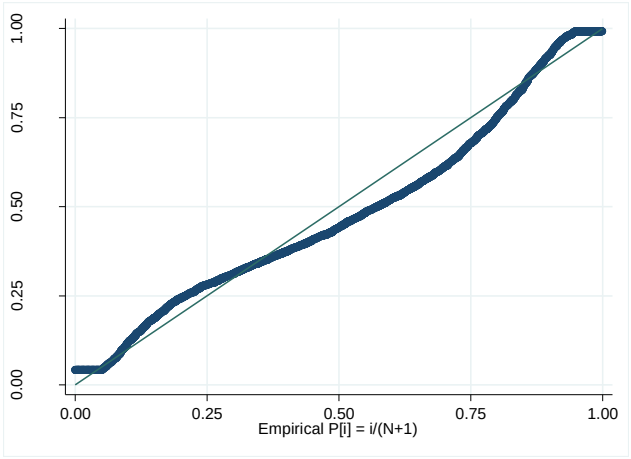
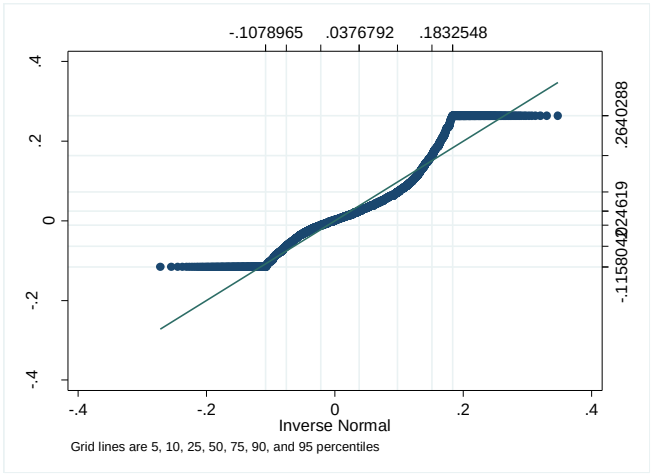
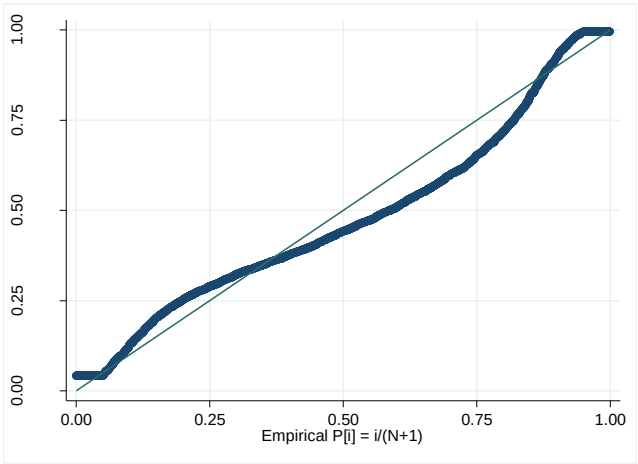
Appendix B

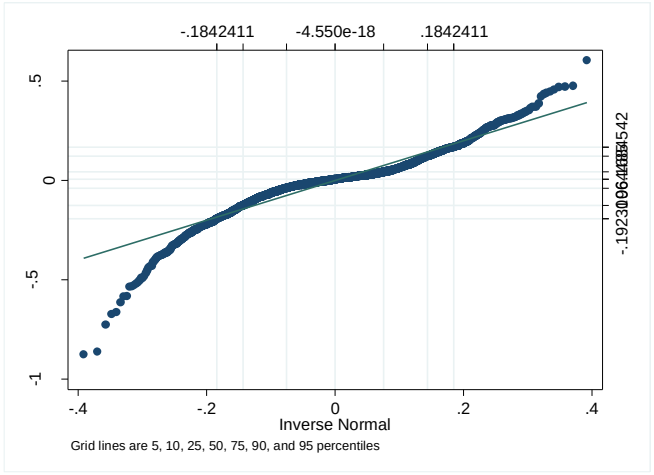
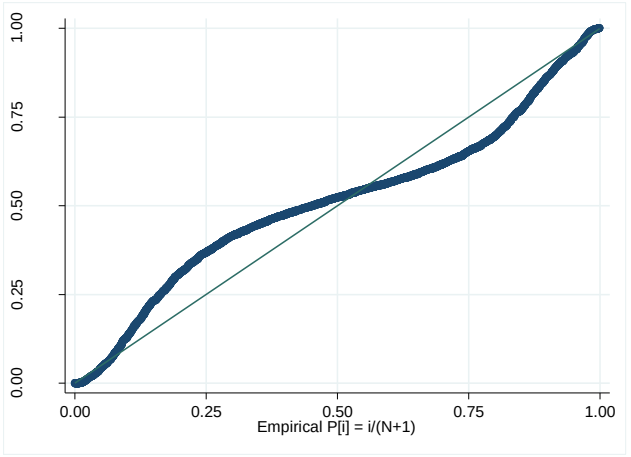
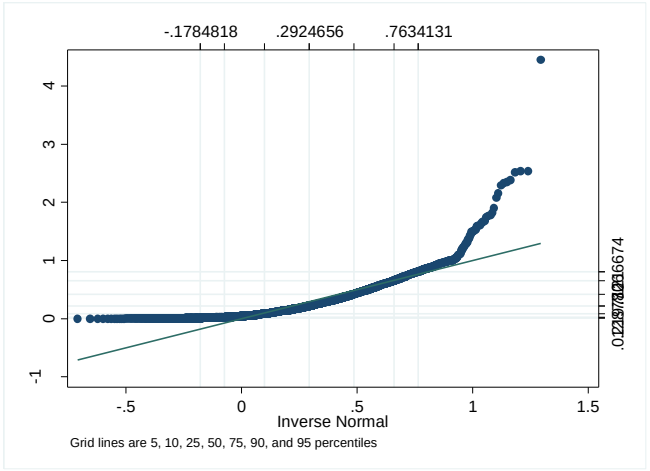
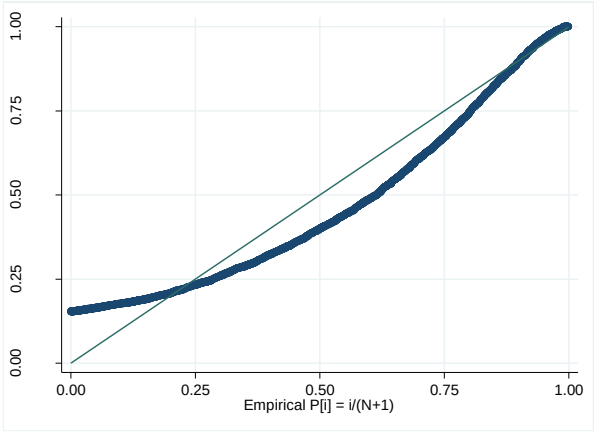
B.1 Statistical diagnostic test: Chapter 2

B.1.1 Test normality of variables

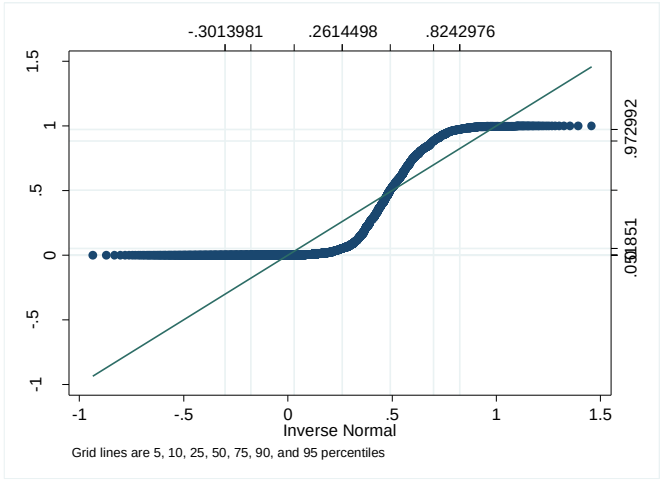
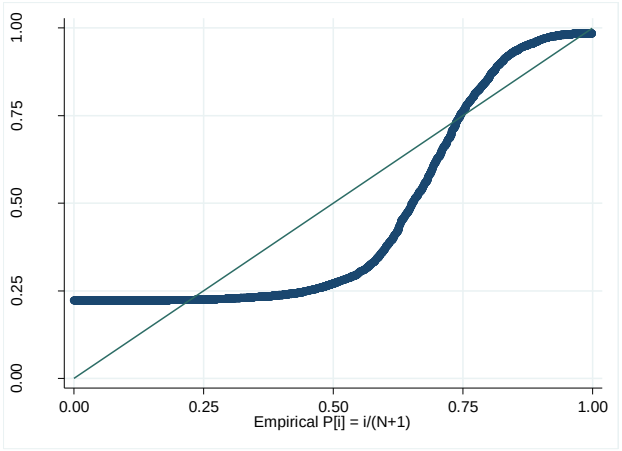
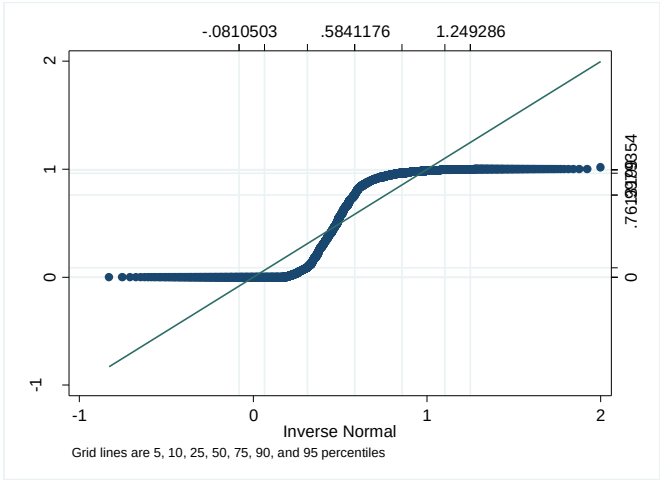
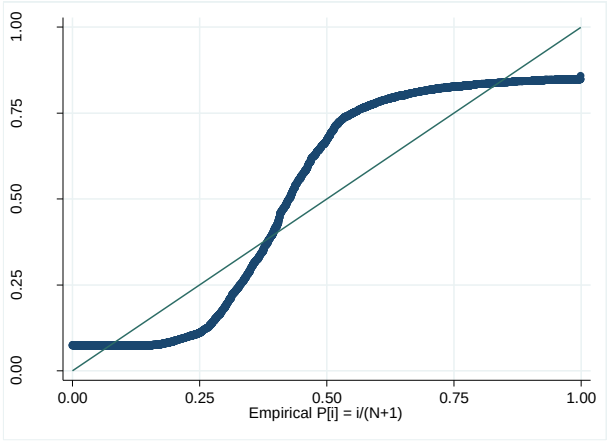
Variable	Normality test (Q-Q plot)	Normality test (P-P plot)
DA_{it}		

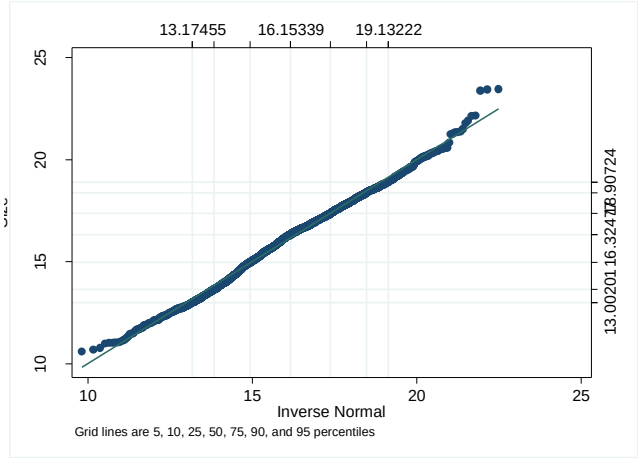
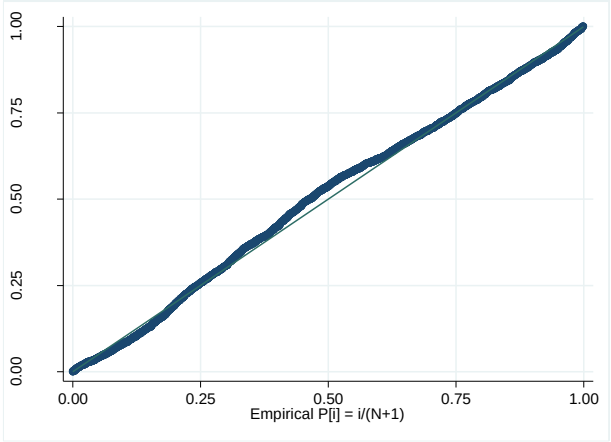
Appendix

$EBDA_{it}$		
$EARNING_{it-1}$		

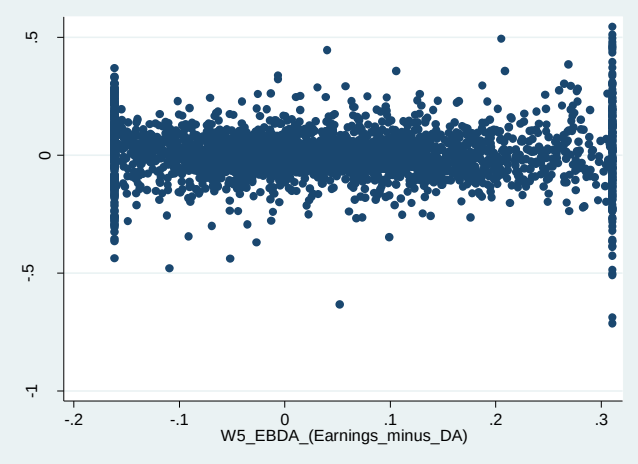
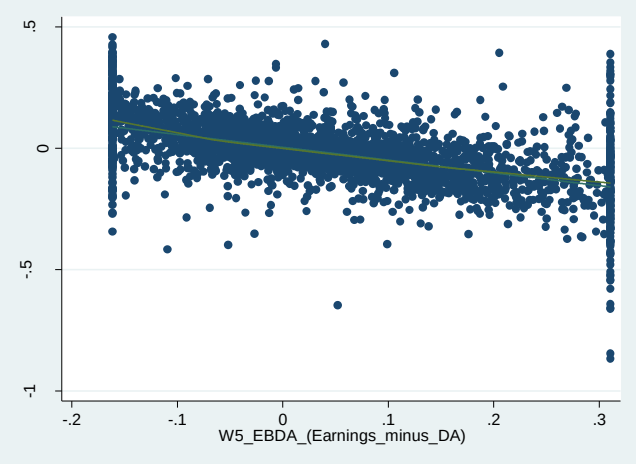
DA_{it-1}	 -.1842411 -4.550e-18 .1842411 .5 0 -.5 -1 -.4 -.2 0 .2 .4 Inverse Normal Grid lines are 5, 10, 25, 50, 75, 90, and 95 percentiles	 0.00 0.25 0.50 0.75 1.00 Empirical P[i] = i/(N+1)
LEV_{it}	 -.1784818 .2924656 .7634131 4 3 2 1 0 -1 -.5 0 .5 1 1.5 Inverse Normal Grid lines are 5, 10, 25, 50, 75, 90, and 95 percentiles	 0.00 0.25 0.50 0.75 1.00 Empirical P[i] = i/(N+1)

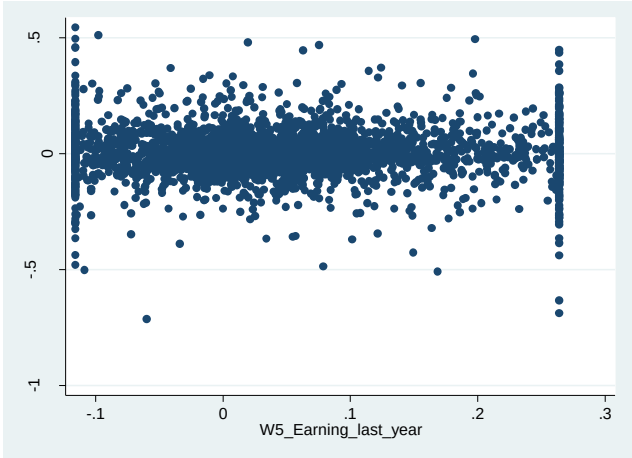
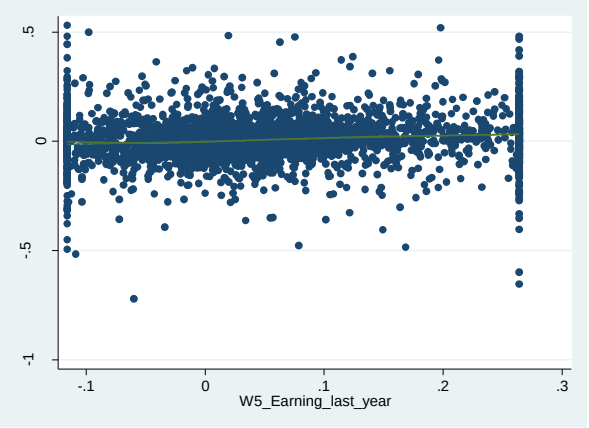
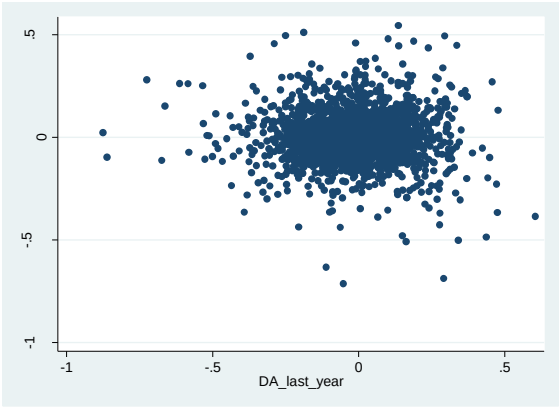
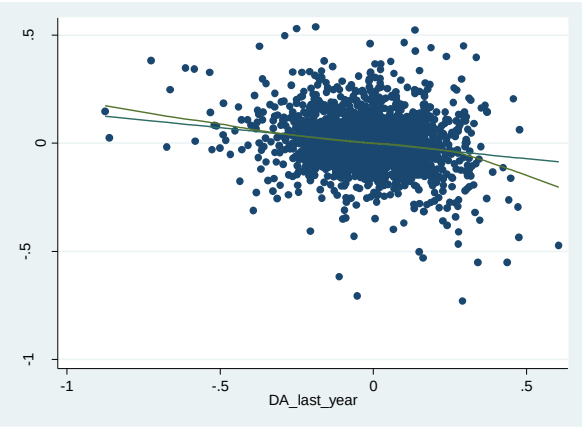
Appendix

VOL_INC_{it}		
$CHAR\_INC_{it}$		

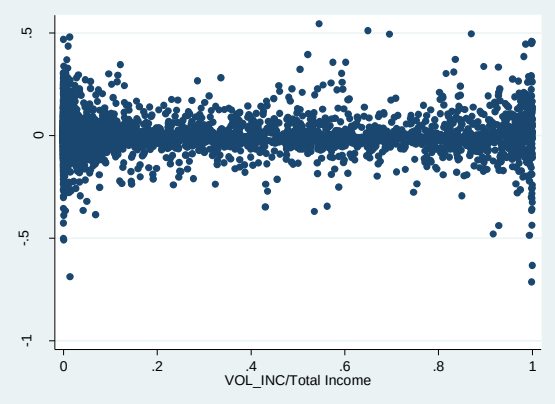
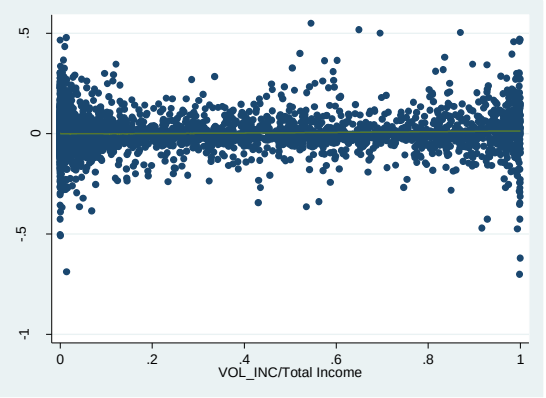
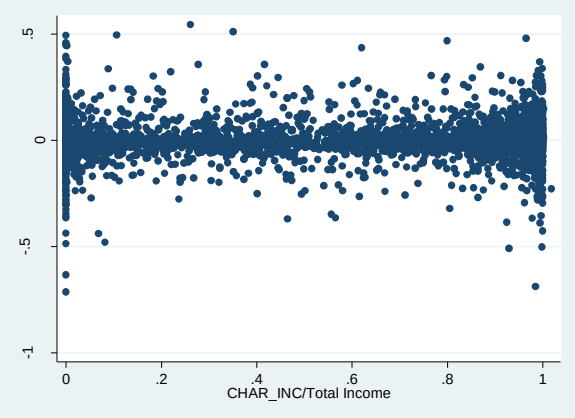
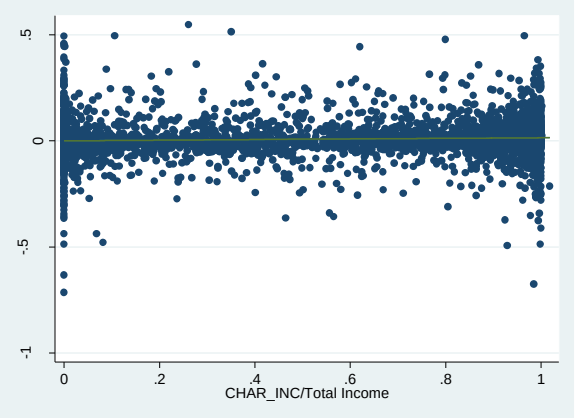
$SIZE_{it}$	 13.17455 16.15339 19.13222 25 20 15 10 13.00201 16.32477 19.90724 10 15 20 25 Inverse Normal Grid lines are 5, 10, 25, 50, 75, 90, and 95 percentiles	 1.00 0.75 0.50 0.25 0.00 0.00 0.25 0.50 0.75 1.00 Empirical P[i] = i/(N+1)

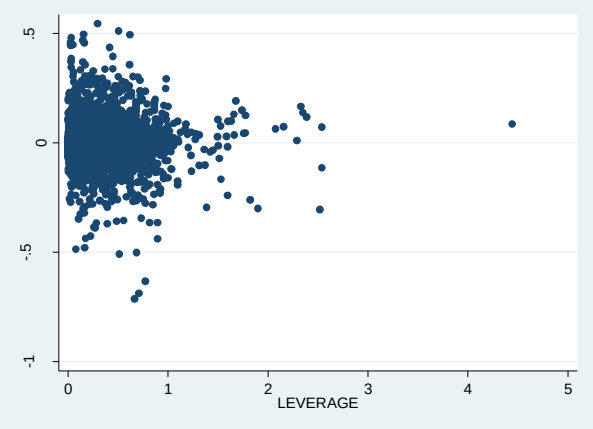
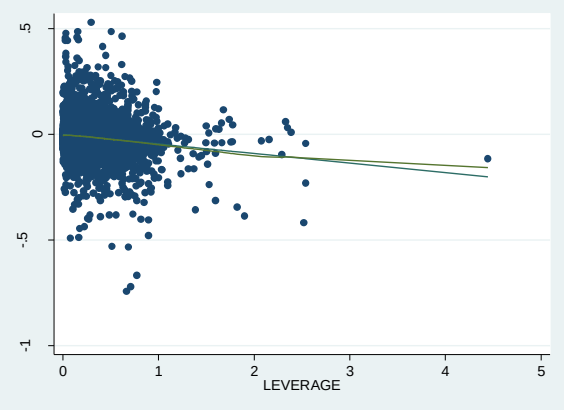
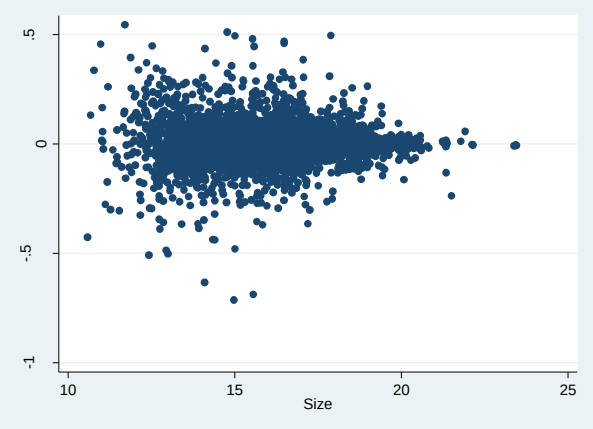
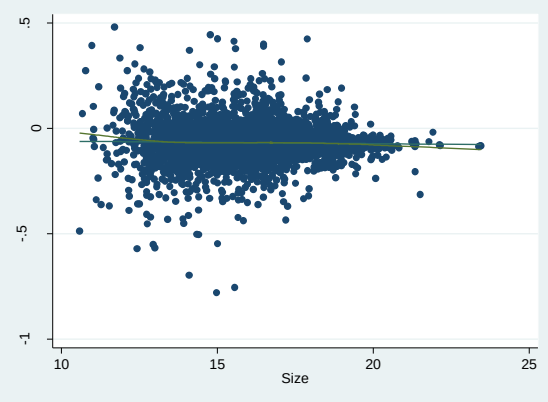
B.1.2 Test linearity

Variables	scatter r and ‘independent variables’	Acprplot ‘independent variables’ lowess lsopts(bwidth(1))
W5_EBDA_Earnings_minus_DA		

W5_Earning_last_year		
DA_last_year		

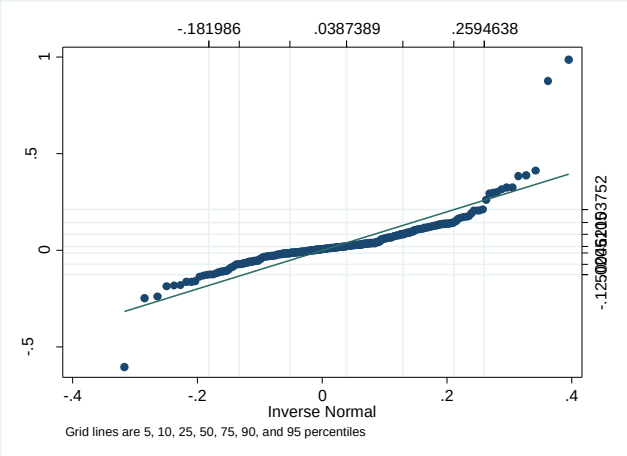
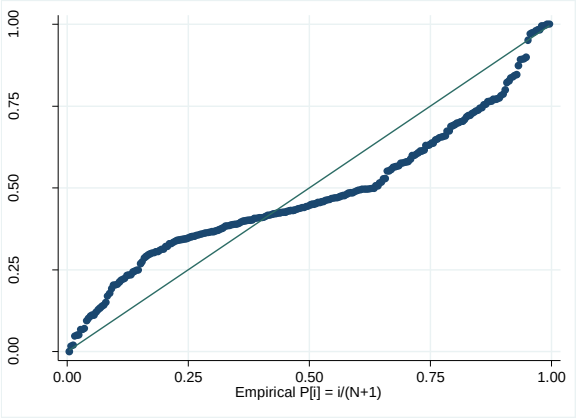
Appendix

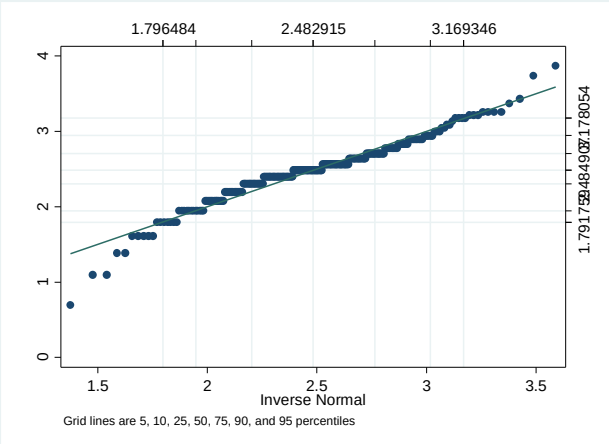
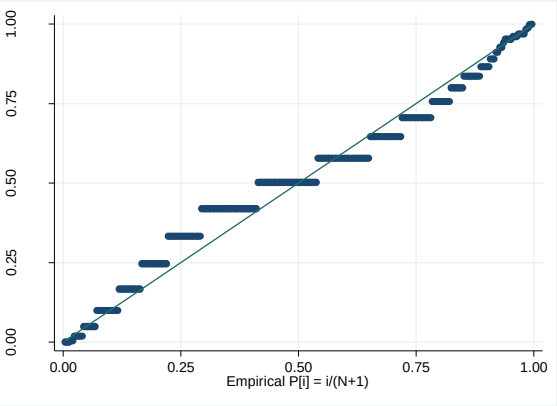
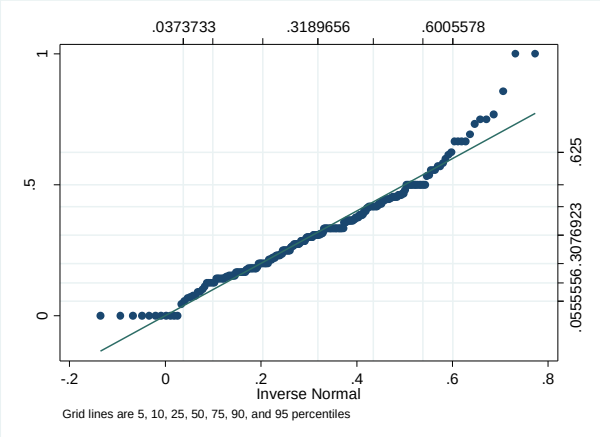
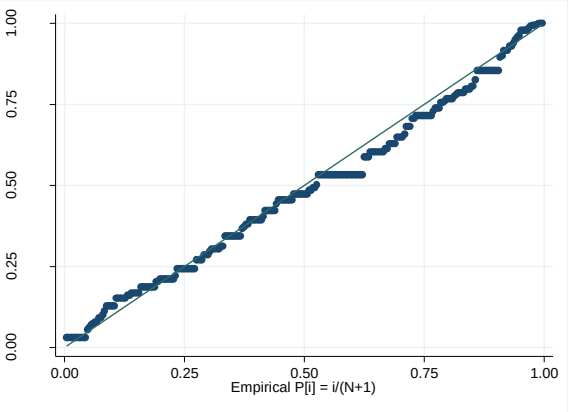
VOL_INCTotalIncome		
CHAR_INCTotalIncome		

LEVERAGE		
Size		

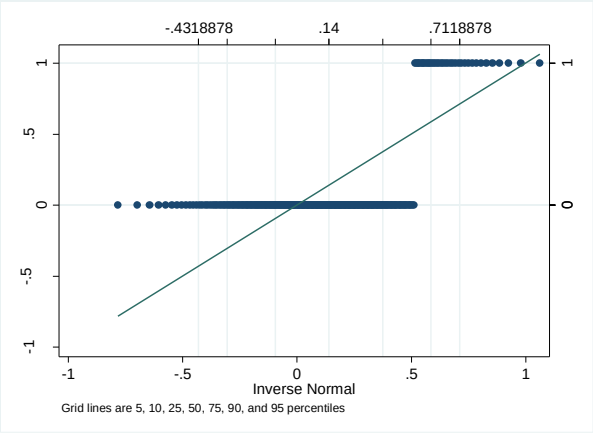
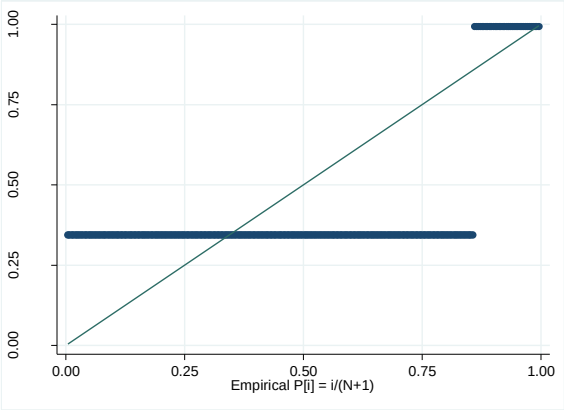
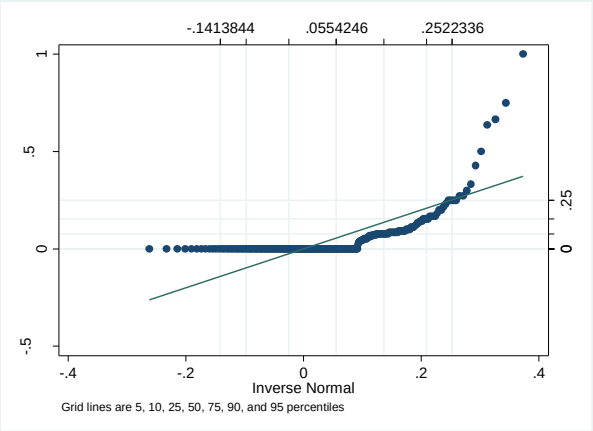
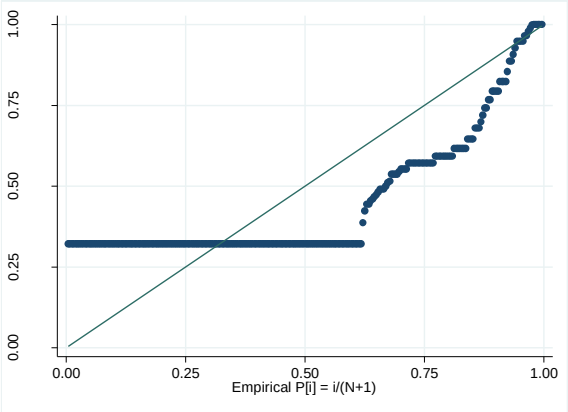
B.2 Statistical diagnostic test: Chapter 3

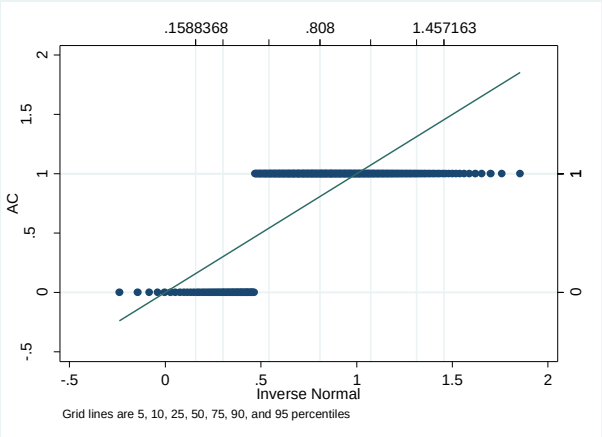
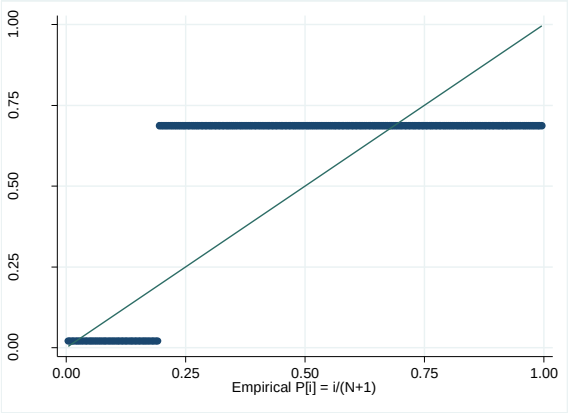
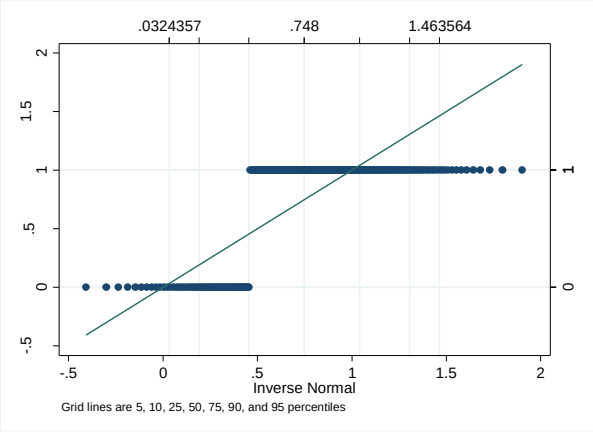
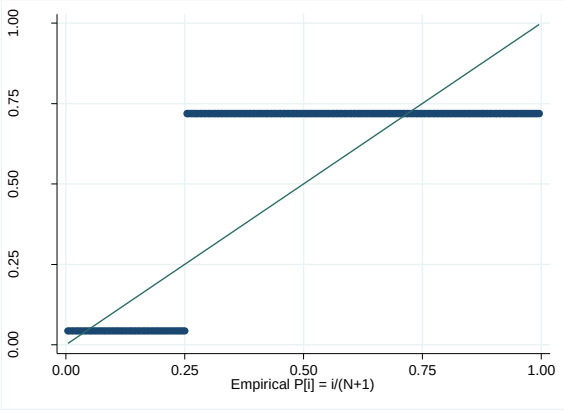
B.2.1 Test normality of variables

Variable	Normality test (Q-Q plot)	Normality test (P-P plot)
DA_{it} (N= 250)		

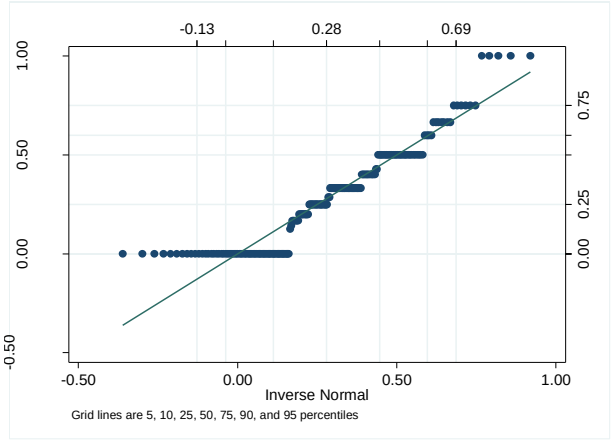
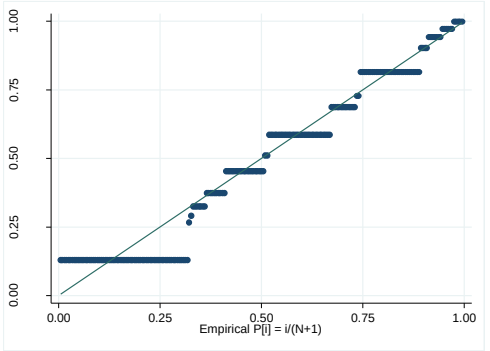
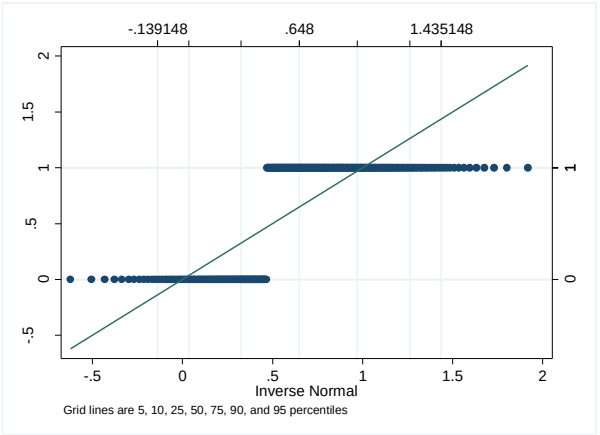
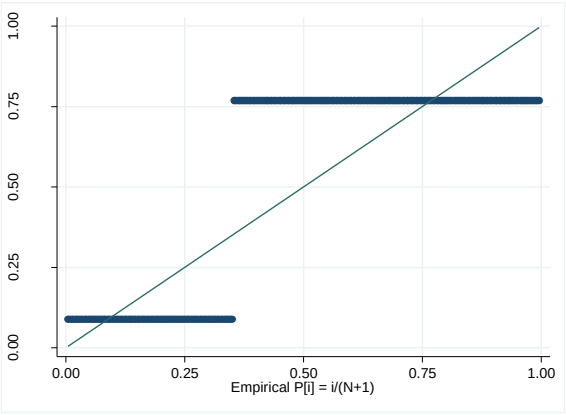
Ln(BOARD_SIZE) (N= 250)		
BOARD_FEM (N= 250)		

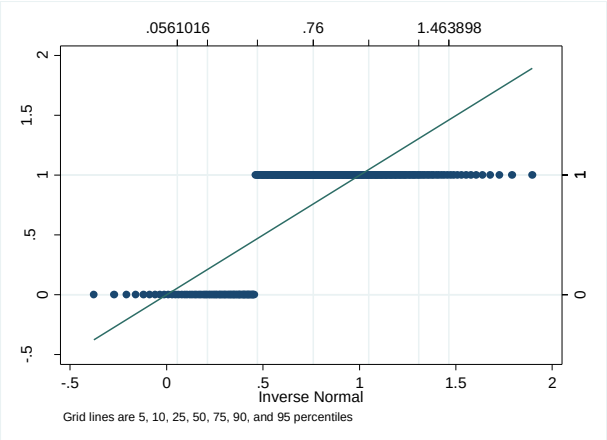
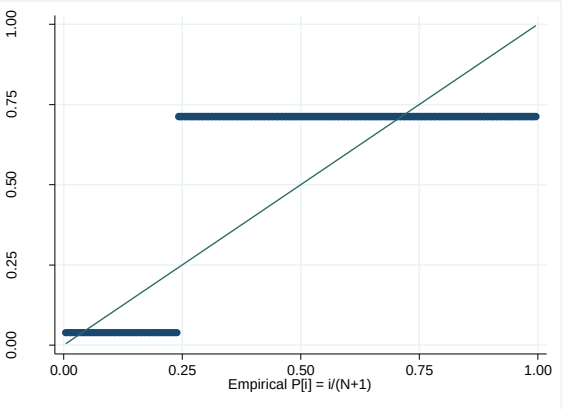
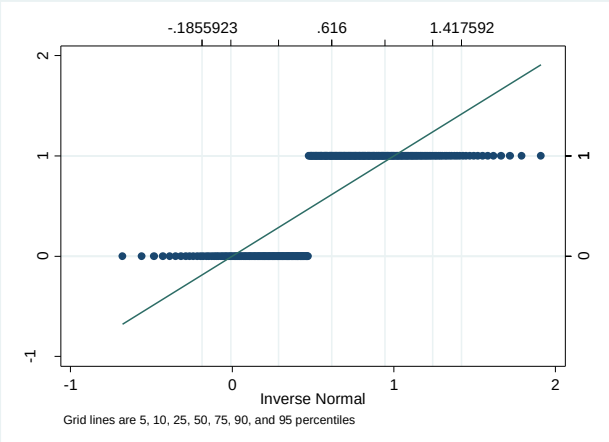
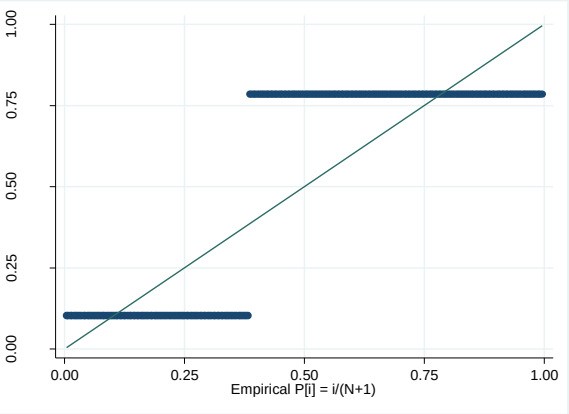
Appendix

BOARD_FEM_SIG Dummy variable (0 & 1) (N= 250)		
BOARD_ETH (N= 250)		

AC Dummy variable (0 & 1) (N= 250)		
AC_EXPERT (N=250) Dummy variable (0 & 1) (N= 250)		

Appendix

AC_EXPERT (N=207) Percentage of expert in audit committee		
INT_AUD Dummy variable (0 & 1) (N= 250)		

AUD_TOP4 Dummy variable (0 & 1) (N= 250)		
NON-AUDIT_FEE 1 Dummy variable (0 & 1) (N= 250)		

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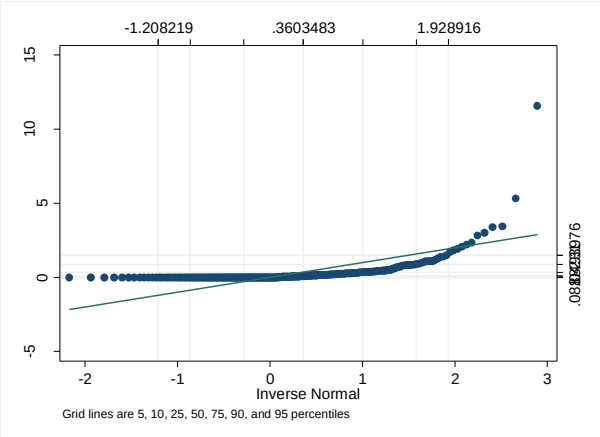
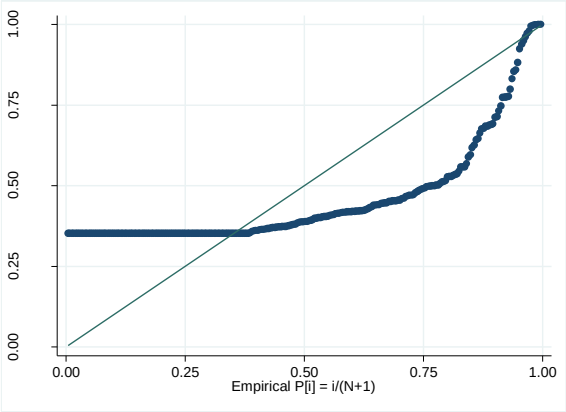
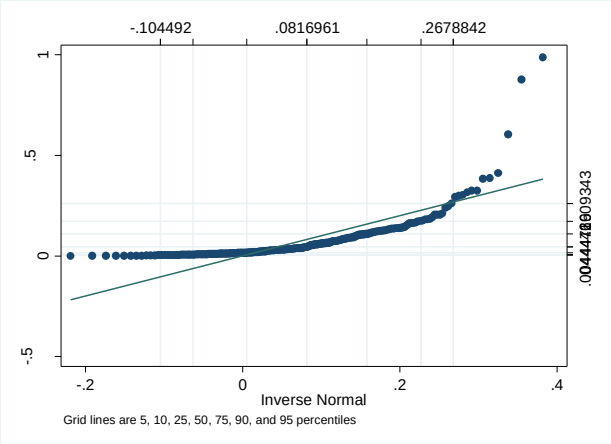
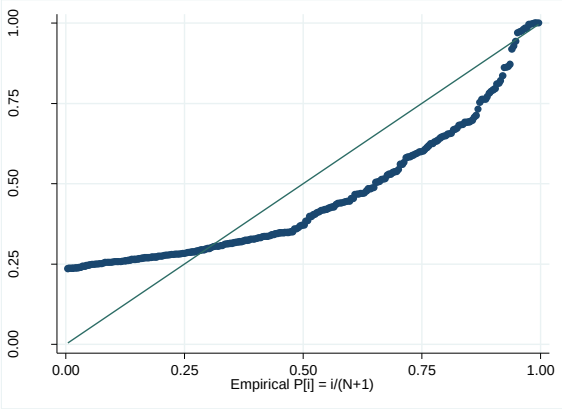
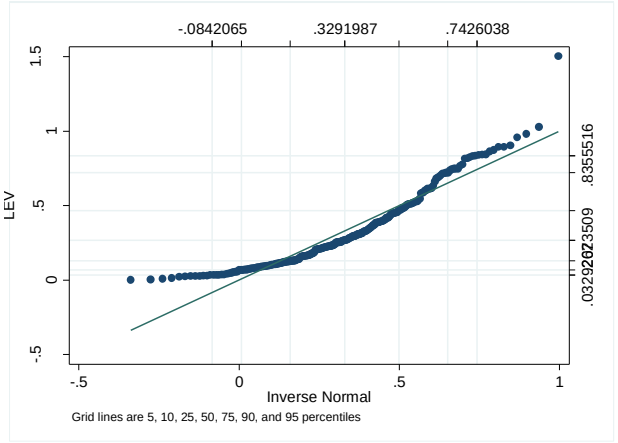
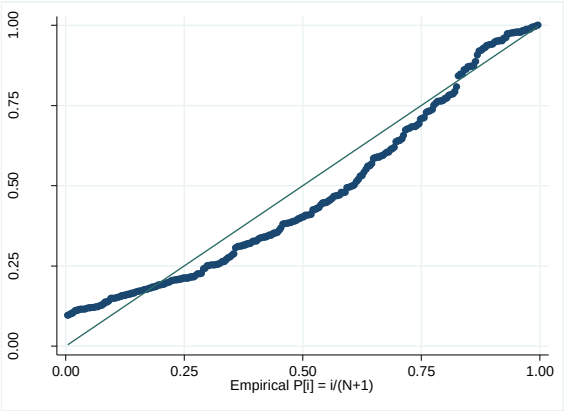
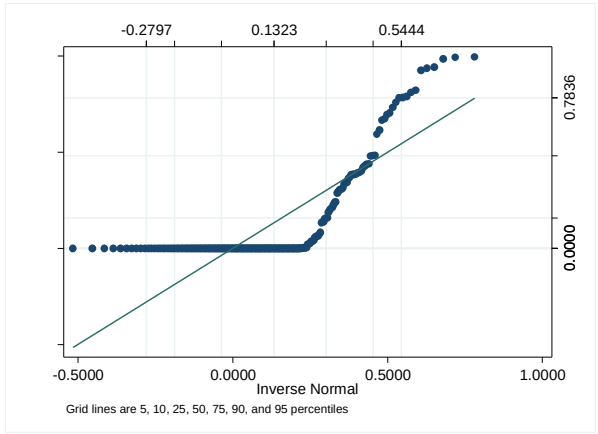
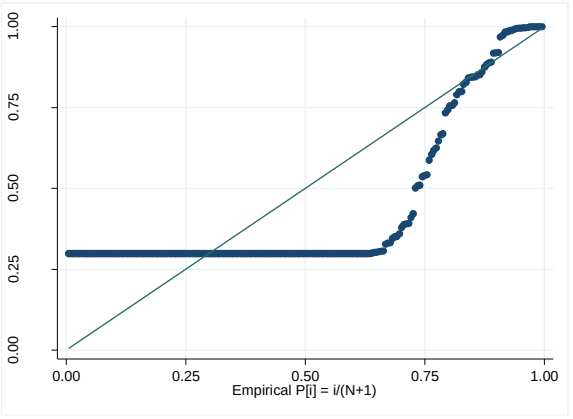
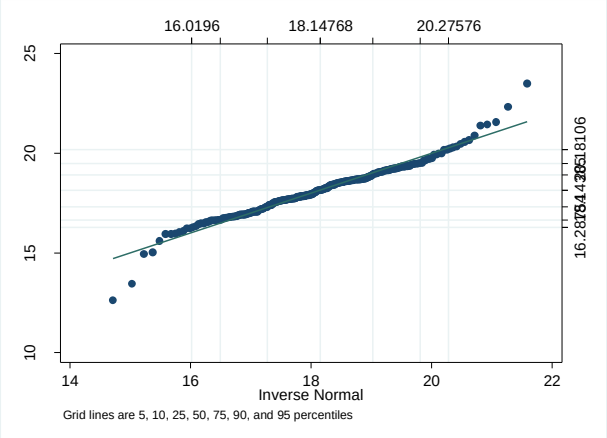
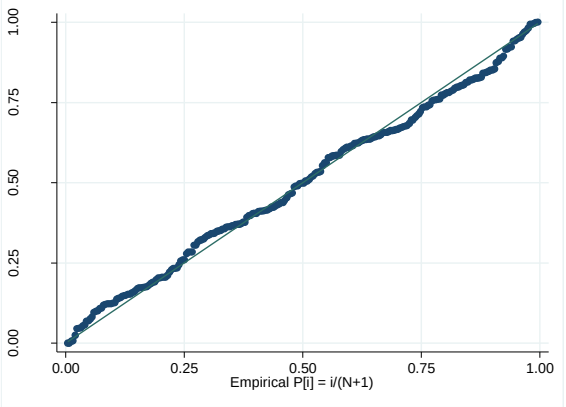
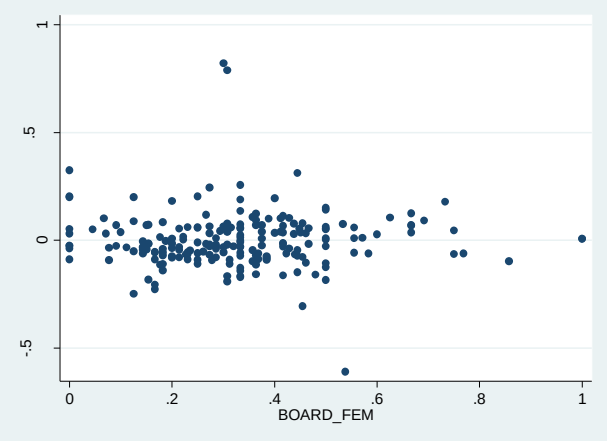
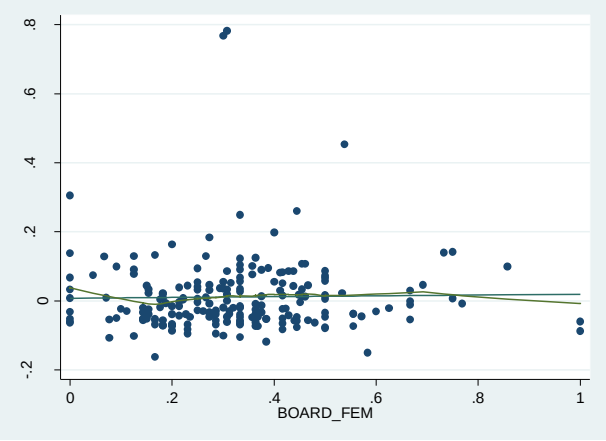
NON-AUDIT_FEE 2 (N= 250)		
Absolute DA (N= 250)		

LEV (N= 250)		
GOV_FUND (N=207)		

Charity size (N= 250)		

Notes: Some variables do not show normality due to using dummy variables

B.2.2 Test linearity

Variables	scatter r and ‘independent variables’	Acprplot ‘independent variables’ lowess lsopts(bwidth(1))
BOARD_FEM		

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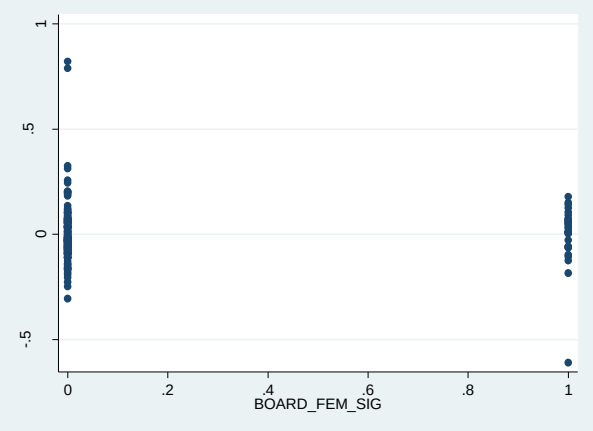
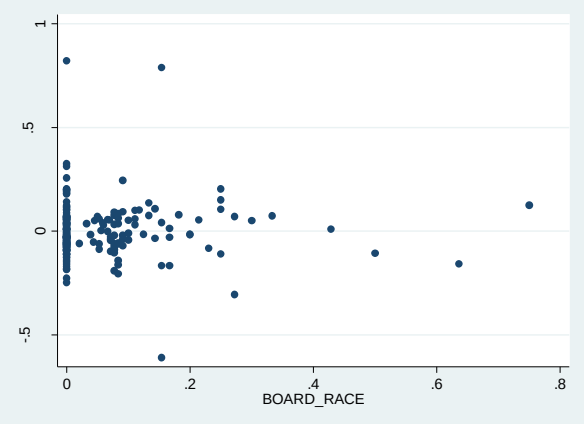
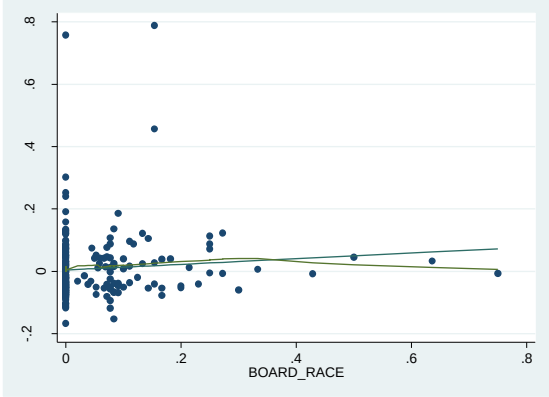
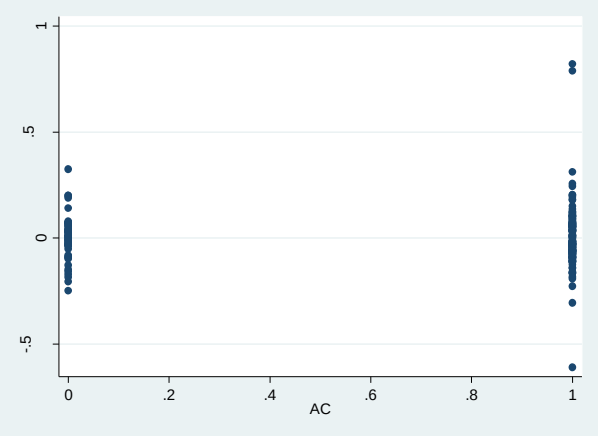
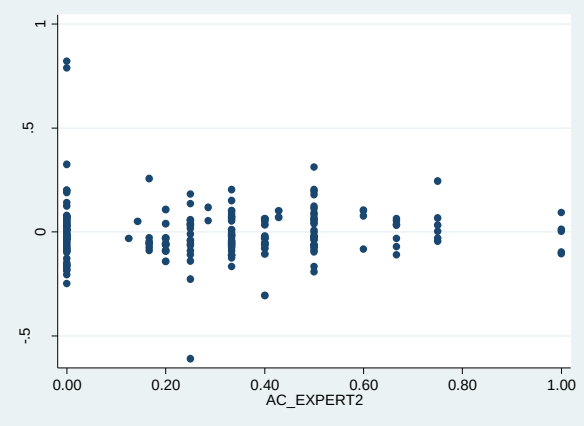
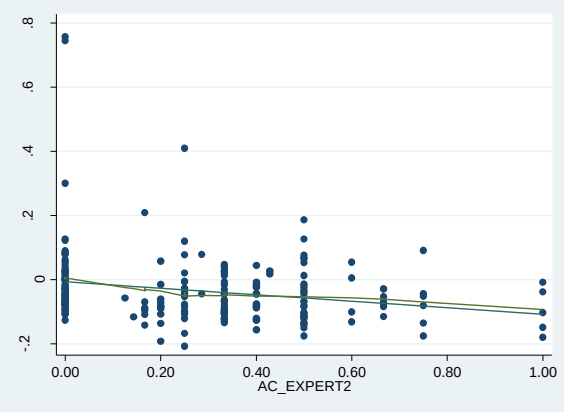
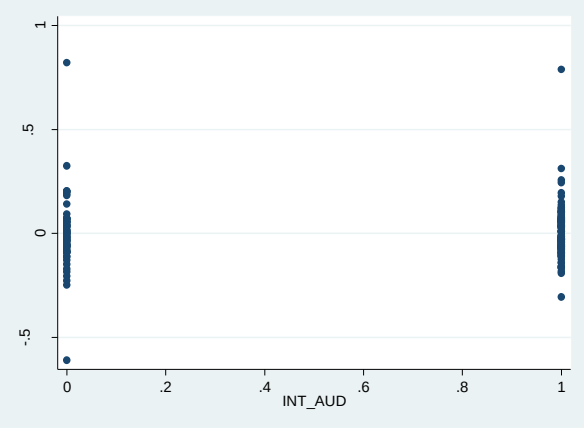
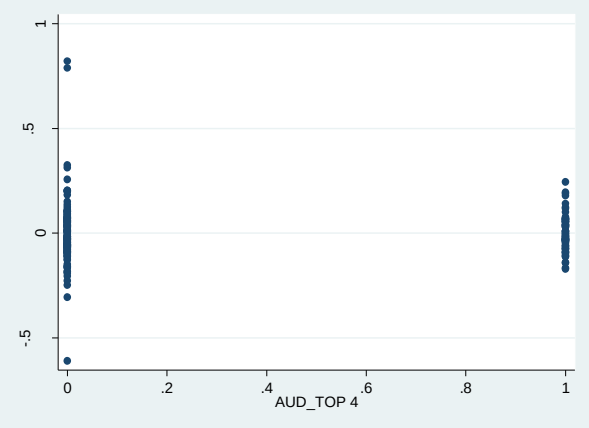
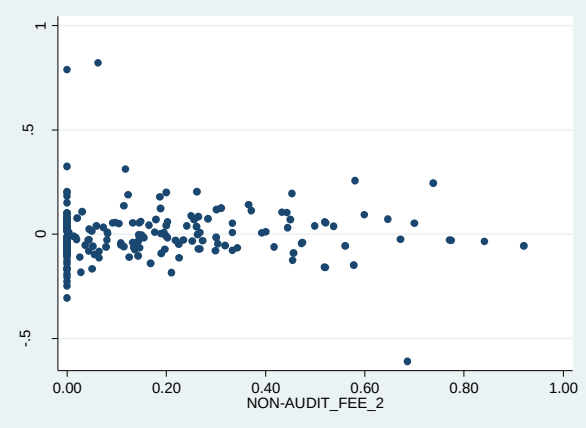
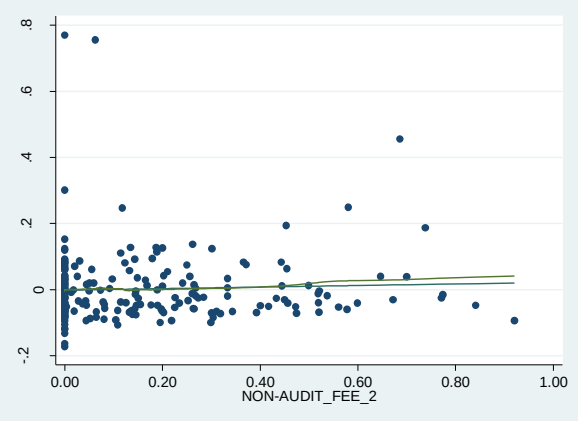
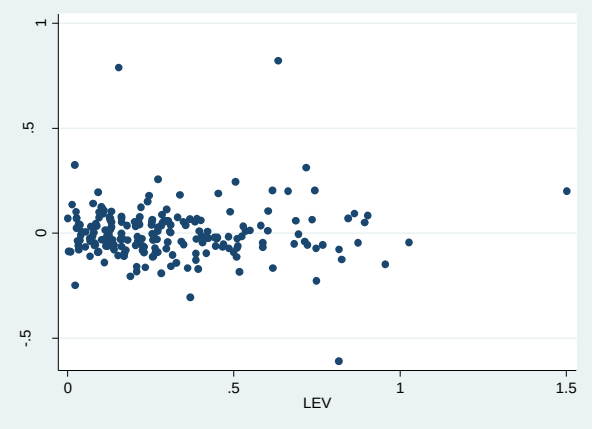
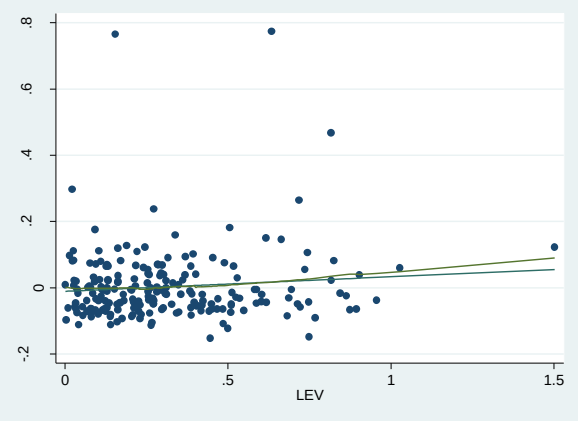
BOARD_FEM_SIG		BOARD_FEM_SIG^2 is collinear with BOARD_FEM_SIG
BOARD_ETH		

AC		AC^2 is collinear with AC
AC_EXPERT		

Appendix

INT_AUD		INT_AUD^2 is collinear with INT_AUD
AUD_TOP4		AUD_TOP4^2 is collinear with AUD_TOP4

NON-AUDIT_FEE		
LEV		

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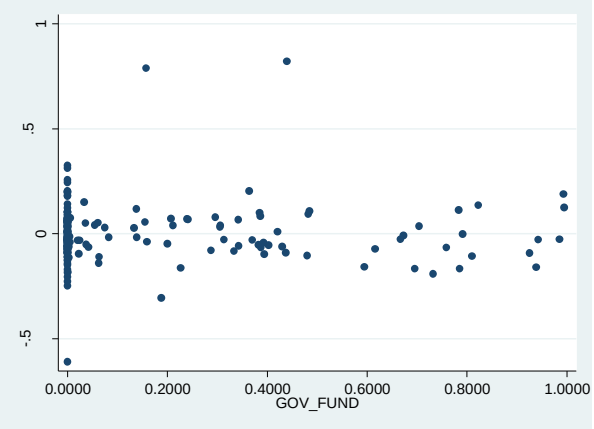
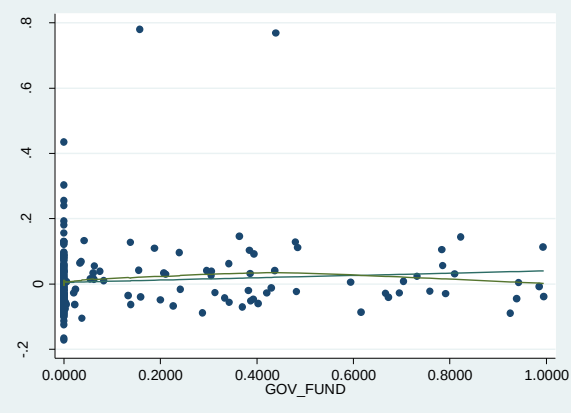
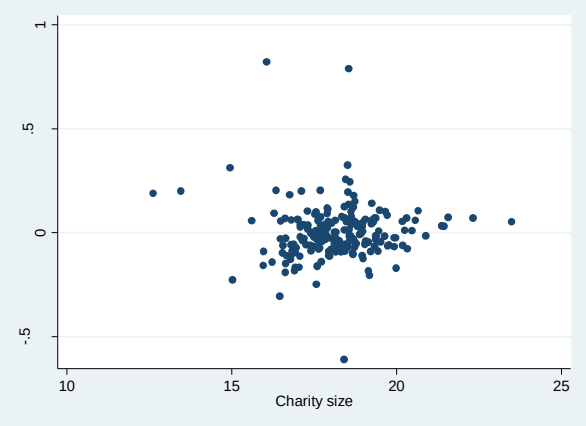
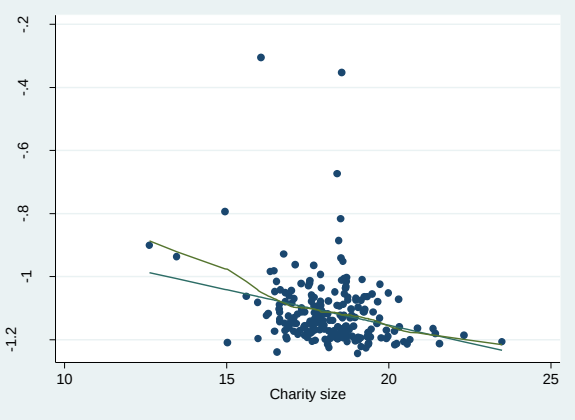
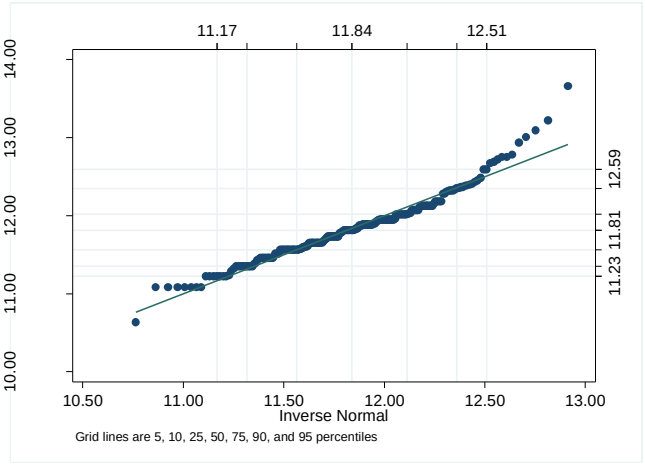
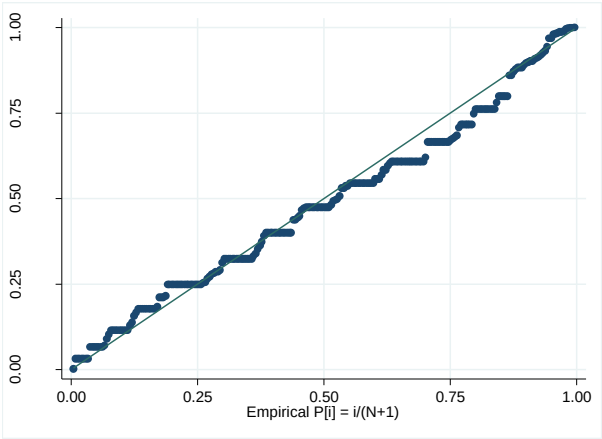
GOV_FUND		
Charity size		

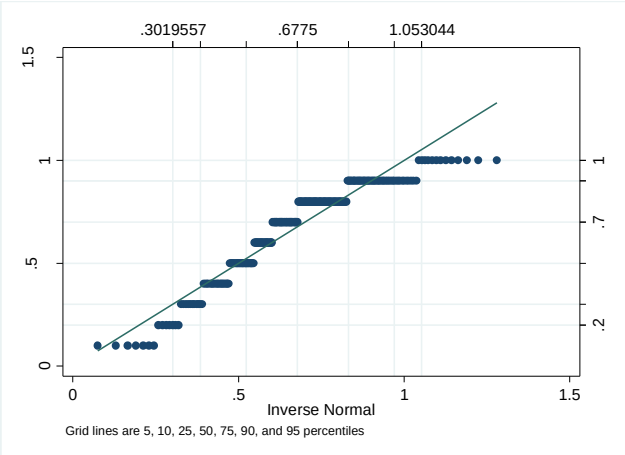
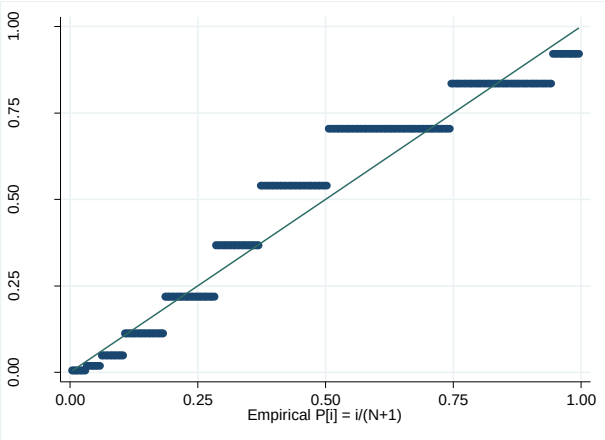
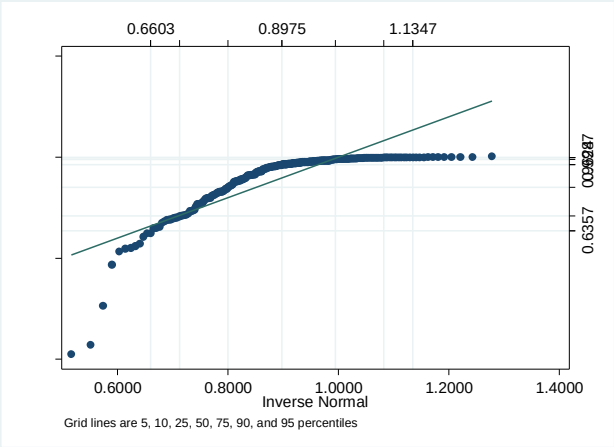
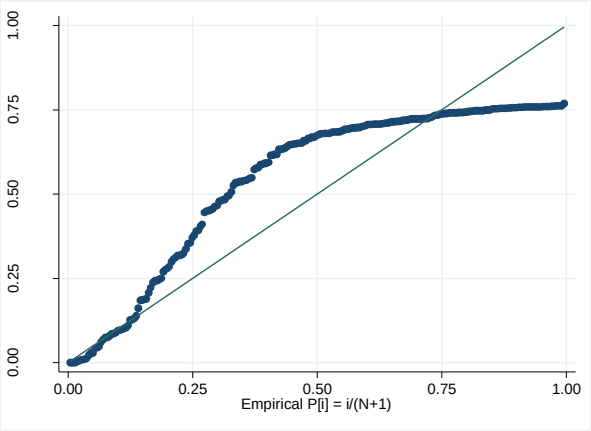
The linearity test shows that several dummy variables are highly collinear with others. Therefore, several models have been applied to reduce the impact of multicollinearity.

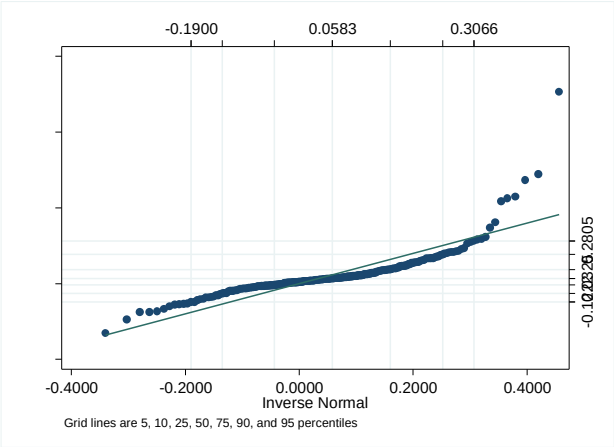
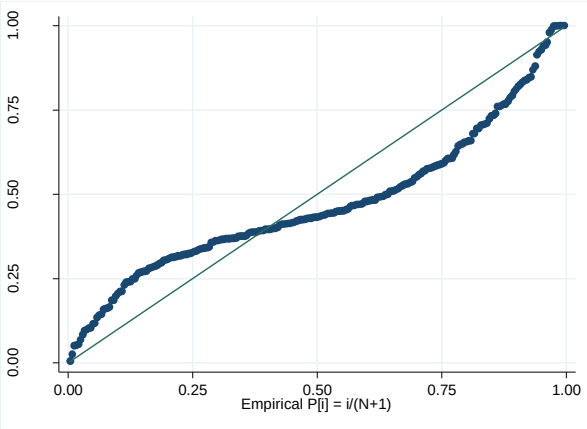
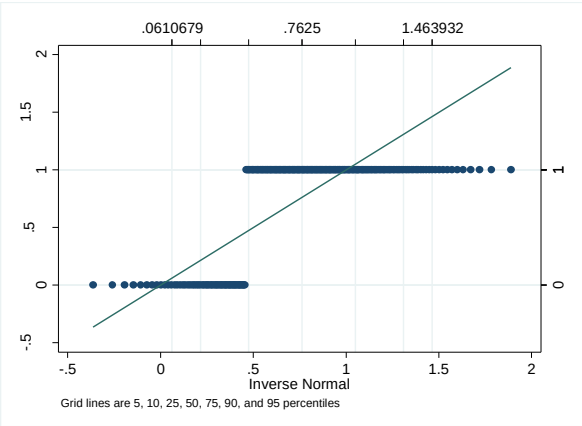
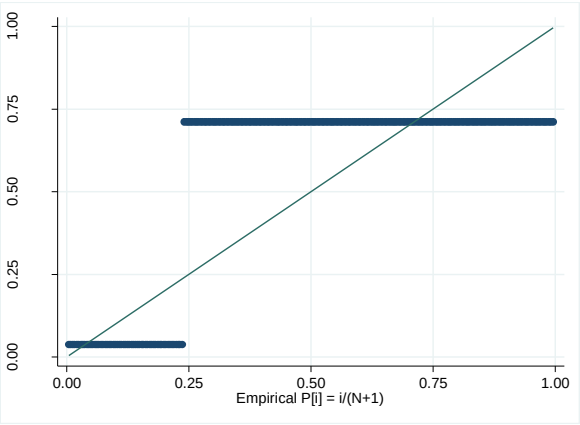
B.3 Statistical diagnostic test: Chapter 4

B.3.1 Test normality of variables

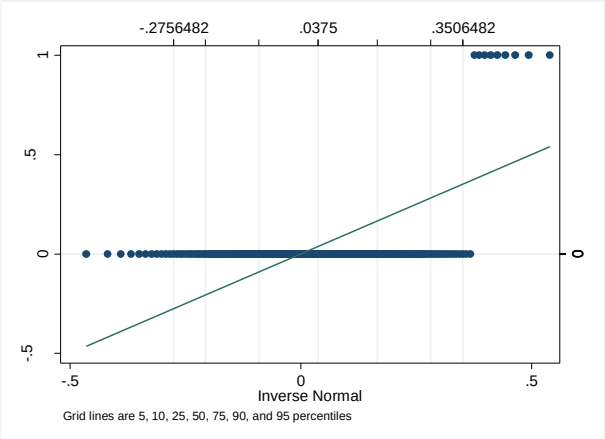
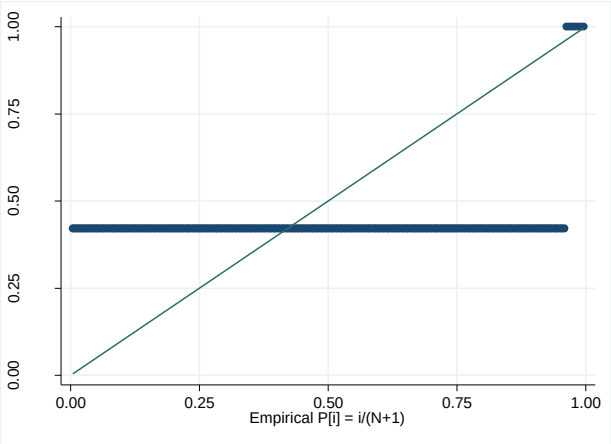
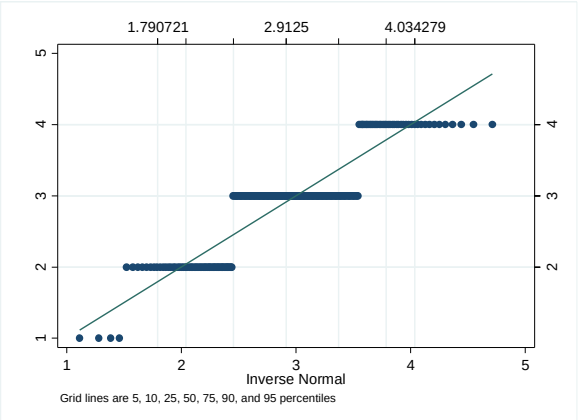
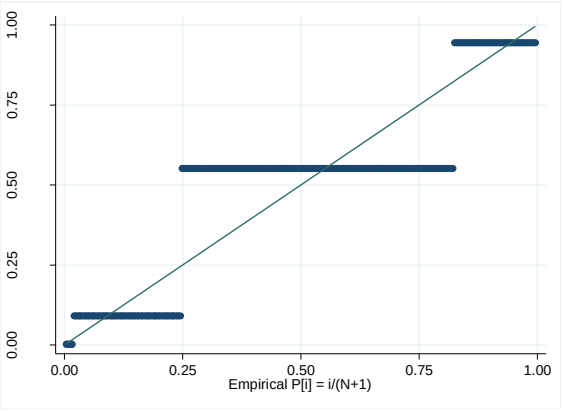
Variable	Normality test (Q-Q plot)	Normality test (P-P plot)
Ln(CEO_COMP)		

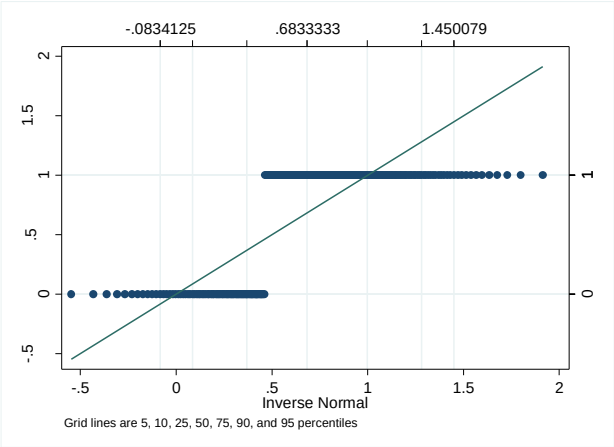
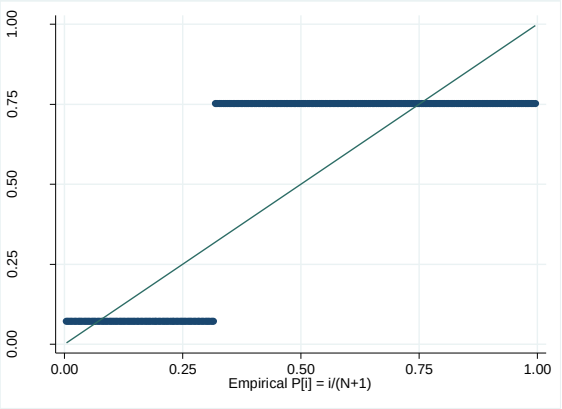
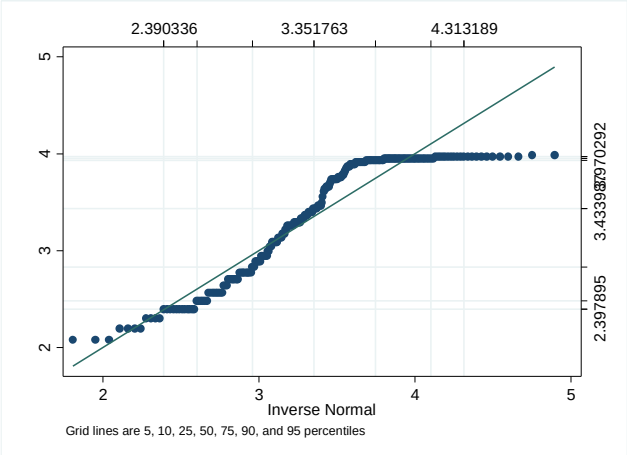
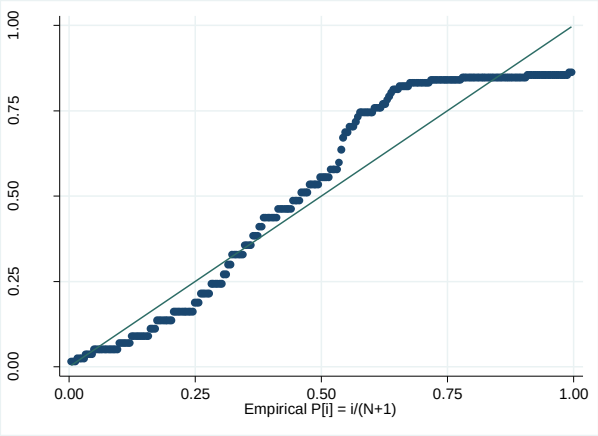
Appendix

Governance Index		
Programme ratio		

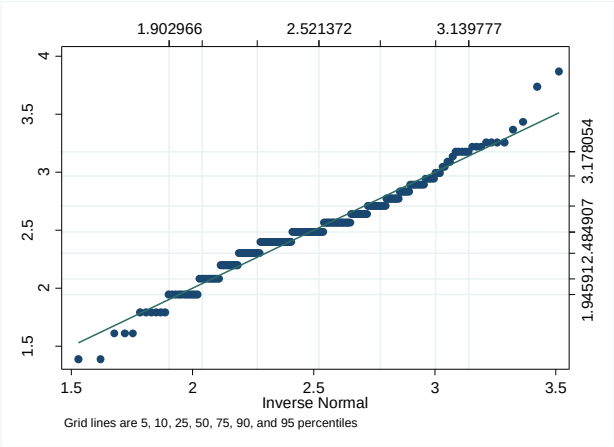
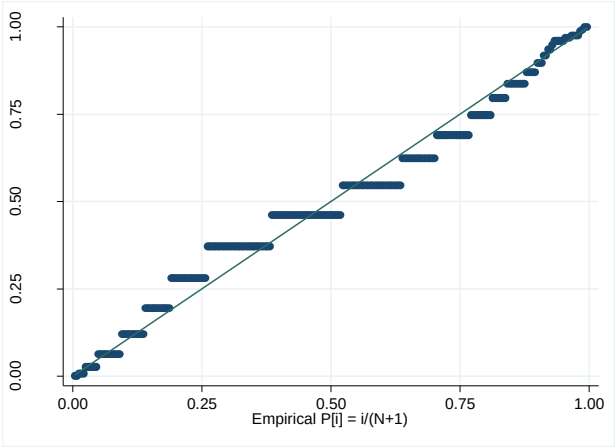
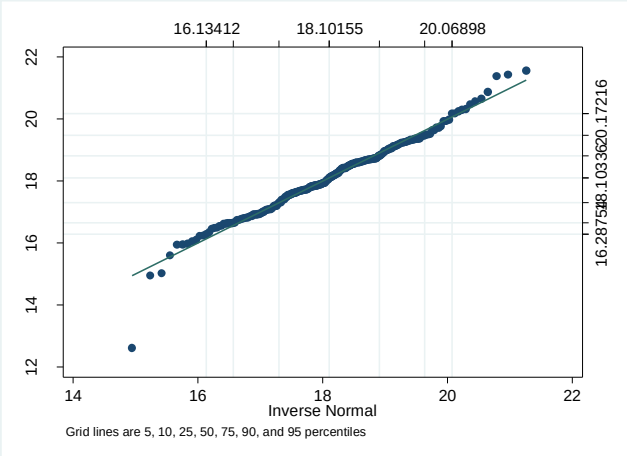
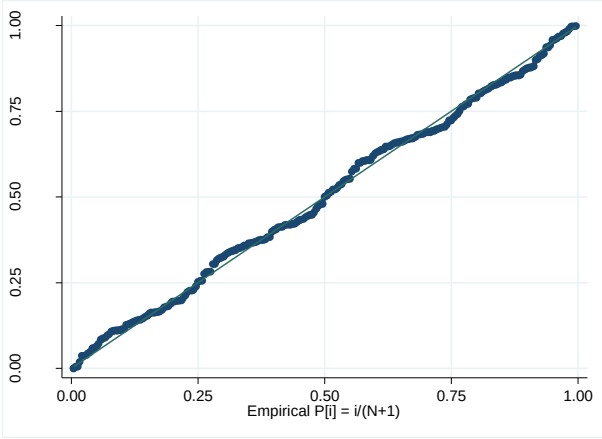
Income growth		
CEO Gender Dummy variable (0,1)		

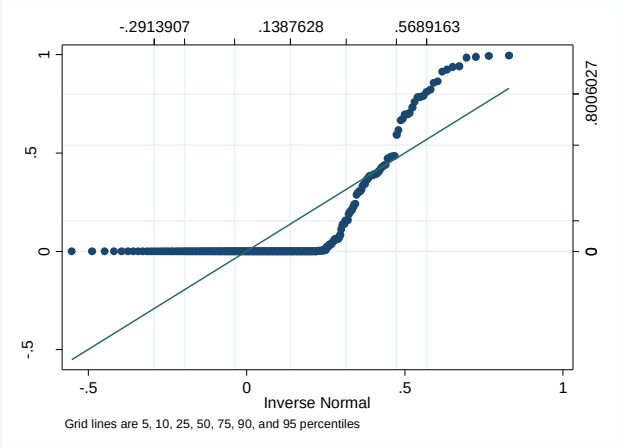
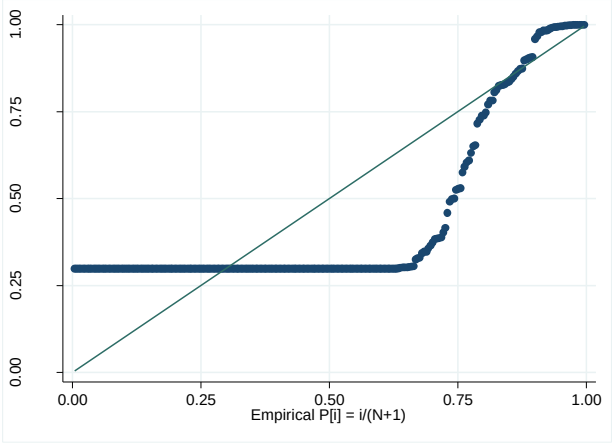
Appendix

CEO Ethnicity Dummy variable (0,1)		
CEO Managerial experience (Step value= 1,2,3,4)		

CEO background in non-profit sector Dummy variable (0,1)		
Ln(Charity age)		

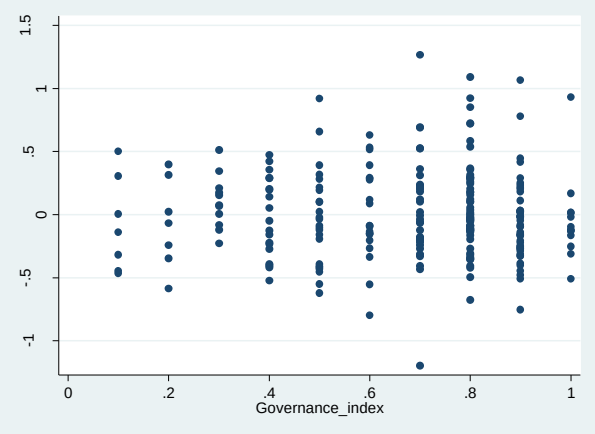
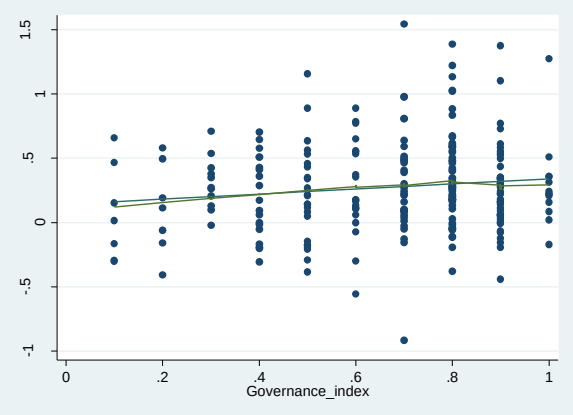
Appendix

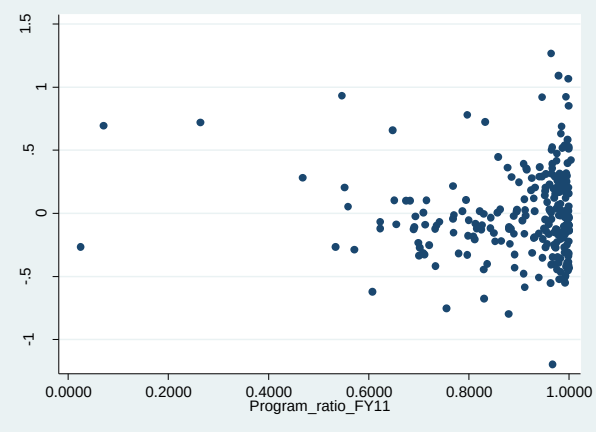
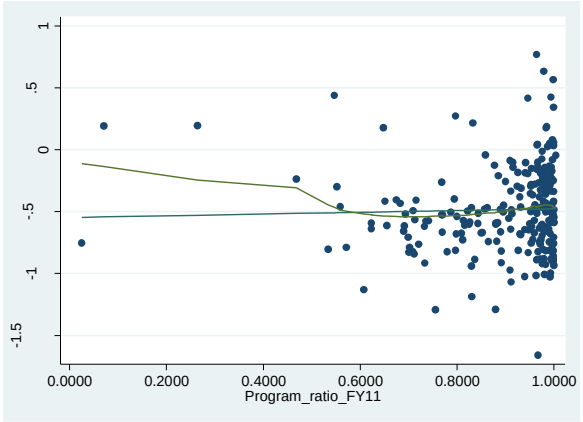
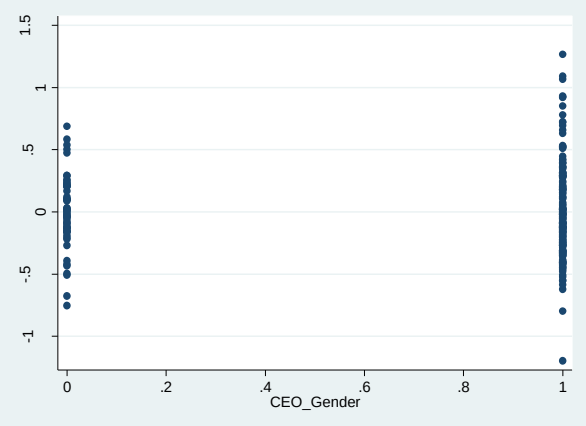
Ln(Board size)		
Ln(Charity size)		

Governmental funding		

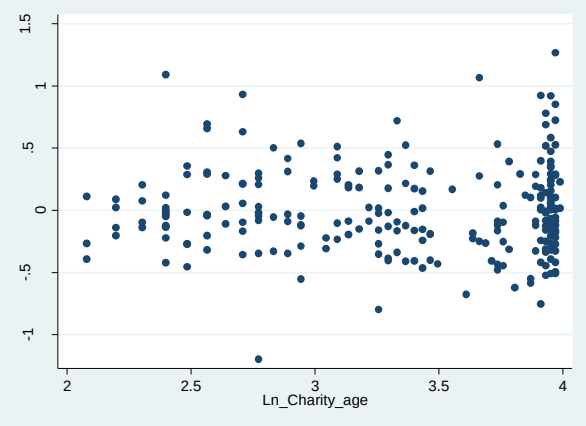
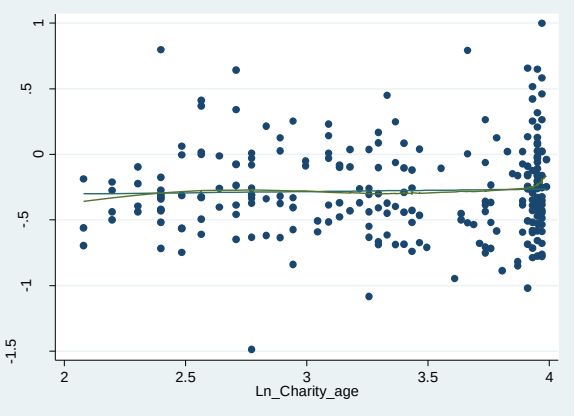
Notes: Some variables do not show normality due to using dummy variables

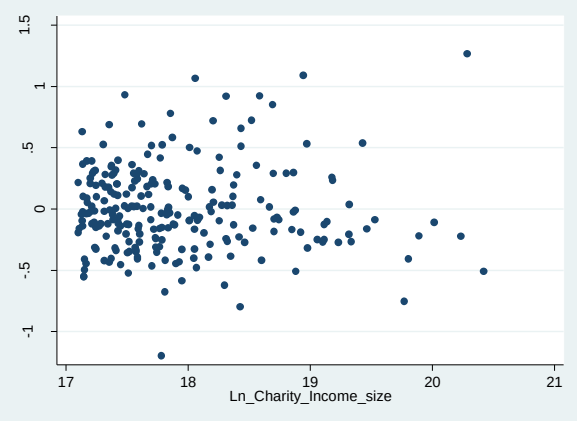
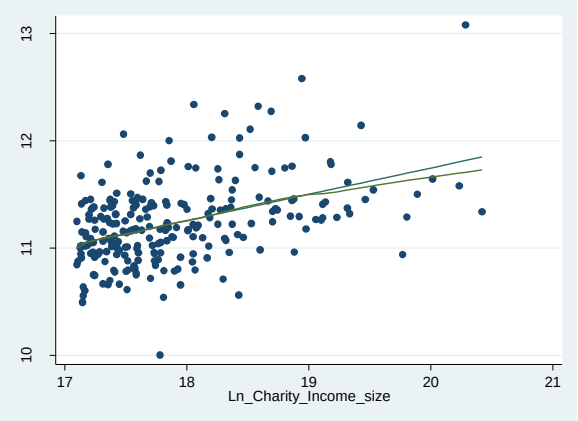
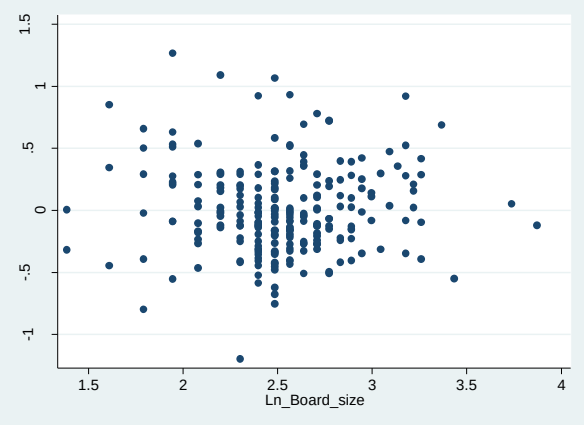
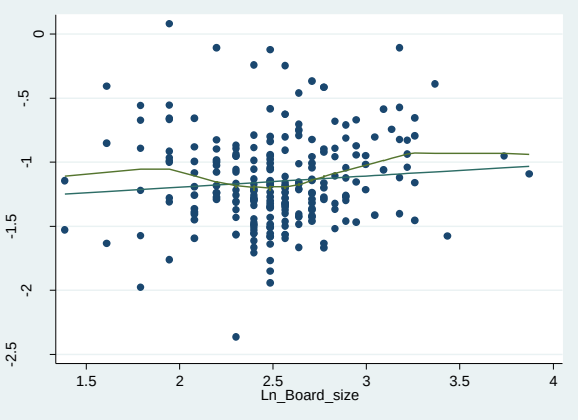
B.3.2 Test linearity

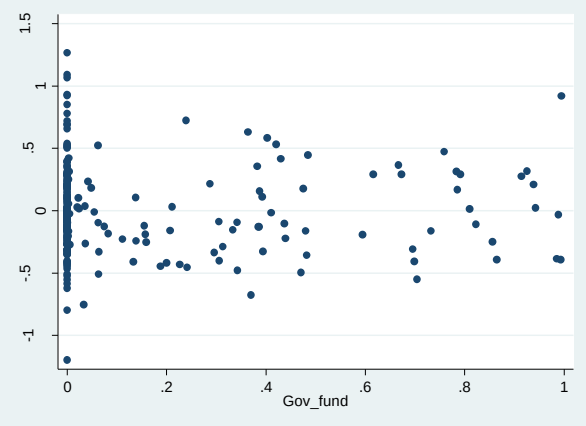
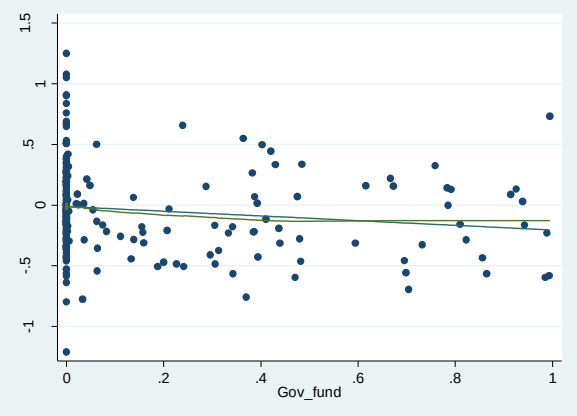
Variables	scatter r and ‘independent variables’	Acprplot ‘independent variables’ lowess lsopts(bwidth(1))
Governance Index		

Programme ratio		
CEO Gender Dummy variable (0,1) CEO Ethnicity Dummy variable (0,1) CEO Managerial experience (Step value= 1,2,3,4)		CEO_Gender^2 is collinear with CEO_Gender

Appendix

CEO background in non-profit sector Dummy variable (0,1)		
Ln(Charity age)		

Ln(Charity size)		
Ln(Board size)		

Governmental funding		

The linearity test shows that several dummy variables are highly collinear with others. Therefore, several models have been applied to reduce the impact of multicollinearity.

List of References

Abbott, L.J., Parker, S. and Peters, G.F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory,* 23 (1), 69-87.

Abdel-Khalik, A.R. and Ajinkya, B.B. (1979). Empirical research in accounting: A methodological viewpoint. Sarasota: American Accounting Association,.

Abdullah, S.N., Ku Ismail, K.N.I. and Nachum, L. (2016). Does having women on boards create value? The impact of societal perceptions and corporate governance in emerging markets. *Strategic Management Journal,* 37 (3), 466-476.

Acevo (2013). *The good pay guide for charities and social enterprises*. London: Acevo.

Acevo, Charity Trustee Networks, Icsa and Ncvo (2005). *Good governance: A code for voluntary and community sector*. London: Ncvo.

Adams, R.B. and Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics,* 94 (2), 291-309.

Adams, R.B., Haan, J., Terjesen, S. and Ees, H. (2015). Board diversity: Moving the field forward. *Corporate Governance: An International Review,* 23 (2), 77-82.

Adams, R.B., Hermalin, B.E. and Weisbach, M.S. (2010). The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. *Journal of Economic Literature,* 48 (1), 58-107.

Afrifa, G.A. and Tauringana, V. (2015). Corporate governance and performance of UK listed small and medium enterprises. *Corporate Governance: The International Journal of Business in Society,* 15 (5), 719-733.

Aggarwal, R.K., Evans, M.E. and Nanda, D. (2012). Nonprofit boards: Size, performance and managerial incentives. *Journal of Accounting and Economics,* 53 (1), 466-487.

Aldamen, H., Duncan, K., Kelly, S., Mcnamara, R. and Nagel, S. (2012). Audit committee characteristics and firm performance during the global financial crisis. *Accounting & Finance,* 52 (4), 971.

Andrés-Alonso, P.D., Azofra-Palenzuela, V. and Romero-Merino, M.E. (2009). Determinants of nonprofit board size and composition: The case of Spanish foundations. *Nonprofit and Voluntary Sector Quarterly,* 38 (5), 784-809.

List of references

Andrés-Alonso, P.D., Azofra-Palenzuela, V. and Romero-Merino, M.E. (2010). Beyond the Disciplinary Role of Governance: How Boards Add Value to Spanish Foundations. *British Journal of Management,* 21 (1), 100-114.

Anheier, H.K. (2005). Nonprofit organizations: Theory, management, policy. London and New York: Routledge.

Antle, R., Gordon, E., Narayanamoorthy, G. and Zhou, L. (2006). The joint determination of audit fees, non-audit fees, and abnormal accruals. *Review of Quantitative Finance and Accounting,* 27 (3), 235-266.

Archer, M.S. (1988). Culture and agency: The place of culture in social theory. Cambridge: Cambridge University Press,.

Arnegger, M., Hofmann, C., Pull, K. and Vetter, K. (2014). Firm size and board diversity. *Journal of Management and Governance,* 18 (4), 1109-1135.

Atieh, A. and Hussain, S. (2012). Do UK firms manage earnings to meet dividend thresholds? *Accounting and Business Research,* 42 (1), 77-94.

Baber, W.R., Daniel, P.L. and Roberts, A.A. (2002). Compensation to managers of charitable organizations: An empirical study of the role of accounting measures of program activities. *The Accounting Review,* 77 (3), 679-693.

Ballantine, J., Forker, J. and Greenwood, M. (2007). Earnings management in English NHS hospital Trusts. *Financial Accountability & Management,* 23 (4), 421-440.

Ballantine, J., Forker, J. and Greenwood, M. (2008a). The governance of CEO incentives in English NHS hospital Trusts. *Financial Accountability & Management,* 24 (4), 385-410.

Ballantine, J., Forker, J. and Greenwood, M. (2008b). Public and private sector auditors and accruals quality in English NHS hospital Trusts. *The British Accounting Review,* 40, 28-47.

Ballou, J.P. and Weisbrod, B.A. (2003). Managerial rewards and the behavior of for-profit, governmental, and nonprofit organizations: Evidence from the hospital industry. *Journal of Public Economics,* 87, 1895-1920.

Balsam, S. and Harris, E. (2015). Nonprofit executive incentive pay. Working paper, Temple University, Rutgers University.

Balsam, S. and Harris, E.E. (2014). The impact of CEO compensation on nonprofit donations. *Accounting Review,* 89 (2), 425-450.

Banghoj, J., Gabrielsen, G., Petersen, C. and Plenborg, T. (2010). Determinants of executive compensation in privately held firms. *Accounting & Finance*, 50 (3), 481-510.

Barros, C.P. and Nunes, F. (2007). Governance and CEO pay and performance in non-profit organizations. *International Journal of Social Economics*, 34 (11), 811-827.

Barton, J. and Simko, P.J. (2002). The balance sheet as an earnings management constraint. *The Accounting Review*, 77 (4), 1.

Bartov, E., Gul, F.A. and Tsui, J.S.L. (2000). Discretionary-accruals models and audit qualifications. *Journal of Accounting and Economics*, 30 (3), 421-452.

Baxter, P. and Cotter, J. (2009). Audit committees and earnings quality. *Accounting & Finance*, 49 (2), 267-290.

Beattie, V. and Jetty, J. (2009). *Disclosure practices and policies of UK charities*. London: Certified Accountants Educational Trust. Retrieved from: http://www.accaglobal.com/general/activities/research/reports/global_integration/rr_108 ; .

Bédard, J., Chtourou, S.M. and Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing: A Journal of Practice & Theory*, 23 (2), 15.

Beiner, S., Drobetz, W., Schmid, M.M. and Zimmermann, H. (2006). An integrated framework of corporate governance and firm valuation. *European Financial Management*, 12 (2), 249-283.

Belliveau, M.A., O'reilly, C.A. and Wade, J.B. (1996). Social capital at the top: Effects of social similarity and status on CEO compensation. *Academy of Management Journal*, 39 (6), 1568-1593.

Bergstresser, D. and Philippon, T. (2006). CEO incentives and earnings management. *Journal of Financial Economics*, 80 (3), 511-529.

Bettis, J.C., Bizjak, J.M. and Lemmon, M.L. (2005). Exercise behavior, valuation, and the incentive effects of employee stock options. *Journal of Financial Economics*, 76 (2), 445-470.

Bettner, M.S. and Sowinski, K. (2013). Changes in annual reporting rituals of financial services firms in periods of market crisis. *International Journal of Critical Accounting*, 5 (6), 577.

Bhargavi, S. and Shehhi, I. (2016). Leadership styles and organizational performance. *Strategic Management Quarterly*, 4 (1), 87-117.

Bielefeld, W. (2006). Quantitative research for nonprofit management. *Nonprofit Management and Leadership,* 16 (4), 395-409.

Bilimoria, D. (2006). The Relationship Between Women Corporate Directors and Women Corporate Officers. *Journal of Managerial Issues,* 18 (1), 47-61.

Bird, P. and Morgan-Jones, P. (1981). Financial reporting by charities. London: The Institute of Chartered Accountants in England and Wales.

Boateng, A., Akamavi, R.K. and Ndoro, G. (2016). Measuring performance of non-profit organisations: Evidence from large charities. *Business Ethics: A European Review,* 25 (1), 59-74.

Bolino, M.C., Kacmar, K.M., Tumley, W.H. and Gilstrap, J.B. (2008). A multi-level review of impression management motives and behaviors. *Journal of Management,* 34 (6), 1080-1109.

Boterenbrood, R. (2014). Income smoothing by Dutch hospitals. *Journal of Accounting and Public Policy,* 33 (5), 510-524.

Bozeman, D.P. and Kacmar, K.M. (1997). A cybernetic model of impression management processes in organizations. *Organizational Behavior and Human Decision Processes,* 69 (1), 9-30.

Breeze, B. (2010). *How donors choose charities*. London: Centre for Charitable Giving and Philanthropy.

Brennan, N.M. and Merkl-Davies, D.M. (2013) *Accounting narratives and impression management* IN: Jack, L., Davison, J. and Craig, R. (eds.) The Routledge Companion to Communication in Accounting. London: Routledge, 109-132.

Brick, I.E., Palmon, O. and Wald, J.K. (2006). CEO compensation, director compensation, and firm performance: Evidence of cronyism? *Journal of Corporate Finance,* 12 (3), 403-423.

Brickley, J.A. and Van Horn, R.L. (2002). Managerial incentives in nonprofit organizations: Evidence from hospitals. *Journal of Law and Economics,* 45 (1), 227-249.

Brickley, J.A., Van Horn, R.L. and Wedig, G.J. (2010). Board composition and nonprofit conduct: Evidence from hospitals. *Journal of Economic Behavior & Organization,* 76 (2), 196–208.

Brown, J. (2010). Accounting and visual cultural studies: Potentialities, challenges and prospects. *Accounting Auditing & Accountability Journal,* 24 (4), 482-505.

Brown, L.D. and Caylor, M.L. (2006). Corporate governance and firm valuation. *Journal of Accounting and Public Policy*, 25, 409-434.

Brown, W.A. (2005). Exploring the Association between Board and Organizational Performance in Nonprofit Organizations. *Nonprofit Management and Leadership*, 15 (3), 317-339.

Bryan, S., Nash, R. and Patel, A. (2015). The effect of cultural distance on contracting decisions: The case of executive compensation. *Journal of Corporate Finance*, 33, 180-195.

Buchheit, S. and Parsons, L.M. (2006). An experimental investigation of accounting information's influence on the individual giving process. *Journal of Accounting and Public Policy*, 25 (2006), 666-686.

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

Burrell, G. and Morgan, G. (1979). Sociological paradigms and organisational analysis: Elements of the sociology of corporate life. London: Heinemann.

Callen, J.L. (1994). Money donations, volunteering and organizational efficiency. *Journal of Productivity Analysis*, 5 (3), 215.

Callen, J.L., Klein, A. and Tinkelman, D. (2003). Board Composition, Committees, and Organizational Efficiency: The Case of Nonprofits. *Nonprofit and Voluntary Sector Quarterly*, 32 (4), 493-520.

Callen, J.L., Klein, A. and Tinkelman, D. (2010). The contextual impact of nonprofit board composition and structure on organizational performance: Agency and resource dependence perspectives. *Voluntas: International Journal of Voluntary & Nonprofit Organizations*, 21 (1), 101-125.

Candler, G. and Dumont, G. (2010). A non-profit accountability framework. *Canadian Public Administration* 53 (2), 259-279.

Cardinaels, E. (2009). Governance in non-for-profit hospitals: Effects of board members' remuneration and expertise on CEO compensation. *Health Policy*, 93 (1), 64-75.

Carpenter, M.A., Sanders, W.G. and Gregersen, H.B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44 (3), 493-511.

Carpenter, V.L. and Feroz, E.H. (2001). Institutional theory and accounting rule choice: An analysis of four US state governments' decisions to adopt generally accepted accounting principles. *Accounting, Organizations and Society,* 26, 565-596.

Carroll, T., Hughes, P. and Luksetich, W. (2005). Managers of nonprofit organizations are rewarded for performance. *Nonprofit Management and Leadership,* 16 (1), 19-41.

Carter, D.A., D'souza, F., Simkins, B.J. and Simpson, W.G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review,* 18 (5), 396-414.

Charity Commission (2004). *RS8: Transparency and Accountability*. London: Charity Commission.

Charity Commission (2005). *Accounting and reporting by charities: Statements of recommended practice*. London: Charity Commission.

Charity Commission (2009). *RS22: Charities' awareness, understanding and attitudes towards public benefit requirement*. London: Charity Commission.

Charity Commission (2010). *CC19: Charities and reserves*. London: Charity Commission.

Charity Commission (2012). *CC8: Internal financial controls for charities*. London: Charity Commission.

Charity Commission (2013a). *Annual Reports and Account*. London: Charity Commission.

Charity Commission (2013b). *Charity reporting and accounting: The essentials*. London: Charity Commission.

Charity Commission (2014). *Tackling abuse and mismanagement: Report of Charity Commission's investigations and compliance case work*. London: Charity Commission.

Charity Commission (2015). *Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland*. London: Charity Commission.

Charity Navigator (2014). *2014 charity CEO compensation study*. London: Charity Navigator.

Chava, S. and Purnanandam, A. (2010). CEOs versus CFOs: Incentives and corporate policies. *Journal of Financial Economics,* 97 (2), 263-278.

Chen, J., Ezzamel, M. and Cai, Z. (2011). Managerial power theory, tournament theory, and executive pay in China. *Journal of Corporate Finance,* 17 (4), 1176-1199.

Chen, J.J. and 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.

Chia, Y.M., Lapsley, I. and Lee, H.W. (2007). Choice of auditors and earnings management during the Asian financial crisis. *Managerial Auditing Journal,* 22 (2), 177-196.

Christopher, J. (2010). Corporate governance: A multi-theoretical approach to recognizing the wider influencing forces impacting on organizations. *Critical Perspectives on Accounting,* 21 (8), 683-695.

Chua, W.F. (1986). Radical developments in accounting thought. *Accounting Review,* 61 (4), 601-632.

Clotfelter, C.T. (1992). Who benefits from the nonprofit sector? London: The University of Chicago Press Ltd.,.

Code Steering Group (2010). *Good governance: A code for the voluntary and community sector*. London: The Code Steering Group.

Committee of University Chairmen (2008). Guide for members of higher education governing bodies in the UK: Incorporates the Governance gode of practice and General principles London: HEFCE.

Connolly, C. and Hyndman, N. (2000). Charity accounting: An empirical analysis of the impact of recent changes. *The British Accounting Review,* 32 (1), 77-100.

Connolly, C. and Hyndman, N. (2001). A comparative study on the impact of revised SORP 2 on British and Irish charities. *Financial Accountability & Management,* 17 (1), 73-97.

Connolly, C. and Hyndman, N. (2004). Performance reporting: A comparative study of British and Irish charities. *The British Accounting Review,* 36, 127-154.

Connolly, C. and Hyndman, N. (2013a). Charity accountability in the UK: Through the eyes of the donor. *Qualitative Research in Accounting & Management,* 10 (3), 259-278.

Connolly, C. and Hyndman, N. (2013b). Towards charity accountability: Narrowing the gap between provision and needs? *Public Management Review,* 15 (7), 945-968.

Connolly, C., Hyndman, N. and Mcconville, D. (2012). Research in charity accounting and reporting: A fertile field for exploration. *Irish Accounting Review,* 18 (2), 1-30.

Connolly, C., Hyndman, N. and Mcconville, D. (2013a). Conversion Ratios, Efficiency and Obfuscation: A Study of the Impact of Changed UK Charity Accounting Requirements on External Stakeholders. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations,* 24 (3), 785-804.

Connolly, C., Hyndman, N. and Mcconville, D. (2013b). UK charity accounting: An exercise in widening stakeholder engagement. *The British Accounting Review,* 45 (1), 58-69.

Conyon, M.J. and He, L. (2011). Executive Compensation and Corporate Governance in China. *Journal of Corporate Finance,* 17 (4), 1158-1175.

Conyon, M.J. and Peck, S.I. (1998). Board control, remuneration committees, and top management compensation. *Academy of Management Journal,* 41 (2), 146-157.

Coombs, J.E. and Gilley, K.M. (2005). Stakeholder management as a predictor of CEO compensation: Main effects and interactions with financial performance. *Strategic Management Journal,* 26 (9), 827-840.

Coram, P., Ferguson, C. and Moroney, R. (2008). Internal audit, alternative internal audit structures and the level of misappropriation of assets fraud. *Accounting and Finance,* 48 (4), 543-559.

Core, J.E., Holthausen, R.W. and Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics,* 51 (3), 371-406.

Cornforth, C. (2001). What makes boards effective? An examination of the relationships between board inputs, structures, processes and effectiveness in non-profit organisations. *Corporate Governance: An International Review,* 9 (3), 217.

Cornforth, C. (2003a) *The changing context of governance: Emerging issues and paradoxes* IN: Cornforth, C. (ed.) The governance of public and non-profit organisations: What do boards do? . London, UK: Routledge: Routledge Studies in the Management of Voluntary and Non-Profit Organizations, 1-20.

Cornforth, C. (2003b). The governance of public and non-profit organisations: What do boards do? London: Routledge.

Covaleski, M.A. and Dirsmith, M.W. (1988). An institutional perspective on the rise, social transformation, and fall of a university budget category. *Administrative Science Quarterly,* 33 (4), 562-587.

Crawford, L., Morgan, G., Cordery, C. and Breen, O.B. (2014). *International financial reporting for the not-for-profit sector*. London, UK: Limited, C.

Davidson, R., Goodwin-Stewart, J. and Kent, P. (2005). Internal governance structures and earnings management. *Accounting & Finance,* 45 (2), 241-267.

Davidson, R. and Mackinnon, J.G. (1993). Estimation and inference in econometrics. New York: Oxford University Press.

Davidson, W.N., Jiraporn, P., Young Sang, K. and Nemec, C. (2004a). Earnings management following duality-creating successions: Ethnostatistics, impression management, and agency theory. *Academy of Management Journal,* 47 (2), 267-275.

Davidson, W.N., Xie, B. and Xu, W. (2004b). Market reaction to voluntary announcements of audit committee appointments: The effect of financial expertise. *Journal of Accounting and Public Policy,* 23 (4), 279-293.

De Vlaminck, N. and Sarens, G. (2015). The relationship between audit committee characteristics and financial statement quality: Evidence from Belgium. *Journal of Management and Governance,* 19 (1), 145-166.

Dechow, P., Sloan, R. and Sweeney, A. (1995). Detecting earnings management. *The Accounting Review,* 70, 193-225.

Dechow, P.M. and Dichev, I.D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review,* 77 (s-1), 35-59.

Dechow, P.M. and Skinner, D.J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons,* 14 (2), 235-250.

Deckop, J.R. (1988). Determinants of chief executive officer compensation. *Industrial & Labor Relations Review,* 41 (2), 215-226.

Defond, M.L., Hann, R.N. and Hu, X. (2005). Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research,* 43 (2), 153-193.

Defond, M.L. and Jiambalvo, J. (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics,* 17 (1-2), 145-176.

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

Demb, A. and Neubauer, F.-F. (1992). The corporate board: Confronting the paradoxes New York: Oxford University Press.

Denzin, N.K. and Lincoln, Y.S. (2011). The SAGE handbook of qualitative research, 4th ed. ed. Los Angeles, London: SAGE

Devers, C.E., Cannella, A.A., Reilly, G.P. and Yoder, M.E. (2007). Executive compensation: A multidisciplinary review of recent developments. *Journal of Management,* 33 (6), 1016-1072.

Devine, C.T. (1960). Research methodology and accounting theory formation. *Accounting Review,* 35 (3), 387.

Dhanani, A. (2009). Accountability of UK charities. *Public Money & Management,* 29 (3), 183-190.

Dhanani, A. and Connolly, C. (2012). Discharging not-for-profit accountability: UK charities and public discourse. *Accounting, Auditing & Accountability Journal,* 25 (7), 1140-1169

Dodd, L. (2014) Charity under pressure to break even. *The Tablet, 8th February*.

Dolnicar, S., Irvine, H.J. and Lazarevski, K. (2008). Mission or money? Competitive challenges facing public sector nonprofit organisations in an institutionalised environment. *International Journal of Nonprofit and Voluntary Sector Marketing,* 13, 107-117.

Donaldson, L. and Davis, J.H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management* 16 (1), 49.

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

Doyle, J.T., Ge, W. and Mcvay, S. (2007). Accruals quality and internal control over financial reporting. *The Accounting Review,* 82 (5), 1141-1170.

Ducharme, L.L., Malatesta, P.H. and Sefcik, S.E. (2004). Earnings Management, Stock Issues, and Shareholder Lawsuits. *Journal of Financial Economics,* 71 (1), 27-49.

Dulewicz, V. and Higgs, M. (2005). Assessing leadership styles and organisational context. *Journal of Managerial Psychology,* 20 (2), 105-123.

Ebrahim, A. (2003). Making sense of accountability: Conceptual perspectives for northern and southern nonprofits. *Nonprofit Management & Leadership,* 14 (2), 191-212.

Edwards, M. and Hulme, D. (1996). Too Close for Comfort? The Impact of Official Aid on Nongovernmental Organizations. *World Development,* 24 (6), 961-973.

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

Eldenburg, L. and Krishnan, R. (2003). Public versus private governance: A study of incentives and operational performance. *Journal of Accounting and Economics,* 35 (3), 377-404.

Eldenburg, L.G., Gunny, K.A., Hee, K.W. and Soderstrom, N. (2011). Earnings management using real activities: Evidence from nonprofit hospitals. *The Accounting Review,* 86 (5), 1605-1630.

Erhardt, N.L., Werbel, J.D. and Shrader, C.B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance: An International Review,* 11 (2), 102-111.

Ezzamel, M. and Watson, R. (2002). Pay comparability across and within uK boards: An empirical analysis of the cash pay awards to CEOs and other board members. *Journal of Management Studies,* 39 (2), 207-232.

Ferreira, A., Carvalho, J. and Pinho, F. (2013). Earnings management around zero: A motivation to local politician signalling competence. *Public Management Review,* 15 (5), 657-686.

Financial Reporting Council (2012). *Guidance on audit committee*. London. Retrieved from: https://www.frc.org.uk/Our-Work/Corporate-Governance-Reporting/Corporate-governance/UK-Corporate-Governance-Code/Guidance-for-boards-and-board-committees.aspx.

Financial Reporting Council (2014). *The UK corporate governance code*. London: Financial Reporting Council. Retrieved from: https://www.frc.org.uk/Our-Work/Codes-Standards/Corporate-governance/UK-Corporate-Governance-Code.aspx.

Finkelstein, S. and Boyd, B.K. (1998). How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal,* 41 (2), 179-199.

Finkelstein, S. and Hambrick, D.C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal,* 9 (6), 543-558.

Firth, M., Fung, P.M.Y. and Rui, O.M. (2007). How ownership and corporate governance influence chief executive pay in China's listed firms. *Journal of Business Research,* 60, 776-785.

Fjeldstad, O.D. and Sasson, A. (2010). Membership matters: On the value of being embedded in customer networks. *Journal of Management Studies,* 47 (6), 944-966.

Forker, J.J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research,* 22 (86), 111-124.

Francis, J., Lafond, R., Olsson, P. and Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics,* 39, 295-327.

Francoeur, C., Labelle, R. and Sinclair-Desgagne, B. (2008). Gender diversity in corporate governance and top management. *Journal of Business Ethics,* 81 (1), 83-95.

Frankel, R.M., Johnson, M.F. and Nelson, K.K. (2002). The Relation between Auditors' Fees for Nonaudit Services and Earnings Management. *Accounting Review,* 77 (4), 71.

Freeman, H.E. (1999). Divergent Stakeholder Theory. *Academy of Management Review,* 24 (2), 233-236.

Freeman, R.E. (1984). Strategic management: A stakeholder approach. Boston: Pitman.

Freeman, R.E. (2010). Strategic management: A stakeholder approach London: Cambridge Unviersity Press.

Friedlan, J.M. (1994). Accounting choices of issuers of initial public offerings. *Contemporary Accounting Research,* 11 (1), 1-31.

Frijns, B., Cimerova, H. and Dodd, O. (2016). The impact of cultural diversity in corporate boards on firm performance. *Journal of Corporate Finance*.

Frocham, M.I. (2005). Executive pay the Latin way. *WorldatWork Journal,* 14 (4), 79-85.

Froelich, K.A. (1999). Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly,* 28 (3), 246-268.

Frumkin, P. (2002). On being nonprofit: A conceptual and policy primer. London: Harvard University Press.

Frumkin, P. and Keating, E.K. (2010). The price of doing good: Executive compensation in nonprofit organizations. *Policy and Society,* 29 (3), 269-282.

Galaskiewicz, J. and Wasserman, S. (1989). Mimetic processes within an interorganizational field: An empirical test. *Administrative Science Quarterly*, 34 (3), 454-479.

Garner, J.L. and Harrison, T.D. (2013). Boards, executive excess compensation, and shared power: Evidence from nonprofit firms. *Financial Review*, 48 (4), 617-643.

Garven, S.A., Hofmann, M.A. and Mcswain, D.N. (2016). Playing the numbers game: Program ratio management in nonprofit organizations. *Nonprofit Management and Leadership*, 26 (4), 401-416.

Gaver, J.J., Gaver, K.M. and Austin, J.R. (1995). Additional evidence on bonus plans and income management. *Journal of Accounting and Economics*, 19 (1), 3-28.

Gavett, G. (2014) CEOs get paid too much, according to pretty much everyone in the world *Harvard Business Review*. Massachusetts: Harvard Business Publishing.

Gavious, I., Segev, E. and Yosef, R. (2012). Female directors and earnings management in high-technology firms. *Pacific Accounting Review*, 24 (1), 4-32.

Geoffrey, C.K. and Gavin, J.N. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11 (3), 189-205.

Gherghina, Ş.C. (2015). Corporate governance ratings and firm value: Empirical evidence from the Bucharest stock exchange. *International Journal of Economics and Financial Issues*, 5 (1), 97-100.

Gill, J., Johnson, P. and Clark, M. (2010). Research methods for managers, 4th ed. Los Angeles, London: SAGE.

Glaser, M. and Weber, M. (2007). Why inexperienced investors do not learn: They do not know their past portfolio performance. *Finance Research Letters*, 4 (4), 203-216.

Global Reporting Initiative (2010). *Sustainability reporting guidelines & NGO sector supplement*. Retrieved from: https://www.globalreporting.org/standards/sector-guidance/sector-guidance/ngo/Pages/default.aspx.

Goddard, A. (2010). Contemporary public sector accounting research – An international comparison of journal papers. *The British Accounting Review*, 42, 75-87.

Goddard, A. and Assad, M.J. (2006). Accounting and navigating legitimacy in Tanzanian NGOs. *Accounting, Auditing and Accountability Journal*, 19 (3), 377-404.

Godfrey, J. and Koh, P.S. (2003). The association between firms' public finance issues and earnings management. *Accounting Research Journal*, 16 (2), 102-116.

Godfrey, L.G. and Orme, C.D. (1999). The robustness, reliability and power of heteroskedasticity tests. *Econometric Reviews*, 18 (2), 169.

Goh, L. and Gupta, A. (2015). Remuneration of non-executive directors: Evidence from the UK. *British Accounting Review*, 1-21.

Gomez-Mejia, L. and Wiseman, R.M. (1997). Reframing executive compensation: An assessment and outlook. *Journal of Management*, 23 (3), 291-374.

Gordon, T.P. and Khumawala, S.B. (1999). The demand for not-for-profit financial statements: A model for individual giving. *Journal of Accounting Literature*, 18, 31-56.

Grant Thornton (2013). *Charity governance review 2013: The science of good governance- Towards charity best practice*. London: Grant Thornton. Retrieved from: http://www.grantthornton.co.uk/en/insights/charity-governance-review-2013.

Grant Thornton (2014). *Charity governance review 2014: Good governance gathers pace*. London: Grant Thornton. Retrieved from: http://www.grantthornton.co.uk/insights/charity-governance-review-2014/.

Grasse, N., Davis, T. and Ihrke, D. (2014). Understanding the compensation of nonprofit executive directors: Examining the influence of performance and organizational characteristics. *Nonprofit Management & Leadership*, 24 (3), 377-398.

Guidestar (2015). *What you need to know about nonprofit executive compensation*. Retrieved from: https://www.guidestar.org/rxg/news/publications/nonprofit-executive-compensation.aspx.

Guidry, F., Leone, A.J. and Rock, S. (1999). Earnings-based bonus plans and earnings management by business-unit managers. *Journal of Accounting and Economics*, 26 (1-3), 113-142.

Guo, C. and Acar, M. (2005). Understanding collaboration among nonprofit organizations: Combining resource dependency, institutional, and network perspectives. *Nonprofit and Voluntary Sector Quarterly*, 34 (3), 340-361.

Hallock, K.F. (2002). Managerial Pay and Governance in American Nonprofits. *Industrial Relations*, 41 (3), 377-406.

Hambrick, D.C., Cho, T.S. and Ming-Jer, C. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41 (4), 659-684.

Hambrick, D.C. and Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior,* 9, 369-406.

Harris, E., Petrovits, C.M. and Yetman, M.H. (2015). The Effect of Nonprofit Governance on Donations: Evidence from the Revised Form 990. *Accounting Review,* 90 (2), 579-610.

Harris, E.E. (2014). The impact of board diversity and expertise on nonprofit performance. *Nonprofit Management and Leadership,* 25 (2), 113-130.

Hausman, J.A. (1978). Specification tests in econometrics. *Econometrica,* 46 (6), 1251-1271.

Healy, P.M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics,* 7 (1/2/3), 85-107.

Healy, P.M. and Wahlen, J.M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons,* 13 (4), 365-383.

Heimovics, R.D. and Herman, R.D. (1993). Executive leadership and resource dependence in nonprofit organizations: A frame analysis. *Public Administration Review,* 53 (5), 419-427.

Hempel, C.G. (1966). Philosophy of natural science. New York: Prentice-Hall

Henderson, A.D. and Fredrickson, J.W. (2001). Top management team coordination needs and the CEO pay gap: A competitive test of economic and behavioral views. *Academy of Management Journal,* 44 (1), 96-117.

Heracleous, L. and Lan, L.L. (2012). Agency theory, institutional sensitivity, and inductive reasoning: Towards a legal perspective. *Journal of Management Studies,* 49 (1), 223-239.

Hillman, A.J. and Dalziel, T. (2003). Boards of directors and firm performance: Integrating Agency and Resource dependence perspectives. *Academy of Management Review,* 28 (3), 383-396.

Hillman, A.J. and Keim, G.D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal,* 22 (2), 125-139.

Hodge, M.M. and Piccolo, R.F. (2005). Funding source, board involvement techniques, and financial vulnerability in nonprofit organizations: A test of resource dependence. *Nonprofit Management and Leadership,* 16 (2), 171-190.

Hofmann, M.A. (2007). Tax-motivated expense shifting by tax-exempt associations. *The Journal of the American Taxation Association,* 29 (1), 43-60.

Hofmann, M.A. and Mcswain, D. (2013). Financial disclosure management in the nonprofit sector: A framework for past and future research. *Journal of Accounting Literature,* 32 (1), 61-87.

Hopper, T. and Powell, A. (1985). Making sense of research into the organizational and social aspects of management accounting: A review of its underlying assumptions. *Journal of Management Studies,* 22 (5), 429-465.

House of Commons (2013). *The role of the Charity Commission and "public benefit": Postlegislative scrutiny of the Charities Act 2006*. London: The Stationery Office Limited. Retrieved from: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmpubadm/76/76.pdf.

Hribar, P. and Collins, D.W. (2002). Errors in estimating accruals: Implications for empirical research. *Journal of Accounting Research,* 40 (1), 105-134.

Hsiao, C. (2003) *Analysis of panel data*, 2nd ed. Cambridge: Cambridge University Press,. Available from: http://catdir.loc.gov/catdir/samples/cam031/2002023348.pdf [Accessed 10 May 2014].

Hsiao, C. (2006). Panel data analysis: Advantages and challenges. *IEPR Working Paper No. 06.49*.

Hyndman, N. (1990). Charity accounting: An empirical study of the information needs of contributors to UK fund raising charities. *Financial Accountability & Management,* 6 (4), 295.

Hyndman, N. and Jones, R. (2011). Editorial: Good governance in charities— some key issues. *Public Money & Management,* 31 (3), 151-155.

Hyndman, N. and Mcconville, D. (2015). Transparency in reporting on charities' efficiency: A framework for analysis. *Nonprofit and Voluntary Sector Quarterly*, 1-22.

Hyndman, N. and Mcdonnell, P. (2009). Governance and charities: An exploration of key themes and the development of a research agenda. *Financial Accountability & Management,* 25 (1), 5-31.

Hyndman, N. and Mcmahon, D. (2010). The evolution of the UK charity Statement of Recommended Practice: The influence of key stakeholders. *European Management Journal,* 28 (6), 455-466.

Hyndman, N. and Mcmahon, D. (2011). The hand of government in shaping accounting and reporting in the UK charity sector. *Public Money & Management,* 31 (3), 167-174.

Indjejikian, R.J., Matejka, M., Merchant, K.A. and Van Der Stede, W.A. (2014). Earnings Targets and Annual Bonus Incentives. *The Accounting Review*, 89 (4), 1227-1258.

Internal Revenue Service (2015). *Form 990: Return of organization exempt from income tax*. Washington: Internal Revenue Service. Retrieved from: https://www.irs.gov/uac/about-form-990.

Ipsos Mori (2014). *Public trust and confidence in charities*. UK: Ipsos. Retrieved from: https://www.ipsos-mori.com/researchpublications/publications/1679/Public-Trust-and-Confidence-in-Charities-2014.aspx.

Iqbal, A., Espenlaub, S. and Strong, N. (2009). Earnings management around UK open offers. *European Journal of Finance,* 15 (1), 29-51.

Jacobs, F.A. and Marudas, N.P. (2012). Quality of financial disclosures of nonprofit organizations that report zero fundraising expense. *Journal of Finance & Accountancy,* 9, 1-12.

Jacobson, C. and House, R.J. (2001). Dynamics of charismatic leadership: A process theory, simulation model, and tests. *Leadership Quarterly,* 12 (1), 75–112.

Jaggi, B., Mitra, S. and Hossain, M. (2015). Earnings quality, internal control weaknesses and industry-specialist audits. *Review of Quantitative Finance and Accounting*, 45 (1), 1-32.

Jaggi, B. and Picheng, L. (2002). Earnings management response to debt covenant violations and debt restructuring. *Journal of Accounting, Auditing and Finance,* 17 (4), 295-324.

James, S.B. (2014) Charity Commission concerned over net liabilities of many large charities. *Third sector*. Available from: http://www.thirdsector.co.uk/charity-commission-concerned-net-liabilities-large-charities/governance/article/1306882 [Accessed 17 August 2014].

Jegers, M. (2009). 'Corporate' governance in nonprofit organizations: A nontechnical review of the economic literature. *Nonprofit Management and Leadership,* 20 (2), 143-164.

Jegers, M. (2010a). Donors and non-profit organisations' accounting manipulations: An overview of the literature. *Irish Accounting Review,* 17 (1), 21-29.

Jegers, M. (2010b). The effect of board-manager agency conflicts on non-profit organisations' earnings and cost allocation manipulations. *Accounting and Business Research,* 40 (5), 407-419.

Jegers, M. (2013). Do nonprofit organisations manage earnings? An empirical study. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations,* 24 (4), 953-968.

Jensen, M.C. and Meckling, W.C. (1976). The theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics,* 3 (4), 305–360.

Jensen, M.C. and Murphy, K.J. (1990). Performance pay and top-management incentives. *Journal of Political Economy,* 98 (2), 225-264.

Jepson, P. (2005). Governance and accountability of environmental NGOs. *Environmental Science & Policy,* 8 (5), 515-524.

Jetty, J. and Beattie, V. (2012). The determinants of audit committees: Evidence from the charity sector. *Public Money & Management,* 32 (5), 371-378.

Jiambalvo, J., Rajgopal, S. and Venkatachalam, M. (2002). Institutional ownership and the extent to which stock prices reflect future earnings. *Contemporary Accounting Research,* 19 (1), 117-145.

Jiang, J., Petroni, K.R. and Wang, I.Y. (2010). CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics,* 96 (3), 513-526.

Jobome, G.O. (2006a). Management pay, governance and performance: The case of large UK nonprofits. *Financial Accountability & Management,* 22 (4), 331-358.

Jobome, G.O. (2006b). Public funding, governance and passthrough efficiency in large UK charities. *Corporate Governance: An International Review,* 14 (1), 43-59.

Jones, C.L., Kitching, K.A., Roberts, A.A. and Smith, P.C. (2013). The spend-save decision: An analysis of how charities respond to revenue changes. *Accounting Horizons,* 27 (1), 75-89.

Jones, C.L. and Roberts, A.A. (2006). Management of financial information in charitable organizations: The case of joint-cost allocations. *The Accounting Review,* 81 (1), 159-178.

Jones, J.J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research,* 29 (2), 193-228.

Kaler, J. (2003). Differentiating stakeholder theories. *Journal of Business Ethics,* 46 (1), 71-83.

Kane, D. and Allen, J. (2011). *Counting the cut, the impact of spending cuts on the UK voluntary and community sector*. London: National Council for Voluntary Organizations.

Kang, H., Cheng, M. and Gray, S.J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance,* 15 (2), 194-207.

Keating, E.K. and Frumkin, P. (2011) What drives nonprofit executive compensation? *Nonprofit Quarterly*. Available from: https://nonprofitquarterly.org/2011/07/27/what-drives-nonprofit-executive-compensation/ [Accessed 10 August 2016].

Keating, E.K., Parsons, L.M. and Roberts, A.A. (2008). Misreporting fundraising: How do nonprofit organizations account for telemarketing campaigns? *The Accounting Review,* 83 (2), 417-446.

Kennedy, P.E. (2003). A guide to econometrics, 5th ed. Boston, MA: MIT Press.

Khan, R., Dharwadkar, R. and Brandes, P. (2005). Institutional ownership and CEO compensation: A longitudinal examination. *Journal of Business Research,* 58 (8), 1078-1088.

Khumawala, S.B., Parsons, L.M. and Gordon, T.P. (2005). Tracks- Assessing the quality of not-for-profit efficiency ratios: Do donors use joint cost allocation disclosures? *Journal of Accounting, Auditing & Finance,* 20 (3), 287.

Kitching, K. (2009). Audit value and charitable organizations. *Journal of Accounting and Public Policy,* 28 (6), 510-524.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics,* 33 (3), 375-400.

Knight, D., Pearce, C.L., Smith, K.G., Olian, J.D., Sims, H.P., Smith, K.A. and Flood, P. (1999). Top management team diversity, group process, and strategic consensus. *Strategic Management Journal,* 20 (5), 445-465.

Kothari, S.P., Leone, A.J. and Wasley, C.E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics,* 39 (1), 163-197.

Krishnan, G.V. (2003). Does Big 6 Auditor Industry Expertise Constrain Earnings Management? *Accounting Horizons,* 17, 1-16.

Krishnan, R. and Yetman, M.H. (2011). Institutional drivers of reporting decisions in nonprofit hospitals. *Journal of Accounting Research,* 49 (4), 1001-1039.

Krishnan, R., Yetman, M.H. and Yetman, R.J. (2006). Expense misreporting in nonprofit organizations. *The Accounting Review*, 81 (2), 399-420.

Kuang, Y.F. (2008). Performance-vested stock options and earnings management. *Journal of Business Finance & Accounting*, 35 (9/10), 1049-1078.

Kuroki, M. (2016). Earnings management toward zero: Evidence from Japanese private colleges and universities. Working paper- Yokohama City University.

Kyoko, N. (2013). Does earnings management lead to favorable IPO price formation or further underpricing? Evidence from Japan. *Journal of Multinational Financial Management*, 23, 301-313.

La Porta, R., Shleifer, A., Lopez-De-Silanes, F. and Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58 (1-2), 3-27.

Laughlin, R. (1995). Empirical research in accounting: Alternative approaches and a case for "middle-range" thinking. *Accounting, Auditing & Accountability Journal*, 8 (1), 63-87.

Leone, A.J. and Van Horn, R.L. (2005). How do nonprofit hospitals manage earnings? *Journal of Health Economics*, 24 (4), 815-837.

Leuz, C., Nanda, D. and Wysocki, P.D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69 (3), 505-527.

Lin, J.W., Yang, J.S. and Li, J.F. (2006). The effect of audit committee performance on earnings quality. *Managerial Auditing Journal*, 21 (9), 921-933.

Lin, S., Pizzini, M., Vargus, M. and Bardhan, I.R. (2011). The role of the internal audit function in the disclosure of material weaknesses. *The Accounting Review*, 86 (1), 287-323.

Liu, Y., Wei, Z. and Xie, F. (2014). Do women directors improve firm performance in China? *Journal of Corporate Finance*, 28 (1), 169-184.

Lubatkin, M., Lane, P.J., Collin, S. and Very, P. (2007). An embeddedness framing of governance and opportunism: Towards a cross-nationally accommodating theory of agency. *Journal of Organizational Behavior*, 28 (1), 43-58.

Lukka, K. (1990). Ontology and accounting: The concept of profit. *Critical Perspectives on Accounting*, 1 (3), 239-261.

Mahadeo, J.D., Soobaroyen, T. and Hanuman, V.O. (2012). Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. *Journal of Business Ethics,* 105 (3), 375-388.

Mangena, M. and Pike, R. (2005). The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. *Accounting & Business Research,* 35 (4), 327-349.

Marquardt, C.A. and Wiedman, C.I. (2004). How are earnings managed? An examination of specific accruals. *Contemporary Accounting Research,* 21 (2), 461-491.

Matolcsy, Z. and Wright, A. (2011). CEO compensation structure and firm performance. *Accounting & Finance,* 51 (3), 745-763.

Menozzi, A., Erbetta, F., Fraquelli, G. and Vannoni, D. (2014). The determinants of board compensation in SOEs: An application to italian local public utilities. *Applied Financial Economics,* 24 (1-3), 145-159.

Miller-Millesen, J.L. (2003). Understanding the behavior of nonprofit boards of directors: A theory-based approach. *Nonprofit and Voluntary Sector Quarterly,* 32 (4), 521-547.

Miloud, T. (2014). Earnings management and initial public offerings: An empirical analysis. *Journal of Applied Business Research,* 30 (1), 117-134.

Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review,* 22 (4), 853-886.

Morgan, G.G. and Fletcher, N.J. (2013). Mandatory public benefit reporting as a basis for charity accountability: Findings from England and Wales. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations,* 24 (3), 805-830.

Morsfield, S.G. and Tan, C.E.L. (2006). Do venture capitalists influence the decision to manage earnings in initial public offerings? *The Accounting Review,* 81 (5), 1119-1150.

Myung Seok, P. and Taewoo, P. (2004). Insider sales and earnings management. *Journal of Accounting and Public Policy,* 23, 381-411.

Nadkarni, S. and Herrmann, P.O.L. (2010). CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *The Academy of Management Journal,* 53 (5), 1050-1073.

Nakazato, M., Ramseyer, J.M. and Rasmusen, E.B. (2011). Executive compensation in japan: Estimating levels and determinants from tax records. *Journal of Economics & Management Strategy,* 20 (3), 843-885.

National Council for Voluntary Organizations (2012). *How are public sector spending cuts affecting the voluntary sector?* . Ncvo. Retrieved from: https://data.ncvo.org.uk/a/almanac12/how-are-public-sector-spending-cuts-affecting-the-voluntary-sector/.

National Council for Voluntary Organizations (2014). *Report of the inquiry into charity senior executive pay and guidance for trustees on setting remuneration*. London: National Council for Voluntary Organizations. Retrieved from: https://www.ncvo.org.uk/images/news/Executive-Pay-Report.pdf.

National Housing Federation (2015). *Code of governance, promoting board excellence for housing associations*. London. Retrieved from: https://www.housing.org.uk/resource-library/browse/code-of-governance-promoting-board-excellence-for-housing-associations/.

Nelson, M.W., Elliott, J.A. and Tarpley, R.L. (2002). Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review,* 77, 175-202.

Newton, A.N. (2015). Executive compensation, organizational performance, and governance quality in the absence of owners. *Journal of Corporate Finance,* 30, 195-222.

Nicholson, G.J. and Kiel, G.C. (2007). Can directors impact performance? A case-based test of three theories of corporate governance. *Corporate Governance: An International Review,* 15 (4), 585-608.

Nielsen, B.B. and Nielsen, S. (2009). Learning and innovation in international strategic alliances: An empirical test of the role of trust and tacitness. *Journal of Management Studies,* 46 (6), 1031-1056.

Niu, F.F. (2006). Corporate governance and the quality of accounting earnings: A Canadian perspective. *International Journal of Managerial Finance,* 2 (4), 302-327.

Ntim, C. and Soobaroyen, T. (2013). Black economic empowerment disclosures by South African listed corporations: The influence of ownership and board characteristics. *Journal of Business Ethics,* 116 (1), 121-138.

Ntim, C.G. (2015). Board Diversity and Organizational Valuation: Unravelling the Effects of Ethnicity and Gender. *Journal of Management and Governance,* 19 (1), 167-195.

Ntim, C.G., Lindop, S., Thomas, D.A. and Osei, K.A. (2015a). Executive compensation, corporate governance and corporate performance: A simultaneous equation approach. *Managerial and Decision Economics,* 36 (2), 67-96.

Ntim, C.G., Opong, K.K. and Danbolt, J. (2012). The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa. *Corporate Governance: An International Review,* 20 (1), 84-105.

Ntim, C.G., Soobaroyen, T. and Broad, M. (2015b). Governance structures, voluntary disclosures and public accountability: the case of UK higher education institutions. *Accounting, Auditing & Accountability Journal,* Forthcoming.

O'reilly, C.A., Caldwell, D.F., Chatman, J.A., Lapiz, M. and Self, W. (2010). How leadership matters: The effects of leaders' alignment on strategy implementation. *Leadership Quarterly,* 21 (1), 104-113.

Oh, K., Choi, W., Jeong, S.W. and Pae, J. (2014). The effect of different levels of internal control over financial reporting regulation on the quality of accounting information: evidence from Korea. *Asia-Pacific Journal of Accounting and Economics,* 21 (4), 412-442.

Olson, D.E. (2000). Agency theory in the not-for-profit sector: Its role at independent colleges. *Nonprofit & Voluntary Sector Quarterly,* 29 (2), 280-296.

Omer, T.C. and Yetman, R.J. (2003). Near zero taxable income reporting by nonprofit organizations. *The Journal of the American Taxation Association,* 25 (2), 19-34.

Omer, T.C. and Yetman, R.J. (2007). Tax misreporting and avoidance by nonprofit organizations. *The Journal of the American Taxation Association,* 29 (1), 61-86.

Orij, R. (2010). Corporate social disclosures in the context of national cultures stakeholder theory. *Accounting, Auditing & Accountability Journal,* 23 (7), 868-889.

Oster, S.M. (1998). Executive Compensation in the Nonprofit Sector. *Nonprofit Management & Leadership,* 8 (3), 207.

Ozkan, N. (2011). Ceo compensation and firm performance: An empirical investigation of uk panel data. *European Financial Management,* 17 (2), 260-285.

Palmer, P.D. (2013). Exploring attitudes to financial reporting in the Australian not-for-profit sector. *Accounting & Finance,* 53 (1), 217-241.

Pan, Y. and Sparks, J.R. (2012). Predictors, consequence, and measurement of ethical judgments: Review and meta-analysis. *Journal of Business Research,* 65 (1), 84-91.

Park, Y.W. and Shin, H.-H. (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance,* 10 (3), 431-457.

Pearl Meyer & Partners (2014). *2013 Patterson Index – FTSE 250: A rule of thumb for all remuneration committees*. London: Pearl Meyer & Partners. Retrieved from: https://www.pearlmeyer.com/why-pearl-meyer/global-reach.

Peasnell, K.V., Pope, P.F. and Young, S. (2000). Detecting earnings management using cross-sectional abnormal accruals models. *Accounting and Business Research*, 30 (4), 313-326.

Peasnell, K.V., Pope, R.F. and Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting*, 32 (7 & 8), 1311-1346.

Pellicer, M.J.A., Hodges, R. and Martí, C. (2014). Earnings management in English local governments: Determining factors and instruments. *Working paper- Universidad de Zaragoza and University of Birmingham*.

Perego, P. and Verbeeten, F. (2015). Do 'good governance' codes enhance financial accountability? Evidence from managerial pay in Dutch charities. *Financial Accountability & Management*, 31 (3), 316-344.

Petrovits, C., Shakespeare, C. and Shih, A. (2011). The causes and consequences of internal control problems in nonprofit organizations. *The Accounting Review*, 86 (1), 325-357.

Pfeffer, J. and Salancik, G.R. (1978). The external control of organizations: A resource dependence perspective. New York: Harper & Row.

Piot, C. and Janin, R. (2007). External auditors, audit committees and earnings management in France. *European Accounting Review*, 16 (2), 429–454.

Piperakis, A.S. (2011). The impact of immigration on EU-15 trade. *International Trade Journal*, 25 (5), 558-580.

Post, C. and Byron, K. (2015). Women on boards and firm financial performance: A metaanalysis. *Academy of Management Journal*.

Prawitt, D.F., Smith, J.L. and Wood, D.A. (2009). Internal audit quality and earnings management. *Accounting Review*, 84 (4), 1255-1280.

Preston, J.B. and Brown, W.A. (2004). Commitment and performance of nonprofit board members. *Nonprofit Management and Leadership*, 15 (2), 221-238.

Reddy, K., Locke, S. and Fauzi, F. (2013). Relevance of corporate governance practices in charitable organisations: A case study of registered charities in New Zealand. *International Journal of Managerial Finance*, 9 (2), 110-132.

Reheul, A.-M., Van Caneghem, T. and Verbruggen, S. (2014). Financial reporting lags in the non-profit sector: An empirical analysis. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations,* 25 (2), 352-377.

Reheul, A.M., Van Caneghem, T. and Verbruggen, S. (2013). Audit report lags in the Belgian non-profit sector: An empirical analysis. *Accounting and Business Research,* 43 (2), 138-158.

Rehli, F. and Jäger, U.P. (2011). The governance of international nongovernmental organizations: How funding and volunteer involvement affect board nomination modes and stakeholder representation in international nongovernmental organizations. *Voluntas: International Journal of Voluntary & Nonprofit Organizations,* 22 (4), 587-612.

Rich, K.T. and Zhang, J.X. (2014). Does audit committee monitoring matter in the government sector? Evidence from municipal internal control quality. *Journal of Governmental & Non Profit Accounting,* 3 (1), 58-80.

Roberts, A.A. (2005). The implications of joint cost standards for charity reporting. *Accounting Horizons,* 19 (1), 11-23.

Rojas, R.R. (2000). A review of models for measuring organizational effectiveness among for-profit and nonprofit organizations. *Nonprofit Management and Leadership,* 11 (1), 97-104.

Rotemberg, J.J. and Saloner, G. (1993). Leadership style and incentives. *Management Science,* 39 (11), 1299-1318

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics,* 42 (3), 335-370.

Rusmin, R. (2010). Auditor quality and earnings management: Singaporean evidence. *Managerial Auditing Journal,* 25 (7), 618-638.

Saleh, N.M. and Ahmed, K. (2005). Earnings management of distressed firms during debt renegotiation. *Accounting and Business Research,* 35 (1), 69-86.

Sandersm, W.M.G. and Carpenter, M.A. (1998). Internationalization and firm governance: The roles of ceo compensation, top team composition, and board structure. *Academy of Management Journal,* 41 (2), 158-178.

Saunders, M.N.K., Lewis, P. and Thornhill, A. (2012). Research methods for business students, 6th ed. Harlow: Pearson Education Limited.

Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons,* 3 (4), 91-102.

Schlenker, B.R. (1980). Impression management: The self-concept social identity, and interpersonal relations. Monterey, CA Brooks/Cole.

Schneider, J.A. (2006). An interdisciplinary conversation on research method best practices for nonprofit studies. *Nonprofit Management and Leadership,* 16 (4), 387-394.

Shaw, K.W. and Zhang, M.H. (2010). Is CEO cash compensation punished for poor firm performance? *Accounting Review,* 85 (3), 1065-1093.

Shleifer, A. and Vishny, R.W. (1997). A survey of corporate governance. *Journal of Finance*, 52 (2), 737-783.

Shubita, M.F. (2012). Earnings manipulation in acquiring companies: An overview. *Academy of Accounting & Financial Studies Journal,* 16 (3), 25-30.

Siciliano, J.I. (1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics,* 15 (12), 1313-1320.

Sivakumar, K. and Waymire, G. (2003). Enforceable accounting rules and income measurement by early 20th century railroads. *Journal of Accounting Research,* 41 (2), 397-432.

Soobaroyen, T. and Sannassee, R.V. (2007). An exploratory study of financial priorities, financial planning and control practices in voluntary organisations: Perceptions of treasurers in a developing country. *Journal of Accounting & Organizational Change,* 3 (3), 270-301.

Srinidhi, B.I.N., Gul, F.A. and Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research,* 28 (5), 1610-1644.

Steinberg, R. (2010) *Principal-agent theory and nonprofit accountability* IN: Hopt, J.K. and Hippel, T.V. (eds.) Comparative corporate governance of non-profit organizations, 1st ed. Cambridge: Cambridge University Press, 73-126.

Stephens, R.D., Dawley, D.D. and Stephens, D.B. (2004). Commitment on the board: A model of volunteer directors' levels of organizational commitment and self-reported performance. *Journal of Managerial Issues,* 16 (4), 583-504.

Stubben, S.R. (2010). Discretionary revenues as a measure of earnings management. *The Accounting Review,* 85 (2), 695-717.

Sun, J., Liu, G.P. and Lan, G. (2011). Does female directorship on independent audit committees constrain earnings management? *Journal of Business Ethics,* 99 (3), 369-382.

Sweeney, A.P. (1994). Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics,* 17 (3), 281-308.

Tauringana, V. and Mangena, M. (2014). Board structure and supplementary commentary on the primary financial statements. *Journal of Applied Accounting Research,* 15 (3), 273-290.

Taylor, S.J. and Bogdan, R. (1998). Introduction to qualitative research methods : A guidebook and resource, 3rd ed. ed. New York: Wiley.

Tedeschi, J.T. and Riess, M. (1981). Identities, the phenomenal self and laboratory research. New York: Academic Press.

Teoh, S.H., Welch, I. and Wong, T.J. (1998). Earnings management and the long-run market performance of initial public offerings. *Journal of Finance,* 53 (6), 1935-1974.

Terjesen, S., Couto, E.B. and Francisco, P.M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management and Governance,* 20 (3), 447-483.

The Public Administration and Constitutional Affairs Committee (2016). *The collapse of Kids Company: Lessons for charity trustees, professional firms, the Charity Commission, and Whitehall*. London: House of Commons.

Third Sector (2015) Charity pay study: Who are the highest earners? Available from: http://www.thirdsector.co.uk/charity-pay-study-highest-earners/management/article/1335060 [Accessed 5 April 2016].

Thornton, J.P. and Belski, W.H. (2010). Financial reporting quality and price competition among nonprofit firms. *Applied Economics,* 42 (21), 2699-2713.

Tinkelman, D. (1998). Differences in sensitivity of financial statement users to joint cost allocations: The case of nonprofit organizations. *Journal of Accounting, Auditing & Finance,* 13 (4), 377-393.

Tinkelman, D. (1999). Factors affecting the relation between donations to not-for-profit organizations and an efficiency ratio. *Research in Government and Non-profit Accounting,* 10, 135-161.

Tinkelman, D. (2009). Unintended consequences of expense ratio guidelines: The Avon breast cancer walks. *Journal of Accounting and Public Policy,* 28 (6), 485-494.

Tinkelman, D. and Mankaney, K. (2007). When is administrative efficiency associated with charitable donations? *Nonprofit and Voluntary Sector Quarterly,* 36 (1), 41-64.

Tosi, H.L. and Greckhamer, T. (2004). Culture and CEO Compensation. *Organization Science,* 15 (6), 657-670.

Tosi, H.L., Misangyi, V.F., Fanelli, A., Waldman, D.A. and Yammarino, F.J. (2004). CEO charisma, compensation, and firm performance. *Leadership Quarterly,* 15 (3), 405-420.

Trussel, J. (2003). Assessing potential accounting manipulation: The financial characteristics of charitable organizations with higher than expected program-spending ratios. *Nonprofit and Voluntary Sector Quarterly,* 32 (4), 616-634.

Tuckman, H.P. and Chang, C.F. (1991). A Methodology for Measuring the Financial Vulnerability of Charitable Nonprofit Organizations. *Nonprofit & Voluntary Sector Quarterly,* 20 (4), 445.

Tuggle, C.S., Schnatterly, K. and Johnson, R.A. (2010). Attention patterns in the boardroom: How board composition and processes affect discussion of entrepreneurial issues. *Academy of Management Journal,* 53 (3), 550-571.

Unerman, J. and O'dwyer, B. (2010). NGO accountability and sustainability issues in the changing global environment. *Public Management Review,* 12 (4), 475-486.

Unerman, J. and O'dwyer, B. (2012) *Accounting and accountability for NGOs* IN: Hopper, T., Tsamenyi, M., Uddin, S. and Wickramasinghe, D. (eds.) Handbook of Accounting and Development. Cheltenham: Edward Elgar Publishing Ltd., 143-161.

Van Der Heijden, H. (2013). Charities in Competition: Effects of Accounting Information on Donating Adjustments. *Behavioral Research in Accounting,* 25 (1), 1-13.

Van Der Zahn, J.L.W.M. and Tower, G. (2004). Audit committee features and earnings management: Further evidence from Singapore. *International Journal of Business Governance and Ethics,* 1 (2-3), 233-258.

Van Essen, M., Otten, J. and Carberry, E.J. (2015). Assessing managerial power theory: A meta-analytic approach to understanding the determinants of CEO compensation. *Journal of Management,* 41 (1), 164-202.

Van Puyvelde, S., Caers, R., Du Bois, C. and Jegers, M. (2011). The governance of nonprofit organizations: Integrating agency theory with stakeholder and stewardship theories. *Nonprofit and Voluntary Sector Quarterly,* 41 (3), 431-451.

Van Puyvelde, S., Caers, R., Du Bois, C. and Jegers, M. (2016). Managerial objectives and the governance of public and non-profit organizations. *Public Management Review,* 18 (2), 221-237.

Vansant, B. (2015). Institutional pressures to provide social benefits and the earnings management behavior of nonprofits: Evidence from the U.S. hospital industry. *Contemporary Accounting Research.*

Verbruggen, S. and Christiaens, J. (2012). Do non-profit organizations manage earnings toward zero profit and does governmental financing play a role? *Canadian Journal of Administrative Sciences,* 29 (3), 205-217.

Verbruggen, S., Christiaens, J. and Milis, K. (2008). Earnings management: A literature review. *HUB Research Paper,* 2008/14, 1-27.

Verbruggen, S., Christiaens, J. and Milis, K. (2011). Can resource dependence and coercive isomorphism explain nonprofit organizations' compliance with reporting standards? *Nonprofit and Voluntary Sector Quarterly,* 40 (1), 5-32.

Vermeer, T.E., Edmonds, C.T. and Asthana, S.C. (2014). Organizational form and accounting choice: Are nonprofit or for-profit managers more aggressive? *Accounting Review,* 89 (5), 1867-1893.

Vermeer, T.E., Raghunandan, K. and Forgione, D.A. (2006). The composition of nonprofit audit committees. *Accounting Horizons,* 20 (1), 75-90.

Vieito, J. and Khan, W. (2012). Executive compensation and gender: S&P 1500 listed firms. *Journal of Economics & Finance,* 36 (2), 371-399.

Vinnicombe, S., Doldor, E. and Sealy, R. (2015). *The female FTSE board report 2015- Putting the UK progress into a global perspective.* . Cranfield: Cranfield University.

Virtanen, A. (2012). Women on the Boards of Listed Companies: Evidence from Finland. *Journal of Management and Governance,* 16 (4), 571-593.

Vu, T.B. (2008). Foreign direct investment and endogenous growth in Vietnam. *Applied Economics,* 40 (7-9), 1165-1173.

Wagner, J.A., Leana, C.R., Locke, E.A. and Schweiger, D.M. (1997). Cognitive and motivational frameworks in U.S. research on participation: A meta-analysis of primary effects. *Journal of Organizational Behavior,* 18 (1), 49-65.

Walker, M. (2013). How far can we trust earnings numbers? What research tells us about earnings management. *Accounting and Business Research,* 43 (4), 445-481.

Wang, H.C., Venezia, C.C. and Lou, Y.-I. (2013). Determinants of chief executive officer compensation. *International Journal of Business and Finance Research,* 7 (4), 29-42.

Watts, R.L. and Zimmerman, J.L. (1990). Positive accounting theory: A ten year perspective. *The Accounting Review,* 65 (1), 131-156.

Wellens, L. and Jegers, M. (2011). Beneficiaries' participation in nonprofit organizations: A theory-based approach. *Public Money & Management,* 31 (3), 175-182.

Wellens, L. and Jegers, M. (2014). Effective governance in nonprofit organizations: A literature based multiple stakeholder approach. *European Management Journal,* 32, 223-243.

Wen-Wen, C., Roger, W.M. and John, T.S. (2010). Audit committee effectiveness in the largest US public hospitals: An empirical study. *Accounting & Taxation,* 2 (1), 107-127.

Westphal, J.D., Seidel, M.-D.L. and Stewart, K.J. (2001). Second-order imitation: Uncovering latent effects of board network ties. *Administrative Science Quarterly,* 46 (4), 717-747.

Whelton, R.S. (2006). *Effects of excessive CEO pay on U.S. society*. Retrieved from: https://www.svsu.edu/media/writingcenter/Whelton_article.pdf.

Wilson, M. (2011). Earnings management in australian corporations. *Australian Accounting Review,* 21 (3), 205-221.

Wilson, M. and Shailer, G. (2007). Accounting manipulations and political costs: Tooth & Co Ltd, 1910-1965. *Accounting and Business Research,* 37 (4), 247-266.

Wing, K., Hager, M.A., Rooney, P.M. and Pollak, T. (2004). *Special issues in nonprofit financial reporting: A guide for financial professionals*. Retrieved from: www.coststudy.org.

Wiseman, R.M., Cuevas-Rodríguez, G. and Gomez-Mejia, L.R. (2012). Towards a social theory of agency. *Journal of Management Studies,* 49 (1), 202-222.

Wooldridge, J.M. (2001). Econometric analysis of cross section and panel data. Boston, MA: MIT Press,.

Xie, B., Davidson, W.N., Iii and 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.

Xu, R.Z., Taylor, G.K. and Dugan, M.T. (2007). Review of real earnings management literature. *Journal of Accounting Literature,* 26, 195-228.

Yang, J.S. and Krishnan, J. (2005). Audit committees and quarterly earnings management. *International Journal of Auditing*, 9 (3), 201-219.

Yasmin, S., Haniffa, R. and Hudaib, M. (2014). Communicated accountability by faith-based charity organisations. *Journal of Business Ethics*, 122 (1), 103-123.

Yetman, M.H. and Yetman, R.J. (2012). The effects of governance on the accuracy of charitable expenses reported by nonprofit organizations. *Contemporary Accounting Research*, 29 (3), 738-767.

Yetman, M.H. and Yetman, R.J. (2013). Do donors discount low-quality accounting information? *The Accounting Review*, 88 (3), 1041-1067.

Yetman, R.J. (2001). Tax-motivated expense allocations by nonprofit organizations. *The Accounting Review*, 76 (3), 297-311.

Yuthas, K., Rogers, R. and Dillard, J.F. (2002). Communicative action and corporate annual reports. *Journal of Business Ethics*, 41 (1), 141-157.

Zahra, S.A. (2007). An embeddedness framing of governance and opportunism: towards a cross-nationally accommodating theory of agency - critique and extension. *Journal of Organizational Behavior*, 28 (1), 69-73.

Zona, F., Gomez-Mejia, L.R. and Withers, M.C. (2015). Board interlocks and firm performance: Toward a combined agency-resource dependence perspective. *Journal of Management*, 1-30.