The Impact of Boards’ Ownership Structure on Voluntary and Mandatory Corporate Social Responsibility

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ABSTRACT

This study examined the impact of boards’ ownership structure as one of the corporate governance mechanisms on the determinations of voluntary and mandatory Corporate Social Responsibility (CSR) engagements. Voluntary CSR refers to costly discretionary proactive stakeholders’ strategies such as investing in the community and philanthropic activities. Mandatory CSR is concerned with the adherence to meeting the required standards and regulations on ratings such as employee rights and environmental issues. Building on the existing literature, a model that relates boards’ ownership structure (executive directors’ ownership, non-executive directors’ ownership and concentrated ownership) to voluntary and mandatory CSR via Corporate Governance (CG) and firm characteristics control variables was developed. The model was tested using a sample drawn from the FTSE4Good UK Index over the period 2009-2013. The data was analysed in two stages using the statistics software packages SPSS and STATA. Stage 1 results are based on 111 companies, while stage 2 results are based on a restricted sample of 53 companies with the largest active engagement in voluntary CSR above a certain threshold. Using the logit regression model, stage 1 findings indicate that share ownership of Chief Executive Directors (CEDs), Non-Executive Directors (NEDs) and concentrated ownership displays a significant positive relationship with mandatory CSR but has significant negative relationships with voluntary CSR, indicating for significant agency theory and stakeholder theory issues that are impacting on decisions regarding voluntary and mandatory CSR. Employing panel data (fixed effects and random effects regression models), outcomes of the stage 2 analysis show that board decisions regarding voluntary CSR are similar to stage 1 findings indicating that those companies with the largest active engagement in voluntary CSR above a certain threshold may be seen as wealth reducing.

The study provides evidence to show that engaging in voluntary and mandatory CSR adds to knowledge for UK board practice and UK policy on CG and contributes to the implications for management and policy makers of an organisation; it informs management on how to attract investors according to their preferred investment time plan thus reducing the agency cost of capital. It also guides management of the compensation committee on how to think about redesigning a directors’ reward system - particularly share options - in order to align their interests with long-term investors to obtain long-term funds. The novelty of this research lies in the fact that this study is the first to specifically investigate the impact of boards’ ownership structure on voluntary and mandatory CSR. The study contributes both to the CG and CSR literature.
Acknowledgments

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I am also indebted to the director of study, Dr. Jacky Holloway, who has been a constant source of help, support, encouragement and enthusiasm. In addition, special thanks go to Dr. Ian Brooks and Mr. David Watson for their valuable assistance during the PhD programme.

The success of this research is undoubtedly due to the unconditional moral and some financial support given by my mother. While her country was at war, and with the many difficulties she must have experienced, she has always provided me with her continued encouragement and hope. To her goes more than I can ever acknowledge here.

Last but foremost, I have a very special debt to my sons, Sanad and Ayoob, whose affectionate support has enabled me to complete this work. I am grateful to my son, Sanad for his sincere assistance provided in proofreading my work. Despite his own GCSE exam preparations, he always found time to comment on my work. My sons have endured my absence, with ceaseless patience, for too many evenings and weekends. I have no adequate words to express my heartfelt appreciation for them, since they are so kind and wonderful.
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<td>Two Stage Least Squares</td>
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<tr>
<td>3SLS</td>
<td>Three Stage Least Squares</td>
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<tr>
<td>AA</td>
<td>Arthur Anderson</td>
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<tr>
<td>BITC</td>
<td>Business in the Community</td>
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<tr>
<td>BMAC</td>
<td>Britain Most Admired Company</td>
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<tr>
<td>CFP</td>
<td>Corporate Financial Performance</td>
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<tr>
<td>CED</td>
<td>Chief Executive Director</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CEP</td>
<td>Council on Economic Priorities</td>
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<td>CER</td>
<td>Community and Environmental Responsibility</td>
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<td>CG</td>
<td>CG</td>
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<tr>
<td>CR</td>
<td>Corporate Responsibility</td>
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<td>CSP</td>
<td>Corporate Social Performance</td>
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<td>CSR</td>
<td>CSR</td>
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<td>D/E</td>
<td>Debt to Equity</td>
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<tr>
<td>DJSI</td>
<td>Dow Jones Sustainability Index</td>
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<tr>
<td>ECSR</td>
<td>Environmental CSR</td>
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<tr>
<td>EEO</td>
<td>Equal Employment Opportunity Commission</td>
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<td>EIRIS</td>
<td>Ethical Investment Research Service</td>
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<td>FP</td>
<td>Firm Performance</td>
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<td>FSA’s DTRs</td>
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<td>Generalised Least Squares</td>
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<td>IBWC</td>
<td>Indonesia’s Best Wealth Creator</td>
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<td>ICB</td>
<td>Industrial Classification Benchmark</td>
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<td>ICMW</td>
<td>Internal Control Material Weaknesses’</td>
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<td>IRMA</td>
<td>Industrial Research Investments Monitoring and Analysis</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>KLD</td>
<td>Kinder, Lydenberg and Domini</td>
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<td>KPMG</td>
<td>Klynveld Peat Marwick Goerdeler</td>
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<tr>
<td>LSE</td>
<td>London Stock Exchange</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<td>PER</td>
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<td>SOX</td>
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<td>UK</td>
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<td>VIF</td>
<td>Variance Inflation Factor</td>
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Chapter One: Introduction

1.1 Chapter Overview
The aim of this chapter is to set the context for this study. This study investigates Corporate Governance (CG) and Corporate Social Responsibility (CSR) and how boards’ ownership structure can impact CSR implementations. Due to the cultural, legal and historical differences across countries and organisations, there is a wide range of CG definitions (Ramon, 2001) creating ambiguity between academic scholars (Demb and Neubauer, 1992). Solomon (2010) stated that there isn’t a particular accepted definition of the term CG; there are considerable differences in CG definitions according to the country considered. Given the evolving and dynamic nature of CG, Solomon (2010) declared that arriving at a single definition of CG is not an easy task even within the confines of one country’s system such as the UK. Wallace and Zinkin (2005) argued that it is noticeable that the term of CG is easy to phrase but complex to recognize and appreciate its mechanisms. Depending on the viewpoint of the researcher, practitioner, theorist or policy-makers, CG may be treated in a narrow or a broad manner. The existing definitions of CG that adopt a narrow view are restricted to the relationship between the firm and its shareholders such as the traditional financial economics paradigm, expressed in the agency theory and epitomized in the definition of Cadbury (2000: p. 8), who defined the term of CG as “the system by which companies are directed and controlled”. Other scholars had also adopted the narrow view (Shleifer and Vishny, 1997; Turnbull, 1997; Colley et al., 2004; Walker Review, 2009).

However, since implementing good CSR requires corporate directors to make the firm have a good influence on a large group of stakeholders (Andriof and McIntosh, 2001), this thesis adopts the broader definitions of CG that consider various groups of stakeholders; it is concerned with CG effectiveness that enhances CSR within a stakeholder context. The broader view has attracted more attention in recent years for being more inclusive and for considering accountability and CSR. Such definitions adopted a broad view by considering a web of relationships not only between the firm and its shareholders but also between the firm and a broad range of other stakeholders including suppliers, customers, employees, communities and anyone who has a stake in the firm or is impacted by the firm’s objectives. This view tends to be expressed in the stakeholder theory (Solomon, 2010). A relatively early definition of the term CG – which sought to establish a broader remit than that enshrined in the agency theory – was
provided by Tricker (1984) who argued that the role of CG is not restricted with running the business of the corporation, but with providing the overall direction to the corporation, with monitoring and controlling executives’ actions, and with responding to legitimate expectations of accountability and relevant regulation by interests beyond the corporate boundaries. Other scholars and publications have also adopted the broad view and argued that stakeholders have different interests therefore the definition of CG ought to be referred to as a collection of different parts united as one body with the power to control, rule, authorize, and direct the corporation (Gregory, 2000; Ruin, 2001; Australian Standard, 2003; CIPFA/SOLACE, 2007; Mwenja and Lewis, 2009; the Audit Commission, 2010).

Considering CSR, the preceding literature provided various definitions of CSR from different perspectives (Carroll, 1979; Marsden and Andriof, 1998; Hill et al., 2008; Du et al., 2010; the European Commission, 2011). The implications of these definitions indicate that obeying the law and meeting the constrained regulations and other required standards is mandatory, while engaging in CSR ratings related to community investment and other discretionary expenditures that go beyond the law and constrained regulations is voluntary, as firms choose to engage in such CSR ratings voluntarily but not mandatorily. Therefore, the researcher believes that they are different engagements and there is a need to distinguish between CSR ratings adopted by firms voluntarily and CSR ratings adopted by firms mandatorily. Given the argument of the legitimacy theory (Suchman, 1995), firms obey the law and show compliance with the regulations in order to obtain legitimacy. However, for further benefits and with reference to the stakeholder theory (Freeman, 1984), firms targeting long-term sustainability strategies focus on community investment as the main stakeholder group. Therefore, this study develops two new categories and distinguishes between them as they are diverse features: voluntary CSR (termed as voluntary CSR specifically in this study to denote for proactive stakeholders’ strategies including investing in the community and engaging in discretionary activities such as philanthropic and charitable expenditures) and mandatory CSR (named mandatory CSR in particular in this study to indicate the level of involvement to meet the required standards and regulations).

The chapter is structured as follows. The next section discusses the motivation of the study, while Sections 1.3 and 1.4 review the scope of the study and the research objectives respectively. Section 1.5 discusses the research method used for this study while Section 1.6 reviews the
originality of the study and key contributions to knowledge. Finally Section 1.7 presents the structure of the rest of this thesis.

1.2 The Motivation of the Study

Since the empirical study of Mace (1971) who argued that boards of directors were largely rubber-stamps senior managements’ decisions, the topic of CG in general has seen a great deal of research. The development of the agency theory (Jensen and Meckling, 1976) offered a theoretical framework for a considerable volume of empirical works on CG mechanisms, particularly board structure and board characteristics (Agrawal and Knoeber, 1996; Bhagat and Black, 1997; Barnhart and Rosenstein, 1998; Han and Suk, 1998; Vafeas and Theodorou, 1998; Short and Keasey, 1999; Bonn et al., 2004; Dulewicz and Herbert, 2004; Andres et al., 2005; Florackis et al., 2009; Ameer et al., 2010; Mahadeo et al., 2012; Shukeri et al., 2012). Taking the perspective of the agency theory (Jensen and Meckling, 1976), these studies considered the financial economic aspect. However, research guided by the agency theory has received criticism for having a narrow theoretical lens through which to conduct CG research (Daily et al., 2003; Ghoshal, 2005; Roberts et al., 2005). These criticisms of the agency theory led to a call for alternative theoretical perspectives of CG that consider a wide range of stakeholders to be developed (Daily et al., 2003; Roberts et al., 2005). The primary alternative perspectives which guided the recent CG literature have been of the stakeholder theory (Freeman and Evan, 1990), legitimacy theory (Suchman, 1995), stewardship theory (Donaldson and Davis, 1991; Davis et al., 1997), and resource dependence theory (Pfeffer, 1972; Pfeffer and Salancik, 1978). The emerging of the stakeholder theory provided a theoretical framework for recent empirical research on CG mechanisms such as board structure and CSR (Pfeffer and Salancik, 1978; Johnson and Greening, 1999). The ownership structure mechanism has been considered by scholars within shareholder context (Morek et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Mura, 2007; Benson and Davidson, 2009; Florackis et al., 2009; Ellili, 2011). There is a need to understand the mechanism of boards’ ownership structure within a stakeholder context. This study continues in the recent tradition of CG research to determine the impact of the boards’ ownership structure mechanism on CSR through a quantitative research study.

Since a number of scholars pay attention to board structure resulting in an increase to our knowledge about this mechanism, this study is considering boards’ ownership structure –
principally managerial ownership – which has received limited attention from management academics, particularly in the UK. Through this study, a greater understanding of the impact of the contemporary boards’ ownership on CSR has been developed. In order to examine the effectiveness of share ownership rewarded to directors as an incentive tool to align their interests with those of shareholders, a model has been developed from reviewing the preceding literature and tested using a secondary data of a sample drawing from the FTSE4Good UK Index which is a part of the FTSE4Good Index Series that has been established to objectively assess the ethical behaviour of firms that meet globally recognised corporate social standards (FTSE, 2012). Specifically, this study is addressing the key motivators that may incentivise CEDs, NEDs and concentrated shareholders to promote voluntary CSR and mandatory connotations, and the total shareholdings percentage of both CEDs and NEDs was proposed to be considered as a motivator tool on both groups. Regarding concentrated shareholders, the total ownership of those holding 3 percent and over were considered in this research.

1.3 The Scope of the Study

The impact of CG mechanisms such as board structure and ownership on maximizing shareholders’ value has attracted numerous business scholars, economists, behavioural scientists, legal practitioners, and also financial and managerial researchers (Agrawal and Knoeber, 1996; Bhagat and Black, 1997; Barnhart and Rosenstein, 1998; Han and Suk, 1998; Vafeas and Theodorou, 1998; Short and Keasey, 1999; Bonn et al., 2004; Dulewicz and Herbert, 2004; Andres et al., 2005; Florackis et al., 2009; Ameer et al., 2010; Mahadeo et al., 2012; Shukeri et al., 2012). Since the 1990s, however, the corporate finance and corporate management literature have captured the ongoing debate regarding ownership structure and CSR relation (Coffey and Fryxell, 1991; Waddock and Graves, 1997; Johnson and Greening, 1999). With this in mind, the literature suggests that the key driver of CSR is the mechanism of corporate control (Carlson and Perrewe, 1995; Ciulla, 1999; Paine, 1996; Parry and Proctor- Thomson, 2002; Weaver et al., 1999; Basu and Palazzo, 2008). Andriof and McIntosh (2001) argued that CSR requires corporate directors to appreciate that firms’ operations have an effect on employees, customers, communities and the environment, and also influence the society into three broad overlapping areas; social, economic, and environmental issues.

Considering ownership implications, empirical studies have continued to show mixed results (Coffey and Fryxell, 1991; Graves and Waddock, 1994; Coffey and Wang, 1998; Johnson and
Greening, 1999; Kassinis and Vafeas, 2002; Neubaum and Zahra, 2006; Arora and Dharwadkar, 2011). Some argued that institutional shareholders, the dominant group of ownership structure, are myopic and give attention to quarterly return targets and hence eliminate CSR activities due to their long-term horizons and the uncertain consequences associated with them (Coffey and Fryxell, 1991). On the other hand, others argued that institutional owners (the concentrated owners) cannot exit the firm easily and thus engage in more CSR in order to mitigate the risk of unfavourable regulatory action, superior compliance costs, consumer retaliation, etc (Spicer, 1978; Neubaum and Zahra, 2006). These contradictions, however, have been resolved when Johnson and Greening (1999) posited that various types of institutional shareholders may possess a variety of interests regarding CSR. Johnson and Greening (1999, p. 564) stated that “some categories of institutional investors act more as traders concerned predominantly with quarterly earnings and that others act as long-term investors . . . more concerned with a firm’s social performance because it may impact financial performance over time.” Similar contradictions appeared when NEDs’ behaviour regarding CSR was examined. A greater proportion of NEDs on the board signals the company’s intention to give greater consideration to its external environment and legitimacy, which shows their intention to increase CSR engagements (Pfeffer and Salancik, 1978; Johnson and Greening, 1999). Contradictorily, the board of directors is elected primarily to protect shareholders’ interests and hence they intend to eliminate philanthropic activities (Coffey and Wang, 1998). Furthermore, Fligstein (1991) stated that these directors are elected for their financial expertise; Lorsch and Maclver (1989), Baysinger and Hoskisson (1990) and Deutsch (2005) argued that it is much easier for them to evaluate historical financial information than to select the option of using an uncertain strategy such as investing on Research and Development (R&D), entrepreneurship, innovation and CSR.

Numerous scholars have considered the relationship between CG mechanisms and CSR. However, this relationship is still ambiguous. Arora and Dharwadkar (2011) theorized that the substitute effect, the interdependence among various CG mechanisms (e.g., Rediker and Seth, 1995), is one of the grounds for the ambiguity surrounding preceding findings. Former research has commonly examined the mechanisms of various CG implications in isolation (Kesner and Johnson, 1990; Coffey and Wang, 1998; Johnson and Greening, 1999). In contrast this study assesses the implication of CG mechanisms by considering three variables of boards’ ownership structure: shareholding of Chief Executive Directors (CEDs), ownership of Non-Executive Directors (NEDs) and concentrated ownership including institutional shareholdings. This view
point appeared to be consistent with Agrawal’s and Knoeber’s (1996) as well as Arora’s and Dharwadkar’s (2011) recommendations for assessing various CG mechanisms simultaneously. The second cause of the ambiguity of previous research is combining all ratings of CSR. Recently, however, there is a growing consensus that social behaviour concerning proactive stakeholder relationship management issues and CSR concerning the violation of regulations and standards are diverse features that should be examined separately (Strike et al, 2006; Mattingly and Berman, 2006; Godfrey et al, 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011). In respect of preceding literature, this study considers two different features of CSR. Issues related to voluntary CSR (including sustainable practices, corporate philanthropy, charitable activities and investing in local community) are not on the same continuum as meeting mandatory CSR acts (including responding to the required regulatory framework on health and safety issues, environment and equal employment opportunities, or controversial acts such as on employment or human rights). As a result, voluntary CSR concerns proactive stakeholder relationship management and long-term sustainability strategies, while mandatory CSR concerns spontaneous compliance with the required standards and regulations, and thus these should not be combined.

In recent years, studies in CG have increasingly moved away from traditional studies investigating the impact of board structure and board characteristics on firms’ financial performance towards a greater interest in process research, examining the impact of different CG mechanisms on CSR (Coffey and Fryxell, 1991; Waddock and Graves, 1997; Johnson and Greening, 1999). This thesis continues this research by developing and examining a model, derived from preceding literature (Husted, 2003; Mitra and Cready, 2005; Arora and Dharwadkar, 2011; Mitra and Hossain, 2011; Withisuphakorn and Jiraporn, 2015; Deschênes et al., 2015), to investigate the impact of boards’ ownership structure on CSR engagements, and to determine the key drivers for good voluntary CSR. The primary aim of this research is to examine the impact of boards’ ownership structure on voluntary and mandatory CSR. To achieve this aim, the researcher is asking two research questions. Firstly, the main research question: How does boards’ ownership structure impact voluntary and mandatory CSR? And secondly, the supplementary research question: What are the key drivers for voluntary CSR? This thesis, therefore, seeks to contribute to the holistic understanding of CG mechanisms and CSR.
1.4 Research Objectives

Most specifically, the objectives of this study are as follows:

1) To critically appraise the existing literature concerning the influence of CG mechanisms on CSR and identify the research gap.

2) To develop a theoretical model from the literature in order to gain a better understanding of how boards’ ownership structure of UK firms can enhance CSR ratings.

3) To test the validity of the theoretical model developed through the defined set of hypotheses.

4) To derive recommendations for effective CSR practice taking into account the importance of boards’ ownership structure implications.

1.5 Overview of Research Method

The approach utilised for this research is a deductive, quantitative, positivist approach (Popper, 1959). The quantitative approach is concerned with establishing causal relationships between concepts in order to establish that the outcomes of a particular test can be generalised beyond the confines of the study location (Podsakoff and Dalton, 1987). A key characteristic of the quantitative paradigm is the replication of established outcomes and is a means in which the results applicable to other contexts may be discovered (Bryman and Bell, 2007; Podsakoff and Dalton, 1987). The overall aim is to establish if the contemporary boards’ ownership structure enhances voluntary CSR and mandatory CSR. The sample is drawn from the FTSE4Good UK Index over the period 2009-2013. Data for voluntary and mandatory CSR was drawn from Corporate Responsibility Indices (CR Indices) that include all firms engaging in both voluntary and mandatory CSR. The data was analysed in two stages using SPSS and STATA. The first stage considers how boards’ ownership structure decisions impact voluntary CSR and mandatory CSR expenditures using the logit regression model. The second stage employed panel data (fixed effects and random effects regression models) in order to further investigate the relationship between boards’ ownership structure and voluntary CSR and to consider the key financial corporate characteristics that enhance good voluntary CSR on a restricted sample of those firms that report the highest level of engagement of 70% and over as defined by the CR Indices.
Results of the stage 1 analysis shows that CEDs’ ownership, NEDs’ ownership and concentrated ownership have a significant positive relationship with mandatory CSR. However, outcomes indicate that share ownership of CEDs, NEDs and concentrated shareholders display a significant negative relationship with voluntary CSR, suggesting significant agency theory and stakeholder theory issues are impacting on decision-making regarding voluntary CSR. Findings of the stage 2 analysis indicate that board decision-making regarding voluntary CSR is similar to the stage 1 outcomes suggesting that those firms with the highest active engagement in voluntary CSR above a certain threshold may be seen as wealth reducing. The findings also indicate that firm performance and R&D intensity are the key enhancers of good voluntary CSR. There is evidence to suggest that firm age, variation in directors’ age and gender diversity have a positive relationship with voluntary CSR engagement.

1.6 Originality and Contribution to Knowledge

The original contribution to knowledge of this thesis is five-fold. First, new ratings were developed for CSR engagements by distinguishing between voluntary CSR and mandatory CSR ratings. A large group of stakeholders including communities was considered by this study via focusing on voluntary and mandatory CSR that lend contributions to the stakeholder theory and legitimacy theory. Secondly, this study concentrates on boards’ ownership structure as an issue of internal mechanisms of CG (Jensen, 1983) that contributes to the debate on the agency theory problems. Thirdly, this study contributes by providing new knowledge of the mechanism of boards’ ownership structure and its effectiveness on CSR in the UK. It is the first empirical, quantitative research to investigate the impact of boards’ ownership on two different engagements of CSR using UK data. This thesis contributes to the existing literature by establishing the relationship between boards’ ownership and CSR using secondary data collected manually from companies’ annual reports and contributes to the demand for longitudinal data.

Fourthly, this study contributes to the literature of the ownership mechanism by considering a multi-dimensional boards’ ownership, a more comprehensive set of boards’ ownership impacting voluntary and mandatory CSR than has been hitherto undertaken. The fifth and final contribution is that this study contributes to the knowledge for UK board practice and UK policy on CG in general and on boards of directors in particular. This research contributes to the implications for management and policy makers of an organisation. It informs management on how to attract investors according to their preferred investment time plan. It also helps
management of the compensation committee in how to think about redesigning a directors’ reward system – particularly in share options – in order to align their interests with long-term investors to attract more of them and secure a long-term source of finance. In addition, this research informs management on how to disclose the reward system and compensation to attract investors and thus reduce the agency cost of capital. This research adds greater emphasis on board gender (women on the board) that increases voluntary CSR. This is supportive of the rules concerning the number of female directors on boards. The research also contributes to the literature of directors’ age by highlighting the need to have members with various ages that allow boards to obtain a variety of knowledge, skills and experience.

1.7 Structure of Thesis

This thesis consists of eight chapters including the introduction chapter. The following section provides a summary of the content of these chapters and the structure of the thesis.

Chapter Two: This chapter provides the background to the study and begins with inclusive definitions of voluntary and mandatory CSR. The chapter proceeds with a brief history of CSR and the current trend in CSR. The chapter reviews the existing literature concerning research on CG mechanisms and CSR. The review revealed a conspicuous gap in the literature as there is a lack of studies considering two different features of CSR hence necessitating a review of general CSR literature in order to place the current research into proper perspective. This review provided the basis for the theoretical framework of this study which is discussed in the following chapter.

Chapter Three: This chapter explores the need for theoretical openness and reviews five theories used in the literature to explain the CSR phenomenon. This chapter also discusses the inter-relationship between theories and how their combination was applied to explain voluntary and mandatory CSR phenomena. This chapter reviews these theories from two different categories: Stakeholder, legitimacy, institutional, and resource dependence theories are examined to explore the key drivers for voluntary and mandatory CSR as external drivers while agency theory is examined to explore the instrumental economic and managerial perspectives regarding voluntary and mandatory CSR as an internal driver. The inter-relationship of these theories in understanding voluntary and mandatory CSR is identified and explored, hence leading to deducing ten propositions.
Chapter Four: This chapter deconstructs the propositions deduced from reviewing theories in Chapter 3 into the main research question and the development of six hypotheses related to this research question. From the total of six hypotheses developed, three are based on the interactions of legitimacy, agency, institutional and resource dependence theories, while the other three are based on the interactions of stakeholder and agency theories. A model is developed and discussed which links the literature discussed in this study, the theories, and the developed hypotheses.

Chapter Five: This chapter provides details of the methodology used in this study to investigate the hypotheses developed in Chapter 4. The chapter begins with a brief review of the philosophical and epistemological position of the research and proceeds with a discussion of the philosophical position of different research paradigms including both the quantitative and qualitative paradigms. It provides the process of research design and methodology of this thesis with justifications. This research is based on quantitative research aiming to establish the relationship between boards’ ownership structure and CSR over a 5-year period, taking into account some other factors that may affect this relationship. This chapter discusses these factors and justifies their inclusions as control variables in this study. It reports variable measurements and the data analysis process. Two stages of analyses take place in this study: the logit model and panel data analysis. These models are presented in this chapter.

Chapter Six: This chapter provides findings of the main analysis (stage 1 analysis) where the logit model is employed. It presents the results and outcomes of the model and hypotheses to investigate the probability relationship between boards’ ownership and CSR. The logit model is used to test the probability of the relevant hypotheses developed in Chapter 4, Hypotheses Development. This chapter also discusses the outcomes of the analysis in relation to preceding literature, and identifies and discusses contributions to knowledge stemming from this study.

Chapter Seven: In this chapter, results of the further analysis (stage 2 analysis) – where the fixed and random effects models were employed – are reported. This chapter provides the findings of the models and hypotheses to further examine the impact of boards’ ownership structure on voluntary CSR and to identify the key drivers for good voluntary CSR. Panel data (the fixed and the random effects models) is used to examine the hypotheses developed in
chapter 4. This chapter also discusses the results of the analysis in relation to existing literature and the contributions to knowledge stemming from this research.

**Chapter Eight:** This chapter provides a summary of the main outcomes of this research. It also concludes this research study by highlighting the new general contributions to knowledge emerging from it. The potential implications of the findings for management and policy makers are discussed. The chapter also offers the limitations of this study and proposes the directions for further research.
Chapter Two: Background to the Study

2.1 Chapter Overview
This chapter provides background to the research by reviewing prior literature related to the subject area of this study – CSR. However, various search engines employed in the search of literature for the subject area found very few studies that investigated different ratings of CSR separately. On the other hand, CSR in general and CG linkage has received a lot of conflicting literature ranging from firm characteristics (Anderson and Frankle, 1980; Ullmann, 1985; Gray et al., 1988; Belkaouki and Karpik, 1989; Mangena and Pike, 2005; Tsamenyi et al., 2007; Arora and Dharwadkar, 2011; Mishra and Modi, 2013) to board features (Ho and Wang, 2001; Haniffa and Cooke, 2002). Yet, the relationship of boards’ ownership structure and voluntary and mandatory CSR has not been explored before. Therefore, this chapter reviews studies on CG mechanisms and CSR in general to identify the research gap and briefly mention a theoretical framework for the current study and finally to serve as a link of previous findings to the current research problem.

The first section of this chapter provides background information on CSR. This section starts with definitions for voluntary and mandatory CSR and then proceeds with a historical perspective and current trends in CSR. The second section of this chapter discusses CG and CSR. This section begins by reviewing CSR dimensions of engagements followed by CSR categories and then proceeds with studies concerning CG and CSR. The third section of this chapter reviews previous studies on CSR.

2.2 Background Information
2.2.1 Definitions of Voluntary and Mandatory CSR
Andriof and McIntosh (2001) stated that CSR requires corporate directors to appreciate that firms’ operations have an effect on employees, customers, communities, and the environment and influence societies into three broad overlapping areas;

a) Social issues such as involvement in education, regeneration, social inclusion and employee volunteering;
b) Economic issues including reducing the unemployment level, product value and ethical trading standards;
c) Environmental issues such as considering emissions and waste management, energy use and product life cycle.

CSR, therefore, is founded on good corporate citizenship that needs to appraise and manage the firm’s wider effect on society for its interest as well as the community’s benefits in general (Marsden and Andriof, 1998). According to the European Commission (2011), being socially responsible indicates that firms must take responsibility for their influences on society beyond legal constraints. Adopting CSR means that firms need to go beyond the law and integrate issues including social, ethical, environmental, human rights, and consumer concerns into their business activities and their core strategy alongside with the aim of maximizing the shared value of both groups, the shareholders and other stakeholders, and mitigating any possible adverse influences. Similarly and considering stakeholders perspectives, Du et al. (2010, p. 8) defined CSR as “a commitment to improve societal well-being through discretionary business practices and contributions of corporate resources”.

Other definitions were provided considering strategic perspectives such as the one provided by Hill et al. (2008, p. 6) who defined CSR as “actions that enhance a firm’s competitiveness and reputation”. A prior CSR definition that attempts to bridge the gap between economics and other practitioners was provided by Carroll (1979, p. 500) who defined CSR as “the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time”. Based on this definition, Carroll (1991; 1993) later incorporated four CSR categories into his pyramid of CSR which is critically discussed later in this chapter.

However, while the preceding literature provided various definitions of CSR from different perspectives, it can be seen that involving in CSR ratings related to community investment and other discretionary expenditures go beyond the law and constrained regulations where firms choose to engage in such CSR ratings voluntarily, but not mandatorily. Hence, there is a need to distinguish between CSR ratings adopted by firms voluntarily and CSR ratings adopted by firms mandatorily. Given the argument of the legitimacy theory (Suchman, 1995), firms obey the law and show compliance with the regulations in order to obtain legitimacy. However, for further
benefits and with reference to the stakeholder theory (Freeman, 1984), firms targeting long-term sustainability strategies focus on community investment as the main stakeholder group. Therefore, this study develops two new categories and distinguishes between them as they are diverse features: voluntary CSR (termed voluntary CSR specifically in this study to denote for proactive stakeholders’ strategies including investing in the community and engaging in discretionary activities such as philanthropic and charitable expenditures) and mandatory CSR (named mandatory CSR in particular in this study to indicate the level of involvement to meet the required standards and regulations).

In order to properly define voluntary CSR, there is a need to explain what corporate community investment means. Moon and Muthuri (2006) argued that corporate community investment refers to the business engagement in social activities in an attempt to satisfy the needs of the society in which they operate. This means community investment includes time commitments and corporate resources to community projects that go beyond donation of cash gifts or charitable and philanthropic giving. Such projects could vary from supporting societies in enhancing health, education, aids to victims of war or to developing countries. Reports on community engagement indicate that school programmes and education appeared to be the most important feature to firms followed by employee involvement (volunteering) (KPMG, 2005). Although many firms donate cash gifts to good cases as part of their engagement in voluntary CSR, the community investment strategy involves far more than providing donations or charities; it includes allowing communities access to firms’ equipment or infrastructure, human resources and business capacity (Moon and Muthuri, 2006). Drawing heavily on these arguments, this study adopts this definition of community investment and thus voluntary CSR.

2.2.2 Historical Perspective
Going back to the sixteenth century, firms were seen as vital centres of power that impact the population’s lives in various ways (Bowen, 1953). CSR was seen as a way of guiding business in the future and answering whether firms have social responsibility, but was not seen as a panacea for all firms’ social issues (Bowen, 1953). According to Bowen (1953, p.6) social responsibility “refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society”. From a normative point of view, Bowen’s (1953) book explains that institutional orientation causes corporate managers to be concerned about their social
responsibilities, and argues that the institutional changes which had been occurring during the first half of the twentieth century contribute to this. As a result, Carroll (1999) has asserted that for such early and seminal arguments, Howard Bowen should be denoted as the “Father of Corporate Social Responsibility” Carroll (1999, p.270). Following Bowen’s work, Drucker (1954) argued that when managers set their business objectives, they should include public responsibility as one of the eight key areas of CSR. Drucker (1954) followed Bowen’s arguments regarding the ethical obligation to recognise the growing requirement for the manager to assume responsibility for the public good. Furthermore, Drucker (1954, p. 388) stated: “it has to consider whether the action is likely to promote the public good, to advance the basic beliefs of our society, to contribute to its stability, strength, and harmony”. In line with Bowen’s standpoint, Drucker (1954) asserted that public responsibility objectives should be set according to prevailing political and social status as perceived by managers.

During the 1960s, the CSR literature had seen a significant expansion as it had concentrated on the actual meaning of CSR and its importance to business and society (Carroll, 1999; Carroll and Shabana, 2010). Frederick (1960, p. 60) stated that social responsibility “implies a public posture toward society’s economic and human resources and a willingness to see that those resources are used for broad social ends and not simply for the narrowly circumscribed interests of private persons and firms”. Other arguments concerning social responsibility had been raised during the 1960s that contributed to the conceptual evolution of CSR. McGuire (1963) argued that CSR requires firms to assume certain responsibility for society, which extend beyond their economic and legal obligation. A Contradictory viewpoint was presented by Friedman (1962), who stated that social responsibility subverts its own order when it denies the principle of profit maximisation set by the capitalists. Friedman (1962, p. 133) asserted that “few trends would so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their shareholders as they possibly can”. In line with Friedman’s (1962) assertion and in an even more radical way, a prior perspective was presented by Levitt (1958, p. 42), who affirmed that “corporate welfare makes good sense if it makes good economic sense – and not infrequently it does. But if something does not make economic sense, sentiment or idealism ought not to let it in the door”. Another concept of CSR had been raised during the second half of the 1960s. Davis (1967) asserted that social responsibility broadens a businessman’s perspective regarding the entire social system. Davis (1967) argued that according to the mutual dependence between businesses
and society, businesses do not sustain alone and that a good business cannot exist within an unhealthy society. Moreover, Walton (1967) highlighted the need to oppose the coercive character of CSR. Walton (1967) provided work that incorporates an ethical orientation concept to CSR and accepts that costs associated with CSR action may not be possibly measured in terms of an economic return. Towards the end of the 1960s, Heald (1970) raised similar arguments with those of Davis (1967) and Walton (1967). Heald (1970) asserted that CSR includes ratings such as employee improvements, customer relations, shareholders relations and philanthropic activities. The periods of 1960s and 1970s were characterised as a stage of “corporate social responsiveness” (Frederick, 2008). In these two decades, research on CSR was carried out at a macro-social level (Lee, 2008).

In 1970, the acceptance of laws, ethical customs and free market rules in CSR were added to Milton Friedman’s previous work on CSR (Friedman, 1970). For the long-term profitable firms, the integration of some social demands into the firm was also accepted as long as these social actions were justified within the companies’ own self-interest (Friedman, 1970). In addition, the work of the “Iron Law of Responsibility” (Davis, 1973) was established in 1973 by reinforcing Davis’s prior work (Davis, 1967) with it. This work requires compatible conduct with the social power of businesses (Davis, 1973), which means that the firm will lose its position in society if it does not use its social power, and other groups will occupy its position. Davis (1973, p. 63) claimed that “Whoever does not use his social power responsibly will lose it. In the long run those who do not use power in a manner which society considers responsible will tend to lose it because other groups eventually will step in to assume those responsibilities”. In 1979, a comprehensive framework to understand various thoughts on CSR was developed. Carroll (1979) categorized CSR into four domains based on the following definition: “The social responsibility of business encompasses the economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time” (Carroll, 1979, p. 500). The discretionary component represents voluntary activities that firms assume but for which society does not provide a clear-cut expectation, as it does in ethical responsibility (Carroll, 1999). Examples of voluntary roles over the period when it was written are: “conducting in-house programs for drug abusers, training the hard-core unemployed or providing day-care centres for working mothers” (Carroll, 1979, p. 500). The four domains of CSR provided by Carroll (1979) proposed a conceptual model of corporate social performance that gained acceptance and was further developed by other scholars including Wartick and Cochran (1985)
and Wood (1991). The 1970s was a decade during which companies’ directors applied traditional management functions to deal with CSR issues, the majority following the enlightened self-interest model (Carroll, 2008).

During the 1980s, business and social interests had become closer and companies had shown more response to their stakeholders (Moura-Leite and Padgett, 2011). This decade witnessed development on CSR related concepts and themes such as corporate social performance, corporate social responsiveness, corporate citizenship, business ethics, public policy, and the stakeholder theory (Waddock, 2004; Moura-Leite and Padgett, 2011). An analogy with the political process was drawn by Jones (1980), who argued that the appropriate procedures of CSR should be fair, where the interests of all stakeholders are heard. Jones (1980) emphasized the importance of the process of CSR implementation rather than the process of conceptualization. In addressing the relationship between business and society, Drucker (1984) claimed that CSR can be a good opportunity for businesses as it can enhance firm profitability. In line with Drucker’s (1984) claim, other researchers asserted that CSR has a positive impact on corporate financial performance (Cochran and Wood, 1984). The 1980s decade had witnessed a significant reference concerning stakeholders (Freeman, 1984), since it triggered thinking around this group. Considering the same concept, older references can be found, but Freeman (1984) extended the scope when he proposed the following definition of stakeholders group: “any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman, 1984, p. 46). The traditional corporate strategy attention to stakeholder’s consideration could lead to unethical, immoral or illegal actions (Freeman, 1984). There is a need to recognize the increasing importance of ethics, as evidenced by the expansion of business ethics codes and the growth number of courses on ethics in business schools (Freeman, 1984). Thus the concept of stakeholder management, provided by Freeman (1984), addressed the integration force to consider CSR, moral/ethical issues and values. Moir (2001) argued that the stakeholder theory of the firm, proposed by Freeman (1984), is used as a starting point to analyse those groups for whom the firm should be responsible. Within the stakeholder perspective, the variation between the economic and social objectives of a firm no longer exists, as the main objective is the firm performance that is addressed not only by their shareholders, but also by other groups of stakeholders such as customers, employees and governments (Carroll, 2008). Other scholars had worked in improving the knowledge involved in the relationship between firms and their stakeholders (Clarkson, 1995; Donaldson and Preston, 1995; Jones, 1995).
During the 1980s, CSR consideration had seen modification into alternative concepts, theories and models, and scholars found that social and economic concerns within corporations had come closer and had become more responsive, but could not yet be tightly coupled together (Lee, 2008).

2.2.3 Current Trends in CSR

Since around 1990 to date, the concept of CSR has become almost universally sanctioned and promoted by all of society’s constituents including corporations, governments, non-governmental organisations and consumers (Moura-Leite and Padgett, 2011). Waddock (2008) asserted that international organisations – such as the Organisation for Economic Co-operation and Development, the World Bank, the International Labour Organisation and the United Nations – have also supported CSR, and aggressive guidelines were established to continue the evolution. Moreover, by the end of the 1990s, Lee (2008) discovered that approximately 90 percent of the Fortune 500 firms listed CSR as one of their objectives, actively reporting events related to CSR held by these firms in their annual reports. Comparing this percentage in 1990 with the percentage in 1977 (less than 50 percent), this shows an increase of more than 40% which supports the development of corporate social behaviours. Since the mid-1990s, the internet and related technologies have enhanced the global communications capability that has led to the increase of institutions’ power to build more pressures on organisations to adopt greater CSR (Waddock, 2008; Moura-Leite and Padgett, 2011). Waddock (2008) argued that since the mid-1990s, most firms’ assets have been found not in tangible assets, but rather in intangible assets including goodwill, human resources and reputation that highlight CSR importance. In the 2000s, researchers paid more attention to CSR which was coupled with strategy literature, and their relationship with firm performance was made more explicit (Orlitzky et al., 2003; Porter and Kramer, 2006). Recently, the stakeholder theory became the central spine of CSR research as it has been used by researchers in exploring the impact of CSR on firms’ financial outcomes and competitiveness (Berman et al., 1999; Ruf et al., 2001; Brammer and Millington, 2008; Surroca and Tribo, 2008; Surroca et al., 2009). It can be noted that the focus of CSR research has moved away from an ethics orientation to a financial performance orientation, and the level of investigation has shifted away from a macro-social scale to a firm scale. Studies on the link between CSR and firm performance have also altered over time from being exclusive to being inclusively requested from CSR scholars (Moura-Leite and Padgett, 2011). Furthermore, the relationship between CSR and firm performance has
received urgent demands from the literature in recent years as evidence shows that 70 percent of
global CEDs trust that CSR is vital to their businesses’ financial success (Vogel, 2005). In other
words, CSR is developing into a core business function that is fundamental to the corporation’s
overall strategy and very important to its success (Vogel, 2005). As mentioned above, the
institutional power to put more pressure for CSR enhancement has augmented extensively,
particularly in the recent 25 years (Waddock, 2008; Moura-Leite and Padgett, 2011). New rules
of CSR behaviour were brought up by the emerging institutional infrastructure of CSR,
specifically for large, multinational firms (Waddock, 2008). The aim of these rules is to go
beyond maximising shareholders wealth, and enhance corporate behaviour concerning social,
environmental and governance issues. Currently, large firms are expected to consider
sustainability of the business in the long-run, live up to the expectation of the required principals
and standards, adopt transparency, and involve with stakeholders in dialogue, partnerships, and
action (Lee, 2008).

2.3 The Importance of CSR
Firms worldwide have recently paid considerable awareness to CSR that has become a corporate
behaviour and management philosophy (Carroll and Shabana, 2010). CSR involvement can be
adapted by responding to issues related to mandatory CSR that is involuntary by complying with
the relevant standards and regulations such as mandatory environmental issues (e.g. waste
management). Adopting CSR can also be done by involving in voluntary issues such as
investing in communities and contributing in philanthropic activities. Firms choose to adopt
voluntary CSR to gain a competitive position that improves firm sustainability for the long-term
basis. This thesis pays more attention to this aspect by focusing on the impact of boards’
ownership structure as one of the CG mechanisms on CSR. This section of the chapter begins
with a review of CSR dimensions of engagements and then proceeds with a discussion on CSR
categories. This section also discusses studies concerning CG and CSR.

2.3.1 CSR Dimensions of Engagements
In examining CSR, different studies have used different ratings of CSR. Some research used a
wide range of CSR ratings including product quality, environmental performance, social ethics,
community issues, etc (McWilliams and Siegel, 2000; Waldman et al., 2006; Padgett and Galan,
2009; Arora and Dharwadkar, 2011; Maria and Sanchez, 2011; and Lioui and Sharma, 2012;
Rakotomavo, 2012; Kim and Jeon, 2015; Withisuphakorn and Jiraporn, 2015). While other
researchers focused on a specific rating such as the quality of community disclosures in annual reports (Yekini et al., 2015). The majority of US scholars used the Archival ratings of CSR. The use of Kinder, Lydenberg and Domini (KLD) ratings of CSR is fairly standard in the US literature. The major social performance includes eight categories: governance and transparency, employee issues, human rights, product quality, diversity, environment, community relations, and other concerns (Arora and Dharwadkar, 2011). Previous research has transformed these ratings into a composite index (Waddock and Graves, 1997; Hillman and Keim, 2001). Recently, however, there is a growing consensus that some CSR ratings are different to other ratings which means diverse dimensions of engagement should be examined separately (Strike et al., 2006; Mattingly and Berman, 2006; Godfrey et al., 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011). It was argued that KLD strengths that mainly concern corporate philanthropy, gender and racial diversity, good union relations, green products or processes, innovation, and the like is not on a continuum with issues regarding the violations of the regulations set by agencies such as Equal Employment Opportunity Commission (EEO), Occupational Safety and Health Administration (OSHA), Environment Protection Agency (EPA), and/or Fair Trade Commission (FTC), and thus should not be combined (Mattingly and Berman, 2006; Godfrey et al, 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011). As a result, and according to the above arguments and justification provided above in (Section 2.2.1), this idea is adapted by this thesis as the researcher believes that investing in the community and involving in philanthropic and charitable activities differ from other ratings of CSR such as compliance with the law and standards related to employee rights and mandatory environmental issues (such as waste management) and thus should be investigated separately. Therefore, two different dimensions of engagements were developed specifically for this study; voluntary CSR (to refer to costly discretionary proactive stakeholders’ strategies such as investing in the community, philanthropic and charitable activities) and mandatory CSR (that is concerned with the adherence to meeting the required standards and regulations on ratings including marketing ethics, employee rights, and mandatory environmental issues).

2.3.2 CSR Categories
This section reviews CSR categories and models that represent the overlapping between these categories. Carroll (1979) categorized CSR into four domains which later were incorporated into a “Pyramid of Corporate Social Responsibility” (Carroll, 1991) which is illustrated in Figure 2.1.
Figure 2.1 shows four different layers in Carroll’s (1991) pyramid of CSR that help firms value the different aspects of obligations that society expects of corporations. The above layers are further elaborated below.

**The economic layer:** The bottom layer of the pyramid represents the economic responsibility to shareholders and other stakeholders as it considers the responsibility of firms providing goods or services demanded by society, hence generating profit. Novak (1996) suggested that the main responsibility of firms (their responsibility to shareholders) is given priority, where firms have to deliver a reasonable return on shareholders’ investments. Employees come second as they require safe and fairly paid jobs, followed by consumers who need good quality goods or services at a fair price. This shows the main responsibility of a firm as it is to be a properly functioning economic unit and remain in business. Carroll (1991) dealt with the economic responsibility as the base of the pyramid and all other responsibility layers rest on it.

**The legal layer:** The second bottom layer of Carroll’s (1991) pyramid displays the legal responsibility that requires firms to obey the law and play by the rules of the game. The misconduct and denying the legal responsibility could be costly and the US software giant Microsoft is the best example which resulted in tough settlements against the business when it
faced a long running anti-trust case in Europe for abusing its monopolistic place to disadvantage its rivals.

**The ethical layer:** The third bottom layer of Carroll’s (1991) pyramid represents ethical responsibility that covers the society’s general expectations above and beyond the economic and legal responsibilities. Ethical responsibilities of firms consist of a wide range of issues which are not necessarily imposed by the law, however, the society and the government expected firms to respond satisfactorily to these issues and behave ethically. Shell is the best example of these issues, where the government intervened by taking action due to the disagreement of the public and society after the disposing of oil platform.

**Philanthropic layer:** The top layer of Carroll’s (1991) pyramid represents firms’ philanthropic responsibility that concentrates on further luxurious activities such as enhancing the quality of employees’ life, investing in local communities and society in general. Philanthropic activities are not required by the law but are desirable as firms choose to have good corporate citizenship. Schwartz and Carroll (2003) argued that Carroll’s (1991) pyramid has a considerable value in CSR literature. However, the use of the pyramid framework to portray CSR categories may be confusing or inappropriate for a number of applications. Firstly, the pyramid framework indicates for the hierarchy of CSR categories that may be led to conclude that philanthropic responsibility is the most important or extremely valued layer for being the top of Carroll’s (1991) pyramid, while the economic responsibility is the least important and slightly valued for being represented by the bottom layer. Reidenbach and Robin (1991) built their conceptual model of corporate moral development based on the hierarchal order of Carroll’s (1991) pyramid, although this was not Carroll’s (1991) intention of the pyramid ranking priorities since he stipulated that the economic and legal categories are the most essential while the philanthropic responsibility is considered less crucial than the other three categories. Secondly, Carroll (1993) recognised that the overlapping nature between CSR categories cannot be fully captured by Carroll’s (1991) pyramid. Mutuality exists in an integral characteristic of CSR (Clarkson, 1991) and any proposed CSR model must include such fundamental importance and should be clearly depicted.

Thirdly, the use of the discretionary philanthropic responsibility as a separate category can be confusing and might be seen as an unnecessary category (Schwartz and Carroll, 2003). Carroll
(1993) acknowledged that it could in fact be a “misnomer” to name philanthropic activities “responsibilities” relevant to their voluntary or discretionary character. L’Etang (1994) argued that philanthropic activities should not be considered as a responsibility in itself. Schwartz and Carroll (2003) suggested that if philanthropic activities were believed to exist, it would be better of the new CSR model proposed to subsume this category under ethical and/or economic responsibilities. This placement could be justified as it is sometimes difficult to distinguish between philanthropic and ethical activities on both a theatrical and practical level and also philanthropic activities may merely be based on economic interests. Shaw and Post (1993) argued that corporate philanthropy could be based principally on economic motives, and often referred to as “strategic philanthropy” or “strategic giving” (Yankee, 1996). Strategic philanthropy is adopted by corporations for a number of reasons such as increasing sales, helping to improve public image, or to improve employee morale, corporate community involvement or corporate giving to charitable organizations that can help sustain the bottom line for corporations in the long-run (Schwartz and Carroll, 2003). The weaknesses of Carroll’s (1991) pyramid were considered by Schwartz and Carroll (2003) when they proposed a new model (Venn Model Framework of Three-Domain Approach to CSR) with the intention to provide a more appropriate means and theoretical framework by which to categorize CSR activities. Figure 2.2 illustrates The Venn model framework that consists of seven CSR categories resulting from the overlap of the three core domains: economic, legal, and ethical.
The idea of the “Three-Domain Model of CSR” (shown in Figure 2.2) is based on Carroll’s (1991) pyramid of CSR and proposed as an alternative means of depicting categories of CSR and orientations which pervade the business community. The “Three-Domain Model of CSR” eliminates the separate philanthropic responsibility and incorporates it within the ethical and/or economic domains. The new proposed model intended to completely and accurately describe the relationship between the three central CSR categories: economic, legal, and ethical. The new model also eliminated the inherent assumption of a hierarchical relationship amongst the layers which some perceived in Carroll’s (1991) pyramid (Schwartz and Carroll, 2003).

Corporations involve in community investment, philanthropic and charitable activities to help improve their competitive advantage and this in turn leads to business sustainability in the long-term basis (Schwartz and Carroll, 2003). However, Arora and Dharwadkar (2011) argued that
effective CG discourages features related to voluntary CSR, but good firm performance directs to greater CSR. Therefore, the level of voluntary CSR engagement is based on firm performance (the financial aspect), while the level of engagement in CSR features related to mandatory CSR might be independent of firm performance but is still really important for firm acceptance as compliance with the required standards and regulations will reward corporate legitimacy and vice versa. Reducing or denying compliance with the required standards and regulations could lead to the collapse of the business and Enron is the best example of this problem (Zandstra, 2002; Neal and Cochran, 2008). Some regulations were emerged and amended as a result of such an event (Chhaochharia and Grinstein, 2007). The next section explores CG and CSR including the legal category of CSR and the emergence of some regulations, and the importance of firms’ compliance.

2.3.3 CG and CSR

In the 1990s, large publicly listed companies were concerned with the creation of firm value for shareholders and senior management began to look at CSR as a means to improve firms’ competitive advantage. Husted (2003) examined corporate experience in undertaking CSR activities and built a decision-making framework drawn from that experience which is consistent with current thinking in the field of strategic management. Husted’s (2003) study shows that the positive impact of CSR on firm value can be enhanced by considering the costs of coordination and motivation of alternative models of governance and their fit with the nature of CSR activities. It was suggested that firms exercising good ethics and good CG are rewarded by the financial markets, while firms exercising poor ethics and poor CG are penalized. Neal and Cochran (2008) argued that there are market forces at work which emphasize good CSR behaviour. Neal and Cochran (2008) examined the lesson from Enron, the most prominent bankruptcy, that resulted not only from expansion into areas outside its expertise, but also from the fraudulent accounting, which consisted of mainly pumping up the profits of the energy trading business. This indicates that markets not only pay attention to CG, but they reward good governance and penalize poor governance, which in turn is integral to CSR. Moreover, several months after the Enron lesson, accounting irregularities and corporate misconduct were identified in a number of other companies including Tyco and Worldcom (Neal and Cochran, 2008).
It was assumed that CSR will improve the reputation of the firm which would be beneficial in the event of a crisis (Grow et al., 2005), but contradictory results were revealed when Linthicum et al. (2010) examined the effect of CSR on price performance of Arthur Andersen (AA) which was associated with the Enron audit collapse. Following the announcement that AA shredded documents related to Enron audit, Linthicum et al. (2010) found evidence of negative returns associated with this event but found no evidence that mitigated this negative return when examining the net social responsibility score. An indicator variable coded one if the net social responsibility score is positive and zero otherwise, and an indicator variable coded one if the firm is a member of the Domini 400 social index and zero otherwise. This evidence indicates that reputation gathered by engaging in voluntary CSR does not help to overcome the negative consequences resulting from neglecting mandatory CSR (an action as violating the accounting rules), as argued by Linthicum et al. (2010) that the continuation of taking the action by senior executives that reflects good social behaviour leads to avoiding share price decline, but does not help to recover from future misconduct.

### 2.3.3.1 The Impact of Current Regulations and CSR

The recent corporate scandals including Enron had led to the Sarbanes Oxley Act (SOX) and various amendments to the US stock exchange’s regulations. Chhaochharia and Grinstein (2007) tested the effect of the announcement of these rules on a sample of various sized US firms and found that this information had a significant effect on firm value. Firms that are less compliant with the rules earn positive abnormal return in comparison with firms that are more compliant. When Chhaochharia and Grinstein (2007) considered firm size, results indicate that those large firms which are less compliant generate positive abnormal return while those small firms which are also less compliant earn negative abnormal return. The rationale for imposing different provisions of rules is to ensure alignment of incentives of senior executives with the maximization of shareholders’ wealth as well as to eliminate the likelihood of corporate misconduct and fraud (Chhaochharia and Grinstein, 2007). These provisions are in fact including penalizing officers who are charged with forging documents and requires more timely disclosure of equity transactions by corporate insiders, the independence of audit committees, certification of financial statements, the effectiveness of internal control, and eventually the level of independency of directors on corporate boards and board committees that choose new directors and compensate managers (Chhaochharia and Grinstein, 2007). In contrast, prior studies on the effect of SOX on firm value arrive at contradictory results with those of
Chhaochharia and Grinstein (2007) as Li et al. (2004) and Rezaee and Jain (2005) discovered a positive impact of the release of SOX on firm value. The following section discusses the literature concerning different CG mechanisms and CSR relations.

2.3.3.2 CG Mechanisms and CSR

Mitra and Hossain (2011) argued that the diligence of the board, management ownership concentration, and CEO-independent boards have a significant favourable effect on ICMW (Internal Control Material Weaknesses’) remediation particularly on non-systematic internal control problems with a greater remediation function of ownership characteristics as well as board diligence. Mitra and Hossain’s (2011) arguments came as a result of their examinations of whether any association between CG attributes and the remediation of ICMW exists in the financial reporting of 528 companies which are pursuant to Section 404 of the Sarbanes-Oxley Act (SOX) 2002. Results indicate that management stock ownership and board diligence have a significant positive impact on diminishing negative CSR (diminishing misconduct and showing more compliance with the required regulations). Former studies (such as Doyle et al., 2007) evidenced that several firm-specific factors were behind several control weaknesses such as firm size (smaller companies tend to disclose ICMW), firms’ financial position (firms with financial weaknesses), firms with more complex operations, firms which grow rapidly, or firms which undergo restructurings such as Enron (Doyle et al., 2007). These factors might be identified as ineffective decisions taken which indicate internal control weaknesses (ICMW). This in turn can be justified as CG being ineffective. The mainstream of previous studies that tested the impact of various CG mechanisms on earnings management and negative actions related to CSR – including Dechow et al. (1996), Gillan and Starks (2000), Klein (2002), and Mitra and Cready, (2005) – had found that both the internal and external governance mechanisms – specifically equity ownership structure and board characteristics including audit committee – were noticeably associated with the elimination of management opportunistic earnings that indicates for more integrity and minimising negative CSR. This thesis focuses on the relationship between CG and CSR engagements, namely voluntary CSR as well as mandatory CSR.

Based on the original notion presented by Bass (1985) regarding transformational leadership, Waldman et al. (2006) investigated the impact of CEOs’ components on different ratings of CSR. Waldman et al. (2006) made an exploration on the debate appearing in prior literature surrounding the probable correlation between charisma and transformational leadership.
Waldman et al. (2006) argued that the loadable emphasis of charismatic leadership pronounced by preceding literature may not be theoretically appropriate for CSR outcomes as their examinations emphasised on the significant role of CEOs’ intellectual stimulation on the tendency of the organisation to engage in CSR rather than CEOs’ charisma. Waldman et al. (2006) results indicate that intellectually stimulating leaders appeared to be mostly germane to strategic issues such as product quality and environmental performance, but do not significantly concern social ethics such as community issues. Despite the argument put forward by Agle et al. (1999) – which indicates that all CEOs, charismatic or not, are put on pressure by certain stakeholders to adhere to CSR demand – Waldman et al. (2006) found no relationship between charismatic leadership and CSR. This could be due to the market condition during financial crises where CSR expenditure could be seen to be unwise, though CEO charismatic appeal might lead to a strategic CSR pursuit in order to retain a favourable image.

Bass and Steidlmeier (1999) and Howell and Avolio (1992) argued that not all CEOs have moral appreciations related to CSR as some CEOs may have personal motivations toward personal-aggrandizement. Therefore, this thesis proposed to select another motivation that may incentivise CEOs to promote voluntary CSR and eliminate any misconduct issues related to mandatory CSR. In addition, directors’ ownership was proposed to be examined as a motivator tool. Furthermore, testing only one dimension of boards’ ownership (the CEO’s ownership) may lead to biased results instead of reflecting a proper relationship as Demsetz (1983) argued for. Demsetz and Lehn (1985) had also evidenced that ownership structure is endogenous when examining the relationship between the firm’s ownership structure and its performance. Demsetz and Villalonga (2001) stated that most of these empirical studies that considered ownership structure and firm performance relation had arrived to conflicting results. Such studies include Hermalin and Weisbach (1988); Morck et al. (1988); McConnell and Servaes (1990); Loderer and Martin (1997); Cho (1998); Holderness et al. (1999) and Himmelberg et al. (1999). Demsetz and Villalonga (2001) justified this conflict for being misconduct due to the use of different measurements of firm performance and different dimensions of ownership structure and, eventually, whether the ownership’s endogeneity1 has been taken into account across these studies. Demsetz and Villalonga (2001) considered a multi-dimensional ownership

1 Endogeneity refers to the existence of an endogenous independent (explanatory) variable in a model. The endogenous variable is one that is correlated with the structural error term (also referred to as “disturbance term” or “residual”) due to an omitted variable or measurement error (Wooldridge, 2013).
and the endogeneity issue in examining the ownership structure and firm performance connection, and found no systematic relationship between them that appeared to be consistent with the thought of ownership diffuseness. As a result, the endogeneity issue was considered in this thesis by focusing on all dimensional ownership of the board including ownership of executive directors, ownership of non-executive directors and ownership of concentrated shareholders.

Over the recent decades, the corporate finance literature has received ongoing debates regarding ownership structure and corporate performance relation while more recently management researchers have been interested in investigating the influence of CG on rating CSR. The literature suggests that the key driver of CSR is corporate control (Carlson and Perrewe, 1995; Paine, 1996; Ciulla, 1999; Parry and Proctor-Thomson, 2002; Weaver et al., 1999). It might be reliable to consider corporate control mechanisms that either complement or weaken particular CSR dimensions (Basu and Palazzo, 2008). Basu and Palazzo (2008) proposed a progression model of organisational sense-making, explaining how senior executives think, discuss, and act within a framework of stakeholder expectations, and with the world as a universal consideration. Basu’s and Palazzo’s (2008) proposal concluded a set of cognitive, linguistic, and conative aspects to determine such an intrinsic orientation that directs CSR-related activities. More recently, an empirical study conducted by Arora and Dharwadkar (2011) was provided, and the relationship between CG mechanisms (board structure) and CSR was explored in respect of contingency on satisfaction with firm performance. Since a number of scholars pay attention to board structure in this domain, this thesis is considering boards’ ownership structure that have received limited attention from management academics particularly in the UK. This research is focusing on a multi-dimensional boards’ ownership structure in respect of the endogenous variable and takes into account firm performance and firm leverage for being logical to examine the impact of boards’ ownership structure on voluntary CSR, in particular bearing in mind that the firm’s earnings and liability play a considerable role in whether to invest in communities and engage in philanthropic activities. In addition, this thesis is concentrating on the key drivers for good CSR. The following section explores these key drivers by discussing previous studies on CSR.
2.4 Previous Studies on CSR

Companies engage in voluntary and mandatory CSR could be, as the legitimacy theory suggests, a form of approval to operate their businesses in their societies (Adams et al., 1998; Campbell, 2003; Deegan et al., 2002), or for further benefit such as a way of accountability to the community-stakeholder as suggested by the stakeholder theory (Cooper and Owen, 2007). Whatever the case, explaining CSR at different levels of analysis requires the application of different theories, ranging from the stakeholder theory and the legitimacy theory to the institutional theory and resource dependence theory (Frynas and Yamahaki, 2016). Nevertheless, in order to examine a topic such as CSR, the role of theory cannot be disregarded. Theories such as the agency, stakeholder, legitimacy and institutional theories have been discovered by researchers to explain CSR phenomenon generally.

Previous research has examined the relationship between firm characteristics such as firm size (Thomson et al., 1993; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Elsayed, 2006; Muller and Kolk, 2009; Arora and Dharwadkar, 2011; Chang et al., 2012), firm age (Roberts, 1992; Moore, 2001; AL-Shubiri et al., 2012; Withisuphakorn and Jiraporn, 2015), firm leverage (Navarro, 1988; Arora and Dharwadkar, 2011; Mishra and Modi, 2013) and R&D intensity (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Arora and Dharwadkar, 2011; Maria and Sanchez, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012), and CSR. Others’ research have considered the relationship between board characteristics such as board gender (Bear et al., 2010; Margaretha and Isnaini, 2014; Fernandez-Feijoo et al., 2014; Deschênes et al., 2015) and board structure (Pfeffer and Salancik, 1978; Coffey and Wang, 1998; Johnson and Greening, 1999) and CSR, while empirical research on boards’ ownership structure and CSR relationship is rather limited, particularly when distinguishing between voluntary and mandatory CSR ratings. Thus, it is the incentive of this thesis to determine this relationship between CG mechanism (boards’ ownership structure) and voluntary and mandatory CSR.

Since the 1990s, the corporate finance and corporate management literature called for research on CSR as a strategy for gaining a competitive advantage and enhancing reputation (Carroll, 1979; Tricker, 1984), and as a response, studies have generally moved from being driven by the agency theory (paying attention to only shareholders) to being driven by the stakeholder theory where a large number of stakeholder groups are considered (Coffey and Fryxell, 1991; Waddock
and Graves, 1997; Johnson and Greening, 1999). As a result, several previous studies have
examined the impact of CSR as a whole (Coffey and Fryxell, 1991; Waddock and Graves, 1997;
Johnson and Greening, 1999; McWilliams and Siegel, 2000; Waldman et al., 2006; Padgett and
Galan, 2009; Arora and Dharwadkar, 2011; Maria and Sanchez, 2011; and Lioui and Sharma,
2012; Rakotomavo, 2012; Kim and Jeon, 2015; Withisuphakorn and Jiraporn, 2015). A few
others have focused on particular ratings of CSR such as: institutional strength and technical
strength (Bear et al., 2010); environment quality and social responsiveness quality (Margaretha
and Isnaini, 2014); level of CSR disclosure and credibility on CSR (Fernandez-Feijoo et al.,
2014); corporate philanthropic activities (Choi and Wang, 2007; Patten, 2008), while empirical
investigation on voluntary and mandatory CSR (as distinguished in Section 2.2.1 above) was not
documented among previous studies on CSR at all. It is therefore the motivation of this study to
investigate the perception of CG to these phenomena.

Furthermore, previous researchers have concentrated on the disclosure of CSR in annual reports
(Abbott and Monsen, 1979; Cowen et al., 1987; Epstein and Freedman, 1994) while research on
companies’ actual implementation and engagement in issues related to voluntary CSR in
particular are rather limited, which encouraged the current study to explore the engagement of
this rating of CSR involvements. However, since numerous studies have examined the voluntary
ratings of CSR such as charitable/philanthropic activities (Cowton, 1987; Campbell et al., 2002;
Brammer and Millington, 2004 and 2005; Campbell and Slack, 2007; Choi and Wang, 2007;
Patten, 2008), it is the argument of this study that such an indication has simply limited the
definition of voluntary CSR adopted by this thesis to only cash spent on charitable/philanthropic
activities. Thus such examination is not only insufficient, but offers a misleading representation
of the overall concept of voluntary CSR as enumerated in Section 2.2.1 above.

Although investing in the community has been identified as one of the key important activities
within stakeholder groups (Clarkson, 1995; Altman, 2000), there is still inadequate research
concerning community investment. This rating attracted the attention of researchers only
recently and Hess’s et al., (2002) study was first in mentioning community investment.
Following studies have examined community investment within, but not separately to general
CSR (Deschênes et al., 2015; Withisuphakorn and Jiraporn, 2015). However, it is to this limit
that the motivation of this thesis is to examine the implementation of voluntary CSR that
considers community investment which goes beyond cash spent on philanthropic and charitable
activities along with other social ratings related to sustainability practices. Nevertheless, this thesis is also concerned with mandatory CSR which is to be examined separately as the researcher believes that issues relating to meeting the required standards and regulations are different to issues carried out by businesses voluntarily. Most research conducted on CSR have combined the ratings related to mandatory CSR with other voluntary ratings and dealt with them as a general CSR (Padgett and Galan, 2009; Maria and Sanchez, 2011).

According to the legitimacy theory and stakeholder theory, businesses engage in CSR activities to obtain legitimacy and enhance reputation and, in order to be perceived by society and obtain a reward and form of licence to operate in society (Adams et al., 1998; Campbell, 2000 and 2003; Deegan, 2002; Deegan et al., 2002; Cooper and Owen, 2007), these activities have to be reported and disclosed to the public. However, communication with investors and the public regarding CSR activities is still limited. According to Cowen et al., (1987) disclosure of corporate community investment responded to firm size and firm industry with only 64 percent of firms reporting it, predominantly from the chemical industrial sector. Further worse findings showed that disclosure of community investment is given lower attention than other ratings of CSR disclosure (Patten, 1992). Reporting voluntary and mandatory CSR activities in companies’ annual reports or social reports is an indication of companies’ engagement in these CSR ratings. Epstein’s and Freedman’s (1994) survey in examining the disclosure of corporate community investment alongside other CSR ratings shows 60 percent of the respondents required firms to disclose their social impacts of community relations activities that they conducted. Regarding the transparency issue, almost half of the respondents demanded the disclosure of community investment in the financial reports, and another quarter not only demanded the disclosure, but also audited such disclosure (Epstein and Freedman, 1994). Therefore, companies, in order to be rewarded by society, need to report their social activities – particularly voluntary involvements – in a transparent manner.

2.5 Chapter Summary

This chapter focused on the background of the study and therefore starts with CSR definitions where voluntary and mandatory CSR were developed and defined. The chapter proceeded with a history of the development of CSR and current trends. The chapter reviewed the existing literature considering CG and CSR. The chapter reviewed CSR dimensions of engagements and then considers CSR categories. Studies concerning CG and CSR were also discussed in this
Further, this chapter reviewed previous studies on CSR. The review assessed different key drivers for good CG and CSR such as firm features and board characteristics. The review revealed a conspicuous gap in the literature as there is very little extant studies on board features as a key driver for CSR that necessitates investigating a multi-dimensional boards’ ownership structure and CSR. The review also revealed an obvious gap in the literature of CSR as there is very limited existing literature that distinguishes between diverse ratings of CSR, which necessitates examining ratings related to voluntary CSR and other ratings relevant to mandatory CSR separately driven by different perspectives.

Since the target of this thesis is to properly position the current study, it is necessary to explore multiple theories, most of which have already been explored in isolation in previous CSR research. The theoretical framework of this study is discussed next in the following chapter.
Chapter Three: Theoretical Framework

3.1 Chapter Overview
This study considers boards’ ownership as an issue of CG mechanisms and its impact on voluntary and mandatory CSR hence this chapter critically reviews the theoretical framework of this study. This chapter will concentrate on five theories related to CG and CSR since it is beyond this study to comprehensively review all theories in this domain. The five theories (agency, stakeholder, legitimacy, institutional and resource dependence theories) are considered key theories in CG and CSR literature. Moreover, since the application of these theories as single theories in prior CSR research has led to inconsistent findings (reviewed later in this chapter), it is assumed in this study to combine them as a meta-theory that might be more effective. This chapter starts with a brief introduction of the kingdom of theory in exploring CSR generally and voluntary and mandatory CSR in particular, and the necessity for theoretical openness. Then the theories are reviewed based on prior literature that have used them in CSR exploration to gain a better understanding of the phenomenon and the applicability of theories to explain voluntary and mandatory CSR phenomena. The overlap between these theories is thoroughly discussed and explored and the chapter concludes with a section that will establish the link between these theories which in turn leads to developing the propositions of this study that sets the framework for the following chapter.

3.2 The Need for Theoretical Openness
Bryman (2008, p.5) has generally defined theory as “an explanation of observed regularities”. More specifically and from a business and financial management point of view, Frynas and Yamahaki (2016) argued that the last decade had experienced an increasing interest in theorising CSR. A number of studies have explored theoretical perspectives on CSR (McWilliams et al., 2006; Bies et al., 2007; Brammer et al., 2012). Various theories – ranging from stakeholder theory and institutional theory to transaction cost economies – have been applied for explaining CSR at diverse levels of investigation (Frynas and Yamahaki, 2016). In making sense of the world around us, it can be acknowledged that theorisation is fundamental (Weick, 1995; Gelman, 1996). In academic research, it is vital to obtain a better understanding of theories as it assists in bringing in superior scholarly rigour and facilitates making sense of the complexity of the empirical world on the basis of explanations and predictions (Bacharach, 1989). Theory is serving to organise the understanding of knowledge more effectively (Frynas and Yamahaki,
Additionally, it “signals the values upon which that knowledge is built” (Suddaby, 2014: 407).

Concerning CSR research, relevant theories can assist in granting explanatory frameworks which enables the researcher to analyse a complex reality easier and simplify abstracting and communicating constructive insights from experimental observations of socially responsible practices (Unerman and Chapman, 2014). CSR researchers have been helped to explore how social change might be triggered or precluded at diverse levels of investigation with the aid of the substantial role of theory (Aguilera et al., 2007). According to Gray et al. (2010), the application of a single theory in understanding a phenomenon is likely to be imperfect and incomplete, while when applying a number of theories, the overlap and intersections between them could lead to a more intelligent debate and a better understanding of the phenomenon. In this study, five theories have been reviewed and are discussed in two different categories, namely external drivers and internal drivers of CSR. External drivers’ theories, including various points of view defined as relational, political and integrative, encompass stakeholder theory, legitimacy theory, institutional theory and resource dependence theory which concentrate on the investigation of the nature of relations between the organisation and the environment. They are specifically appropriate in notifying external drivers, mediators, moderators and predictors of CSR (Frynas and Yamahaki, 2016). Internal drivers’ theories encompass instrumental economic and managerial perspectives such as the agency theory which considers the focal point of analysis of the internal drivers. They are specifically appropriate for analysing internal dynamics in tackling social and environmental matters, as they focus on explaining both corporate management and social rates of individuals within corporations (Frynas and Yamahaki, 2016).

All theories mentioned above (agency, stakeholder, legitimacy, institutional and resource dependence theories) have been applied by the literature in explaining CSR. They have also been utilised in this study to serve as foundations in determining voluntary and mandatory CSR. It is important to review analysis of the relationship of these theories to one another as well as their relevance and capability in understanding the drives behind CSR in general, and voluntary and mandatory CSR in particular.
In order to obtain a methodical review of these theories and to determine whether any links whatsoever exist between them, Morris’s (1987) ideology was adopted by this study. Morris (1987) argued that when a researcher applies a couple of theories in explaining a particular phenomenon, the linkage between these theories can best be examined by analysing their underlying assumptions. Morris (1987) proposed the following four possible linkages between theories that may be established:

- Equivalent – sharing the same ideas;
- Subsets – one implying the other;
- Consistent – one confirming or complementing the other;
- Competing – one contradicting the other (Morris, 1987, p.49).

Examining the essential and adequate conditions for each theory and comparing them with one another is the best approach in discovering the links between theories (Morris, 1987). This approach allows researchers to define whether they are indeed equivalent, consistent or competing. Thus, this chapter reviews the assumptions upon which these theories are based according to the studies that have applied them in understanding CSR and how these theories could assist in explaining voluntary and mandatory CSR.

Firstly, the key features of the theories and how they have been applied by studies that investigate CSR will be reviewed, while identifying any possible linkages to understanding voluntary and mandatory CSR. Secondly, the links between theories and any association whatsoever that may exist between them and voluntary and mandatory CSR will be discussed. With such an inclusive conceptual framework this thesis will contribute to the holistic understanding of the linkage between the various theories considering CSR and their link to voluntary and mandatory CSR.

3.2.1 Agency Theory

While the agency theory has been extensively used in preceding literature as a guiding theory in clarifying CG and firm performance relation considering the short-term performance (Jarrell and Poulsen, 1987; Brickley et al., 1988; Morek et al., 1988; McConnell and Servaes, 1990; Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Demsetz and Villalonga, 2001; Benson and Davidson, 2009; Florackis et al., 2009; O’Connell and Cramer, 2010; Ellili,
2011), it has not often been employed as a possible guiding theory in discovering the relationship between CG and CSR ratings as a long-term strategy. In investigating CSR engagement, limited studies – and only recently – have employed the agency theory (Deckop et al., 2006; Barnea and Rubin, 2010; Jo and Harjoto, 2012; Wiese and Toporowski, 2013; Frynas and Yamahaki, 2016). According to the agency theory, agency costs incur when managers act on behalf of business owners (financial stakeholders) where they become accountable to their shareholders (Jensen and Meckling, 1976). However, companies recently pay attention also to other stakeholders as stated by the stakeholder theory (Freeman, 1984; Donaldson and Preston, 1995). Despite that, the agency theory is still examined in this study as a possible clarification and/or complementary theory in determining the mechanism of boards’ ownership as an incentive tool that may impact corporate decision regarding voluntary and mandatory CSR expenditures.

The proposal of the agency theory could be traced back to Coase (1937), but the ideals of its perception have only been applied by firms after five decades. This perspective of CG concentrates on the relationship between the principals (suppliers of funds, the financial stakeholders) and the agent (senior management of the firm) (Jensen and Meckling, 1976; Fama and Jensen, 1983). The separation of ownership and control is the basis of the agency theory and the main concern of this perspective is the relationship between the principals and the agent (Berle and Means, 1932; Mallin, 2010). The separation of ownership and control is the foundation of the agency problem for creating governance issues (Berle and Means, 1932). The development of the agency theory is mainly based on the assumption of maximizing shareholders’ wealth, but the agent may not act in the best interest of the principal (Eisenhardt, 1989b; Selvaggi and Upton, 2008; Mallin, 2010). The issue of the separation of interests can be found when the opportunism or self-interest of the agent may take place as the agent may not act in the best interest of shareholders (Mallin, 2010). Senior management have a tendency to pursue their own personal ambition at the expense of the principles (Fama and Jensen, 1983); this could include enhancing their reputation as managers (Beliveau et al., 1994). The literature has shown that managerial reputation is a key factor when taking decisions regarding CSR expenditure (Beliveau et al., 1994; Campbell and Slack, 2007; Barnea and Rubin, 2010); including expenditure on philanthropic activities (voluntary CSR) and/or expenditure on meeting the required standards and regulations (mandatory CSR) (Galaskiewicz, 1985; Barnea and Rubin, 2010). This is because such decisions will reveal how reputable the manager is. Unlike investors who have the opportunity to diversify their holdings, managers fear an employment
loss and therefore tend to protect their employment by enhancing their reputation at the expense of shareholders’ interests (Beliveau et al., 1994). The agents may also act only partially in the principals’ favour by misusing their power for pecuniary or by not taking the appropriate risks that allow the prosperous performance to be achievable (Fama and Jensen, 1983). This may include avoiding taking the decision in activities related to voluntary CSR; it is a long-term investment and has uncertain outcomes (Bushee, 1998). Managers tend to enhance their reputation in order to safeguard their job even in the face of recession thus having the incentives to satisfy the global stakeholders’ requirements for CSR and business sustainability by contributing in voluntary CSR including community and philanthropic activities, even where such investment diverges from shareholders’ wealth maximisation which leads to agency problems (Abdul and Ibrahim, 2002). As implied by the agency theory, this divergence of interests would incur agency costs (Jensen and Meckling, 1976). In other words, shareholders who are short-term oriented have no desire to involve in voluntary CSR engaged in by reputable managers. This would incur an agency cost which consists of CG monitoring cost – implying one of the CG monitoring mechanisms – to keep an eye on management alignment with that of shareholders (Donaldson and Davis, 1991). According to Morris (1987), shareholders may sell their holdings thus incurring an agency cost of equity when they recognise that management’s action was not aligned with their best interests. Consequently, this will negatively impact the market value of the firm’s shares. The ownership of institutional shareholders and managerial shareholders is another CG monitoring mechanism that has an impact on the agency cost (Baek et al., 2009). Rewarding managers with managerial ownership could eliminate the conflict of interests between managers and shareholders thus enhancing shareholders wealth (Jensen and Meckling, 1976).

The problem of information asymmetry is an issue of the agency problem whereby shareholders and managements have access to different levels of information (Mallin, 2010). Managers may reduce the agency cost if they communicate with shareholders and explain their decision regarding voluntary CSR investment, stating its costs and benefits for business sustainability (long-term investment). This can be done by disclosing information concerning voluntary CSR to shareholders by producing CSR reports which will incur costs including the cost of gathering the information, management supervision, audit and legal fees, and the cost of publication of these reports (Morris, 1987), hence incurring agency costs. However, the benefit of such information disclosure will extremely outweigh the cost (Cooke, 1992). The term monitoring
and bonding cost is used to indicate for such agency costs that are related to disclosing information by managers to their shareholders (Fama and Jensen, 1983). The above argument shows that the agency theory can be utilised to clarify that the monitoring and bonding cost associated with producing information regarding voluntary CSR to shareholders via CSR reports is proposed to minimise agency costs.

The separation of ownership and control has created more issues where it cannot be expected that firms’ directors should take care of shareholders’ funds with the same anxious vigilance as if it was their own funds (Smith, 1838). The agency theory implies that firms pursue their business under challenging conditions regarding incomplete information and uncertainty that could be resolved by employing professional managements who have the advantage and superior knowledge over owners to run the business (Eisenhardt, 1989b). Nevertheless, employing the agent proved to be associated with a couple of the agency problems, specifically unfavourable selection and moral hazard. The unfavourable selection is the top manager who was appointed to run the business effectively but does not expose his potential or capability to do so, while the problem of moral hazard occurs when owners have no assertion of whether the manager has paid extra attention to processes and operations and showed competitive performance by putting great effort (Eisenhardt, 1989b). These problems have risen because managers care about their personal welfare more than owners’ welfare (Berle and Means, 1967). The agency theory describes managers as self-interested and might be selfish hence they are not trustworthy to act in the best interest of shareholders. Moreover, the relationship between executives and shareholders is defined as a contract by the agency theory hence executives’ actions need to be checked to secure that these actions are taken to match the best interest of shareholders (Wong, 2011).

Scholars suggested that, when appropriate, governance body is implemented which will safeguard owners’ welfare and managers will act to maximise wealth for them (Donaldson and Davis, 1991). The agency theory implies that CG’s role is to restrict management’s potential which contradicts the reason principals appoint them for: maximising their wealth (Donaldson and Davis, 1991). According to the agency theory proponents, senior managers of modern firms – those which have their shares widely spread on a wide range of shareholders – became more powerful, particularly when the board holds directors who know little information about the firm. As a result, it was suggested that the agency theory has an implicit idea that assures positive
relationship between CG and the ownership percentage of senior management. Therefore, top management should own a considerable amount of stock within the firm (Mallin, 2004). In this condition and as a solution to the problem of interest divergence, the agency theory also requires firms to set up compensation systems and incentives as a way of alignment of management behaviour and shareholders’ interests (Hawley and Williams, 1996), which increase the agency costs.

However, the agency perspective has received much criticism despite having its prominence. The agency perspective is narrowing CG dimensions to a restricted set of interests and dilemmas by ignoring interpersonal behaviour, group dynamics and political issues (Clarke and Rama, 2008). The agency perspective may be far more relevant to the micro-economic perspective than to the governance perspective (Claessens and Yurtoglu, 2012). Statistical methods that adapt the agency perspective will not demonstrate the reality of the boardroom (Demb and Neubauer, 1993). More issues and criticisms regarding the agency perspective focus upon the distance and remoteness that exists between the agent and the principal. In practice, shareholders are found to be very passive in attending and exercising their duties and obligations at the annual general meeting and this can lead to the diminishing of the principal’s authority over the agent and this in turn indicates the limitation of the agency’s validity (Dey, 1994). An additional issue of the agency perspective is the maximisation of only shareholder value, while good CG should consider improving economic growth, entrepreneurship, innovation and value creation, and that only shareholder return and value are of interest so far because they contribute to achieving these objectives (Mayer, 2012). In regard to recent views of long-term oriented shareholders and considering business sustainability, shareholders’ interests can only be satisfied by taking into account stakeholders’ interests as firms that are accountable for all of their key stakeholders are, over the long run, more successful and more prosperous (Solomon, 2010). The satisfaction of stakeholders can be obtained by engaging in voluntary and mandatory CSR. Critical views on the agency theory emerged for the reason of its propensity and focusing only on shareholders rather than other stakeholders. The agency theory provides a solution for a principal-agent relationship dilemma only and ignores other concerns (Eisenhardt, 1989b). Further, the agency theory has built its assumption relying on the perception which implies that the corporation’s role is just to maximise shareholders’ wealth (Blair, 1995). The agency theory has received a lot of criticism, nevertheless this perspective is still the prevalent paradigm amongst CG researchers.
and constitutes the largest research output in the literature of CG. However, the agency theory has received limited attention from CSR researchers for being able to explain CSR only partially.

In regard to CSR expenditure, Friedman (1962) was arguably an early antecedent of the agency theory. Friedman (1962) stated that CSR engagement demonstrates self-serving behaviour of CEOs (the agents) who adopt social and environmental objectives that eventually disadvantages owners (principals) by producing lower profits. A number of subsequent studies had examined CSR by applying the agency theory (Galaskiewicz, 1985; Atkinson and Galaskiewicz, 1988), lending more credence to Friedman’s (1962) statement. For instance, Galaskiewicz (1985) argued that senior managers engage in philanthropic activities to obtain endorsement and appreciation from local business elites. Atkinson and Galaskiewicz (1988) asserted that CEO shareholdings have a negative impact on philanthropic expenditure as they found that the higher the percentage of CEO share ownership, the more profit-driven they are and, as a result, the less of a philanthropic contributor they become. With reference to the agency theory, more recent CSR studies have continued examining the agent-principal conflict of interest in regard to business adoption of social and environmental objectives (Barnea and Rubin, 2010; Faleye and Trahan, 2011). For example, Barnea and Rubin (2010) argued that the increase of CEOs’ ownership stake leads to the overinvestment in CSR ratings to gain private reputational advantages. Faleye and Trahan (2011) stated that managers utilised labour-friendly corporate policies to get away with managerial excesses at the board level. On the other hand, and from the agency perspective, recent research viewed CSR as conductive to financial and non-financial performance (Bear et al., 2010; Oh et al., 2011). Oh et al. (2011) indicated that foreign investors with a long-term orientation and institutional shareholders favour to invest in responsible firms to safeguard their investments from financial risks. Recently, it can be seen that shareholders have changed their points of view regarding their investment. More shareholders became long-term oriented and pay more attention to business sustainability. They have become more concerned about voluntary CSR investment and its benefits to the success of their business.

With reference to the agency theory, some CSR studies used the firm-level data instead of individual-level data (e.g. Beliveau et al., 1994; Wright and Ferris, 1997). However, according to the key role played by executive officers and other board members in the board room as agents, several agency studies focused on the role of individual board members and CEOs in formulating CSR strategies. While a number of micro-level studies have employed the agency
theory in investigating how CEO reward system affects the extent level of CSR performance (e.g. McGuire et al., 2003; Deckop et al., 2006; Berrone et al., 2010), others have examined the impact of individual characteristics of CEOs and board members on decisions made regarding CSR expenditure (e.g. Wang and Coffey, 1992; Bear et al., 2010; Chin et al., 2013). Considering CSR studies, there is a key limitation about the agency application for being able to explain CSR only partially. According to Eisenhardt (1989a, p.71) “Agency theory presents a partial view of the world that, although it is valid, also ignores a good bit of the complexity of organisation”. Hence, it would be more appropriate if the agency theory was applied in conjunction with another theoretical perspective to have a clear picture of the interaction of individual level phenomenon with other levels of analysis (Frynas and Yamahaki, 2016). In summary, the agency theory can be applied in the current study to understand the relationship between the agent (by considering boards’ ownership structure as an issue of CG mechanisms) and the principal (by paying attention to shareholders with long-term targets, who prefer to invest in firms which engage in sustainability practices and voluntary CSR).

3.2.2 Stakeholder Theory
The stakeholder theory declares that firms provide a broader social function (when compared with the agency theory) for being social entities that influence the welfare of a wide range of stakeholders including shareholders as well as local communities, suppliers, employees and consumers (Freeman, 1984). Stakeholders were identified as groups or individuals who interact with the corporation and impact or are impacted by the accomplishment of the corporations’ aims (Freeman, 1984; Dobson, 1991; Donaldson and Preston, 1995). Mainstream schools of thought have emerged on this perspective and an extensive literature considered the implications of the stakeholder theory (Freeman, 1984; Buchholz, 1989; Dobson, 1991; Donaldson and Preston, 1995; Clarkson, 1995; Sternberg, 1997; Rowley and Berman, 2000; Jensen, 2001; Freeman and Phillips, 2002). Stakeholder theory is the guiding theory that provides the theoretical underpinning for the effective appreciation of CSR expenditure and also helps in forming the basis for understanding the relationship between an organisation and its stakeholders (Clarkson, 1995; Rowley and Berman, 2000). Since the stakeholder theory has the ability to effectively explore and highlight the importance of being involved in CSR ratings in a stakeholder infrastructure of an organisation, this has made it the appropriate conceptual framework for this study which lends itself well in evaluating how valuable the voluntary and
mandatory CSR engagements are in satisfying this group of stakeholders and how this enhances business sustainability.

Corporations need to formulate and implement processes that satisfy all groups that have a stake in the business in a way that ensures the long-term success of the corporation (Clarke, 2004). Corporations need to identify their significant stakeholders, then to engage in a dialogue to determine their value to the corporation’s success (Clarke, 2004). Corporations can become more inclusive and achieve more sustainable business success by measuring performance enhancement in delivering value to all stakeholders (Clarke, 2004). The key success of a corporation is the value added to all of their stakeholders who represent the natural environment of a corporation (Starik and Rands, 1995; Dunphy et al., 2003). Stakeholders can be used as a governance tool for the success of the firm as they have moral and legal rights (Donaldson and Preston, 1995). Stakeholders will show loyalty and return to the firm when they are satisfied by the firm (Freeman, 1984; Freeman and McVea, 2001). Thus, CG should consider stakeholders’ demands when taking action (Blair, 1995) and perform business accountability towards stakeholders’ rights (White, 2009; Manville and Ober, 2003). Integrating stakeholders’ demands into decision-making can diminish conflicts and promote efficiency (Turnbull, 1994; Rothman and Friedman, 2001).

The level of incorporating stakeholders’ consideration into governance decisions leads firms to adopt reactive or proactive strategies (Kaptein and Van Tulder, 2003). A recent study declared that firms are likely to adopt reactive strategies if stakeholders’ demands are ignored. This leads to a misalignment of the firm’s aspirations and their stakeholders’ concerns (Mackenzie, 2007). The collapse of Enron and WorldCom could be attributed to the misconduct of the firms’ governance in integrating stakeholders’ demands into their decision process (Zandstra, 2002; Turnbull, 2002; Watkins, 2003; Currall and Epstein, 2003). In order to avoid such a collapse, some governments considered the alignment of stakeholders’ concerns with corporate conduct and set up new rules and regulations regarding this matter. For instance, the Sarbanes-Oxley Act was released (Wong, 2011). Most regulations could be referred to the theoretical framework of the stakeholder theory (Adams, 2002). Unlike firms which adopt a reactive strategy, a proactive strategy is adopted by firms which incorporate their stakeholders’ demands into the process of their decision-making. As a result, a good governance structure will emerge (De Wit et al., 2006). Therefore, this perspective is viewed as more suitable for this research and has made this
study’s theoretical foundations. The proactive perspective will allow the researcher to examine the effectiveness of boards’ ownership in enhancing voluntary and mandatory CSR.

Given the implications of the stakeholder theory, corporate actions can be predicted as a direct result of different groups of stakeholders, related to power dependence (Freeman and Reed, 1983; Clarkson, 1995; Jawahar and McLaughlin, 2001) or legitimacy claim (Hill and Jones, 1992; Langtry, 1994). Mitchell et al., (1997) pooled these different factors into a single model of stakeholder identification and salience and proposed that the impact of stakeholders is based on three attributes: power, legitimacy and urgency. According to Donaldson and Preston (1995), the stakeholder perspective defines a firm in terms of its relationship with stakeholders and identifies the management of this relationship being based upon three key areas: power (the extent a party has means to impose its will in a relationship), legitimacy (socially accepted and expected structures or behaviours) and urgency (time sensitivity or criticality of the stakeholder’s claim).

In regard to different groups of stakeholders, scholars distinguished between normatively legitimate stakeholders (can also be labelled as “ethical”) and descriptively legitimate stakeholders (can also be labelled “empirical” as it lends itself to empirical testing) (Donaldson and Preston, 1995; Gray et al., 1996; Phillips and Reichart, 1998). While the normative perspective assumes that firms should take all stakeholders’ interests (hereby stakeholder salience is less relevant) into account, the descriptive perspective assumes that the stakeholder model describes what the firm actually is and how the firm identifies and manages its substantial stakeholders (hereby stakeholder salience is fairly relevant) and their interests (Donaldson and Preston, 1995; Frynas and Yamahaki, 2016). An integration of both perspectives, the normative and descriptive stakeholder lenses, is questionable (Treviño and Weaver, 1999) and arguments have been made to ignore the normative stakeholder perspective as “it has little descriptive or explanatory power in a CSR context” (Gray et al., 1996, p. 45-46). As a result, and in consistency with recent CSR studies (e.g. Frynas and Stephens, 2015; Mellahi et al., 2016), it is the descriptive (empirical) application of the theory that is investigated in this research which can be applied to explain the drivers and outcomes of voluntary and mandatory CSR. In summary, the stakeholder theory can be applied to voluntary CSR in particular as firms voluntarily choose to focus on stakeholder groups and engage in community investments and philanthropic and charitable activities.
3.2.3 Legitimacy Theory

Legitimacy was defined as “a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p.574). According to the legitimacy theory, organisations trade on the grounds of a social contract between the organisation and society (Dowling and Pfeffer, 1975; Campbell, 2000). Organisations necessitate social approval and legitimacy from society in order to evade society’s disapproval of its goals, to obtain rewards and to secure the organisation’s survival (Dowling and Pfeffer, 1975; Preston and Post, 1975; Lindblom, 1983; Ashford and Gibbs, 1990; Deegan, 2002). The legitimacy theory indicates that organisations cannot be separated from society and their existence is based on the level society grants legitimacy upon them. Thus, organisations ought to endlessly legitimise their activities to maintain congruence between society and their goals (Dowling and Pfeffer, 1975; Preston and Post, 1975; Lindblom, 1983; Ashford and Gibbs, 1990; Deegan, 2002).

Literature on legitimacy can be categorised into two perspectives: strategic and institutional (Frynas and Yamahaki, 2016). It is believed that under the strategic legitimacy approach, a level of managerial control over the legitimating process exists (Suchman, 1995). Legitimacy in this approach is informed by the stakeholder and resource dependence theories (which are reviewed in sections 3.2.2 and 3.2.5 respectively) that highlight how critical the resources are and the necessity for management to consider those who manage such resources (Milne and Patten, 2002; Sonpar et al., 2010). As a result, legitimacy can be referred to as a resource that is awarded by groups outside the corporation (Frynas and Yamahaki, 2016). The legitimacy theory and stakeholder theory then must be considered as ‘overlapping perspectives’, rather than competing perspectives (Gray et al., 1995a, p.52). However, the legitimacy theory differs from the stakeholder theory in looking at the expectations of society in general, since the stakeholder theory concentrates on corporations’ interaction with specific groups within society (Deegan and Unerman, 2006).

The strategic perspective of the legitimacy theory has been extremely applied in accounting research to examine firm social disclosure to bridge the gaps between societal anticipations and corporate practices (Patten, 1992; O’Donovan, 2002; Campbell et al., 2003; Magness, 2006). With reference to research from the legitimacy theory, it was verified that firms adopt different
ways of social performance including philanthropic activities and, most remarkably, social
disclosure as a means to achieve legitimacy, specifically for firms with unfortunate performance
in other CSR ratings (Deegan et al., 2002; Chen et al., 2008; Lanis and Richardson, 2013). Studies that applied the legitimacy theory demonstrated that firms which adopt CSR as a means to achieve legitimacy might advantage through inter alia better CG ratings, enhanced investor appeal and reputational achievement (Milne and Patten, 2002; Bebbington et al., 2008; Chan et al., 2014). Publicly owned firms and large firms are particularly active in engaging in CSR activities and disclosure as they are more observable and apparent to public scrutiny and thus require superior legitimacy (Branco and Rodrigues, 2006; Arvidsson, 2010; Panwar et al., 2014).

In terms of the institutional perspective of the legitimacy theory, legitimacy can be obtained when corporations become isomorphic with their environment (Meyer and Rowan, 1977). Thus, and as corporations maintain legitimacy by merely reacting to external anticipations, the potential to manage legitimacy is rather limited (Palazzo and Scherer, 2006). This approach of the legitimacy theory can be considered as almost equivalent with the institutional theory which will be discussed in the following section (section 3.2.4). The application of both approaches of the legitimacy theory leads to various challenges of inter alia gain, maintain or repair legitimacy, that necessitate a range of strategies amongst the ones congruent to the current environment and creating new audience values and beliefs (Suchman, 1995). A number of studies have applied Suchman’s (1995) frameworks (O’Donovan, 2002; O’Dwyer et al., 2011). While O’Donovan (2002) used Suchman’s (1995) framework in examining managerial choices behind the reporting of environmental information, O’Dwyer et al., (2011) investigated the coevolution and the impact of legitimacy process adopted by sustainability assurance practitioners upon their attempts to develop assurance practices. Some scholars have adopted a more refined approach to the legitimacy theory (Suchman, 1995), while others have allowed for the legitimacy theory to merge a wider range of perspectives in explaining CSR (O’Donovan, 2002; Mobus, 2005; O’Dwyer et al., 2011). In summary, the legitimacy theory has been found to be an important theory to be applied in this study as it gives a better understanding of why firms involve in mandatory CSR where firms choose to meet the required standards and regulations, and voluntary CSR while there are no obligations mandating them (the firms) to engage in philanthropic and charitable activities. The legitimacy theory can be applied to mandatory CSR in particular as firms choose to meet the required standards and regulations to obtain legitimacy by satisfying society as a whole.
3.2.4 Institutional Theory

The institutional theory assumes that in a given business environment, organisations should adopt the expected social standards and regulations in order to sustain themselves as they cannot do that without a certain level of external social approval which leads them to obtain legitimacy (Meyer and Rowan, 1977; DiMaggio and Powell, 1983). Organisations often adopt social standards, not because external players are powerful, but because certain actions are taken for approval seeing that that is “the way we do these things” (Scott, 2001, p.57). The institutional perspective includes various intellectual traditions and focuses, which can be categorised into three generic approaches (Hotho and Pedersen, 2012). The economic approach – which is often termed as “new institutional economics” – considers the regulatory function of institutions that support economic activity (Davis and North, 1971; North, 1990). The sociological approach – that is often termed as “neo-institutionalism” addresses the legitimacy function of institutions (DiMaggio and Powell, 1983; Scott, 2001). To some extent overlapping with the two preceding approaches, a comparative institutional approach (encompasses the business system, assortment of capitalism and regulation perspective strands) considers divergences between the institutional instructions that determine capitalist economics and form economic organisation and firm competitiveness (Whitley, 1999; Soskice, 2001; Wood et al., 2014). Numerous studies have applied the institutional theory to explain CSR (Jennings and Zandbergen, 1995; Doh and Guay, 2006; Campbell, 2007; Matten and Moon, 2008). The institutional factors that influence or shape responsible behaviour – on CSR and environmental management and practices as well as on social and environmental disclosure – have been determined by many studies (Campbell, 2007; Jackson and Apostolakou, 2010; Montiel and Husted, 2009; Laine, 2009; Zeng et al., 2012).

As a subsequent to the neo-institutionalism approach, the CSR literature has inter alia explored “institutional isomorphism”, the idea that firms’ strategies and actions become parallel within a determined institutional environment where parallel firms face parallel institutional demands (Frynas and Yamahaki, 2016). The convergence demands for parallel CSR strategies and actions between firms with parallel attributes (those firms normally share the same national context) have been examined by the literature (Doh and Guay, 2006; Holder-Webb and Cohen, 2012; Farnsen, 2013). Other literature paid more attention to the convergence demands for parallel CSR strategies and actions between firms with parallel attributes although convergence demands exist within the institutional context of local communities (Marquis et al., 2007). More literature
have considered global issue arenas and strategic groups within an industry in examining the convergence demands for parallel CSR strategies and actions between firms with parallel attributes (Levy and Kolk, 2002; Kolk and Van Tulder, 2006). From a comparative point of view, the institutional theory has been applied to explain the divergences in CSR nature according to organisations’ local context (Matten and Moon, 2008; Sison, 2009; Xu and Yang, 2010; Jamali and Neville, 2011). In terms of the influence of the national institutional context on CSR, a number of studies have demonstrated considerable divergences between the US and Europe (Doh and Guay, 2006; Matten and Moon, 2008; Sison, 2009; Avetisyan and Ferrary, 2013).

While various institutional studies have provided evidence on the largely passive adaptation of organisations’ CSR involvements to institutional contexts, a fundamental theme of much recent institutional research has exhibited a finer analysis of the complexity of institutional environments and the proactive strategies of organisations for coping with institutional demands (Frynas and Yamahaki, 2016). Given this literature, one very notable study explained how multinational companies operate in complicated environments with multiple institutional contexts and challenge a multitude of competing and sometimes contradictory institutional demands (Jamali, 2010a; Aguilera-Caracuel et al., 2012; Hah and Freeman, 2014; Marano and Kostova, 2016). As a reaction to conflicting demands, multinational companies may neglect or amend some of their CSR involvements or they may endeavour to alter institutional environments, as exemplified by research that examined institutional decoupling, which results in the deliberate establishment of gaps between actual CSR involvements and official CSR rules related to those involvements (Jamali, 2010b; Holder-Webb and Cohen, 2012; Bjerregaad and Lauring, 2013). This emerging institutional research demonstrates that companies’ reaction to institutional demands combine both elements of adaptation and reluctance (Frynas and Yamahaki, 2016). For the purpose of this study, the institutional theory will be used to understand how different institutional demands of institutions trade in different industries with different institutional environments react and then amend their proactive strategies regarding voluntary and mandatory CSR over five years post-recession period (2009-2013).

3.2.5 Resource Dependence Theory

The proposal of the resource dependence theory could be traced back to the work provided by Pfeffer and Salancik (1978) and since then, this theory has been applied broadly among CG and
CSR research field. The resource dependence theory provides five options that have the ability to minimize the environmental interdependency and the uncertainty of the firm. These include board of directors, executive succession, merger activities/vertical integration, joint ventures and other inter-firm’s relationships, and political actions (Pfeffer and Salancik, 1978).

According to Pfeffer (1972), boards of directors facilitate firms to diminish dependency or gain resources. Other scholars – including Hillman et al. (2009) – also echo this view once they conclude that the resource dependence theory is found to be advocated more repeatedly than other CG perspectives – supported by Zahra and Pearce (1989); Johnson et al. (1996) and Dalton et al. (2007) – including the agency theory. Hillman et al. (2009) stated that to date, empirical evidence shows that the resource dependence theory is the more successful lens for understanding CG in spite of being less commonly used to study CG than the agency theory.

In the context of the resource dependence theory, Pfeffer (1972) examined the impact of board size and composition on governance ability to provide key resources to the firm. Pfeffer (1972) stated that board size and composition are not random or independent factors, but are, rather, rational organizational responses to the conditions of the external environment, it is therefore evident that board size responds to the firms’ environmental needs and firms with a greater degree of interdependence necessitate a higher proportion of outsiders. Once more, this evidence was replicated in the following year (Pfeffer, 1973) and recently supported by Sanders’s and Carpenter’s (1998) results which identify a relationship between board size and the degree of the firm’s internationalisation that represents an environmental dependence.

Further supporter studies have also investigated the association between board size and firm performance as an indicator of a successful resource dependence strategy, and have found positive association (Pfeffer, 1972; Boyd, 1990; Pearce and Zahra, 1992; Dalton et al., 1999). Dalton et al. (1999) compiled these studies using meta-analyses methodology. Pearce and Zahra (1992) stated that board size and composition paid a considerable level of contingency on the external environment of the firm as well as on the firm’s present strategy and preceding financial performance. Pfeffer (1972) also highlighted the importance of board composition to firms’ requirements by matching these necessities with the appropriate resources provided by the board. These arguments had received an advocating view from Boyd (1990) who asserted that the composition of the board should be considered in terms of resource-rich directors as the type of board directors matters more than just the board size. Boyd (1990) argued that board size can be
a hindrance in a number of environmental situations, while board interlocks (the resource quantity of other directorships each director possesses) are a real assistance to the firm’s needs.

According to Pfeffer and Salancik (1978) the board provides critical resources to the firm through their human and social capital. These resources include advice and consultation services, accessibility to information channels linking the organisation and its environmental contingency, superior accessibility to critical resources and obtaining the organisation’s legitimacy. Mainstream empirical studies have advocated these advantages, both generally and specifically (Pfeffer and Salancik, 1978; Provan, 1980; Luoma and Goodstein, 1999; Johnson and Greening, 1999). Provan (1980) empirically evidenced that successful organisations which obtain critical resources from their environments hold powerful directors into their boards while, more specifically, Pfeffer and Salancik (1978) argued that organisations which operate in regulated industries require a higher degree of outsiders who possess appropriate knowledge. These arguments have received more support by subsequent studies where it has been found that organisations related to highly regulated industries include a larger number of stakeholder directors who were found to be more concerned with corporate social promotion (Luoma and Goodstein, 1999; Johnson and Greening, 1999).

Recently, a number of scholars asserted that despite the preceding arguments that the resource dependence theory was originally formulated to explain relationships between firms and among units within firms, the theory is found to be applied to explain relationships between organisations and different types of institutions and actors (Ingram and Simons, 1995; Frooman, 1999; Julian et al., 2008). The resource dependence theory has been linked to the institutional theory (discussed in the previous section, section 3.2.4), however, there is a fundamental difference in that this perspective explicitly enables for strategic decision-making (Frynas and Yamahaki, 2016). Since firms depend on numerous diverse actors who can put conflicting social demands on the organisation and an organisation cannot show response to all demands (Oliver, 1991), the resource dependence perspective predicts that an organisation will place more consideration to social actors who control critical resources (Pfeffer and Salanick, 1978; Frooman, 1999). Consequently, one can justify, for instance, why firms with a high dependence on female employees place more concerns to work-life balance issues (Ingram and Simons, 1995) or why natural resource companies with great dependence on provincial local communities in developing states invest in comprehensive local development initiatives in health
and education (Hess and Warren, 2008). On the contrary, activist demanding groups like environmental Non-Government Organisations (NGOs) choose various CSR strategies to influence the organisation depending on their relative power vis-à-vis the organisation and the interdependence relationship with the organisation (Hendry, 2005). The resource dependence theory pays attention to the board of directors in ensuring the flow of critical resources – such as knowledge, personal ties or legitimacy – to the organisation (Frynas and Yamahaki, 2016). It has been found that a number of studies highlighted the role of the board of directors (De Villiers et al., 2011; Ortiz-de-Mandojana et al., 2012; Hafsi and Turgut 2013; Mallin et al., 2013). De Villiers et al. (2011) found that boards with a larger number of directors, with a larger representation of active non-CEOs, and with more legally experienced directors, have influenced their firms to engage in high environmental performance. In addition, Ortiz-de-Mandojana et al. (2012) evidenced that directors that interlock with companies providing knowledge-intensive business services are positively linked to the adoption of proactive environmental strategies. Moreover, Hafsi and Turgut (2013) concluded that board diversity has a positive impact on the company’s social performance. Given the key importance of interactions with other groups for the stream of resources, research applied on the resource dependence theory has evidenced that interactions with essential external groups assist to enhance a company’s environmental performance (Kassinis and Vafeas, 2006; Ortiz-de-Mandojana et al., 2012; Ramanathan et al., 2014). For instance, while Kassinis and Vafeas (2006) highlighted that firms with higher dependence on their local communities exhibit superior environmental performance in that community, Ramanathan et al. (2014) evidenced that stakeholder demands, economic demands and environmental regulations (in this order) have a positive association with environmental performance. The above arguments show that the resource dependence theory has been applied recently to explain board behaviour regarding CSR ratings. Thus it can be applied in this study as a possible explanation for voluntary and mandatory CSR specifically while considering the behaviour of board directors as concerning their share ownership.

3.3 The Inter-relationship of theories
With reference to the discussion of agency theory, stakeholder theory and legitimacy theory above, it can be seen that voluntary and mandatory CSR have been viewed from different perspectives. The viewpoints and assumptions of each theory provide us with a clear explanation of a number of issues concerning the determinants of CSR in general and voluntary and mandatory CSR in particular. It can be argued that theories are not competing with each
other, but rather, are either subsets or complement one another (Morris, 1987); this would allow researchers to achieve a better understanding when employing them (the theories) as a combined theory with a better explanatory power to understand voluntary and mandatory CSR.

### 3.3.1 Legitimacy Theory vs. Stakeholder Theory

With reference to the discussion of the prior sections (3.2.1 and 3.2.2), it can be noticed that a similar ontological view of the firm and society relationship has been shared by both the legitimacy and stakeholder theories. The assumption of both theories states that firms and society both affect one another (Gray et al., 1995a; Chen and Robert, 2010) and that reality and social structures have been persistently built up by the interactions between firms and society. However, the legitimacy theory and stakeholder theory each have different perspectives in terms of the social system (Gray et al., 1995a). According to Chen and Robert (2010), the legitimacy theory is paying attention to the legitimisation process, however, the stakeholder theory considers the legitimisation strategy. Woodward et al., (1996) had also suggested that despite the fact that legitimacy and stakeholder theories are similar in viewing a firm as an entity of a large society, both hold different perspectives. While the legitimacy theory considers the firm’s contractual obligation to its entire society, the stakeholder theory distinguishes between stakeholder groups within the society of a firm and perceives that some stakeholder groups are more important to the firm than others (Mitchell et al., 1997; Altman, 2000). It can be expressed further that the legitimacy theory concerns the process of shaping the society perception regarding a firm via emblematic actions and communication, however stakeholder theory provides support to a firm to determine, understand and manage the specific interest of its significant stakeholder group whose perceptions need to be shaped (Van Der Laan, 2009). Hence, the legitimacy theory generally focuses on managerial perceptions while the stakeholder theory considers the accountability to key stakeholders as its core focus.

As a result, the so-far combined theories can be utilised to explain voluntary and mandatory CSR as firms engage in community investment and philanthropic and charitable activities as well as satisfy the required standards and regulations as a means of legitimising their business operations and sustainability within the society and consequently obtain the licence to pursue operating within the society. However, the literature suggests that for the purpose of legitimising activities to gain acceptance and consequently obtain the desired legitimising influence, the expectations of the society stakeholder group must be met; such activities can not only set such expectations
but also has the ability to award legitimacy (Van Der Laan, 2009; Chen and Roberts, 2010). Thus, engaging in voluntary and mandatory CSR can be adopted either as a way of a legitimisation process or a practice in accountability to key stakeholder groups or both together (Van Der Laan, 2009). To this extent it cannot be argued that the legitimacy and stakeholder theories are not equivalent theories as their assumptions are not entirely the same. The legitimacy and stakeholder theories are not competing theories either as their assumptions are not contradictory, but rather are complementary to one another (Morris, 1987). In terms of voluntary CSR where firms engage in community investment and philanthropic and charitable activities towards their society, Stenberg’s (1997) criticism regarding the stakeholder theory indicates that a stakeholder can be clarified with the application of the legitimacy theory. Voluntary CSR can be viewed by the legitimacy theory from the perspective of legitimising firms’ operations as compliance to the implied social contact existing between the firm and its society (Dowling and Pfeiffer, 1975), hence obtaining a licence to operate within that society.

Furthermore, society falls within the determination of the primary stakeholder group according to the various theoretical determinations of stakeholders; Clarkson’s (1995) classification includes the primary and secondary groups of stakeholders. Moreover, the firm is responsible for society as an implied social contract exists between them regardless of whether or not society is a financial stakeholder group. Nevertheless, the stakeholder theory provides strength to the relationship between the firm and the society in which they operate by defining society as a stakeholder in the firm. Therefore, the legitimacy and stakeholder theory complement one another. Thus, managers of the firm have a dual responsibility towards the firm’s society. First the firm has to show moral obligation to provide evidence of compliance of its part of the social contract in existence; second the firm has to show responsibility to society as a stakeholder group. It can be confirmed as a result that the existence of the firm entirely relays on the support of society as the guardian of the resources available to the firm as well as a stakeholder in the firm.

3.3.2 Legitimacy and Stakeholder Theories vs. Agency Theory
The legitimacy theory, stakeholder theory and agency theory all share the same provision concerning the implied social contract prevalent to them; though the implication of this provision varies from one theory to another. The provision of a social contract is an implied essential provision between the firm and its society for the legitimacy theory (Dowling and Pfeiffer, 1975;
Preston and Post, 1975; Lindblom, 1983; Ashford and Gibbs, 1990; Deegan, 2002) and stakeholder theory (Freeman, 1984; Buchholz, 1989; Dobson, 1991; Donaldson and Preston, 1995; Clarkson, 1995; Mitchell et al., 1997; Sternberg, 1997; Rowley and Berman, 2000; Jensen, 2001; Freeman and Phillips, 2002). However, for the agency theory, the social contract is an implied essential provision between the firm and its financial stakeholders (Morris, 1987). Hence, it can be noticed that both the legitimacy and stakeholder theories focus on a wider range of stakeholder groups (society as a whole). On the other hand, the agency theory focuses only on a subset of the firm’s stakeholder, the financial stakeholders (shareholders). Consequently, and since the application of agency theory is limited to financial stakeholders, it may not be able to be applied to understand voluntary and mandatory CSR on its own; it may be utilised to explain the interaction between the legitimacy and stakeholder theories in understanding voluntary and mandatory CSR. The following two paragraphs are considering this analysis.

3.3.2.1 Legitimacy vs. Agency Theory

With regards to voluntary and mandatory CSR, it can be noticed that the legitimacy and agency theories are not parallel theories but rather subcategories, hence agency theory might be applied to provide an explanation of the legitimacy theory’s position in understanding voluntary and mandatory CSR. With reference to Morris’s (1987) ideology, it can be assumed that the two theories are subcategories whether the substantial condition of one is at least a subcategory of the substantial condition of the other or whether the sufficient condition of one “is entailed in part but not all of a set of sufficient condition” of the other (Morris, 1987, p.49). This means it can be claimed that the agency theory is implicit in the legitimacy theory. According to Chan and Milne (1999) the legitimacy theory assumed that the firm pursues its business under a mandate that might be lost if the firm was found wanting. For that reason, assuming the presence of an agent-principal relationship where the agent (the firm) owes accountability to some extent to the principal (society), the society may pull out their loyalty if the firm fails to perform, thus incurring agency costs (Jensen and Meckling, 1976; Morris, 1987).

3.3.2.2 Stakeholder vs. Agency Theory

Similarly, it can also be noticed that the stakeholder and agency theories are not parallel theories but rather subcategories; the agency theory might be employed to give an explanation of the stakeholder theory’s position in explaining voluntary and mandatory CSR. The implications of both the agency theory and the stakeholder theory can be used to understand voluntary and
mandatory CSR phenomena since the firm cannot be sustained without the resources and support received from the social stakeholder group as the society stakeholder group could compensate or penalise a firm when the firm’s actions meet or do not meet their expectations, and may pull out if they feel they have not been treated fairly (Clarkson, 1995; Chan and Milne, 1999). Thus, it is obvious that the implied agent-principals relationship exists between the firm and its stakeholders. As a result, with the complementary role of the agency theory, the stakeholder theory can be applied to understand the nature of the legitimacy relationship between the agent (firm) and its principal (its society) and additionally identify the accountability level expected by the principal (society) from the agent (firm) (Woodward et al., 1996; Mitchell et al., 1997).

3.3.3 Legitimacy Theory vs. Institutional Theory

According to Suchman (1995), since legitimacy is assumed to stem from some socially constructed system of values, norms, beliefs, and definitions, conformity to this system awards social approval. In other words, for the reason to be perceived as legitimate corporations, the patterns of corporation structures and behaviours is suggested to pursue the direction of these socially constructed norms and values (Chen and Roberts, 2010). Consequently, the characteristic of the socially constructed value system is presumed to be institutionalised into each part of institutions (Meyer and Scott, 1983; Zucker, 1987; DiMaggio and Powell, 1991). Institutions were defined as “the ways in which the value patterns of the common culture of a social system are integrated into the concrete action of its units.” (Smelser, 1956, p.102). Many scholars may have found this definition reasonable and assumed that conformity to the structures and principals of a pre-existing institution is the simplest method to grant legitimacy as sustained institutional patterns should already have the feature of legitimacy (Ashford and Gibbs, 1990; Oliver, 1991; Suchman, 1995). As a result, and according to Suchman (1995, p.576), “legitimacy and institutionalisation are virtually synonymous. Both phenomena grant rights to organisations primarily by making them seem natural and meaningful.”

However, the institutional theory holds a narrower perspective than that of the legitimacy theory. While the institutional theory views the pattern of the established institutions as the emblematic representation of the social value system, the legitimacy theory examines directly the value system of the society (Chen and Roberts, 2010). Moreover, the institutional theory offers a clear resolution as conformity is the essential managerial approach for corporations seeking legitimacy. Despite the reasonable course of legitimacy provided by the institutional theory, it
was argued that this type of legitimacy practice supports the legitimacy of only the current existing social system (e.g. capitalism) (Gray et al., 1996). Furthermore, the institutional theory can be employed to describe the reinforcement of the existent condition of legitimacy. However, the institutional theory could not be sufficient to clarify the preliminary changes in social expectations or the dynamics of legitimacy, for example why firms may begin paying attention to voluntary and mandatory CSR expenditures. Within the context of voluntary and mandatory CSR, it is obvious that the legitimacy and institutional theories are not equivalent theories but rather subsets hence the institutional theory might be utilised to provide an explanation of the position of the legitimacy theory in understanding voluntary and mandatory CSR phenomena. Morris (1987) argued that it can be assumed that two theories are subcategories whether the substantial condition of one is at least a subcategory of the substantial condition of the other or whether the sufficient condition of one “is entailed in part but not all of a set of sufficient condition” of the other (Morris, 1987, p.49).

3.3.4 Legitimacy Theory vs. Resource Dependence Theory

It has been agreed that legitimacy is like any other resource that firms seek for persistent survival (Ashford and Gibbs, 1990; Suchman, 1995; Deegan, 2002; Pfeffer and Salancik, 2003). Suchman (1995, p.576) views “legitimacy as an operational resource that organisations extract – often competitively – from their cultural environments and that they employ in pursuit of their goals.” This view was found to be in line with the concept of the resource dependence theory (Pfeffer and Salancik, 2003). The concept of the resource dependence theory implies that whatever resources are essential to the existence of a firm, the firm will seek methods that ensure the continuation of the supply of these resources (Pfeffer and Salancik, 1978). With this in mind, it is obvious that the legitimacy theory and the resource dependence theory are related and the overlap between their notions is existent.

The legitimacy theory and the resource dependence theory are both paying attention to the relationship between corporations and the environment in which they operate in. The legitimacy theory persists on avoiding any threat to a corporation’s legitimacy. However, the resource dependence theory has a lower interest in the outcome of being or not being legitimate. Resource dependence theorists use the less abstract term of “resource” rather than using the abstract expression “legitimacy”. The term “resource” explicitly suggests the objective for a corporation in its interaction with its environment is to gain resources (Chen and Roberts, 2010).
It has been suggested that legitimacy is basically like any resource that corporations must gain from the environment they operate in (Ashford and Gibbs, 1990; Suchman, 1995; Deegan, 2002; Pfeffer and Salancik, 2003). On the other hand, Hybels (1995) criticised such a suggestion by presenting a tautological linkage between resource acquisition and legitimacy. Legitimacy can be achieved as resources are transferred from external entities to the central corporation, yet legitimacy is needed before other externals will award any resource (Hybels, 1995). Legitimacy is a figurative image of the appraisal of a corporation which has no material form. Therefore it was emphasised that legitimacy has better features as both part of the context for exchange and a by-product of exchange instead of viewing legitimacy as something prepared for exchange among corporations (Hybel, 1995). Hybels (1995) had also appealed to Terreberry’s (1968) assertion regarding the relationship between resources and corporate legitimacy which was provided a long time ago. Terreberry (1968, p.608) declared that “the willingness of the firm A to contribute to X and of agency B to refer personnel to X, and firm C to buy X’s product testifies to the legitimacy of X.” From this point of view, Chen and Roberts (2010) argued that legitimacy can be represented by resource flow – a noticeable measure of an abstract notion – and that firm legitimacy can be informed when they obtain an understanding of the roles played by a number of corporation constituencies and their interactions with the focal entity. It was also declared that “to build a well-grounded theory of the legitimation of organisations, it is necessary above all to identify the critical actors, both internal and external, whose approval is necessary to the fulfilment of an organisation’s functions.” (Hybels, 1995, p.243). The above arguments indicate that the two concepts of both the legitimacy and resource dependence theories are complementary to one another.

3.3.5 Establishing the Link

In summary, the inter-relationship of the theories reviewed in this chapter and the proposed link between voluntary and mandatory CSR and these theories are shown in Figure 3.1 below. In a few words, the legitimacy theory declares that a social contract persists between society and the firm. The stakeholder theory has strengthened this relationship where it sees the society as one of the main stakeholder groups of the firm. In contrast, the agency theory further explains this relationship from the implication of a principal-agent perspective.
Legitimacy Theory

A social contract exists between firms and their society (community).

Stakeholder Theory

Identify:
- the key stakeholder groups including the society
- their requirements and expectations
- expected response

Resource Dependence Theory/Legitimacy Theory

Legitimacy can be obtained when it is simply perceived like any resource that the firm should obtain from the environment.

Institutional theory/Legitimacy Theory

Institutionalization and institution needs to be reflected to be perceived as reality and therefore grant legitimacy.

Legitimacy/Stakeholder Theories

Firms are under pressure and moral obligation to:
- Fulfil social contract
- Manage perception and meet society’s expectation
- Involve in voluntary and mandatory CSR

So managers create alignment between firm objectives and society’s expectation.

Agency Theory/Legitimacy Theory/Agency Theory/Stakeholder Theory

This leads to:
- Conflict of interest with shareholders’ wealth maximisation strategy (short-term)
- Agency issue
- Agency cost of equity
- Monitoring mechanism
- Investors with long-term orientation suggest compensating managers with long-term share option in order to align their interest with business sustainability and therefore invest in voluntary and mandatory CSR

Legitimacy/Agency Theories

The society perceives and evaluates the level of voluntary and mandatory CSR engagement then confers legitimacy or sanction.
To this end the firm is under the pressure of stakeholder requirements as well as under a moral obligation to involve in voluntary and mandatory CSR, firstly obtaining operational legitimacy; secondly considering accountability to stakeholders, hence communicating the outcomes with shareholders and other stakeholders via disclosing the impact of its activities in the local society and the possible strategies it has taken to diminish any negative impact, and discussing the firm’s participation conducted into the society which the firm operates in; and thirdly reducing agency cost of equity. Regarding voluntary and mandatory CSR involvements, the concept of institutionalisation and institution needs to be reflected to be perceived as reality and therefore grant legitimacy. The institutional theory implied that institutionalisation and institution have developed over time from creating social reality in order to achieve social approval (legitimacy). Nevertheless, legitimacy can be obtained when it is simply perceived like any other resource that the firm should obtain from the environment in which it operates, as suggested by the resource dependence theory.

3.4 The Propositions

Considering the whole discussion of this chapter, it can be suggested that the decision-making by management in regard to voluntary and mandatory CSR expenditures is diverse but regardless, the debate is that engaging in voluntary and mandatory CSR is aimed to grant legitimacy and satisfy stakeholders’ requirements in order to gain a competitive advantage for the long-term basis for business sustainability. The assumptions of the legitimacy theory, stakeholder theory and agency theory indicate that the firm is operating under a social contract with the society in which it operates in and thus is under a moral obligation of accountability. On the other hand, society requires that the firm fulfils this moral obligation by withdrawing its approval if a response is not to be found (Chan and Milne, 1999). Therefore, managers are under pressure to fulfil this obligation and respond to stakeholders’ requirements in order to gain a competitive advantage that supports business sustainability over the long-term, thus requiring share ownership as an incentive tool that works for the long-term basis and which may lead managers to adhere to society’s expectations:

Firstly, firms involve in voluntary and mandatory CSR as the compelling motivation to legitimise the firms’ operations and actions within the society in which they operate in as a result of the social contract in presence between the firm and its society.
Secondly, managers are required to meet the perceptions of the social audience (their stakeholders including their community) that would award legitimacy via satisfying their expectations.

Thirdly, satisfying stakeholders and community expectations would be based upon the perceptions of the social audience observing the firms’ legitimising activities against a list of legitimising actions constructed by the firm itself.

Fourthly, Firms engage in voluntary and mandatory CSR as a response to the global request for stakeholders’ demands for CSR, therefore managers build their reputations as managers by responding to such demands in order to be seen as strategically aligning firm objectives with the current global quest regarding CSR expenditures.

Fifthly, the management reputational mechanism leads to the conflict of interest with the short-term oriented shareholders therefore creating agency cost of equity.

Sixthly, the management reputational mechanism alternatively leads to the alignment of management interests with those of long-term oriented investors.

Seventhly, in order to reduce the agency issues, shareholders are constrained to instituting boards of directors for monitoring purposes incurring additional agency costs.

Eighthly, institutionalisation should be reflected to be perceived as reality and hence grant legitimacy.

Ninthly, legitimacy can be obtained when it is simply perceived like any resource that the firm should obtain from the environment.

Tenthly, communicating effectively with shareholders and other stakeholders and making them aware of the outcomes of investing in voluntary and mandatory CSR concerning business sustainability would reduce agency cost of equity.
Notably, it can be seen that the above propositions incorporate the overlapping relationship of the theories, for instance, propositions 8 to 10 seem to cut across all five theories, while 1 to 4 consider both stakeholder and legitimacy theories and propositions 5 to 7 relate to agency, legitimacy and stakeholder theories. The implication of these is that certain constructs applicable to one theory may also apply to other theories. Moreover, more than one theory could be captured when proxy variables are used as metrics of such constructs.

3.5 Chapter Summary

The theoretical framework of this study was discussed in detail in this chapter. This chapter examined five theories and their inter-relationship and how their combination was applied to explain voluntary and mandatory CSR phenomena. The theories were discussed from two different categories; the stakeholder, legitimacy, institutional, and resource dependence theories were examined to explore the key drivers for voluntary and mandatory CSR as external drivers, while the agency theory was examined to explore the instrumental economic and managerial perspectives regarding voluntary and mandatory CSR as an internal driver. The review of theories in this context led to a total of ten propositions which sets the framework of the next chapter where the propositions will be developed into the main research question and testable hypotheses to be examined in this study.
Chapter Four: Hypotheses Development

4.1 Chapter Overview
The theoretical background underpinning the investigation of voluntary and mandatory CSR was reviewed in the previous chapter. The theories used in explaining CSR and the inter-relationship were also discussed in the previous chapter. Then the chapter provided ten propositions which were deduced from reviewing the theoretical background. This chapter aims to synchronise the theories, deduced propositions and the research gap identified from reviewing the literature into the main research question and testable hypotheses. However, as mentioned in the previous chapter (Chapter 3), specific proxy variables applicable to legitimacy theory will also apply to the stakeholder theory, agency theory and resource dependence theory, while specific proxy variables applicable to the legitimacy theory may apply to the institutional theory, given that these theories are complementary and subset respectively. Firstly, in this chapter, the deduced propositions are conceptualised into the main research question in order to properly define the main variables to be tested, and which testable hypotheses were developed for the empirical investigation. Thus, the main research question asked by this study is as follows:

*How does boards’ ownership structure impact voluntary and mandatory CSR?*

Subsequently, the chapter discusses the development of six hypotheses related to the main research question. However, there is a lack of studies addressing ownership structure and CSR relationship and, since boards’ ownership structure is an element of CG mechanisms and CSR is a topic usually considered under CG, this chapter reviews studies concerning boards’ ownership and firm performance relationship in order to understand such a mechanism. Then this chapter discusses the impact of such a mechanism and other CG mechanisms on CSR. Therefore, Section 4.2 reviews studies examining the impact of boards’ ownership structure on firm performance. Then, Section 4.3 discusses the relationship between boards’ ownership structure and voluntary and mandatory CSR in order to develop hypotheses of the current study and Section 4.4 discusses the link between the new model developed from the literature, theories and developed hypotheses.
4.2 Previous Studies on Boards’ Ownership Structure

This section will analyse boards’ share ownership as a key variable for good CG and its effectiveness in enhancing firm performance that considers the interests of investors with short-term targets. In other words, it will focus on boards’ ownership structure as a CG mechanism and investigate its key role in promoting CG. There is a lack of studies considering the relationship between boards’ ownership structure and CSR and since implementing good CSR shows that the firm has good CG in place and because the literature suggests that there is a high correlation between the key variables of CG and CSR (Waddock and Graves, 1997; Johnson and Greening, 1999; Parry and Proctor-Thomson, 2002; and Basu and Palazzo, 2008), this section will review studies concerning the relationship between boards’ ownership and firm performance that shows the effectiveness of such a mechanism of CG. In other words, there is a conspicuous gap in the literature concerning boards’ ownership structure and CSR evaluating the long-term business sustainability, thus necessitating the review of boards’ ownership and firm performance concerning the short-term basis in order to identify empirical issues in such a CG mechanism generally, hence positioning the current study into proper perspective.

Furthermore, it is necessary to understand the mechanism of boards’ ownership for being an issue of internal mechanisms of CG (Jensen, 1983). This adds debate to the aspects of the agency theory such as that of executive ownership that can be used as a solution for the separation of ownership and control for being a good way to align the interests of executive directors with those of shareholders (Jensen and Meckling, 1976). On the other hand, other studies concerning the effectiveness of ownership rewarded by firms to their management in order to obtain effective CG indicate for the greater diffuseness in ownership structure that makes the agency problem more severe (Demsetz and Villalonga, 2001). This confusion necessitates this study to discuss prior research concerning boards’ ownership structure including executive ownership, non-executive ownership and concentrated ownership that will be reviewed in order to assess its key significance to structure a new model for good CG and CSR.

4.2.1 Executive Ownership

Firms need to reward their directors a certain percentage of shares in the firm in order to align their interests with those of shareholders which is maximizing shareholders’ wealth and thus reducing agency costs (Jensen and Meckling, 1976). In other words, executive share ownership can be used as an effective tool to enhance CG (Jensen and Meckling, 1976). Previous literature
suggests that there is a significant and positive relationship between shareholdings percentage of executive directors and firm performance (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Florackis et al., 2009). These studies support Jenson’s and Meckling’s (1976) assumption. However, in examining the effectiveness of executive ownership in enhancing CG, outcomes of prior research had shown inconsistency (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Demsetz and Villalonga, 2001; Florackis et al., 2009; O’Connell and Cramer, 2010). While most studies proved a positive relationship between executive ownership and firm performance (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Florackis et al., 2009), a few studies found an insignificant relationship (Demsetz and Villalonga, 2001; O’Connell and Cramer, 2010). These diverse findings could be due to a few reasons such as geographical locations, sample size, the regression model employed in data analysis, and the measures used as proxies for the dependent and independent variables, mainly the measurement proxy used for executive ownership.

Morck et al., (1988) is one of the first key papers which confirmed the assertion of Jensen and Meckling (1976) that when executives of 371 (a U.S. large industrial firms) Fortune 500 firms own a higher percentage of share ownership, firms tend to have high financial performance. Similarly, Short and Keasey (1999) found that companies quoted on the London Stock Exchange (LSE) and their executives that hold a considerable share ownership have better firm performance over a four-year sample period. In attempting to reduce reverse causality arising between corporate performance and ownership, Short and Keasey (1999) measured boards’ ownership at the beginning of the period under consideration (ownership variables were collected for the year of 1988) though the possibility of reverse causality clearly remains. However, other variables of corporate performance and control variables were measured as the averages over the period of 1989-1992. Consistent with Morck’s et al. (1988) evidence, Short and Keasey (1999) concluded a positive relationship between corporate performance and managerial ownership.

Tobin’s Q was used as a market measure of firm performance by Morck et al.2 (1988) and Short and Keasey3 (1999). Morck et al. (1988) used the profit rate4 as an alternative measure of

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2 The average Tobin’s Q in Morck’s et al. (1988) study was measured as the ratio of the firm’s market value to the replacement cost of its physical assets; Tobin’s Q is high when the firm has valuable intangible assets in addition to physical capital, such as monopoly power (Lindenberg and Ross, 1981), goodwill, a stock of patents, or good managers. Morck et al. (1988) obtained the measure of Tobin’s Q from the Griliches R&D master file (Cummins et al., 1982) for 1980.
management performance and revealed parallel results with that of Tobin’s Q regression. Short and Keasey (1999) had also considered two different measures for corporate performance (accounting and market measures) in examining the ownership-performance relationship and evidence indicates for a positive association. The return on shareholders’ equity\(^5\) was used by Short and Keasey (1999) as an accounting measure of corporate performance. Despite using two measures for corporate performance and the attempts to protect the integrity of Morck’s et al. (1988) and Short’s and Keasey’s (1999) assumption, there is no escaping the fact that reverse causality could underpin the estimated findings; the positive performance-ownership relation could simply indicate that more successful companies compensate executives with equity shares and in this case the causality effect runs from corporate performance to executive ownership rather than vice versa. However, Morck’s et al. (1988) and Short’s and Keasey’s (1999) results show that the increase of firm value is associated with the increase of boards’ ownership reflecting the convergence of interests of management and shareholders as shareholders’ interest is to maximize their wealth and the increase of boards’ ownership was found to give management the incentive to deliver value. Generally, a positive relationship was identified between firm value and the percentage of total shares held by all directors of the board of Morck’s et al. (1988) and Short’s and Keasey’s (1999) samples.

Using a quadratic relationship (for non-linear relationship) between directors’ ownership and Tobin’s Q, Morck’s et al. (1988) further results report a significant non-monotonic relationship. Morck’s et al. (1988) results show that the increase of Tobin’s Q is associated with the rise of board ownership from 0 percent to 5 percent reflecting the convergence of interests of management and shareholders. Tobin’s Q falls as board ownership rises further to 25 percent reflecting managerial entrenchment and then continues to rise, although much more gradually, as ownership rises beyond 25 percent. Overall, a positive relationship was identified between Tobin’s Q and the percentage of total shares held by directors of the board of Morck’s et al. (1988) sample. Consistent with Morck’s et al. (1988) evidence, Short and Keasey (1999) also concluded a non-linear relationship between corporate performance and managerial ownership

\(^3\) The valuation ratio (Tobin’s Q) which was used by Leech and Leahy (1991) was in turn adopted by Short and Keasey (1999) as a proxy for market measure of corporate performance, and was measured as the market value of the firm divided by book value of equity.

\(^4\) Profit rate was measured as the ratio of the firm’s net cash flow minus the inflation-adjusted value of depreciation to the replacement cost of its capital stock.

\(^5\) The return on shareholders’ equity was measured as profits attributed to shareholders divided by shareholders’ equity and reserves.
by extending the analysis and considering a more generalised form of the relationship. The non-linearity relationship reflects the positive performance-ownership relation at a lower level of ownership followed by management entrenched behaviour at the range of 12 percent to 40 percent ownership then again followed by a positive relationship. This confirms that the UK executives became entrenched at a higher level of ownership than their US counterparts.

More supporting evidence for the link between executive ownership and firm performance was provided using cross sectional studies\(^6\) (Han and Suk, 1998; Florackis \textit{et al.}, 2009). Using a sample of 301 US industrial firms, Han and Suk (1998) utilized stock return as a proxy for firm performance\(^7\). In Florackis’s \textit{et al.} (2009) analysis, Tobin’s Q was used to measure the dependent variable, corporate performance\(^8\). Only executive ownership was considered by Han and Suk (1998) and Florackis \textit{et al.} (2009) as a proxy for the independent variable, while Morck \textit{et al.} (1988) and Short and Keasey (1999) used ownership of all directors in the board. Florackis \textit{et al.} (2009) measured executive ownership as the percentage of shares held by the executive director. In comparison, Han and Suk (1998) measured executive shareholdings as the average stake of executives during the sample five-year period (1988-1992). Nevertheless, findings of Han and Suk (1998) and Florackis \textit{et al.} (2009) both indicate a positive and statistically significant relationship between executives’ ownership and corporate performance of US and UK firms and this indicates for strong alignment effect of executive ownership. These findings support the conjecture that executive ownership helps align the interests of executive directors with those of shareholders (Jensen and Meckling, 1976) leading to effective CG.

Although prior studies have found a positive relationship between executive ownership and firm performance using cross sectional studies (Morck \textit{et al.}, 1988; Han and Suk, 1998; Short and

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\(^6\) Han and Suk (1998) adopted the weighted least-squares (WLS) method using the reciprocals of the error variances, estimated over the 60 months prior to the sample period as suggested by Amemiya (1985). Florackis \textit{et al.} (2009) used the semi-parametric approach in their examination; this approach offers the flexibility of relaxing the functional form of ownership (for example, the shape of ownership-performance relationship is not a priori determined) and still controlling for other variables that may affect corporate performance. Florackis \textit{et al.} (2009) used this methodology which was suggested by Rajan and Zingales (1995) to control for potential endogeneity problems. The dependent variable, firm performance, was measured in the year 2004, while the independent variables including ownership were measured using the average values over the period 2000-2003. The framework suggested by Rajan and Zingales (1995), however, is not capable of revealing the true relationship between executive ownership and corporate performance due to the possibility of reverse causality.

\(^7\) Stock return was measured as the geometric average return of the firm for the period 1988-1992.

\(^8\) Tobin’s Q was measured as the ratio of the book value of assets minus the book value of equity plus the market value of equity to the book value of assets.
Keasey, 1999; Florackis et al., 2009), other studies used the same methodology and evidenced insignificant relationship (Demsetz and Villalonga, 2001; O’Connell and Cramer, 2010). Using ordinary and two-stage least squares regressions, Demsetz’s and Villalonga’s (2001) findings cast considerable doubt on the asserted effect of ownership structure on firm performance; none of the estimates are statistically significant. O’Connell and Cramer (2010) applied an Ordinary Least Square (OLS) regression model on a small sample of 44 firms listed on the Irish Stock Exchange at the year end of 2001. Comparing the sample size (44 companies) of O’Connell’s and Cramer’s (2010) study with other studies (Demsetz and Villalonga, 2001; Benson and Davidson, 2009; Florackis et al., 2009) who used a sample of 223 and 1309 US firms, and 1010 UK firms respectively, the sample is relatively small and their analysis considered only one year, though O’Connell and Cramer (2010) added a valuable contribution to the literature for using three alternative proxies for corporate performance; stock market return\(^9\), financial Q\(^10\), and return on assets\(^11\). In comparison, Demsetz and Villalonga (2001) used Tobin’s Q\(^12\) as a proxy for firm performance. In measuring ownership, O’Connell and Cramer (2010) used the combined stake of directors on the board for the independent variable. Demsetz and Villalonga (2001) considered two dimensions that represent conflicting interests: management ownership that was measured by the fraction of combined board, and concentrated ownership.

Using panel data in examining the effectiveness of executive ownership in enhancing CG, outcomes of prior research (Palia and Lichtenberg, 1999; Mura, 2007; Benson and Davidson, 2009) had shown consistency as all studies proved a positive relationship between executive ownership and firm performance. Unlike most previous studies in this domain which were based on cross-sectional analysis, Palia and Lichtenberg (1999) used panel data (12 years of data for the period 1982-1993) in exploring the ownership-performance relationship to control for any unobservable firm heterogeneity\(^13\) and the problem of endogeneity\(^14\) and discovered a positive

\[\text{Stock market return, the market based measure that was measured as the change of stock price plus dividend for the period.}\]
\[\text{Financial Q was measured as the sum of market capitalization plus both long and short-term debt over the book value of total assets.}\]
\[\text{Return on assets, the accounting measure that was measured as the ratio of earnings before interest and tax over total assets.}\]
\[\text{Tobin’s Q was measured by taking the average of annual values for the five years 1976-1980; the numerator of the Tobin’s Q ratio is the year-end market value of common stock, and the book value of preferred stock and debt. The denominator of the Q ratio is year-end book value of its total assets.}\]
\[\text{Heterogeneity bias refers to the bias in regression results due to the omission of firm-specific variables that are unobservable or very difficult to observe (Wooldridge, 2013).}\]
relationship. Out of 600 randomly selected US firms, Palia and Lichtenberg (1999) used a sub-sample of 255 randomly selected manufacturing US companies with 1823 observations, ensuring that the sample does not suffer from any survivorship or large firm size biases. More use of panel data by employing the fixed effects model was done by Mura (2007) who considered 11 years of data for the period 1991-2001 for the random sample of 672 firms listed in FTSE All Shares. Using another sample of panel data of 1309 US firms and 9424 firm-year observations for the period 1995-2003, Benson and Davidson (2009) have also investigated the relationship between managerial ownership and corporate value and found a positive significant relationship in both analyses using fixed effects regressions and after controlling for potential endogeneity.

In measuring firm performance, all the above studies used Tobin’s Q\(^{15}\) (Palia and Lichtenberg, 1999; Mura, 2007; Benson and Davidson, 2009). The combined percentage of shares outstanding owned by the board was used as a proxy for managerial ownership hence evidence of Palia’s and Lichtenberg’s (1999) study does not reflect the actual impact of two different groups – executives and non-executives shareholdings – on firm performance. Mura’s (2007) results show that overall directors’ ownership is associated with firm performance; additional analyses illustrated that these results are driven by executive ownership where investigation of only executive ownership took place and findings were consistent with those of all directors of the board. Benson and Davidson (2009) measured managerial ownership differently as it was measured by pay-performance sensitivity and pay-performance semi-elasticity for each director’s shareholdings\(^{16}\). Palia and Lichtenberg (1999) used a one year lagged managerial ownership as an explanatory or an independent variable to ensure that findings are not affected by endogenous regressors. Two factors have improved Palia’s and Lichtenberg’s (1999) results, the use of lagged data of the independent variables that ensures that findings are not affected by

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\(^{14}\) Endogeneity refers to the existence of an endogenous independent (explanatory) variable in a model. Endogenous variable is this that is correlated with the structural error term (also referred to as “disturbance term” or “residual”) due to an omitted variable or measurement error (Wooldridge, 2013).

\(^{15}\) Palia and Lichtenberg (1999) measured Tobin’s Q as the market value of common stock plus the book value of preferred stock and the book value of debt over the replacement values of assets; calculation of the replacement value of assets of the firm was adopted from Cummins et al. (1994). Tobin’s Q in Mura’s (2007) and Benson’s and Davidson’s (2009) study was measured as the market value of equity minus the book value of equity plus the book value of assets, over the book value of assets.

\(^{16}\) Pay-performance sensitivity was defined as the dollar change in wealth for a dollar change in corporate value. The level of managerial ownership changes slowly and this masks a significant ownership effect when examining the performance-ownership relation using firm fixed effects to control for unobserved firm heterogeneity. This occurs as much smaller within firm variation than between firm variation (Benson and Davidson, 2009). Using pay-performance semi-elasticity, instead of using pay-performance sensitivity as a proxy of managerial ownership incentives, results in meaningful variation within firms over time (Benson and Davidson, 2009).
endogenous regressors and to avoid reverse causality, and the use of panel data to control for any unobservable firm heterogeneity. However, the study of Palia and Lichtenberg (1999) can be criticised for the use of a market-based measure as a proxy for firm performance with the use of lagged data. In addition, it would be better if executive ownership and non-executive ownership were examined separately rather than examining the combined directors’ ownership as executive and non-executive may have conflicting interests. As a result, lagged data and panel data will be used by this thesis with an accounting measure to be used as a proxy for firm performance.

In summary, prior studies concerning the relationship between executive ownership and firm performance show minor inconsistencies due to some factors including the use of differing geographical locations, varied sample size, a differing regression model employed in analysing data, and various measures in measuring ownership and performance (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Palia and Lichtenberg, 1999; Demsetz and Villalonga, 2001; Mura, 2007; Benson and Davidson, 2009; Florackis et al., 2009; O’Connell and Cramer, 2010). The majority of the above studies presented in Table 4.1 promote the concept of executive directors holding shares in their firms, resulting in the alignment of their interests with those of shareholders and improving performance (Jensen and Meckling, 1976).
### Table 4.1: Summary of literature concerning executives’ ownership

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mura (2007)</td>
<td>1991-2001</td>
<td>UK-672 Firms</td>
<td>Positive Relationship with Tobin’s Q</td>
</tr>
<tr>
<td>Florackis et al. (2009)</td>
<td>2000-2004</td>
<td>UK-1010 Firms</td>
<td>Positive Relationship with Tobin’s Q</td>
</tr>
<tr>
<td>O’Connell and Cramer (2010)</td>
<td>2001</td>
<td>Ireland-44 Firms</td>
<td>Insignificant Relationship with Tobin’s Q, ROA, and Stock Market Return</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

#### 4.2.2 Non-executive Ownership

Non-executive directors have different incentives than those of executive directors and their roles are based on reviewing the performance of both the board and the executive director (Morck et al., 1988; Cadbury, 2000). Non-executive directors are typically paid less than the executive director as their positions are generally part time and they commonly sit on several boards (Morck et al., 1988, Davies, 2002; Mura, 2007). As a result, and in order to induce non-executive directors to actively oversee executive directors’ use of firm resources and control the board, non-executive directors have been rewarded stock ownership as it is the usual mechanism utilised to provide incentives (Mura, 2007) and this was one of the suggestions provided to obtain good CG. The literature suggests that non-executive directors, like executive directors, will monitor effectively only if they have a significant investment in the firm (Jensen, 1993; Morck et al., 1988). Therefore, ownership of non-executive directors is considered in terms of
its key role in obtaining good CG and CSR. This section reviews prior empirical research concerning this dimension of boards’ ownership structure.

Prior literature suggests that there is a significant and positive relationship between non-executive ownership and firm performance as measured by Tobin’s Q, the market based measure (Morck et al., 1988; Davies et al., 2005). Considering the present literature, limited studies addressed the effectiveness of non-executive ownership in obtaining good CG. Across different countries and using cross sectional studies in examining the effectiveness of non-executive ownership in enhancing CG, outcomes of prior research had shown consistency as they have proved that non-executive ownership is a good CG mechanism that enhances CG and has a positive significant relationship with firm performance (Morck et al., 1988; Davies et al., 2005). Using a sample of 371 US large industrial firms, Morck et al. (1988) investigated the relationship between non-executive ownership and market valuation of the firm’s assets, which was measured by Tobin’s Q, and reported a positive significant relationship. While Morck et al. (1988) used US data, other evidence came from cross sectional studies and used a sample of 752 UK industrial firms and found a positive relationship that shows non-executives’ ownership is effective in monitoring the board (Davies et al., 2005). Similar to Morck et al. (1988), Tobin’s Q\(^{17}\) was also used by Davies et al. (2005) as a proxy for firm performance. Davies et al. (2005) measured non-executive ownership as the total percentage of shares held by all non-executive directors.

However, in determining the impact of non-executive ownership on firm performance, some findings show an insignificant relationship (Mura, 2007; Florackis et al., 2009). Using a sample of 1010 UK firms, Florackis et al. (2009) considered the relationship between managerial ownership and corporate performance over the period 2000-2004 and findings reject the hypothesis that non-executive ownership plays a significant role in CG of UK firms as the coefficient of non-executive ownership is not statistically different from zero. Considering the UK market again and using panel data for a period of 10 years, Mura (2007) provided further evidence for the relationship between boards’ ownership structure and firm performance. Mura (2007) randomly selected 672 firms listed in FTSE All Shares and examined the impact of board ownership structure on firm performance for the period 1991 and 2001. Tobin’s Q was used as a

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\(^{17}\) Tobin’s Q was measured as the market value of the firm’s common stock plus the book value of the firm’s preferred stock plus the book value of the firm’s total debt, over total assets minus current liabilities.
proxy of the dependent variable, corporate performance in both studies (Mura, 2007; Florackis et al., 2009). Results of Florackis et al. (2009) contradicted prior studies including Morck et al. (1988) and Davies et al. (2005) as the ownership of non-executive directors was measured differently by taking the average ownership over the period 2000-2003 rather than considering only a single year. This leads to mis-specified results and in order to obtain reliable results in this thesis, an ownership of a single year in each relevant year (for panel data of this thesis) is used in collecting ownership of executive, non-executive and concentrated ownership. Mura’s (2007) results show that overall directors’ ownership is associated with firm performance however, the relationship between non-executive ownership and firm performance is insignificant. Although Mura (2007) used panel and lagged data that is adopted by this thesis, results of Mura (2007) are not reliable for using Tobin’s Q (the market based measure) in measuring firm performance with lagged data and this had mis-specified outcomes. Thus, despite the popularity of Tobin’s Q in measuring performance, this study will not use it and instead return on assets (the accounting-based measure) will be used as it is more suitable for use with lagged data.

In summary, this study focuses on this dimension of boards’ ownership structure (non-executive ownership) for being a very important mechanism that impacts CG and included it as one of the independent variables in examining its role in obtaining good CG that considers various groups of stakeholders. Table 4.2 illustrates a summary of studies discussed in this section which shows some inconsistency due to the use of differing regression models with unsuitable measures such as the use of a market-based measure of firm performance (Tobin’s Q) with lagged data. Some studies support the concept which implies that non-executive ownership helps to align their interests with those of shareholders and enhance CG (Morck et al., 1988; Davies et al., 2005). Since ownership of non-executive directors proved to be a potential factor in enhancing CG and firm performance, it will be examined in terms of whether it will improve sustainability of the long-run as well.
Table 4.2: Summary of literature concerning non-executives’ ownership

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davies et al. (2005)</td>
<td>1995</td>
<td>UK-752 Firms</td>
<td>Positive Relationship with Tobin’s Q</td>
</tr>
<tr>
<td>Mura (2007)</td>
<td>1991-2001</td>
<td>UK-672 Firms</td>
<td>Insignificant Relationship with Tobin’s Q</td>
</tr>
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<td>Florackis et al. (2009)</td>
<td>2000-2004</td>
<td>UK-1010 Firms</td>
<td>Insignificant Relationship with Tobin’s Q</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

4.2.3 Concentrated Ownership

Concentrated shareholders, who have a large stake in a company, have both the incentive and the ability to oversee management in order to protect their investment as suggested by Shleifer and Vishny (1986). Further arguments had supported this suggestion where it was argued that concentrated owners ensure the control effectiveness within the firm and they can exert a pressure on management to enhance firm value (Demsetz, 1983; Agrawal and Mandelker, 1990; Denis et al., 1995). In the context of the UK market, the majority of concentrated shareholders are financial institutions that are less active investors due to the lack of monitoring expertise and their strong desire to safeguard investment liquidity (Florackis et al., 2009). The typical characteristics of the modern type of UK firm are the insignificant individual ownership and substantial institutional ownership; the ownership of the UK equities by institutional investors had grown from 30 percent in 1963 to almost 80 percent in 2004 (Florackis et al., 2009). Institutional ownership is still diffuse and institutional investors generally lack both the power due to insufficient voting rights, and the will as controlling costs outweigh the benefits, and hence lack control behaviour (Florackis and Ozkan, 2009). Recently, however, institutional investors employ non-executive directors to represent them in the board and monitor performance on behalf of them as they lack monitoring experience (Ellili, 2011). The above arguments highlight the important role of concentrated shareholdings in determining CG effectiveness that needs to be understood. This section reviews the existent empirical literature concerning the mechanism of this dimension of boards’ ownership. The literature suggests that there is a significant and positive association between concentrated shareholdings and corporate performance (Jarrell and Poulsen, 1987; Brickley et al., 1988; McConnell and Servaes, 1990;
Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Benson and Davidson, 2009; Ellili, 2011).

Employing cross sectional studies in examining the effectiveness of concentrated ownership in enhancing CG, outcomes of prior research proved a positive and statistically significant relationship between concentrated ownership and firm performance (Han and Suk, 1998; Short and Keasey, 1999). In contrast, only one study found a negative significant relationship (Devies et al., 2005). This contradiction is due to a few reasons such as geographical location, sample size, and the measure used as a proxy for the dependent and independent variables. In order to capture the impact of concentrated ownership on firm performance, Han and Suk (1998) used a sample of 301 US industrial firms and examined the impact of concentrated shareholdings (mainly institutional investors) on firm performance for the period 1988-1992 and found that in concentrated shareholding the majority of institutional stake have a significant and positive relationship with firm performance, indicating for the effectiveness of institutional owners in monitoring the board. A similar study was conducted on a different location by selecting a sample of 225 UK companies quoted on the LSE for the period 1988 to 1992. Short’s and Keasey’s (1999) results were consistent with those of Han and Suk (1998) despite the use of differing measures of corporate performance. The proxy of stock return\(^{18}\) was adapted by Han and Suk (1998) to measure corporate performance. Short and Keasey (1999) considered different measures of corporate performance (accounting and market measures) in examining the ownership-performance relationship and outcomes of both proxies show a positive association. The return on shareholders’ equity was used as an accounting measure of corporate performance and the Tobin’s Q (the valuation ratio) was used as the market measure. The independent variable, the concentrated shareholdings of Han’s and Suk’s (1998) investigation was measured as the average stake of institutional investors and any other major investors during the sample five-year period (1988-1992). Concentrated ownership (mainly institutional ownership) was measured by the percentage of shares owned by institutions and other investors owing 5 percent or more in Short’s and Keasey’s (1999) study. Concentrated ownership in this thesis was measured similarly by considering the percentage of shares held by institutional and other investors owing 3 percent and over.

\(^{18}\) Stock return was measured as the geometric average return of the firm for the period 1988-1992.
More literature have supported the outcomes of Han and Suk (1998) and Short and Keasey (1999) and the concept of concentrated shareholders enhance CG using panel data (Thomsen and Pedersen, 2000; Benson and Davidson, 2009; Ellili, 2011). One of the key papers that highlight the effectiveness of the monitoring role of concentrated ownership using panel data came from Thomsen and Pedersen (2000) who investigated the impact of ownership on firm performance over the period 1991-1996 using a sample of the 435 largest firms (with 2610 observations) from 12 European countries, including the UK, and generally found a positive relationship between concentrated stake and firm performance. Although the percentage of concentrated ownership is relatively small in the UK where the largest owner holds less than 20 percent, the impact was more pronounced in the UK market than in the European continent. It was also found that the impact was pronounced further when the largest owner is an institutional investor particularly when asset return was used as a proxy for performance. Using panel data – that consists of 1309 US firms and 9424 firm year observations for the period 1995-2003 – Benson and Davidson (2009) investigated the relationship between concentrated ownership (mainly institutional ownership) and corporate value and found a positive and significant relationship in both analyses using fixed effects regressions and also after controlling for potential endogeneity. More evidence on the relationship between concentrated ownership and firm performance using fixed effects panel data was provided by Ellili (2011). Over the period 2001-2004, Ellili (2011) used the sample of 815 US firms to investigate the impact of concentrated ownership (the majority of institutional ownership) on firm performance and found a positive and marginally significant relationship at a confidence degree of 10%.

Three differing measures were used as a proxy for performance in Thomsen’s and Pedersen’s (2000) study; Return on Assets (ROA), market to book value of equity, and sales growth. Tobin’s Q was used as a proxy for firm performance by Benson and Davidson (2009). Unlike other studies (Davies et al., 2005; Mura, 2007; Benson and Davidson, 2009) who used Topin’s Q and (Thomsen and Pedersen, 2000) who used three different measures as a proxy for firm performance including Return on Assets (ROA), market to book value of equity, and sales growth, Ellili (2011) measured firm performance differently as it was measured by total shareholders’ return. Concentrated ownership was measured by identity and share of the largest owner in Thomsen’s and Pedersen’s (2000) study. Benson and Davidson (2009) measured concentrated ownership as the percentage of shares held by major shareholders (mainly dominated by institutional shareholders). Ellili (2001) measured concentrated ownership as the
stake of institutional owners and other external shareholders who own 5 percent and over of the firm’s equity. Outcomes of the above studies (Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Benson and Davidson, 2009; Ellili, 2011) confirm the literature suggesting that concentrated investors play a significant role in monitoring top executives (Holderness, 2003; Hartzell and Starks, 2003).

A negative relationship, however, was discovered by limited scholars including Devies et al. (2005) and Mura (2007) who used a cross sectional study and panel data respectively. Using a sample of 752 UK industrial firms, Davies et al. (2005) examined the impact of concentrated ownership on firm performance for the year 1995 and found a negative relationship which shows that UK concentrated owners (the majority of institutional investors) are ineffectively monitoring. Mura (2007) provided further evidence for the relationship between board ownership structure and firm performance in the UK. Mura (2007) randomly selected 672 firms listed in FTSE All Shares and examined the impact of concentrated ownership on firm performance for the period 1991 and 2001 and discovered a negative and significant relationship. Tobin’s Q was used by Davies et al. (2005) and Mura (2007) as a proxy for firm performance. Mura (2007) measured concentrated ownership by taking the total ownership of all external blockholders, mainly institutional investors. In Davies’s et al. (2005) study, concentrated ownership was measured as the total percentage of shares held by investors owning 3 percent or more of the firm’s equity. This method of measuring concentrated ownership was used by this thesis. Outcomes of Davies et al. (2005) and Mura (2007) are consistent with the prior proposition that too much concentrated stake will overly constrain executives and limit their abilities to take the value-maximizing action (Burkart et al., 1997; Faccio and Lasfer, 1999, 2000).

While some studies considering the relationship between concentrated ownership and firm performance evidenced a significant relationship (Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Devies et al., 2005; Mura, 2007; Benson and Davidson, 2009; Ellili, 2011), other studies have shown an insignificant relationship (Demsetz and Villalonga, 2001; Seifert et al., 2005; Florackis et al., 2009). Applying cross sectional studies to the 223-firm random subsample of the 511-firm original sample from all sectors of the US economy for the period 1976-1980, Demsetz and Villalonga (2001) examined the relation between the concentrated ownership and firm performance and found no statistically significant relation
between them. In order to capture the impact of ownership concentration on firm performance, Florackis et al. (2009) also investigated this relationship using cross sectional studies by taking the average over the period 2000-2004. The results reject the hypothesis that concentrated shareholders play a significant role in CG of UK firms where the coefficients of concentrated ownership are not statistically different from zero.

Mixed results were shown across different locations using cross sectional studies where Seifert et al. (2005) have investigated the impact of concentrated ownership on firm performance in four countries, US, UK, Germany, and Japan, in 2000 by taking the average of three-years of data for the period 1997-1999 in order to reduce the noise associated with figures based on only one year of data. Using both regressions Ordinary Least Squares (OLS) and Two Stage Least Squares (2SLS), Seifert et al. (2005) found that the concentrated ownership of the US market and Germany, which is dominated by institutional owners overall, has a positive impact on firm performance. This relationship was found to be negative in the UK market and insignificant in Japan. Across the four countries, the empirical results of Seifert et al. (2005) indicate that there is no universal relationship between concentrated ownership and firm performance and this is due to the use of various country-specific sources for ownership data and this creates a couple of information problems; firstly, different sources do not provide the same information on concentrated ownership. Secondly, variable definitions are inconsistent across sources. In measuring concentrated ownership, Demsetz and Villalonga (2001)\(^1\), Seifert et al. (2005)\(^2\), and Florackis et al. (2009)\(^3\) used various methods of measurements.

In summary, Table 4.3 shows a summary of studies discussed in this section, which resulted in some inconsistency due to utilising different regression models, different locations and various measures of the dependent variable. Most studies support Graves’s and Waddock’s (1990) arguments that institutional investors are under tremendous pressure to show success to their

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\(^1\) Concentrated ownership was determined by the fraction of shares owned by the five largest shareholders.
\(^2\) Seifert et al. (2005) measured concentrated ownership of the four countries as follows:

1) Concentrated ownership of US firms was measured as the total equity holdings of all institutions owning more than $100 million.

2) Concentrated ownership of UK firms was measured as the total percentage held by major shareholders minus percentage held by directors as the source lists directors and major shareholders.

3) Concentrated ownership of German firms was measured as the percentage owned by institutions and only individuals who were classified as blockholders.

4) For Japan, concentrated ownership was measured as the total percentage of blockholders’ ownership.

\(^3\) Florackis et al. (2009) measured major shareholdings by the percentage sum of stakes of all shareholders with equity ownership greater than 3%.
constituents (Han and Suk, 1998; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Benson and Davidson, 2009; Ellili, 2011). These studies had also confirmed prior suggestions made by Pound (1988) and McConnell and Servaes (1990), those who highlighted the efficient monitoring of institutional ownership. Since concentrated ownership is found to be an important predictor of CG, it is important to examine this dimension of boards’ ownership to see whether it plays a key role in impacting CG that enhances the interests of various groups of stakeholders.

Table 4.3: Summary of literature concerning concentrated ownership

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davies et al. (2005)</td>
<td>1995</td>
<td>UK-752 Firms</td>
<td>Negative Relationship with Tobin’s Q</td>
</tr>
<tr>
<td>Seifert et al. (2005)</td>
<td>1997-1999</td>
<td>4 Countries-319-2198 Firms</td>
<td>Insignificant Relationship with Tobin’s Q</td>
</tr>
<tr>
<td>Florackis et al. (2009)</td>
<td>2000-2004</td>
<td>UK-1010 Firms</td>
<td>Insignificant Relationship with Tobin’s Q</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.
4.3 Boards’ Ownership Structure and Voluntary and Mandatory CSR

This section of the chapter concentrates on the development of the hypotheses, which will be used in answering the main research question: “How does boards’ ownership structure impact voluntary and mandatory CSR”? Given the implications of the legitimacy theory, stakeholder theory and agency theory, the deduced propositions from these theories suggest that directors’ decisions regarding issues related to voluntary CSR might be heterogeneous. Considering the achievement of firms’ legitimacy, managing stakeholders’ expectations, and reducing the agency costs, it can be assumed that CEDs’ ownership, NEDs’ ownership and concentrated ownership (mainly institutional ownership) are the main key drivers for voluntary and mandatory CSR.

Since a number of scholars pay attention to board structure, this study is considering boards’ ownership structure including managerial ownership which has received limited attention from management academics particularly in the UK. Although CED tenure and incentivisation (Rajan and Zingales, 2000; Kakabadse et al., 2001) such as share options and bonus schemes (Core, et al., 2003; Murphy, 1999) has received much scholarly (Florakis and Balafas, 2014) and regulatory (U.K. Corporate Governance code, 2012) attention, there remains a gap for the holistic understanding of U.K. based CEDs’ ownership structures as influential to the promotion of voluntary CSR.

Looking to the key motivators – the reward system including share options – that may incentivise CEDs to promote voluntary CSR and mandatory connotations, CED shareholdings percentage as a motivator tool is likely to align their interest with owners’ in maximizing shareholders wealth for the long-run. Hence CEDs’ decisions regarding issues related to voluntary CSR should lead to increased investment for business sustainability. However, this relies on CEDs time horizon (CED tenure) of their shareholdings within the firm where short-term horizons of senior management will have a negative impact on issues related to voluntary CSR (Arora and Dharwadkar, 2011).

With reference to the agency theory (Coase, 1937), the separation between ownership (shareholders) and control (management) in a modern form of an organisation is referred to be the agency problem. The conflict of interests between shareholders and management leads to poor performance and a great loss of shareholders’ wealth (Jensen and Meckling, 1976). As a
general solution to the agency problem, the reward system and compensation were established in order to align management interest with owners’ interest (Jensen and Meckling, 1976). Core et al. (2003) and Murphy (1999), however, provide evidence on the issuing and the existence of executives’ compensation and ownership, and state that stock options are the fastest growing component of management compensation, but they outline a lack of a sound theory predicting this increasing reliance on such a reward system. Using traditional cross section studies including Rajan and Zingales (2000) and Kakabadse et al. (2001) in examining individual CG mechanisms including CED shareholding and firm performance, results show a very weak relationship. Prior to this Shleifer and Vishny (1997) had also highlighted that the most evidence provided which show that managements act in an opposite favour of their shareholders came from event studies, as stock price performance should be associated with a significant abnormal return in the release of positive information (and vice versa). However, most evidence shows exactly the opposite.

Moreover, a major literature stream asserts that compensation serves for executive alignment with longer term shareholder interests (Gabaix and Landier 2008, Kaplan, 2008, Kaplan and Rauh, 2010). Others argue that managerial power may complicate the agency problem (Yermack, 1997, Bertrand and Mullainathan, 2001, Bebchuk and Fried, 2003). Past performance has been understood as signalling CED ability, whilst in the post financial crisis (2008) era, the focus has been on tying executive share option schemes to the longer term future growth of the firm (Grout and Zalewska, 2012). Where management act in opposition to their shareholders (Shleifer and Vishney, 1997), self-interest and shorter-time horizons can adversely affect voluntary CSR (Arora and Dharwadkar, 2011). Previous studies argued that ownership motivates directors to act to maximize wealth rather than destroy wealth on uncertain long-term strategies such as engaging in philanthropic activities and investing in the community (Amihud and Lev, 1981; Morck et al., 1988; Davis, 1991; Denis et al., 1997; Gedajlovic and Shapiro, 2002). Therefore, it was proposed that CEDs’ ownership has a negative impact on voluntary CSR.

A little closer to reality, the voluntary CSR lens associates effective governance with a greater degree of uncertainty where investment interest and potential benefit is preferred by those with a longer-term horizon (Jamali et al., 2008). However, when governance mechanisms focus on short-term performance – e.g. institutional owners demanding short-term returns (Neubaum and
Zahra, 2006) – this focus conflicts with and prevents managerial voluntary CSR investment options (Bushee, 1998). The institutional owner may be perceived as passive (Pound, 1992; Wahal, 1996; Edwards and Hubbard, 2000) or having an agenda that determines value as part of a diversified portfolio (Dharwadkar et al., 2008) when addressing its impact on voluntary CSR. Institutional investors and other concentrated shareholders have the incentive to monitor firm performance since they hold a considerable percentage in it hence they appoint a non-executive director (NED) to represent them in the board (Lorsch and Maclver, 1989). NEDs are elected primarily to protect shareholders’ interests (primarily institutional interests) and thus they intend to eliminate activities related to voluntary CSR (Coffey and Wang, 1998). Furthermore, these directors are elected for their financial expertise (Fligstein, 1991), where it is much easier for them to evaluate historical financial information than investing in uncertain strategies such as R&D, entrepreneurship, innovation and CSR (Lorsch and Maclver, 1989; Baysinger and Hoskisson, 1990; Deutsch, 2005). Mainstream studies have proved that NEDs have a negative impact on ratings of voluntary CSR and its related activities (Kesner and Johnson, 1990; Wang and Coffey, 1992; Coffey and Wang, 1998; Johnson and Greening, 1999; Kassinis and Vafeas, 2002; Arora and Dharwadkar, 2011). As such, it is anticipated in this thesis that a greater shareholdings’ percentage of NEDs as well as institutional owners will reduce voluntary CSR.

Effective CG that promotes monitoring is positively associated with stringent mandatory CSR ratings, where failure to comply with rules or standard regulations that can result in penalties or erosion of corporate reputation is avoidable (Arora and Dharwadkar, 2011). With reference to the implications of the agency theory discussed in Chapter 3 (Section 3.2.1), managers have a tendency to follow their own personal ambition at the expense of shareholders (Fama and Jensen, 1983), including enhancing their reputation as managers (Beliveau et al., 1994). Previous literature clarifies that managerial reputation plays a key role when taking decision regarding CSR expenditure (Beliveau et al., 1994; Campbell and Slack, 2007; Barnea and Rubin, 2010) – particularly expenditure on mandatory activities (Galaskiewicz, 1985; Barnea and Rubin, 2010) – as such a decision will reveal how reputable the manager is. Unlike shareholders who have the opportunity to diversify their holding portfolios, managers fear an employment loss and thus they tend to safeguard their employment by enhancing their reputation particularly when meeting the required standards and regulations (Beliveau et al., 1994). Thus, it was proposed that CEDs’ ownership has a positive impact on mandatory CSR.
Considering the board, a greater number of NEDs are associated with an attention to and legitimacy within the external marketplace (Pfeffer and Salancik, 1978). Moreover, where the majority of owners in this study’s sample are institutional investors, and since a vast majority of NEDs are hired by those institutional investors (Lorsch and Maclver, 1989), they are likely to raise awareness and have an impact on the board regarding the importance of meeting the required standards and regulations. Therefore, to the extent that good CG is associated with better monitoring, in general, it is expected in this study to be associated with higher mandatory CSR. Table 4.4 represents hypotheses which will be tested on UK firms in this thesis.

Table 4.4: Hypotheses tested on UK firms by this study

| Hypothesis 1 | An increase in the ownership stake of CED in the firm has a negative association with voluntary CSR |
| Hypothesis 2 | An increase in the ownership stake of CED in the firm has a positive association with mandatory CSR |
| Hypothesis 3 | An increase in the ownership stake of NEDs in the firm has a negative association with voluntary CSR |
| Hypothesis 4 | An increase in the ownership stake of NEDs in the firm has a positive association with mandatory CSR |
| Hypothesis 5 | A greater percentage of concentrated ownership has a negative relationship with voluntary CSR |
| Hypothesis 6 | A greater percentage of concentrated ownership has a positive relationship with mandatory CSR |

4.4 The Link Between Literature, Theories and Testable Hypotheses

This study is the first research that empirically investigates the validity of six hypotheses, which link boards’ ownership structure with voluntary CSR and mandatory CSR of UK firms. Figure 4.1 illustrates the theoretical model developed from reviewing theories and literature of this study.

Figure 4.1: Model developed from the literature
The figure shows the testable hypotheses developed in this chapter to be examined within a stakeholder context by this study for being important to understanding boards’ ownership structure and CSR involvements of UK firms for the first time. The model shows the relationship between CG mechanism and CSR. The implication of boards’ ownership (including shareholdings of CEDs, NEDs and concentrated owners) as a CG mechanism will be investigated in relation to voluntary and mandatory CSR. The proposed link between each element of boards’ ownership structure and voluntary and mandatory CSR is addressed by developing six testable propositions. The agency theory explains the link between boards’ ownership and voluntary and mandatory CSR from the implication of a principal-agent perspective (Jensen and Meckling, 1976; Fama and Jensen, 1983). In contrast, the legitimacy theory declares that a social contract exists between the society and the corporation (Dowling and Pfeffer, 1975; Campbell, 2000). Further, the stakeholder theory has strengthened this linkage as it considers society as one of the main stakeholder groups of the corporation (Freeman, 1984; Dobson, 1991; Donaldson and Preston, 1995).

It is vital to make a distinction between voluntary and mandatory CSR to clarify the nature of the relationship between boards’ ownership mechanism and CSR. Distinguishing between voluntary and mandatory CSR will allow the researcher to separately examine the implications of boards’ ownership structure for both enabling effective decision-making (e.g., proactive stakeholder strategy and sustainability practices) and emphasising on adopting ethical and good decision-making (e.g. meeting the required standards and the environmental regulations). According to Mattingly and Berman (2006) different ratings of CSR do not load together in factor analysis which might be the reason for inconsistent results. Arora and Dharwadkar (2011) argued that the distinction between different CSR ratings is vital not only from an empirical viewpoint, but also from a theoretical perspective, which would assume that good CG should always enhance issues related to mandatory CSR (meeting the required standards and regulations) while determining the levels of voluntary CSR (proactive stakeholder strategies such as investing in the community and involving in sustainable practices) based on a cost-benefit analysis. Thus, and to the extent that effective CG is associated with good monitoring, in general, it is expected in this thesis to be associated with better mandatory CSR, as the failure to satisfy the required standards and regulations can result in penalties and bad publicity that good CG would consider avoidable. This insight is valuable as previous studies have predominantly concentrated on the upsides of good CG (such as value creation, profit earnings, etc.) (e.g., Agrawal and Knoeber, 1996; Bhagat
and Black, 1997; Barnhart and Rosenstein, 1998; Han and Suk, 1998; Vafeas and Theodorou, 1998; Short and Keasey, 1999; Bonn et al., 2004; Dulewicz and Herbert, 2004; Andres et al., 2005; Florackis et al., 2009; Ameer et al., 2010; Mahadeo et al., 2012; Shukeri et al., 2012), and rarely considered the benefits of avoiding potential downside losses and associated costs (Arora and Dharwadkar, 2011). An example of such losses and costs, which resulted from ignoring the required standards and regulations, can be seen by considering the occurrence of recent corporate scandals such as Enron, WorldCom and Parmalat cases (Filho and Balassiano, 2008; Neal and Cochran, 2008). Therefore, paying great attention to legitimacy and other issues related to mandatory CSR is very important for businesses to continue operating within society and avoid losses.

As mentioned above in Chapter 3 (section 3.2.3) Legitimacy was defined as “a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995: p. 574). The legitimacy theory considers the firm’s contractual obligation to its society (Mitchell et al., 1997; Altman, 2000). Since the legitimacy theory assumed that the firm pursues its business under a mandate that might be lost if the firm was found wanting (Chan and Milne, 1999), society may pull out their loyalty if the firm fails to perform thus incurring agency costs (Jensen and Meckling, 1976; Morris, 1987), assuming the presence of an agent-principal relationship where the agent (the firm) owes accountability to some extent to the principal (society).

Legitimacy can be considered as any resource that corporations must gain from the environment they operate in (Ashford and Gibbs, 1990; Suchman, 1995: Deegan, 2002; Pfeffer and Salancik, 2003). Moreover, the institutional theory offers a clear resolution as conformity is the essential managerial approach for corporations seeking legitimacy (Gray et al., 1996). Since effective CG enhances mandatory CSR ratings and legitimacy can be granted by meeting the required standards and regulations (Arora and Dharwadkar, 2011), it can be proposed ($H2$, $H4$ and $H6$) that boards’ ownership structure is associated with mandatory CSR.

While effective CG, that promotes monitoring, is positively associated with issues related to mandatory CSR, the relationship between good CG and ratings related to voluntary CSR is a little more complex (Arora and Dharwadkar, 2011). This is because voluntary CSR associates
good CG with a greater degree of uncertainty where investment interest and potential benefit is preferred by those with a longer-term horizon (Jamali et al., 2008). When governance mechanisms focus on short-term performance – e.g. institutional owners demand short-term returns (Neubaum and Zahra, 2006) – this focus conflicts with and prevents managerial voluntary CSR investment options (Bushee, 1998). Therefore, it is expected in this study that CG would reduce engagement in voluntary CSR particularly during the period of the UK economic downturn where a cost-cut strategy is adopted in all investments.

The implication of the agency theory clarifies that firms need to reward their directors a certain percentage of shares in the firm in order to align their interests with those of shareholders that is maximizing shareholders wealth and thus reduces agency costs (Jensen and Meckling, 1976). This conflicts with investments in long-term strategies such as voluntary CSR. However, the firm cannot be sustained whilst lacking the resources and support received from the social stakeholder group; the society stakeholder group could reward or punish a firm when the firm’s actions satisfy or do not satisfy their expectations and may withdraw if they perceived that they have not been treated in a fair manner (Clarkson, 1995; Chan and Milne, 1999). Hence, it is obvious that the implied agent-principals relationship exists between the firm and its stakeholders. Consequently, with the complementary role of the agency theory in mind, the stakeholder theory is suitable to be applied to explain the nature of the legitimacy relationship between the agent (firm) and its principal (its society) and additionally identify the accountability level expected by the principal (society) from the agent (firm) (Woodward et al., 1996; Mitchell et al., 1997). Despite the recent pressure of stakeholders’ demands on firms (Agle et al., 1999), during the period of UK economic downturn, firms intended to adopt a cost-cut strategy particularly on voluntary activities such as investing in the community (Pettinger, 2013). Therefore, it can be proposed (H1, H3 and H5) that boards’ ownership structure has a negative relationship with voluntary CSR.

4.5 Chapter Summary

This chapter synchronised the propositions deduced from reviewing theories in Chapter 3 into the main research question and the development of six hypotheses related to this research question. From the total of six hypotheses developed, three were based on the interactions of the legitimacy, agency, institutional and resource dependence theories, while the other three were based on the interactions of stakeholder and agency theories. A model was developed and
discussed, which links the literature discussed in this study, theories and developed hypotheses. The following chapter provides details of the methodology used in this study to investigate the hypotheses developed above in this chapter.
Chapter Five: Research Design and Methodology

5.1 Chapter Overview

Choices of research design and methodology will be considered in this chapter. The aim of this study is to investigate the relationship between boards’ ownership structure and corporate social responsibility. As the aim is concerned with identifying causal relationships between variables, the research design and methodology require employing a quantitative research. This study employs and utilises the two statistical software packages: SPSS and STATA. Since quantitative studies are theory driven and conducted in a deductive manner, it is vital for this study that the research constructions, models and hypotheses are to be based on solid theoretical and conceptual foundations. Therefore, it is necessary to report a review of an extensive literature regarding all theoretical dimensions related to this particular study in Chapters 2, 3 and 4. Figure 5.1 overleaf illustrates the structure of Chapter 5.
Figure 5.1: Outline of Chapter Five

5.1 Chapter Overview

5.2 Philosophical/Epistemological Assumptions

5.3 Research Approaches and Techniques

5.4 Research Method and Design

5.5 Variable Measurements and Analysis

5.5.1 Stage 1 Analysis

5.5.1.1 Variables and their Measurements of Stage 1 Analysis

5.5.1.2 Data Analysis Process (The Logit Model)

5.5.2 Stage 2 Analysis

5.5.2.1 Variables and their Measurements of Stage 2 Analysis

5.5.2.2 Data Analysis Process (Panel Dataset)

5.6 Sample Data

5.7 Data Collection Process

5.8 Chapter Summary

Source: compiled by the Author
5.2 Philosophical/Epistemological Assumptions

Although there is no need to involve in the complex and continual debate (Burrel and Morgan, 1979; Bhaskar, 1989; Creswell, 1994; Cooper and Schindler, 2002) regarding the most suitable philosophical position for a given social research, it is essential to clarify the philosophical position of this research as this sorts the underpinning to which subsequent discussions in this chapter will hang on. The philosophical logic for a given social research is based on the perception of the social world according to the researcher’s perspective and their conceptualisation of what shapes social reality (Bryman, 2008a). According to Trochim (2006), the question of how best the world can be perceived and understood has made philosophers discuss it over the last two millennia. The various philosophical positions in this discussion are positivism, post-positivism (realism), interpretivism, relativism, subjectivism and hermeneutics, structuralism and post-structuralism, deconstructivism, constructivism and feminism (Trochim, 2006; Bryman, 2008; Saunders et al., 2009). However, for the purpose of this research, only the philosophical positions relevant to this study are reviewed in this chapter.

Positivism logic considers the natural science method of theory investigating that includes observation of social reality, precision, control and measurement (Remenyi et al., 1998). The position of positivists shows that social reality can be measured and scientifically investigated, in the same way as the physical sciences do with the molecules and atoms, by paying great care to the reliability, validity and generalisability of the measurements in predicting cause-effect relationships (Bryman, 2008a; Saunders et al., 2009). Positivists declared that the best way to explain a particular phenomenon is to develop testable hypotheses from relevant existing theories to be tested and either accepted or rejected using quantifiable observations (Saunders et al., 2009). Positivists indicated that events can be predicted and controlled accurately, however, other social researchers believe in contrasting analyses to investigate the social world such as the interpretivists who believe that humans are the main focus in social science examinations and should not be examined scientifically in the same way as the natural or physical sciences are. This view is expressed in the following discussions.

The interpretivist view, known as interpretivism, established from the logical thought of how humans analyse and interpret the world around them, referred to as “phenomenology” (Bryman,
and the reality that humans continue interpreting and perceiving the world around them and respond according to their interpretation and perception referred to as “symbolic interactionism” (Bryman, 2008: p.14). Hence, it can be noticed that the argument of interpretivists is that social science scholars should search for the appropriate method, to examine social phenomena, that considers the social world from the perspective of humans who interpret the social world they live in on a daily basis (Bryman and Bell, 2007). This argument came as an answer for what was emphasised at the end of the investigation as it can be contrasted that on one hand the positivists seek to understand human behaviour via scientific means while on the other hand, the interpretivists seek to explain human behaviour from their daily interactions within the social world they live in (Bryman, 2008).

However, another view is the post-positivist (also referred to as the critical realist) which indicates that a given phenomenon should be examined at different levels in order to obtain a better explanation. Bhaskar (1989) clarified that the only method to explain a social phenomenon is to begin with an explanation of the event or discourse that makes it rise. A researcher’s philosophical position therefore has a key role in the research approach and technique utilised in conducting the study. The subsequent sections discuss this further.

5.3 Research Approaches and Techniques

5.3.1 The Quantitative Paradigm

The traditional paradigm has gained popularity as by taking a scientific (or quantitative) research it is aimed to discover a specific research problem. Quantitative research relies on quantitative data such as numbers and figures (Blumberg et al., 2008). Quantitative studies take mathematical and statistical methods to measure and analyse causal relationships between concepts. Subject to the effective sampling, testing, and validating processes of the quantitative paradigm, it is generally understood that this paradigm contributes to more validated, reliable and generalisable research outcomes. According to Berelson and Steiner (1980) in Behling (1980), a study should be based on sound scientific principles and should take the natural science model of research. In this regard, some features of research – including the objectivity of data collection, the precision of definitions, the publicity of procedures and the applicability of outcomes, the fact that the approach should be systematic and cumulative, and the purposes should be understood, as well as an explanation and prediction – should be ensured (Berelson and Steiner, 1980 in Behling, 1980). This perspective was further emphasised by Behling (1980)
who argued that scholars from the traditionalist quantitative perspective believe that in undertaking good study, a careful sampling should be characterised, measurements should be precise, and in testing hypotheses deductively derived from tentative general laws, design and analysis should be rigorous. This paradigm adopts the deductive approach of reasoning from generalising to specifying (Popper, 1959).

The advantages of the quantitative paradigm that have strengths over the qualitative paradigm are as follows:

- The quantitative paradigm is concerned with causal relationships between variables. According to Popper (1959: p. 3), “A scientist, whether theorist or experimenter, puts forward statements, or systems of statements, and tests them step by step.” Considering the empirical research in particular, hypotheses or systems of theories will be constructed, and tested against experience through observation and experiment.

- Researchers using the quantitative paradigm are concerned with the establishment of the findings of a particular examination that can be generalised beyond the boundaries of the study’s location (Podsakoff and Dalton, 1987). Since generality had been verified, the quantitative scholar can draw nearer to the law-like results of the sciences. In contrast, the qualitative paradigm that is based on the study of one or two single cases is often disparaged due to the study cases that may be unrepresentative and is thus of unknown generality (Bryman and Bell, 2007).

- Consistent with Bryman’s and Bell’s (2007) arguments, a deductive strategy was strongly advocated by Hume and Popper (1959) as quantitative research follows the deductive approach drawing from general to specific. Inversely, the inductive approach draws from specific to general.

- The quantitative paradigm has a characteristic of the replication of established results and this replication can offer a means of checking the extent to which results are applicable to other contexts (Podsakoff and Dalton, 1987).

The deductive strategy can be traced back to Popper (1959), who was first in developing this strategy and the founding father of the philosophy of science which is known as Critical Rationalism. Popper (1959, 1972) attempted to overcome the deficiencies of Positivism and the inductive strategy. He justified that observations do not provide a reliable foundation for scientific theories and as inductive logic became imperfect, there is a need for an alternative
logic that helps in developing theories. As a solution, Popper (1959, 1972) suggested to accept that all data collection is selective and the observer needs to interpret and develop an appropriate logic that is the reverse of that advocated by Positivism. Popper (1972) added that observations are always starting from a point of view based on a frame of reference, with a number of expectations, hence making the notion of presuppositionless observation impossible. Collecting any useful data should be based on some hypotheses that have been derived from a theory in order to provide direction for data gathering (Blaikie, 2000). Then, data collected are used to test tentative answers rather than accumulate data as in the inductive approach. The deductive research aims to determine whether the data match the hypotheses; in other words, researchers who employ deductive research would like to be able to develop a theory that matches the behaviour of the phenomenon under study (Blaikie, 2000).

5.3.2 The Qualitative Paradigm

The definition of qualitative research must recognise the history behind it and the fact that it crosses various philosophical approaches and includes several methods (Denzin and Lincoln, 2005). Accordingly, Denzin and Lincoln (2005: p. 3) defined qualitative research as:

“A situated activity that locates the observer in the real world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level of qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study thinks in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.”

The social and cultural contexts of the study had been clearly emphasised in the above definition of qualitative research. Moreover, the researcher has been placed close to the objects or group of individuals being studied. This also identifies the qualitative paradigm in terms of the socially constructed nature of reality where an intimate relationship exists between the researcher and the research object (Denzin and Lincoln, 2005). Based on Becker’s (1986) arguments, Denzin and Lincoln (2005: p. 12) declared that “Qualitative researchers use ethnographic prose, historical narratives, first person accounts, still photographs, life histories, fictionalised facts, and biographical and autobiographical materials, among others.” Alternatively, Marshall and Rossman (1989) cited a greater variety of qualitative techniques for gathering data including
projective techniques and psychological testing, participant observations, in-depth interviewing, elite or expert interviewing, street ethnography, case study, document analysis, and proxemics and kinesics. According to Becker (1996) qualitative data consists of investigating the constraints of everyday life, capturing the individual’s point of view, and securing rich descriptions. Furthermore, Miles and Huberman (1994) argued that qualitative data is rich data and has a strong prospective for theory development and revealing complexity via interpretive procedures and rigorous coding.

Several strengths of qualitative data over quantitative data were highlighted by Miles and Huberman (1994: p. 10) as follows:

- Qualitative data are based on natural occurring, ordinary incidents in a natural setting, so that researchers can have a strong handle on the everyday life of individuals, groups, organisations and societies.
- The data are rich and comprehensive with a strong prospective for revealing complexity.
- Qualitative data are gathered in close proximity to a particular case, instead of using the mail or the phone, which shows that the data have local groundedness. This emphasis is on a particular situation, a focused and confined phenomenon embedded in its context. The possibility for non-obvious matters, underlying, or understanding latency is high.
- Qualitative data are suitable to be used for studying any process as they are typically gathered over a sustained period; qualitative data can also be used to assess causality as such data actually play out in a specific setting.
- It has often been advocated that qualitative data are the best approach for developing and examining hypotheses, and they are particularly suitable when researchers need to supplement, validate, explain, illuminate, or reinterpret quantitative data collected from the setting.

There is principally one method used with the quantitative paradigm that is one of deduction where statistical analysis is employed to investigate general theory or concepts. In contrast, there is no single method where researchers choose to use the qualitative paradigm. Six schools of the qualitative paradigm were identified by Flick (2006): Grounded theory (ethnomethodology, conversation, discourse and genre analysis), narrative analysis, biographical search, ethnography, cultural studies, and gender studies. Three broad approaches to qualitative
data analysis were suggested by Miles and Huberman (1994) as an alternative categorisation which included the six schools of Flick (2006) within aspects of part of the three classifications: Interpretivism, Social Anthropology, and Collaborative Social Research. The literature suggests that interpretivists perceive researchers as being part of the research, with their own convictions and conceptual orientations; they utilize textual analysis viewing text as conveying layers of meaning (Miles and Huberman, 1994). Social anthropologists are interested in behaviours in everyday situations where observation is very important; they utilize ethnography, staying very close to the naturalist profile (Miles and Huberman, 1994). In the third category – the collaborative social research – researchers join closely with the participants throughout the research (Miles and Huberman, 1994). Using qualitative research, the literature suggests four general philosophical paradigms: positivist and post-positivist, critical (e.g., Marxist), constructivist-interpretive, and feminist-poststructural (Denzin and Lincoln, 2005). The four paradigms were further sub-divided into seven paradigms: positivist/post-positivist, constructivist, Marxist, ethnic, feminist, cultural studies, and queer theory (Denzin and Lincoln, 2005). Table 5.1 below illustrates the characteristics of the ontological/epistemological positions of the different paradigms.

<table>
<thead>
<tr>
<th>Paradigm</th>
<th>Ontology</th>
<th>Epistemology</th>
<th>Methodological Procedures and Theoretical Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivist/post-positivist</td>
<td>Realist and critical realist</td>
<td>Objective</td>
<td>Experimental, quasi-experimental, survey, rigorously defined qualitative methodologies</td>
</tr>
<tr>
<td>Constructivist</td>
<td>Relativist (multiple realities)</td>
<td>Subjective</td>
<td>Naturalistic using grounded theory or pattern theories</td>
</tr>
<tr>
<td>Poststructural, Marxist, ethnic,</td>
<td>Materialist-realist (real world</td>
<td>Subjective</td>
<td>Naturalistic, especially ethnographies using critical theory</td>
</tr>
<tr>
<td>feminist, cultural, studies, queer</td>
<td>makes a material difference in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>studies</td>
<td>terms of race, class, gender)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Denzin and Lincoln, 2005).
Although qualitative research has strengths, it has some weaknesses as well. Practically, qualitative research has some difficulties including the issue of data analysis (Miles and Huberman, 1994) and the access issue of interpretation (Bryman and Bell, 2007). Qualitative data are in need of a meaningful response and interpretation as they are symbolic in nature (Denzin and Lincoln, 2005). The literature suggests that there is a generic suspicion about the legitimation of qualitative studies in terms of their reliability, validity and generalisability since the lack of appropriate data analysis and interpretation still exists (Denzin and Lincoln, 2005). This leads to a serious re-evaluation of its effectiveness when combined with the other problem of its representation crisis (Denzin and Lincoln, 2005). Nevertheless, scholars suggest that there is no doubt that qualitative studies take researchers into specific contexts to investigate deeper perspectives of the research, and produce insights regarding specific relations or problems, which cannot be revealed by quantitative studies (Denzin and Lincoln, 2005). The following table (Table: 5.2) shows the characteristics of quantitative and qualitative research paradigms.
Table 5.2: The characteristics of quantitative and qualitative research paradigms

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Quantitative Paradigm</th>
<th>Qualitative Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of reality</td>
<td>Reality is objective and singular, apart from the researcher</td>
<td>Reality is subjective and multiple, as seen by participants in a study</td>
</tr>
<tr>
<td>Relationship of researcher to that researched</td>
<td>Researcher is independent from that being researched. Researcher is an outsider – reality is what quantifiable data indicate it to be.</td>
<td>Researcher interacts with that being researched. Researcher is an insider – reality is what people perceive it to be.</td>
</tr>
<tr>
<td>Role of values</td>
<td>Value-free and unbiased</td>
<td>Value-laden and biased</td>
</tr>
<tr>
<td>Language of study</td>
<td>Formal; non-human; based on the set definitions; Impersonal voice; use of numbers</td>
<td>Informal; human; evolving decisions; personal advice; use of words</td>
</tr>
<tr>
<td>Process of study</td>
<td>Deductive process</td>
<td>Inductive process</td>
</tr>
<tr>
<td></td>
<td>Controlled conditions</td>
<td>Naturalistic conditions</td>
</tr>
<tr>
<td></td>
<td>Cause and effect</td>
<td>Mutual simultaneous shaping of factors</td>
</tr>
<tr>
<td></td>
<td>Static design – categories isolated before study</td>
<td>Emerging design – categories identified during research process</td>
</tr>
<tr>
<td></td>
<td>Context-free</td>
<td>Context-bound</td>
</tr>
<tr>
<td></td>
<td>Generalisations leading to prediction, explanation, and understanding</td>
<td>Patterns, theories developed from understanding</td>
</tr>
<tr>
<td></td>
<td>Accurate and reliable through validity and reliability tests.</td>
<td>Accurate and reliable through verification by gaining real, rich and deep data.</td>
</tr>
<tr>
<td>Nature of the problem</td>
<td>Previously studied by other researchers so that body of literature exists; known variables; existing theories.</td>
<td>Exploratory research; variables unknown; context important; may lack theory base for study</td>
</tr>
<tr>
<td>Researcher’s psychological attributes</td>
<td>Comfort with rules and guidelines for conducting research; low tolerance for ambiguity; time for a study of short duration</td>
<td>Comfort with lack of specific rules and procedures for conducting research; high tolerance for ambiguity; time for lengthy study.</td>
</tr>
<tr>
<td>Research approaches</td>
<td>Experiment</td>
<td>Biography</td>
</tr>
<tr>
<td></td>
<td>Survey and survey research</td>
<td>Phenomenological study</td>
</tr>
<tr>
<td></td>
<td>Analysis of collected data</td>
<td>Grounded theory</td>
</tr>
<tr>
<td></td>
<td>Structured observation</td>
<td>Ethnography</td>
</tr>
<tr>
<td></td>
<td>Content analysis</td>
<td>Case study</td>
</tr>
</tbody>
</table>

Source: (Smith and Dainty, 1991; Bryman and Bell, 2007; Blumberg et al., 2008).

In summary, as illustrated in Table 5.2 both paradigms, the quantitative research and the qualitative research, have their own advantages and disadvantages. The literature suggests that variations in quantitative and qualitative studies do not necessarily imply the superiority of one research methodology compared to the other as a research option; instead, these variations may make one methodological option more suitable than the other based on the research aim and
research question (Hassard, 1991; Ticehurst and Veal, 2000). Since the aim of this study is to identify causal relationship between variables, the quantitative research paradigm was chosen to be the methodological option of this study as this methodological approach will more likely offer a better understanding of the phenomena. The suitability and justification of this research choice is discussed further in the following section.

5.4 Research Method and Design

Scholars define research design in different ways where some scholars have provided basic definitions (Zarlowksi, 2001; Saunders et al., 2009) while others provided a more detailed definition (Kerlinger, 1986 in Blumberg et al., 2008). Starting with the basic definition of research design, Saunders et al. (2009: p. 136) stated that “your research design will be the general plan of how you will go about answering your research question.” Earlier, in the same decade, a slightly more detailed definition of research design was provided and defined by Royer and Zarlowski (2001: p. 111) as “the framework through which the various components of a research project are brought together: research question, literature review, data, analysis and results.” However, an even more detailed definition was provided by Kerlinger (1986: p. 279) in Blumberg et al. (2008) where he stated that

“Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing hypothesis and their operational implications to the final analysis of data. A structure is the framework, organisation, or configuration of ... the relation among variables of study. A research design expresses both the structure of the research problem and the plan of investigation used to obtain empirical evidence on relations of the problem.”

Although definitions vary, what is demonstrated in these definitions is obviously that research design is core to the entire research activities. Blumberg et al. (2008) stated that research design is a framework for specifying the interactions among the examination’s variables. Research design outlines the entire structure and direction of the concerned investigation, presenting a logical testimony to draw conclusions concerning causal relations among variables under study (Bryman and Bell, 2007; Blumberg et al., 2008). Phillips (1971: p. 93) declared that “the research design constitutes the blueprint for the collection, measurement and analysis of data.”
Moreover, Bryman and Bell (2007) and Blumberg et al. (2008) asserted that research design entails the preference of an optimal research method, sampling, data gathering, analysis and interpretation. Blumberg et al. (2008) added that research design also directs to the best way of utilising resources in terms of cost and timescale. Blumberg et al. (2008: p. 195) highlighted some features of an Effective Research Design (ERD) as follows:

- an ERD is an activity-and time-based plan,
- an ERD is based on the research question,
- an ERD guides the selection of sources and types of information,
- an ERD is a framework for specifying the relationships among the study variables,
- and eventually outlines procedures for every research activity.

Dainty (1991), cited in Smith and Dainty (1991), argued that the biggest challenge to research design is its validity and reliability. According to Saunders et al. (2009) validity can be defined as the extent to which data collection method or methods accurately measure what they were intended to measure. Validity refers to the extent to which research outcomes are really about what they profess to be about (Saunders et al., 2009). In order to evaluate the quality of research design, four essential tests were considered by Yin (2009) including construct validity, internal validity, external validity and reliability, where construct validity concerns the appropriate operational measures for the theories being investigated, and internal validity considers the establishment of a causal relationship of these investigations where certain conditions guide to other conditions, as distinguished from specious correlation. External validity refers to the degree to which the examination findings from a particular research are generalisable to all relevant contexts (Saunders et al., 2009), and reliability concerns either the data collection method or methods that yield consisting results, the similar findings achieved by other researchers, or the degree of transparency that was made from the data collected (Saunders et al., 2009).

Indeed, the non-experimental research is the most widely used research in the field of social sciences, where the researcher is not interfering or manipulating the natural setting of the organisation (Bennett, 1991 in Smith and Dainty, 1991). The non-experimental research design generally consists of three main categories including survey research, qualitative research and
case study research (Bennett, 1991 in Smith and Dainty, 1991). However, quantitative research is employed for this study for being the appropriate research in investigating the relationship between boards’ ownership structure and voluntary and mandatory CSR over a 5-years period and taking into account some other factors that may affect this relationship.

5.4.1 Methodological Choice and Research Strategy

The prior section considers the existing literature regarding research design and methodology wherefrom it is obvious for a researcher to notice that there isn’t a single, standard, correct method of carrying out a research. With the existence of the strengths and weaknesses of each research design and each data collection method, however, the choice of the appropriate research design and data collection methods of a particular study relies on the availability of resources and how best the method can generate the required data (Bennett, 1991 in Smith and Dainty, 1991). This study is positioned within ownership structure and CSR literature (Dechow et al, 1996; Gillan and Starks, 2000; Klein, 2002; Mitra and Cready, 2005; Mitra and Hossain, 2011). This study’s approach is deductive; hence a model is necessary to represent cause, effect and other relationships identified in the existing theoretical concepts in the literature (Popper, 1959; Bennett, 1991 in Smith and Dainty, 1991; Raphael, 2001 in Monk and Raphael, 2001). As the aim of this study is to establish if the contemporary boards’ ownership structure enhances good CG and CSR of an enterprise, it was obviously noticed that quantitative analysis was the most appropriate approach to establish the relationships between boards’ ownership dimensions and CSR engagements.

The main focus of this study is to investigate the impact of boards’ ownership structure on voluntary and mandatory CSR. In order to carry on with this investigation, the researcher adopted a holistic approach utilising an extensive theoretical framework and asking the main question: how does boards’ ownership structure impact voluntary and mandatory CSR? As stated above in this section, the study employed a quantitative technique of data collection and analysis for this investigation. Six hypotheses are developed to provide an answer to the main research question above and are examined with a panel data regression model. The next subsections provide further discussion on the research strategies and analysis.
5.4.1.1 Cross-country Study

Since the aim of this study is to investigate management actions and the pressure on them regarding CSR – particularly community investment and other issues related to voluntary CSR – it was originally intended that a cross-country study (Adams et al., 1998) be conducted in order to measure and compare the level of engagement in countries with various management perspectives and various levels of pressure on them. The measure of CSR was planned to be collected from archival ratings of CSR such as KLD ratings of CSR, which is fairly standard in the US literature (Waddock and Graves, 1997; Hillman and Keim, 2001; Arora and Dharwadkar, 2011). It was planned to select firms in sensitive industries located in countries with two different levels of CSR consciousness. However, it was discovered that countries with a minimal level of CSR consciousness are predominantly developing countries (Belal and Owen, 2007) and that the variations between developing and developed countries are strikingly existent. Data availability was also a major limitation as is the case with cross-country studies.

As a result, and given the fact that the research’s focus is fundamentally on voluntary CSR (including community engagement) and mandatory CSR, the research concentrated on the UK market. The first reason is because cross-country studies are undesirably associated with possible impediments such as data availability, government and required standards and regulations, cultural differences and the awareness/attitudes of the society towards the legitimate actions of enterprises. The second is that concentrating on a single country will allow comparing like with like where firms pursue their businesses in the same economic condition, within the same society and under the same standards and regulations and thus subject to the same homogenous cultural and institutional regulatory and legal infrastructure and also who are likely to be affected in the same manner by the expectations of society (Adams et al., 1998).

5.4.1.2 Longitudinal/Cross-Section Study

Since the sample is limited to only a single country as explained above, it was decided to select a sample over a longitudinal period (Campbell, 2000 and 2006; Watson et al., 2002) to explore alterations in the levels of voluntary and mandatory CSR involvements over the period particularly vis-à-vis the augmented awareness for corporate citizenship by considering the economic condition during the UK economic downturn between 2008 and 2013 (Pettinger, 2013). According to Campbell et al., (2006) longitudinal investigation provides a comprehensive idea about the popularity of CSR disclosure, which in turn indicates for CSR
engagements. Furthermore, longitudinal studies have been employed in literature to examine voluntary disclosures related to voluntary CSR activities (Campbell, 2000; Watson et al., 2002). For example, Campbell (2000) used a longitudinal period in exploring the causes of fluctuations in the social disclosure of Marks and Spencer. In addition, scholars used a longitudinal methodology to explore involvement in CSR ratings related to voluntary CSR such as Chakrabarty and Wang (2012) who used a longitudinal study to investigate the relationship between R&D intensity and sustainability practices.

Additionally, employing longitudinal study gives the opportunity to investigate the same phenomena, such as voluntary CSR, across companies and over time with a chance to capture cross-sectional fluctuations as well as time effects (Campbell, 2000; Watson et al., 2002; Campbell et al., 2006). The use of the longitudinal methodology has an advantage as it allows researchers to isolate the effects of specific actions and treatments across sections and over time (Hill and Phan, 1991). Better inferences would be allowed by utilising longitudinal studies as fluctuation itself is pervasive in nature while employing discrete observations such as a one-shot cross-sectional survey of enterprises will not be adequate to measure fluctuation in corporate behaviour or attitudes towards a particular strategic action (Singer and Willett, 2003: p.3). As such, the level of engagement in voluntary CSR at any specific time may not necessarily be the same if the same phenomenon (voluntary CSR) is observed at a different time, and that explains the fluctuation in CSR disclosure in Marks and Spencer captured by Campbell (2000) over a longitudinal period. In examining social information disclosure, Dougherty (2007) argued that despite the fact that a cross-sectional observation could give an idea about such a phenomenon; findings would be spurious and unreliable due to unobserved heterogeneity, which is the omission of some firm-specific variables – such as corporate culture and orientation, management ethical values and management’s decision-making quality – for being difficult to be observed.

Therefore, there is a high possibility of omitting some key variables from our regression model if such variables (corporate culture and orientation, management ethical values and management’ decision-making quality) and other similar difficult to measure variables are existing in our dataset. Since these sorts of variables also have the capability to impact the levels of engagement in voluntary and mandatory CSR, it is necessary to find a method to solve this issue. To date, there is one method to resolve this issue and overcome the challenge. The method is to
employ a panel dataset (i.e. both longitudinal and cross-sectional). One of the best characteristics of a panel dataset is its capability to control for these unobserved variables that could also impact voluntary and mandatory CSR, which could otherwise be omitted if only one cross-sectional data was employed. Unobserved variables might either be those that fluctuate overtime such as management quality and ethical values or those that remain constant overtime such as cultural orientation or the firm’s geographical location.

As an example of the omitting issue, Campbell (2000) used time series analysis to examine the causal effect of variations in the volume of CSR disclosure in Marks and Spencer over a 27-year period. Campbell (2000) argued that the changes in CSR disclosure over the examination period could have occurred due to other causers (such as the rise in oil price and/or the variations in societal opinion as a result of high unemployment level) which were omitted or unobserved over the period under examination. Within the context of the legitimacy theory, Campbell (2000) realised the challenges in discovering a suitable and reliable method for measuring and analysing societal opinion accurately. This was described in the literature as “conspicuous omission” (Campbell, 2000: p.93); as a result, he declared that a wider cross-sectional sample over a longitudinal time period is capable of offering a “richer dataset” (Campbell, 2000: p.97) for the estimation of causal inferences. Consequently, Arora and Dharwadkar (2011) used a panel dataset to understand the CSR phenomenon. Moreover, Yekini et al., (2015) have also employed a panel dataset to investigate the quality of community disclosures in annual reports and here in this study, a panel dataset is utilised to examine voluntary and mandatory CSR phenomena.

5.4.1.3 Period of Study
The year 2009 was chosen to begin the longitudinal study for a number of reasons: this year marks the twentieth anniversary of the largest oil spill in Alaska; it is the year within the first decade that follows the millennium as well as the first year following the first UK economic crises in this millennium. According to Gamble et al. (1996) the Alaskan Exxon Valdez oil spill drew the attention of the world about the impact of corporate activities on the environment and how corporations should take responsibility for their actions. In this regard, various investigations have explored the impact of the oil spill on CSR disclosure (Patten, 1991 and 1992; Gamble et al., 1996; Walden and Schwartz, 1997) and findings show that in the period immediately following the oil spill, disclosure increased significantly against the level of
disclosure preceding the incident (Cowen et al., 1987; Patten, 1991 and 1992), which explains why CSR engagement had seen significant enhancement immediately after the oil spill.

On one hand it can be consequently noticed that as the years go by, there is growing awareness and demand for corporate responsibility. On the other hand, during the UK economic downturn between 2008 and 2013 (Pettinger, 2013), this period had experienced austerity that could impact CSR expenditures. To this end, it is intended that this study investigates how the passing years have impacted voluntary and mandatory CSR with the challenge of the UK economic condition during the UK economic downturn and hence the sample was taken over five years between 2009-2013.

5.5 Variable Measurements and Analysis
Two stages of analyses were taken place in this thesis in order to investigate the impact of boards’ ownership structure on CSR and define the key drivers for good voluntary CSR. In this study, the whole sample (111 firms) was considered in the first stage of analysis to investigate the probability relationship between boards’ ownership structure and CSR of UK firms which involve in CSR by all levels of engagements. Then, the sample was reduced to only include those firms which were engaged in voluntary CSR by 70% and over. This second sample (the restricted sample) included 53 firms and was used to determine the key financial corporate characteristics that enhance good voluntary CSR. This section will firstly present the variables used in the main analysis and the regression model that was used to analyse the impact of boards’ ownership structure of the first sample (111 firms) on CSR engagements. The variables and the regression models that were used to determine the key drivers for good voluntary CSR of the second sample (53 firms) are reported secondly in this section.

5.5.1 Stage 1 Analysis
This section reports all variables (the dependent variables and the independent variables) chosen for the stage 1 analysis of this study and their measurements. It also provides the regression model used in the stage 1 analysis of this study to investigate the relationship between boards’ ownership structure and CSR expenditures. The stage 1 analysis was constructed in order to provide an answer to all hypotheses from $H1$ to $H6$ (shown in page 82) by identifying the probability relationship between boards’ ownership structure and voluntary and mandatory CSR.
5.5.1.1 Variables and their Measurements of Stage 1 Analysis

The dependent variables including voluntary CSR and mandatory CSR are reported firstly. Then, the independent variables (CEDs’ ownership, NEDs’ ownership, and concentrated ownership) and the control variables (cash, firm leverage, firm size, firm industry, board gender, and variation in directors’ age) are reported secondly in this section.

a) Dependent Variables

This section presents the dependent variables used for this study; voluntary CSR and mandatory CSR.

Corporate Social Responsibility

The Archival ratings of CSR were used as the dependent variables by the majority of US studies; according to Arora and Dharwadkar (2011) the use of KLD ratings of CSR, which is obtained from the firm KLD Inc, is fairly standard in the literature. The major social performance includes eight categories: governance and transparency, employee issues, human rights, product quality, diversity, environment, community relations, and other concerns; these CSR dimensions had been transformed into a composite index or rating by previous studies such as Waddock and Graves (1997) and Hillman and Keim (2001). Recently, however, there is a growing consensus that positive CSR (proactive stakeholder relationship management) and negative CSR (violation of regulations and standards) are diverse dimensions of engagement that should be examined separately (Strike et al., 2006; Mattingly and Berman, 2006; Godfrey et al., 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011). It was suggested that KLD strengths that mainly concern corporate philanthropy, gender and racial diversity, good union relations, green products or processes, innovation, and the like are not on a continuum with issues regarding the violations of the regulations, and thus should not be combined (Arora and Dharwadkar, 2011). Using the KLD for the US literature, it was suggested that ratings related to CSR strengths should be treated as positive CSR while ratings related to CSR concerns should be treated as negative CSR (Mattingly and Berman, 2006; Godfrey et al., 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009).
In contrast this study developed a different category based on the same idea in dealing with diverse ratings of CSR where the researcher believes that voluntary CSR (to refer costly discretionary proactive stakeholders’ strategies such as investing in the community, philanthropic and charitable activities) and mandatory CSR (that is concerned with the adherence to meeting required standards and regulations) ratings hold various strategic benefits and therefore are examined separately in this study. Moreover and with reference to the voluntary and mandatory CSR definitions (discussed in Chapter 2, pages 12-14), coupled with the implications of the legitimacy theory (Suchman, 1995), firms obey the law and show compliance with the regulations as a strategy to obtain legitimacy. However, for further benefits and with reference to the stakeholder theory (Freeman, 1984), firms targeting long-term sustainability strategies focus on community investment as the main stakeholder group. Consequently, two separate composite ratings were used and separate regression models were employed for each of them. Criteria of voluntary CSR and mandatory CSR are illustrated in Table 5.3. Two different categories of CR indices were used that provide CSR ratings for voluntary and mandatory CSR. Appendix 1 shows CR index 2012 ranking based on community investment and voluntarily environmental issues as an illustration of one of the CR indices used for voluntary CSR in the current study. However, Appendix 2 shows CR index 2013 ranking based on environmental management in regard to energy consumptions and operational strategy and performance in respect of issues related to mandatory CSR as illustrated in Table 5.3 below.
<table>
<thead>
<tr>
<th>CSR dimensions</th>
<th>CSR assessment issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voluntary CSR</strong></td>
<td>Social investments including charitable donations and pro bono work. Community investments including sustainability practices and voluntarily environmental issues.</td>
</tr>
<tr>
<td><strong>Mandatory CSR</strong></td>
<td>Marketing Ethics: infringements of regulations and marketing codes of practice. Employee rights: Employees have the right to fair benefits, sharing in the company’s success, and a working environment that nurtures their talent, free from discrimination and harassment. Consumers’ rights: Consumers have a right not to be misled or unduly offended by the communications created and to entrust that companies comply with industry codes of practice and the law. Environmental: Energy consumption issue where the community at large has a right to expect organisations to minimise the impact of their operations on the environment.</td>
</tr>
</tbody>
</table>

Source: (BITC, 2012)

Apparently, the use of KLD ratings of CSR is fairly standard in the literature. Though it provides CSR information for US companies, it does not provide ratings of CSR of UK companies, hence a different source, the Business in the Community (BITC), was found to be the most useful source of CSR ratings for this study. The BITC, the specialist business network that emerged in 2002, determined how the activities of 117 UK companies positively impacted the local communities, their own staff, the environment and the market as a whole in its CR Indices (FT, 2010). CR Index Tables include those companies which are involved in voluntary CSR as well as mandatory CSR and scored 70% and over. According to BITC (2012), The CR Index has four performance bands; Platinum (lists firms scored ≥ 95%); Gold (lists firms scored ≥ 90% and up to 95%); Silver (lists firms scored ≥ 80% and up to 90%); and Bronze (lists firms scored ≥ 70% and up to 80%). In this study, CSR engagement was classified into two ranks: 0 and 1. Rank 1 indicates for firms that have engaged in CSR by 70% and over and therefore, were included in the CR Index, while rank 0 was given to firms that were not included in the CR Index. This classification was used for the logistic regression model (logit) which was employed
to identify the probability relationship between boards’ ownership structure and CSR engagements. Table 5.4 illustrates CSR ranking for the first classification.

Table 5.4: Voluntary and mandatory CSR ranking for the first classification.

<table>
<thead>
<tr>
<th>CR Index Performance Band (t)</th>
<th>Platinum</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
<th>Not included in CR Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage (%)</td>
<td>95 and over</td>
<td>90 up to 95</td>
<td>80 up to 90</td>
<td>70 up to 80</td>
<td>Less than 70</td>
</tr>
<tr>
<td>Rank</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Source: compiled by the author

b) Independent Variables and Control Variables

This section reports the independent variables and the control variables of the stage 1 analysis, and their measurements and justification for using these measurements supported by prior literature. The independent and control variables are shown in Table 5.5.
Table 5.5: The Independent Variables and Control Variables.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Authors</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boards’ Ownership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. CEDs’ ownership (t-1)</td>
<td>Johnson and Greening, 1999; Ahmed and Duellman, 2007; Chen, 2008; Mitra and Hossain, 2011.</td>
<td>Percentage of total CEDs shareholdings to the total number of shares in issue</td>
</tr>
<tr>
<td>2. NEDs’ ownership (t-1)</td>
<td>Morck et al., 1988; Davies et al., 2005; Mura, 2007; Chhaochharia and Grinstein, 2007; Florackis et al., 2009</td>
<td>Percentage of total NEDs shareholdings to the total number of shares in issue</td>
</tr>
<tr>
<td>3. Concentrated Ownership (t-1)</td>
<td>Morck et al., 1988; Kang and Sorensen, 1999; Demsetz and Villalonga, 2001; Hoskisson et al., 2002; Seifert et al., 2005; Laidroo, 2009; Florackis et al., 2009.</td>
<td>Total percentage of all institutions and other shareholders that own 3 percent or more shares in the firm to the total number of shares in issue</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash (t-1)</td>
<td>Arora and Dharwadkar, 2011.</td>
<td>The log of cash and accounts receivables</td>
</tr>
<tr>
<td>Firm Leverage (t-1)</td>
<td>Navarro, 1988; Daniel et al., 2004; Arora and Dharwadkar, 2011.</td>
<td>Total debt to equity ratio</td>
</tr>
<tr>
<td>Firm Size (t-1)</td>
<td>Ullman, 1985; Burke et al., 1986; McWilliams and Siegel, 2000; Elsayed, 2006; Arora and Dharwadkar, 2011.</td>
<td>The log of the number of full time employees</td>
</tr>
<tr>
<td>Firm Industry</td>
<td>Bowman and Haire, 1975; Ullman, 1985; Spencer and Taylor, 1987; Griffin and Mahon, 1997; Waddock and Graves, 1997; McWilliams and Siegel, 2000; Tsoutsoura, 2004; Margolis et al., 2007.</td>
<td>The Herfindhal-Hirschman Index; down to two-digit code industry level as defined in the UK Standard Industrial Classification (SIC 2007) provided by the office for national statistics</td>
</tr>
<tr>
<td>Board Gender (t-1)</td>
<td>Carter et al., 2003; Dutta and Bose, 2007; Campbell and Mínguez-Vera, 2008; Bear et al., 2010; Julizaerma and Zulkarnain, 2012; Oba and Fodio, 2013.</td>
<td>The ratio of total number of female directors to the total directors in the board</td>
</tr>
<tr>
<td>Variation in Directors’ Age (t-1)</td>
<td>McIntyre et al., 2015.</td>
<td>Standard deviation of the age of the members of a particular board</td>
</tr>
</tbody>
</table>

Source: compiled by the author
The dependent, independent, and control variables presented in the above table were chosen for this study to examine the relevant hypotheses and answer the main research question by employing the logistic regression model which is presented in the following section (section 5.5.1.2).

**Boards’ Ownership Structure and Effective CG**

In order to identify the relationships between boards’ ownership structure and CSR engagements, three approaches were used. First, concentrated ownership (the majority of institutional ownership in the case of UK market) may be the most effective mechanism of CG as financial institutions have more incentives and more means to monitor performance by employing NED to represent them in the board (Morck et al., 1988; Kang and Sorensen, 1999; Hoskisson et al., 2002). To test hypotheses *H5* and *H6*, all institutions and other concentrated shareholders that own 3 percent or more shares in a firm were considered to sum up concentrated ownership (Laidroo, 2009). According to the Financial Services Authority’s Disclosure and Transparency Rules (FSA’s DTRs) (2012), companies are required to disclose all concentrated shareholders who hold 3 percent and over and represent a substantial interest in the voting rights and taking decisions regarding CSR involvements and thus the total of these substantial shareholdings were considered in this examination. Secondly, CED stock ownership has a significant positive impact on enhancing CSR (Mitra and Hossain, 2011). To test the related hypotheses (*H1* and *H2*), CED shareholdings were empirically tested by this study. As with Chen (2008) and Mitra and Hossain (2011), CEDs’ ownership was measured as the percentage of total equity owned by the CED of the firm. Thirdly, according to the existing literature, the greater representation of independent CEDs (NEDs) provides better governance and enhances seeking external legitimacy for the corporation (Johnson and Greening, 1999; Ahmed and Duellman, 2007). Thus, in order to identify the impact of NEDs’ ownership on CSR engagements and test hypotheses (*H3* and *H4*), the proportion of NEDs was also included as a boards’ ownership variable in the study’s model. NEDs are those directors who neither worked for nor affiliated in any other way to the company (Chhaochharia and Grinstein, 2007).
Control Variables
This study adapts the appropriate methodology that allows examining a multi-dimensional boards’ ownership structure in respect of endogenous variables (discussed in page 28) and taking into account the issue of controlling variables including cash, firm leverage, firm size, firm industry, board gender, and variation in directors’ age. These variables are explained below.

Cash
Cash and cash receivables are widely used measures of cash as they refer to source availability (e.g., Navarro, 1988). Firms with stable cash flows and profitability can afford to engage more in CSR (Withisupakorn and Jiraporn, 2015). Findings of the pervious literature indicate that cash has a positive relationship with CSR (Arora and Dharwadkar, 2011; Withisupakorn and Jiraporn, 2015). Therefore, cash was considered in this study and included in the empirical model to examine the impact of boards’ ownership structure on CSR expenditures. This study expects a statistically positive relationship between cash and voluntary and mandatory CSR. In this study, cash and accounts receivables were log transformed, as this variable is often skewed and may violate assumption of normality (Arora and Dharwadkar, 2011). This approach was used to avoid any deviation.

Firm Leverage
Since those companies which experience financial position difficulties and are not able to garner continuing resources for philanthropic expenditures, any investments towards such engagements might appear as unsustainable over time by their stakeholders (Mishra and Modi, 2013). The cost of high leverage can impact firm performance negatively (Opler and Titman, 1994), thus reducing investment in philanthropic activities. The above arguments indicate the importance of the role of firm leverage in determining the level of CSR engagements, therefore it was considered as a control variable in this thesis and this section will analyse its impact on CG and CSR.

In investigating whether financial leverage has an important role in enhancing or weakening CG and CSR, two different proxies were used in the prior literature to measure financial leverage: total debt divided by total assets and debt to equity ratio (e.g., Navarro, 1988; Short and Keasey, 1999; Chen and Hu, 2007; Florackis et al., 2009; Arora and Dharwadkar, 2011; Ellili, 2011; González, 2013; Mishra and Modi, 2013; Vithessonthi and Tongurai, 2015; Tsuruta, 2015).
Using the ratio of total debt to total assets as a proxy for firm leverage, Chen and Hu (2007) investigated the role of firm leverage in enhancing or lessening CG and found a negative relationship. By examining the relationship between firm performance and its controlling shareholder’s personal loans of a sample of 355 firms listed at the Taiwan Stock Exchange, Chen and Hu (2007) controlled for firm leverage that was measured by the debt-to-asset ratio in terms of its book value. Chen and Hu (2007) found a negative relationship between firm leverage and performance using both proxies of firm performance, ROA and Return on Equity (ROE). Evidence shows that firms with low leverage tend to perform better while firms with high leverage tend to perform worse.

An international examination which was provided by González (2013) also investigated the relationship between financial leverage and firm performance using an international panel database of 10,375 firms in 39 developing and developed countries over the period 1995-2004 and found a negative and statistically significant relationship. More evidence that proved a negative relationship between financial leverage and firm performance was provided by Vithessonthi and Tongurai (2015) who used a panel dataset of 159,375 firms in Thailand during the financial crisis of 2007-2009. Findings of Vithessonthi and Tongurai (2015) were consistent with those of Chen and Hu (2007) and González (2013); all have shown that financial leverage is negatively associated with firm performance which means that highly leveraged firms perform worse than those with lower leverage and this lent support to the literature which suggests that the cost of high leverage can lessen firm performance (Opler and Titman, 1994).

However, contradictory results were reported using the same measure of firm leverage (the ratio of total debt to total assets). Over the period 2001-2004, Ellili (2011) used the sample of 815 US firms to investigate the impact of ownership structure on firm performance and controlled for firm leverage and found that the coefficient of leverage is positive and significant at a confidence degree of 5%. This shows that leverage constitutes a good signal on the market reflecting the

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22 Firm performance was measured by ROA and ROE and the examination considered the period from 1996 to 2000 using regression fixed effects for firm and calendar month to remove any possible incidental effects.

23 The generalized-method-of-moments (GMM) estimator – developed for dynamic models of panel data by Arellano and Bond (1991) – was used by González (2013) with one lag of the dependent variable. In González’s (2013) study, firm performance was measured by ROA and leverage was measured by the ratio between the book value of total debt and the book value of assets.

24 Vithessonthi and Tongurai (2015) used ROA as a proxy for firm performance and the ratio of total debt to total assets as a proxy for financial leverage. To address the issue of endogeneity with respect to the relation between firm performance and leverage, Vithessonthi and Tongurai (2015) utilised both regression models, the two-stage least square (2SLS) and the Generalized Method of Moments (GMM) and obtained consistent results.
management ability to generate enough returns to pay both interests and dividends; management of firms with high debt take the appropriate action for maximizing value to protect their non-diversifiable human capital. More empirical evidence is given on the positive relationship between leverage and firm performance. Tsuruta (2015) used a sample of 93,036 small Japanese manufacturing firms for the period 1996-2006. Using the fixed effects model and lagged data, Tsuruta’s (2015) results show a positive and statistically significant relationship between leverage and firm performance which indicates that highly leveraged firms enjoy better performance as lenders and trade creditors oversee actions and prevent inefficient management. Ellili (2001) also used a fixed effect panel data and unlike prior studies (Davies et al., 2005; Mura, 2007; Benson and Davidson, 2009) who used Tobin’s Q, and Thomsen and Pedersen (2000), who used three different measures as a proxy for firm performance including ROA, market to book value of equity, and sales growth, Ellili (2011) measured firm performance differently as it was measures by total shareholders’ return.

An insignificant relationship between leverage and performance was discovered by Short and Keasey (1999) and Florackis et al. (2009). Using the same proxy (total debt to total assets) to measure firm leverage, Short and Keasey (1999) used cross sectional studies in a random sample of 225 UK firms quoted on LSE during the period of 1988-1992 to examine the impact of leverage on firm performance. Results show an insignificant relationship when firm performance was measured by the use of both measures, return on equity (the accounting measure) and Tobin’s Q (the market measure). More use UK data in examining the relationship between leverage and firm performance such as Florackis et al. (2009) who found an insignificant relationship as well. Florackis et al. (2009) measured leverage by the ratio of total debt to total assets. For the period 2000-2004, Florackis et al. (2009) considered large and small firms by selecting a total sample of 1010 UK firms that includes 412 large firms listed on LSE and 598 small unlisted firms.

Total debt to equity ratio has been used as a proxy for financial leverage in prior studies that investigated the role of leverage in enhancing or lessening CSR (e.g., Navarro, 1988; Arora and Dharwadkar, 2011; Mishra and Modi, 2013). Considering a negative relationship, Navarro (1988) used the debt to equity ratio to measure financial leverage in examining the relationship
between leverage and giving contribution\textsuperscript{25}. Results show a negative and statistically significant relationship indicating that highly leveraged firms systematically contribute at lower levels of charitable activities. Navarro (1988) used a pooled cross section of 249 firms drawn from the ACA guide for the period 1976-1982 using both regressions, the un-weighted (OLS) and the weighted least squares(WLS). Results indicate the existence of a negative relationship between leverage and charitable contribution.

Using the debt to equity ratio as a proxy for financial leverage, Arora and Dharwadkar (2011) and Mishra and Modi (2013) have investigated the relationship between leverage and CSR and outcomes of both studies show consistency. Findings of both studies show a positive relation between leverage and negative CSR, while the relationship between leverage and positive CSR was found to be insignificant. Arora and Dharwadkar (2011) used a panel dataset (the random effects model) with lagged CSR data\textsuperscript{26} on a sample of 518 US firms for the period 2001-2005. Similarly, Mishra and Modi (2013) empirically investigated the relationship between firm leverage and CSR\textsuperscript{27} using a panel dataset of 192 US firms from multiple industries over the period 2000-2009. They found a positive and statistically significant relationship between leverage and negative CSR which indicates that over-leveraged firms are more likely to engage in negative CSR. Using the Three-Stage-Least-Squares (3SLS), Mishra’s and Modi’s (2013) results show an insignificant relationship between leverage and positive CSR. The debt to equity ratio was used in examining the role of firm leverage in predicting CSR (e.g., Navarro, 1988; Arora and Dharwadkar, 2011; Mishra and Modi, 2013). This measure was also used by this thesis to determine whether firm leverage has an impact on the level of CSR engagements.

\textsuperscript{25}Navarro (1988) measured giving contribution by the logarithm of charitable contribution to sales ratio, where giving contribution was derived from a source of previously unanalysed, firm-specific contributions data, namely the American Council for the Arts (ACA) Guide to Corporate Giving. The ACA targeted the 1,000 largest industrial firms as listed in the Fortune Double 500 Directory and published three volume reports by the use of written survey and telephone follow-up.

\textsuperscript{26}Ratings of CSR were collected from the KLD database based on eight major social performance categories (Governance and Transparency, Employee relations, Diversity, Environment, Product Quality, Community relations, human rights, and other concerns). Within each of these categories, the KLD database provides a zero and one rating on multiple sub-criteria that are grouped as either strengths (positive aspects) or concerns (negative aspects).

\textsuperscript{27}Mishra and Modi (2013) rated CSR based on the six dimensions of CSR concerns (CG, Employee Relations, Diversity, Environment, Product, and Community) that were collected from the KLD database. Within each of these dimensions, the KLD database provides a zero and one rating on multiple sub-criteria that are grouped as either strengths (positive aspects) or concerns (negative aspects).
In summary, while studies considering the impact of firm leverage on firm performance had shown mixed results, other studies which considered the influence of firm leverage on CSR had shown consistency. A summary of studies discussed in this section is presented in Table 5.6. Studies that were concerned with the relationship between leverage and performance had shown mixed results across different countries as a negative and significant relationship between leverage and performance had been evidenced by Chen and Hu (2007), González (2013) and Vithessonthi and Tongurai (2015). Conversely, results of other studies showed a positive and significant relationship (Ellili, 2011; Tsuruta, 2015). However, an insignificant relationship between leverage and performance was discovered by Short and Keasey (1999) and Florackis et al. (2009) who used UK data. Recent studies concerning the impact of leverage on CSR had shown consistency as Arora and Dharwadkar (2011) and Mishra and Modi (2013) have investigated the relationship between leverage and CSR. Findings of both studies show a positive relation between leverage and negative CSR while the relationship between leverage and positive CSR was found to be insignificant.

However, as discussed above in this section, firms in a poor financial position are not able to gather continuing resources for philanthropic activities thus any investments towards such actions might appear as unsustainable over time by their stakeholders (Mishra and Modi, 2013). According to Myers (1977), high debt leads to underinvestment problems and causes poor performance. The literature suggests that the cost of high leverage can impact firm performance negatively (Opler and Titman, 1994), hence reducing investment in philanthropic activities. In contrast, Jensen (1986) argued that the threat of defaulting on debt payments has a positive impact on CG as it makes firms more efficient. Highly leveraged firms have to pay off debts and make interest payments. This will give them the incentive to earn more cash from efficient investments and enhance performance. However, these firms’ priority is to pay off the debt rather than investing in philanthropic activities and, by the time they get rid of their high debts and think about investing in charitable and philanthropic activities, they become firms with low leverage. From the above arguments it can be seen that firms’ financial leverage is an important issue for CG in making a decision regarding CSR. Therefore, it is included in this study as a control variable and it is expected to have a negative impact on voluntary and mandatory CSR. To compute firm leverage in this study, the measure of debt-to-equity ratio was used. According to Navarro (1988) and Arora and Dharwadkar (2011), firm leverage is represented by a high debt-to-equity ratio and is an extensively used measure of high firm leverage.
Table 5.6: Summary of literature concerning firm leverage

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen and Hu (2007)</td>
<td>1996-2000</td>
<td>Taiwan-355 Firms</td>
<td>Negative Relationship with FP</td>
</tr>
<tr>
<td>Florackis et al. (2009)</td>
<td>2000-2004</td>
<td>UK-1010 Firms</td>
<td>Insignificant Relationship with FP</td>
</tr>
<tr>
<td>Ellili (2011)</td>
<td>2001-2004</td>
<td>US-815 Firms</td>
<td>Positive Relationship with FP</td>
</tr>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Positive Relationship with Negative CSR</td>
</tr>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Insignificant Relationship with Positive CSR</td>
</tr>
<tr>
<td>González (2013)</td>
<td>1995-2004</td>
<td>39 Developing and Developed Countries-10,375 Firms</td>
<td>Negative Relationship with FP</td>
</tr>
<tr>
<td>Tsuruta (2015)</td>
<td>1996-2006</td>
<td>Japan-93,036 Small Firms</td>
<td>Positive Relationship with FP</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

**Firm Size**

This study uses firm size as one of the firm-specific characteristics. This variable is used extensively in the literature (Thomson et al., 1993; Han and Suk, 1998; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Short and Keasey, 1999; Elsayed, 2006; Morrow et al., 2007; Guest, 2009; Muller and Kolk, 2009; Arora and Dharwadkar, 2011; Chang et al., 2012; Yekini et al., 2015). Firm size is a key factor that impacts the level of involvements in philanthropic activities as the society exerts heavier pressure on larger firms for philanthropic
giving, and larger firms correspondingly conform to the pressure (Burke et al., 1986; Buysse and Verbeke, 2003). Larger firms are involved in community investment almost as twice as much as smaller firms. Larger firms are more committed to CSR and tend to respond more to stakeholders’ demands (Chang et al., 2012). The modern society tends to pay more attention to larger firms and pressures them to respond to stakeholders’ calls. Besides, larger firms are more willing to orient their actions towards stakeholders’ demands than small firms due to their interests in seeking external legitimacy and gaining competitive advantages (Fombrun and Shanley, 1990; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Ahmed and Duellman, 2007; Udayasankar, 2008). According to Johnson and Greening (1999) and Muller and Kolk (2010), firm size has a positive impact on CSR. Moreover, the nature of the ownership-performance association is likely to contrast across companies with different characteristics such as firm size. The literature suggests that firm-specific characteristics strongly determine the effectiveness of managerial ownership as an incentive mechanism (Cheung and Wei, 2006; Florackis et al., 2009). The above arguments indicate that firm size has a potential key role in enhancing CG and CSR, hence it was considered by this thesis. Firm size is a significant predictor for good CG and CSR, hence it is included as a control variable in this study. This section is critically analysing its key role in enhancing CG and CSR.

Florackis et al. (2009) examined the relationship between executive ownership and corporate performance by categorising the original sample into two sub-samples (based on firm size that was measured by the logarithm of market capitalisation); one includes 412 large UK firms and the other sample consists of 598 small UK firms. Results show that the alignment effect of executive ownership on corporate performance differs across the two sub-samples, as the alignment effect was found to be significant at ownership levels lower than 5 percent for large companies and lower than 15 percent for small companies.

Total assets has been one of the most commonly used proxies for firm size in prior literature (e.g., Johnson and Greening, 1999; Morrow et al., 2007; Chang et al., 2012). Taking the natural logarithm of firms’ total assets to discover the role of firm size in predicting CG and CSR, Johnson and Greening (1999); Chang et al., (2012) and Morrow et al., (2007) found support for the positive significant relationship between firm size and CG and CSR. Johnson and Greening (1999) have randomly selected 300 US firms from the KLD database (Kinder, Lydenberg, Domini, and Company corporate social performance database, the largest multinational CSP
database available to the public) for 1993 for the purpose of examining the relationship between CG and CSR\textsuperscript{28}, and controlled for firm size\textsuperscript{29}. Considering the relationship between firm size and CSR, Chang et al. (2012) have also empirically examined this relationship using a data set of 180 Korean companies in 2005. The outcomes support the prior argument that suggests a positive significant relationship between firm size and CSR\textsuperscript{30}. More empirical support for the positive significant prediction of firm size using the logarithm of firms’ total assets comes from Morrow et al. (2007). Using a sample data of 178 single-product manufacturing firms from 1982 to 1994 in the COMPUSTATA database, Morrow et al. (2007) have examined the firm size-firm performance relationship and found that firm size is positively associated with firm performance\textsuperscript{31} using both models, the probit and OLS regression.

Prior studies have used total sales as a proxy for firm size in examining the relationship between firm size and CG and CSR. All have found a positive significant association between firm size and both CG and CSR regardless of having differing geographical locations (Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Short and Keasey, 1999; Muller and Kolk, 2009). Using a sample data of 111 US firms listed on the Fortune 500 from 1987 to 1992, Stanwick and Stanwick (1998) have examined the firm size-CSR relationship and regression analyses show that firm size is positively associated with CSR\textsuperscript{32} indicating that larger firms are more likely to actively respond to stakeholders’ demands. In addition to the logarithm of total assets and employee number, Johnson and Greening (1999) used the total sales as a proxy for firm size and

\textsuperscript{28}CSR ratings were taken from the KLD database that assesses five dimensions which have been used for research including community relations, treatment of women and minorities, employee relation, response to the natural environment, and product quality (Johnson and Greening, 1999).

\textsuperscript{29} Three different measures were used by Johnson and Greening (1999) as a proxy for firm size; the logarithm of total assets, total firm sales, and total firm employees and findings of the three measures prove a positive relationship between firm size and CSR and this demonstrates consistency regardless of the measure used for firm size.

\textsuperscript{30} Chang et al. (2012) used the natural logarithm of total assets as a proxy for firm size. CSR ratings were taken from the KEJI Index that considers seven major issues including Environment, Community, CG, Corporate Integrity, Customer Satisfaction with Product Quality and Safety, Employee Relations, and Long-term Orientation.

\textsuperscript{31} The natural logarithm of the firm’s total assets was used as a proxy for firm size while firm performance was measured by the use of a market-based measure, Jensen’s alpha that was used to assess a firm’s performance relative to its rivals in the market.

\textsuperscript{32} CSR was rated by the use of the Fortune Corporate Reputation Index that considers eight attributes including Quality of Management, Quality of Products or Services, Innovativeness, Long-term Investment Value, Financial Soundness, Ability to Attract, Develop, and Keep Talented People, Wise use of Corporate Assets, and Responsibility to the Community and the Environment. Stanwick and Stanwick (1998) used the Fortune Corporate Reputation Index since it incorporates the responsibility to the community and the environment as one of its eight attributes.
found a positive significant relationship between firm size and CSR\textsuperscript{33}. Unlike prior studies that used total sales without taking the logarithm (e.g., Stanwick and Stanwick, 1998; Johnson and Greening, 1999), Short and Keasey (1999) and Muller and Kolk (2009) used the logarithm of total sales in discovering the role of firm size in predicting CG and CSR. Considering the UK market, Short and Keasey (1999) used a random sample of 225 UK companies quoted on LSE for the period 1988 to 1992 to discover whether there is a significant relationship between firm size and firm performance. Evidence shows a positive association when the logarithm of firms’ sales was used as a proxy for firm size (Short and Keasey, 1999). Using the OLS regression model and obtaining data of 121 Mexican auto parts suppliers in 2006, Muller and Kolk (2009) tested the firm size-CSR relationship\textsuperscript{34}. The outcomes show a positive association between firm size and CSR among auto parts suppliers in Mexico.

Firm size was measured by the logarithm of market capitalisation by some studies in examining the relationship between firm size and firm performance (e.g., Han and Suk, 1998; Guest, 2009). While Guest (2009) provided evidence on the positive and significant relationship of firm size and firm performance\textsuperscript{35}, the results obtained by the study of Han and Suk (1998) show an insignificant relationship during the sample period (1988-1992)\textsuperscript{36}. Other researchers have used employee number as a proxy for firm size in examining the relationship between firm size and CG and CSR, all of which showing consistent results as they found a positive significant association of firm size and CSR (Thomson et al., 1993; Johnson and Greening, 1999; Elsayed, 2006; Arora and Dharwadkar, 2011). Within a major city in the south-western United States, Thomson \textit{et al.} (1993) have randomly selected 167 small firms to examine the impact of firm size on charitable contribution of small firms that have annual sales of less than $10 million and a number of full-time employees between 15 and 100. Regression analysis of Thomson’s \textit{et al.} (1993) shows that the number of full-time employees in average small firms is a statistically significant predictor of total dollar contributions. This indicates that firm size has a positive impact on charitable contribution when full-time employee number was used as a proxy for firm

\textsuperscript{33} CSR ratings were taken from the KLD database that assesses five dimensions which have been used for research including community relations, treatment of women and minorities, employee relation, response to the natural environment, and product quality (Johnson and Greening, 1999).

\textsuperscript{34} Muller and Kolk (2009) have also used the natural logarithm of firm sales as a proxy for firm size, and ratings of CSR were based on six dimensions including recycling, environmental training, philanthropy, vocational training, organization of community relations, and internship opportunities.

\textsuperscript{35} Guest (2009) used ROA as a proxy for firm performance of a large UK sample that consists of 2746 firms between 1981 and 2002 using panel data of both regressions: the OLS and fixed effect models.

\textsuperscript{36} Han and Suk (1998) measured firm performance by taking the geometric average return for the period 1988-1992 of a sample of 301 US industrial firms using the weighted least-squares (WLS) method in analysing data.
size. Johnson and Greening (1999) have also used the total number of firm employees and findings prove a positive significant relationship between firm size and CSR\(^\text{37}\).

Unlike Thomson et al., (1993) and Johnson and Greening (1999) who used the total number of employees as a proxy for firm size in examining the relationship of firm size and CSR, Elsayed (2006) and Arora and Dharwadkar (2011) used the natural logarithm of employee number, though findings of all these studies appeared to be consistent. Elsayed (2006) used the natural logarithm of total number of employees as a proxy for firm size when examining the relationship between firm size and environmental orientation and found positive a significant association using both models: the logistic model and the random effects model. Elsayed (2006) tackled two sides of environmental orientation: environmental responsiveness and environmental performance. Elsayed (2006) used the logistic regression model to examine the relationship of firm size and environmental responsiveness as a binary variable that takes the value of unity if the firm has an environmental policy and nil if it does not and this information is based on a survey conducted in 1999 using a sample of 173 UK firms.

In this thesis, a similar binary variable is used to examine the impact of boards’ ownership structure on CSR as the value of unity was given to firms that engage by 70% and over in CSR and are included in the CR Index, and nil to firms that are not included in the index. Elsayed (2006) used the random effects model (for the period 1995-1999) in discovering the relationship between firm size and environmental performance that was measured by the mean annual Community and Environmental Responsibility (CER) score in the Management Today’s Britain Most Admired Company (BMAC). In this thesis, a further analysis was conducted using the fixed effects and random effects models (panel data) by splitting the main sample and considering only firms that are included in the CR Index and giving them different ranks based on their bands of CSR engagement in the index in order to identify the key drivers for proactive CSR engagement.

Arora and Dharwadkar (2011) have also used the natural logarithm of employee number to measure firm size and selected a final sample of 518 US firms from the S&P 500 and KLD

\(^{37}\)CSR ratings were taken from the KLD database that assesses five dimensions which have been used for research including community relations, treatment of women and minorities, employee relation, response to the natural environment, and product quality (Johnson and Greening, 1999).
In summary, almost all studies evidenced that firm size is a good predictor of CG and CSR and has a positive significant relationship with firm performance and CSR across different countries (Thomson et al., 1993; Han and Suk, 1998; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Short and Keasey, 1999; Elsayed, 2006; Morrow et al., 2007; Guest, 2009; Muller and Kolk, 2009; Arora and Dharwadkar, 2011; Chang et al., 2012). Although different proxies were used in the above literature to measure firm size (total assets, total sales, market capitalisation and number of employees), all studies evidenced a positive and significant impact of firm size on CSR and also on firm performance except of Han’s and Suk’s (1998) study that shows an insignificant impact due to the use of a different measure of firm performance.

Moreover, and according to the existent literature, firm size is a factor that affects both firm performance and CSR and hence ought to be controlled (Ullman, 1985; Burke et al., 1986; McWilliams and Siegel, 2000; Arora and Dharwadkar, 2011). Firm size is a key variable to be controlled since more attention and pressure to respond to stakeholders’ demands are received by larger firms (Burke et al., 1986; Arora and Dharwadkar, 2011). Prior research suggests that firm size is likely to act as an intervening variable and should be controlled for in the empirical test (Cochran and Wood, 1984; Ullmann, 1985; Cowen et al., 1987). For this reason, firm size was included in this study as another control variable. While the majority of prior researchers have used total assets as a measure for firm size, this study (consistent with previous literature) prefers to measure size according to the number of employees as this measure has been seen as the appropriate measure for studies concerning CSR within a stakeholder context (Thomson et al., 1993; Johnson and Greening, 1999; Elsayed, 2006; Arora and Dharwadkar, 2011). Furthermore, firm size is often skewed and may violate assumption of normality (Elsayed, 2006; Arora and
Dharwadkar, 2011). Hence this variable has been log transformed in this study. From Table 5.7, it can be seen that all studies that considered the impact of firm size on CSR evidenced a positive and statistically significant impact of firm size hence this study anticipates a statistically positive relationship between firm size and voluntary and mandatory CSR.

Table 5.7: Summary of literature concerning firm size

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson and Greening (1999)</td>
<td>1993</td>
<td>US-300 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Muller and Kolk (2009)</td>
<td>2006</td>
<td>Mexico-121 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Chang et al. (2012)</td>
<td>2005</td>
<td>Korea-108 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Guest (2009)</td>
<td>1981-2002</td>
<td>UK-2746 Firms</td>
<td>Positive Relationship with FP</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

**Firm Industry**

Scholars pointed out the diversification of different industries in their social responsibility practices where some industries, such as heavy manufacturing and chemical industries, might be considered as more polluted than other industries (Bowman and Haire, 1975; Spencer and Taylor, 1987; Griffin and Mahon, 1997). Some industries can be growing versus declining, and different industries could vary in their stakeholders’ responses relevant to the degree of regulation and inspection which they are subject to. Margolis et al. (2007) conducted a meta-analysis of 167 studies, considering the redirection of empirical research on the relationship between CSP (Corporate Social Performance) and CFP (Corporate Financial Performance).
Margolis *et al.* (2007) argued that firm industry variables should be controlled for either when it is explicitly entered as a control variable in the study’s original investigation, when it is incorporated into the research design using samples matched on industry, or when the examination is sampled from within a solitary industry. Prior research suggests that firm industry is likely to act as an intervening variable and should be controlled for in the empirical model (Cochran and Wood, 1984; Ullmann, 1985; Cowen *et al*., 1987). Mainstream studies have also argued that firm industry is a factor that affects both firm performance and CSR and thus should be included as a control variable (Ullman, 1985; McWilliams and Siegel, 2000). Since this study examines the impact of boards’ ownership structure on CSR using a UK sample, this examination controls for this variable and adopts the two-digit SIC (Standard Industry Classification, 2007) provided by the National Statistics.

**Board Gender**

In recent years, board gender diversity became one of the most important board compositions that enhance CG and CSR. More recently, the link between CSR and the presence of females in the governance structure attracts researchers’ attention (Harjoto and Jo, 2011). Women in the board offer a potential and wide range of involvements to boards (Bear *et al*., 2010). The literature suggests that female board members play a significant role in enhancing the reputation of the firm (Bear *et al*., 2010). The appointment of females in the board should be given greater emphasis to enhance the ability of boards of directors to deal with CSR (Deschênes *et al*., 2015). Females are more apt to socially desirable responses and more perceptive to ethical issues than males (Bernardi, 2006). Females focus more on sustainable development and CSR (St-Pierre *et al*., 2011) and bring sensitivity to the board toward CSR and a participatory decision-making style (Bear *et al*., 2010). Boards with a higher number of female directors engage in charitable giving to a larger extent than boards with a lesser number of female directors (Williams, 2003). Board gender was valued by Singh *et al.* (2006) as positive for shareholders, as an advantage in an international market where sensitivity is necessary to sustain in the long-term. The literature suggests that females are more than twice as likely as males to be highly qualified (hold a doctoral degree), have gained a broader experience with smaller firms, and bring diverse perspectives to the board (Hillman *et al*., 2002). These arguments raised awareness for the key role of board gender in enhancing CSR engagements. This thesis is considering such a mechanism and this section explores its key role on the level of engagements in voluntary and mandatory CSR.
Across different locations, prior studies examined the relationship between board gender diversity and CSR engagements and found a positive relationship (Bear et al., 2010; Margaretha and Isnaini, 2014; Fernandez-Feijoo et al., 2014; Deschênes et al., 2015). Considering the US and other international markets, Bear et al. (2010) found a positive and statistically significant relationship between the percentage of women in the board and CSR using lagged data for independent and control variables. Bear et al. (2010) used a sample from Fortune’s 2009 Most Admired List that considers 64 industries, 39 primarily based in the US and 25 international industries38. More consideration of the impact of gender composition on CSR performance was applied on the Indonesian market by Margaretha and Isnaini (2014) who argued that the increase in the percentage of women in the board is associated with the increase in CSR performance. Through a purposive sampling technique, Margaretha and Isnaini (2014) selected 219 firms from 300 firms which have obtained the Indonesia’s Best Wealth Creator (IBWC) Award from SWA Magazine in the years 2010, 2011 and 2012.

Concerning the international market on the relationship between board gender composition and CSR reporting, outcomes of Fernandez-Feijoo et al. (2014) show that countries with a higher proportion of boards of directors with at least three females are associated with higher levels of CSR reporting. An international sample was considered by Fernandez-Feijoo et al. (2014) with around 2400 firms within 22 countries for the year of 2008 and results of the OLS regression analysis indicate that board gender composition has a positive and statistically significant relationship with the level of CSR disclosure, while marginal support was shown with credibility on CSR. Deschênes et al. (2015) have also examined the link between the percentage of females in the board and CSR of the largest publicly traded Canadian companies and findings show that board gender has a significant positive impact on CSR. The sample of Deschênes’s et al. (2015) study consists of 38 firms and was drawn from the S&P/TSX 60 Index. The study considered the five-year period, from 2004 to 2008.

Considering the engagement of CSR, Bear et al. (2010) used CSR ratings drawn from the KLD database that are based on ratings of strengths and is concerned with a number of dimensions including employee relations, CG, diversity, the environment, the community, and product.

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38 The Fortune survey covers 689 firms including the 10 largest firms for each US industry, and the 15 largest firms for each international industry, however Bear et al. (2010) considered only the health care industry and the final sample consists of 51 companies.
Mattingly’s and Berman’s (2006: p. 20) results conclude that strengths and concerns ratings are “empirically and conceptually distinct” and researchers need to utilize them separately. Mattingly and Berman (2006) developed two social performance strength dimensions: institutional strength and technical strength. Bear et al. (2010) concentrate on these two ratings where the institutional strength considers positive measures for community and diversity ratings while the technical strength focuses on positive measures for government, product and employee issues. Engagements of CSR, institutional strength and technical strength, are positively associated with board gender. CSR used by Margaretha and Isnaini (2014) was obtained from the yearly company report and was measured using two levels of engagement, environment quality and social responsiveness quality, by taking the average rate of total disclosure of 31 items. Margaretha and Isnaini (2014) adopted Bear’s et al. (2010) methodology and used the OLS regression model and obtained the same evidence.

The KPMG International report – that conducts a survey every three years “to gain insight into CSR reporting and to contribute to the evolving global dialog on transparency and accountability” (KPMG, 2008: p. 2) – was used by Fernandez-Feijoo et al. (2014) to obtain the measure of CSR reporting. From six CSR reporting variables reported by KPMG report that are highly correlated, Fernandez-Feijoo et al. (2014) applied factor analysis for variable reduction and used only two variables to measure CSR: level of CSR disclosure and credibility on CSR. On the other hand, Deschênes et al. (2015) used CSR components – including employee issues and environment, CG, and community and society – that were obtained from the database created by Michael Jantzi Research Associates, which scores the social performance of numerous Canadian firms.

In summary, outcomes of all studies discussed in this section and presented in Table 5.8 show that board gender diversity has a key role on enhancing CSR. Outcomes of prior studies show that women on the board have a positive and significant impact on CSR expenditures (Bear et al., 2010; Margaretha and Isnaini, 2014; Fernandez-Feijoo et al., 2014; Deschênes et al., 2015). Although these studies have used differing ratings of CSR, results show consistency. These studies used various ratings of CSR, while this thesis is concerned more with the key drivers of voluntary CSR that considers community investments and philanthropic and charitable activities used to improve competitive position as a means of a sustainable strategy for the long-term basis. Since a mainstream of recent researchers have seen board gender as an important factor in
determining CSR (Williams, 2003; Bernardi, 2006; Singh et al., 2006; Bear et al., 2010; St-Pierre et al., 2011; Deschênes et al., 2015), this study includes board gender in the statistical model as a control variable and anticipates a statistically positive relationship between board gender and voluntary and mandatory CSR. In this study, board gender was measured as the proportion of female directors to the total number of directors in the board (Carter et al., 2003; Dutta and Bose, 2007; Campbell and Mínguez-Vera, 2008; Bear et al., 2010; Julizaerma and Zulkarnain, 2012; Oba and Fodio, 2013).

Table 5.8: Summary of literature concerning board gender and CSR

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margaretha and Isnaini (2014)</td>
<td>2010-2012</td>
<td>Indonesia-219 Firms</td>
<td>Positive Relationship with Environment Quality and Social Responsiveness Quality of CSR</td>
</tr>
<tr>
<td>Fernandez-Feijoo et al. (2014)</td>
<td>2008</td>
<td>22 International Countries-2,400 Firms</td>
<td>Positive Relationship with the Level of CSR Disclosure and Credibility on CSR</td>
</tr>
<tr>
<td>Deschênes et al. (2015)</td>
<td>2004-2008</td>
<td>Canada-38 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

Directors’ Age

One of the CG mechanisms, the composition of the board of directors and directors’ age, is the key important characteristic in board composition. Directors’ age has been shown to be an essential factor in determining directors’ power and experience that predict a CED’s accountability for strategic development, particularly in a high discretion environment (Finkelstein and Hambrick, 1990; Halebian and Finkelstein, 1993; Hambrick et al, 1993; Arora and Dharwadkar, 2011). The literature suggests that younger directors have a greater propensity for strategic change and development (Hambrick and Mason, 1984). An advocated argument came from Wiersema and Bantel (1992) who evidenced that firms with younger directors were more likely to undergo major changes in corporate strategy. Burke and Light (1981) argued that
cognitive ability, including learning ability, reasoning and memory decrease as people become old. Moreover, the literature suggests that older directors may become risk-averse and avoid risky decisions for both financial security and career security (Vroom and Pahl, 1971). Thus, firms with older directors are less likely to undergo major strategic change (Golden and Zajac, 2001).

On the other hand, younger directors are more likely to pursue more risky and innovative growth strategies and seem to handle new and creative ideas better than older directors do as they have more energy to do this (Campbell, 1987; Guthire and Olian, 1991). The above literature shows that directors’ age has a significant influence on CG hence it is investigated in this thesis. Several studies have examined the impact of directors’ age on CG (Bonn, 2004; Bonn et al., 2004; McIntyre et al., 2007; Ellili, 2011; Mahadeo et al., 2012; Platt and Platt, 2012; Vintilă and Gherghina, 2012) but there is a lack of studies concerning the impact of this mechanism on CSR. As the literature suggests that there is a high correlation between the determinants of CG and CSR (Waddock and Graves, 1997; Johnson and Greening, 1999; Parry and Proctor-Thomson, 2002; and Basu and Palazzo, 2008), this section will critically analyse prior studies that contributed in determining the impact of directors’ age on firm CG.

Across differing geographical locations (US and Japan), some scholars examined the relationship between directors’ age and CG and found that directors’ age has a negative and significant impact on firm performance (Bonn et al., 2004; Ellili, 2011; Vintilă and Gherghina, 2012). Over the period 2001-2004, Ellili (2011) used a sample of 815 US firms to investigate the impact of directors’ age on firm performance and discovered that directors’ age has a negative impact on firm performance. The outcome shows that having an older director is a key characteristic that weakens CG39. This outcome corroborates prior literature which stated that directors’ age is an indicator of the managerial entrenchment (Eaton and Rosen, 1983). Similarly, Vintilă and Gherghina (2012) used a random sample of 155 US firms in 2011 and results of multiple regression indicate that younger CEOs deliver better performance when price-earnings ratio (PER) was used as a proxy for firm performance. It also shows that CEO age has a negative

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39 Ellili (2001) used a fixed effect panel data for this study and measured age as the logarithm of the average of directors’ age and the total shareholders’ return was used as a proxy for firm performance.
impact on firm performance\textsuperscript{40}. Vintilă and Gherghina (2012) used the age of the chief executive officer to measure CEO age as they consider the age of a single director that would not reflect the experience of the whole board. More evidence on the negative relationship between directors’ age and firm performance using Japanese companies was provided by Bonn et al. (2004) who used a sample of 169 manufacturing firms from the Nikkei 300 Index. Bonn et al. (2004) found a negative and significant relationship between the average age of directors and market-to-book value (MB ratio). These results appeared to be consistent with US studies (Ellili, 2011; Vintilă and Gherghina, 2012) that discovered a negative relationship between directors’ age and firm performance. These results support the literature which suggests that older directors may become risk-averse and avoid taking risky investments that deliver better firm performance for both financial security and career security (Vroom and Pahl, 1971; Burke and Light, 1981; Hambrick and Mason, 1984; Campbell, 1987; Guthrie and Olian, 1991; Wicrsem and Bantel, 1992; Golden and Zajac, 2001).

However, Bonn et al. (2004) used another sample in investigating the relationship between directors’ age and firm performance. The sample of 104 manufacturing firms from the top 500 companies in Australia was used. The application of multiple regression analyses shows an insignificant relationship between directors’ age and firm performance\textsuperscript{41} (Bonn et al., 2004). A more insignificant relationship between directors’ age and CG was discovered by Bonn (2004) and McIntyre et al. (2007). Using data from the Australian market, Bonn (2004) investigated whether directors’ age enhances firm performance as measured by ROE and market-to-book value ratio (MB ratio). The outcomes of multiple regression analyses show that directors’ age has no influence on firm performance. Bonn (2004) used a sample of 84 manufacturing firms from the top 500 publicly listed firms in Australia and collected data of the ROE for the year 2003, while data of directors’ age were collected in the year of 1999 in order to use time lag between directors’ age and firm performance. Consistent with Bonn (2004) and Bonn et al. (2004), McIntyre et al. (2007) used data from different markets in discovering the impact of directors’ age on CG and also found no significant impact. McIntyre et al. (2007) used a sample of 300 large Canadian firms and examined the impact of the age diversity of directors of the board on firm performance for the year 2001. Outcomes of the cross-sectional regression

\textsuperscript{40} In addition to PER, Vintilă and Gherghina (2012) used Tobin’s Q, ROA, and ROE to measure firm performance and found an insignificant relationship between CEO age and firm performance.

\textsuperscript{41} Bonn et al. (2004) used ROA and MB ratio as proxies for firm performance and the 1999 data were collected for firm performance, while the average age of directors were collected for the year of 1998.
analyses show an insignificant relationship between the average age of the members of the board and firm performance.

However, McIntyre’s *et al.* (2007) results also show that greater variation in the age of directors of the board has a positive and statistically significant relationship with firm performance\(^{42}\) when within-board standard deviation of directors’ age was used as a metric for age variation. Further non-US study on the relationship of directors’ age variation and firm performance was conducted by Mahadeo *et al.* (2012) who used a sample of 42 listed firms operating in an emerging economy (Mauritius). Outcomes of OLS regression analyses show that for the year of 2007, directors’ age diversity has a positive influence on firm performance as measured by ROA. This can be justified by how the moderate levels of various ages of directors commit to decision-making by involving different strategic and operational issues. Considering the sustainability of the business, more positive outcomes were provided by another study that focused on US market; Platt and Platt (2012) contributed to the existing literature concerning directors’ age and the stability of firm performance. For the period 1998-2007, Platt and Platt (2012) used a sample of 292 US firms (87 bankrupt firms and 205 non-bankrupt firms) in discovering whether directors’ age plays a good role in enhancing CG and found that directors’ age is positively associated with more stable performance which means that older directors have a positive impact on business stability. Platt and Platt (2012) discovered that boards of bankrupt firms were directed by younger directors (the average age was 52.8 years), while boards of healthier firms were directed by older directors (the average age was 55). Generally, younger directors are taking increased risks leading to a greater variation in performance that in turn causes the bankruptcy of the business while older directors have more experience – which is measured by the average age of directors – in keeping the business stable.

In summary and as illustrated in Table 5.9, prior studies discussed in this section show mixed results and this can be noticed when directors’ average age was used to measure directors’ age as some studies show a negative relationship between directors’ age and CG (Bonn *et al.*, 2004; Ellili, 2011; Vintilă and Gherghina, 2012), while other studies proved an insignificant relationship (Bonn, 2004; Bonn *et al.*, 2004; McIntyre *et al.*, 2007) and only one study evidenced

\(^{42}\) McIntyre *et al.* (2007) used Tobin’s Q, Economic Value Added (EVA), and ROA as proxies for firm performance, and out of these performance metrics, the positive relationship between age variation and firm performance was discovered only with Tobin’s Q.
a positive relationship (Platt and Platt, 2012). However, when variation in directors’ age was used as a metric for directors’ age, prior studies discussed in this section show consistency as all proved a positive and significant relationship between age and CG (McIntyre et al., 2007; Mahadeo et al., 2012). Therefore, and because the literature suggests that there is a high correlation between the key drivers of CG and CSR (Waddock and Graves, 1997; Johnson and Greening, 1999; Parry and Proctor-Thomson, 2002; and Basu and Palazzo, 2008), this variable is included in this study’s statistical model as a control variable and the variation of directors’ age is used as a proxy for directors’ age.

Further, directors’ age is a diversity attribute that has recently seen attracting a reasonable level of interest in CSR disclosure literature. However, the literature found an insignificant relationship between directors’ average age and CSR disclosure (Slater and Dixon-Fowler, 2009; Huang, 2013; Giannarakis, 2014). Findings of these studies indicate that firms with a better CSR disclosure do not necessarily have a mature board. Moreover, Arora and Dharwadkar (2011) also discovered no significant relationship between CED’s age and CSR.

While the mainstream of prior studies used either the average age of directors or CEO age as a proxy for directors’ age (Slater and Dixon-Fowler, 2009; Arora and Dharwadkar, 2011; Huang, 2013; Giannarakis, 2014), this study used the variation in directors’ ages following McIntyre et al., (2007) that was measured by the standard deviation of the age of the members of a particular board. In other words, directors’ ages for each company were collected from the company’s annual report (for every year of the study period) and then the standard deviation of directors’ age of each company was worked out (for each year) using Excel to measure the variation in directors’ ages. McIntyre et al., (2007) argued that a certain amount of diversity with respect to directors’ age is beneficial in a board. Therefore, a statistically positive relationship between the variation in directors’ age and voluntary and mandatory CSR is expected in this study.
Table 5.9: Summary of literature concerning directors’ age and FP

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonn (2004)</td>
<td>1999</td>
<td>Australia-84 Firms</td>
<td>Insignificant Relationship with FP</td>
</tr>
<tr>
<td>Bonn et al. (2004)</td>
<td>1998-1999</td>
<td>Australia-104 Firms</td>
<td>Insignificant Relationship with FP</td>
</tr>
<tr>
<td>McIntyre et al. (2007)</td>
<td>2001</td>
<td>Canada-300 Firms</td>
<td>Insignificant Relationship between average age and FP</td>
</tr>
<tr>
<td>McIntyre et al. (2007)</td>
<td>2001</td>
<td>Canada-300 Firms</td>
<td>Positive Relationship between age variation and FP</td>
</tr>
<tr>
<td>Mahadeo et al. (2012)</td>
<td>2007</td>
<td>Mauritius-42 Firms</td>
<td>Positive Relationship between age diversity and FP</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

5.5.1.2 Data Analysis Process of Stage 1 Analysis

This study adopts the methodology that allows examining a multi-dimensional ownership structure in respect of endogenous variables (discussed in detail in page 28) and taking into account the issue of controlling variables including cash, firm leverage, firm size, firm industry, board gender and the variation in directors’ age. Lagged data were used by this study as when a researcher includes temporal lags and controls for prior states of variables, this will support the empirical establishment of the causality mechanisms (Hambrick, 2007). In addition, the use of lagged data of the independent variables ensures that findings will not be affected by endogenous regressors (Palia and Lichtenberg, 1999). In this study, CSR engagements were firstly classified into two ranks: 0 and 1. This classification (binary data where 1 = firms with higher level of CSR engagement with 70% and over, and 0 otherwise) was used for the logistic regression model (logit) that was employed to identify the probability relationship between boards’ ownership structure and CSR expenditures. The following section reviews the logit model used in the main analysis.
The Logit Model for Binary Dependant Variable

Considering all levels of CSR engagements and as a result of CSR ratings which were collected from the CR Indices (the BITC CR Indices), the ranks of 0 and 1 were found to be the most suitable ranks as CR Indices include only firms that have a higher level of engagements (70% and over of engagements), which were given the rank of 1, and other firms that have lower engagements (less than 70%), which were not included in the CR Indices, were given the rank of 0. Moreover, for the present data set, it was found that the binary outcome (binary data where 1 = firms with higher level of CSR engagement with 70% and over, and 0 otherwise) is the best measure to explain CSR engagements as $Y_i$ was defined to indicate whether or not the firm has engaged in CSR in year $t$ by 70% and over. Owing to the dichotomous nature of the dependent variables (voluntary CSR and mandatory CSR) a logit model was employed in this study given that the dependent variables are dummies which take the value 1 if the firm is included in the CR Index, and 0 otherwise. The logit approach is used when the dependent variable in a regression model is binary (0 or 1), which ensures that the estimated probabilities are bounded by 0 and 1 (Brooks, 2014). The logit model has the ability to overcome the limitation of the Linear Probability Model that can produce estimated probabilities that are negative or greater than 1; this is done by using a function that effectively transforms the regression model so that the fitted values are bounded within (0,1) interval (Brooks, 2014). The logit regression model can be written as follows:

$$Y_{i,t} = \frac{1}{1 + e^{\beta_0 + \beta_1 X_{i,t-1} + \beta_2 X_{i,t-1} + \ldots + \beta_p X_{i,p,t-1} + \epsilon_{i,t}}}$$

Visually, the fitted regression model takes the S-shape where the Linear Probability Model takes the shape of a straight line. The binary measurement of the dependent variable was used to analyse the data sample of this study (the whole sample that consists of 111 firms) using the Logit Regression Model to estimate the probability relationship of CSR engagements and boards’ ownership of UK firms when probabilities are bounded by 0 and 1. Two Models were estimated for this analysis: Model 1 for estimating the probability relationship of voluntary CSR (as a distinction between voluntary and mandatory CSR two different indices, for each year under the period of study, were used which include CSR ratings related to each of the voluntary and mandatory CSR; detailed discussion shown in page 105) and boards’ ownership, and Model 2 for estimating the probability relationship of mandatory CSR and boards’ ownership structure.
Model 1:

\[ PVolCSR_{i,t} = \frac{1}{1 + e^{\beta_0 + \beta_1 CEDOwn_{i,t-1} + \beta_2 NEDown_{i,t-1} + \beta_3 ConcOwn_{i,t-1} + \beta_4 Cash_{i,t-1} + \beta_5 Leverage_{i,t-1} + \beta_6 FSize_{i,t-1} + \beta_7 DFI_{i,t-1} + \beta_8 Gender_{i,t-1} + \beta_9 VinAge_{i,t-1} + \epsilon_{i,t} }} \]

Model 2:

\[ PMandCSR_{i,t} = \frac{1}{1 + e^{\beta_0 + \beta_1 CEDOwn_{i,t-1} + \beta_2 NEDown_{i,t-1} + \beta_3 ConcOwn_{i,t-1} + \beta_4 Cash_{i,t-1} + \beta_5 Leverage_{i,t-1} + \beta_6 FSize_{i,t-1} + \beta_7 DFI_{i,t-1} + \beta_8 Gender_{i,t-1} + \beta_9 VinAge_{i,t-1} + \epsilon_{i,t} }} \]

Where the Probability Voluntary Corporate Social Responsibility (\( PVolCSR \)) is the probability that the dependent variable in Model 1 (Voluntary CSR) = 1, and the Probability Mandatory Corporate Social Responsibility (\( PMandCSR \)) is the probability that the dependent variable in Model 2 (Mandatory CSR) = 1. Chief Executive Directors’ Ownership (\( CEDown \)), Non-Executive Directors’ Ownership (\( NEDown \)), Concentrated Ownership (\( ConcOwn \)), Cash and Account Receivables (\( Cash \)), Firm Leverage (\( Leverage \)), Firm Size (\( FSize \)), Dummy Variables for Firm Industry (\( DFI \)), Board Gender (\( Gender \)) and Variation in Directors’ Age (\( CEDAge \)) are observed independent variables. \( \beta_0 \) is the intercept or constant, and the point at which the regression line cuts the vertical axis. \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \text{and} \beta_9 \) are the standardised regression coefficients. The index \( i \) refers to the unit of observation (the study sample; 111 firms), \( t \) refers to the time period (the period of 2009-2013), and \( \epsilon_{i,t} \) is a disturbance term assumed to satisfy the usual regression model conditions.

5.5.2 Stage 2 Analysis

All variables (the dependent and independent variables) chosen for the stage 2 analysis of this study are reported in this section. The regression model used in the second stage of analysis aims at determining the key drivers of CSR is provided in this section. In this study boards’ ownership structure (CEDs’ ownership, NEDs’ ownership and concentrated ownership) was considered as one of the CG mechanisms as well as the key driver for voluntary CSR. Therefore, this stage of analysis will further examine the relationship between boards’ ownership structure and voluntary CSR theorised by \( H1, H3 \) and \( H5 \).
5.5.2.1 Variables and their Measurements of Stage 2 Analysis

This section reports the dependent variable (voluntary CSR) and the independent variables (CEDs’ ownership, NEDs’ ownership, and concentrated ownership) and also the control variables (firm performance, firm industry, firm age, dividends payout, research and development intensity and board gender) which are used in stage 2 analysis.

Dependent Variable of the stage 2 analysis

This section presents the dependent variable used for the stage 2 analysis of this study: voluntary CSR (proactive stakeholders’ strategies such as investing in the community, philanthropic and charitable activities). The voluntary CSR ratings for this analysis were also collected from the BITC (only CR Indices which include CSR ratings related to voluntary CSR were used as discussed in detail in page 105). CR Index Tables include those companies involved in voluntary CSR and scored 70% and over. According to BITC (2012), the CR Index has four performance bands; Platinum (lists firms scored ≥ 95%); Gold (lists firms scored ≥ 90% and up to 95%); Silver (lists firms scored ≥ 80% and up to 90%); and Bronze (lists firms scored ≥ 70% and up to 80%). In the stage 2 analysis, the sample was split up and only firms that engaged in voluntary CSR by 70% and over were kept in the second sample to be considered as the restricted sample for the stage 2 analysis of this study. Therefore, CSR engagements were classified into four ranks relevant to their four different bands reported in the CR Index. Rank 1 indicates the lowest rank, the Bronze band, where firms engage in voluntary CSR by 70% and over up to 80%. Rank 2 indicates for the Silver band where firms involve in voluntary CSR by 80% up to 90%. Rank 3 indicates for the Gold band where firms engage in voluntary CSR by 90% up to 95%. Ultimately, rank 4 indicates for the highest rank, the Platinum band, where firms involve in voluntary CSR by 95% and over. This classification allows the researcher to utilise panel data and hence employ the random and fixed effects models to further investigate the impact of boards’ ownership structure on voluntary CSR and to identify the key drivers of voluntary CSR of UK firms over the period 2009-2013. Table 5.10 illustrates CSR ranking for the second classification.
Table 5.1: Voluntary CSR Ranking for the second classification

<table>
<thead>
<tr>
<th>CR Index Performance Band (t)</th>
<th>Platinum</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage (%)</td>
<td>95 and over</td>
<td>90 up to 95</td>
<td>80 up to 90</td>
<td>70 up to 80</td>
</tr>
<tr>
<td>Rank</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: compiled by the author

**Independent Variables and Control Variables of stage 2 analysis**

This section reports the independent variables and the control variables used in the stage 2 analysis of this study. The independent and control variables are shown in Table 5.11.
<table>
<thead>
<tr>
<th><strong>Independent Variables</strong></th>
<th><strong>Measure</strong></th>
<th><strong>Authors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Board’s Ownership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. CEDs’ ownership (t-1)</td>
<td>Percentage of total CEDs shareholdings to the total number of shares in issue</td>
<td>Johnson and Greening, 1999; Ahmed and Duellman, 2007; Chen, 2008; Mitra and Hossain, 2011.</td>
</tr>
<tr>
<td>2. NEDs’ ownership (t-1)</td>
<td>Percentage of total NEDs shareholdings to the total number of shares in issue</td>
<td>Morck et al., 1988; Davies et al., 2005; Mura, 2007; Chhaochharia and Grinstein, 2007; Florackis et al., 2009</td>
</tr>
<tr>
<td>3. Concentrated Ownership (t-1)</td>
<td>Total percentage of all institutions and other shareholders that own 3 percent or more shares in the firm to the total number of shares in issue</td>
<td>Morck et al., 1988; Kang and Sorensen, 1999; Demsetz and Villalonga, 2001; Hoskisson et al., 2002; Seifert et al., 2005; Laidroo, 2009; Florackis et al., 2009</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm performance (ROA). (t-1)</td>
<td>Return on Assets ratio (ROA)</td>
<td>Bromiley, 1991; Waddock and Graves, 1997; Dutta et al., 2005; Richard et al., 2007; Arora and Dharwadkar, 2011.</td>
</tr>
<tr>
<td>Firm Industry</td>
<td>The Herfindhal-Hirschman Index; down to two-digit code industry level as defined in the UK Standard Industrial Classification (SIC 2007) provided by the Office for national statistics</td>
<td>Bowman and Haire, 1975; Ullman, 1985; Spencer and Taylor, 1987; Griffin and Mahon, 1997; Waddock and Graves, 1997; McWilliams and Siegel, 2000; Tsoutsoura, 2004; Margolis et al., 2007.</td>
</tr>
<tr>
<td>Firm age (t-1)</td>
<td>The number of years since a firm has been listed on LSE</td>
<td>Li et al., 2008; Withisuphakorn and Jiraporn, 2015; Wang et al., 2015; Yekini et al., 2015</td>
</tr>
<tr>
<td>Dividends payout (t-1)</td>
<td>The ratio of dividends per share to earnings per share</td>
<td>Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015.</td>
</tr>
<tr>
<td>R&amp;D Intensity (t-1)</td>
<td>The ratio of total expenditure on Research &amp; Development (R&amp;D) to total sales</td>
<td>Padgett and Galan, 2009; Maria and Sanchez, 2011; Arora and Dharwadkar, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012.</td>
</tr>
<tr>
<td>Board Gender (t-1)</td>
<td>The ratio of total number of female directors to the total directors in the board</td>
<td>Dutta and Bose, 2007; Campbell and Mínguez-Vera, 2008; Bear et al., 2010; Julizaerma and Zulkarnain, 2012; Oba and Fodio, 2013.</td>
</tr>
</tbody>
</table>

Source: compiled by the author
The above variables (the dependent, independent, and control variables) were selected for the stage 2 analysis of this study to test the relevant propositions and answer the research questions by employing the random effects and fixed effects regression models which are reported in the following section.

**Key drivers for good voluntary CSR**

The set of independent variables used in the main analysis are used again in the second stage of analysis to discover if the relationship between boards’ ownership structure and voluntary CSR, examined in the stage 1 analysis using the logit, is consistent when panel data is used. The stage 1 analysis determines the probability linear relationship between boards’ ownership structure and CSR. In the stage 2 analysis, the linear relationship between boards’ ownership structure and voluntary CSR is examined. Stage 2 analysis also determines whether the relationship between boards’ ownership dimensions and voluntary CSR is non-linear (using a quadratic fit). Ownership of CEDs, NEDs and concentrated shareholders are the independent variables and their measurements are shown in Table 5.1 above. Firm performance, firm industry, firm age, dividends payout, R&D intensity and board gender were included in this analysis as control variables to discover the key drivers for good voluntary CSR. Justifications of controlling for board gender and firm industry were provided in the previous section. The following section provides justifications for the inclusion of firm performance, firm age, dividends payout and R&D intensity.

**Firm performance**

The availability of financial resources is a key issue for the firm which encourages its directors to allocate some funds on philanthropic activities (Mishra and Modi, 2013). Previous research found a positive relationship between firm performance and CSR activities (Morck et al., 1988; Short and Keasey, 1999; Arora and Dharwadkar, 2011; Mishra and Modi, 2013). Consequently, this study included this variable and expects a statistically positive relationship between firm performance and voluntary CSR. Previous studies used the market-based measure (Tobin’s Q) as a proxy for firm performance (Morck et al., 1988; Short and Keasey, 1999). This study has seen this measure as unsuitable for the reason of using lagged data. In order to calculate financial performance, this study considered an alternative measure by selecting the accounting-based measure. Return on assets (ROA) proxy was calculated and used as an accounting
measure of performance for being suitable in using lagged data and being fairly standard in the literature (e.g. Waddock and Graves, 1997; Arora and Dharwadkar, 2011).

**Firm Age**

In investigating CSR, firm maturity must be considered as it is a crucial determinant of CSR levels of engagements (Withisuphakorn and Jiraporn, 2015). The literature suggests that firms engage further in CSR as they turn more mature (Withisuphakorn and Jiraporn, 2015). Firm maturity is a key factor that shapes CSR activities (Wang *et al.*, 2015). The literature suggests that mature firms are more likely to engage in CSR activities as they are more likely to have the slack resources needed to commit to doing so (Wang *et al.*, 2015). According to Sharma and Kiran (2012), mature firms have both time and funds to adopt new CSR initiatives and go for implementation. Firm age represents some aspects of stakeholder power and economic performance (Roberts, 1992). Scholars suggested that firm maturity is likely to act as an intervening variable that should be controlled for in empirical examinations (Cochran and Wood, 1984; Ullmann, 1985; Cowen *et al.*, 1987). The above arguments have recently drawn the attention of scholars for the key role of firm age in determining the level of CSR engagements. This section discusses the results of scholars who considered the impact of firm age on CSR expenditures.

Across differing geographical locations and various sizes of samples, prior studies considered the key role of firm age on enhancing CSR and outcomes show a positive relationship between firm maturity and CSR level of engagements (Roberts, 1992; Moore, 2001; AL- Shubiri *et al.*, 2012; Withisuphakorn and Jiraporn, 2015). The impact of firm maturity on CSR was investigated by Withisuphakorn and Jiraporn (2015) who used a sample which is among the most comprehensive in the literature that consists of 1,250 firms. Withisuphakorn and Jiraporn (2015) found that more mature firms engage significantly more in CSR over the study period that covers 21 years, from 1991 to 2012. While Withisuphakorn and Jiraporn (2015) considered a very large sample, Moore (2001) focused on a very small sample in considering the relationship between firm age and CSR. Moore (2001) found a positive association between firm maturity and social performance of eight U.K. supermarket firms for the period 1997-1999. Moore (2001) focused on the U.K. supermarket industry that is relatively concentrated with eleven main companies and due to the lack of data, only eight companies were included, representing a small sample.
Roberts (1992) and AL-Shubiri et al., (2012) applied their studies on samples of similar sizes; Roberts (1992) found a positive and statistically significant relationship between firm age and CSR disclosure of 80 large firms from the Fortune 500 for the period 1984-1986. A more positive relationship between corporate age and CSR was discovered by AL-Shubiri et al., (2012) who applied their examination on a sample of 60 industrial firms listed on the Amman Stock Exchange for the period 2006-2010. Results of AL-Shubiri’s et al., (2012) study suggested that firms that are more mature tend to engage more in voluntary CSR disclosure.

Considering ratings of CSR, Roberts (1992) and AL-Shubiri et al., (2012) used CSR disclosure, while Moore (2001), and Withisuphakorn and Jiraporn (2015) used corporate social performance and variety ratings of CSR respectively. The KLD database was used by Withisuphakorn and Jiraporn (2015) to measure CSR that considers 13 ratings: CG, diversity, community, environment, employee relations, human rights, product, military, alcohol, tobacco, gambling, firearms, and nuclear power. Six stakeholder groups were considered by Moore (2001) to measure social performance: shareholders, customers, suppliers, employees, community and environment, with one general measure of companies’ disclosure. Moore (2001) collected social performance measures from various sources including: the factsheet from EIRIS (Ethical Investment Research Service) and companies’ annual reports. In addition, the Advertising Standards Authority and the Independent Television Commissions were used to collect data in relation to advertising, while the Ethical Trading Initiative and Christian Aid were used to obtain data related to suppliers. Data for CSR disclosure of Roberts’s (1992) study were taken from the 1986 Council on Economic Priorities (CEP) report, while CSR data of AL-Shubiri’s et al., (2012) study were collected from companies’ annual reports and CSR reports. In Withisuphakorn’s and Jiraporn’s (2015) study, firm age was measured by identifying the year in which the firm firstly appeared in the Center for Research in Security Prices database and results show a positive and significant impact on CSR when firm age was measured both by taking the natural log and without taking the natural log. Using OLS and the random effects model, Withisuphakorn and Jiraporn (2015) found that as firms get more mature their responsibility develops further, particularly in terms of diversity and environmental awareness. In AL-Shubiri’s et al., (2012) study, corporate age measure was referred to as the time since a company was listed on the Amman Stock Exchange. Roberts (1992) and Moore (2001) measured firm maturity by using the age of the corporation.
In summary, findings of all studies presented in Table 5.12 and discussed in this section show that firm age has a significant key role in enhancing CSR expenditures. Findings of prior studies show that firm maturity has a positive and significant impact on CSR engagements (Roberts, 1992; Moore, 2001; AL-Shubiri et al., 2012; Withisuphakorn and Jiraporn, 2015). Despite the sample size that varies from 6 to 1,250 firms across these studies and although these studies have used differing ratings of CSR, findings show consistency. These studies used differing ratings of CSR engagements, while this thesis is concerned with the key drivers of voluntary CSR which considers community investment and philanthropic and charitable activities that are used to gain a competitive advantage as a means of a sustainability strategy for the long-term.

Since prior research suggests that firm age is likely to act as an intervening variable and should be controlled for in the empirical examination (Cochran and Wood, 1984; Ullmann, 1985; Cowen et al., 1987), it is important to include this variable in the empirical model of this study to determine its major role as a key driver for good voluntary CSR. This study anticipates a statistically positive relationship between firm age and voluntary CSR. Consistent with prior studies, firm maturity was measured by the length of time a firm has been listed on the stock exchange (Li et al., 2008; Yekini et al., 2015). As a result of the normality test, firm age was log transformed.

Table 5.12: Summary of studies considering firm age and CSR engagements

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moore (2001)</td>
<td>1997-1999</td>
<td>UK-8 Supermarket Firms</td>
<td>Positive Relationship with Corporate Social Performance</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

### Dividends payout

Since the free cash that is in excess of a firm’s requirement has to be distributed as dividends to the shareholders (Jensen, 1986), it has become axiomatic to control for cash dividends paid-out
in discovering the firm’s level of engagements in CSR. Arora and Dharwadkar (2011) argued that CSR might signify agency losses in some circumstances, hence it is vital to control for cash dividends paid-out in examining the impact of CG on CSR. According to Rakotomavo (2012), engaging in CSR does not subtract from cash dividends payout. Instead, CSR investments and cash dividends paid-out tend to increase simultaneously. The literature suggests that CSR levels of engagement tend to be affected by firms who can afford investing in CSR, and it does not lower value by lowering shareholders’ expected payout (Rakotomavo, 2012). These debates urged this study to discover the relationship between cash dividends paid-out and good voluntary CSR. This section reviews prior literature concerning the dividends payout and CSR relation.

Prior studies evidenced that dividends payout is positively associated with CSR (Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015). Some studies used US data in exploring the relationship between dividends payout and CSR including Arora and Dharwadkar (2011) and Rakotomavo (2012), while others used the Korean market (Kim and Jeon, 2015). Arora and Dharwadkar (2011) examined the relationship between cash dividends paid-out and CSR of a sample of 518 US firms for the period 2001-2005. Results of the random effects model revealed a positive and significant relationship between cash dividends paid-out and CSR. Rakotomavo (2012) examined whether corporate investment in social responsibility takes away from expected dividends. Evidence suggested that CSR investments do not take away from dividends and these results were consistent with Arora’s and Dharwadkar’s (2011) findings. Rakotomavo (2012) found a positive relationship between CSR and dividends of a sample that covers the 1991-2007 period and contains 17,670 US firm-year observations. Kim and Jeon (2015) examined the relationship between dividend rate and CSR of two samples for the period 2000-2010. The first sample consists of 2,390 multinational enterprise (MNE) subsidiaries in Korea and the second sample includes 668 local firms in Korea. Kim and Jeon (2015) used the ratio of dividend provision to total sales as a proxy for dividend rate. Using pooled ordinary least squares (pooled-OLS), random effect, fixed effect, and generalised least squares (GLS) panel models, Kim and Jeon (2015) revealed that the dividend rate is positively and significantly associated with CSR of both samples.

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43 CSR ratings data were collected from KLD Research and Analytics then Rakotomavo (2012) used a proxy for CSR investment by summing up the values of the strength indicators for the firm and dividing it by the total number of strength indicators for the year. CSR ratings indicators include: community, CG, diversity, employee relations, environment, human rights, and product quality.

44Following (Coffey and Wang, 1998; Bartkus et al., 2002; Meng-Ju, 2011; Koos 2012) CSR was measured by the ratio of donations to sales (Kim and Jeon, 2015).
In summary, findings of all studies presented in Table 5.13 and discussed in this section show that CSR expenditures do not subtract from cash dividends; findings of prior studies show that dividends payout has a positive and significant relationship with CSR engagements (Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015). Although these studies used different locations and different ratings of CSR, findings show consistency. These studies used differing ratings of CSR engagements while this thesis is concerned with the key drivers of voluntary CSR that considers community investment, philanthropic and charitable activities which are used to obtain a competitive advantage as a means of a sustainable strategy for the long-term run and therefore, it is important to investigate this variable and its impact on such an engagement of CSR. While prior studies measured dividends payout as the dividends per share, this study used the ratio of dividends per share to earnings per share as a proxy for dividends payout (Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015). Since CSR expenditure tends to be affected by firms who can afford it (Rakotomavo, 2012) coupled with the fact that firms distribute dividends when they hold free cash in excess of their requirements, it was necessary to use a measure that relates dividends with earnings of the firm. As a subsequence of the above arguments, this study expects a statistically positive relationship between dividends payout and voluntary CSR.

Table 5.13: Summary of literature concerning dividends payout

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Positive Relationship with Positive CSR</td>
</tr>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Positive Relationship with Negative CSR</td>
</tr>
<tr>
<td>Kim and Jeon (2015)</td>
<td>2000-2010</td>
<td>Multinational Enterprise Subsidiaries in Korea-2,390 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Kim and Jeon (2015)</td>
<td>2000-2010</td>
<td>Korea-668 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

Research and development intensity

According to Padgett and Galan (2009), both research and development and CSR activities can provide firms with a competitive advantage. Engaging in such activities can enhance the welfare of the community and satisfy stakeholder expectations. McWilliams and Siegel (2000)
demonstrated that R&D intensity offers other important variables with a bearing on the relationship between CSR and financial performance. McWilliams and Siegel (2000) claimed that a model that fails to include R&D intensity in examining the relationship between CSR and firm performance will be mis-specified and fundamentally flawed. Most firms that are actively involved in CSR are also pursuing a differentiation strategy, engaging in complementary strategic investments in research and development (McWilliams and Siegel, 2000). There is a long standing theoretical literature linking engagement in R&D to improvements in long-run economic performance, hence excluding R&D in the econometric model is especially problematic (Griliches, 1979). As a result, McWilliams and Siegel (2000), Bouquet and Deutsche (2008) and Prior et al. (2008) had seen R&D intensity as an important driver for CSR and found that R&D intensity is positively correlated with CSR. Considering the above arguments, this thesis has also seen R&D intensity as a key driver for voluntary CSR, thus it was considered and prior literature concerning its impact on CSR is critically analysed in this section.

The majority of prior studies proved that R&D intensity is a key driver for good CSR and has a positive and statistically significant relationship with CSR activities (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Maria and Sanchez, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012). All prior studies had been consistent in using the same proxy for R&D intensity; the ratio of total expenditure on R&D to total revenues was used to measure R&D intensity (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Maria and Sanchez, 2011; Arora and Dharwadkar, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012). Using a cross sectional study with non-lagged data, McWilliams and Siegel (2000) provided one of the first key papers that examined the relationship between R&D intensity and corporate social performance (CSP)\(^\text{45}\). Although McWilliams and Siegel (2000) used a cross sectional study with non-lagged data, their results appeared to be consistent with Padgett and Galan (2009), Maria and Sanchez (2011), Lioui and Sharma (2012), and Chakrabarty and Wang (2012) who all used panel models with lagged data.

\[^{45}\text{McWilliams and Siegel (2000) proved that CSP is positively associated with R&D intensity for a sample of 524 US firms for the period 1991-1996. Using the KLD, McWilliams and Siegel (2000) assessed CSP along eleven dimensions: military contracting, nuclear power, gambling, tobacco, alcohol, community relations, diversity, employee relations, environment, product quality, and non-US operations (typically environment and labour relations).}\]
Padgett and Galan (2009) examined the impact of research and development intensity on CSR and outcomes of the panel and lagged data show a positive and significant relationship between R&D intensity and CSR of manufacturing industries. Padgett and Galan (2009) used a sample of 575 firms for the research period that has a span of 16 years, from 1991 to 2007. Using the random effects model and fixed effects model, Padgett and Galan (2009) proved that R&D intensity is a key driver for CSR. Maria and Sanchez (2011) have also used panel lagged data to discover the relationship between R&D and CSR. This data was devised to include international firms whose investments in R&D for the period 2003-2007 were analysed by the Industrial Research Investments Monitoring and Analysis (IRMA) system of the European Commission. CSR was measured by a dummy variable that coded 1 if the firm is listed on the DJSI, and zero otherwise. Maria’s and Sanchez’s (2011) sample consists of 500 European firms and 500 non-European firms. Results of logistic regression show a positive and significant relationship between R&D intensity and CSR. More use of panel and lagged data, as with Padgett and Galan, 2009 and Maria and Sanchez, 2011, Lioui and Sharma (2012), employed fixed effects and random effects models in discovering the relationship between R&D intensity and CSR. Lioui and Sharma (2012) used 3100 US firms for the period 1991 to 2007 to investigate the relationship between R&D intensity and Environmental CSR (ECSR) and found a positive and significant association between R&D intensity and ECSR.

Moreover, Chakrabarty and Wang (2012) used longitudinal panel data from 1989 to 2009 to investigate the relationship between R&D intensity and sustainability practices. The sample consists of 1,128 multinational companies (MNCs) that were headquartered in USA. The dependent variable (sustainability practices from KLD) was lagged ahead of the independent

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46 CSR ratings were collected from Kinder, Lyndenberg, and Domini (KLD) Research and Analytics, Inc.
47 CSR data were obtained from DJSI index that provides a multi-dimensional construct to enable the measurement of CSR practices which is based on economic, social and environmental indicators. The DJSI considers the following aspects: customer relations, environmental policy and performance, labour practices, human capital development, standards for suppliers, corporate philanthropy, social reporting, and others (Maria and Sanchez, 2011).
48 Using KLD STATS Inc., Lioui and Sharma (2012) Built two aggregate measures related to ECSR strengths and concerns; Environmental Strength is a dummy variable coded 1 if the company takes at least one positive action and 0 otherwise. Environmental Concern is a dummy variable coded 1 if the company takes at least one negative action and 0 otherwise. Environmental Strengths include: Beneficial Products and Service, Pollution Prevention, Recycling, and Clean Energy. On the other hand Environmental Concerns include: Hazardous waste, Regulatory Problems, Ozone Depletion, Substantial Emissions, Agricultural Chemicals, and Climate change.
49 Sustainability practices that were regarded by stakeholders as positive indicators of CSR were measured by summing up the number of positive practices across six sustainability related areas: environment, community, employee relations, diversity, governance, and product technology (Chakrabarty and Wang, 2012).
variable (R&D intensity). R&D intensity was firstly measured by the ratio of R&D expenditure to the number of employees for being a strong indicator of an MNC’s intellectual capital and innovation. Secondly, R&D intensity was measured as the ratio of R&D expenditure to total revenues. Using both measures of R&D intensity, Chakrabarty and Wang (2012) proved a positive and statistically significant relationship between sustainability practices and R&D intensity of MNCs. These results were consistent with those of McWilliams and Siegel (2000); Padgett and Galan (2009); Maria and Sanchez (2011); and Lioui and Sharma (2012). Arora and Dharwadkar (2011) have also used the ratio of R&D expenditure to total sales as a proxy for R&D intensity to discover the relationship between R&D intensity and CSR. Results of the random effects model show an insignificant relationship between R&D intensity and both ratings of CSR, positive CSR and negative CSR\textsuperscript{50}. For the period 2001-2005, Arora and Dharwadkar (2011) applied their study on a final sample of 518 US firms from the S&P 500 and KLD Domini 400 Universe.

In summary, although the prior studies discussed above have used differing regression models – some used cross sectional with non-lagged data while others used panel with lagged data – almost all studies proved that research and development intensity has a key role on the level of engagements in CSR and outcomes show that R&D intensity has a positive and significant relationship with CSR expenditures (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Maria and Sanchez, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012). Findings of prior studies presented in Table 5.14 show consistency as all show a positive and significant relationship between R&D and CSR, with the exception of one study that shows no significant relationship due to the use of different CSR ratings (Arora and Dharwadkar, 2011). These studies used differing ratings of CSR expenditures, while this thesis is concerned with the key drivers of voluntary CSR that consider community investment and philanthropic and charitable activities.

\textsuperscript{50} Ratings of CSR were collected from the KLD database based on eight major social performance categories (Governance and Transparency, Employee relations, Diversity, Environment, Product Quality, Community relations, human rights, and other concerns). Within each of these categories, the KLD database provides a 0 and 1 rating on multiple sub-criteria that are grouped as either strengths (positive aspects) or concerns (negative aspects). Panel data was used by collecting R&D intensity data over the period of 2000-2004 while data for CSR was lagged by a year to ensure that the independent variable predates the dependent variable thus data of CSR pertains to the years 2001 to 2005.
Since previous literature had considered R&D intensity as an important driver for CSR (McWilliams and Siegel, 2000; Bouquet and Deutsche, 2008; Prior et al., 2008), this study has also considered R&D intensity as a key driver for voluntary CSR. It was therefore included in the empirical model to discover its key role in predicting voluntary CSR. This study anticipates a statistically positive relationship between R&D intensity and voluntary CSR. Consistent with prior studies, R&D was measured as the ratio of total expenditure on R&D to total sales (Padgett and Galan, 2009; Maria and Sanchez, 2011; Arora and Dharwadkar, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012).

Table 5.14: Summary of literature concerning R&D intensity

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Data Range</th>
<th>Data Used</th>
<th>Outcomes</th>
</tr>
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<tr>
<td>Maria and Sanchez (2011)</td>
<td>2003-2007</td>
<td>Europe-500 Firms</td>
<td>Positive Relationship with CSR</td>
</tr>
<tr>
<td>Maria and Sanchez (2011)</td>
<td>2003-2007</td>
<td>Non-Europe-500 Firms</td>
<td>Positive Relationship with CSR</td>
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<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Insignificant Relationship with Positive CSR</td>
</tr>
<tr>
<td>Arora and Dharwadkar (2011)</td>
<td>2001-2005</td>
<td>US-518 Firms</td>
<td>Insignificant Relationship with Negative CSR</td>
</tr>
</tbody>
</table>

Source: Compiled by the author.

5.5.2.2 Data Analysis Process of Stage 2 Analysis

This section explains and justifies the choice of using panel data for the purpose of data analysis undertaken in this study. In order to avoid biased and misleading estimates that come from the traditional cross-sectional studies (Finkelstein and Boyd, 1998), this study employs cross-sectional time-series regression analysis (panel data). The use of a longitudinal methodology enables this study to isolate the effects of specific actions and treatments over time and across
sections (Hill and Phan, 1991; Arora and Dharwadkar, 2011). This study adopts a methodology that allows examining a multi-dimensional boards’ ownership structure in respect of endogenous variables (discussed in page 28), taking into account the issue of controlling variables including firm performance, firm industry, firm age, dividends payout, R&D intensity and board gender. A panel and lagged data were used in this analysis. Including temporal lags and controlling for prior states of variables will support the empirical establishment of the causality mechanisms (Hambrick, 2007). In addition, the use of lagged data of the independent variables ensures that findings will not be affected by endogenous regressors (Palia and Lichtenberg, 1999). Panel data also enables to control for any unobservable firm heterogeneity (Palia and Lichtenberg, 1999) (discussed in detail in page 67). More justification for using panel data is discussed in detail in pages 100-102. The reliability of panel data refers to rigorous statistical analysis such as the fixed effects and random effects models. Unlike the traditional cross-sectional regression models, the fixed effects and random effects models account for the individual heterogeneity problem in the examination (Halaby, 2004; Baltagi, 2005; Wooldridge, 2009; Yekini et al., 2015). The fixed effects model assumes constant individual effects over time; in comparison, the random effects model assumes the possibility of a time-varying individual heterogeneity (Halaby, 2004; Baltagi, 2005; Wooldridge, 2009; Yekini et al., 2015). Moreover, from the perspective of generalising the findings beyond the sample under study, it is preferable to use panel data, specifically the random effects model (Maddala, 2002). In the stage 2 analysis, voluntary CSR engagements were classified into four ranks: from 1 to 4. This classification allows the researcher to utilise the fixed effects model and random effects model that were employed to identify the key drivers for good voluntary CSR. The fixed effects and random effects regression models are reviewed in the following section.

The Random Effects Regression Models

This approach is the most effective tool to be used when the variables of interest are constant for each firm because such variables cannot be included (Dough, 2006). For the effectiveness of the random effects model, Appendix 3 illustrates the Hausman test that was used for this study.

\[ Y_{it} = \beta_0 + \sum_{j=2}^{k} \beta_j X_{ji} + \sum_{p=1}^{s} y_p Z_{pi} + \delta t + \varepsilon_{it} \quad (3.1) \]
Where $Y$ is the dependent variable, the $X_j$ are observed independent variables, and the $Z_p$ are unobserved independent variables; $\sum_{p=1}^{s} y_p Z_{pi}$, known as the unobserved effect on $Y_i$; $B_0$ is the intercept or constant which is the point at which the regression line cuts the vertical axis and $B_j$ is the standardised regression coefficient.

The index $i$ refers to the unit of observation, $t$ refers to the time period and $j$ and $p$ are used to differentiate between different observed and unobserved independent variables. Subscript $\varepsilon_{it}$ is a disturbance term assumed to satisfy the usual regression model conditions.

A trend term $t$ has been introduced to allow for a shift of the intercept over time. If the implicit assumption of a constant rate of change seems too strong the trend can be replaced by a set of dummy variables, one for each time period except the reference period (Dough, 2006).

The $X_j$ variables are usually the variables of interest while the $Z_p$ variables are responsible for unobserved heterogeneity and as such constitute a nuisance component of the model.

As the $Z_p$ variables are unobserved, there is no means of obtaining information about the $\sum_{p=1}^{s} y_p Z_{pi}$ component of the model and it is convenient to rewrite (3.1) as

$$Y_{it} = \beta_0 + \sum_{j=2}^{k} \beta_j X_{jit} + \alpha_i + \delta t + \varepsilon_{it} \quad (3.2)$$

Where

$$\alpha_i = \sum_{p=1}^{s} y_p Z_{pi} \quad (3.3)$$

$\alpha_i$, known as the unobserved effect, represents the joint impact of the $Zpi$ on $Y_i$. It will be convenient to refer to the unit of observation as an individual and to the $\alpha_i$ as the individual-specific unobserved effect, but it should be borne in mind that the individual in question may actually be a household or an enterprise, etc. If $\alpha_i$ is correlated with any of the $X_j$ variables, the regression estimates from a regression of $Y$ on the $X_j$ variables will be subject to unobserved heterogeneity bias.
The random effects model makes it possible to treat each of the unobserved $Z_p$ variables as being drawn randomly from a given distribution. This may well be the case if the individual observations constitute a random sample from a given population.

Then, we may rewrite the model as

$$Y_{it} = \beta_0 + \sum_{j=2}^{k} \beta_j X_{ji} + \alpha_i + \delta t + \varepsilon_{it}$$

$$Y_{it} = \beta_0 + \sum_{j=2}^{k} \beta_j X_{ji} + \delta t + u_{it} \quad (3.4)$$

Where

$$u_{it} = \alpha_i + \varepsilon_{it} \quad (3.5)$$

Thus, the unobserved effect has been dealt with by subsuming it into the disturbance term. For the fixed effects model, the author is interested in a stable difference across cross-section units hence the term of $u_i$ was used and the term of $\delta t$ was dropped from the equation in order to get time-fixed effects regression model (Maddala, 1997).

**The Random and Fixed Effects Regression Models**

The random effects model was used in the stage 2 analysis in order to consider only firms which are included in the CR Index for being engaged in voluntary CSR by 70% and above over the period of post-recession (2009-2013). Voluntary CSR engagements were ranked from 4 to 1; number 4 indicates for the highest scores and 1 for the lowest. These classifications were used for the stage 2 analyses that were conducted by splitting up the data (the restricted sample which consists of 53 firms) using the random effects and fixed effects models to confirm whether any association between boards’ ownership and voluntary CSR exists when UK firms engage by 70% and over. Firms in the restricted sample engage in voluntary CSR by 70% and above over the period of study. The stage 2 analysis is aiming to discover the key drivers that had led firms to engage at a high level in voluntary CSR. Two complementary regression models were estimated for this study; Model 3 for discovering the association of voluntary CSR and the key
drivers for good voluntary CSR using the time-fixed effects model, and Model 4 for exploring the relationship of boards’ ownership and voluntary CSR and the key drivers for good voluntary CSR when the random effects model was employed.

Model 3:

\[
VolCSR_{it} = \beta_0 + \beta_1 CEDown_{it-1} + \beta_2 CEDown_{it-1}** + \beta_3 NEDown_{it-1} + \beta_4 NEDown_{it-1}** + \beta_5 ConcOwn_{it-1} + \beta_6 ConcOwn_{it-1}** + \beta_7 ROA_{it-1} + \beta_8 DFI_i + \beta_9 FirmAge_{it-1} + \beta_{10} Divid_{it-1} + \beta_{11} R&D_{it-1} + \beta_{12} Gender_{it-1} + \alpha_i + \epsilon_{it}
\]

Model 4:

\[
VolCSR_{it} = \beta_0 + \beta_1 CEDown_{it-1} + \beta_2 CEDown_{it-1}** + \beta_3 NEDown_{it-1} + \beta_4 NEDown_{it-1}** + \beta_5 ConcOwn_{it-1} + \beta_6 ConcOwn_{it-1}** + \beta_7 ROA_{it-1} + \beta_8 DFI_i + \beta_9 FirmAge_{it-1} + \beta_{10} Divid_{it-1} + \beta_{11} R&D_{it-1} + \beta_{12} Gender_{it-1} + \alpha_i + \delta t + \epsilon_{it}
\]

Where Voluntary Corporate Social Responsibility (\(VolCSR\)) is the dependent variable in Model 3 and Model 4. Chief Executive Directors’ Ownership (\(CEDown\)), square of Executive Directors’ Ownership (\(CEDown**\)), Non-Executive Directors’ Ownership (\(NEDown\)), square of Non-Executive Directors’ Ownership (\(NEDown**\)), Concentrated Ownership (\(ConcOwn\)), square of Concentrated Ownership (\(ConcOwn**\)), Return on Assets (\(ROA\)), Dummy variables for Firm Industry (\(DFI\)), Firm Age (\(FirmAge\)), Dividends Payout (\(Divid\)), Research and Development Intensity (\(R&D\)) and Board Gender (\(Gender\)) are observed independent variables. \(\alpha_i\) is the unobserved effect on the depending variable; \(\beta_0\) is the intercept or constant, the point at which the regression line cuts the vertical axis. \(\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \) and \(\beta_{12}\) are the standardised regression coefficients. The index \(i\) refers to the unit of observation (the study sample; 53 firms), \(t\) refers to the time period (the period of 2009-2013) and \(\epsilon_{it}\) is a disturbance term assumed to satisfy the usual regression model conditions.
A trend term $t$ has been introduced to allow for a shift of the intercept over time. If the implicit assumption of a constant rate of change seems too strong the trend can be replaced by a set of dummy variables, one for each time period except the reference period (Dough, 2006).

### 5.6 Sample Data

The sample was drawn from the FTSE4Good UK Index which is part of the FTSE4Good Index Series that has been established to objectively assess the ethical behaviour of firms that meet globally recognised corporate social standards (FTSE, 2012). The majority of the companies selected for the sample that are listed in the FTSE4Good UK Index are already listed companies in FTSE 100. The FTSE 100 presents the largest 100 companies listed on the London Stock Exchange (LSE). Since society exerts heavier pressure on larger firms for philanthropic giving, larger firms correspondingly conform to the pressure (Burke et al., 1986; Buysse and Verbeke, 2003). Additionally, the UK literature selected samples of the top 100 companies in investigating CSR disclosure (Gray et al., 1995b; Campbell et al., 2006). Consequently, the current study selected a sample that consists of top firms that are already listed on FTSE 100 as well as being firms that meet the globally recognised corporate social standards.

This study was designed to investigate the impact of boards’ ownership structure on CSR in the UK over the period of post-recession (2009-2013). The number of FTSE4Good UK Index constitutes over the period of 2009-2013 is comprised between 250 and 280 companies, but only firms that remained listed within the FTSE4Good UK Index over the period of study were kept in the sample (representing 179 firms) and other firms which did not remain over this period were excluded from the sample in order to obtain more reliable results for this study. Due to the unavailability of sufficient information, the sample was dropped to 124 firms. Conducting the normality test on this sample and taking out all outliers, the final sample was dropped to 111 firms (Appendix 4 shows firms included in the final sample). As a result of the normality tests conducted on all variables, some variables were log transformed in order to avoid any deviations (Withisuphakorn and Jiraporn, 2015).

### 5.7 Data Collection Process

In order to investigate the CSR engagement over the period of post-recession (2009-2013) social performance ratings for all the firms, included in this index, were collected during the period 2009-2013. The dependent variable was lagged by a year to ensure that the independent
variables predate the dependent variable for the reason of temporal nature of the decision-making process (Bonn et al., 2004; Arora and Dharwadkar, 2011), hence the information about the independent variables were collected for the period 2008-2012. Information about CEDs’ ownership, NEDs’ ownership and concentrated ownership were collected – for representing boards’ ownership of UK companies, the FTSE4Good UK Index in particular – from annual reports. Beforehand, it was proposed to collect data from Morningstar Company Intelligence Database (formerly Hemscott Company Guru) that contains information on 300,000 British companies. It was chosen for being a database which provides financial information, share price data, board of directors’ information and a variety of descriptive details as well as information regarding directors’ shareholdings. Unfortunately, it was found that this source was unreliable for this study because, for instance, it provides share ownership of only events taking place during the period required and it does not provide the ongoing shareholdings. Looking for the accuracy of the study’s results, annual company reports were selected for data collection (data were collected manually) as a substitute for Morningstar Database for its reliability, despite the method being time consuming, adding a valuable contribution to the existing literature. Data stream, Global Business Browser and BITC (Business in the Community) were additional sources of the required data needed for this examination. Finally, in the stage 1 analysis (logit model), industry dummies were included to control for variation across industries. In comparison, in the stage 2 analysis (panel data), year and industry dummies were included to control for variation over time and across industries.

5.8 Chapter Summary

The chapter assessed the ontological position, the research design and the methodological choice of this study. The approach in this research is deductive, hence a model was necessary to be built to represent cause, effect and other relationships identified in the existing theoretical concepts in the literature (Popper, 1959; Bennett in Smith and Dainty, 1991; Raphael in Monk and Raphael, 2001). In order to achieve the aim of this thesis, six hypotheses were developed from the literature to be tested using a sample from the FTSE4Good UK Index over the period of post-recession (2009-2013). The following two stages of analysis were designed:

1) Stage 1 analysis that employed the logit regression model in order to discover the probability relationship between boards’ ownership structure and CSR.
2) Stage 2 analysis that employed the fixed effects and random effects regression models to investigate the relationship between boards’ ownership structure and good voluntary CSR and to determine the key drivers for good voluntary CSR.

The final sample which consists of 111 firms was used in the stage 1 analysis and Model 1 used voluntary CSR as the dependent variable while Model 2 used mandatory CSR as the dependent variable. Ownership of CEDs, NEDs and concentrated shareholders were used as the independent variables. Model 1 and Model 2 controlled for cash, firm leverage, firm size, firm industry, board gender and variation in directors’ age.

Stage 2 analysis was designed to determine the key drivers for good voluntary CSR using a restricted sample consisting of 53 firms. Model 3 and Model 4 used voluntary CSR as the dependent variable. Model 3 and Model 4 also used the ownership of CEDs, NEDs and concentrated shareholders as the independent variables. Firm performance (ROA), firm industry, firm age, dividends payout, R&D intensity and board gender were used as control variables in Model 3 and Model 4. The following chapter reports the findings of the above models.
Chapter Six: Stage 1 Results and Discussion

6.1 Chapter Overview
The aim of this study is to establish if boards’ ownership structure enhances good CG and CSR of an enterprise. In order to achieve this aim and answer the main research question – how does boards’ ownership structure impact corporate social responsibility? – a number of hypotheses were developed from the literature and reported in Chapter Four: Hypotheses Development. The hypotheses were developed to investigate the relationship between boards’ ownership on both engagements of CSR (voluntary CSR and mandatory CSR) of UK firms over the period 2009-2013. To test the validity of the hypotheses developed and answer the study’s main research question, stage 1 analysis took place and results are reported in this chapter. The descriptive statistics and correlation matrix of the variables used in the stage 1 analysis are firstly reported in this chapter. This chapter also reports the statistical analysis (regression analysis) that was selected for the stage 1 analysis of this study. Discussions of the findings and results of the regression analysis undertaken are provided in this chapter. A logistic regression model was employed to identify the probability relationship between boards’ ownership structure and CSR engagements. A summary of these findings are reported in the end of this chapter. This chapter will be structured as illustrated by Figure 6.1 overleaf.
6.2 Descriptive Statistics
The descriptive statistics for the variables used in stage 1 analysis are shown in Table 6.1. Voluntary CSR was given the rank of 1 and 0 with an average rank of 0.480 and a standard deviation of 0.502. Mandatory CSR was similarly given the rank of 1 and 0 with the mean rank of 0.660 and standard deviation of 0.477. This shows that mandatory CSR has a higher average than voluntary CSR which indicates that, on average, firms comply with the required standards and regulations a little more than engaging in community investments and philanthropic activities.

As expected, the average percentage of concentrated shareholdings including institutional ownership (35.532 percent) proved to be much higher than both average ownership percentages of CEDs (1.255 percent) and NEDs (1.415 percent) as institutional shareholders are the main...
concentrated shareholders of UK firms. Concentrated shareholdings ranged from 2.59 percent (held by Computershare Company Nominees Limited) (Standard Life Plc Annual Report and Accounts, 2008: p. 74) to 95.060 percent (held by Friends Provident plc, Eureko B.V., Fidelity, and Artemis) (F&C Asset Management Plc Annual Report and Financial statements, 2008: p. 31) with a standard deviation of 18.060. A relatively high standard deviation reflects that some firms in the study’s sample have a low concentrated shareholdings percentage while other firms have a very high concentrated shareholdings percentage. However, the average percentage of concentrated shareholdings (35.532 percent) shows that concentrated shareholdings hold around one third of UK firms’ equities. The average ownership percentage of NEDs (1.415 percent) appeared to be a slightly higher than the average ownership percentage of CEDs (1.255 percent). This is because the founders of a few firms in the sample became NEDs and they still hold their own shares. Cash and accounts receivables, that was measured by the Log of cash and accounts receivables, ranged from 2.182 (achieved by British Land Company Plc in 2008) (GBBa, 2013) to 7.477 (achieved by Reed Elsevier Plc in 2012) (GBBb, 2013) with a mean of 4.900 and a standard deviation of 0.954. This indicates that firms within the sample have a good source availability that is needed to invest in CSR.

Table 6.1: Descriptive Statistics for Variables used in Stage 1 analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Observations</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VolCSR</td>
<td>555</td>
<td>0</td>
<td>1</td>
<td>0.480</td>
<td>0.502</td>
</tr>
<tr>
<td>MandCSR</td>
<td>555</td>
<td>0</td>
<td>1</td>
<td>0.660</td>
<td>0.477</td>
</tr>
<tr>
<td>CEDOwn</td>
<td>555</td>
<td>0.002</td>
<td>19.147</td>
<td>1.255</td>
<td>3.688</td>
</tr>
<tr>
<td>NonCEDOwn</td>
<td>555</td>
<td>0.001</td>
<td>35.428</td>
<td>1.415</td>
<td>5.194</td>
</tr>
<tr>
<td>ConcOwn</td>
<td>555</td>
<td>2.590</td>
<td>95.060</td>
<td>35.532</td>
<td>18.060</td>
</tr>
<tr>
<td>Cash</td>
<td>555</td>
<td>2.182</td>
<td>7.477</td>
<td>4.900</td>
<td>0.954</td>
</tr>
<tr>
<td>Leverage</td>
<td>555</td>
<td>0.000</td>
<td>2.970</td>
<td>0.666</td>
<td>0.607</td>
</tr>
<tr>
<td>FSize</td>
<td>555</td>
<td>1.230</td>
<td>5.671</td>
<td>3.856</td>
<td>0.822</td>
</tr>
<tr>
<td>VinAge</td>
<td>555</td>
<td>2.120</td>
<td>9.160</td>
<td>4.474</td>
<td>1.891</td>
</tr>
<tr>
<td>Gender</td>
<td>555</td>
<td>0.000</td>
<td>0.500</td>
<td>0.115</td>
<td>0.108</td>
</tr>
</tbody>
</table>

With regard to board gender that was measured by the ratio of the number of women in the board to board size, the ratio ranged from nil (no women in the board despite a large total of twelve directors sitting in the Aggreko Plc board) (Aggreko Plc Annual Reports and Accounts, 2008, 2009, 2010, 2011) to 0.5 (with 4 women out of 8 directors sitting in the Pearson board in 2011,
according to Pearson Annual Reports and Accounts, 2011) with an average of 0.115 and a standard deviation of 0.108.

6.3 Correlation Analysis
The correlation matrix is presented in Table 6.2. It can be seen that there are significant correlations among the independent variables and among the control variables. This finding may be of concern due to potential multicollinearity between the variables. Though, in the regression analyses which are reported in the following section, section 6.4, VIF (Variance Inflation Factor in statistics describes the level of multicollinearity – the correlation between predictors – existing in a regression analysis; if VIF = 1 the status of predictors is not correlated, if 1 < VIF < 5 predictors are moderately correlated, and are highly correlated if VIF > 5) statistics were all well below 5 and very close to 1, hence suggesting that there was no multicollinearity problem (Burns and Burns, 2008).

Table 6.2: Correlation Matrix of Voluntary CSR, Mandatory CSR and Other Variables

<table>
<thead>
<tr>
<th>VolCSR</th>
<th>MandCSR</th>
<th>CEDOwn</th>
<th>NEDOwn</th>
<th>ConcOwn</th>
<th>Cash</th>
<th>Leverage</th>
<th>FSize</th>
<th>VinAge</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>VolCSR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MandCSR</td>
<td>0.690**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEDOwn</td>
<td>-0.094</td>
<td>0.174</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEDOwn</td>
<td>0.079</td>
<td>0.179</td>
<td>0.036</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ConcOwn</td>
<td>-0.213*</td>
<td>-0.040</td>
<td>0.084</td>
<td>0.086</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>0.463**</td>
<td>0.281**</td>
<td>-0.027</td>
<td>-0.142</td>
<td>-0.215*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>0.135</td>
<td>0.005</td>
<td>-0.065</td>
<td>0.132</td>
<td>-0.233*</td>
<td>0.059</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSize</td>
<td>0.726**</td>
<td>0.435**</td>
<td>-0.235*</td>
<td>-0.018</td>
<td>-0.209*</td>
<td>0.501**</td>
<td>0.212*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>VinAge</td>
<td>0.003</td>
<td>0.036</td>
<td>0.046</td>
<td>-0.057</td>
<td>-0.076</td>
<td>-0.012</td>
<td>0.148</td>
<td>0.006</td>
<td>1.000</td>
</tr>
<tr>
<td>Gender</td>
<td>0.134</td>
<td>0.047</td>
<td>0.034</td>
<td>0.150</td>
<td>-0.080</td>
<td>0.207*</td>
<td>-0.074</td>
<td>0.211*</td>
<td>-0.014</td>
</tr>
</tbody>
</table>

Note: The Table shows Pearson correlation coefficient: * < .05 and ** < .01

6.4 Regression Analyses and Discussions
Regression analyses were utilised to answer the main question and test the propositions developed in Chapter Four: Hypotheses Development. In this stage of analysis (stage 1 analysis), the logit regression analysis was employed in order to include the whole final sample (consisting of 111 firms) and consider all levels of CSR rating. CSR rating was classified into two ranks (0 and 1) where rank 1 indicates for firms that have engaged in CSR by 70% and over and therefore were included in the CR Index, while the rank of 0 was given to firms that were not included in the CR Index. This classification was used for the logistic regression model.
(logit) that was employed to identify the probability relationship between boards’ ownership structure and CSR engagements. Findings of the Logit regression model on standardized (normalized) variables for the period 2009-2013 are reported in this section. The outcomes of the relationship between boards’ ownership structure and voluntary CSR are reported first followed by the outcomes of the relationship between boards’ ownership and mandatory CSR.

6.4.1 The Relationship Between Boards’ Ownership Structure and Voluntary CSR (The Logit Regression Model)

The logit analyses were conducted to examine the impact of boards’ ownership on CSR ratings. Starting with the impact of boards’ ownership structure on voluntary CSR this section presents the results and findings of the logit regression models on standardized (normalized) variables for the period of 2009-2013. Table 6.3 shows findings with voluntary CSR as the dependent variables. In Table 6.3, Model 1a, Model 1b, Model 1c, Model 1d, and Model 1e illustrate the outcomes of the logit regression analyses including the interaction terms with all independent variables – when voluntary CSR was used for the dependent variables, and CEDs’ ownership, NEDs’ ownership, concentrated ownership, cash, firm leverage, firm size, variation in directors’ age, and board gender were used as independent variables – for the years 2009, 2010, 2011, 2012, and 2013 respectively.

Table 6.3: Logit Regression analyses of Boards’ Ownership and Voluntary CSR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDOwn</td>
<td>-0.145**</td>
<td>-0.165**</td>
<td>-0.137**</td>
<td>-0.097*</td>
<td>-0.129*</td>
<td>–</td>
</tr>
<tr>
<td>NEDOwn</td>
<td>-0.290**</td>
<td>-0.283**</td>
<td>-0.279*</td>
<td>-0.293*</td>
<td>-0.301*</td>
<td>–</td>
</tr>
<tr>
<td>ConcOwn</td>
<td>-0.120**</td>
<td>-0.127**</td>
<td>-0.031*</td>
<td>-0.042*</td>
<td>-0.037*</td>
<td>–</td>
</tr>
<tr>
<td>Cash</td>
<td>0.773*</td>
<td>0.790*</td>
<td>0.689**</td>
<td>0.801**</td>
<td>0.715**</td>
<td>+</td>
</tr>
<tr>
<td>Leverage</td>
<td>-1.235</td>
<td>-1.123</td>
<td>-0.987</td>
<td>-0.998</td>
<td>-1.001</td>
<td>–</td>
</tr>
<tr>
<td>FSize</td>
<td>7.678***</td>
<td>7.125***</td>
<td>7.291***</td>
<td>7.164***</td>
<td>6.867***</td>
<td>+</td>
</tr>
<tr>
<td>DFI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>VinAge</td>
<td>0.279**</td>
<td>0.282**</td>
<td>0.257**</td>
<td>0.282**</td>
<td>0.232**</td>
<td>+</td>
</tr>
<tr>
<td>Gender</td>
<td>1.113*</td>
<td>1.097*</td>
<td>1.197**</td>
<td>1.083**</td>
<td>1.092**</td>
<td>+</td>
</tr>
<tr>
<td>R²</td>
<td>0.534</td>
<td>0.528</td>
<td>0.519</td>
<td>0.575</td>
<td>0.568</td>
<td></td>
</tr>
<tr>
<td>F Significance</td>
<td>12.94***</td>
<td>13.62***</td>
<td>12.78***</td>
<td>12.83***</td>
<td>14.07***</td>
<td></td>
</tr>
<tr>
<td>No of Firms</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

Note: The table shows the standardised coefficients (β), the value of the adjusted R², and the value and significance of the F change. The levels of significance are: ***, *p<.01, **p<.05, *p<.10. Yes means industry dummies (based on the two digit of SIC) are included to control for variation across industries (e.g. see Withisuphakorn and Jiraporn, 2015).
Table 6.3 indicates that the percentage of CEDs’ ownership has a probability of a marginally significant negative linear relationship with voluntary CSR in Model 1d (in the year of 2012) and Model 1e (in the year of 2013). The table shows that CEDs’ ownership has a probability of a significant negative linear relationship with voluntary CSR in Model 1a (in the year of 2009), Model 1b (in the year of 2010) and Model 1c (in the year of 2011). These findings contradict the agency theory which suggests that executive ownership can be used as a solution for the separation of ownership and control for being a good way to align the interests of executive directors with those of shareholders (Jensen and Meckling, 1976). This theory holds with short-term shareholders who focus on firm performance where previous researches show a positive relationship between executive ownership and firm performance (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Palia and Lichtenberg, 1999; Demsetz and Villalonga, 2001; Mura, 2007; Benson and Davidson, 2009; Florackis et al., 2009; O’Connell and Cramer, 2010). However, shareholders who focus on the sustainability of the business over the long-run would prefer to invest more in voluntary CSR activities as their target is capital gain over the long-term rather than focusing on capital income (dividends). They believe that considering stakeholders’ groups will add value to the firm in the long-run hence they prefer to invest in voluntary CSR. However, management might align their interests with shareholders of short-term targets rather than those with long-term interest. Similarly, previous studies argued that ownership motivates management to act to maximize wealth rather than destroy wealth on uncertain long-term strategies such as engaging in philanthropic activities and investing in the community (Amihud and Lev, 1981; Morck et al., 1988; Davis, 1991; Denis et al., 1997; Gedajlovic and Shapiro, 2002).

These findings, however, support this study’s prediction. Hypothesis 1 predicted that CEDs’ ownership would reduce voluntary CSR. The table reveals that high CED shareholdings have a probability of a negative impact on the levels of voluntary CSR. Mainstream studies support this finding (Amihud and Lev, 1981; Morck et al., 1988; Lorsch and Maclver, 1989; Baysinger and Hoskisson, 1990; Davis, 1991; Fligstein, 1991; Denis et al., 1997; Coffey and Wang, 1998; Gedajlovic and Shapiro, 2002; Deutsch, 2005; Arora and Dharwadkar, 2011). According to Coffey and Wang (1998), CEDs are hired by the principals (shareholders) mainly to protect their interests. Therefore, executive directors actually endeavour to eliminate philanthropic activities and other issues related to voluntary CSR. These directors are hired mainly for their financial experience (Fligstein, 1991) and prefer to evaluate historical financial information rather than
invest in uncertain, long-term activities such as entrepreneurship, internal innovation, R&D, and investing in the community (Lorsch and Maclver, 1989; Baysinger and Hoskisson, 1990; Deutsch, 2005).

Table 6.3 shows that the increase of shareholdings’ percentage of NEDs has a probability of a moderately significant negative linear relationship with voluntary CSR in Model 1c, Model 1d and Model 1e. The table illustrates that NEDs’ ownership has a probability of a significant negative linear relationship with voluntary CSR in Model 1a and Model 1b. These outcomes disagree with the prior literature which suggest that non-executive directors, like executive directors, will monitor effectively only if they have a significant investment in the firm (Jensen, 1993; Morck et al., 1988). However, these outcomes provide strong support for this thesis’s prediction. Hypothesis 3 predicted that NEDs’ ownership would lessen voluntary CSR. The Table illustrates that NEDs’ ownership has a probability of a negative significant impact on the level of engagement in voluntary CSR. Although the appearance of NEDs in the board (board structure) shows alignment with stakeholder groups, this can be more applicable to the continental European model which holds the features of the German and Latin countries in which the firms with more than two thousand employees must have boards composed of the same numbers of shareholder-elected and employee-chosen members following the co-determination principle (Franks and Mayer, 1994; Fohlin, 2005). The interests of a wide range of stakeholders such as creditors, employees and the community are integrated by the continental European model and this distinguishes its capacity to guide the firm (Oquendo, 2001). However, the appearance of NEDs in the board as an aspect of board structure can be a different mechanism to NEDs’ ownership which is an aspect of boards’ ownership structure. Focusing on boards’ ownership structure of mainly major UK companies, which are dominated by institutional investors owning up to 75 percent of the stock, with fifty key institutions acting as core shareholders (Kakabadse and Kakabadse, 2001), it is therefore the impact of such dominant ownership on the board that could lead to a reduction in CSR investment and a focus on short-term objectives. Institutional investors and other concentrated shareholders have the incentive to monitor firm performance since they hold a considerable percentage in it, hence they employ an NED to represent them in the board as they lack experience in other industries (Arora and Dharwadkar, 2011). The mainstream of studies has proved that NEDs have a negative impact on voluntary CSR and its related activities (Kesner and Johnson, 1990; Wang and Coffey, 1992;
CEDs and NEDs own considerable shares and would not destroy a large amount of their wealth on philanthropic activities despite their appreciation of the outcome of such long-term investments because their perception regarding such investments leads them to reduce voluntary CSR since it is a long-term investment and its outcome is uncertain. Thus, CEDs and NEDs would not benefit from this investment’s outcome due to their time horizons where they would retire or leave the firm by the time they benefit from these outcomes. This study examines the impact of directors’ ownership on voluntary CSR during the period of 2009-2013 (post-recession). The UK economic downturn between 2008 and 2013 (Pettinger, 2013) could also have made directors feel reluctant to spend a considerable amount of shareholders’ wealth on voluntary CSR. To explore this further, future study could examine and compare this relationship over two periods: the pre-recession and post-recession periods. Scholars argued that when firms reward their NEDs with share ownership, this will make them act like CEDs to maximize wealth and focus on the short-term objectives rather than long-term objectives (Amihud and Lev, 1981; Morck et al, 1988; Davis, 1991; Denis et al, 1997; Gedajlovic and Shapiro, 2002).

Similar to the probability impact of CEDs’ and NEDs’ ownership on voluntary CSR, Table 6.3 shows that concentrated ownership also has a probability of a negative significant, but moderate impact on voluntary CSR involvements over the period 2009-2013 in Model 1c, Model 1d and Model 1e. The table illustrates that concentrated ownership has a probability of a significant negative linear relationship with voluntary CSR in Model 1a, and Model 1b. These results support previous literature which suggests that concentrated shareholders (the majority of institutional investors in the case of UK firms) focus on meeting short-term goals, and achieving performance targets may prevent executive directors to invest in the community due to goal conflicts relating to time horizons and benefits’ uncertainty (Bushee, 1998). These results also provide support to this thesis’s hypothesis. Hypothesis 5 predicted that concentrated ownership, the majority of institutional shareholders, would diminish voluntary CSR. According to Bushee (1998) institutional shareholders neglect investing in the community, since it is a long-term strategy and carries uncertain outcomes, and instead focus on short term goals and achieving performance targets. Being short term momentum investors, institutional owners are likely to
ignore long term strategies such as engaging in voluntary CSR (Coffey and Fryxell, 1991; Neubaum and Zahra, 2006). Institutional investors fairly diversify their portfolio (Dharwadkar et al, 2008) and hence are not willing to engage in philanthropic activities in each firm they hold shares in.

**Control Variables (firm characteristics) and Voluntary CSR**

As expected and from the above table, cash has a probability of a positive significant linear relationship with voluntary CSR (Models 1c, Models 1d and Models 1e). These findings are consistent with the literature which suggest that the availability of cash not only provides firms with the opportunity to commit resources to social causes, but also makes them less resistant to proactive stakeholders’ demands including engaging in community investment and philanthropic activities (Waddock and Graves, 1997). These results are also consistent with Arora’s and Dharwadkar’s (2011) outcomes who found that cash has a positive significant relationship with issues related to voluntary CSR of US firms over the period of 2001-2005. Cash can be used as a free source of finance that would be used in financing long-term investments including investing in the community and philanthropic activities for the sustainability strategy. The availability of cash is an important factor for getting involved in philanthropic and charitable activities. However, the availability of cash could be used to minimize financial costs and reduce firm leverage by saving companies from paying more interest on their loan. Despite this, results show a probability of a positive significant relationship between cash and voluntary CSR indicating that UK firms who engage in voluntary CSR have surplus that allow them to meet their liabilities and invest in philanthropic and charitable activities alike.

As anticipated, findings in the above table show that firm leverage has a negative but insignificant relationship with voluntary CSR, thus supporting previous literature. The literature suggests that firms with high leverage are not able to gather continuing resources for philanthropic activities, hence any investments towards such actions might appear as unsustainable over time by their stakeholders (Mishra and Modi, 2013). High debt leads to underinvestment problems and causes poor performance (Myers, 1977). More literature suggests that the cost of high leverage can impact firm performance negatively (Opler and Titman, 1994), hence reducing investment in philanthropic activities. However, findings of this study show that firm leverage has a negative but insignificant relationship with voluntary CSR, thus supporting the above literature to some extent.
As anticipated, Table 6.4 shows that firm size has a probability of a positive and highly significant linear relationship with the dependant variable, Voluntary CSR. These outcomes support the literature which suggests that modern society tends to pay more attention to larger firms and pressures them to respond to stakeholders’ calls, and larger firms are more willing to orient their actions towards stakeholders’ demands than small firms, due to their interests in seeking external legitimacy and gaining competitive advantages (Fombrun and Shanley, 1990; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Ahmed and Duellman, 2007; Udayasankar, 2008).

Given the argument of the legitimacy theory (Suchman, 1995), firms involve in CSR activities as the compelling motivation to legitimise the firm’s operations and actions within the society which they operate in as a result of the social contract in presence between the firm and society. For further benefits and with reference to the stakeholder theory (Freeman, 1984), firms targeting a long-term sustainability strategy focus on community investment as the main stakeholder group. However, these outcomes were supported by Burke et al (1986) and Buysse and Verbeke (2003) who argued that larger firms tend to have more pressure to respond to voluntary CSR. Society exerts heavier pressure on larger firms for philanthropic giving and larger firms correspondingly conform to the pressure. Larger firms are involved in community investment almost twice as much as smaller firms. Larger firms are more committed to CSR where they tend to respond more to proactive stakeholders’ demands (Chang et al., 2012). Scholars had found that firm size is a key factor that influences firms’ philanthropic activities (Boatsman and Gupta, 1997; Galaskiewiez, 1997; Amato and Amato, 2007). In addition, Johnson and Greening (1999), Muller and Kolk (2010), and Arora and Dharwadkar (2011) found similar results as they found that firm size has a positive significant relationship with issues related to voluntary CSR. Larger firms tend to engage in voluntary CSR to retain sustainability and improve their competitive position (Fombrun and Shanley, 1990; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Ahmed and Duellman, 2007; Udayasankar, 2008). Larger firms are managed by more expert directors who have the ability to manage liquidity and other resources used for community investment and philanthropic activities and appreciate its outcomes for firm sustainability more than other directors do.
Control Variables (board characteristics) and Voluntary CSR

As anticipated, Table 6.3 illustrates that variation in directors’ age has a probability of a positive significant linear relationship with voluntary CSR. This shows that a greater variation in the age of directors of the board has a probability of a positive impact on voluntary CSR. These results came in consistency with McIntyre’s et al. (2007) results which exhibited a positive and statistically significant relationship between directors’ age diversity and firm performance which indicates that age diversity has a key role for good CG. Variation in directors’ age means the board has young directors as well as senior directors and according to Hambrick and Mason (1984) younger directors have a greater propensity for strategic change and development. Wiersema and Bantel (1992) advocated Hambrick’s and Mason’s (1984) arguments when they evidenced that firms with younger directors are more likely to undergo major changes in corporate strategy. Whilst looking to the board that lacks variation in directors’ age and has only senior directors, Burke and Light (1981) stated that cognitive ability including learning ability, reasoning and memory decrease as people become old. Moreover, Vroom and Pahl (1971) suggested that older directors may become risk averse and avoid risky decisions including investing in voluntary CSR for both financial security and career security. Firms with older directors are less likely to undergo major strategic changes (Golden and Zajac, 2001).

Results in Table 6.3 show that board gender has a probability of a positive and significant linear relationship with voluntary CSR (in Model 1c, Model 1d and Model 1e) as expected. These results support the literature which suggests that female directors are more than twice as likely as males to be highly qualified (hold a doctoral degree), have gained a broader experience with smaller firms and bring diverse perspectives to the board (Hillman et al., 2002). Women on boards act as support specialists and community influencers more than men do (Hillman et al., 2002). These results were also supported by prior studies which evidenced that firms with a higher percentage of women sitting in the board have a higher level of engagement in philanthropic activities (Wang and Coffey, 1992; Williams, 2003). These outcomes appeared to be consistent with prior studies which considered the impact of women in the board on CSR (Bear et al., 2010; Margaretha and Isnaini, 2014; Fernandez-Feijoo et al., 2014; Deschénes et al., 2015). This study’s outcomes show that females focus more on sustainable development and CSR and bring sensitivity to the board toward voluntary CSR and a participatory decision-making style. Boards with a higher proportion of female directors engage in philanthropic and charitable activities to a larger extent than boards with a lesser proportion of female directors.
Since female board members play a key role in increasing voluntary CSR they can enhance the firm’s reputation. Board gender can be valued as positive for shareholders as an advantage in an international market where sensitivity is necessary to sustain in the long-term. It can be argued that the appointment of females in the board should be given greater emphasis to enhance the ability of boards of directors to deal with voluntary CSR. Women in the board can offer a significant and wide range of contributions to boards (this is consistent with Bear’s et al. (2010) arguments). While some of the prior studies provided evidence of the significant role of women in the board in increasing CSR (Bear et al., 2010; Margaretha and Isnaini, 2014; Fernandez-Feijoo et al., 2014; Deschênes et al., 2015), this study contributed to the literature by providing the significant role of female directors in the board in enhancing voluntary CSR of UK firms over the period of post-recession. This study’s outcomes are contributing in considering UK data in linking the relationship between board gender and community investment and philanthropic activities.

6.4.2 The Relationship Between Boards’ Ownership Structure and Mandatory CSR (The Logit Regression Model)

Considering the impact of boards’ ownership structure on mandatory CSR, this section presents results and findings of the Logit regression models on standardized (normalized) variables for the period 2009-2013. Table 6.4 reports results with mandatory CSR as the dependent variable. Table 6.4, Model 2a, Model 2b, Model 2c, Model 2d, and Model 2e show the outcomes of the Logit regression analyses including the interaction terms with all independent variables – when mandatory CSR was used for the dependent variables and CEDs’ ownership, NEDs’ ownership, concentrated ownership, cash, firm leverage, firm size, variation in directors age and board gender were used as independent variables – for the years 2009, 2010, 2011, 2012, and 2013 respectively.
Table 6.4: Logit Regression Analyses of Board’s Ownership and Mandatory CSR

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDOwn</td>
<td>3.080***</td>
<td>3.097***</td>
<td>2.999***</td>
<td>2.982***</td>
<td>2.897***</td>
<td>+</td>
</tr>
<tr>
<td>NonCEDOwn</td>
<td>3.297***</td>
<td>2.978***</td>
<td>2.996***</td>
<td>2.873***</td>
<td>3.092***</td>
<td>+</td>
</tr>
<tr>
<td>ConcOwn</td>
<td>0.075**</td>
<td>0.120**</td>
<td>0.085**</td>
<td>0.093**</td>
<td>0.105**</td>
<td>+</td>
</tr>
<tr>
<td>Cash</td>
<td>0.923**</td>
<td>0.987**</td>
<td>0.874**</td>
<td>0.313*</td>
<td>0.797**</td>
<td>+</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.593</td>
<td>0.601</td>
<td>0.651</td>
<td>0.577</td>
<td>0.617</td>
<td>+</td>
</tr>
<tr>
<td>FSize</td>
<td>7.310***</td>
<td>7.125***</td>
<td>7.097***</td>
<td>7.076***</td>
<td>7.189***</td>
<td>+</td>
</tr>
<tr>
<td>DFI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>+</td>
</tr>
<tr>
<td>VinAge</td>
<td>0.261**</td>
<td>0.559**</td>
<td>0.242**</td>
<td>0.211**</td>
<td>0.284**</td>
<td>+</td>
</tr>
<tr>
<td>Gender</td>
<td>3.544**</td>
<td>3.767**</td>
<td>3.325**</td>
<td>3.629**</td>
<td>3.545**</td>
<td>+</td>
</tr>
<tr>
<td>R²</td>
<td>0.498</td>
<td>0.478</td>
<td>0.513</td>
<td>0.537</td>
<td>0.539</td>
<td></td>
</tr>
<tr>
<td>F significance</td>
<td>13.24***</td>
<td>13.29***</td>
<td>12.97***</td>
<td>11.87***</td>
<td>12.97***</td>
<td></td>
</tr>
<tr>
<td>No of Firms</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

Note: The table shows the standardised coefficients (β), the value of the adjusted R², and the value and significance of the F change. The levels of significance are: ***, p<.01 ** , p<.05, *, p<.10. Yes means industry dummies (based on the two digit of SIC) are included to control for variation across industries (e.g. see Withisuphakorn and Jiraporn, 2015).

Table 6.4 shows that the increase of shareholdings’ percentage of CEDs, NEDs and concentrated shareholders has a probability of a positive significant linear relationship with mandatory CSR. These outcomes show consistency with the literature which suggests that effective boards of directors would avoid misconduct and comply with the law (Mattingly and Berman, 2006). With reference to the legitimacy theory (Suchman, 1995), firms obey the law and show compliance with the required standards and regulations in order to obtain legitimacy. The literature suggests that the use of directors’ ownership is an effective tool to align the interests of directors with those of shareholders (Jensen and Meckling, 1976). These findings show that Jensen’s and Meckling’s (1976) arguments hold in terms of mandatory CSR as shareholders prefer to obey the law to avoid the collapse of the business resulting from committing fraud.

The table illustrates that CEDs’ ownership has a probability of a positive and highly significant impact on mandatory CSR. These results show consistency with this study’s prediction. Hypothesis 2 predicted that CEDs’ ownership would augment mandatory CSR. Table 6.4 reveals that high CEDs’ ownership has a probability of a positive impact on the levels of mandatory CSR. These results were supported by Arora’s and Dharwadkar’s (2011) arguments. Arora and Dharwadkar (2011) argued that effective CG would enhance issues related to
mandatory CSR of US firms. Good governance would avoid misconduct as failure to comply with the required rules and regulations leads to penalties and may ruin the firm’s reputation (Arora and Dharwadkar, 2011). It is evidenced from numerous studies that executive ownership is a good CG mechanism that enhances CG and generally has a positive significant relationship with firm performance and other issues related to mandatory CSR (Morck et al., 1988; Han and Suk, 1998; Short and Keasey, 1999; Florackis et al., 2009). Morck’s et al. (1988) results show that the increase of directors’ ownership is associated with firm value of US large industrial firms reflecting the convergence of interests of management and shareholders. Han and Suk (1998) have also found that CEDs’ ownership is an effective tool that enhances CG of US industrial firms. More evidence shows that CEDs’ ownership plays a significant role in aligning the interests of executive directors with those of shareholders of UK companies (Short and Keasey, 1999). More findings indicate a positive and statistically significant linear relationship between executive ownership and corporate performance of UK firms and this indicates a strong alignment effect of executive ownership (Florackis et al., 2009). These findings support the conjecture that executive ownership helps align the interests of executive directors with those of shareholders (Jensen and Meckling, 1976), leading to effective CG. This shows that CEDs’ ownership that augments CG and increases convergence of interests of management and shareholders should boost mandatory CSR by complying with the required standards and regulations.

In regard to the ownership of NEDs, results shown in Table 6.4 indicate a probability of a positive and significant relationship between NEDs’ ownership and mandatory CSR for the period 2009-2013. These results show consistency with predictions of this study where proposition 4 predicted that NEDs’ ownership would improve mandatory CSR. Table 6.4 illustrates that NEDs’ ownership has a probability of a positive significant impact on the engagement of mandatory CSR. These findings were supported by prior arguments. Pfeffer and Salancik (1978) argued that the selection of a greater number of NEDs signals the firm’s intention to pay greater attention to its external environment and legitimacy and other issues related to mandatory CSR. Arora and Dharwadkar (2011) have also argued that the increased proportion of NEDs would enhance compliance with the required standards and regulations. The role of NEDs is based on reviewing the performance of both the board and CEDs (Morck et al., 1988; Cadbury, 2000). Share ownership owned by NEDs induces them to actively oversee CEDs and control the board (Mura, 2007). NEDs will monitor effectively if they have an
investment in the firm (Jensen, 1993; Morck et al., 1988). Studies addressing the effectiveness of non-executive ownership in obtaining good CG were fairly limited. Evidence shows that non-executive ownership is a good CG mechanism that enhances CG, and generally has a positive significant relationship with firm performance across different countries (Morck et al., 1988; Davies et al., 2005). NEDs are effective in monitoring the US and UK boards (Morck et al., 1988; Davies et al., 2005). Since shareholdings of NEDs lead to better performance, it should be associated with good compliance for the required standards and regulations and this appears to be consistent with the results obtained in this research.

Table 6.4 illustrates that concentrated ownership has a probability of a positive and significant linear relationship with mandatory CSR of UK firms over the period of post-recession (2009-2013). This supports prior literature which suggests that concentrated owners ensure the control effectiveness within the firm and they can exert a pressure on management to enhance firm value and firm’s reputation (Demsetz, 1983; Agrawal and Mandelker, 1990; Denis et al., 1995). These results show consistency with this study’s prediction. Proposition 6 predicted that a greater percentage of concentrated shareholdings would increase mandatory CSR. Table 6.4 reveals that high concentrated ownership has a probability of positive impact on the levels of mandatory CSR involvement. These results also support previous studies including Demsetz (1983), Shleifer and Vishny (1986), Agrawal and Mandelker (1990), and Denis et al. (1995). According to Shleifer and Vishny (1986) concentrated shareholders who have a large stake in a company have both the incentive and the ability to oversee management in order to protect their investment. Spicer (1978) and Neubaum and Zahra (2006) argued that institutional investors (that are the majority of UK concentrated shareholders; the typical characteristics of the modern type of UK firms are the insignificant individual ownership and substantial institutional ownership; the ownership of the UK equities by institutional investors had grown from 30% in 1963 to almost 80% in 2004 (Florackis et al., 2009)) cannot exit the firm easily and thus they have the incentive to alleviate the risk of adverse regulatory action, higher compliance costs etc.

This study’s findings were supported by several previous research which found a positive and statistically significant relationship between concentrated ownership and firm performance suggesting that concentrated ownership is a good CG mechanism that enhances CG (Jarrell and Poulsen, 1987; Brickley et al., 1988; Han and Suk, 1998; McConnell and Servaes, 1990; Short and Keasey, 1999; Thomsen and Pedersen, 2000; Benson and Davidson, 2009; Ellili, 2011). As
the majority of concentrated shareholders of the UK firms are institutional shareholders, this study’s findings were also supported by Graves and Waddock (1990) who argued that institutional investors are under tremendous pressure to show success to their constituents. Since concentrated owners lead to better performance, it should be associated with good compliance for the required standards and regulations. This appears to be consistent with this thesis’s outcomes.

**Control Variables (firm characteristics) and Mandatory CSR**

As expected, Table 6.4 illustrates that cash has a probability of a positive significant linear relationship with mandatory CSR. These results appear to be consistent with the literature discussed in page 161. In addition, the availability of cash shows that the firm has a good financial position hence the firm has the ability to meet their liabilities and satisfy their suppliers including both the short-term and the long-term. The availability of cash provides firms with the opportunity to spend funds on compulsory environmental issues such as energy consumptions and other activities related to health and safety and employee rights. Cash allows firms to meet the required standards and regulations.

As anticipated and as shown in Table 6.4, firm size has a probability of a positive and highly significant linear relationship with mandatory CSR as measured by the Log of employee number. These findings support previous literature which suggests that larger firms tend to have more pressure to respond to all issues related to CSR in general (Burke et al., 1986). Prior arguments support these findings. According to Johnson and Greening (1999) and Muller and Kolk (2010) firm size has a positive impact on CSR. Moreover, this study’s results were consistent with Arora’s and Dharwadkar’s (2011) examination. Larger firms tend to improve all issues related to mandatory CSR to remain consistent and avoid the collapse of their business. Large firms need to satisfy the requirements for being listed in the London Stock Exchange Market. Large firms are managed by more expert directors who would like to secure their jobs by meeting the required standards and regulations and avoiding any misconduct. Burke et al. (1986) and Buysse and Verbeke (2003) argued that firm size is a key factor that impacts the level of involvements in mandatory CSR as society exerts heavier pressure on larger firms to consider environmental issues and human rights. Larger firms are more committed to CSR where they tend to respond more to stakeholders’ demands such as health and safety, employee rights, and environmental issues (Chang et al., 2012). Modern society tends to pay more attention to larger firms and
pressures them to respond to stakeholders’ calls and larger firms are more willing to orient their actions towards stakeholders’ demands than small firms, due to their interests in seeking external legitimacy (Fombrun and Shanley, 1990; Stanwick and Stanwick, 1998; Johnson and Greening, 1999; Ahmed and Duellman, 2007; Udayasankar, 2008).

**Control Variables (board characteristics) and Mandatory CSR**

As expected, Table 6.4 shows that variation in directors’ age has a probability of a positive and moderately significant linear relationship with mandatory CSR, and this shows that a greater variation in the age of directors of the board has a probability of a positive impact on mandatory CSR. These outcomes show consistency with the literature discussed in page 163. Furthermore, variation in directors’ age means the board consists of young directors and senior directors alike. Having some young directors in the board is a good indication for mandatory CSR. This can be shown by outcomes which were in favour of young directors which were provided by scholars (Campbell, 1987; Guthire and Olian, 1991) who argued that younger directors are more likely to pursue more risky and innovative growth strategies and seem to handle new and creative ideas better than older directors do as they have more energy to do this. Firms with some younger directors sitting in their boards signal more effective CG and strategic development, thus this should be associated with better compliance and enhancement in the firm’s external legitimacy that supports this thesis’s outcomes.

As anticipated, results in Table 6.4 illustrate that board gender has a probability of a positive and significant linear relationship with mandatory CSR. These results support the literature which suggests that firms with a higher percentage of females sitting in the board have more favourable work environments and have better engagement in issues related to mandatory CSR (Bernardi, 2006; Johnson and Greening, 1999). These results were supported by Post et al. (2011) who provided evidence that highlighted the positive impact and improvements that board gender has on some aspects of mandatory CSR. Moreover, more female directors have a positive impact on the level of environmental CSR (Post et al., 2011). Furthermore, this thesis’s results are also supported by the work of the previous researchers discussed in pages 163-164.
6.5 Chapter Summary

This section summarizes the outcomes of the logit regression model of this study. Table 6.5 illustrates the comparisons of this study’s results and the hypotheses developed from the prior literature.

Table 6.5: Boards’ Ownership Impact on CSR Engagements

<table>
<thead>
<tr>
<th>Variables</th>
<th>Predicted impact on Voluntary CSR</th>
<th>Outcomes</th>
<th>Predicted impact on Mandatory CSR</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDs’ ownership</td>
<td>Negative</td>
<td>Negative</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>NEDs’ ownership</td>
<td>Relationship</td>
<td>Relationship</td>
<td>Relationship</td>
<td>Relationship</td>
</tr>
<tr>
<td>Concentrated Ownership</td>
<td>Negative</td>
<td>Negative</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Cash</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Leverage</td>
<td>Negative</td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>FSize</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>VinAge</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Gender</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
</tr>
</tbody>
</table>

This chapter highlighted the probability relationship of both engagements of CSR and other independent variables using the Logit Model for binary dependent variables. The following chapter provides the stage 2 analysis that further concerns the relationship between boards’ ownership and CSR engagements using the Random Effects and Fixed Effects Models when firms have higher levels of CSR engagements (engagements by 70% and over). The key drivers for good CSR will also be considered in the following chapter.
Chapter Seven: Stage 2 Results and Discussion

7.1 Chapter Overview
The previous chapter considered the probability linear relationship between boards’ ownership and CSR of UK firms that involve in CSR by all levels of engagements. This chapter is concerned with investigating the relationship between boards’ ownership structure and voluntary CSR of UK firms that engage in voluntary CSR by 70% and over. The key financial corporate characteristics that enhance good voluntary CSR are addressed and analysed. This chapter presents the stage 2 analysis as well as the discussion to entirely answer the main question of this study – how does boards’ ownership structure impact corporate social responsibility? – that allows to achieve the aim and test the propositions of this study. The chapter also presents findings that answer the other research question: what are the key drivers for good voluntary corporate social responsibility? This chapter reports the descriptive statistics and correlation matrix of the variables used in the stage 2 analysis. The statistical analyses (regression analyses) that were selected for the stage 2 analysis of this study are reported in this chapter. Discussion of the outcomes of the regression analyses undertaken to test the validity of this study’s propositions is also presented. The random and fixed effects models were mainly employed to further investigate boards’ ownership structure’s impact on voluntary CSR, and to identify the key drivers for good voluntary CSR. These analyses were undertaken by splitting up the data using the random effects model and fixed effects model to discover any association between boards’ ownership structure and other key drivers and voluntary CSR when UK firms engage by 70% and over. Last but not least, the summary of these findings is reported in this chapter. The structure of this chapter is illustrated by Figure 7.1 overleaf.
Figure 7.1: Outline of Chapter Seven

7.1 Chapter Overview

7.2 Descriptive Statistics

7.3 Correlation Analysis

7.4 Stage 2 Regression Analyses and Discussions

7.4.1 The Relationship between Boards’ Ownership and Voluntary CSR

7.5 Chapter Summary

Source: compiled by the Author
7.2 Descriptive Statistics

The descriptive statistics for the variables in the model used in the stage 2 analysis are shown in Table 7.1. Voluntary CSR was given four ranks from 4 for the highest rank to 1 for the lowest rank with an average rank of 2.981 and a standard deviation of 0.951. The average indicates that the sample engages in voluntary CSR by more than 90% which reflects good voluntary CSR. The average percentage of concentrated ownership (28.520 percent) of the sample of the stage 2 analysis proved to be lower than its average of the main sample used in the stage 1 analysis (35.532 percent). Concentrated shareholdings ranged from 2.590 percent (held by Computershare Company Nominees Limited) (Standard Life Plc Annual Report and Accounts, 2008: p. 74) to 64.210 percent (held by Standard Life Investments Limited, Threadneedle Asset Management, Holdings Limited, HSBC Holdings Plc, Lloyds Banking Group Plc, Legal & General Group Plc, and Invesco Limited) (Fenner Plc Annual Report, 2010: p. 16) with a standard deviation of 15.876. This shows that the sample which was used in the stage 2 analysis that engages in voluntary CSR by 70% and over consists of firms that are owned by a lower percentage of concentrated shareholdings. Similarly, the average percentage of CEDs (0.892 percent) of the current sample is also lower than its average in the main sample (1.255 percent). This shows that firms with a higher engagement in voluntary CSR have a lower percentage of shares held by their executive directors. In contrast, the average percentage of NEDs (1.842 percent) of the sample proved to be a little higher than its average percentage in the main sample (1.415 percent). This indicates that firms with higher engagement in voluntary CSR have a slightly higher percentage of shares held by non-executive directors.

Table 5.1: Descriptive Statistics for Variables used in Stage 2 analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Observations</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VolCSR</td>
<td>265</td>
<td>1</td>
<td>4</td>
<td>2.9811</td>
<td>0.951</td>
</tr>
<tr>
<td>CEDOwn</td>
<td>265</td>
<td>0.003</td>
<td>19.147</td>
<td>0.892</td>
<td>3.253</td>
</tr>
<tr>
<td>NEDOwn</td>
<td>265</td>
<td>0.001</td>
<td>35.428</td>
<td>1.842</td>
<td>6.422</td>
</tr>
<tr>
<td>ConcOwn</td>
<td>265</td>
<td>2.590</td>
<td>64.210</td>
<td>28.520</td>
<td>15.876</td>
</tr>
<tr>
<td>ROA</td>
<td>265</td>
<td>-9.300</td>
<td>17.910</td>
<td>5.302</td>
<td>5.733</td>
</tr>
<tr>
<td>FAge</td>
<td>265</td>
<td>1.360</td>
<td>1.890</td>
<td>1.685</td>
<td>0.173</td>
</tr>
<tr>
<td>Divid</td>
<td>265</td>
<td>0.000</td>
<td>0.800</td>
<td>0.295</td>
<td>0.240</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>265</td>
<td>0.010</td>
<td>0.120</td>
<td>0.059</td>
<td>0.030</td>
</tr>
<tr>
<td>Gender</td>
<td>265</td>
<td>0.000</td>
<td>0.380</td>
<td>0.130</td>
<td>0.095</td>
</tr>
</tbody>
</table>
Firm performance that was measured by the return on assets ratio ranged from -9.300% (achieved by Barratt Developments Plc in 2008) (GBBc, 2013) to 17.910% (achieved by Next in 2008) (GBBd, 2013) with a mean of 5.302% and a standard deviation of 5.733. The mean indicates that the sample has a positive return on assets which means that firms included in the sample had performed well over the period of study. The mean of board gender in the sample of this stage of analysis (0.130) appeared to be slightly higher than the mean of the sample in stage 1 analysis (0.115) which shows that firms that engage in voluntary CSR by 70% and over have more women sitting in their boards.

7.3 Correlation Analysis

The correlation matrix is reported in Table 7.2. The table shows a significant positive correlation between firm age and voluntary CSR indicating that firms with longer years listed in the LSE engage more in voluntary CSR. The table also shows a significant positive correlation between Return on Assets (ROA) and Research and Development Intensity (R&D) which indicates that firms engage in R&D since they perform well.

Table 7.2: Correlation Matrix of Voluntary CSR and Other Variables

<table>
<thead>
<tr>
<th></th>
<th>VolCSR</th>
<th>CEDOwn</th>
<th>NEDOwn</th>
<th>ConcOwn</th>
<th>ROA</th>
<th>FAge</th>
<th>Gender</th>
<th>R&amp;D</th>
<th>Divid</th>
</tr>
</thead>
<tbody>
<tr>
<td>VolCSR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEDOwn</td>
<td>-0.096</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEDOwn</td>
<td>-0.125</td>
<td>0.004</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ConcOwn</td>
<td>-0.056</td>
<td>0.093</td>
<td>0.102</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.164</td>
<td>0.151</td>
<td>-0.008</td>
<td>-0.165</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAge</td>
<td>0.342*</td>
<td>0.061</td>
<td>-0.041</td>
<td>0.171</td>
<td>-0.081</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.141</td>
<td>0.056</td>
<td>0.195</td>
<td>-0.200</td>
<td>0.158</td>
<td>-0.047</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td>0.151</td>
<td>0.210</td>
<td>0.088</td>
<td>-0.179</td>
<td>0.277*</td>
<td>-0.206</td>
<td>-0.009</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Divid</td>
<td>0.168</td>
<td>-0.020</td>
<td>0.046</td>
<td>0.014</td>
<td>-0.080</td>
<td>0.139</td>
<td>-0.004</td>
<td>-0.090</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: The Table shows Pearson correlation coefficient: * < .05 and ** < .01

It appears that some correlations exist among the dependent variable and among control variables. This may be of concern due to the existence of potential multicollinearity between the variables. However, in the regression analyses which are reported in the following section, VIF statistics were all well below 5 and very close to 1, suggesting that there was no multicollinearity problem.
7.4 Regression Analyses and Discussion

Regression analyses were utilised to answer the research questions and test the propositions developed in this study. The stage 2 analysis considers the Random Effects Model and Fixed Effects Model. These were employed in order to consider only firms which are included in the CR Index for being engaged in voluntary CSR by 70% and above over the period of post-recession (2009-2013). For the stage 2 analysis, CSR engagements were ranked from 4 to 1 where the rank of 4 indicates the highest score and the rank of 1 indicates the lowest. This measurement was used for the stage 2 analysis that was conducted by splitting up the data (with the restricted sample consisting of 53 firms) using the random effects model and fixed effects model to determine the relationship between boards’ ownership structure and voluntary CSR and to identify the key drivers for good voluntary CSR when UK firms engage by 70% and over.

The outcomes of the Random Effects and Fixed Effects panel data regression models on standardized (normalized) variables for the period of 2009-2013 are reported in this section. In Table 7.3, Model 3 and Model 4 show the results of the fixed effects and random effects regression analyses respectively including the interaction terms with all independent variables when voluntary CSR was used as the dependent variable, and CEDs’ ownership, NEDs’ ownership, concentrated ownership, return on assets, firm age, dividends payout, research and development intensity and board gender were used as independent variables.
Table 7.3: Fixed Effects Model and Random Effects Model Regression analyses

<table>
<thead>
<tr>
<th>VolCSR</th>
<th>Model 3 (Fixed effects model)</th>
<th>Model 4 (Random effects model)</th>
<th>Expected Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDOwn</td>
<td>-0.151**</td>
<td>-0.139**</td>
<td></td>
</tr>
<tr>
<td>CEDOwn**2</td>
<td>-0.102**</td>
<td>-0.127**</td>
<td></td>
</tr>
<tr>
<td>NEDOwn</td>
<td>-0.138**</td>
<td>-0.116**</td>
<td></td>
</tr>
<tr>
<td>NEDOwn**2</td>
<td>-0.121**</td>
<td>-0.103**</td>
<td></td>
</tr>
<tr>
<td>ConcOwn</td>
<td>-0.054**</td>
<td>-0.187*</td>
<td></td>
</tr>
<tr>
<td>ConcOwn**2</td>
<td>-0.046*</td>
<td>-0.123*</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.172**</td>
<td>0.212*</td>
<td>+</td>
</tr>
<tr>
<td>FAge</td>
<td>0.371***</td>
<td>0.420***</td>
<td>+</td>
</tr>
<tr>
<td>DFI</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Divid</td>
<td>0.098</td>
<td>0.081</td>
<td>+</td>
</tr>
<tr>
<td>R&amp;D Intensity</td>
<td>0.598**</td>
<td>0.621**</td>
<td>+</td>
</tr>
<tr>
<td>Gender</td>
<td>0.243**</td>
<td>0.182**</td>
<td>+</td>
</tr>
<tr>
<td>R²</td>
<td>0.497</td>
<td>0.462</td>
<td></td>
</tr>
<tr>
<td>F significance</td>
<td>15.07***</td>
<td>17.35***</td>
<td></td>
</tr>
<tr>
<td>No of Observations</td>
<td>265</td>
<td>265</td>
<td></td>
</tr>
</tbody>
</table>

Note: The table shows the standardised coefficients (β), the value of the adjusted R², and the value and significance of the F change. The levels of significance are: ***p<.01 **p<.05, *p<.10. Yes means industry dummies (based on the two digit of SIC) are included to control for variation across industries (e.g. see Withisuphakorn and Jiraporn, 2015).

7.4.1 The Relationship Between Boards’ Ownership and Voluntary CSR (The Fixed Effects and Random Effects Regression Model)

Table 7.3 shows that CEDs’ ownership has a significant negative linear relationship with voluntary CSR in Model 3 (the fixed effects model) and Model 4 (the random effects model). This relation could be due to a non-linear relationship, hence, and following Morck et al. (1988) and Short and Keasey (1999), a quadratic function was included in the statistical model to discover this assumption (For the use of quadratic functions to discover any non-linear relationship see Morck et al. (1988) and Short and Keasey (1999) who concluded a non-linear relationship between corporate performance and managerial ownership by extending the analysis and considering a more generalised form of the relationship). As assumed, the table illustrates that there is strong evidence of a curvilinear relationship between executive ownership and the level of voluntary CSR engagements (this adds a major contribution on the existing CG literature); it decreases first and then increases. This suggests that the decision-making power is partly concentrated in the hands of CEDs. Figure 7.2 contains a graph of the relation between CEDs’ ownership and voluntary CSR. At a low level of CEDs’ ownership, the negative effect of executive ownership strongly dominates the positive effect. The curve reaches its minimum
prior to 15 percent CEDs’ ownership. Thus, the level of voluntary CSR engagement is less when executive directors own 15 percent of the firm’s equity than when they own 0 percent meaning that excessive executive ownership rather lowers voluntary CSR. These results indicate that executive ownership is negatively related to voluntary CSR up to about 12 percent of CEDs’ ownership, but after that the relationship turned to show a slight increase when CEDs hold shares between 12 and 20 percent. These results support the view that, as executive ownership rises, their interests align more closely with outside shareholders’ at a very low ownership (between 0 and 1 percent), but excessive executive ownership (between 12 and 15 percent) is likely to hurt voluntary CSR because executives who own enough stock to dominate the board of directors could get entrenched (Han and Suk, 1998). These findings add to the debate of the agency theory and stakeholder theory (Berle and Means, 1932; Freeman, 1984).

The outcomes are consistent with prior studies including Stulz (1988), McConnell and Servaes (1990), and Han and Suk (1998) who found that an excessive ownership of insiders is likely to hurt firm performance as insiders could get entrenched. Overall, Table 7.3 provides support for this study’s prediction. Hypothesis 1 predicted that CEDs’ ownership would lower the level of voluntary CSR engagement. Table 7.3 reports that the increase of CEDs’ ownership has a negative impact on the levels of voluntary CSR when UK firms engage by 70% and over and these outcomes confirm the findings of the logit model (stage 1 analysis reported in Chapter 6). From the results reported in Table 7.3 coupled with the fact that the current sample of the stage 2 analysis consists of firms which involve in voluntary CSR by 70% and over, findings indicate that firms already demonstrated that they still spend in voluntary CSR within an incremental ceiling, but in a diminishing way during the period of post-recession (2009-2013).

Table 7.3 illustrates that NEDs’ ownership has a significant negative linear relationship with voluntary CSR in Model 3 and Model 4. This diminishing relation might be due to a non-linear relationship therefore, and in consistence with the above arguments, a quadratic function was included in order to investigate this conjecture. As expected, it can be seen from the table that there is strong evidence of a curvilinear relationship between non-executive ownership and voluntary CSR (first diminishes, and then slightly rises), suggesting that the decision-making power regarding voluntary CSR investment is also concentrated in the hands of NEDs. The graph in Figure 7.3 shows the relationship between NEDs’ ownership and voluntary CSR engagements. The negative effect of non-executive ownership robustly dominates the positive
effect at a low level of CEDs’ ownership. The curve reaches its minimum prior to 30 percent NEDs’ ownership. Hence, voluntary CSR is less when NEDs own 30 percent of the firm’s stock than when they own 0 percent indicating that, when NEDs hold excessive ownership, they would reduce voluntary CSR. These findings were supported by the arguments that as directors’ ownership increases, their interests will align with those of outside shareholders (at a very low level when they hold a very little percentage close to zero), but excessive shareholdings of NEDs (between 20 and 30 percent) is likely to impair voluntary CSR as directors who hold enough equities to dominate the board could get entrenched (Han and Suk, 1998). Findings show that NEDs got entrenched at a higher percentage of ownership than that of CEDs. These outcomes are consistent with those of executive directors adding to the debate of the agency theory and stakeholder theory (Berle and Means, 1932; Freeman, 1984). Results shown in Table 7.3 provide support for this study’s prediction. Proposition 3 predicted that NEDs’ ownership would lessen voluntary CSR. Table 7.3 indicates that the augment of NEDs’ ownership has a negative impact on voluntary CSR when UK firms engage by 70% and over and these outcomes confirm the findings of the logit model reported in Chapter 6.

Table 7.3 also shows that concentrated ownership (the majority of institutional ownership) has a significant negative linear relationship with voluntary CSR in Model 3 and Model 4. Similarly, this negative relation can be due to a non-linear relationship thus a quadratic function was added to the statistical model to examine this claiming statement. As claimed, there is moderate evidence of a curvilinear relation between concentrated ownership and the level of voluntary CSR engagements. The relation between concentrated ownership and voluntary CSR is shown in Figure 7.4 (it first decreases and then remains stable when concentrated shareholders own 60 percent and over as ownership is concentrated in their hands). These results support the conjecture that institutional investors are pressured to focus on short-term gains as they are under tremendous pressure to provide annual returns to their constituents and this eventually hurts long-term investment such as voluntary CSR (Bushee, 1998; Graves and Waddock, 1990). These outcomes provide reasonable support for hypothesis 3 which predicts that concentrated ownership, the majority of institutional shareholders, would diminish voluntary CSR. These results show that the increase of concentrated ownership has a negative impact on the level of voluntary CSR engagements when UK firms engage by 70% and over and these results confirm the outcomes of the logit model reported in Chapter 6.
Figure 7.2: The relation between CEDs’ ownership\(^2\) and voluntary CSR

Source: Developed by the author

Figure 7.3: The relation between NEDs’ ownership\(^2\) and voluntary CSR

Source: Developed by the author
7.4.2 Control Variables (Financial and Firm Characteristics) and Voluntary CSR

As expected, Table 7.3 shows that return on assets is positively and significantly associated with voluntary CSR when the fixed effects model was employed. When the random effects model was utilised, the relationship between return on assets and voluntary CSR showed to be marginally significant. However, the result of the fixed effects model supports the literature which suggests that ROA is a key financial driver for philanthropic engagements (Mishra and Modi, 2013). It also supports the literature which suggests that the availability of financial resources is a key issue for the firm which encourages its directors to allocate some funds on philanthropic activities (Mishra and Modi, 2013).

The literature suggests that firm maturity is a key factor that shapes CSR activities (Wang et al., 2015). Mature firms are more likely to engage in CSR activities as they are more likely to have the slack resources needed to commit to doing so (Wang et al., 2015). Mature firms have both the time and funds to adopt new CSR initiatives and go for implementation (Sharma and Kiran, 2012). As anticipated, it is shown in Table 7.3 that firm age is positively associated with voluntary CSR in both models (Model 3 and Model 4). These findings offer a solid support for this study’s prediction. Findings of the fixed effects model and random effects model report that more mature firms engage more in voluntary CSR and these findings appeared to be consistent with previous research (Kiran, 2012; Wang et al., 2015; Withisuphakorn and Jiraporn, 2015).

Figure 7.4: The relation between concentrated ownership$^2$ and voluntary CSR

![Voluntary CSR Graph](source: Developed by the author)
This study’s findings indicate that when examining the level of engagement in voluntary CSR, the researcher must consider firm age for being a crucial determinant of voluntary CSR. Firms engage more in CSR as they turn more mature. Mature firms tend to be managed by expert directors who appreciate the beneficial outcomes of voluntary CSR for the firm’s long-term basis. Mature firms tend to be large in size and larger firms tend to have more pressure to respond to voluntary CSR. Withisuphakorn and Jiraporn (2015) provided evidence of the key role of firm age in enhancing general CSR using 13 combined ratings of CSR including CG, diversity, community, environment, employee relations, human rights, product, military, alcohol, tobacco, gambling, firearms and nuclear power. However, this study added more support to the literature by offering evidence emphasising the crucial role of firm age in increasing the levels of voluntary CSR engagements.

Table 7.3 shows that the increase of dividends payout has a positive but insignificant relationship with voluntary CSR in the fixed effects and random effects models. Findings in the table show that dividends payout has no significant impact on the level of voluntary CSR engagements of UK firms. These results paralleled previous literature which assumes that CSR engagement does not subtract from cash dividends paid-out, but instead CSR investments and cash dividends paid-out tend to increase simultaneously (Rakotomavo, 2012). In line with previous research that show a positive relationship between dividends payout and CSR activities (Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015), this thesis reports a positive but non-significant relationship between dividends payout and voluntary CSR that casts doubt on the existing literature concerning the proxy used for the dividends payout variable. The insignificant relationship of these results is not surprising as this study concerns voluntary CSR that can be considered as a long-term strategy, hence shareholders require capital gain as an outcome of such investment rather than capital income. As a result, a decision regarding dividends payout would not impact CSR expenditure. This means that shareholders concentrate on capital gained from value added to their shareholdings as a result of investing in voluntary CSR as well as investing in R&D rather than focusing on capital income received as dividends.

These findings show that a high level of engagement in philanthropic and charitable activities tend to be adopted by firms who can afford investing in CSR and it does not impact shareholders’ expected payout. This paralleled Rakotomavo’s (2012) conjunctures and previous studies alike. Previous studies evidenced that dividends payout is positively associated with
CSR (Arora and Dharwadkar, 2011; Rakotomavo, 2012; Kim and Jeon, 2015) but, although this study also provides a positive relationship, this relationship was found to be insignificant. In discovering the relationship between cash dividends paid-out and CSR of US firms, Arora’s and Dharwadkar’s (2011) results revealed a positive and significant relationship between cash dividends paid-out and CSR constructs (positive CSR and negative CSR) using the KLD database. Consistent with Arora and Dharwadkar (2011), Rakotomavo (2012) also used US data in discovering whether corporate investment in social responsibility takes away from expected dividends and found a positive and significant relationship between CSR and dividends pay-out using multiple dimensions of CSR. While Arora and Dharwadkar (2011) and Rakotomavo (2012) used US data, Kim and Jeon (2015) investigated the relationship between dividends rate and CSR using two non-US data samples. Kim and Jeon (2015) considered multinational enterprise (MNE) subsidiaries in Korea and firms in Korea and measured CSR by the ratio of donation to sales and used the ratio of dividend provision to total sales as a proxy for dividend rate. However, Kim and Jeon (2015) revealed consistent findings with those of Arora and Dharwadkar (2011) and Rakotomavo (2012) and these findings indicate that dividends rate is positively associated with CSR in both samples. Unlike prior scholars who used a variety of ratings to measure CSR (Arora and Dharwadkar, 2011; and Rakotomavo, 2012; Kim and Jeon, 2015), this thesis distinguished itself by using a unique measure for voluntary CSR that was based on the level of engagement in community and philanthropic activities and, despite that, similar outcomes were obtained. This thesis’s outcomes contributed to the existent literature by demonstrating that engaging in voluntary CSR does not significantly impact cash dividends payout. Moreover, none of these scholars considered UK data and neither did they investigate the relation between voluntary CSR and dividends payout when dividends payout was measured by the ratio of dividends per share to earnings per share.

Table 7.3 illustrates that the increase of research and development intensity has a significant positive relationship with voluntary CSR in both models: the fixed effects and random effects models. As anticipated, results in Table 7.3 reveal that high involvement in R&D has a significant positive relationship with the high levels of voluntary CSR engagements. These results support the literature which suggests that most firms which are actively involved in CSR are also pursuing a differentiation strategy, engaging in complementary strategic investments in research and development (McWilliams and Siegel, 2000). These results are consistent with prior studies (McWilliams and Siegel, 2000; Padget and Galan, 2009; Maria and Sanchez, 2011;
Lioui and Sharma, 2012; Chakrabarty and Wang, 2012). Results indicate that R&D and voluntary CSR are parallel activities as both can lead to the mean target for offering firms a competitive advantage. Involving in such activities can enhance the welfare of the community and satisfy stakeholder expectations.

Results evidenced that a model that fails to include R&D intensity in examining the firm’s level of engagement in voluntary CSR will be mis-specified and fundamentally flawed. This supports McWilliams’s and Siegel’s (2000) arguments. The importance of the role of R&D in enhancing voluntary CSR was supported by the view that R&D intensity offers other important variables with a bearing on the relationship between CSR and financial performance (McWilliams and Siegel, 2000). Scholars including McWilliams and Siegel (2000), Bouquet and Deutsche (2008) and Prior et al. (2008) had seen R&D intensity as an important driver for CSR and found that R&D intensity is positively correlated with CSR. Consistently, results of the random effects and fixed effects models have also seen R&D intensity as a key driver for voluntary CSR.

While prior studies have used a variety of dimensions as a proxy for CSR (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Maria and Sanchez, 2011; and Lioui and Sharma, 2012), this thesis distinguished itself by using a new measure for voluntary CSR that was based on the level of community investments and philanthropic activities. Regardless of using a different dimension of CSR, outcomes of prior research support this study’s results. These studies had shown a high degree of consistency related to the key role of engaging in research and development on enhancing CSR and proved a positive and statistically significant relationship between R&D intensity and CSR activities (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Maria and Sanchez, 2011; Lioui and Sharma, 2012; Chakrabarty and Wang, 2012). However, none of the prior studies considered UK data and neither did they examine the relationship of R&D and CSR ratings used for voluntary CSR in this study. Therefore, this thesis’s results contributed to the literature by demonstrating that R&D is a key driver for good voluntary CSR of UK firms over the period of post-recession (2009-2013).

7.4.3 Control Variables (Board Characteristics) and Voluntary CSR

Table 7.3 illustrates that board gender has a positive and statistically significant relationship with voluntary CSR in both models (the fixed effects model and random effects model). These outcomes provide strong support for this study’s prediction. Outcomes in Table 7.3 reveal that a
higher percentage of female directors in the board has a significant positive relationship with higher levels of voluntary CSR engagements. These outcomes show support to the literature discussed in Chapter 6 in pages 163-164.

### 7.5 Chapter Summary

This section summarized the outcomes of the random effects model and fixed effects model. Table 7.4 illustrates the comparisons of this study’s results and the propositions developed from the prior literature.

#### Table 7.4: Key drivers for good voluntary CSR

<table>
<thead>
<tr>
<th>Key Variables for Good Voluntary CSR</th>
<th>Outcomes of the Fixed Effects Model</th>
<th>Outcomes of the Random Effects Model</th>
<th>Predicted impact on Voluntary CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEDs’ ownership</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
</tr>
<tr>
<td>NEDs’ ownership</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
</tr>
<tr>
<td>Concentrated Ownership</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
<td>Negative Relationship</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
</tr>
<tr>
<td>Firm Age</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
</tr>
<tr>
<td>Dividends Payout</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
</tr>
<tr>
<td>R&amp;D Intensity</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
</tr>
<tr>
<td>Board Gender</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
<td>Positive Relationship</td>
</tr>
</tbody>
</table>

Source: compiled by the author

The previous chapter highlighted the probability relationship of both engagements of CSR and other independent variables using the Logit Model for binary dependent variables. This chapter confirmed the relationship between boards’ ownership structure and voluntary CSR, and discovered a curvilinear relation between them using panel data. The chapter also highlighted the relationship of voluntary CSR and the key drivers for good voluntary CSR using the random effects model and fixed effects model. The following chapter provides a conclusion of this study and discusses the theoretical and practical contributions.
Chapter Eight: Conclusion

8.1 Chapter Overview
This study had a number of objectives. Fundamentally, via a thorough review of the existent literature, a model was developed and investigated to examine the impact of boards’ ownership structure and decision-making on the determinations of CSR engagement. This study focused on boards’ ownership as an issue of internal mechanisms of CG (Jensen, 1983). This adds debate to the aspects of the agency theory such as that of directors’ ownership that can be used as a solution for the separation of ownership and control as a good way to align the interests of directors with those of shareholders (Jensen and Meckling, 1976). Previous research concerning the effectiveness of ownership rewarded by firms to their directors in order to obtain effective CG indicates the greater diffuseness in ownership structure that makes the agency problem more severe (Demsetz and Villalonga, 2001). The prior research considered the impact of this mechanism on firm performance considering the short-term basis. This study concentrates on the impact of this mechanism on CSR engagements considering the long-term basis. To test the model and hypotheses developed from the literature, secondary data was collected from different sources and databases. Analysis of this data has resulted in a number of substantial outcomes to increasing our knowledge of the mechanism of boards’ ownership structure, an area of CG effectiveness that many CG and CSR researchers have been recently calling for (Gillan and Starks, 2000; Klein, 2002; Mitra and Cready, 2005; Roberts et al., 2005; Pye and Pettigrew, 2005; Huse, 2005; Minichilli et al., 2009; Mitra and Hossain, 2011). This chapter will report an overview of the research, a discussion of the key findings, an outline of the study’s contribution to knowledge, a discussion on the implications of this research for management and policy makers, an identification of the research limitations of this study, an outline of future areas of research, a summary of the final conclusion and an outline of the final notes on the initial research objectives.

8.2 Overview of the Research
A comprehensive literature review exploring the research on boards’ ownership structure suggested that there is limited understanding of the factors explaining CG effectiveness. The aim of this study is to investigate the effectiveness of boards’ ownership structure, as an element of CG mechanism, in order to contribute to the literature and to identify how boards’ ownership structure may help to add to the long-term value of an enterprise (maximizing shareholders’
value through capital gain) by engaging in CSR ratings. From this literature review, a model and hypotheses were developed to discover the relationship between boards’ ownership structure and voluntary and mandatory CSR. To be able to examine the reliability of the model, secondary data were used and collected manually from companies’ annual reports, Global Business Browser, Data Stream, and Business in the Community. Examinations of this study were conducted on a final sample of 111 companies which were drawn from the FTSE4Good UK Index for the period 2009-2013. The author developed new rankings of CSR – namely voluntary and mandatory CSR – that were used to offer greater insights to the CG and CSR literature. Voluntary CSR incorporates social investments including charitable donations and philanthropic activities, while mandatory CSR involves the level of compliance to the relevant standards and regulations. The author believes that voluntary and mandatory CSR are different engagements and should be tested separately as firms decide to engage in voluntary CSR by choice to gain a competitive advantage and enhance reputation for business sustainability. Firms have to comply with the law and enhance their level of engagements in mandatory CSR as there are obligations for them to do so. Data of voluntary and mandatory CSR were collected from the BITC source, the specialist business network that emerged in 2002, and determines how the activities of 117 UK companies positively impact the environment, local communities, their own staff and the market as a whole in its CR Indices (FT, 2010). CR Index Tables include those companies which involve in ratings related to voluntary CSR and other tables include companies which engage in ratings related to mandatory CSR and scored 70% and over. According to BITC (2012), the CR Index has four performance bands; Platinum (lists firms scored ≥ 95%); Gold (lists firms scored ≥ 90% and up to 95%); Silver (lists firms scored ≥ 80% and up to 90%); and Bronze (lists firms scored ≥ 70% and up to 80%). In this study, CSR engagement was firstly classified into two ranks: 0 and 1 for stage 1 analysis. Rank 1 indicates for firms that have engaged in CSR by 70% and over and therefore were included in the CR Index, while rank 0 was given to firms that were not included in the CR Index. This classification was used for the Logistic regression model (Logit) that was employed to identify the relationship between boards’ ownership structure and CSR engagements (voluntary and mandatory CSR). The logit model was used to test the probability of hypotheses 1 – 6 on a sample of 111 firms from the FTSE4Good UK Index for the period 2009-2013. All of these hypotheses were accepted at the 1%, 5% and 10% significant levels. The following hypotheses were deemed to be true.
Hypothesis 1: An increase in the ownership stake of CEDs in the firm has a negative association with voluntary CSR
Hypothesis 2: An increase in the ownership stake of CEDs in the firm has a positive association with mandatory CSR
Hypothesis 3: An increase in the ownership stake of NEDs in the firm has a negative association with voluntary CSR
Hypothesis 4: An increase in the ownership stake of NEDs in the firm has a positive association with mandatory CSR
Hypothesis 5: A greater percentage of concentrated ownership has a negative relationship with voluntary CSR
Hypothesis 6: A greater percentage of concentrated ownership has a positive relationship with mandatory CSR

To ensure the validity of hypotheses 1, 3 and 5 stated above, panel data was employed in the stage 2 analysis by considering a restricted sample which includes only firms engaged in voluntary CSR by 70% and over. This analysis was also conducted to entirely meet the aim of this study and answer the supplementary research question – what are the key drivers for good voluntary CSR? It also enables to test the literature related to the control variables of this study (board gender, firm age, ROA, R&D intensity and dividends payout) and ensure the validity of the relevant hypotheses related to boards’ ownership structure.

In the stage 2 analysis, the sample was split up and only firms that engaged in voluntary CSR by 70% and over were kept in the second sample to be the restricted sample for the stage 2 analysis of this study (leaving 53 firms within the restricted sample). Accordingly, CSR engagements were classified into four ranks relevant to their four different bands reported in the CR Index. Rank 1 indicates for the lowest rank, the Bronze band, where firms engage in voluntary CSR by 70 and over up to 80%. Rank 2 indicates for the Silver band where companies involve in voluntary CSR by 80% up to 90%. Rank 3 indicates for the Gold band where firms engage in voluntary CSR by 90% up to 95%. Rank 4 indicates for the highest rank, the Platinum band, where companies involve in voluntary CSR by 95% and over. This classification enabled the researcher to use panel data. Thus, the fixed effects and random effects models were utilised to discover the key drivers of voluntary CSR of UK firms over the period 2009-2013.
8.3 Key Findings

Findings of the Stage 1 analyses confirm that voluntary CSR and mandatory CSR are different features and should be examined separately. Findings show that CEDs’ ownership, NEDs’ ownership and concentrated ownership have a probability of a positive linear relationship with mandatory CSR and this supports the agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983) and stakeholder theory (Freeman, 1984; Donaldson and Preston, 1995). However, results show that CEDs’ ownership, NEDs’ ownership and concentrated ownership have a probability of a negative linear relationship with voluntary CSR, and this indicates that voluntary and mandatory CSR are diverse features and therefore should be investigated separately. This supports the previous literature which called for investigating CSR ratings with different features separately (Strike et al., 2006; Mattingly and Berman, 2006; Godfrey et al., 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011).

The results of the fixed effects and random effects models suggest that CEDs’ ownership, NEDs’ ownership and concentrated ownership have a negative linear relationship with voluntary CSR over the period 2009-2013. These findings confirm the results of the stage 1 analysis and also lend support to hypotheses 1, 3 and 5 stated above. The results also provide evidence of a curvilinear relationship between CEDs’ ownership, NEDs’ ownership and concentrated ownership, and the level of voluntary CSR engagements over the post-recession period. This relationship first decreases when ownership of CEDs, NEDs and concentrated ownership is relatively low (between zero and 12 percent, between zero and 25 percent and between zero and 80 percent respectively), then increase when their ownership becomes excessive. The literature suggests that the increase of directors’ ownership leads to align directors’ interests with those of shareholders, but when directors hold excessive share ownership, firm performance is likely to be impaired as directors who own enough stock to dominate the board could get entrenched (Han and Suk, 1998). This study provides strong evidence of a non-linear relationship between boards’ ownership and the level of voluntary CSR engagements which first decreases, then increases. This study supports the prior literature concerning the curvilinear relationship as the increase of directors’ ownership indicates the alignment of their interests regarding the long-term basis with those of shareholders at a very low ownership (between zero and 1 percent for CEDs and NEDs). Nevertheless excessive directors’ ownership (between 12 and 15 percent for CEDs and between 20 and 30 percent for NEDs) is likely to lessen voluntary CSR because executives who own enough stock to dominate the board of directors could get entrenched (Han and Suk,
1998), and that lends a valuable contribution and casts doubt on the existing literature concerning the agency theory and directors’ reward system (Jensen and Meckling, 1976, Weisbach, 1988; Shleifer and Vishny, 1989). These results suggest that CEDs’ ownership, NEDs’ ownership and concentrated ownership are significant predictors of voluntary CSR.

In addition, the results provided evidence that board gender, firm age, ROA and R&D intensity have a positive linear relationship with voluntary CSR, all at the 1% and 5% significant levels. Only dividend payout appeared to have a marginal positive linear relationship with voluntary CSR at the 10% significant level indicating an insignificant relationship between them. This, to some extent, supports Rakotomavo’s (2012) arguments that engaging in CSR does not subtract from cash dividends payout; instead, CSR investments and cash dividends payout tend to increase simultaneously. The results confirm previous empirical findings of the importance of board gender, firm age, ROA, R&D intensity and dividend payout in predicting CSR (McWilliams and Siegel, 2000; Padgett and Galan, 2009; Bear et al., 2010; Maria and Sanchez, 2011; Chakrabarty and Wang, 2012; Kiran, 2012; Lioui and Sharma, 2012; Rakotomavo, 2012; Fernandez-Feijoo et al., 2014; Margarethia and Isnaini, 2014; Deschênes et al., 2015; Wang et al., 2015; Withisuphakorn and Jiraporn, 2015).

8.4 **Key Contributions**

There are a number of contributions which this study contributes to literature on boards’ ownership structure. First, this study distinguished between voluntary CSR and mandatory CSR for being different CSR engagements, and CG has different perceptions regarding them. The recent literature suggests that there is a growing consensus that CSR ratings have diverse dimensions of engagement that should not be combined (Strike et al., 2006; Mattingly and Berman, 2006; Godfrey et al., 2009; Kacperczyk, 2009; Chiu and Sharfman, 2009; Arora and Dharwadkar, 2011). While an increasing number of empirical studies have examined the perception of CG regarding all CSR ratings combined as a single engagement (McWilliams and Siegel, 2000; Waldman et al., 2006; Padgett and Galan, 2009; Arora and Dharwadkar, 2011; Maria and Sanchez, 2011; and Lioui and Sharma, 2012; Rakotomavo, 2012; Kim and Jeon, 2015; Withisuphakorn and Jiraporn, 2015), this study examined the perception of CG regarding two different features of CSR engagements which were developed specifically for this study, namely voluntary CSR and mandatory CSR. As predicted, this study found the perception of CG
regarding voluntary CSR to be different to their perception regarding mandatory CSR, proving
the differentiation between them, and these findings could be valuable for the use of literature
concerning CSR ratings and firms’ willingness to engage in different ratings of CSR. The study
found that boards’ ownership has a negative relationship with voluntary CSR, and conversely
has a positive relationship with mandatory CSR.

The second major contribution is the examination of a more important issue of CG mechanisms
influencing decision-making regarding CSR. Previous research has paid attention to board
structure mechanism (Pfeffer and Salancik, 1978; Johnson and Greening, 1999). However, this
research is the first empirical study examining boards’ ownership structure as an element of
internal mechanisms of CG (Jensen, 1983) on CSR that contributes to the debate on the agency
theory problems. The literature suggests that the key driver of CSR is the mechanisms of
corporate control (Carlson and Perrewe, 1995; Ciulla, 1999; Paine, 1996; Parry and Proctor-
Thomson, 2002; Weaver et al., 1999; Basu and Palazzo, 2008). This study has been able to
identify the critical importance of boards’ ownership structure in determining the level of
voluntary and mandatory CSR engagements, and this can be used by firms in decision-making
regarding shares rewarded to directors in order to align their interests with those of long-term
oriented shareholders. Findings of this research indicate that share ownership of CEDs, NEDs
and concentrated shareholders has a negative significant impact on voluntary CSR. Findings
show that share ownership of CEDs, NEDs and concentrated shareholders has a positive
significant impact on mandatory CSR. These findings highlight the importance of boards’
ownership mechanism that adds fruitful contributions and casts doubt on the agency theory
(Berle and Means, 1932).

The third contribution is that this is the first empirical study investigating boards’ ownership
structure’s impact on voluntary and mandatory CSR of UK data. Previous scholars have
empirically investigated the impact of managerial ownership on firm performance (considering
short-term basis) that supports the agency theory and shareholder theory. Considering a wide
range of stakeholders by investigating boards’ ownership’s impact on voluntary and mandatory
CSR (paying attention to the long-term basis), results of this study add to the debate regarding
the stakeholder theory. Previous literature suggests that firms need to reward their directors a
certain percentage of shares in the firm in order to align their interests with those of shareholders,
which is maximizing shareholders’ wealth, and thus reduces agency costs (Jensen and Meckling,
This study shows that directors’ decisions concerning a large group of stakeholders differ from their decisions considering only shareholders. Unlike prior studies which evidence that directors’ ownership has a positive relationship with firm performance (Morck et al., 1988; Davis, 1991; Han and Suk, 1998; Short and Keasey, 1999; Palia and Lichtenberg, 1999; Mura, 2007; Benson and Davidson, 2009; Florackis et al., 2009), this research demonstrates that boards’ ownership has a negative relationship with voluntary CSR that adds knowledge to the literature concerning the stakeholder theory (Freeman, 1984).

The fourth contribution of this research is the examination of a multi-dimensional boards’ ownership, a more comprehensive set of boards’ ownership impacting voluntary and mandatory CSR than has been hitherto undertaken. Prior research has examined a single dimension of boards’ ownership (Han and Suk, 1998; Florackis et al., 2009) and others have investigated the combiNEDs’ ownership of directors of the board (Morck et al., 1988; Short and Keasey, 1999). Prior research has considered a smaller set of boards’ ownership mechanisms (Han and Suk, 1998; Florackis et al., 2009), while this study investigated a broader range of boards’ ownership mechanisms including CEDs’ ownership, NEDs’ ownership and concentrated ownership. The literature suggests that NEDs have different incentives to those of CEDs and their roles are based on reviewing the performance of both the board and CEDs (Morck et al., 1988; Cadbury, 2000). The literature also suggests that NEDs, like CEDs, will monitor effectively only if they have a significant investment in the firm (Jensen, 1993; Morck et al., 1988). The literature also suggests that concentrated shareholders, who have a large stake in a company, have both the incentive and the ability to oversee management in order to protect their investment (Shleifer and Vishny, 1986). Consequently, this study considered a multi-dimensional ownership to test the validity of prior literature. This study has been able to identify the interests of different groups, the CED, NEDs, and the concentrated shareholders, regarding voluntary and mandatory CSR and that of the use of knowledge to the mechanism of boards’ ownership structure.

The fifth and final contribution this study makes relates to the implications of the findings for UK board practice and UK policy on CG in general and on boards of directors in particular. The literature suggests that females on boards are more likely than males to hold a doctoral degree, have gained a broader experience with smaller firms and bring diverse perspectives to the board (Hillman et al., 2002). This study’s results suggest a greater emphasis on board gender (women on the board) that enhances CSR engagements and voluntary CSR in particular. Primarily, this
requires firms to appoint more female directors to represent shareholders in the board. This is supportive of the rules regarding the number of female directors on boards. The findings also suggest that boards need to have members with various ages that allow boards to obtain a variety of knowledge, skills and experience. This has important implications for the selection of board members in order to obtain good CG. This may imply that existing UK recommendations – where companies that do not respond to the requirements can simply report in their annual report and accounts whenever they fail to do so – should become mandatory for listed companies. Increasing the variation of directors’ age and the proportion of women sitting on the board can enhance firms’ competitive position, reputation, and secure sustainability that attracts more investors, particularly those interested in firms with an above average CSR profile. Furthermore, this research found predictive support that enables shareholders, practitioners, and academics to assess how firms could structure reward systems to enhance CG decision-making latitude and voluntary CSR level of engagements.

8.5 Implications for Management and Policy Makers

The results of this study are quite noteworthy and significant to management and compensation committees as policy makers in corporations. For instance, the negative relationship between CEDs’ ownership and voluntary CSR established in Chapter 7 implies that CEDs’ ownership plays a significant role in the management of the agent/principal contract. It provides management with the opportunity to create an impression about their strategy in reducing investment in voluntary CSR to investors with short-term interests and therefore attract more investors with short-term targets and reduce the agency cost of equity. However, it also provides management with the idea that such a strategy (reducing voluntary CSR) would make investors with long-term interests disregard investing in their corporation and thus exit the firm which leads to the increase of the agency cost of equity. To avoid this, management could review their strategy by setting up long-term objectives (promoting community investment projects and disclosing their developed strategy) to attract long-term investors as well.

Such findings are also of great use for the compensation committee of the firm since it provides managements of the compensation committee with the idea to redesign the reward system – particularly the share options – and try to find a way for rewarding CEDs the optimal share ownership that align their interests with those of long-term investors. As a result of this practice, this could also help managements in raising long-term funds from the financial market. The
financial market has a very vital role in raising long-term corporate finance and has a key role in maintaining sustainability by providing long-term financial stability and helping with corporate growth; it attracts other long-term shareholders which leads to greater opportunities for expansion and growth and improved market position and performance, hence achieving firm value added and capital gain. This practice can be applied to NEDs’ ownership as well, as findings regarding the relationship between NEDs’ ownership and voluntary CSR show a similar relationship with those of CEDs.

The outcome of the CEDs’ ownership/mandatory CSR association established in Chapter 6 implies that CEDs’ ownership plays a much more considerable role than merely obeying the law; it plays a significant role in the management of obtaining corporate legitimacy. It offers management with the opportunity to create a good legitimate impression about their firms to investors – particularly those who pay more attention to corporate legitimacy and business stability – and attract more investment and thus reduce the agency cost of equity. According to Jensen and Meckling (1976), executive ownership helps align the interests of executive directors with those of shareholders leading to effective CG and thus reduces the agency costs, so this provides management with the opportunity to disclose CEDs’ ownership that helps to align their interest with shareholders who pay considerable attention to corporate legitimacy and business stability. Again, this can be applied to the association between NEDs’ ownership and mandatory CSR as well. In regard to the association between concentrated ownership and mandatory CSR, this once again offers management with the opportunity to attract investors by disclosing that the concentrated ownership is held by institutional investors who demand legitimacy and business stability for their organisations and again will lead to a reduction in agency cost of equity.

Additionally, the link between board characteristics (board gender) as CG mechanisms and voluntary CSR in Chapter 7 (also variation in board’s age as CG mechanism and voluntary and mandatory CSR in Chapter 6) could be exploited by management to encourage more engagement in community investment and philanthropic and charitable activities, so that meaningful community investment might be required by long-term investors to be offered. This could in turn expand society’s interest in these practices of community investments so that aspects of accountability and the social contract can be established. According to Adams (2004) and Cooper and Owen (2007) a move towards mandating voluntary CSR implementation and
disclosure may enhance CG mechanisms that in turn enhance firms’ engagement to be vigorous participants in their society.

Finally, community engagement and other environmental involvement appeared to be sufficient enough to appease the public and investors these days however, if the demand from stakeholder groups for CSR engagement increases, the demand for community investments will also increase. Demands for CSR will not remain constant; society demands for community engagements based on the times and the context in which current scandals occur. As an example, Hess et al. (2002: p.110) refer to the “new wave of corporate community initiatives” as a response to the September the 11th disaster in 2001, where concerns were raised to question the contributions corporations were making towards improvements in their local communities. If this were to intensify, senior managers would receive more pressure to engage more in community investment and society improvements.

8.6 Limitations of the Study

Despite a number of methodological improvements of the research design, this study is unavoidably constrained by limitations. Starting with CSR rating, this study relies on BITC ratings that rank 117 UK firms in terms of environmental and local communities’ engagements (FT, 2010). The CR Index includes firms that involve in voluntary CSR by 70% and over (BITC, 2012). Other firms that engage in voluntary and mandatory CSR by less than 70% are excluded from the CR Indices. Therefore, they were given the rank of zero despite their satisfactory contribution in voluntary and mandatory CSR activities. Results assume that zero rank indicates for non-engagement while in fact involvement in voluntary and mandatory CSR by less than 70% does not mean that these firms are impacting the local communities, environment and other activities in a negative manner. Hence, it can be noticed that this study examines the impact of boards’ ownership structure on voluntary and mandatory CSR of only firms that engage proactively in local communities, environmental activities etc. It would be better if the CR Indices include firms that engage in CSR activities with a smaller percentage to obtain better results in examining the relationship of CG mechanisms and CSR.

Secondly, it was proposed to collect data – related to CEDs’ ownership, NEDs’ ownership and concentrated ownership – from Morningstar Company Intelligence Database (formerly Hemscott Company Guru) that contains information on 300,000 British companies. It was chosen for
being a database which provides financial information, share price data, board of directors’ information and a variety of descriptive details as well as information regarding directors’ shareholdings. Unfortunately, it was found that this source is unreliable for this study for not being free of limitations. For instance, it provides share ownership of only events taking place during the period required and it does not provide the existent shareholdings. Hence, ownership data were collected manually from companies’ annual reports for the accuracy of the study’s results and this has lengthened the time period of data collection (as data were collected from 555 annual reports of 111 firms for the period 2009-2013).

Thirdly, the proxies used to measure control variables were largely based on prior literature. Although the researcher adopted these proxies based on sound theoretical reasons, there are alternative proxy measures that could have been adopted and this could be investigated by further research. For instance, total assets could have been used as a proxy for firm size instead of employee number. Also, return on equity could have been used to measure firm performance instead of return on assets.

Fourthly, the study is limited to a category of large companies listed on the FTSE4Good UK Index that provides the context of this research. Collecting data regarding different ownership holders and social performance ratings for medium and small companies during the period of 2009-2013 will need a much longer time. Fifthly, this research used a single country and hence the results will be limited to the UK and not generalised to other countries.

8.7 Further research
The outcomes and limitations of this study point to a number of areas requiring further research. First, a study investigating the impact of multi-dimensional ownership structure on different ratings of CSR engagement is an area worthy of further exploration. Despite the issue surrounding the metric of CSR – where CR Index includes only firms engage by 70% and over – the negative relationship of boards’ ownership in suggesting that CEDs, NEDs and concentrated ownership reduce the level of voluntary CSR engagement points to it being a fruitful area of research.

Secondly, given the negative nature of the relationship between boards’ ownership structure and voluntary CSR over the period of post-recession, it opens up the possibility of repeating the
study considering the period of pre-recession and discover whether a curvilinear relationship exists over this period. This will allow the findings of the study to be compared with a period of different economic conditions and helps increase the understanding of boards’ ownership impact on voluntary CSR.

Thirdly, a cross-country investigation could be undertaken to better understand the impact of national contexts on boards’ ownership structure and different ratings of CSR. Replicating the study using data from other countries will enable cross-country comparison. As suggested by previous literature, a cross-country investigation would allow researchers to examine CG mechanisms both within-country and between-countries, and therefore help in developing a universal framework for exploring CG (Minichilli et al., 2010).

Fourthly, findings of this study apply to large companies. Generalising these findings on medium and small companies is a good idea for future research. This will allow the finding of the study to represent the whole market and help expand the understanding of boards’ ownership structure mechanism towards CSR.

Fifthly, results show that boards’ ownership structure has a dissimilar relationship with voluntary and mandatory CSR suggesting that boards do have different perceptions towards diverse ratings of CSR. Investigating the impact of boards’ ownership structure on each rating of CSR separately is a fruitful area for further research.

Sixthly, a study of CG mechanisms and CSR could enhance the understanding of the key drivers leading to effective CG and good CSR. The results suggesting that board characteristics are good predictors of CSR lead to questions regarding board specifications such as board gender and variation in directors’ age. Future research exploring the key drivers for good voluntary CSR is an area that has considerable opportunity for opening up another direction of future research in which a greater understanding of what makes firms engage more in CSR could be obtained.

8.8 Final Conclusion
This study has provided a valuable contribution to the existing literature on boards’ ownership structure as an element of CG mechanism and its impact on voluntary and mandatory CSR. It
provided an empirical study in the UK context and found a non-linear relationship between boards’ ownership and voluntary CSR, and added to the debate on the agency theory and stakeholder theory. It contributed to the research on boards’ ownership structure as an issue of CG mechanism, and on CSR in several ways. Firstly, it distinguished between two different CSR engagements, voluntary and mandatory CSR. Secondly, it examined the mechanism of boards’ ownership structure regarding voluntary and mandatory CSR for the first time. Thirdly, it was the first to investigate boards’ ownership structure’s impact on voluntary CSR within a stakeholder context considering the long-term basis for the sustainability issue of the firm. Fourthly, it examined a more comprehensive, multi-dimensional boards’ ownership to explain its mechanism regarding CSR than has hitherto taken place. Fifthly, it has a number of implications for UK board practice and UK policy on CG. Particularly, the outcomes of the importance of board gender (female directors sitting in the board) and the variation in directors’ age highlights the need for boards to have more female directors sitting on them to enhance voluntary CSR and the importance of board selecting members with a diverse range of ages to obtain various knowledge, skills and experience that enhance CG. Finally, the study offered suggestions on future research on boards’ ownership structure and CSR.

8.9 Final Notes on the Initial Research Objectives

In Chapter 1 of this thesis, the researcher stated that the study was to achieve four research objectives: the first was to critically appraise the existing literature concerning the influence of CG mechanisms on CSR and identify the research gap. This objective has been met. In Chapter 2 of this thesis, the researcher reviewed the literature related to CSR and discussed previous studies on CG and CSR. The review assessed different key drivers for good CG and CSR such as firm and board characteristics. The review revealed a conspicuous gap in the literature as there is very little extant studies on board features as a key driver for CSR that necessitates investigating a multi-dimensional boards’ ownership structure and CSR. The review also revealed an obvious gap in the literature of CSR as there is very limited existing literature that distinguishes between diverse ratings of CSR, which necessitates examining ratings related to voluntary CSR and other ratings relevant to mandatory CSR separately driven by different perspectives. In Chapter 3 of this thesis, the theoretical framework of this study was discussed in order to properly position the current study and understand CG and CSR phenomena. Multiple theories were discussed from two different categories: The stakeholder, legitimacy, institutional, and resource dependence theories were examined to explore the key drivers for voluntary and
mandatory CSR as external drivers while the agency theory was examined to explore the instrumental economic and managerial perspectives regarding voluntary and mandatory CSR as an internal driver. The review of theories in this context led to a total of ten propositions which set the ground of the next objectives where the propositions were developed into a research question, theoretical model and testable hypotheses examined in this study.

The second research objective was to develop a theoretical model from the literature in order to gain a better understanding of how boards’ ownership structure of UK firms can enhance CSR ratings. This research objective has been met. In Chapter 4 of this thesis, the researcher attempted to synchronise the propositions deduced from reviewing theories in Chapter 3 into the main research question and the development of six hypotheses related to this research question. From the total of six hypotheses developed, three of which were based on the interactions of legitimacy, agency, institutional and resource dependence theories, while the other three were based on the interactions of stakeholder and agency theories. The model was developed and discussed, which links the literature discussed in this study, theories and developed hypotheses.

The third research objective was to test the validity of the theoretical model developed through the defined set of hypotheses. This research objective has been achieved. In Chapter 6 of this thesis, the researcher employed the agency, legitimacy and stakeholder theories and tested six hypotheses to achieve this objective. These results of the investigation suggest that CEDs’ ownership, NEDs’ ownership and concentrated ownership are significant predictors of voluntary and mandatory CSR. While CEDs’ ownership, NEDs’ ownership and concentrated ownership show a probability of a positive relationship with mandatory CSR, the probability of this relationship appeared to be negative for voluntary CSR. In Chapter 7 of this thesis, the researcher tested $H1$, $H3$ and $H5$ further to identify the key drivers for voluntary CSR. Findings confirmed that CEDs’ ownership, NEDs’ ownership and concentrated ownership are significant predictors of voluntary CSR. Results showed that CEDs’ ownership, NEDs’ ownership and concentrated ownership have a negative impact on the level of engagement in voluntary CSR. A non-linear relationship was also discovered between CEDs’ ownership, NEDs’ ownership and concentrated ownership and voluntary CSR. In addition, results confirmed that board gender and board age play a significant role as key drivers for voluntary CSR. A strong positive association was discovered between board gender as well as board age and voluntary CSR, indicating that
board characteristics have an influence on the level of engagement of voluntary CSR. For more details of these findings see Section 8.3 above.

Finally, the fourth research objective was to derive recommendations for effective CSR practice, taking into account the importance of boards’ ownership structure implications. This objective has been met. In the current chapter (Chapter 8: Section 8.5 above) the implications of management and policy makers were discussed to achieve this research objective.
References


Appendices

Appendix 1: CR index 2012 ranking based on community investment and voluntarily environmental issues
Appendix 2: CR index 2013 ranking based on environmental management in regard to energy consumptions and operational strategy and performance

2013 England East Environment Index Results

The Environment Index enables businesses and organisations to measure and benchmark their environmental management and performance. The Index assesses participants' integration of strategy into their operations, environmental management and their performance in reducing their negative impacts on the environment. This year, we are delighted to invite and include businesses and organisations with activities in the North East, Yorkshire and Humber and the East Midlands. Find out how this year's participants have performed below.

For further information go to [www.biteone.uk/environment-index](http://www.biteone.uk/environment-index) with full analysis, reports and case studies.

The 2013 England East Environment Index has been kindly sponsored by ASDA Stores Ltd.
Appendix 3: The Hausman Test

<table>
<thead>
<tr>
<th></th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>Sqrt(diag(V_b-V_B))</th>
<th>S.E.</th>
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<td>CEDOwn</td>
<td>-0.1390121</td>
<td>-0.1519798</td>
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Test: Ho: difference in coefficients not systematic

\[ \text{Chi2}(8) = (b-B)' \cdot [(V_b-V_B)^{-1}] (b-B) \]

\[ = 18.81 \]

Prob/chi2 = 0.0434

The Hausman test was significant at (P<0.05) and therefore rejected the null hypothesis which states that the fixed effect model is appropriate.
Appendix 4: Firms Included in the final sample

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<th>Firm</th>
<th>Number</th>
<th>Firm</th>
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<td>International Personal Finance</td>
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<td>5</td>
<td>Amlin</td>
<td>61</td>
<td>Kingfisher</td>
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<td>Land Securities Group</td>
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