The impact of corporate social responsibility on earnings quality in UK listed firms

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Abstract: A business committed to CSR activities can establish a favourable reputation in the market hence this reputation can be used to mislead the market by making them rely on the financial reporting of the organisation. This study aimed to investigate the relationship between CSR and earnings quality for firms listed on FTSE 350. Besides, it aimed to explore the impact of CSR on the motivation of the management to improve the earnings quality or manage earnings. The research has applied LSDV regression and OLS regression on the data collected from 217 firms listed on the FTSE 350. The respective regression models applied by keeping earnings quality as a dependent variable and range of independent variables such as CSR, SIZE, GROWTH, LEVERAGE and ROA. Besides, the correlation coefficient has also been calculated despite, the result could not reveal the nature of the relationship between the variables hence regression model was applied. The results have revealed no relationship between earnings quality and CSR in the case of LSDV regression model. The same has been observed for the OLS model however, there exists a relatively significant relationship between earnings quality and LEVERAGE. Similar findings recorded for earnings quality and GROWTH.

Keywords: CSR; Earnings Quality; FTSE 350; OLS Model.

1. Introduction

A business operates for success in the market and for serving the need of the market that leads to performance reporting so that the stakeholders can be aware of the business ability to satisfy the desired objectives of the stakeholders. Performance reporting is a technical and significantly important area because the performance of one business can potentially influence the range of market forces. There are several underlying factors for which a business can manipulate on financial reporting, this gives wrong information to the market that has several repercussions including misleading the investor and gaining benefit from the negligence in the market (Kothari, et al., 2005). Reporting on the performance of a business can have legal, moral and ethical perspectives. Performance reporting with any fabrications and intentional alterations can lead to ethical violations. There are certain ethical initiatives that are considered as a source of elevating the quality of financial reporting. According to Schwartz (2004), an organisation involved in ethical activities is considered as more inclined to fair reporting of financial performance. Corporate social responsibility (CSR) is a combination of ethical activities that are executed by the organisation for the welfare of the environment and society (McWilliams et al. 2006).

A business committed to CSR activities can establish a favourable reputation in the market hence this reputation can be used to mislead the market by making them rely on the financial reporting of the organisation. It implies that even the fabricated performance reporting can be considered flawless due to the association of the organisation to the CSR activities. Therefore, CSR and other ethical activities can be a source of deception and can also act as a stimulator for improved earnings quality. However, if CSR comes into use for the exploitation of market trust and confidence then a more holistic approach is required to be adopted for analysing the earnings quality.

Research Objectives:

This research has been conducted with an aim to investigate the relationship between CSR and earnings quality for firms listed on FTSE 350. It is possible for a firm to use the involvement in CSR activities as a deception for managing earning quality however, naturally, CSR should lead to the elevation of earnings quality. The research has considered a range of firms from different market sectors so that the given relationship can be considered irrespective of the type of business or market sector. Therefore, the aim of this research has been targeted from a holistic approach in order to gain a productive outcome from the research. The research aim has been divided into

the following objectives so that the achievement of each objective can lead to the achievement of overall research aim. The objectives of this research are as follows:

- To investigate the theoretical debate surrounding the relationship between CSR and earnings quality.
- To explore the impact of CSR on the motivation of the management to improve the earnings quality or manage earnings.
- To investigate the positive influence on earnings quality due to CSR.
- To understand the use of CSR for covering the wrongdoing and earnings management.

2. Literature review

Corporate social responsibility (CSR) has long been considered as an ethical way of conducting operations however, the evolution of CSR has made it somehow obligation for businesses to sustain their position in the market. CSR is an approach to negotiate the role of the business in society (McWilliams et al., 2006). This research considers the relationship between CSR and earnings quality. It includes the analysis of CSR development in the UK. The theoretical debate surrounding CSR and earnings quality respectively.

Background Information and Institutional Setting
- **Earnings Quality**

Earnings quality of an organisation can be representative of future earnings. If current earnings cannot represent future earnings pattern, then the earnings quality can be low (Schipper and Vincent, 2003). A business earnings in normal circumstances can be used as a tool for predicting future performance. According to Francis et al. (2004), earnings quality can be considered based on several attributes such as estimated discretion can be a characteristic of lower quality whereas degree to which economic reality can be reflected is a characteristic of high quality.

- **CSR**

The concept of CSR has evolved in both meaning and practice. In the classic perspective, the concept of CSR was limited to philanthropy that extended to the relationship between the business and society (Secchi, 2007). According to Lee (2008), CSR is based on the act of an organisation of taking responsibility for the impact on suppliers, customer, employees, environment and stakeholders due to the operational activities.
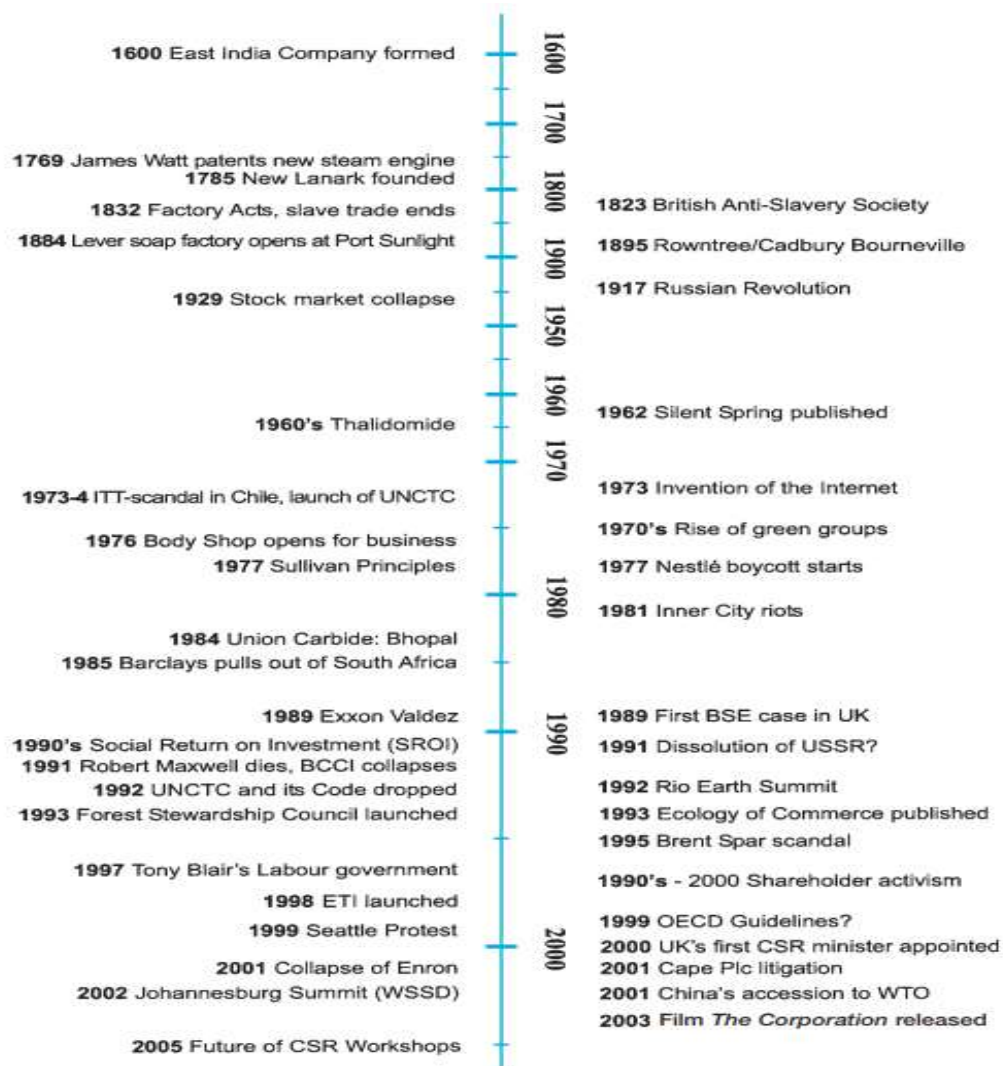
- **CSR and Earnings Quality**

Business transparency is a growing phenomenon that directs employees, customers, investors and stakeholders to expect transparency from a business. The aspect of transparency along with the growing use of ethics as a differentiating factor has extended the CSR from large corporations to the necessity of all businesses. Transparency is associated with earnings quality of a business, it is the quality of reported earnings through which the future earnings can be predicted (Melumad and Doron, 2008). CSR has been linked with earnings quality because adequate reporting of the earnings by the business is an aspect of CSR. A socially responsible business deemed to report earnings without any fabrication hence maintaining the earnings quality (Francis et al., 2004).

CSR can be in different forms including social welfare activity, transparent reporting, serving stakeholder interest and many more. The business can provide transparent and reliable financial information as an act of socially responsible initiative. It is common for CSR oriented businesses to constrain earnings management hence providing reliable and transparent financial information (Alsaadi et al., 2017). CSR can be adopted for certain underlying motives such as providing cover to corporate misconduct. It means CSR can be positively related to earnings management as well as earnings quality.

- **CSR Development in UK**

CSR application and status in a country relies on its economic development. In the case of the UK, the country is developed that provides an ideal breeding ground for CSR. However, the UK has come a long way to the existing level of CSR practices in the country. According to Detomasi (2008), there was a time when the UK market was mostly sceptical about CSR whereas today it is a mainstream activity that determines an organisation legitimacy to operate in the market. In addition, CSR is not a generalised concept in the market instead it has specific dimensions for certain market sector along with some regional perspectives. Figure 1 shows the development of CSR in the UK and it is associated constituencies. It all started in 1600 when the UK established East India Company that aimed to explore the resources of underdeveloped parts of the world and enable them to develop. Over the years numerous scientific and social developments in the UK have targeted the betterment of social life.

1600 East India Company formed — 1600

— 1700

1769 James Watt patents new steam engine
1785 New Lanark founded — 1800
1832 Factory Acts, slave trade ends   **1823** British Anti-Slavery Society
1884 Lever soap factory opens at Port Sunlight — 1900   **1895** Rowntree/Cadbury Bourneville

1929 Stock market collapse   **1917** Russian Revolution

— 1950

— 1960
1960's Thalidomide   **1962** Silent Spring published

— 1970
1973-4 ITT-scandal in Chile, launch of UNCTC **1973** Invention of the Internet

1976 Body Shop opens for business   **1970's** Rise of green groups
1977 Sullivan Principles   **1977** Nestlé boycott starts

— 1980   **1981** Inner City riots

1984 Union Carbide: Bhopal
1985 Barclays pulls out of South Africa

1989 Exxon Valdez   — 1990   **1989** First BSE case in UK
1990's Social Return on Investment (SROI)   **1991** Dissolution of USSR?
1991 Robert Maxwell dies, BCCI collapses
1992 UNCTC and its Code dropped   **1992** Rio Earth Summit
1993 Forest Stewardship Council launched   **1993** Ecology of Commerce published
                                                  1995 Brent Spar scandal
1997 Tony Blair's Labour government   **1990's - 2000** Shareholder activism
1998 ETI launched
1999 Seattle Protest   **1999** OECD Guidelines?
                                         — 2000   **2000** UK's first CSR minister appointed
2001 Collapse of Enron   **2001** Cape Plc litigation
2002 Johannesburg Summit (WSSD)   **2001** China's accession to WTO
                                                  2003 Film *The Corporation* released
2005 Future of CSR Workshops

Theoretical Debate

CSR has transformed over the year despite in the last two decades it has rationalised and has been associated with aspects like stakeholder management and reputation of a business. Nonetheless, the management quest to follow CSR practices is due to the relationship of organisational performance with the CSR (Orlitzky et al., 2003). Today, CSR rationalised to a point that most of the Fortune 500 as well as FTSE 350 not only promote their CSR initiatives but also publish it in their annual reports (Vogel, 2005).

During the 1950s and 1960s, CSR was not considered as a solution of all ill instead it was a positive development that was required to be encouraged (Lee, 2008). At the time, the responsibilities of business were not clearly articulated. Generally, the social benefit was promoted so that the wider public can gain from the operations of a business. However, the management in the organisation considered CSR as a source of bottom-line financial destruction (*ibid*).

CSR went through another era during the 1970s, CSR received wider perspective that considered social and economic reconciliation hence economic gain cannot be possible without ensuring a social gain (Lee, 2008). A question considered that an organisation should engage in CSR activities as it can destroy stockholder interest. The answer came that organisation can damage stockholder interest by engaging in CSR however, the stockholder interest can be diversely considered. It is in the stockholder interest to preserve the surrounding society. If the surrounding society deteriorates then it is possible for a business to lose customer base and support structure (Detomasi, 2008). Therefore, the well-being of the environment including the society is in the interest of the stockholder. It implies that all action in pursuit of social benefit serves the interest of stockholder.

CSR developed significantly during the 1980s by the development of three-dimensional models of corporate social performance (CSP), it includes CSR, corporate social responsiveness and social issues (Garriga and Melé, 2004). It shows that CSR has been widely accepted as a component of business performance. In addition, economic and social goals considered beyond the discussion of incompatible trade-off. Economic and social goals combined

in the total social responsibility that included legal, economic, ethical and discretionary. Although some categories can carry more weights such as economic category can be considered as more important than ethical despite each category was part of total responsibility (Secchi, 2007). Therefore, the development of the new approach was significant for CSR. The model had been theoretically applauded without any significant empirical acceptance. There was a lack of measurement criteria for CSP that lead to the difficulty in comparing the social performance of competing businesses (Margolis and Walsh, 2001).

- **Stakeholder Theory**

The last decade of the 20th century focused on the reasons the CSR became a source of better performance by some businesses than the others. Stakeholder model developed for partially justifying the superior performance by some businesses (Gao et al., 2014). The consideration of wider stakeholders means a business can develop a better response for each stakeholder hence satisfaction of each stakeholder eventually leads to better performance by an organisation (Booth and Schulz, 2004). The significance of the stakeholder model lies in the fact that it envisions the purpose of a corporation in a different manner. However, the stakeholder model diminishes the difference between social and economic goals instead the central issues emerged in the form of corporation survival. A corporation survival relies on more than shareholder because employees, government, customer and many other players can play a significant role in the survival of a business (Garriga and Mele, 2004). Stakeholder theory also considered CSR in respect to the moral obligation, it implies that a business has a moral obligation towards all stakeholders including the environment hence environment is required to be preserved. The stakeholder concept further developed by Clarkson (1995), he considered stakeholder issues and social issues separate from each other.

Social issues are public issues that can prompt regulation or legislation. If there is no regulation or legislation for an issue, then the issue can be considered as a stakeholder issue. It implies that social issues are far more critical for a business than stakeholder issues. It is relevant from the perspective of the society that social issues are related to wider society hence the action of business against the society can raise a substantial backlash that can be even capable of destabilising the foundations of an organisation (Linthicum et al., 2010). At present, CSR is embedded in an organisation to an extent that every activity, every action, every policy associated to an organisation required to have an embedded element of CSR (Kotler and Lee, 2005). A business social and economic performance are not separate from each other instead they are due to each other, they rely on each and goes along (Porter and Kramer, 2006).

- **Agency Theory**

Agency theory is based on the relationship between the manager and the shareholder. The conflict between manager and shareholder gives rise to agency cost. The agency problem can exist if the manager has a certain level of opportunistic behaviour, this motivates the manager to act in self-interest instead of striving to maximise shareholders wealth. According to Wiese and Toropowski (2013), an agency relationship is not limited to manager and shareholder, it can be between the organisation and the society, the buyer and supplier etc. It implies that the relationship of the organisation to the environment and stakeholders can also be considered from the perspective of agency theory. Therefore, an organisation is required to operate in the best interest of all stakeholder because the organisation has a responsibility towards all stakeholders based on agency concept (Van Marrewijk, 2003).

Some of the theoretical and empirical research for exploring the relationship between CSR and earnings quality is given in Table 1 below.

Table (1): Prior Research and Empirical Evidence

Study	Country	Period	Sample
Petrovis (2005)	US	1989-2000	323 Firms
Prior *et al.* (2008)	26 Countries	2002-2004	593
Kim *et al.* (2012)	-	1991-2009	23,391 Firms
Bozzolan *et al.* (2015)	24 Countries	2003-2009	5,863 Firms
Rezaee *et al.* (2019)	China	2009-2015	2,580 Firms
Alsaadi *et al.* (2017)	EU	2003-2013	900 Firms

Empirical Evidence and Hypothesis Development

Earnings quality can be estimated by using a range of approaches. Literature has provided the application for some of the relevant models. The discretionary accruals can be used to determine earning quality. Discretionary accruals are directly linked to earnings quality as they are one of the most common tools for managing earnings. In order to estimate earning quality, Alsaadi et al. (2017) used a modified Jones model adjusted for performance. The research conducted by Alsaadi et al. (2017) also considered the drawbacks and strengths of the applied model so that the user can ascertain the potential outcome from the application of the model.

Despite the limitations of the modified Jones model, there is no superior alternative model that can estimate the discretionary accruals with more precision and accuracy (Botsari and Meeks, 2008). This study uses the cross-sectional approach to the modified Jones model instead of the firm-specific time-series approach. The reason for this selection is the Bartov et al. (2000), the rationale provided for the cross-sectional approach is the ability of the

technique in detecting the manipulation of earnings. In addition, the cross-sectional approach can be useful for maximising the sample size and mitigating the issue of survivorship bias that occurs with the time-series model (Dargenidou et al., 2014). A large number of freedom degrees also enable the cross-sectional model to provide accurate estimates of parameters, the same function is the limitation of the time series model. Lastly, Alsaadi et al. (2017), focused on current discretionary accrual instead of total discretionary accrual.

Business transparency is a growing phenomenon that directs employees, customers, investors and stakeholders to expect transparency from a business. The aspect of transparency along with the growing use of ethics as a differentiating factor has extended the CSR from large corporations to the necessity of all businesses. Transparency is associated with earnings quality of a business, it is the quality of reported earnings through which the future earnings can be predicted (Melumad and Doron, 2008). CSR has been linked with earnings quality because adequate reporting of the earnings by the business is an aspect of CSR.

CSR can be in different forms including social welfare activity, transparent reporting, serving stakeholder interest and many more. The business can provide transparent and reliable financial information as an act of socially responsible initiative. It is common for CSR businesses to constrain earnings management hence providing reliable and transparent financial information (Alsaadi et al., 2017). CSR can be adopted for certain underlying motives such as providing cover to corporate misconduct. It means CSR can be positively related to earnings management as well as earnings quality.

CSR is a growing phenomenon whose link has been developed with several aspects of organisational operations. CSR can be associated with earnings management; it can be due to reputation management and it can also be due to the market trends. According to Linthicum et al. (2010), CSR is externally directed initiative of a business that can fulfil the desire of shareholders. Shareholder core desire is to make maximum money while complying with the social rules both required by law and embodied in ethical values. According to Surroca et al. (2010), a common trait can be observed among CSR firms, these firms usually generate profit, they conduct their operations in the legal framework as well as ethical boundaries and usually aim to be considered as a corporate citizen.

Kim et al. (2012) identified the existence of conflicting incentives in the form of potential opportunistic behaviour and moral obligation. The CSR activities can be committed in respect of the stated incentives. Theoretically, moral obligation leads the organisation to act diligently however, the ethical, honest and trustworthy approach of the management bring benefit in the form of corporate reputation. Therefore, ethical behaviour and high moral standards are beneficial for the organisation (Garriga and Melé, 2004). It is the motivation of an organisation towards CSR that lead the strategy formulation based on developing long term relationship with the stakeholder instead of short-term profit maximisation (Chih et al., 2008). CSR is naturally associated with an organisation because an organisation operates in society therefore, serving and securing the interest of the society is a natural outcome from the operations of an organisation. Furthermore, the integrative theory considers the requirement from an organisation to incorporate social demand so that the decisions of an organisation are in compliance to social rules and the reliance of the business on the society also demands the compliance to social rules. CSR is also linked to the self-interest of the manager, the level of manager's ethical reasoning and the firm's moral obligation become a source of motivation for the manager to manage the business in the interest of stakeholders instead of serving own interest (Booth and Schulz, 2004). Similarly, the CSR can act as a tool for controlling the opportunistic behaviour of managers (Gao et al., 2014).

Empirical research has been conducted by Hong and Anderson (2011) based on US nonfinancial firms from 1995 to 2005. The findings of the research revealed that firms with CSR commitment are likely to have a higher quality of financial reporting. In particular, these firms had a positive relationship between CSR and quality accruals and a negative relationship between CSR and earning management. Therefore, earnings quality increase due to the CSR commitment of an organisation. Kim et al. (2012) reported similar findings, the firms with high CSR score are less prone to manipulate real activities or use discretionary accrual thus their financial reports are providing the accurate information of the financial performance of the organisation. Chih et al. (2008) considered earnings loss avoidance and earnings smoothing as tools of earnings management. The findings of Chih et al. (2008) also revealed a negative relationship between CSR and earnings management. Therefore, based on theoretical and empirical findings, the engagement of business in CSR activities leads to a favourable influence on the earning quality and financial reporting quality. Thus, a hypothesis can be created as follows:

Hypothesis 1: CSR is positively related to earning quality

There is an opportunistic behaviour perspective associated with CSR, in this perspective, a manager uses CSR as a tool for satisfying stakeholder demand and to manage their perception of the firm. According to Prior et al. (2008), CSR can act as a tool for distracting the attention of any wrongdoing in the financial reporting of an organisation. The opportunistic behaviour perspective is not limited to manipulation for distracting attention, instead, managers can use CSR for serving their self-interest (Hemingway and Maclagan 2004; McWilliams et al., 2006; Petrovits, 2006). A perception can be created by using CSR as mentioned by Kim et al. (2012), a firm can create a perception of transparency by using CSR. The creation of a positive perception of a firm will help the

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management to secure support from the stakeholder and to legitimise the decisions as well as activities. It implies that earnings manipulation can be managed by using CSR effectively by the management. Empirical existence of the aforementioned phenomenon has been proven by the research of Prior et al. (2008), the research considered the data of 593 firms from 26 countries between 2002 and 2004, the findings revealed a positive relationship between CSR and earning management. It means poor earnings quality can be manipulated by presenting them as high earnings quality. If there is an opportunistic behaviour among the management then it can motivate the management to CSR engagement for influencing the perception of stakeholders, therefore, in this way CSR can be used as an unfavourable tool for effecting the quality of financial reporting. Thus, a hypothesis can be created as follows:

Hypothesis 2: CSR is negatively related to earning quality

CSR can be considered in respect of several outcomes including activities for employee's welfare, environmental sustainability and earnings quality. The improvement of operational responsibility can increase the earning quality because several prior researches has revealed that CSR oriented firms are less likely to engage in earnings management. However, there are also instances where a firm tend to engage in CSR activities so that the cover can be provided for wrongdoings. The diversion of attention to the CSR initiatives can allow the management to manage the unethical activities without letting them appear in the limelight. CSR and better financial performance are an intended outcome whereas CSR and improved financial reporting is the observed outcome.

3. Research Methodology

Corporate social responsibility (CSR) emerged as a mean of maintaining a check on the actions of business in respect of corporate responsibility towards the society. The evolution of CSR has developed it as a predictor of improved earnings quality however, CSR has also been used to cover the unethical measures adopted by the management for crafting business earnings (McWilliams et al., 2006). It implies that CSR can be a source of positive initiatives and a source to provide a cover for negative initiatives of the business. A business engaged in CSR activities can use CSR for projecting an ethical impression of operating activity, this positive impression can also be used as a deception tool because in the cover of ethical impression the unethical activities of the business can go unnoticed. This shows that CSR in relation to earnings quality has multiple dimensions hence the research has aimed for the objective of exploring the positive influence of CSR on earnings quality and to understand the CSR cover for hiding wrong practices in the form of earnings management. The positive and negative relationship between CSR and earnings quality cannot exist at the same time therefore, it is important to unfold the respective relationship for a respective business. Based on the literature reviewed in the prior section of this research, the research hypotheses are:

H_0: CSR has a positive effect on the earnings quality of firms.

H_1: CSR has a negative effect on the earnings quality of firms.

This section deals with the explanation of the methodology adopted for conducting the research. It includes an explanation of the data sample, a period of analysis and variable definition. The section explained the mathematical expression used for measuring earnings quality along with an explanation of the explanatory variable and control variable. Lastly, the regression model adopted for the research has been explained.

Data and Sample Selection

This research considers the firms listed on FTSE 350; the initial sample of firms collected from Thomson Reuters Eikon. The initial sample collected comprises of 351 firms. The firms listed between the period 2007 to 2017 have been selected. The reason for the selection of ten years period from 2007 to 2017 is due to the aim of analysing the period after the financial crisis.

CSR engagement has been measured by taking the social and environmental performance score in the Thomas Reuters Eikon. Financial firms are not included in the sample because these firms have relatively different influence from the financial crisis than other firms operating in the market (Kim et al. 2012). In addition, the practices and trends of earnings quality for financial firms is substantially different than any other form of a business. Apart from financial firms, the research has excluded firms with missing data, extreme value and insufficient information. Therefore, the final sample for this research is 217 firms. Table 1 provides the sample selection procedure.

### Table (2): Sample Selection Procedure

Initial Sample		351
Less: Financial Firms (Insurance companies and Banks)	(134)	
Final Sample		217

The initial sample collected from nine different sectors, table 2 provides the ICB Industry code, the name of the sector, number of firms selected from each sector and the percentage proportion of each sector in the total sample.

Table (3): Sample Breakdown by Sectors

ICB Industry Code	Sector	No. of Firms	% of Final Sample
1	Oil & Gas	10	4.61%
1000	Basic Materials	20	9.22%
2000	Industrials	62	28.57%
3000	Consumer Goods	31	14.29%
4000	Health Care	12	5.53%
5000	Consumer Services	59	27.19%
6000	Telecommunications	5	2.30%
7000	Utilities	8	3.69%
9000	Technology	10	4.61%
Total		217	100%

It is essential to observe the percentage proportion of each section in the total sample. The proportion of each section in the total sample can be analysed by using a pie chart. The graphical representation of table 2 is given in figure 1 in the form of a pie chart.
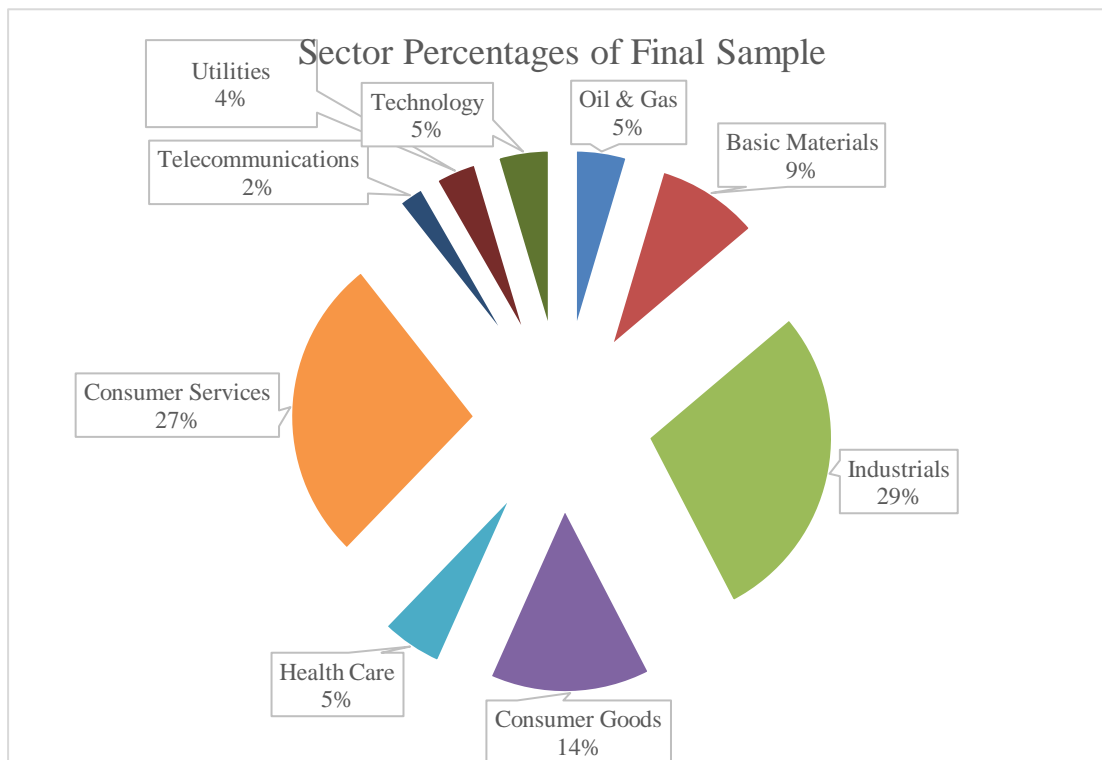
Figure (2): Percentage of Sector in Final Sample

Through the sectors of operation, figure 1 indicates that 29% accounted for industrials, consumer services represented the second sector of 27%. followed by that consumer goods.

Variable Definitions

This section of the discusses the independent and dependent variables of the empirical model. The definitions of each variable are presented collectively in Table 3, prior to the discussion justifying the variables' inclusion in the model.

Table (4): Variables Definitions

Variable		Definition
EQ1		The absolute value of current discretionary accruals-sectional modified Jones Model used for calculating Discretionary accruals
CSR		The CSR considered by taking the average score of social and environmental scores
SIZE		Firm size the log of Total Assets
GROWTH		Firm growth Sales growth (year on year change in sales)
ROA		Profitability Return on assets (EBIT divided by total assets)
LEVERAGE		Calculated as long-term debt divided by total assets
INDUSTRY		Industry fixed effects controlled by using ICB code as a proxy
YEAR		Controls for year fixed effects using year dummies

- **Dependent Variable - Earnings Quality**

Earnings quality has been estimated in the prior research while using different methods and approaches. In this research, earnings quality has been estimated by using discretionary accrual as a proxy of earnings quality. The modified Jones model (MJM) is the basis for the estimation of discretionary accruals (Kothari et al., 2005). Although MJM has limitations despite there is no alternative model that can estimate the discretionary accrual with superiority (Botsari and Meeks, 2008).

Instead of firm-specific time series approach to modified Jones Model, the research has used a cross-sectional approach. The cross-sectional model leads to better performance in detecting earnings manipulation (Bartov et al., 2000). In addition, the current discretionary accruals have been used instead of total discretionary accruals based on Teoh et al. (1998).

Steps to Measure Earnings Quality

Step 1: The first step is based on the estimation of current discretionary accruals, it involves the computation of total current accrual (TCA_{it}) for firm i at year t, the mathematical expression is as follows:

$$TCA_{it} = (\Delta CA_{it} - \Delta Cash_{it}) - (\Delta CL_{it} - \Delta STDebit_{it}) \qquad (3.1)$$

In the above equation:
- ΔCA_{it} = Change in current assets,
- $\Delta Cash_{it}$ = Change in cash and the cash equivalent,
- ΔCL_{it} = Change in current liabilities, and
- $\Delta STDebt_{it}$ = Change in short- term debt.

Step 2: The second step runs the given regression expression using ordinary least squares, this has been applied for all sample firms (with at least ten observations in year t) from each industry:

$$\frac{TCA_{it}}{TA_{it-1}} = \alpha_0 \left(\frac{1}{TA_{it-1}}\right) + \alpha_1 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}}\right) + \alpha_2 \left(\frac{EARN_{it-1}}{TA_{it-1}}\right) + \varepsilon_{it} \qquad (3.2)$$

In the above equation:
- TCA_{it} = Total current accruals for firm i at year t,
- ΔREV_{it} = Change in net revenues in year t from year t-1,
- ΔREC_{it} = Change in net receivables in year t from year t-1 and
- $EARN_{it-1}$ = Income before extraordinary items for firm i in the year t from year t-1.

In order to correct heteroscedasticity, the above expression deflated each variable by the lagged value of the firm $i's$ total assets (TA_{it-1}).

Step 3: The step three calculated non-discretionary (NDACi,t) component of total current accruals for all the firm while using the year specific and industry specific estimates of $\alpha 0$, $\alpha 1$ and $\alpha 2$, the mathematical expression is as follows:

$$NDAC_{i,t} = \hat{\alpha}0 \left(\frac{1}{TA_{it-1}}\right) + \hat{\alpha}1 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}}\right) \qquad (3.3)$$

Step 4: In order to compute the current discretionary accruals ($DAC_{i,t}$) component for each year t and each firm i, the non-discretionary component ($NDAC_{i,t}$) subtracted from the total current accruals (TCA_{it}). The mathematical expression is as follows:

$$DAC_{i,t} = \frac{TCA_{it}}{TA_{it-1}} - NDAC_{i,t} \qquad (3.4)$$

The method used absolute value for current discretionary accruals in the form of proxy for earnings quality.

$$|DAC_{i,t}| = \left|\frac{TCA_{it}}{TA_{it-1}} - NDAC_{i,t}\right| \qquad (3.5)$$

This research has used the signed and absolute value of the discretionary accruals used as a proxy for earnings quality. It implies that discretionary accruals are considered as an absolute (EQ1), negative (EQ-) and positive (EQ+) values. This led to determining the overall effect in the form of income declining earnings management or income growing earnings management (Klein, 2002). Ceteris paribus, in the case of high value for the discretionary accruals, the high degree of earnings management can be achieved that leads to low earnings quality (EQ1). Whereas in respect to signed value, the positive (negative) or higher (lower) value for discretionary accrual means a high probability of earnings management thus low earnings quality (EQ1- and EQ1+).

- **Explanatory Variables - CSR**

The explanatory variable (CSR) will help in determining the relationship between earnings performance and growth prospects. The research has considered the work of Cheng *et al.* (2012), based on it, the research has calculated the CSR engagement of a firm by taking the equally weighted average of the annual performance scores of the social and environmental. The scores were sourced from Thomson Reuters Eikon database. In order to calculate each of the scores (social and environmental), the research has selected two policies from the sample firm's environmental and social policies. Environmental product innovation policy and resource reduction policies proxy for the entirety of the firm's environmental policy. Similarly, human right policy and employment quality act as proxies for the firm's social policy score. These were measured and then averaged for the two variables for the environmental policy as well as the social policy. The values thus arrived were further averaged to arrive at the CSR scores of the sample firms.

- **Control Variables**

This research had added several control variables based on the findings from the prior research. According to Becker et al. (1998), *SIZE* can be considered as a control variable that may reflect the influence on earnings quality from omitted variables. In addition, *LEVERAGE* can be a control variable that can capture the opportunistic behaviour of the manager pertaining to earnings quality, it is possible for a manager to be opportunistic by managing the earning due to avoid the violation of debt covenants (DeFond and Jiambalvo, 1994).

GROWTH Similar findings were also published by Lee et al. (2006), they found that earnings quality decreased with earnings growth, even though the sample of the study was markedly different from that of Iatridis and Kadorinis (2009).

ROA The study by Iatridis and Kadorinis (2009) also explored whether a firm's profitability influenced its likelihood of indulging in earnings management. The scholars found that firms with lower levels of profitability were more likely to indulge in earnings management in order to improve their financial numbers and present a more favourable version to their stakeholders. However, contradictory findings were reported by Lee et al. (2006) who find evidence that firms with higher performance are more likely to over-report earnings because of its favourable impact on market value.

The research has also considered the effect of *INDUSTRY and YEAR* fixed based on the findings from Capkun et al. (2016) and Barth et al. (2008). The control for year fixed effect and industry effects was necessary for this research as the sample comprises of the long time period that is extended over a large span of different industries listed on FTSE 350. Consequently, this research has used "panel data" that is the term used for the type of data relies on pooling of observations in relation to a cross-section of households, firms, countries etc. over the duration of several time periods. This led to controlling the industry-specific fixed effects and unobserved time-invariant factors for controlling mitigating the macroeconomic conditions and economy-wide shocks. This also enables the research to circumvent any biases that can arise due to the use of standard OLS regression if the fixed effects are not adequately controlled.

1. **Regression Model**

The examination of the first hypothesis has been carried out by using the following model, it includes selected independent and depends on variables (both explanatory and control variables

$$EQ = \beta_0 + \beta_1 CSR_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 GROWTH_{i,t} + \beta_5 ROA_{i,t} + \beta_6 LEVERAGE_{i,t} + \beta_7 INDUSTRY_{i,t} + \beta_8 YEAR_{i,t}$$
$$+ \sum_{k=1}^{10} \beta_k \, Controls_{it} + \varepsilon_t$$

In the given model, EQ1 can be either, EQ1+, EQ1- or EQ whereas CSR is weighted average of social and environment extracted from Thomson Eikon social and environmental pillars.

The research has performed an additional sensitivity test, it has been done by using standard OLS regression without fixed effects control performed for the entire period under consideration. This test has been adopted by following the prior literature such as Chen et al. (2010), Francis, (1999). and Skinner and Sloan (2002). The prior literature has considered that for mitigating outliers' problem, for each variable in the regression model the 1 and 99 % of the distribution is required to be winsorised. Therefore, the final sample included in this research after the removal of missing data but prior to winsorising outliers comprises of 217 firms. All the regression included in this research will be performed in relation to White Heteroscedasticity test. Heteroscedasticity is present when error terms do not have the same variance all over the regression line (lack of homoscedasticity). In each instance when heteroscedasticity exists, the regression is required to run while using robust heteroscedasticity- consistent standard error estimates. The main regression used in this research is the LSDV industry and year fixed effects regression.

This research deals with the effect of ethical and environment principle in the earnings quailty. Opportunistic behaviour can engage the firm in CSR activities, it means that CSR is not always lead to positive earnings quality because opportunistic behaviour can lead to the adoption of unethical practices hence earnings quality can reduce. The section has included the research methods that are applied to the test the research questions along with the

rationale for the selection of research methods. The research has collected the data from Thomas Reuters Eikon. The data collected from 2007 to 2017 so that the firm's initiatives in respect of CSR can be considered after the financial crisis. The financial crisis has increased the responsibility and competition in the market hence firms are expected to be engaged in CSR that can lead to improved earnings quality. The dependent variable in the research has been earnings quality. The initial sample has been reduced due to the exclusion of financial firm based on their specific characteristics not suitable for this research.

4. Results and Discussion

This section is based on the methodology explained in the prior section that tests the relationship between CSR and earnings quality. The section includes a brief discussion of descriptive statistics followed by the inclusion of main LSDV regression results for the sample considered for this research between the period 2007 to 2017. The sensitivity test is performed using OLS regression without fixed effects control performed for the entire period under consideration.

- Descriptive Statistics

The sample of this research for the period between 2007 to 2017 comprises of 217 firms. The descriptive statistics of different variables included in the research is given in table 1 below:

Table (5): Descriptive statistics (N = 271)

	N	mean	p50	SD	skewness	kurtosis	min	max	P1	P25	P75	P99
eq_dis~e	1320	.0385	.024	.045	2.919	15.13	.0003	.389	.0007	.0106	.048	.211
SIZE	1320	14.747	14.648	1.419	.409	2.678	11.309	18.890	12.164	13.736	15.590	18.146
ROA	1320	.103	.086	.084	.826	5.105	-.184	.443	-.089	.053	.142	.377
LEVERAGE	1320	.204	.1938	.152	.603	2.979	0	.785	0	.085	.294	.591
GROWTH	1320	.080	.067	.141	1.057	6.647	-.361	.898	-.235	0	.143	.578
CSR	1320	63.878	64.827	16.188	-.221	2.183	27.552	89.397	30.452	53.215	76.645	89.397

SD is the standard deviation. P1, P25, P75, P99 are 1st, 25th, 75th and 99th percentiles respectively. *eq_dis~e* represents earnings quality considered by cross-sectional modified Jones Model used for calculating Discretionary accruals. *SIZE* represents the logarithm of total assets. *LEVERAGE* represents long term debt divided by total assets. *ROA* represents profitability return on assets (EBIT divided by total assets). *GROWTH* represent firm growth sales growth (year on year change in sales). *CSR* represents CSR considered by taking the average score of social and environmental scores.

In the above table the dependent variable *eq_dis~e*, the mean of the variable is .0384 whereas the standard deviation is .0449. It shows that the sample is dispersed prominently around the mean. It shows that the firms included in the sample have a varied level of earnings quality. The difference between mean and standard deviation also followed in the case of *SIZE, LEVERAGE, ROA, GROWTH* and *CSR*. However, *ROA* mean is lesser dispersed than other variables. In respect of skewness and kurtosis, the *eq_dis~e* (earnings quality) has positive skewness of 2.9, the variable has high skewness toward the right based on the absolute values taken of discretionary accruals. Earnings quality also shows a kurtosis with a high peak of 15, it means that the variable has a high dispersion of absolute discretionary accruals and it also exhibits the existence of numerous extreme values in the overall sample. The same pattern followed in the case of *LEVERAGE, GROWTH* and *ROA*. However, none of the variables has more skewness and kurtosis than *eq_dis~e*. The second highest skewness and kurtosis is of *GROWTH* with 1 and 6.647 respectively. It implies that *eq_dis~e* substantially differs from other variables in respect of the normal distribution. *CSR* has slightly negative skewness whereas as the relatively lesser kurtosis of 2 shows the stable distribution of values. The similar attributes are exhibited by the variable SIZE that has slightly positive skewness of .409 and kurtosis of 2.6788, this shows the stable distribution of values hence the sample has both large and small equity value but mostly are similar to each other.

The normality test of D'Agostino *et al.* (1990) has been performed for all the variables to test the normality of variables distribution along with the normality of kurtosis and skewness. The normality test has been performed by using STATA. The normality test has been conducted by the rejection of the null hypothesis of normality at the significance level of 1%. The reason for the rejection of the null hypothesis is the test statistics χ^2 significance of (*P<0.01*). This shows an abnormal distribution of variables in the sample. Figure 1 shows the graphical representation of the normality test.

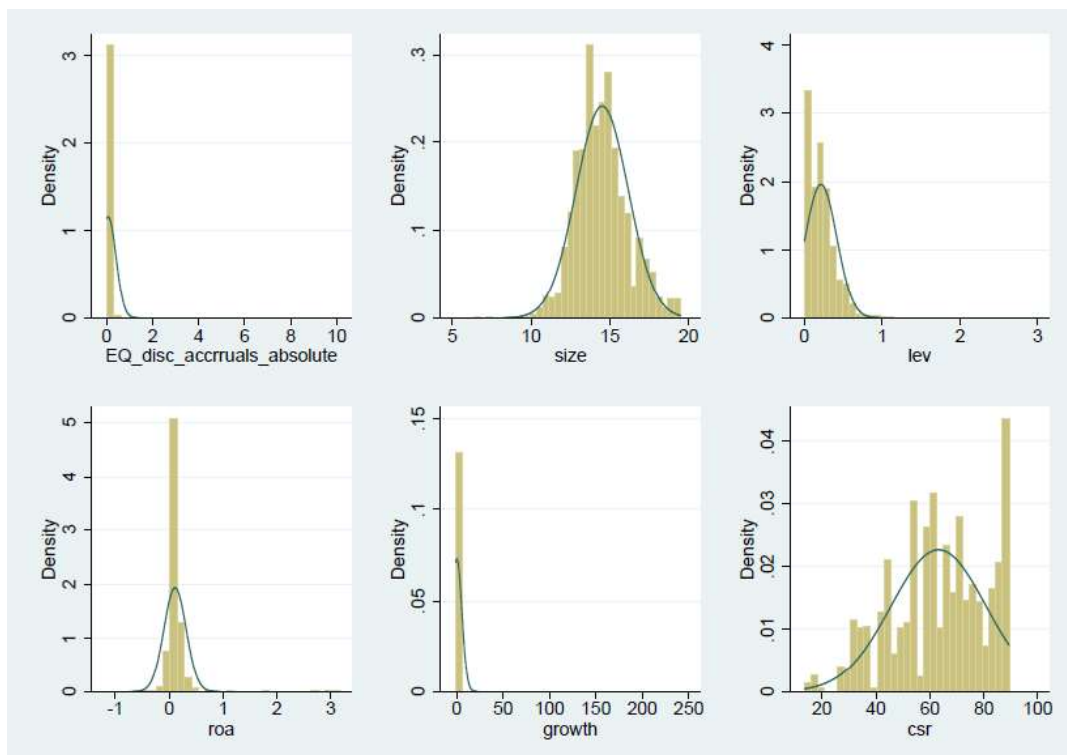**Figure (3): Normality distribution plots for the dependent variable eq_dis~e and explanatory variables SIZE, LEVERAGE, ROA, GROWTH, and CSR, respectively**

Table 6 shows the correlation between the research variables. Although correlations between variables are presented despite, the reliance has been placed on regression due to lack of information provided by correlation regarding the nature of the relationship between variables.

Table (6): Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)
eq_disc_ac~e	1					
CSR	-0.125*	1				
SIZE	-0.167*	0.572*	1			
ROA	0.097*	-0.121*	-0.348*	1		
LEVERAGE	-0.089*	0.084*	0.304*	-0.252*	1	
GROWTH	0.092*	-0.109*	-0.110*	0.184*	-0.115*	1

* represents the 5% significance level. *eq_dis~e* represents earnings quality considered by cross-sectional modified Jones Model used for calculating Discretionary accruals. *SIZE* represents the logarithm of total assets. *LEVERAGE* represents long term debt divided by total assets. *ROA* represents profitability return on assets (EBIT divided by total assets). *GROWTH* represent firm growth sales growth (year on year change in sales). *CSR* represents CSR considered by taking the average score of social and environmental scores.

In the case of SIZE, the correlation of 0.572 shows that there is 57.2% dependence between CSR and SIZE. However, this relationship does not elaborate the nature of relationship, it is not clear that either CSR increasing or decreasing because of SIZE and vice versa. The problems of correlation extend to other variables given in the table.

- **LSDV Regression**

Table 7 presents the LSDV regression outcomes for earnings quality (*EQ*) being a dependent variable along with the explanatory variable and control variables. The explanatory variable is CSR whereas the controls variables are *SIZE, LEVERAGE, GROWTH, ROA, INDUSTRY* and *YEAR*.

Table (7): LSDV regression for the period between 2007 to 2017

	All firms
CSR	- .000
	(-1.02)
SIZE	- .004***
	(-3.90)
ROA	.018
	(1.16)

LEV	-.005
	(-0.67)
GROWTH	.019**
	(2.12)
INDUSTRY	Yes
YEAR	Yes
Constant	0.130***
	(7.14)
N	1320
R²	0.083

Two-tailed p-value is indicated between brackets. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. CSR is a dummy variable. SIZE represents the logarithm of total assets. LEVERAGE represents long term debt divided by total assets. GROWTH represent firm growth sales growth (year on year change in sales). INDUSTRY is the ICB industry code. YEAR is year dummies.

The results from table 3 show no relationship between *earnings quality* and *CSR* (P>0.1). In the non-existence of any significant relationship between two variables, the nature of the behaviour of the dependent variable in respect of independent variable is not required to be considered (Maronna et al., 2006). The given result is in contradiction to the research hypothesis where *earnings quality* was expected to be either positively related to *CSR* or negatively related to *CSR*. However, the results of the control variables is different than explanatory variable. In the case of the relationship between *earnings quality* and *SIZE*, the relationship is negative but statistically insignificant at a significance level of 1% (*P<0.01*). It means that firms listed on FTSE 350 have no prominent relationship between their *earnings quality* and the equity value of the respective business. It implies that irrespective of a business *SIZE*, the *earnings quality* can be considered.

The relationship between earnings quality and *ROA* shows a statistically insignificant positive relationship (*P>0.1*). Again, *ROA* is not a representative factor of change in *earnings quality* hence in order to understand the variation of earnings quality, the *ROA* cannot be considered. Likewise, *LEVERAGE* is another control variable that failed to show any significant relationship with the *earnings quality*. *LEVERAGE* has a statistically insignificant negative relationship with the earnings quality (*P<0.1*). Therefore, the *LEVERAGE* of the firm listed on FTSE 350 cannot represent its *earnings quality* neither variation of *earnings quality* can be characterised by *LEVERAGE*. Lastly, the *GROWTH* as a control variable shows a statistically insignificant relationship with the *earnings quality* at a significance level of 5% (*P>0.05*). It implies that if the firm has *GROWTH* based on its change in sales then it does not represent a positive or negative significant relationship with the *earnings quality*. Therefore, *GROWTH* is not a representative factor for determining *earnings quality*.

Table 8 includes pooled OLS regression results with the exclusion of year instrumental and industry variables. OLS regression is a useful measure for testing the robustness of results. Despite, it is not an absolute statistical tool due to its inability to consider and control unobserved cross-sectional and time-invariant fixed effects (Greene, 2003; Baltagi, 2009).

- OLS Regressions

Table (8): Pooled OLS regression results

Dependent variable: EQ (EARNINGS QUAILTY)

Independent variables	(1)	(2)
CSR	-.000	.000
	(-1.34)	(-1.45)
SIZE	-.004***	.003***
	(-4.30)	(-3.05)
ROA		.0172
		(1.09)
LEVERAGE		-.010
		(-1.23)
GROWTH		.0207
		(2.34)
INTERCEPT	.113***	.0976***
	(8.62)	(6.61)
No. Obs.	1320	1320
R-Squared	0.028	.037

Notes: This table presents results from pooled OLS regressions of EQ on firm governance and financial variables for a sample of FTSE 350 companies over the period 2007 to 2017. *t*-statistics are shown in parentheses below coefficient estimates.
*, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

The OLS regression has been performed by developing two relationships where in the case of the first relationship that is represented as data set (1), the model has kept earnings quality as dependent variable whereas CSR and SIZE have been kept as independent variables. In addition, in another relationship represented as data set (2), the dependent variable has been maintained in the form of earnings quality whereas independent variables are CSR, SIZE, ROA, LEVERAGE and GROWTH.

In the first data set, the data in table 4 shows that OLS regressions results have not identified any relationship between earnings quality and CSR (P<0.1). Likewise, the SIZE has no significant influence on earnings quality at a significance level of 1% (P<0.01). The findings from OLS regression is similar to LSDV regression in regard to CSR and SIZE. It implies that in respect of the data sample considered in this research the earnings quality has no changes due to the CSR activities of a firm and the SIZE of the firm. Therefore, the changes in earnings quality cannot be represented by either CSR or the SIZE of the firm.

In the second data set, the data in table 4 shows no relationship between earnings quality and CSR (P<0.1). This is the continuation of the first data set, likewise, an insignificant relationship can be observed between earnings quality and SIZE of the firm at a significance level of 1% (P<0.01). It implies that irrespective of relationship developed between a dependent variable and independent variable there is no relationship between earnings quality and either of CSR or SIZE. ROA is a new variable in the second data set whose relationship with earnings quality is insignificant (P>0.1). However, LEVERAGE has a significant negative relationship with earnings quality (P<0.1). The data shows that for one point of increase in LEVERAGE for a firm listed on FTSE 350, the earnings quality decrease by 1 point. On the contrary, the decrease of LEVERAGE increases the earnings quality in an absolute manner. It implies that if a firm listed on FTSE 350 experiences increase of LEVERAGE then it decreases the earnings quality hence possibly involved in some activities that can possibly lead to improvement of LEVERAGE. It also shows that businesses in struggling time can be involved in activities that can damage the earnings quality and help the business to revive back from struggling instances. These findings are inconsistent from the LSDV regression.

Apart from LEVERAGE, GROWTH is another variable whose relationship with earnings quality is relatively significant than other independent variables in data set 2. The GROWTH has a relatively significant relationship with earnings quality (P>0.1). The firm with a growing prospect can possibly prefer to keep improved earnings quality so that the reputation can be maintained.

- **Discussion of main results**

The regression results given in table 3 and 4 are inconsistent with the hypothesis and the literature reviewed for this research. The two hypotheses expected to have either a positive or negative relationship between earnings quality and CSR. The result of primary data is quite unique in terms of no relationship between CSR and earnings quality. The findings are not relevant to the prior research performed in the similar area such as the Alsaadi et al. (2017), the research has identified a significant relationship based on 900 firms. In addition, according to Linthicum et al. (2010), CSR is based on initiatives by the business that are externally oriented. The external orientation of firms motivates them to act as a corporate citizen that includes elevating the earnings quality. Likewise, Surroca et al. (2010) identified the characteristics of CSR firms including profit generation, legal compliance, ethical operations and corporate citizenship. It implies that a firm with prominent CSR foundations can naturally aim for improved earnings quality. On the contrary, the findings of this research have not identified any relationship between earnings quality and CSR.

The current research has considered a sample of 217 firms which is smaller than any other prior research. This could possibly be the reason for the inconsistent findings from the research. It means that the research can lead to a different outcome if either the size of the sample will increase or multiple samples included in the research. In addition, the focus of the research has been quite specific to the FTSE 350 that can possibly contain firms with similar characteristics hence the consideration of sample beyond FTSE 350 could possibly increase the chances of finding a relationship between CSR and earnings quality. Theoretically, there exists a relationship between CSR and earnings quality hence the current research was expected to identify a relationship regardless of weak or strong. On the contrary, the current research has identified no relationship between the dependent variable and independent variable.

- **Control Variables**

In the case of control variables, SIZE is one of the variables mentioned by Walker (2013) that can influence earnings quality. It is possible that small firms are lesser involved in earnings management than bigger firms. However, the findings of this research have identified an insignificant relationship between SIZE and earnings quality hence the findings are inconsistent with the hypothesis. On the contrary, larger firms are required to apply strong control measures that can limit the chances of decreasing earnings quality. Likewise, earnings quality had not shown any significant relationship with ROA. This could be because of losses incurred by firms in the sample hence earnings quality is not managed by these firms.

LSDV regression identified no relationship between *earnings quality* and *LEVERAGE* whereas OLS regression identified a strong negative relationship. The findings are not consistent with prior literature as Watts and

Zimmerman (1990) identified a positive relationship between *LEVERAGE* and *earnings quality*. The negative relationship is also inconsistent with the research hypothesis.

The case of *GROWTH* also lacks in showing any significant relationship between *earnings quality* and *GROWTH.* The findings are not only inconsistent with McNicholas (2002), it is also inconsistent with the general perception associated with earnings quality.

The section shows the findings of primary data considered for the research to investigate the relationship between *earning quality* and *CSR.* The primary data has been considered in respect of descriptive statistics, correlations, LSDV regression and OLS regression. The outcome of results shows that *earnings quality* is not statistically associated with *CSR.* The findings of this research can put to the further test by applying different statistical tools and by changing the sample as this is assumed to be the main reason for unique and inconsistent findings from this research.

The research has revealed no relationship between earnings quality and CSR in the case of LSDV regression model. The same has been observed for OLS model however, there exists a relatively significant relationship between earnings quality and LEVERAGE. Similar findings recorded for earnings quality and GROWTH. The result of this research has been contrary to the research hypothesis that could be due to size of the sample, application of the regression models and variation in the sample selected.

This research has implications both for the literature related to the area of research and practical utilisation of CSR as an indicator of earnings quality.

1. Most of the prior research on earnings quality focused on the certain market sector that leads to the implementation of the research findings on the selected market sector. In addition, the reliability of the data collected is integral to the research quality. Therefore, the data collected for this research collected from financial market hence the findings can be used for practical purposes. In this way, the result has avoided selection bias that can hinder the research from fulfilling academic research requirements.
2. The relationship between the CSR and earnings quality can be a motivator factor for the organisations to engage in CSR activities. In the case of regulators, they can critically analyse the financial performance of the business considering CSR can be used as a shelter to deceive the policymaker by diverting their attention to CSR policies of the organisation.
3. The research has considered a unique dimension as prior studies have contributed towards earnings management in relation to IFRS or other relationships of earnings management. On the other hand, this research has considered CSR in relation to earnings quality. Therefore, the research can help in exploring the way CSR can be an indicator or other business activities such as earnings quality.

5. Conclusion

This study explored the possible relationship between CSR and earnings quality based on 271 firms listed on FTSE 350. The data collected between 2007 to 2017 based on the requirement to understand the development of CSR and earnings quality after the financial crisis. The sample has been tested by applying regression in the form of LSDV regression and OLS regression. The reason for applying two statistical tools is to find the difference in outcome from the two techniques that helps in developing a critical stance for the research. The research has considered earnings quality as a dependent variable however, there had been few independent variables. The independent variables are CSR, SIZE, LEVERAGE, ROA and GROWTH. The variables are further classified in the form of explanatory and control variables. All the variables have a distinctive approach for collecting data from the financial market.

Ethics and earnings quality and interrelated concepts due to the elevation of earnings quality based on the involvement of the business in ethical activities. It is also ethical for the business to present its financial performance without any fabrication that leads to high earnings quality. Ethical activities in the form of CSR can be an indicator of high earnings quality however, the same CSR can also be used as a tool for covering the unethical activities such as earnings management. The relationship between CSR and earnings quality considered in this research in respect of firms listed on FTSE350.

CSR started as a discretionary initiative for organisations to differentiate their operations from competitors. However, gradually CSR developed as an obligatory activity that enhances the organisation legitimacy to operate. CSR has a relationship with earnings quality because CSR can act as an underlying factor for enhancing earnings quality. Earnings quality is a predictor of future earnings as if current earnings cannot be used as an indicator for future earnings then earnings quality can be considered as low. A business involved in CSR expected to have high earnings quality because the CSR itself can be a source of motivation for the management to report the earnings appropriately. In addition, maintaining high earnings quality is itself an aspect of CSR as it assists the market forces to improve the quality of their decisions. Discretionary accrual is a common method applied for earnings manipulation however, a CSR firm can avoid discretionary accrual to report the earnings appropriately. CSR relies

on the economic development in a country, so the earnings quality in the market also relies on the economic development in the country. In the UK, CSR has come a long way in which there had been corporate scandals and other issues that lead to regulatory development and other aspects to strengthen the market pillars.

Theoretically, CSR can be considered with respect to its association with stakeholder management and reputation management. Nonetheless, most organisation are aiming to pursue CSR for gaining financial objectives (Orlitzky et al., 2003). Therefore, if CSR is leading to the achievement of financial objectives along with stakeholder management then the organisation can potentially be motivated to achieve other financial objectives by managing earnings hence earnings quality can be low. Stakeholder management through CSR can be incomplete if the dimension of the stakeholder theory will not be taken into consideration. Stakeholder theory diminishes the difference between economic and social goals of an organisation hence with the aim of securing the corporation survival motive, the management can potentially incline to adopt approaches that can eventually decrease the earnings quality. It implies that the relevance of agency theory to CSR is not an indicator of ethical compliance by the organisation therefore, theoretically, CSR cannot be an absolute indicator of high earnings quality. The research has explored the deemed relationship between CSR and earnings quality by considering the firms listed on FTSE 350. Prior to this research, empirical evidence showed a relationship between CSR and factors like transparency, financial reporting and other factors.

The data from 2007 to 2017 of 217 firms listed on FTSE 350 lead to findings for the research be considering earnings quality as the dependent variable and several independent variables. The LSDV regression and OLS regression revealed a slightly different outcome. In the case of LSDV regression, earnings quality has no relationship with earnings quality. The findings of LSDV regression is contrary to the research hypothesis where earnings quality was expected to be either positively or negatively related to CSR. However, SIZE of the firms has identified to be negatively related to CSR nonetheless the insignificant relationship makes it inconsiderable for the firms listed on FTSE 350 to have an influence on earnings quality due to the equity value. Likewise, the LSDV regression has not identified any significant relationship between earnings equality to ROA, LEVERAGE and GROWTH.

The anomalous outcome from the LSDV regression could be an indicator for certain underlying factors such as consideration of small sample, inaccurate application of the statistical tool, the necessity to apply alternative statistical tools and the need to consider a wider range of data such as consideration of data from multiple capital markets. However, the findings of LSDV regression have been contested against the findings from OLS regression to diversity the data analysis and to gain an in-depth understanding of the research problem. In addition, the OLS regression performed by distributing the data into two sections where data set 1 contained CSR and SIZE as independent variables whereas data set 2 contained CSR, SIZE, ROA, LEVERAGE and GROWTH as dependent variables.

The findings of data set 1 is no different from LSDV regression as the earnings quality identified insignificantly related to either CSR or SIZE. In the case of data set 2, the earnings quality identified to be insignificantly related to CSR, SIZE and ROA. However, the relationship between CSR and LEVERAGE identified as significant with a negative relationship. It implies that the decrease in LEVERAGE of a firm can lead to an increase in earnings quality. Therefore, a firm can manipulate the earnings during the time of financial struggle. Likewise, GROWTH has identified to be significantly related to earnings quality. It means that an organisation with growing prospects can have high earnings quality that could be a case so that the firm can maintain its market reputation and regulatory compliance.

Implications of the Study

1. The result generated in this research is focused on the data collected from the UK. It means that findings can be applied by the policymakers and other market forces in the UK. However, the implications of the research can be improved if a comparison study conducted between the UK and any other country. This will lead to a better understanding associated with the research problem.
2. The underlying factors of earnings quality could possibly be explored so that the findings of this research can be more productive for the market. It implies that the relationship between CSR and earnings quality can have a lasting influence on the market if the earnings quality itself explored in a more detailed manner.
3. This research will influence as the reliance on CSR as an indicator of other ethical measures by the business will decrease. It will make the market regulators more critical of business operations hence a detailed understanding and in-depth analysis of the operations will be conducted that will lead to transparency in the market. However, over scrutinisation by the regulators can dissuade the organisation to divert their attention from CSR to other possible activities. Therefore, the findings of this research have to be used in a balanced manner that cannot influence the overall significance of CSR.

Limitations and Suggestions for Future Research

A limitation is commonly associated factor with any research however, adequate management of limitations can help a research to avoid the adverse influence from the limitations. The limitations associated with this research and the respective potential future research direction is given below:

1. This research has considered a small sample of 271 firms listed on FTSE 350. A bigger and diverse sample could have possibly improved the quality of findings from the research. In this perspective, future research in the same area can consider firms listed on different capital market or firms operating in a certain market sector can be considered from different capital markets.
2. This research has considered earnings quality as a principle concept without considering its associated features such as time recognition of loss, discretionary accruals and other measures. The consideration of detailed aspects of earnings quality could have entailed a wider scope to the research.
3. The number of explanatory variables in this research is limited, the inclusion of more variables could help in determining the relationship between earnings quality and range of the variable.

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