The relationship between CSR and financial performance

-A quantitative study examining Swedish publicly traded companies

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Abstract

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Title: The relationship between CSR and financial performance – A quantitative study examining the Stockholm OMX stock exchange

Purpose: Examine the relationship between Corporate Social Responsibility (CSR) and financial performance in Swedish publicly traded companies in the years 2006-2009.

Hypothesis: These are the following hypothesis:

H1: There is a positive linear relationship between a company’s CSR performance and its accounting based financial performance (represented by ROA).

H2: There is a positive linear relationship between a company’s CSR performance and its market based financial evaluation (represented by Tobin’s Q).

H3: Industry moderates the relationship between CSR and financial performance

H4: Firm size moderates the relationship between CSR and financial performance.

Theoretical framework: CSR, Previous research

Methodology: Longitudinal study, Secondary analysis

Conclusion: Hypothesis 1 may be rejected. Hypothesis 2 may be rejected. Hypothesis 3 may be rejected. Hypothesis 4 may be rejected.
Table of Contents

1.0 Background ........................................................................................................................................... 1
1.1 Problem discussion ................................................................................................................................. 2
1.2 Purpose .................................................................................................................................................. 4
2.0 Theoretical Framework .......................................................................................................................... 5
  2.1 CSR dimensions .................................................................................................................................... 5
    2.1.1 Social dimension ............................................................................................................................. 5
    2.1.2 Environmental dimension ............................................................................................................... 6
    2.1.3 Financial dimension ....................................................................................................................... 7
  2.2 Stakeholder Theory ............................................................................................................................... 8
    2.2.1 Stakeholder Pressure ...................................................................................................................... 9
  2.3 The relationship between CSR and Financial performance ................................................................. 10
    2.3.1 Influential factors .......................................................................................................................... 11
    2.3.2 Theory and hypothesis ............................................................................................................... 11
3.0 Methodology chapter .............................................................................................................................. 13
  3.1 Research approach ............................................................................................................................... 13
  3.2 Research design .................................................................................................................................... 14
  3.3 Data sources ......................................................................................................................................... 14
  3.4 Research strategy .................................................................................................................................. 15
  3.5 Data collection method ......................................................................................................................... 16
    3.5.1 Financial data ................................................................................................................................... 17
  3.6 Operationalization ................................................................................................................................ 17
    3.6.1 Measuring CSR ............................................................................................................................... 17
    3.6.2 Measuring the financial performance ........................................................................................... 18
  3.7 Financial measurement .......................................................................................................................... 19
    3.7.1 Tobin's Q ........................................................................................................................................ 19
    3.7.2 Return on assets ............................................................................................................................ 20
  3.8 Models used in this research .................................................................................................................. 20
    3.8.1 Simple linear regression ................................................................................................................ 20
    3.8.2 Moderated regression analysis ..................................................................................................... 21
  3.9 Sample .................................................................................................................................................... 22
    3.9.1 Selection of participants ............................................................................................................... 22
  3.10 Ethics in research ................................................................................................................................. 23
  3.11 Quality criteria .................................................................................................................................... 24
    3.11.1 Reliability ...................................................................................................................................... 24
1.0 Background

The concept Corporate Social Responsibility (CSR), originally referred to as Social Responsibility (SR), was discussed as early as the 1930’s (Carroll, 1999). However, Carroll (1999) argues, it was not until the publication of Bowen’s *Social Responsibilities of the Businessman* in 1953 that the concept became popularized and discussed in similar terminology as it is today. Bowen (1953) defines CSR as “(it) 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” (Bowen, 1953, p 6). From this publication and through the research that has followed onwards, the true definition of what CSR entails has been heavily debated (Moon & Matten, 2008). Moura-Leite and Padgett (2011) discuss how the focus of CSR has shifted from acknowledgement of social interest to having become an important part of a many companies overall strategic approach.

The interest in CSR is continuing to increase worldwide and although different companies approach to the concept varies, more companies are implementing voluntary initiatives aimed at minimizing its negative impact on society and the environment (White, 2012). Of the world’s 250 largest corporations, 93% publish corporate sustainability reports as of 2013, compared to 71% in 2008 (GreenBiz, 2013). This recent incline is not purely based on companies adopting an altruistic business model, but also because companies are under increasing pressure from its stakeholders to demonstrate responsibility and sustainability (White, 2012). Whilst regulatory and legislative guidelines connected to CSR is still not predominant worldwide, certain unions and countries have started implementing such changes, as in the case of the European Union. A new directive, effective as of December 6 2014, requires companies with 500 or more employees to disclose in their management reports information on policies, social and employee aspects, risks and outcomes regarding environmental matter, etcetera. The member states of the European Union were subsequently given two years to pass the new directives into national legislation (European Commission, 2015).
Kristian Karlsson (2006), the author of *Avlatsindustrin: Etik i Fonder och Företag* criticizes governments’ and other interest groups’ role in forcing corporations to accept an expanded definition of ethics and responsibility which he considers to be misdirected. Ethics, he argues, is by nature a subjective term and its implication varies depending on whom you ask and thus it is impossible to generalize the extent to which corporations compare to each other or a general framework and the scope of the responsibility (Karlsson, 2006). During the negotiations of the EU directive regarding the mandatory reporting of CSR activities in 2014, Claes Norberg, accounting expert at Svenskt Näringsliv, expressed concern that it could become nothing but a constraint and paradoxically hinder corporation’s ability to excel in matters connected to social responsibility (Norberg, 2014).

### 1.1 Problem discussion
Since the popularization of the concept of CSR, there have been different opinions as to what CSR is intended to accomplish for a firm. One of the first influential public figures to air his opinion in the matter was renowned economist and debater Milton Friedman (1970) who claimed that the sole social responsibility of a business is oblige to the wills of its shareholders and increase its profits within the boundaries of laws and business ethics. Friedman (1970) further argues that firms should not focus on CSR unless it acts as a value creator and adheres to the wishes of the company’s shareholders. Cheng et al. (2014) argues that CSR can strengthen the relationship with a company’s stakeholders and further adds that firms using CSR tend to lower its capital constraints through better access to bank loans which makes it easier to undertake strategic investments. Another factor which has been highlighted as a beneficial reason for corporations to work actively with CSR is the increased influence of various stakeholders (Grafström et al. 2008). Grafström et al. (2008) discusses how the traditional division of stakeholders (customers, citizens, institutions and/or media which are classified as to being directly or indirectly affected by the corporation) is in need of revision, partly due to the digitalization of the world and increased flow and access to information.

Due to the debate regarding CSR and its potential value creating capabilities, interest has increased amongst researchers to investigate a potential linkage between CSR and financial performance (Pava & Krausz, 1996). An early example of such research is McGuire et al. (1988), who examined the relationship between companies CSR activities and financial
performance. The researchers concluded that firms low in social responsibility experienced weaker financial performance while noting that low CSR performance also could expose such companies to risks to a larger extent than high performing firms (McGuire et al. 1988). In subsequent years, several researchers have noted similar results regarding a positive relationship between CSR and financial performance (Russo & Fouts, 1997; Simpson & Kohers, 2002; Lai et al., 2010; Saeidi et al., 2015). Even so, overall results in the research area are far from univocal as a large number of researchers have failed to identify a positive relationship between the variables (Alexander & Buchholz, 1978; Stanwick & Stanwick, 1998; Peng & Yang, 2014). Some researchers have denoted the inconsistency in results to be caused by differences in selecting methodologies, approaches and selection of variables (Simpson & Kohers, 2002; Girerd-Potin et al., 2013). Peng and Yang (2014) further argues that most studies in this research area have focused on the US Stock Exchange and that this limits the opportunity to generalize results as the degree of governance, environmental policies and business practices varies globally. Further, the authors argue that research in the area would benefit from input from other countries to enhance understanding regarding the nature of the CSR and financial performance relationship (Peng & Yang, 2014).

The newly introduced EU directive that mandates large companies to increase its reporting on CSR related matters is likely to have a significant effect on Swedish corporations which previously have reported CSR activities on a largely voluntary basis (Government, 2008). The complexity of the claims made by advocates and assailants of CSR in terms of the value it creates and the costs it incurs raises questions as to what the possible effects of the new EU regulations will have on businesses operating in Sweden. Although a large body of research has been devoted to investigating the relationship between CSR and financial performance worldwide, published research devoted to the Swedish market is scarce. In today’s increasingly competitive marketplace and considering the forthcoming regulations for large Swedish companies to report CSR activities, it should be important to investigate the nature of the relationship between CSR and financial performance in Swedish companies. If the relationship is determined to be positive, companies could be encouraged to expand its investments and reporting’s beyond the required levels. Conversely, if a relationship can’t be observed or is deemed negative, companies might benefit financially from keeping CSR investments and reporting’s only at the required level.
1.2 Purpose
Examine the relationship between Corporate Social Responsibility (CSR) and Financial Performance on the Stockholm OMX stock exchange in the years 2006-2009
2.0 Theoretical Framework

This chapter introduces the theoretical framework and relevant concepts related to existing previous research regarding the relationship between CST and financial performance. The chapter consists of theoretical concepts regarding CSR and its three dimensions, Stakeholder theory and a review of previous research investigating the relationship between CSR and financial performance. Subsequently, the emerging hypotheses are presented.

2.1 CSR dimensions

How companies define and organizes its CSR activities varies, but a common practice is to utilize the Triple Bottom Line (TBL) framework (Shnayder et al., 2015). TBL refers to three different entities, people, planet and profit, sometimes referred to as the 3P’s. People refers to how companies carries out its business in regard to the affected labour force, Planet attributes to how the company takes its responsibility towards environmental parameters and Profit refers to how the company’s economically generates benefits to society (Shnayder et al., 2015). The TBL concept was established in the mid-1990s by economist John Elkington and has since been a frequently used term in the areas of CSR and sustainable development. An example of how the concept can be utilized in practice was when the petroleum company Shell was severely criticized for its drilling practices in Nigeria during the 1990s. In an attempt to improve its public image, the company hired consultants who based their proposals on the TBL framework as a mean to transform Shell’s negative image to a more positive one (Tullberg, 2012). The 3P’s have also been referred to social, environmental and financial dimensions of a company's CSR performance (Slaper & Hall, 2011). These three dimensions should, if properly evaluated, cover corporate sustainability and capital growth and meet the needs of a company’s direct and indirect stakeholders (Dyllick & Hockerts, 2002).

2.1.1 Social dimension

Increasing pressure on companies to continuously manage its social responsibilities has forced companies to dedicate more time and resources on CSR activities in order to meet stakeholder expectations (Malsch, 2012; González-Rodríguez et al., 2015). With the increase of stakeholder awareness of a company's CSR activities, firms have become eager to promote its sustainable activities for marketing purposes (Bhattacharya & Sen, 2004; Lii & Lee, 2011). Examples of such CSR activities could be donations or subsidizing of medical drugs and vaccines by pharmaceutical companies to Third World nations or firms active in the
manufacturing industry implementing internal norms or codes of ethics addressing issues regarding its environmental impact or working conditions (Hillman & Keim, 2001).

Dyllick and Hockerts (2002) discuss the importance of widening the interpretation of the company’s CSR activities within the three dimensions, as companies nowadays need to view their CSR activities in a long-term perspective. For companies to be able to generate positive long-term results, the company needs to listen not only to its shareholders but also to its customers and other stakeholders. Therefore, it is difficult to discuss the societal dimension without considering the opinions of a company’s end-consumers (Löhman & Steinholtz, 2003). Company’s stakeholders often cover a large group of individuals and as information travels faster and is more accessible through the Internet, news regarding companies activities spread fast, which has increased people’s awareness of how companies manage its social responsibilities (Grafström et al., 2008).

Mohr et al. (2001) discusses consumers’ purchasing behavior and how it relates to companies social responsibilities. The authors claim that the pressure on companies to participate in solving problems related to its communities, such as donating to charities or actions to protect the environment, is increasing. Societal marketing is explained as conducting business in a manner that maintains and improves both the society’s and the customer's well-being in form of minimizing any harmful effects and maximizing the company's long-term beneficial impact on the society (Kotler, 1991; Mohr et al., 2001). Mohr et al.’s (2001) research results shows a majority of surveyed consumers already do or would consider rewarding companies working actively with charitable giving’s and philanthropy.

2.1.2 Environmental dimension
Humans’ negative impact on the environment has been frequently discussed in the global forum for the past several decades, and Hart (1995) discusses how human activities and consumption of natural resources has sharply accelerated the last 40 years. Other concerns relate to the proceeding growth of the earth’s population and its potential effect on the planet’s ecological systems. As a consequence, the environmental impact of companies has come under increased scrutiny (Hart, 1995). Considering the increase in public interest in terms of company’s environmental impact, it becomes more important for companies to consider the environmental consequences of its actions (Chatterji et al, 2009).
Originally, the concept of CSR was mostly concerned with social responsibility (community-based programs, employments rights, etc.) but has in recent years shifted more towards corporations’ environmental responsibilities (emission, water pollution etc.) and has become an essential part of CSR (Flammer, 2013). The concept CSR is constantly developing and it is becoming increasingly important for companies to handle its activities properly in order to maintain or improve its image. Improving a company’s image through the communication of its CSR activities is now utilized by a company’s mean of gaining reputational value and attracting customers (Peloza et al., 2012). As stakeholders’ awareness of CSR increases is it important for companies to handle its environmental responsibilities to prevent negative criticism that could be avoided (Heikkurinen & Ketola, 2011). This is line with the finding of Flammer (2013) which indicate that shareholders often react positively to company's eco-friendly initiatives and negatively towards those that in some form affects the environment in a destructive way. It has also been indicated that environmentally well-performing firms are rewarded by customers as the perceived value of such companies is higher than that of companies which are less environmentally friendly (Flammer, 2013).

2.1.3 Financial dimension
During the past decades, companies CSR activities have increased simultaneously with the rising of stakeholders’ demands (González-Rodríguez et al., 2015; Malsch, 2012). In order to evaluate the potential financial benefits for firms undertaking such activities, there have been numerous of studies trying to distinguish the link between CSR and financial performance. These studies have generated various results where some researchers observe a positive linkage and some not being able to detect a relationship at all (Cavaco & Crifo, 2014). Researchers have suggested that different approaches, methodology and selection of variables are the cause of the mixed results observed within this field of study (Girerd-Potin et al., 2013). Windsor (2006) proposes a conceptualization of the link between CSR and financial performance through the visualization of four different scenarios which connect to the correlation between financial performance and CSR performance. The scenarios are described as:

- If financial performance and CSR increase at the same time, it results in a win-win situation, regardless of governmental or ethical input towards the activities.
If both financial performance and CSR fall at the same time, it results in a lose-lose scenario, where governmental input is likely to occur in order to counteract the unwanted situation.

If financial performance increases when CSR decreases, public aversion towards companies can occur since environmental or social harm leads to increased profits for the companies.

If financial performance decreases while CSR increases, it creates a conflict in contrast to the previous example where companies become unwilling to invest in CSR activities because of the decline in financial performance. This could also be caused by CSR investments requiring significant expenditure which may results in short term economic loss.

(Windsor, 2006)

Since the economical dimension is broad and consist of numerous of different aspect, it is difficult to determine how CSR relates to a company’s financial performance (Flammer, 2012). An example of how a company’s stock price can be affected by a company’s environmental performance is the aftermath of British Petroleum’s oil spill in the Gulf of Mexico in 2010. BP’s stock price before the accident was 59.5 US dollar per share whereas three months later it had dropped to 28.9 US dollar per share (Flammer, 2012). Since the accident, the company has increased its CSR activities in an attempt to regain the stakeholders’ trust but this proven to be difficult (Lyon & Maxwell, 2011). There have also been findings which indicate that CSR can be affected by financial performance. In the aftermath of the financial crisis in 2007 which started in the US Financial Market and spread across the world, many companies experienced a significant downturn in financial performance (Kestens et al., 2012). During the financial crisis, Garcia-Benau et al (2013) notes that the number of published sustainability reports in Spain increased steadily which is attributed to positive perception of CSR held by many companies as a potential value creator and as mean of increasing stakeholder trust.

2.2 Stakeholder Theory
According to Murray and Vogel (1997), the practical definition of a stakeholder is any entity, typically outside the firm, that the organization aims to influence and that has an impact on the organization. The most commonly mentioned stakeholders of an organization include customers, government, competitors, regulatory agencies and political activist groups which
have long been recognized as having a significant influence on the viability of an organization (Dill, 1958; Murray & Vogel, 1997). The values and norms held by stakeholders can concern issues which apply to those individuals or organizations themselves or extend to matters which do not directly influence their own well-being, for instance the case of a company utilizing child labor in a foreign country. As such, Maignan et al. (2005) argues that the marketing and operations of organizations have excelled from a narrow customer orientation to managing benefits and relationships with a variety of stakeholders.

Up until recent decades, the sole objective of companies has been perceived by many to be generating profits and oblige to the demands of its shareholders (Friedman, 1970). This perception is gradually changing and profits can no longer be considered to be the only objective of a firm as success is increasingly affected by stakeholder relationships, which covers a wide range of interests, the most pivotal of which being how the organization works with social and environmental issues (Russo & Perini, 2010). This stakeholder approach to CSR suggests that the needs of shareholders cannot be met without satisfying the needs of other stakeholders. As such, it has turned organizations attention away from focusing solely on profit maximization (Jamali, 2008). With this approach, the inherent challenge for organizations lies in determining whom they are responsible towards and how far that scope of that responsibility extends (O’Riordan & Fairbrass, 2008).

According to Murray and Vogel (1997), it has been suggested that how an organization is evaluated and viewed by stakeholders underpins all subsequent interactions. As such, it is of managerial interest to value how the organization is perceived in terms of ethical and social responsibility as CSR represents an important barter and cooperation between the organization and its stakeholders (Murray & Vogel, 1997).

2.2.1 Stakeholder Pressure
Acting individually or collectively, formally or informally, stakeholders have the potential to negatively or positively affect operations of an organization (Murray & Vogel, 1997). Murray and Vogel (1997) argue that many executives assumes, mistakenly, that stakeholders are interfering with what should be considered the organization’s private affairs and as a result, less progressive firms may choose to ignore being responsive to public issues. In contrast, more progressive firms may choose to implement well-managed CSR-programs to bring company practices at par with public expectation at an early stage of issue development. This
approach consists of managers identifying key issues which threaten and/or are of mutual interest for the organization and its stakeholders in order to avoid future discontent (Murray & Vogel, 1997). One example of such discontent is the case in which Greenpeace’s exerted pressure on Nestlé’s use of palm oil in its products. Palm oil is crucial ingredient in many consumer products but the increased world demand of the product has been linked with extensive deforestation of rainforests for palm oil production. In 2009, Greenpeace published an infomercial on YouTube in which the organization encouraged a boycott for KitKat chocolate bars, a Nestlé product, to put pressure on the company to adopt a more sustainable supply chain in terms of the company’s sourcing of palm oil used in the product. Similar eye-catching examples include Apple and the use of sweatshops and Nike’s connection to child labor (Wolf, 2014). As a result, many organizations strive to go beyond the basic regulatory requirements of its operations and actively contribute to stakeholder needs (Maignan et al., 2005).

2.3 The relationship between CSR and Financial performance
Ever since the subject of CSR became popularized in the 1970’s, the concepts and its possible linkage to financial performance has been of increased interest of practitioners and researchers alike. In one of the first published articles in the field, Alexander and Buchholz (1978) argued that the concept can be viewed from two different standpoints, the first being that a socially aware management also possesses the skill to run a superior company which is likely to result in better financial results and the second being that the cost incurred from increased CSR expenditure induces a competitive disadvantage.

In their research, Alexander and Buchholz (1978) utilized a reputation index as the basis of evaluating CSR performance, a method which came to be criticised by Cochran and Wood (1984) for the subjective nature of evaluation and not necessarily mirroring a company’s actual CSR performance. In subsequent years, researchers continued debating the various approaches used by researchers in measuring both CSR performance and financial performance, not even in present day reaching a consensus which has hindered the possibility of generalizing results (Martinez-Ferrero & Valeriano, 2015). One reason for the problematic situation is the existence of a vast number of variables and that the researcher's’ selection of which variables to include in a study can have major implications on its eventual results (McGuire et al., 1988).
2.3.1 Influential factors

Other than the measuring of CSR and financial performance, researchers investigating the relationship have acknowledged that there are several other factors which can influence the relationship and should be taken into consideration (Brammer & Millington, 2008).

According to McWilliams and Siegel (2000), each company is different in how it incorporates CSR, if at all, in its business structure. This, they argue, is determined by a variety of factors such as company size, industry environment, business culture and exposure to risks. Depending on the characteristic of the individual firm it can choose to focus heavily on one area of CSR, such as human rights or environmental aspects, or alternatively aim to integrate a wider range of CSR aspects into its organization (McWilliams & Siegel, 2000). Griffin and Mahon (1997) reach a similar conclusion and reiterate the suggestion that research investigating the CSR and financial performance relationship should separate companies by industry because of the dissimilarity in environmental and social related concerns, stakeholder engagement and activism. Further, separating industries would also increase the internal validity of the research (Griffin & Mahon, 1997).

Company size is another factor which has been suggested to influence the relationship between CSR and financial performance. Waddock and Graves (1997) suggests that there is some evidence that larger firms may exhibit more socially responsible behaviour than smaller firms which could be related to the increased expectation from stakeholders for large firms to act socially and environmentally conscious and be more attentive to stakeholder demands. Whether or not company size is an influential variable on the CSR and financial performance relationship remains debated in the research community (Orlitzky, 2001).

2.3.2 Theory and hypothesis

Waddock and Graves (1997) observe that three different kinds of associations between CSR and financial performance have been found in previous research. These associations have been considered to positive, negative or results where the association cannot be determined (Waddock and Graves 1997). In their own study, utilizing a sample consisting of firms from Standard & Poor’s 500 Index (an index of 500 large US firms), the researchers observed a positive association between CSR and financial performance during one observed year (Waddock & Graves, 1997). Similar observations of a positive association between CSR and financial performance have been found by a number of other researchers (Rosso & Fouts, 1997; Preston & O’Bannon, 1997; Simpson & Kohers, 2002; Martinez-Ferraro & Valeriano,
2015). Meanwhile, a significant amount of researchers have generated results in which it has not been possible to determine whether the association between CSR and financial performance is positive or negative or if there is an association between the variables at all (Lee et al., 2009; Peng & Yang, 2014; Brammer et al., 2006; Brammer & Millington, 2008).

In order to test the association between CSR and financial performance in this research two main hypotheses are set:

**H1:** There is a positive linear relationship between a company’s CSR performance and its accounting based financial performance (represented by ROA).

**H2:** There is a positive linear relationship between a company’s CSR performance and its market based financial evaluation (represented by Tobin’s Q).

In accordance with previous researchers’ suggestions to include control variables which have been observed to moderate the relationship between CSR and financial performance (McWilliams & Siegel, 2000), two additional sub hypotheses are set:

**H3:** Industry moderates the relationship between CSR and financial performance.

**H4:** Firm size moderates the relationship between CSR and financial performance.
3.0 Methodology chapter

This chapter presents information regarding how the research was conducted and the researcher’s line of reasoning and motivation in selecting particular methods, approaches and strategies. The selections are based on guidelines set by previous researchers whilst adhering to the purpose of the research.

3.1 Research approach

This study utilizes a quantitative and deductive approach. A quantitative approach is considered suitable as the purpose of the study is to examine the relationship between CSR and financial performance from a statistical perspective regarding publicly traded companies on the Stockholm OMX stock exchange. Further, a quantitative approach is commonly applied in research when working with statistical figures (Bryman & Bell, 2011). A deductive approach is considered most suitable as the research is based on existing theory and the results of previous research. The empirical result is tested and compared to previous research, hence it is can be considered a deductive approach (Saunders et al., 2009).

There are generally two research approaches when a research study is performed. A research study can either be approached in a deductive or inductive way (Bryman & Bell, 2011). Depending on which of the two approaches the study utilizes, the purpose of the reading differs (Saunders et al., 2009). According to Hyde (2000), following a deductive approach means that a research process is based on existing and established theory with the purpose of testing if theory still applies. A deductive approach is most commonly used in quantitative research. Robson (2011) argues that there are five stages in a deductive process; (1) firstly, based on existing theory, testable hypothesis need to be extracted. (2) Secondly, the hypothesis is diverted into measurable terms and operationalized. (3) The third step involves testing the hypothesis in order to be able to move to the (4) fourth stage, which includes either accepting or rejecting the hypothesis. (5) The fifth and final stage involves feeding results back to the existing theory and considering if it needs revision. Inductive approach involves a movement that is opposite to deduction (Bryman & Bell, 2011). Inductive approach implies that theory is based by observations of the real world, in other words, the findings of the study is the base for the theory. Generally inductive approach is used when conducting a qualitative research study (Bryman & Bell, 2011) and is not considered suitable for the purpose of this study.
A quantitative research commonly involves numbers and statistical measures that helps explain, describe, explore and show relationships between variables (Saunders et al., 2009). Moreover, quantitative research can be seen as a research method that through statistical and quantified results that are based on the reality tries to measure objectives in order to produce generalizable information (Bryman & Bell, 2011).

3.2 Research design
This study utilizes correlational research design. Since the aim of this study focuses on examining the relationship between CSR and financial performance it was considered to be the most suitable research design. According to Kumar (2005), the aim of a correlational research design is to establish or explore a relationship, association or interdependence between at least two facets of a situation or a phenomenon. The researcher continues by mentioning that the main theme of this type of research design is to determine if there is a relationship between the two facets. There are three additional types of research designs besides correlational research (Kumar, 2005). Descriptive research design focuses on detailed explanations of social phenomena, experience, situation, problem, etc. and strives to be as accurate as possible. Exploratory research design is an approach utilized when approaching a relative unexplored phenomenon or a new research area (Ruane, 2005). The third research design is explanatory research which aims to establish a causal effect of determining how variable can cause a change another variable (Saunders et al, 2009).

3.3 Data sources
According to Saunders et al. (2009) there are two types of data, primary and secondary, where researchers tend to overlook existing data in preference of create one's own database. This study uses only secondary data which is gathered through Folksam’s Index For Corporate Responsibility (FIFCR) and the sampled companies’ annual reports. Using an already existing database can save both time and resources while also allowing the researchers to be able to focus more on the interpretation and analysis of data than the data collection itself (Bryman & Bell, 2011).

When researchers have set their research questions and need to locate and gather data, there is a possibility that the researchers neither have the time or resources to perform the data collection properly (Saunders et al., 2009). In order to circumvent this obstacle, researchers can choose to acquire data from companies and organizations that perform this service, usually for a fee (Bryman & Bell, 2011). However, there are also organizations (often
government departments) which publish official statistics regarding economic, demographic and social subjects. A large number of such databases are free of use for the public and data collected through these types of mediums are generally of high quality (Saunders et al., 2009). Another beneficial aspect of utilizing secondary data is that it offers researchers the opportunity to perform a longitudinal research (Bryman & Bell, 2011). In this study the use of secondary data offers the possibility to evaluate a company's CSR and financial performance over a four-year period without requiring significant resources on data collection.

It should also be noted that there are some disadvantages of utilizing secondary data in research. As the data often reflects the organization’s perspective or purpose for collecting the data, researchers need to ensure that the data includes the necessary elements needed to perform the study (Rew et al., 2000). Large data collections archives are often provided by governments or larger organizations but this don’t necessary mean that the quality of the data is high, therefore researchers must evaluate the data carefully before usage (Saunders et al., 2009).

The secondary data used in this research can be classified as compiled data, as Folksam has summarized parts of its result, which is examined together the variables ROA and Tobin’s Q. Secondary data that has been combined from different sources to form another set of data is called multiple-source data and is often area based or time-series based. This can also be related to Folksam’s index as both area and time-series based data often consist of financial information and industry reports (Saunders et al., 2009).

3.4 Research strategy

This study utilizes a longitudinal research strategy aimed at investigating the relationship between CSR and financial performance in publicly traded Swedish companies over the course of four years, 2006 through 2009. This research strategy is selected by reason of being in line with the purpose of the study which is to investigate a relationship between variables where data is collected from four different years. According to Bryman and Bell (2011), analyzing data collected over set time-span offers researchers the opportunity to gauge trends and in certain cases allow causal inferences to be made.

Bryman and Bell (2011) describes longitudinal research as a type of research which is commonly applied to map changes in business and management research. In longitudinal
research, a sample is selected by researchers and then surveyed again on at least one other occasion. Longitudinal studies can be divided into two major subcategories, panel studies and cohort studies (Bryman & Bell, 2011). In the former, the sample often consists of a randomly selected national one and data is collected on at least two different occasions. A key feature of a panel study is that it performs repeated measures on the same sample at different point in time. In a cohort study, an entire cohort of people or a randomly selected one are chosen as the source of data collection where participants share a certain characteristic, such as being born on the same date, being employed or getting married in a particular week. Panel and cohort studies share many similar potential problems, namely that members of the initial sample may drop off during the course of the study for various reasons or do not wish to participate any longer (Bryman & Bell, 2011). In this research, the panel study is considered most suitable as the same sample is used through the entirety of the four years examined.

When discussing longitudinal research, Ployhart and Vanderberg (2010) stresses the importance for researchers not to mistakenly label observed association between variables as always being the result of a causative relationship. There are numerous alternative explanations as to what influences the association between the statically observed measures of the selected variables (Ployhart & Vanderberg, 2010).

3.5 Data collection method
In this study, a secondary data analysis method is used for the collection of data. The choice of method was chosen due to the availability of CSR data provided by the Swedish insurance company Folksam in its Index of Corporate Social Responsibility (FIFCR). FIFCR offers the advantage of providing CSR-evaluations for 250 companies on the Swedish Large-, Mid- and Small Cap stock exchange (on the Stockholm OMX stock exchange market) during all four years examined in this research (Folksam, 2015). Saunders et al. (2009) discusses the importance for researchers of conducting thorough investigations regarding the accessibility of existing data and if the data can be connected to the purpose of the study. When the data available through the FIFCR was located, a scrutinising examination was conducted in order to assess if would be a suitable measure of Swedish companies CSR performance. Subsequently, a decision was made by the researchers to include it in the study where the main aspect considered was the index’s perceived trustworthiness and reliability.

The FIFCR focuses on individual companies’ preparedness regarding management of environmental risks and human rights issues and an assessment is made based on how the
company addresses such risks in its public reports, annual reports and other publications. The findings of the FIFCR are ranked based on Global Engagement Services’ (GES) reports which in turn bases its ranking system on Global Compact’s ten principles and OECD: s guidelines for multinational corporations (Folksam, 2009). The Global Compact’s ten principles describe how a company within the private sector manages its exposure to risks regarding human rights, environmental impact and anti-corruption (unglobalcompact, 2015). OECD: s guidelines for multinational corporations are recommended objectives concerning sustainable responsibility for company that operate on the global market (Folksam, 2009). These principles indicate of how the companies are expected to take responsibility regarding environmental and human rights issues. Depending on how the companies perform, they receive a score between zero and seven of both environmental and human rights scales, where seven represents the best possible score and zero the lowest (Folksam, 2009).

3.5.1 Financial data
The financial data utilized in this research is collected from participating companies’ annual reports which includes data which enables calculations of the dependent variables of ROA and Tobin’s Q. This particular use of secondary data considered by the researchers to be in line with what Saunders et al. (2009) consider to be reliable data. The publication of an annual report is mandatory for publicly traded Swedish Companies to which joint-stock company has the obligation to report its financial performance each fiscal year (bolagsverket, 2015). As this longitudinal research stretches between the years of 2006-2009 the annual reports for each of these years are needed for all companies in the sample.

3.6 Operationalization
3.6.1 Measuring CSR
During the course of the past several decades, a large number of researchers have chosen to apply methods which attempts to measure overall CSR performance of firms, such as the KLD Index. The KLD Index (nowadays known as MSCI ESG Research) evaluates companies CSR performance based on eight different attributes (Waddock & Graves, 1997; McWilliams & Siegel, 2000; Tang et al., 2012; Pätäri et al., 2014). Whilst this method of measuring CSR performances has been applied by numerous researchers, some have criticized it for not being comprehensive enough or cover large enough samples (Simpson & Kohers, 2002) and that it is limited to measuring companies which are trading on the US Stock Exchange (Peng & Yang, 2014).
In this study, data from the FIFCR will be utilized and act as the measurement of companies CSR performance. Much like KLD Index, the FIFCR evaluates companies CSR performance based on several parameters. In the case of FIFCR, the measurement of CSR is based on two attributes; human rights and environmental performance (Folksam, 2009). The main areas of evaluating human rights are; employee rights, the company’s action in a societal context and the consideration of human rights in the supply chain. Main areas evaluated regarding environmental performance are; environmental management and environmental impact (Folksam, 2009). In order to address the purpose and hypotheses set for this particular study, the environmental and human right scores are combined to form a joint index of a corporation’s CSR performance.

3.6.2 Measuring the financial performance

Cochran & Wood (1984) notes that there is no real consensus in the researching community when it comes to selecting which parameter to use as indicators of financial performance. The method which researchers commonly have utilized when evaluating financial performance can be divided into three categories. The first is using accounting and profitability based measures, such as Return on Assets (ROA) (Aupperle et al., 1985; Russo & Fouts, 1997; Tang et al., 2012; Moon et al., 2014) or combinations of various accounting variables (Cochran & Wood, 1984; Waddock & Graves, 1997; Preston & O’Brannon, 1997; Lee et al., 2009; Cavaco & Crifo, 2014; Saeidi et al., 2015). The second method is to use market based measures such as stock market performance (Alexander & Buchholz, 1978; Brammer et al., 2006) or market value (Martinez-Ferrero & Valeriano, 2015). The third approach is to use a combination of accounting based and market based measures (McGuire et al., 1988; Pätäri et al., 2014; Akisik & Gal, 2014). According to McGuire et al (1988) and Orlitzky et al. (2003), CSR is more strongly correlated with accounting based measures than market based measures.

In this research, financial performance is assessed through the use of two financial performance measures, one accounting based and one market based. The accounting based measure is ROA, a variable applied previously by several researchers when examining the relationship between CSR and financial performance (Aupperle et al., 1985; Russo & Fouts, 1997; Tang et al., 2012; Moon et al., 2014). Additionally, one market based measure is utilized in the form of Tobin’s Q, a measurement of market based performance which also have been used by several researchers previously in researching the relationship between
CSR and market based performance (Dowell et al., 2000; Guenster et al, 2011; Nishitani & Kobuku, 2012).

3.7 Financial measurement

3.7.1 Tobin’s Q
Tobin’s Q was introduced by James Tobin in 1968 (Wang et al., 2014). The practical use of Tobin’s Q is measuring a firm’s market based financial performance (Horvathova, 2010). Essentially, Tobin’s Q aims to evaluate how effectively a firm exploits its assets and assesses if investments in that firm should be made on that basis. This method has become widely used in measuring a firm’s market based financial performance (Wang et al, 2014).

The basic principle of Tobin’s Q involves calculating a firm's market value plus loans divided by its total assets. If the result is equal to 1, it means that a firm’s market value exactly reflects the replacement cost of its assets. If the result is higher than 1, it implies that the market value exceeds the replacement cost of the firm’s assets which would indicate that the company is overvalued. Conversely, a value less than 1 would indicate that the replacement cost of a company’s assets is lower than its market value and thus the company is undervalued (Wang et al., 2014). Several researchers have utilized Tobin’s Q when examining the relationship between CSR and financial performance (Dowell et al., 2000; Guenster et al, 2011; Nishitani and Kobuku, 2012). The latter, Nishitani and Kobuku (2012), used Tobin’s Q as their financial performance variable to see if a particular facet of CSR (reduction of greenhouse gas) would enhance a firm’s value. Guenster et al. (2011) utilized both ROA and Tobin’s Q as indicators of financial performance to see if eco-efficient firm’s achieved greater profitability (ROA) and market value (Tobin’s Q).

This study will also utilize Tobin’s Q in order to examine the relationship between CSR and market based financial performance. The calculation of Tobin’s Q is inspired by Chung and Pruitt (1994) approximation of Tobin’s Q. The original calculation model for Tobin’s Q has been considered very intricate and therefore a simplified calculation model was constructed by Chung and Pruitt (1994). This calculation is a relatively simple formula, however it has been proven to be 96.6% accurate to the more complex and intricate calculations constructed by Lindenberg and Ross (1981). The formula for Tobin’s Q utilized in this study is:

\[ \text{Approximation of Tobin’s Q} = \frac{\text{MVE + PS + DEBT}}{\text{TA}} \]
MVE = the firm’s share price multiplied by its common stock shares outstanding
PS = the firm’s liquidating value of outstanding preferred stock
DEBT = the firm’s short term liabilities and net of short term assets + the value of the long term debts
TA = the firm’s total assets

3.7.2 Return on assets
Return on assets (ROA) is a measure commonly utilized when estimating a firm’s economic performance and profitability (Belu & Manescu, 2013). Compared to a market based measure such as Tobin’s Q, ROA is a measure of which represents the financial performance within the firm (Guenster et al, 2011). According to Russo and Fouts, (1997), this type of measure is generally considered to be representing a firm’s financial performance. Moreover, a large body of previous research has utilized ROA when examining the relationship between CSR and financial performance (Tang et al., 2012). Russo and Fouts, (1997) used ROA as a measure in order to see if environmental performance were positively related with a firm’s financial performance. In another research made by (Moon et al., 2014) utilize ROA to see if companies participating in voluntary environmental programs experienced a positive effect on its financial performance. As ROA is a well-known and generally accepted measure when examining the relationship between CSR and financial performance, this study will utilize ROA as an accounting based financial measure. The formula used for calculating ROA is inspired by Hackston and Milne (1996) who calculated a firm’s ROA as the firm’s net profit divided by total asset:

\[
\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}
\]

3.8 Models used in this research
3.8.1 Simple linear regression
This study utilizes a simple linear regression model in the program SPSS in order to examine the relationship between CSR and the two dependent financial variables. A simple linear regression is commonly used as a statistical method to measure the relationship between one dependent variable and one independent variable (Yan & Su, 2009). It can also evaluate the direction (positive/negative) and the strength of the relationship between the two variables (Nolan & Heinzen, 2014). The direction of the variables is represented by the Beta value
which describes how much the independent variable changes the dependent variable. A Beta value of 0.01 represents 1% (Nolan & Heinzen, 2014). In turn, the strength of the relationship is explained by the R squared value, which tells how much the independent variable explains the relationship with the dependent variable. An R squared value of 0.01 represents 1% (Malhotra & Birks, 2003). In order for the relationship between the independent and dependent variable to be considered reliable, common practice is to only consider results reliable when the P-value be no less than 0.05 (Nolan & Heinzen, 2014). There is however instances in which researchers allow a more relaxed lower boundary set at 0.1 (Waddock & Graves, 1997; Wang et al. 2014).

Linear regression has been utilized as method in previous research when investigating in the relationship between CSR and financial performance (Simpson & Kohers, 2002) and will also be included in this research. The dependent variables used in the simple regression model are ROA or Tobin’s Q, the independent variable is represented by the CSR score provided by the FIFCR.

### 3.8.2 Moderated regression analysis

In classical validation models, the degree of association between two or more variables is measured. While this method has proven useful in many instances, there is uncertainty whether this method accurately describes a phenomenon and provides complete understanding regarding certain relationships (Sharma et al., 1981). In order to address this uncertainty, some researchers include additional, moderator variables in calculations which have been found to influence or strengthen the relationship examined (Sharma et al., 1981). In this research, the moderator variables firm size and industry are included in accordance with suggestions from several previous researchers of the CSR and financial performance relationship (Ullmann, 1985; Waddock & Graves 1997; McWilliams & Siegel 2000). In contrast, Orlitzky (2001) do not find evidence which would indicate that firm size generates smaller or greater positive effects on the relationship.

In order to test the hypothesis regarding the moderating effect of industry set for this research, the researchers followed the proposed division of industries set by FIFCR. After the exclusion of companies which do not fill the requirements necessary to perform this research, the number of companies in nine of the original 15 industry categories is considered too small to offer representative results of an industry. To minimize the possibility of misleading
results, the researchers set a minimum requirement of 14 companies in a certain industry. After applying this requirement, six industries remain: Various Industries (28), Real Estate (14), Consumer Goods (14), Health Services (20), Finance (18) and IT (23), a total of 117 companies.

In order to evaluate the possible moderating effect of firm size, this research utilizes the division made in the FIFCR where companies are separated based on the Market Cap (short for market capitalization) segments they are listed on at the Stockholm OMX Stock Exchange. This division leads to three groupings regarding firm size, Small Cap (market value below €150 million), Mid Cap (market value between €150 million and €1 billion) and Large Cap (market value exceeding €1 billion) (Swedbank, 2015).

3.9 Sample
In this section the sampling process for this study is presented as well as the sampling frame. The purpose of sampling techniques is, by deploying a variety of methods, to narrow down a population to identify a suitable sample where the related data needed is accessible and for it to be as suitable or targeted as possible to satisfy the study’s purpose (Saunders et al., 2009). Bryman and Bell (2011) describe the process as narrowing the entirety of a population, consisting of companies, people or regions etc. through different samplings methods to generate a sample which is as accurate and representative as possible in order for research to answer its purpose. In the case of this research, the FIFCR provides the researchers with the entire population of companies in the Stockholm OMX Stock Exchange's three largest Market Caps and the accompanying data needed to investigate the subject of interest.

3.9.1 Selection of participants
Folksam has performed and published the FIFCR since 2006 with annual reporting’s being published between 2006-2009 and biannual reports from 2009 and onwards. The index consists of three sections, one where companies are divided by industry, one where companies are divided based on Market Cap (related to companies’ turnover) and one where all companies are compared regardless of industry and size. In 2011, Folksam revised the industry categorization to form new industry categories (Folksam, 2011). In order to adhere to the research strategy of this research and the longitudinal panel data study design where the same sample is surveyed throughout the study, the years 2006-2009 are selected as an appropriate time span. The panel data study design also results in the exclusion of companies which are not scored in the FIFCR throughout the entire time span.
Other aspects which are required for participating companies is that financial information, in the form of annual reports, are available for every year between 2006-2009 in order to allow the calculations of Tobin’s Q and ROA. Further, companies with broken fiscal years have to be excluded because of the inaccuracy it causes in terms of data consistency. Lastly, companies with annual reports lacking the financial variables needed to calculate Tobin’s Q are excluded. Based on these requirements, 144 companies are excluded and 167 companies form the sample of this study.

Original population of 311 companies examined between 2006-2009 by FIFCR:
- 107 companies excluded due to not being scored each year.
- 15 companies excluded due to broken fiscal year(s).
- 22 companies excluded due to insufficient financial figures in annual report(s).

Remaining sample size: 167

3.10 Ethics in research
The ethical aspect of data collection is often an important consideration for researchers in describing how and why data is collected. The most common considerations researchers need to consider during data collection is if there is any potential harm of participants, a risk of privacy invasion or any form of deception or lack of informed consent (Bryman & Bell, 2011). The ethical issues concerning the use of secondary data, as in this research, is considered to be difficult to determine as it concerns more of collective quality of the data (Saunders et al., 2009). A potential ethical issue that can occur through the use of secondary data is that it could end up being used in a way which it was not initially meant to or raise questions regarding the legal rights of utilizing the data (Bryman & Bell, 2011). The ethical issues connected to the use of secondary data in this research is considered to be minimal seeing as the FIFCR and financial reports of publicly traded companies are published through the websites of the respective owners of that information and it being dedicated or meant for public review.
3.11 Quality criteria

3.11.1 Reliability
According to Bryman and Bell (2011), reliability in research is related to whether the results of the study would be consistent if the study would be repeated with the same data and method. Reliability is of certain interest in quantitative researches as it is more noticeable if the measurements are stable or not. In this particular research, the CSR scores are taken from a large organization (Folksam) and companies published financial reports which adds reliability, as secondary data of this sort is often very reliable (Saunders et al., 2009). Bryman and Bell (2011) states three key terms of what reliability in research consists of: stability, internal reliability and inter-observer consistency. Stability concerns how stable the measurement is over time. Internal reliability describes whether or not the indicators of the index are consistent. Inter-observer consistency relates to if observations of the data are affected by any subjective input.

One aspect that could be taken into consideration in this research is that Folksam could, through the company’s investments and offering of investment funds, possibly act biased towards certain companies in the Index (Folksam, 2014) which in turn could affect the score distribution.

3.11.2 Validity
Validity is another aspect which researchers have to consider to ensure the trustworthiness of a research. The validity of a research is focused on the included measurements and that the research instrument actually measure what it is suppose to measure (Saunders et al., 2009). According to Houston (2004), the use of reliable secondary data within the field of economics and finance is commonly preferred to the use of self-generated data.

3.11.3 Face validity
Face validity is a form an approval from a person with experience within the field, which the person input with his or hers expertise to the study’s measures (Bryman & Bell, 2011). Even though this research utilizes previously established measurements models and not presenting any new form of measurement, the constructed models where discussed and evaluated with help from teaching staff at Linnaeus University. The use of the regressions model, both the linear regression model and the moderate regression analysis, were tested and approved by an expert at Linnaeus University within the field of statistics and SPSS before the final measurements are performed.
3.11.4 Internal validity
Internal validity is also related to the trustworthiness of the study but differs in that it is more focused on the researcher's observation and if the dependent variables vary because of the independent variable and not because of some other variable (Gay, 1992). The measures also need to be consistent in order to create a valid result throughout the research (Saunders et al., 2009). In this research, the dependent variables ROA and Tobin’s Q were calculated and controlled before entered into a data sheet. Regarding significance in relationships between variables, researchers traditionally test relationships and consider those producing a $P$-value below 0.05 to be significant. In this research, a more relaxed boundary of 0.1 is set in accordance with previous research in this field of study (Waddock & Graves, 1997; Wang et al, 2014).

3.11.5 External validity
External validity refers to the possibility of drawing generalizable conclusions of results and it reflects how well the study’s results are applicable to other organizations or companies (Saunders et al., 2009). Researchers often strive to reach a result that can be considered to represent a larger sample than what has been investigated. Therefore, the concern within quantitative studies is especially focused on selecting as a representative sample as possible to be able to apply the result on even larger scales (Bryman & Bell, 2011). The sample in this study consists of publically traded companies on the three largest Market Caps of the Stockholm OMX Stock Exchange in order to cover the broadest possible sample of large companies in Sweden.

3.14 Source criticism
According to Thorén (2013), source criticism is a collection of methods which are utilized by researchers in order to evaluate if something is true and how reliable a source is. There are different kinds of sources including as verbal, written or in the form of material. When conducting a research it is pivotal for researchers to investigate the reliability of a source (Thorén, 2013).

One method which can be used in assessing reliability is the traditional Source Criticism Principles which consists of four criteria. The first (1) is authenticity and relates to if the source actually is what it claims to be representing, if it is real or fictitious. The second (2) is the time aspect and concerns how relevant information is and if there newer findings which are more relevant to the research topic. The third (3) criteria is connected to the dependence
of material from a source and if the information is dependent on other sources or pieces of information. The fourth (4) and final criteria relates to potential tendencies of a source and if it is influenced by an agenda to only portray certain pieces of information and exclude others. To evaluate this it is important to look at a variety of sources in order to portray the subject as fairly as possible and include opposing views (Alexanderson 2012; Thorén 2013).

In this research the sources of information primarily consists of academic articles, literature connected to the subject, company's financial reports and information from a CSR index generated by the Swedish insurance company Folksam. The scientific articles included in the research where selected based on a few criteria, namely that they were published in a peer-reviewed publication (assessed through the use of Ulrichsweb) and included an abstract, introduction, method and results as suggested by the framework for scientific articles set by LNU (ulrichsweb, 2015; Linnéuniversitet, 2014). The time aspect (2) suggested by Alexanderson (2012) & Thorén (2013) was also taken into consideration through the inclusion of a large number of articles published in the last decade. However, due to the fact that investigations in the CSR and financial performance relationship has been conducted during the past several decades, some older articles were included to give readers a notion of the development within the field and display the diversity in results.
4.0 Results

In this chapter, results of the empirical investigation are presented. The data regarding the sample is presented in descriptive terms before being tested for statistical significance regarding the relationship between CSR and the financial variables included. Further, the results of two moderator regression analyses are presented concerning the moderator variables firm size (represented by Market Caps) and industry. The results are all based on models created in the statistical program SPSS.

4.1 Descriptive statistics – entire sample

<table>
<thead>
<tr>
<th>Variable:</th>
<th>Mean</th>
<th>Median</th>
<th>Std D</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td>1,98</td>
<td>1,51</td>
<td>1,53</td>
<td>0,00</td>
<td>5,71</td>
<td>167</td>
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<tr>
<td>ROA</td>
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<td>0,18</td>
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<td>167</td>
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<tr>
<td>Tobin's Q</td>
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<td>2,58</td>
<td>0,78</td>
<td>18,54</td>
<td>167</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td>2,07</td>
<td>1,72</td>
<td>1,45</td>
<td>0,00</td>
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<td>167</td>
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<tr>
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<td>0,068</td>
<td>0,13</td>
<td>-0,46</td>
<td>0,61</td>
<td>167</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>2,29</td>
<td>1,59</td>
<td>2,68</td>
<td>0,27</td>
<td>27,91</td>
<td>167</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td>2,14</td>
<td>1,82</td>
<td>1,41</td>
<td>0,00</td>
<td>5,56</td>
<td>167</td>
</tr>
<tr>
<td>ROA</td>
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<td>0,04</td>
<td>0,26</td>
<td>-1,70</td>
<td>0,36</td>
<td>167</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>1,52</td>
<td>1,17</td>
<td>1,14</td>
<td>0,52</td>
<td>10,42</td>
<td>167</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CSR</td>
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<td>167</td>
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<tr>
<td>ROA</td>
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<td>0,25</td>
<td>-2,05</td>
<td>0,56</td>
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<tr>
<td>Tobin's Q</td>
<td>1,99</td>
<td>1,40</td>
<td>1,91</td>
<td>0,16</td>
<td>13,90</td>
<td>167</td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistics – entire sample

In table 1 above, the descriptive statistics of the entire sample are listed the sampled companies’ CSR, ROA and Tobin’s Q data is presented. A total of 167 companies remain after companies missing financial data and companies which were not present on the Stockholm OMX Stock Exchange during the entire time period are excluded.

The statistics indicates that the mean and median CSR score increases in each year observed in the study. The financial variables, ROA and Tobin’s Q, display a less predictable pattern in terms of rises and falls. The ROA mean value in 2006 is 5% compared to 6% in 2007, -1% in 2008 and 0 in 2009. The median value of ROA remained higher than the mean in each observed year which indicates a negative skewedness of the distribution of data, meaning that there are fewer low values in the sample. The mean value of Tobin’s Q falls between 2006 and 2007 before decreasing heavily in 2008 and recovering slightly in 2009. There is a considerable difference between the minimum and maximum Tobin’s Q values in the observed time period, the largest being 27, 91 in 2007 and the smallest being 0, 16 in 2009.
4.1.1 Regression results – entire sample

<table>
<thead>
<tr>
<th></th>
<th>Values:</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROA</strong></td>
<td>P-value</td>
<td>Not sig</td>
<td>Not sig</td>
<td>0,043**</td>
<td>0,079*</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>0,015</td>
<td>0,008</td>
<td>0,029</td>
<td>0,024</td>
</tr>
<tr>
<td></td>
<td>R Squared</td>
<td>0,009</td>
<td>0,003</td>
<td>0,019</td>
<td>0,013</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
</tr>
<tr>
<td><strong>Tobin's Q</strong></td>
<td>P-value</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>-0,108</td>
<td>-0,143</td>
<td>0,027</td>
<td>-0,106</td>
</tr>
<tr>
<td></td>
<td>R Squared</td>
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<td>0</td>
<td>-0,005</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
</tr>
</tbody>
</table>

* = > 10 %, ** = > 5%, Not Sig = Not significant

Table 2: Regression results – entire sample

In table 2, the regression results for the entire sample are presented. In terms of ROA, the years 2006 and 2007 do not present a significant relationship between CSR and ROA. In 2008, the p-value is below 0,05 which indicates a relationship between the variables where the Beta is 0,029 and the R squared value is 1,9%. Data from 2009 also indicates a relationship between the variables although not as strongly with a p-value slightly below 0.1. The Beta this year is 0,024 and the R squared is 1,3%. The regression results for Tobin’s Q do not indicate a statistically significant relationship between the variables in any of the observed years.

4.2 Descriptive statistics – divided by industry

<table>
<thead>
<tr>
<th>Variable:</th>
<th>Various industries</th>
<th>Real Estate</th>
<th>Consumer goods</th>
<th>Health Service</th>
<th>Finance</th>
<th>IT</th>
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</thead>
<tbody>
<tr>
<td>2006</td>
<td>CSR</td>
<td>1,99</td>
<td>2,18</td>
<td>2,32</td>
<td>1,61</td>
<td>0,92</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0,09</td>
<td>0,09</td>
<td>0,07</td>
<td>-0,15</td>
<td>0,11</td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q</td>
<td>2,50</td>
<td>1,11</td>
<td>3,48</td>
<td>4,92</td>
<td>1,89</td>
</tr>
<tr>
<td>2007</td>
<td>CSR</td>
<td>2,17</td>
<td>2,22</td>
<td>2,56</td>
<td>1,56</td>
<td>0,93</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0,08</td>
<td>0,07</td>
<td>0,10</td>
<td>-0,06</td>
<td>0,79</td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q</td>
<td>2,02</td>
<td>0,94</td>
<td>4,28</td>
<td>3,56</td>
<td>1,3</td>
</tr>
<tr>
<td>2008</td>
<td>CSR</td>
<td>2,21</td>
<td>2,32</td>
<td>2,26</td>
<td>1,58</td>
<td>1,08</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0,05</td>
<td>-0,02</td>
<td>0,10</td>
<td>-0,06</td>
<td>-0,21</td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q</td>
<td>1,35</td>
<td>0,89</td>
<td>1,89</td>
<td>2,66</td>
<td>1,14</td>
</tr>
<tr>
<td>2009</td>
<td>CSR</td>
<td>2,19</td>
<td>2,29</td>
<td>2,28</td>
<td>1,62</td>
<td>1,07</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0,03</td>
<td>0,02</td>
<td>0,08</td>
<td>-0,16</td>
<td>0,08</td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q</td>
<td>1,66</td>
<td>0,88</td>
<td>2,56</td>
<td>4,44</td>
<td>1,19</td>
</tr>
<tr>
<td>N</td>
<td>28</td>
<td>14</td>
<td>14</td>
<td>20</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 3: Descriptive statistics divided by industry – Mean values
In table 3, the sample has been divided into its industry categories with each industry including a minimum of 14 companies in each industry and year. This leads to a classification where the highest number of companies can be found in Various Industries (28) and the smallest amount in Real Estate and Consumer Goods (14). In terms of CSR score, it can be observed that companies in the Consumer Goods industry receive consistent high scores compared to other industries (only receiving a lower mean score than companies in the Real Estate industry in 2008 and 2009). At the other end of the spectrum, it can be observed that companies in the Finance and IT industries receive lower scores than other industries, where the mean CSR scores of IT companies are consistently lower than 1.44. The mean CSR scores in the IT industry are considerably lower than those of Various Industries, Real Estate and Consumer Goods throughout the observed time span.

When comparing ROA means of the industries, it can be observed that companies in the Various Industries and Consumer Goods categories have a mean ROA greater than zero throughout the observed time period. The mean ROA for companies in the Health Service industry is never greater than 0 while Companies in the Real Estate, Finance and IT industries have a mean ROA which fluctuates across the time span. In terms of Tobin’s Q, Consumer Goods and Health Services companies produce the highest values. Companies in the Real Estate industry have an average Tobin’s Q less than zero in three of the observer years and companies in the Finance Industry have a Tobin’s Q which is slightly above 1.

4.2.1 Regression results – divided by industry
In this section, regression results are presented after the division of companies based on industry. In four of the six industries, the p-value exceeded 0.1 in terms of the relationship between CSR and ROA and Tobin’s Q respectively in all of the observed years and are therefore not further examined. The other two industries, Various Industries and Health Services, produced a p-value below 0.1 regarding some of the relationships between CSR and ROA or Tobin’s Q during the observed time span and these industries’ respective results are presented in table 4.
The sample in the Various Industries group consists of 28 companies and the regression results are presented in table 4. In 2007 and 2008, neither of the relationships between CSR and ROA or Tobin’s Q indicated statistical significance with p-values above 0.1. In 2006 and 2009 significant relationships can be observed both in terms of the CSR-ROA and CSR-Tobin’s Q relationships. In terms of ROA, the Beta in 2006 indicates that the relationship is negative with an R squared value of 0.103 whereas in 2009 the Beta is positive with an R squared value of 0.083.

The statistical significance regarding the relationship between CSR and Tobin’s Q in 2006 and 2009 are 0.065 and 0.036 respectively. The Beta values are negative in both 2006 and 2008 and the R squared value in 2006 is slightly lower than in 2009, 0.092 and 0.125 respectively.

**Table 4: Regression analysis – Various Industries**

<table>
<thead>
<tr>
<th>CSR</th>
<th>Values:</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>P-value</td>
<td>0.053*</td>
<td>Not sig</td>
<td>Not sig</td>
<td>0.075*</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>-0.026</td>
<td>0.01</td>
<td>0.016</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>R Squared</td>
<td>0.103</td>
<td>0.017</td>
<td>0.014</td>
<td>0.083</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>P-value</td>
<td>0.065*</td>
<td>Not sig</td>
<td>Not sig</td>
<td>0.036**</td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>-0.45</td>
<td>-0.162</td>
<td>-0.092</td>
<td>-0.252</td>
</tr>
<tr>
<td></td>
<td>R Squared</td>
<td>0.092</td>
<td>0.019</td>
<td>0.031</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

**Table 5: Regression analysis – Health Services Industry**
The second industry in which certain p-values were below 0.1 in certain instances was Health Services. The CSR and ROA relationship does not produce a p-value below 0.1 in any of the four years observed whereas the CSR and Tobin’s Q relationship in 2006 and 2008 are below 0.05. In these years, Beta values are positive and the R squared figures are 0.268 and 0.361 in 2006 and 2008 respectively.

4.2.2 Moderating effect of Industry

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.027**</td>
<td>Not sig</td>
<td>0.029**</td>
<td>Not sig</td>
</tr>
</tbody>
</table>

** = > 5%, Not Sig = Not significant

Table 6: Moderator analysis – Industry

In the figure above, the statistical significance of the moderating effect of industry is represented by p-value. In terms of the moderating effect of industry on the CSR and ROA relationship, the p-value is above 0.1 in each year investigated in this study. The p-value of the Tobin’s Q-CSR relationship is below 0.05 on two occasions, in 2006 and 2009.

4.3 Descriptive statistics – divided by Market Cap

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Small Cap</td>
<td>Mid Cap</td>
<td>Large Cap</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>CSR 1,17</td>
<td>1,78</td>
<td>3,15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROA -0,01</td>
<td>0,05</td>
<td>0,1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q 2,79</td>
<td>2,67</td>
<td>2,6</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>CSR 1,34</td>
<td>1,92</td>
<td>3,12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROA 0,02</td>
<td>0,06</td>
<td>0,09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q 2,46</td>
<td>2,03</td>
<td>2,3</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>CSR 1,41</td>
<td>1,94</td>
<td>3,21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROA -0,08</td>
<td>-0,04</td>
<td>0,03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q 1,46</td>
<td>1,44</td>
<td>1,65</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>CSR 1,47</td>
<td>1,9</td>
<td>3,25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROA -0,08</td>
<td>0,03</td>
<td>0,06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tobin’s Q 1,94</td>
<td>2,17</td>
<td>1,9</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>68</td>
<td>45</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Descriptive statistics divided by Market Cap – Mean values
In table 7, the descriptive statistics for the sample are displayed when the sample is divided based on their respective Market Cap on the Stockholm OMX stock exchange. In terms of CSR scores, the different Market Caps display a similar pattern in that the mean score of companies is successively increasing every year throughout the observed time period (with the sole exception of Large Cap in 2007). Another aspect that can be observed is that the CSR score mean is highest for companies in the Large Cap while companies in the Mid cap segment receive higher scores than companies in the Small Cap segment.

Regarding ROA, Large Cap companies have a mean value which is positive in all of observed years whilst Mid Cap companies have a negative ROA mean in 2008 and ROA mean for the Small Cap companies is negative in three of the four observed years. The Tobin’s Q mean value is above 1 in all Market Caps throughout the observed time period with the highest overall mean value being 2.79 for the Small Cap segment in 2006.

4.4.1 Regression results – divided by Market Cap

In this section, the companies in the sample have been divided on the basis of which Market Cap they are listed on in the Stockholm OMX stock exchange. There are three different Market Caps, Small, Mid and Large. The respective regression results are presented in table 8.

<table>
<thead>
<tr>
<th>CSR</th>
<th>Values:</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>P-value</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
<td>Not sig</td>
</tr>
<tr>
<td>Beta</td>
<td>-0.006</td>
<td>0.004</td>
<td>0.018</td>
<td>0.052</td>
<td></td>
</tr>
<tr>
<td>R Squared</td>
<td>-0.015</td>
<td>-0.015</td>
<td>-0.012</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>P-value</td>
<td>0.028**</td>
<td>0.1*</td>
<td>0.046**</td>
<td>0.055*</td>
</tr>
<tr>
<td>Beta</td>
<td>-0.874</td>
<td>-0.799</td>
<td>-0.265</td>
<td>-0.466</td>
<td></td>
</tr>
<tr>
<td>R Squared</td>
<td>0.057</td>
<td>0.024</td>
<td>0.045</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

* = > 10 %, ** = > 5%, Not Sig = Not significant

Table 8: Regression analysis – Small Cap

For companies listed in the Small Cap, there is no statistical significance in the relationship between CSR and ROA in any of the observed years. Conversely, the p-value for the CSR and Tobin’s Q relationship is below 0.1 in each observed year, ranging from 0.028 in 2006 to 0.1 in 2007. The Beta values for these relationships are negative throughout the time span while the R squared values range from 2.4% to 5.7%.
For companies in the Mid Cap segment, the relationship between CSR and ROA indicates statistical significance on one instance, in 2008, where it is 0,024. The Beta value in for that relationship is 0,091 and the R squared is 9,2%. The regression analysis of the relationship between CSR and Tobin’s Q does not indicate statistical significant in any of the observed years.

In Large Cap, the p-value for the relationship between CSR and ROA is less than 0,1 in one instance, in 2009, where it is 0,093. The Beta value for the relationship is -0,014 and the R squared is 3,5%. The relationship between CSR and Tobin’s does not indicate statistical significance in any of the observed years.
4.4.2 Moderating effect of Market Cap

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.017**</td>
<td>0.089*</td>
<td>Not sig</td>
<td>Not sig</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.082*</td>
<td>Not sig</td>
<td>0.052*</td>
<td>Not sig</td>
</tr>
</tbody>
</table>

* = > 10%  ** = > 5%, Not Sig = Not significant

Table 11: Moderator analysis – Market Cap

In the figure above, the statistical significance of the moderating effect of Market Cap is represented by p-value. In terms of Market Caps moderating effect on the CSR and ROA relationship, the p-value is 0.017 in 2006 and 0.089 in 2007 whilst not appearing to statistically significant in 2008 and 2009. The p-value of the moderating effect of Market Cap regarding the relationship between CSR and Tobin’s Q 0.082 in 2006 and 0.052 in 2008 and above 0.1 in 2007 and 2009.
5.0 Discussion

5.1 Hypothesis 1:

There is a positive linear relationship between a company’s CSR performance and its accounting based financial performance (represented by ROA).

In the regression results for the entire sample in table 2, it can be observed that the relationship between ROA and CSR produced different levels of significance (p-value) during the four intervals measured. In 2006 and 2007 the p-values appear to exceed 0.1, whereas in 2008 and 2009 it is 0.043 and 0.079 respectively. This differentiates from the findings by several other researchers who found statistical significance in the relationship between ROA and CSR (Waddock and Graves, 1997; Simpson and Kohers, 2002).

The R squared values for 2008 and 2009, in which results indicate statistical significance, are 1.9% and 1.3% which indicates that although a relationship can be observed between the variables ROA and CSR, the movement is only explained by 1.9% and 1.3% respectively. These figures indicate that even when a relationship is detected, R squared values on this level are very low and thus hinder the possibility of drawing too wide-spread conclusions from. It can further be inferred that there are other factors which have a significantly larger impact on a company’s ROA than its CSR performance. For instance, the financial crisis which ensued in 2007 has been noted to have had significant impact on the profitability of firms (Kestens et al., 2012).

The Beta values related to the significance levels of the ROA-CSR relationship are positive in all observed years, including 2008 and 2009 when statistical significance is observed. This suggests that a rise in CSR rating by 1 leads to an increase in ROA of 2.9% in 2008 and 2.4% in 2009. As shown in the table 1, CSR slightly increases each of the years observed across the majority of the sample which indicates that companies CSR reporting’s have increased during the time span (Folksam, 2009). This can be connected to the finding of Malsch (2012) and González-Rodríguez (2015) who found that companies dedicate more time and resources to CSR activities in recent years. The reason as to why companies report CSR activities more extensively could be due to several factors, however since the time span investigated occurred before it has become mandatory for Swedish companies to report such figures (European Commission, 2015), one must assume that these undertakings were made on a
largely voluntary basis. Therefore, it is presumably connected to companies’ dedications to adhere to the wills of its stakeholders or shareholders to increase CSR activities and reporting’s, something which has been noted by several researches in previous studies (Russo & Perini, 2010).

When observing the regression results for the entire time span in table 2 it can be noted that the model does not produce a P-value lower than 0.1 in all years, only in 2008 and 2009. This could indicate that stakeholder’s interest in companies CSR activities increased in more recent years and that companies adhere to the wishes of its stakeholders accordingly. Such findings would be line with the findings of other researchers regarding the increasing influence of stakeholder demands on firms CSR activities (Murray & Vogel, 1997; Malsch, 2012; González-Rodríguez, 2015). It can also be inferred that the relationship between CSR and financial performance is positive, albeit not very strongly. According to the argumentation of Friedman (1970) this would indicate that companies should invest in CSR activities because it brings financial gains to the company in terms of ROA. The finding also relate to the win-win scenario described by Windsor (2006) where CSR and financial performance increase simultaneously.

Even so, Hypothesis 1 cannot be accepted since statistical significance does not occur during the entirety of the times span. Hypothesis 1 is therefore rejected.

5.2 Hypothesis 2:

There is a positive linear relationship between a company’s CSR performance and its market based financial evaluation (represented by Tobin’s Q).

In table 2 the results of the regression analysis of the relationship between CSR and Tobin’s Q is examined for the entire sample. In contrast to the analysis of the CSR and ROA relationship, these results do not produce statistical significance in any of the observed years and therefore it is difficult to discuss the Beta and R squared values and what they may represent.

Seeing as this model produces less significance than the relationship between ROA and CSR which was examined through hypothesis 1, these findings can be connected to the remarks
made by Orlitzky et al. (2003) that accounting based measures are more strongly correlated with CSR than market based ones. Further, because the results indicate that the relationship between CSR and Tobin’s Q is not significant which means that it is not an influential factor when it comes to the potential rise or fall in Tobin’s Q value. These results differentiate from those found by other researchers (Dowell et al., 2000; Guenster et al., 2011) who note a significant positive relationship in the relationship between CSR and Tobin’s Q. Again as research within this field uses different approaches, methodology and variables leads to mixed end results (Girerd-Potin et al., 2013), so is this study. Because of the lack of significance throughout the timespan in this research, Hypothesis 2 is rejected.

5.3 Hypothesis 3:

*Industry moderates the relationship between CSR and financial performance.*

In order to properly examine Hypothesis 3, both a regression analysis and a moderator analysis is performed. In the regression analysis, four of the industries examined failed to produce significant results regarding the relationship between CSR and ROA/Tobin’s Q. In two of the industries, Various Industries and Health Services, some significance can be observed. This supports the comments made by Griffin & Mahon (1997) who argued that there is dissimilarity between industries regarding environmental and social concerns and the amount of time and resources that are allocated to such activities. Further, it reiterates the notion that the extent to which a company undertakes CSR activities is largely based on an industry’s exposure to risks and the degree of stakeholder engagement (Griffin & Mahon, 1997).

In Various Industries, the relationship between CSR and ROA produces significance in two of the years examined (2006 & 2009) and none in the other two (2007 & 2008). In 2006, the Beta of the relationship between CSR and ROA was -0.0026 which indicates that an increase in CSR investment that year decreased the ROA for the companies in that industry, although very slightly. In 2009 on the other hand, the Beta is positive which means that an increase in CSR performance leads to a small increase in ROA (3.7%). According to the scenario model set by Windsor (2006), these two years display different characteristics regarding the relationship between CSR and financial performance and also indicates that the relationship varies in different years. The R squared figures are 10.3% and 8.3% in 2006 and 2009.
respectively, which is a quite small figure and as such there are several other factors which has a larger impact on ROA than CSR performance. The relationship between CSR and Tobin’s Q is also significant in 2006 and 2009, but in these years, the Beta value of the relationship is negative (-0.45 and -0.252 respectively). This means that in these years increase in CSR leads to a lowered Tobin’s Q value, albeit the R squared figures are fairly low (around 0.1).

In the Health Services industry, no significance can be observed regarding the relationship between CSR and ROA. The relationship between CSR and Tobin’s Q on the other hand, indicates statistical significance on the 1% level in 2006 and 2008 and an R squared figure of 0.268 and 0.361 respectively. The Beta values in these years are positive which means that an increase in CSR leads to an increase in Tobin’s Q.

In order to test industry’s overall effect on the relationship between CSR and financial performance, a moderator analysis is made in table 6. This model indicates that there is no statistical significance of this moderator (industry) and the relationship between CSR and ROA whereas statistical significance can be observed on two occasions regarding the relationship between CSR and Tobin’s Q, in 2006 and 2008. Because only 2 out of the 8 moderated regression analyses show statistical significance, Hypothesis 3 cannot be accepted. Even though there are certain industries that display some statistical significance, the overall moderating effect of industry in terms of its effect on the CSR and financial performance relationship occurs sporadically and only to a small extent. Based on these results, Hypothesis 3 is rejected.

5.4 Hypothesis 4:

*Firm size moderates the relationship between CSR and financial performance.*

The variable that was tested in terms of moderating the relationship between CSR and financial performance was firm size. Companies are divided into three categories and based on the Market Cap the companies are listed on the Stockholm OMX stock exchange. In the small cap section, there was no significance in the relationship between CSR and ROA during any of the years examined. In the relationship between CSR and Tobin’s Q on the other hand, the p-value was lower than 0.1 in all years, the lowest being 0.028 in 2006. The
Beta values are consistently negative in all years which indicate that the market punishes investments in CSR made by Small Cap companies in terms of ROA. These finding could also indicate that CSR investments can incur short-term economic loss due to investments made in CSR activities (Windsor, 2006).

The mean scores of CSR for companies in the Small Cap are consistently lower than those in the Mid or Large Caps which is in line with Waddock and Graves (1997) suggestions that smaller companies tend to invest less significantly in CSR activities than larger companies. Since these results display a recurring negative relationship between the two variables the results can be connected to the findings of Alexander and Buchholz (1978) in that increased CSR expenditure could lead to a competitive disadvantage as the investments could have been better spent on other activities. However, because of the relatively short time span investigated in this research, the results could also be connected to Windsor’s (2006) findings which suggest that CSR investments can generate a short-term economic loss. A different view of the short-term impact on a company’s effect of its CSR activities and how the activities are perceived by stakeholders can be discussed, as Grafström et al. (2008) states that information nowadays travels faster, which increase the population’s awareness regarding company’s handling of social responsibility. This could perhaps be viewed as an opportunity where companies have the possibility to generate a greater reputational value fast but simultaneously balance between the possible economic losses (Windsor, 2006).

Reviewing the entire firm size sample (table 7), it can be concluded that the average CSR score from 2006 until 2009 has increased. It can be interpreted to what has been discussed more recently, to which companies’ CSR activities are becoming more important and more resources are put into (González-Rodríaiguez et al., 2015; Malsch, 2012). Another aspect of viewing the CSR increase could be in form as companies do not only use its resources into charity (Lesinger, 2007) but target activities to also be appreciated by the firm’s own employees in order to generate the firm’s positive long-term results (Dyllick & Hockerts, 2002). Furthermore, the discussion of how CSR activities can be seen as an additional factor for companies using CSR. As Cheng et al. (2014) states that it strengthens the relationship with stakeholders as it also tend to lower its capital constraints through better access to bank loans which makes it easier to undertake strategic investments.
In the Mid and Large Cap, significance levels are generally low with only two of the sixteen moderated regression models producing significant results. In order to test firm size’s overall effect on the relationship between CSR and financial performance was a moderator analysis made in table 11. As can be observed, there are some tendencies of statistical significance of this moderator (Firm size). The relationship between CSR and ROA in 2006 shows strong significance as the p-value is 0.017, and Tobin’s Q in the same year is within the significance rate of 0.1 at 0.082. However, the general observation of the entire sample during all the years shows no clear significance which is in line with the findings of Orlitzky (2001) that firm size does not influence the relationship between CSR and financial performance. Seeing as significance levels are generally low throughout the time span with a few exceptions, Hypothesis 4 is therefore rejected.


6.0 Conclusion

Reviewing the research result of investigating the relationship between CSR and financial performance in large Swedish publicly traded companies it can be concluded that no significant relationship can be observed for the sample during the time period 2006-2009. Accordingly, this research joins the large body of research within this research area which also failed to observe a significant relationship between the variables CSR and financial performance. It can therefore be inferred that there are other factors which influences financial performance to a larger extent than CSR.

Even though tendencies can be observed, as in the case of the negative relationship between Tobin’s Q and CSR in the Small Cap market, the regression analysis moderated by Market Cap displayed no significance in terms of its moderating effect on the CSR and Tobin’s Q relationship. Considering that very few of the regression analyses in this research produced P-values lower than 0.05 attests to the lack of significance in the relationship between CSR and financial performance regarding the sample examined.

The moderating regression analysis showed that industry and firm size did not act as moderators of the CSR and financial performance. Similarly, as in the case of Small Cap companies and the negative relationship between CSR and Tobin’s Q, tendencies of could be observed where regressions models of some individual industries (Various Industries and Health Services) displayed statistical significance to a larger extent than others. However, the moderating regression analysis did not indicate that industry is a significant moderator of the relationship.
7.0 Implications and suggestions for future research

7.1 Theoretical implications
This study contributes to the existing literature body of CSR and financial performance relationship research field in several ways. Firstly, the results showed that during the time span of 2006-2009, there was no significant relationship between CSR performance and financial performance (in terms of ROA and Tobin’s Q) across the sample of 167 Swedish companies. In that way, it adds to the limited amount of studies in this research area on the Swedish market and builds on the findings by Peng & Yang (2012) that research in the relationship between CSR and financial performance need to be conducted in different markets and regions since there are numerous different factors which differentiates how companies operate and how this can influence the relationship. This addition to the existing body of literature can therefor help further understanding of the CSR and financial performance relationship in publicly traded Swedish companies.

Secondly, this research adds to the existing body of literature in this research field in which the relationship between CSR and financial performance cannot be determined (Alexander & Buchholz, 1978; Stanwick & Stanwick, 1998; Peng & Yang, 2014).

Thirdly, the testing of moderator variables in terms firm size and industry indicated that neither of the variables moderated the relationship between CSR and financial performance. These findings are in line with those made by Orlitzky (2001) who could not identify firm size as producing either stronger or weaker relationships between the variables.

7.2 Practical implications
The practical implication of this research consists of an outlining of the nature of the relationship between CSR and financial performance in Swedish companies during 2006-2009. This information can further companies and practitioners understanding the CSR and financial performance relationship in the context of publicly trades Swedish companies. As the result indicates that there is generally very low statistical significance regarding the relationship, investments in CSR is not observed be related company’s ROA or Tobin’s Q. This in turn could influence the extent to which companies choose to invest in such activities if these financial measures are considered important. However, it should also be noted that this research only examines the relationship between these two financial variables and that the time span examined does not necessarily reflect the relationship between the variables in
more recent years. Since the results of this research do not indicate a recurring statistically significant relationship between CSR and financial performance, it can offer insight to management of Swedish companies regarding what investments in CSR can be expected to yield in terms of ROA and Tobin’s Q. The lack of association between the variables suggest that firm’s undertaking CSR investments in the years 2006-2009 did not generate greater ROA or Tobin’s Q figures than companies with poorer CSR performance. As previous research has suggested, there could be several other beneficial aspects of improving a company’s CSR performance, such as better access to capital, reduction of risks or an improved relationship with stakeholders.

7.3 Suggestions for future research
The result of this study adds to the existing body of research literature which has also failed to find statistical significance in the relationship between CSR and financial performance. The results however are based only on two different financial variables and future research should utilize a larger number of financial parameters in order to test for significance in the relationship in publicly traded companies on the Swedish market. The use of more financial variables could also offer a wider scope of insight into how CSR performance affects different financial parameters. Further, future research could perform similar testing’s in more recent years to investigate if the relationship is more significant than in the time span investigated in this study. It can be observed from the results in this research that companies CSR scores are predominantly increasing in the years 2006-2009 and future research could if investigate the nature of the relationship between CSR and financial performance could be more significant in recent years as companies expands its CSR investments.

Another suggestion for future research is to utilize a larger sample than the one observed in this research. Due to the panel data study design, the sample was only able to include 167 companies that were scored in the Folksam Index in all the years during 2006-2009. Considering that the total number of companies listed in the Small Cap, Mid Cap and Large Cap during these years were 311 in total, future research could apply another research design which allows the inclusion of the total population of companies.
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