FINANCIAL PERFORMANCE: THE MOTIVATION BEHIND CORPORATE SOCIAL RESPONSIBILITY REPORTING

An Investigation into the relationship between Corporate Social Responsibility reporting and Financial Performance

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Abstract

Corporate Social Responsibility (CSR) reporting has become an increasing trend in the corporate world. It is a relatively new concept but has become a major research topic in the accounting profession. The motivations behind why companies make voluntary CSR disclosures are unclear. Does a firm really spend its shareholders funds without some kind of return?

This paper aims to empirically explore the relationship between CSR and financial performance to see if this is what motivates firms to disclose voluntary CSR activities. This paper provides a New Zealand perspective on the topic using 125 firms from the NZSX. The relationship between CSR and financial performance is compared in two broad industries, the production industry and the service industry. This is carried out to see if there is a difference in the relationship between CSR and financial performance across different industries. A comparison of the relationship between CSR and financial performance across industries has been suggested but has never been empirically tested.

The results suggest that the industry a firm operates in has a large effect on the relationship between CSR and financial performance. Only firms in the production industry seemed to benefit financially from reporting more CSR. There is evidence of legitimacy theory as those firms in the production industry are often more publicly exposed or have a greater impact on the environment.

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Chapter 1: Introduction

1.1: An Introduction to Corporate Social Responsibility Reporting

Corporate Social Responsibility (CSR) reporting has an important place in the accounting profession today. It has become an increasing trend in the corporate world and the accounting profession. CSR disclosures involve reporting more than just the financial performance of a firm. This is done by including social and environmental elements of a firm's performance. They are currently completely voluntary. This approach to financial reports appeals to a range of different stakeholders (such as creditors, debtors, shareholders, government groups, lobby groups, consumers and a number of other stakeholders), resulting in a shift from traditional financial reporting which focused on shareholder wealth maximisation, to a new era in annual reports.

CSR has become one of the most important research topics in the accounting profession. A large number of major corporations all around the world are adopting CSR reporting. In 2002 KPMG produced a report showing that 45% of the 250 largest companies worldwide report CSR. This was an increase from 35% in 1999 (Simms 2002).

1.2: Motivations for the Research

CSR reporting can be an expensive process. Are companies really spending their shareholders profits without any kind of financial return? There has been a lot of debate as to why companies would choose to disclose certain information voluntarily. The motivations behind voluntary CSR disclosures by corporations are unclear, and this has become one of the major research areas within the topic of CSR.

It is the purpose of this research to investigate why a company may undertake CSR reporting. One theory is that CSR can impact a company's financial performance. It could be that by reporting, a company can increase its financial performance, or by not reporting, its performance could be negatively affected (Legitimacy Theory).

1.3: Structure of the Dissertation

The literature review in Chapter Two provides an overview of CSR reporting and highlights the previous research that has looked at financial performance as the key motivator for a company reporting corporate social responsibility. Chapter Three discusses the key variables that have impacted previous researcher's method (including a schematic diagram of the relationship of the variables being researched) and outlines the hypotheses being tested. Chapter Four provides information on the research method and design. The chapter looks at the sample used in the research, outlines the variables and examines content analysis and its use. Chapter Five presents an analysis of the results produced. Chapter Six looks at a discussion of the results and concludes the papers findings. Limitations of the research and future research directions are outlined in Chapter Seven.

1.4: Importance of the Research

The relationship between CSR reporting and financial performance is important to both researchers and managers. A relationship between these variables could have a significant impact on how managers approach CSR, and whether their firm is likely to participate or not. A negative relationship might provide a warning to managers to think carefully when deciding on whether to undertake CSR (Cochran 1984). This research adds to the previous literature by controlling for variables that were pointed out in previous research papers. CSR is a new trend and is always changing so this research provides evidence of whether or not there is a relationship (positive or negative) between CSR and financial performance today. This paper adds a New Zealand perspective by using 125 (usable) companies listed on the New Zealand Stock Exchange (NZSX).

Chapter 2: Literature Review

Section 2.1: Overview of Corporate Social Responsibility

CSR is a reasonably new concept in the accounting profession. The ‘father’ of social and environmental reporting was David Linowes (Mobley 1970). Early CSR research was empirical in nature and was mainly based around the frequency of CSR in companies’ annual reports. The motivation behind CSR disclosures has quickly become a popular research area within the topic.

Various researchers have defined CSR. There is no one accepted definition because CSR reporting is voluntary and there are no reporting standards that outline what exactly the term incorporates (Deegan 2004). A definition is determined by factors such as convenience and experience (Haigh and Jones 2006). A firm defines CSR depending on its motivations and stakeholders; for example, The Body Shop’s CSR concentrates on poverty and human rights whereas Starbucks CSR looks at employee welfare (Haigh and Jones 2006). Most authors’ definitions are similar, but with slight differences.

The European Commission defines CSR as “a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment.” (Simms 2002). Adams and Zutshi (2004) define it as “the integration of business operations and values whereby the interest of all stakeholders including customers, employees, investors and the environment are reflected in an organisation’s actions and policies”. The Three Concentric Approach (developed in 1971 by the Committee for Economic Development based in America) encompasses CSR as a model with three specific levels (Carroll 1991). The first circle involves financial performance, in particular, growth and productivity. The second circle focuses on these financial items and awareness of the society a firm interacts with. The final circle involves the care and improvement of the environment that a firm operates in (Carroll 1991).

These three interpretations of CSR incorporate a similar understanding of a responsibility to more than just the financial interests of a corporation. Waddock and Graves (1997) note that CSR comprises many dimensions and variations in behaviours, such as investing in pollution reduction technology and investigating internal processes like treatment of minority groups. This is a different approach to traditional accounting, which focuses on shareholder wealth maximisation. CSR involves a reporting approach aimed at a number of other stakeholders other than just shareholders. These may be creditors, investors, staff, the community the company operates in and future investors. CSR may involve reporting things such as interactions with the community (for example donations, community events or sponsorship), supporting developing countries, employee training and education programmes and environmental issues (Deegan 2004).

The most common form of reporting CSR is a triple bottom line report. This involves disclosing a firm's social, environmental and financial performance for an accounting period in a report. Awards now exist for outstanding triple bottom line reporting and performance (Milne *et al.* 2003). Some guidelines (such as the Global Reporting Initiative guidelines) have been constructed, outlining what should be disclosed and how this should be undertaken (Milne *et al*. 2003). A few countries, such as Great Britain and Canada have also regulated environmental accounting**;** however, social reporting today still remains unregulated. Social and environmental audits can be carried out but this is voluntary (O'Dwyer 2003).

Section 2.2: The Motivations Behind Corporate Social Responsibility

A number of reasons have been suggested as to why companies report CSR. There are two main sides to the debate. The first is that companies undertake CSR reporting because they accept they have a responsibility to a large range of stakeholders in society rather than just to their shareholders. The other explanation is that there is some kind of payoff to the organisation if they report CSR (Parket and Eilbirt 1975)). Parket and Eilbirt (1975) give some examples of these payoffs, such as better PR, increased product recognition, increased employee motivation, an increased labour pool, and better public image for the reporting corporation and ultimately, increased long-term profitability. A 1997 survey revealed that 86% of employees were strongly committed to an organisation if it had good business ethics (Stodder 1998).

Criticism of this viewpoint focuses around one question: if CSR really does increase financial performance, why are some firms reporting more actively than others (Parket and Eilbert 1975)? It seems possible; therefore, that financial payoffs do not motivate firms reporting CSR, and that there is some acceptance by corporations of accountability to stakeholders other than the company's owners.

Parket and Eilbert (1975) also raise the point that CSR may just be a current fashion in the accounting profession that will fade away over time. Because of the uncertainty concerning the relationship between CSR and financial performance, it is important that these variables be examined empirically. This will provide some evidence as to whether financial performance is the key motivator of why organisations report CSR. If a negative relationship or no relationship is found between CSR and financial performance, this provides evidence of other motivators.

2.2.1: Financial Performance as a Motivation

Profitability is the most important aspect affecting a firm's growth and survival. It seems unlikely that a company could spend shareholders' funds without providing some kind of return. As discussed earlier, corporate social reporting can be a very costly process. Most researchers consider increasing financial performance as the key motivator for firms to report CSR. The argument is that companies who report CSR will experience increased profits, and those that do not will suffer adverse effects on financial performance. Friedman (1962) first researched the relationship between CSR and financial performance.

One view is that by showing more information, a company is showing investors and the general public that they are trustworthy. "You are saying you have nothing to hide, you are explaining where there are problems which there inevitably are." [1] Deegan (2002) shared this view, and looked at opportunities for "ethical investment funds" for ethical investors. Adams and Zutshi (2004) also suggest that profitability can be boosted through increased savings due to technological improvements and employee productivity.

In 2002 Price Waterhouse Coopers undertook a survey of top global companies' management, regarding their views on how vital CSR is to their company. The results showed that 70% of managers felt these disclosures were essential to the continued profitability of their company.

There have been a large number of papers written to empirically examine the relationship between CSR reporting and a firm's financial performance. By 1995 there had been 51 papers looking into this relationship. However the research that has been carried out is varied in its results (Chand 2006) so it is difficult to establish whether there is a relationship between the two variables.

[1] Adams and Zutshi (2004)

Some researchers found a negative relationship, some found a positive relationship and some found no relationship (Chand 2006). As so many conflicting conclusions have been drawn, it is difficult to make any judgement on whether a relationship does exist. The largest number of researchers however, found a positive relationship between CSR and financial performance.

A negative relationship between CSR and financial performance would suggest that the costs incurred from CSR make the firm less profitable than firms that do not participate in CSR activities (Bragdon and Marlin 1972).

Legitimacy theory is directly related to financial performance. It states that social and environmental disclosures are the result of crises that have occurred and are a way of managing reputation (Clarke and Gibson-Sweet 1998). Legitimacy theory suggests that by not managing its reputation a company will experience a decline in sales. Clarke and Gibson-Sweet (1998) tested whether this theory is used by companies, and the results showed legitimacy theory encouraged companies to report CSR.

Deegan (2002) describes legitimacy theory as a “system-oriented theory” and raises the issue that CSR is essential for a firm’s survival. This is because a bad reputation can spell disaster for a firm’s financial performance due to boycotts by the public. One example of this is Nike who suffered negative publicity because of their sweatshops using child labour. Reporting CSR can lead to increased sales on the other hand, as consumers perceive the product as positive and will buy more of that company’s product. Companies that react to such criticism from the public by reporting CSR are attempting to show their critics that they accept they may have committed a social, environmental or ethical wrongdoing but have fixed their error (Parket and Eilbirt 1975).

Section 2.3: The Relationship Between Corporate Social Responsibility and Financial Performance

Of the 51 studies carried out between 1970 and 1995, 33 found a positive relationship, 9 found a negative relationship and 9 found no relationship between CSR and financial performance (Chand 2006). This sub-section looks at some of the most important and relevant empirical studies that have been carried out in the past.

2.3.1: Positive Relationships Between CSR and Financial Performance

Spicer (1978) found a positive correlation between a firm's economic performance and its level of pollution control in the paper and pulp industry. This study found that the higher the level of pollution control the greater the profitability and size of the firm and the lower the systematic and total risk. Spicer also concluded that the benefits seen were short lived.

Anderson and Frankle (1980) took a different approach by using a firm's market value to measure financial performance and its relationship with CSR. A positive relationship between market value and CSR was found. This meant that investors were investing more in firms who reported CSR than those who did not. This provides some evidence of the existence of the 'ethical investors.'

Cochran and Wood (1984) examined the relationship between CSR and corporate financial performance (CFP) by using new (at the time) statistical research tools to look at financial variables working as moderating variables. Cochran and Wood (1984) found that asset age was highly correlated to levels of CSR and that there was a positive relationship between CSR and CFP when asset age was removed. This extra variable added a new element to Cochran and Wood's empirical research and it provided a possible insight into a variable that may be causing conflicting conclusions by various researchers.

Griffin and Mahon (1997) looked at the chemical industry and found that high CSR was linked to high CFP and that low amounts of CSR reporting was linked to lower CFP. Griffin and Mahon's empirical study was one of only a handful of studies that was industry-specific. Industry is a moderating variable. However, the internal validity of this empirical research was low as Griffin and Mahon only studied six firms.

More recent research by Joyner and Payne (2002) also found a positive correlation between reporting CSR with performance and firm value. Joyner and Payne noted the difficulty of measuring the benefits of CSR. There were also limitations as only a small sample of two firms was studied in detail, so their results could not be generalized adequately. The authors also saw some indication of a time lag between when CSR was reported and the financial benefits seen. These findings conflict with the results of Spicer (1978) who found that the financial benefits were short lived.

Parket and Eilbirt (2006) undertook some research that looked at a couple of directly related issues. The first was that managers perform a cost-benefit analysis of reporting CSR. The empirical research showed that there was no evidence to suggest that managers perform a cost-benefit analysis on CSR. One suggestion Parket made was that this would be a challenge as it is very difficult to quantify the benefits received from reporting CSR. A company may be more inclined to report CSR "when there is some fat in the company financial statements."[2] That is a company that has spare money to invest in CSR is more likely to do so (Parket and Eilbirt 1975). This adds to the strength of the argument for companies being motivated by increased financial performance when reporting CSR, as the company could use this excess money to invest in other revenue earning investments such as bonds, share portfolios or even in the bank instead of investing in CSR. Parket and Eilbirt were able to find a

[2] Parket and Eilbirt (1975)

positive relationship between profitability and CSR providing more evidence of the relationship between the two variables.

2.3.2: Negative Relationships Between CSR and Financial Performance

The first study to find a negative relationship between CSR and financial performance was Vance (1975). The study looked at share price and found that in building a portfolio an investor would be better off investing in companies who reported little or no CSR. His concluding comment, "companies have more reasons to be socially responsible than only how it affects the per share value of their common stock"[3] summed up Vance's findings.

An opposing view to CSR influencing profitability is that it is a firm's financial performance that influences CSR and not the other way round, contrary to what the majority of researchers think. The idea is that firms that have 'spare cash' available are more likely to invest in society and the environment (McGuire *et al.* 1988). This idea was shared by Parket and Eilbirt who believed that firms with larger profits were more likely to report CSR. The explanation provided for the adverse relationship observed between CSR and financial performance is that firms accept a responsibility to a range of different stakeholders. Firms take on the extra costs to benefit society as a whole and at the expense of their shareholders' personal wealth (McGuire *et al.* 1988).

Shane and Spicer (1983) also found a negative relationship between the level of social disclosures and economic returns. This is a direct contrast to Spicer's 1978 paper which found a significant positive relationship. This highlights the inconsistency of the results obtained by different studies. This paper uses a different measurement tool for valuing CSR: the Council of Economic Priorities (CEP) listing on a firm's CSR levels. It is suggested that this measurement tool caused the different results which were seen across Spicer's

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[3] Vance (1975)

two papers. It can be suggested, therefore, that how CSR is measured can also have a large impact on the conclusions that are reached. Consistency is required for comparable results. The explanation that Shane and Spicer (1983) provided for the negative results is that investors are put off by CSR; this is consistent with research by Riahi-Belkaoui (1992).

Riahi-Belkaoui (1992) found a negative relationship between external perceptions of a company's CSR activities and executive compensation schemes, providing a new angle on the relationship. Riaha-Belkaoui's findings suggest that top management may be discouraged from undertaking CSR activities. This is due to the fact that the shareholders do not appreciate their profits being spent on activities they do not consider beneficial to them.

2.3.3: No Relationship Between CSR and Financial Performance

The relationship between CSR and financial performance may be different across industries (Fry and Hock 1976). Fry and Hock loosely looked at members of the oil industry such as Texaco and concluded that the amount of CSR did not increase or decrease the profitability of the firm. Fry and Hock put any change in financial performance down to an increase in firm size. Their concluding comments also suggest that the firm's size and public image management also determine the amount of CSR reporting undertaken. The important point raised in this research paper however, is a concern that has been raised by previous researchers as well (Aupperle *et al.* 1985, Chand 2006 and Griffin and Mahon 1997). This is that the industry a firm operates in may have a strong effect on the results that are found when examining the relationship between CSR and financial performance. Firm size is possibly a problematic variable that must be controlled (Fry and Hock).

Alexander and Buchholz (1978) examined the relationship between the level of CSR and stock market performance, and also stock level risk. Alexander and

Buchholz's empirical study did not find any significant relationship between CSR and either of these two variables. One possible explanation for this is that the market is efficient and thus any 'positive news' will change the share price instantly rather than over a period of time (Fama 1970). If the changes to the stock price had occurred instantly, this research didn't provide any insight into whether or not CSR impacted stock market performance. If it did, the effects (if any) had occurred before the research was undertaken.

The research carried out by Aupperle *et al.* (1985) made a large contribution to the debate at the time. Aupperle *et al.* were critical of the research that had been carried out previously, especially in regards to what they had considered to be weak methodology applied on the relationship of CSR and financial performance. To avoid using weak methodology, Aupperle *et al*. carried out a survey using a specially designed survey instrument that they created to minimise the effects of bias in their respondents' answers. To measure financial performance the researchers used both long-term and short-term return on assets. No relationship was found between the variables, CSR and financial performance, suggesting the effect CSR has on profitability is neutral and by reporting CSR profits are neither increased nor decreased (Aupperele *et al*.). A point is raised however, that there may be some intangible benefits which arise from the reporting of CSR, and the question is raised whether this debate may ever be resolved.

An anonymous researcher (2005) in the *New Zealand Management Journal* found no relationship between CSR and profitability. They conclude that business's report from "their hearts as well as their wallets". The creditability of this paper however is low.

Chapter 3: Conceptual Framework

3.1: Moderating Variables Identified in Previous Research

Looking at the previous research identified two essential moderating variables that have caused conflicting results. The first is the industry that a firm operates in and the second is the size of the firm.

Previous research was not industry specific, causing comparison difficulties as different industries are exposed to an array of different social and environmental challenges and conditions (Chand 2006, Lerner and Fryxell 1998 and Griffin and Mahon 1997). The relationship between CSR and financial performance may be different across industries (Fry and Hock 1976). The differences in the conditions across industries could change how firms in different industries approach CSR. Different industries are exposed to different: legal compliance regimes, consumers, external pressures and public involvement, and this could affect the amount of CSR the firm has undertaken and the financial performance of the firm. For this reason it is impossible to compare the relationship between CSR and financial performance of firms in different industries together (Griffin and Mahon 1997). A paper which looks at comparisons within an industry will have greater internal validity (Chand 2006). These researchers proposed carrying out empirical research within one industry to avoid conflicting conclusions or by looking at the results of an industry individually rather than collectively. This paper looked at the relationship between CSR and financial performance by comparing the performance of firms within the same industry (firms were divided into those in the service industry and those in the manufacturing industry). This will provide evidence of whether or not the relationship varies with industry.

Firm size may also have a significant impact on the results concerning the relationship between CSR and financial performance (Lerner and Fryxell 1998, McWilliams and Siegel 2001 and Fry and Hock 1976). Fry and Hock found no relationship and put change in financial performance down to firm size. The reason Fry and Hock think this is that larger firms have a greater ability to make profits than smaller firms. They are therefore more likely to spend money on CSR. To control this variable, I am using ROA and ROE as they are financial performance measures that provide a firm's financial return based on the company's size

Two variables are used to measure CSR. Firstly the variable CSRScore which is the raw CSR score for a firm and secondly CSRWord which is size adjusted. Larger firms generally are more likely to report more CSR than smaller firms and this must be controlled. The variable CSRWord is used to control for the effect size has on a firms CSR. Only a handful of previous researchers controlled for both the effect size have on a company's CSR score and on financial performance (Guthrie *et al.* 2004). CSRWord is calculated by dividing CSRScore by the total number of words written in the annual report. This number is then multiplied by 10,000 to remove the decimals in the data. A programme called AnyCount 6.0 was used to count the number of words that appeared in the annual reports (in PDF form).

3.2: Hypothesis

The literature review clearly shows the importance of the topic of Corporate Social Responsibility within the accounting profession. In particular the motivations behind why companies undertake these voluntary activities must be fully examined. This paper looks at financial performance as the key motivator of companies reporting CSR by examining the relationship between CSR and financial performance. The size and industry variables have a moderating effect on the relationship between CSR and financial performance. To get reliable results it is essential that these variables are controlled.

There have been a number of conflicting conclusions drawn on the relationship between CSR and financial performance. Most evidence suggests that a positive relationship exists between the two variables. However there have been some important negative and non-existent relationships found. There has been a call for better method by researchers in this research area of CSR to provide stronger evidence on the relationship. The research mentioned previously in this Chapter, outlines the importance of controlling both the size and industry variables.

H1: ***There is a significant positive relationship between CSR and financial performance. Companies that undertake and disclose CSR will experience increased financial performance in the following year.***

A company which undertakes and reports CSR will experience increased financial performance. The greater the amount of CSR a company reports the better the reported financial performance will be. The companies with the highest CSR scores (raw and size adjusted) in 2004 will earn larger profits (size adjusted by ROA and ROE) in the following year.

H2: ***There will be a significant difference between the CSR scores for firms in the production industry and firms in the service industry.***

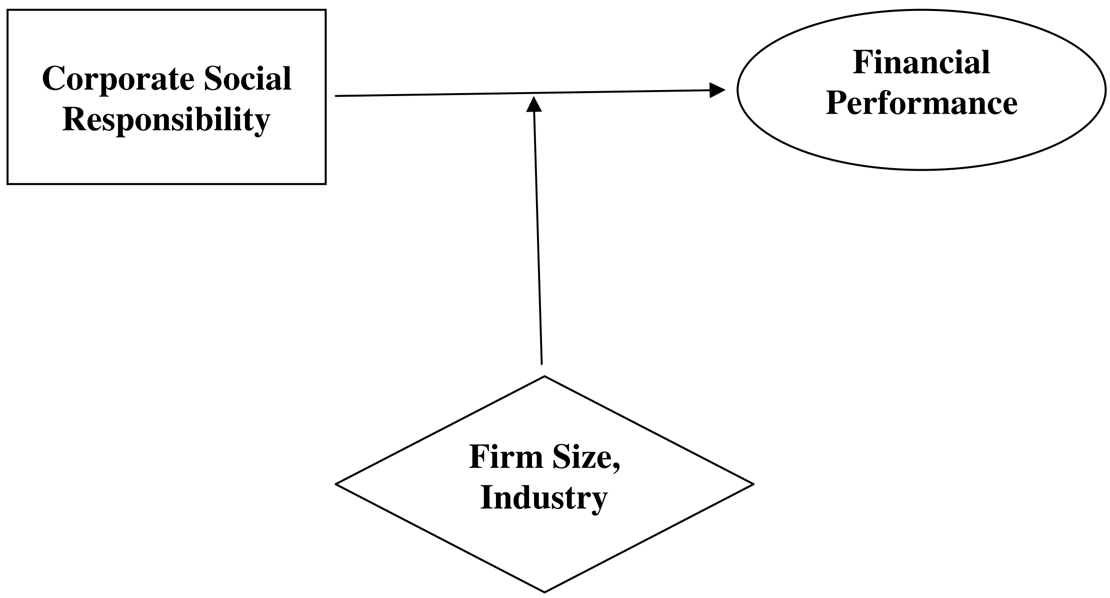
This paper looks at the relationship between CSR and financial performance inside two broad industries, the production industry and the service industry. The production industry is involved with converting natural resources or raw products and often has a greater impact on the environment because of this.

The production industry also includes the energy industry. Firms in the energy industry are often subject to a large amount of publicity so to adverse financial implications they will disclose more CSR than firms that are not as affected financially by publicity.

H3: ***There is a significant positive relationship for both the production and service industries. The relationship will be stronger for firms in the production industries than firms in the service industry.***

Fry and Hock 1976 suggest that the relationship between CSR and financial performance might be different in different industries. Both industries will report CSR because they are motivated to do so by increasing their financial performance. This difference between the strength of the relationship is because of the difference in the nature of the two industries. CSR will have a bigger influence on the profitability of the production industry so it is more essential that these firms take the opportunity to report more CSR to increase and maintain profitability.

3.3: Schematic Diagram of the Relationship Between Variables



Chapter 4: Research Method

4.1: Research Design

Previous researchers' conclusions indicate there are two key issues concerning research method in this topic area. The first issue is the moderating variables which affected the relationship between CSR and financial performance. The second issue is the inconsistency of methods used to measure CSR and financial performance.

4.1.1: The Sample

This paper used the annual reports of 125 companies from the New Zealand stock exchange (NZSX). Only 125 NZSX companies' annual reports were both obtainable and usable. These companies were split into manufacturing and service industries for an industry analysis as well as an overall analysis. The companies were split into broad industries because the small number of firms listed on the NZSX prevented the research from exploring the relationship in a number of narrow industries. There were 44 usable firms in the production industry and 76 usable firms in the service industry. 2004 data was used to calculate a company's CSR score using a content analysis. 2005 financial performance data was collected from a firm's annual report.

4.1.2: Measuring CSR

Measuring CSR performance is a challenging task. There have been a number of methods used by past researchers but there are four main methods used: the Fortune survey, the KLD index, the TRI (Toxic Release Inventory) index, researchers' personally designed survey instruments and a content analysis (Chand 2006). The method used to measure CSR is very important for the research as different methods may show conflicting results as companies may be ranked differently under varying criteria (Griffin and Mahon 1997). Both reputation indices and surveys are highly subjective and must be handled with some amount of scepticism (Cochran and Wood 1984). A universal measure for CSR is required for comparative purposes.

Unfortunately the Fortune Survey, KLD and the TRI index are reputation indexes only related to American listed firms and will not be applicable for looking at New Zealand firms. No CSR reputation indexes exist for New Zealand companies so a content analysis must be carried out to collect a CSR score.

4.1.3: The Use of Content Analysis

Because of the limited scope of universal measurements a content analysis is usually used for measuring corporations CSR reporting (Unerman 2000). A content analysis is defined as "a method of codifying the text (or content) of a piece of writing into various groups (or categories) depending on selected criteria."[4] The use of a content analysis in CSR research has been found be to be empirically applicable by several researchers (Guthrie and Parker 1990 and Gray *et al.* 1995).

There has been a number of measurement methods (known as the unit of analysis) used to generate a CSR score. The most common methods are counting words, sentences, paragraphs, pictures and pages. The measurement method used can have quite an impact on the overall results. Different researchers have justified the use of each of these measurement techniques (Deegan and Gordon 1996). Some researchers feel that using sentences is a

[4] Weber (1988)

more reliable measurement than using words. These researchers argue that counting sentences is more accurate than counting words. Sentences portray the intended meaning but words may not carry the meaning for which they are counted (Tsang 1998). Milne and Adler (1999) argue that using sentences “for both coding and measurement seems likely to provide complete, reliable and meaningful data for further analysis."

A large number of researchers feel that words provide a more reliable measure because different researchers write in different styles. One researcher may take several or more sentences to portray the same idea that another may summarise in a single sentence because of the use of grammar. Words are the smallest unit of analysis used and therefore provide more robustness than other measures (Zegal and Ahmed 1990). The more a firm includes a word related to CSR in their annual report the more they are trying to advertise that activity. Sentences don’t allow for the multiple use of a word in a sentence to stress particular CSR activates. Research on the consistency of various different units of analysis found that word counts were the least subjective of the different measurement techniques (Deegan and Gordon 1996).

Word counting is the most appropriate method of content analysis when there are a number of documents to be analysed and time constraints in place (Deegan and Gordon 1996). I have chosen to use word counting as the unit of analysis for my research as it will give the most reliable results and as it fitted in with the time constraints and sample size.

The list of CSR keywords was generated from Hackston and Milne’s (1996) list of CSR sentences (known as the ‘Decision Rules’) used for content analysis. This is because Hackston and Milne’s coding instrument is one of the most popular instruments used and has been built upon the success and failures of previous researcher’s instruments (Unerman 2000).

A content analysis was carried out on the 125 company annual reports (in PDF format) by searching for 77 different key words and their related terms (for example when searching for employee the word employ was searched to ensure that employer, employment, employed etc were also picked up in the search). This was done by using the *Find* function in Adobe Reader® which provided a list of each occurrence in the annual report of the keyword being searched. The number of times each word occurs (the CSR keyword had to be related to CSR and not there by coincidence) was counted and recorded in a spreadsheet. If a word was there by coincidence and not because it is related to reporting CSR it was excluded from the word count to ensure that the content analysis is as accurate as possible. This overcame the problem of using word counts pointed out by Tsang (1998). One common example of this was the use of the word environment referring to the market environment rather than the environment itself.

4.1.4: Exclusive Use of Annual Reports

Annual reports are used in this research paper to collect the data. The exclusive use of annual reports for this type of research is in agreement with the majority of researchers for several reasons. Annuals reports are the most widely read of any corporate documents issued by firms. Annual reports are read by a range of different stakeholders so the information contained in the annual reports has the most impact on readers (Deegan and Rankin 1997). "Annual reports are highly useful sources of information, because managers of companies commonly signal what is important through the reporting mechanism."[5] A number of companies produce speciality CSR reports but unless these are included in the annual reports they are unlikely to be read by a large audience.

"Our acceptance of the social importance of the corporate annual report stresses its potential (rather than fact) to be influential. Corporate annual reports can

[5] Guthrie *et al.* (2004)

therefore be of interest as much for what they do not report, as for their actual content. This focus on the corporate annual report is also consistent with previous social disclosure studies, since the corporate annual report is the main form of corporate communication and, particularly in the case of quoted companies, is made widely available."[6]

Tilt (1994) found that the annual reports were the most 'common medium' for CSR disclosures and for obtaining information on a firm. It is difficult to identify all sources issued by a corporation that contain CSR information. If a study looks at the CSR reported in all documents and some are missed a company's CSR score will not be accurate (Guthrie *et al*. 2004). Annual reports are the most accessible medium (they are readily available on a number of databases) and as every registered company produces an annual report they provide the most reliable source of information (Gray *et al.* 1995).

4.1.5: Measuring Financial Performance

The financial performance measure has a significant impact on the comparability and reliability of the results. In the 51 papers empirically examining the relationship between CSR and financial performance published prior to 1995, there have been 80 different measures for financial performance used, and 57 of these were used by only one researcher (Griffin and Mahon 1997). This inconsistency has caused comparability issues, which has caused a weakness in the case for a relationship between CSR and financial performance (Cochran and Wood 1984).

This paper uses two measurements, return on assets (ROA) and return on equity (ROE). These are the two most commonly used measures for financial performance and will therefore provide the most comparable results (Griffin and Mahon 1997). Larger firms have the resources to make larger profits. The

[6] Adams and Harte (1998)

use of ROA and ROE controls this problem by providing a firm's financial return in relation to total assets (ROA) or total equity (ROE) which are generally accepted measures of size. Size is a problem as it moderates the relationship as discussed previously in this Chapter and must be adequately controlled to provide reliable results.

ROA and ROE were calculated from relevant figures from a company's 2005 annual report (obtained from Datex). The Formulas used to calculate ROA and ROE are:

ROE = Net Income/Total Equity

ROA = Net Operating Income/Total Assets

4.2: Internal Validity and External Validity

The research is an ex *post facto* study as the CSR has already impacted the companies being looked at. The study therefore lacks the ability to manipulate all the variables being tested in the relationship because it is not being performed under the strict conditions of a laboratory study. The two moderating variables that have been identified (size and industry) have been tightly controlled and this will provide the research with strongest internal validity given the lack of manipulation over variables.

As the study is carried out in a business environment the external validity is high and the results are generalisable to New Zealand firms. The number of firms selected is 125. This number is large enough to provide the study with strong external validity but the study may not be so generalisable to companies outside of New Zealand. A number of past studies have looked at UK and US companies, and the purpose of this study was to provide a New Zealand perspective on the relationship between CSR and financial performance.

The use of a word-based content analysis will provide the most reliable and least subjective CSR scores given the constraints placed on the research. This is due to the robustness of using a word count as outlined by Deegan (2002?) and Gordon and because the keywords were constructed from Hackston and Milne's (1996) coding instrument which had been built based on previous researchers successes and flaws which generated 77 key CSR words (and their related terms). Key words which were identified in the search by coincidence were eliminated from the word count to provide the most accurate CSR score. By using the Hackston and Milne Instrument the research is also comparable to a large amount of the previous research.

The firm size variable is controlled by the use of ROA and ROE as financial performance measures. The effect that size has on CSR is controlled through the variable CSRWord which provided a proportion of CSR words to the total number of words in the annual report. Controlling for the effect size has on both financial performance and CSR will provide the research with strong internal validity. The industry variable is controlled by performing the testing on the relationship of firms in the service and production industries, and comparing results to indicate any differences.

4.3: Statistical Techniques

To analyse the relationship between the CSR and financial performance variables, it was intended for a regression analysis to be carried out on the data. This was not the case because a number of assumptions were violated by the data. A regression provides the correlation between the independent and dependent variables. The data in this research is continuous which fits the criteria for a regression (Coakes *et al.* 2006). Regression requires a number of assumptions to hold. The ratio of samples to independent variables must be large enough; a rule of thumb is 20 times the number of independent variables.

In this research a sample size of 125 is used, and therefore this assumption holds. Both univariate and multivariate outliers were removed from the sample. Five outliers were found giving a testable sample size of 120 companies. Data must be normal and linear and homoscedastic residuals must be independent of one another. Normality test were done on the data and it was found that the residuals weren't normally distributed (Appendix D). Non-parametric testing is therefore required for analysis of the data.

A Spearman's rank-order correlation is a non-parametric alternative used to calculate the correlation between the financial performance measures and corporate social responsibility. The assumptions tests required for the Spearman's rank-order correlation are much weaker (Noether 1991). The only assumptions required are that the samples are random, there is a similar variability across distributions and that there is independence from each subject (Coakes *et al.* 2006). The Spearman rank-order correlation was used to test the relationship between the two CSR variables (CSRWord and CSRScore) and the financial performance measures (ROA and ROE) independently.

A Mann-Whitney U test (Wilcoxon rank sum test) is used to test whether two independent groups are different or whether they come from the same populations (Coakes et al 2006). The Mann-Whitney U test is a non-parametric alternative to the independent group's t-test. This test must be used because it violates the normality assumptions (as discussed above). The Mann-Whitney U test was used to see if there is a significant difference in CSR scores of companies in the production and service industries.

Chapter 5: Analysis of Results

5.1: CSR Scores and Disclosures Overview

The CSR scores for the 125 companies (Appendix C) ranged from 1 CSR keyword (AMP Investments World Index Fund, ING Property Trust and Widespread Portfolios Ltd) to 738 CSR keywords (The Warehouse Group Ltd) in the annual report. Appendix E shows that the corporate social responsibility scores for the 125 companies had a mean score of 96.35 and a median of 43. This indicates that half the companies had CSR scores of 43 words or less and that a number of companies in the upper half had much higher CSR scores comparatively. This is further shown by the large standard deviation figure and the large skewness and Kutosis which shows that the data is positively skewed. Appendix D shows that the CSR scores were not normally distributed.

The most common keywords (and their related terms), that occurred in a company's annual reports were employee, environment, remuneration and staff. The least common keywords that occurred in the annual reports were poison, toxin, abatement and harmonise, which didn't occur once in relation to CSR.

This breakdown of CSR scores is similar to that of Guthrie and Parker (1990) who found that 93% of companies that disclosed any CSR made disclosures regarding human resources (disclosures about remuneration and employees for example). Guthrie and Parker also found that 29% of those companies disclosed community involvements and 21% environmental disclosures. I also found that community and environmental words were significant in a number of company's annual reports. However a much larger percentage of the 125 corporations were found to disclose these aspects of CSR in this research than Parket had found. This is because of the growing popularity of reporting CSR today. Guthrie and Parker carried out their research seventeen years ago. At this time disclosing CSR activities was just starting to take off and a very different business environment existed. Today's business environment is influenced by a range of stakeholders and not just shareholders. Corporate scandals such as Enron and WorldCom have thrown the corporate world into the limelight and put the investment markets under scrutiny. The result of these scandals was the demand for more transparency from the community.

5.2: The Relationship Between CSR and Financial Performance

A Spearman's rank-order correlation examining the relationship between financial CSR and performance was performed on all 120 usable firms together. Table 1 shows the correlation between both CSR and both financial performance variables. There was an insignificant positive relationship found between both CSR variables and ROA. This was shown by a p value of 0.201 using CSRScore and 0.475 using CSRWord as the CSR measure being greater than 0.05. The relationship between CSRWord and ROE was also positive and insignificant with a p value of 0.307. There was a significant positive relationship found between CSRScore and ROE with a p value of 0.003. This significant relationship was very weak however with an r value of only 0.271.

Hypothesis one is rejected because a significant positive relationship was not found between CSR and financial performance in the following year. A weak significant positive correlation was found between CSRScore and ROE but this r value was very low. The correlation between the size adjusted CSRWord variable was insignificant suggesting that the significant relationship found between CSRScore and ROE was because of the effect that size is had on the CSR score of a firm.

Table 1: Spearman Rank-Order Correlation of CSR and Financial Performance Variables.

Correlations

			CSR Score	CSR/Word x 10000	2005 ROA	2005 ROE
Spearman's rho	CSR Score	Correlation Coefficient	1.000	.869**	.118	.271**
		Sig. (2-tailed)	.	.000	.201	.003
		N	120	120	120	120
	CSR/Word x 10000	Correlation Coefficient	.869**	1.000	.066	.094
		Sig. (2-tailed)	.000	.	.475	.307
		N	120	120	120	120
	2005 ROA	Correlation Coefficient	.118	.066	1.000	.774**
		Sig. (2-tailed)	.201	.475	.	.000
		N	120	120	120	120
	2005 ROE	Correlation Coefficient	.271**	.094	.774**	1.000
		Sig. (2-tailed)	.003	.307	.000	.
		N	120	120	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

5.3: Corporate Social Responsibility Scores Across Industries

A Mann-Whitney U Test was carried out to see if there was a significant difference between the production and service industries in CSRScore and CSRWord scores. Table 2 shows that there is a significant difference between the CSR raw score for firms in the production and service industries. This is because the p value of 0.036 is significant because it is less than 0.05. There was a stronger significant difference (p = 0.14) between the two industries when using the size adjusted variable CSRWord (Table 3).

Hypothesis two is accepted as it was found that there is a significant difference between the CSR raw score for firms in the production and service industries. The result provides further evidence for the need to control the industry variable that is moderating the CSR and financial performance relationship. Controlling for size provided a stronger significant difference, this suggests that size also has a big affect on CSR and that when controlling for size the difference in industry conditions impacts a company's CSR disclosures even more.

Table 2: Man Whitney U Test Using CSRScore.

Test Statistics[a]

	CSR Score
Mann-Whitney U	1320.000
Wilcoxon W	4246.000
Z	-2.092
Asymp. Sig. (2-tailed)	.036

a. Grouping Variable: Industry

Table 3: Mann Whitney U Test Using CSRWord.

Test Statistics[a]

	CSR/Word x 10000
Mann-Whitney U	1252.000
Wilcoxon W	4178.000
Z	-2.456
Asymp. Sig. (2-tailed)	.014

a. Grouping Variable: Industry

5.4: The Relationship Between CSR and Financial Performance Across Industries

A Spearman's rank-order correlation examining the relationship between CSR and financial performance was performed on both the production and the service industries.

5.4.1: Production Industry

Table 4 shows the correlation between ROA and both CSRScore and CSRWord in the production industry. The r value (of 0.559 using the CSRScore variable and 0.402 for the CSRWord variable) indicates that there is a positive relationship. The correlation using both CSR variables is significant (p<0.05) suggesting there is a positive significant relationship between CSR and ROA for firms that operate in the production industry.

Table 4: Spearman Rank-Order Correlation of CSR Variables and ROA for Firms in the Production Industry.

Correlations

			2005 ROA	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROA	Correlation Coefficient	1.000	.559**	.406**
		Sig. (2-tailed)	.	.000	.006
		N	44	44	44
	CSR Score	Correlation Coefficient	.559**	1.000	.856**
		Sig. (2-tailed)	.000	.	.000
		N	44	44	44
	CSR/Word x 10000	Correlation Coefficient	.406**	.856**	1.000
		Sig. (2-tailed)	.006	.000	.
		N	44	44	44

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5 shows the results of the correlation between CSRScore and ROE for companies in the production industry. The r value of 0.473 is positive and this is highly significant (the p value of 0.001 is < 0.05). The relationship between CSRWord and ROE is weaker however but there is a positive correlation of 0.289. The correlation has a p value of 0.053 which is close enough to 0.05 to still be considered significant. The results suggest that a significant positive relationship exists between CSR (adjusted for size and non-adjusted) and ROE for firms that operate in the production industry.

Table 5: Spearman Rank-Order Correlation of CSR Variables and ROE for Firms in the Production Industry.

Correlations

			2005 ROE	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROE	Correlation Coefficient	1.000	.473**	.289
		Sig. (2-tailed)	.	.001	.057
		N	44	44	44
	CSR Score	Correlation Coefficient	.473**	1.000	.846**
		Sig. (2-tailed)	.001	.	.000
		N	44	44	44
	CSR/Word x 10000	Correlation Coefficient	.289	.846**	1.000
		Sig. (2-tailed)	.053	.000	.
		N	44	44	44

**. Correlation is significant at the 0.01 level (2-tailed).

5.4.2: Service Industry

Table 6 shows the correlation between ROA and CSRScore and CSRWord for firms in the service industry. The negative r value indicates that a negative relationship was found when correlating ROA with both CSR variables. The r value was only -0.047 using CSRScore and -0.054 using CSRWord. This is a very weak correlation and this is confirmed by the insignificant p values of 0.641 and 0.658 respectively. The data suggests that no significant relationship exists between CSR and ROA for firms in the service industry.

Table 6: Spearman Rank-Order Correlation of CSR Variables and ROA for Firms in the Service Industry.

Correlations

			2005 ROA	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROA	Correlation Coefficient	1.000	-.047	-.054
		Sig. (2-tailed)	.	.685	.641
		N	76	76	76
	CSR Score	Correlation Coefficient	-.047	1.000	.860**
		Sig. (2-tailed)	.685	.	.000
		N	76	76	76
	CSR/Word x 10000	Correlation Coefficient	-.054	.860**	1.000
		Sig. (2-tailed)	.641	.000	.
		N	76	76	76

**. Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows the relationship between ROE and the two CSR variables in the service industry. The r values are positive, indicating that the variables are positively related. However the relationship was found to be insignificant using both CSR variables. The CSRScore variable had a p value of 0.08 and CSRWord a p value of 0.355. As with using ROA as the financial performance measure, there was no significant relationship found between CSR and financial performance for firms operating in the service industry. The consistency between the results using alternative measurement variables provides evidence that the results are reliable.

Table 7: Spearman Rank-Order Correlation of CSR Variables and ROE for Firms in the Service Industry.

Correlations

			2005 ROE	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROE	Correlation Coefficient	1.000	.202	.107
		Sig. (2-tailed)	.	.080	.355
		N	76	76	76
	CSR Score	Correlation Coefficient	.202	1.000	.852**
		Sig. (2-tailed)	.080	.	.000
		N	76	76	76
	CSR/Word x 10000	Correlation Coefficient	.107	.852**	1.000
		Sig. (2-tailed)	.355	.000	.
		N	76	76	76

**. Correlation is significant at the 0.01 level (2-tailed).

5.4.3: The Relationship Between CSR and Financial Performance in the Production and Service Industries

Hypothesis three is rejected because a significant positive relationship between CSR and financial performance wasn't found for both the production and service industries. There was a significant positive relationship found between CSR and financial performance for firms operating in the production industry. No relationship was found however between both the CSR and financial performance variables for firms in the service industry. As hypothesised the CSR variables and financial performance measures were more highly correlated for companies in the production industry than those in the service industry.

Chapter 6: Discussion and Conclusion

6.1: Discussion

Previous literature has suggested that different industries are exposed to different conditions and therefore examining the relationship between CSR and financial performance must be undertaken inside industries to control for this variable. Table 1 showed that when the two CSR variables and the two financial performance variables were correlated with all 120 usable firms the relationship between the variables was weak and insignificant. Previous literature also outlined the importance of controlling for size on financial performance and CSR. The results of this research show the importance of controlling both of these moderating variables.

ROA and ROE are both financial measures that provide a return based on the size of the firm, it was therefore expected that both variables would have similar correlations with the CSR variables. The size variable moderating a company's raw CSR score didn't play a great role in impacting the relationship between ROA and CSR, but it had a significant influence on the relationship between CSR and ROE. The CSRWord variable provided more reliable results because it was size adjusted. The CSRScore variable was used to ensure that there was consistency in the results, which there was. Although there was a slightly weaker relationship between CSR and the two financial performance variables, the relationship was the same in nature (significant and positive for the production industry and insignificant for the service industry), which indicates reliability and consistency in the results.

The CSR variables and financial performance measures were more highly correlated for companies in the production industry than those in the service industry. It was predicted that the nature of the industry plays an important part in a company reporting CSR and that the effect on income that CSR has depends on the industry of the firm. It wasn't however predicted that the service industry wouldn't benefit at all financially from undertaking CSR reporting.

The results indicate that the amount of CSR reported only affects the financial performance of firms that operate in the production industry. For firms in the production industry, reporting more CSR could increase financial performance. This paper looked at two broad industries that encompass a number of industries within them. There is evidence of legitimacy theory. Companies in the production sector are often more publicly exposed or have a bigger impact on the environment because they work with natural resources or converting raw product into finished goods. The affect this has on the environment and the community can attract a lot of attention from interest groups, government and both the local and international community's. Companies can control this attention through CSR. As discussed in Chapter Two, legitimacy theory is directly related to a firm's financial performance. This view supports that of Fry and Hock (1976) who state that companies with more need to manage their public image are more likely to disclose CSR. A CSR disclosure for these firms is more likely to have a much greater influence on the firm's short-term and long-term profitability. By reporting CSR these firms can increase their financial performance but by not doing so there could be negative ramifications.

Previous research has not looked at comparing the relationship of CSR and financial performance in different industries individually. Different industries are exposed to different regulations, consumers, external pressures and public involvement (Griffin and Mahon 1997). These industry conditions seem to influence the way that companies report CSR. The researchers have either analysed the relationship with companies from all different industries together or from companies within an individual industry like Griffin and Mahon (1997) and Fry and Hock (1976). Fry and Hock (1976) raise the argument that the industry a firm operates in plays an essential role in the amount of CSR that a firm reports. Fry and Hock (1976) introduce the argument that the relationship between CSR and financial performance may be different across industries. The results found in this paper support this idea. These findings provide some answer to the question raised by Parket and Eilbert (1975) that if financial performance is positively related to CSR why aren't all firms reporting CSR and why do firms report different amounts? Larger firms in particular industries that are under external pressures, or whose activities have an effect on the environment, are more likely to report CSR because of the financial benefits earned from disclosing. Firms that don't feel they are going to benefit in some way or haven't see any financial benefits from reporting previously aren't as likely to report CSR because CSR activities are completely voluntary. Shareholders aren't likely to want their funds spent on activities that don't benefit them or the company financially when those funds used on CSR could be invested somewhere else.

Deegan (2002) suggests that legitimising a firm's activities is essential for the survival of the firm. A bad reputation can have a devastating effect on financial performance. The relationship between CSR and financial performance exists for those firms that have a need to control their reputation. Firms that are heavily exposed to the public can be subject to boycotts and their sales could be hit hard by negative publicity. By reporting CSR, firms in particular industries could increase financial performance through better PR, increased product recognition, increased sales as consumers perceive these companies with a positive attitude, increased employee motivation and a number of other factors which all in turn increase profitability.

This research could assist managers who are considering undertaking CSR reporting (or increasing their CSR activities) to increase financial performance. CSR can be a very expensive process so a decision to invest in CSR activities should not be taken lightly. Firms that spend shareholder funds on undertaking CSR reporting when there is no financial return may come under scrutiny from their shareholders. Managers must carefully consider undertaking CSR, as the research indicates that only firms in the production industry experience increased profitability. If a firm has a need to control its reputation or it is publicly exposed to criticisms then CSR could help increase or maintain their performance. A firm that is not in the production industry or in the public limelight may gain little or no financial benefit at all from undertaking CSR. Firms like this may be better to invest their funds elsewhere to provide a better return. It is very difficult to identify and measure the financial return brought about by CSR and this must also be factored into the decision of investing in CSR disclosures.

6.2: Conclusion

CSR has become an important part of the accounting profession. There has been a shift from traditional shareholder wealth maximisation by firms to reporting the environmental and social aspects of a firm's performance rather than just a firm's financial status. CSR reporting can be a very expensive process and the question has been raised as to why companies would undertake such expenditure at the cost of their shareholders. What motivates a company to report more than the bottom line has become a major research topic in the area of CSR. This paper looked at financial performance as the motivator for CSR disclosures. The relationship between CSR and financial performance is an important one to both management and academics.

There have been a number of researchers investigating the relationship between CSR and financial performance. The results have been inclusive. A number of papers found positive relationships while others found negative relationships or no relationships between the variables at all. This paper looks at the relationship between CSR and financial performance in a New Zealand perspective using 125 firms from the NZSX. The majority of studies didn't control for two essential variables moderating the relationship, industry and size. The research for this paper was carried out in two broad industries, the production and services industries. The second important issue is the inconsistency of the financial performance measures and CSR reporting measures. This paper used the two most common financial performance measures, ROA and ROE, which control for size for comparability. A content analysis was carried out to measure a firm's CSR score. A content analysis is subjective but this was the only alternative and was undertaken (in accordance with constraints) using a method that gave the most reliable results.

There was a significant difference in the CSR scores across the two industries. This demonstrated the importance of controlling the industry variable when researching the CSR and financial performance relationship. A significant positive relationship was found between CSR and financial performance for firms inside the production industry but not inside the service industry.

Only companies that operate in the production industry experienced increased profitability through CSR disclosures. There is evidence of legitimacy theory as firms that are more publicly exposed because they often have a lot to do with natural resources and the environment tends to be in the production industry. Legitimacy theory is directly related to firm performance. Previous research has not compared the relationship between CSR and financial performance in different industries. Managers, whose firms aren't operating in one of the production industries, should think very carefully about investing in CSR if they are doing so because they want to increase profitability.

Chapter 7: Limitations and Future Research

7.1: Limitations

Due to time constraints the research only uses one year's data. It was originally intended that two years data would be used but this was not viable. Using two years (or more) data would increase the reliability of the results if a consistent relationship between CSR and financial performance was found repetitively across multiple years.

The data was restricted to New Zealand listed companies so may not be completely generalisable to the corporate environments of other countries, especially those countries with very different social, political and economic environments. A number of previous studies have looked at the relationship between CSR and financial performance of corporations in other countries and this study aimed to provide a New Zealand perspective on the relationship between these variables. Using publicly listed New Zealand companies limited the sample size to 125 usable companies. A larger sample size may provide more reliable results.

Content analysis was a central part of the research. The use of a content analysis is subjective because it is very much dependent on the coding instruments used and the opinions of the researcher (Deegan and Rankin 1996). The coding instrument used was a keyword count of a list of CSR keywords generated from Hackston and Milne (1996). The list of 77 words (and their related terms) doesn't account for every possible word that could be used for CSR so the score may not be exact. This is the first time this coding instrument has been used and although steps were taken to make sure the data is as reliable and comparable as possible, the reliability of the CSR scores could be hindered. Content analysis makes the assumption that the quantity of the disclosures is more meaningful than the quality of CSR disclosures (Deegan and Gordon 1996).

The final limitation is the exclusive use of annual reports. Only using annual reports "may result in a somewhat incomplete picture of disclosure practices"[7] Roberts 1991. Other documents like CSR reports, pamphlets, advertising, environmental reports and other reports and documents may be produced by firms (Unerman 2000). These documents may include CSR reporting and as a result the overall picture of a company's CSR disclosures may not be complete when only the annual reports are considered. As discussed in Chapter 3 it is impossible to ensure that all documents are used in the research.

7.2: Future Research

As this paper was limited to a single year's data, research could be undertaken which looks at the relationship in New Zealand across a number of years. This would provide a trend analysis of the change in CSR as a whole and how it has grown. Comparing a company's CSR score to companies five years and a decade or more ago would provide an interesting look at if the corporate environment in New Zealand is becoming more stakeholder-oriented.

This paper only looked at two broad industries, the production and service industries. These industries can be further divided into a number of more specific industries. Research which explores the relationship between CSR and financial performance in these specific industries may be of great benefit to managers considering CSR investments. Looking at New Zealand firms for this

[7] Roberts (1991)

research may be unreliable because there are only a small number of listed companies and the sample size for each industry would be tiny.

Research could be done which compares the relationship between CSR and financial performance for New Zealand with other countries. It would be interesting to see if countries that operate in very different political, social and environmental environments like Malaysia, India, South Africa, Egypt and Argentina for example have a similar relationship between CSR and financial performance. It will also be interesting to see if companies in these countries undertake the same types of CSR activities and whether or not employee related disclosures are the most common disclosures.

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Appendices

Appendix A: Hackston and Milne List of CSR Disclosure's

The following is taxonomy of the types of corporate social disclosure that form the substance of the content analysis of annual reports. The list is intended to represent an exhaustive itemization of information with social importance.

Environment

(1) Environmental pollution

- Pollution control in the conduct of the business operations; capital, operating and research and development expenditures for pollution abatement;
- Statements indicating that the company's operations are non-polluting or that they are in compliance with pollution laws and regulations;
- Statements indicating that pollution from operations have been or will be reduced;
- Prevention or repair of damage to the environment resulting from processing or natural resources, e.g. land reclamation or reforestation;
- Conservation of natural resources, e.g. recycling glass, metals, oil, water and paper;
- Using recycled materials;
- Efficiently using materials resources in the manufacturing process;
- Supporting anti-litter campaigns;
- Receiving an award relating to the company's environmental programmes or policies;
- Preventing waste.

(2) Aesthetics

- Designing facilities harmonious with the environment;
- Contributions in terms of cash or art/sculptures to beautify the environment;
- Restoring historical buildings/structures.

(3) Other

- Undertaking environmental impact studies to monitor the company's impact on the environment;
- Wildlife conservation;
- Protection of the environment, e.g. pest control.

Energy

- Conservation of energy in the conduct of business operations;
- Using energy more efficiently during the manufacturing process;
- Utilizing waste materials for energy production;
- Disclosing energy savings resulting from product recycling;
- Discussing the company's efforts to reduce energy consumption;
- Disclosing increased energy efficiency of products;
- Research aimed at improving energy efficiency of products;
- Receiving an award for an energy conservation programme;
- Voicing the company's concern about the energy shortage;
- Disclosing the company's energy policies.

Employee health and safety

- Reducing or eliminating pollutants, irritants, or hazards in the work environment;
- Promoting employee safety and physical or mental health;
- Disclosing accident statistics;

- Complying with health and safety standards and regulations;
- Receiving a safety award;
- Establishing a safety department/committee/policy;
- Conducting research to improve work safety;
- Providing low cost health care for employees.

Employee other

(1) Employment of minorities or women

- Recruiting or employing racial minorities and/or women;
- Disclosing percentage or number of minority and/or women employees in the workforce and/or in the various managerial levels;
- Establishing goals for minority representation in the workforce;
- Programme for the advancement or minorities in the workplace;
- Employment of other special interest groups, e.g. the handicapped, ex-convicts or former drug addicts;
- Disclosures about internal advancement statistics.

(2) Employee training

- Training employees through in-house programmes;
- Giving financial assistance to employees in educational institutions or continuing education courses;
- Establishment of trainee centres.

(3) Employee assistance/benefits

- Providing assistance or guidance to employees who are in the process of retiring or who have been made redundant;
- Providing staff accommodation/staff home ownership schemes;
- Providing recreational activities/facilities.

(4) Employee remuneration

- Providing amount and/or percentage figures for salaries, wages, PAYE taxes, superannuation;
- Any policies/objectives/reasons for the company's remuneration package/schemes.

(5) Employee profiles

- Providing the number of employees in the company and/or at each branch/ subsidiary;
- Providing the occupations/managerial levels involved;
- Providing the disposition of staff - where the staff are stationed and the number involved;
- Providing statistics on the number of staff, the length of service in the company and their age groups;
- Providing per employee statistics, e.g. assets per employee and sales per employee;
- Providing information on the qualifications of employees recruited.

(6) Employee share purchase schemes

- Providing information on the existence of or amount and value of shares offered to employees under a share purchase scheme or pension programme;
- Providing any other profit sharing schemes.

(7) Employee morale

- Providing information on the company/management's relationships with the employees in an effort to improve job satisfaction and employee motivation;

- Providing information on the stability of the workers' jobs and the company's future;
- Providing information on the availability of a separate employee report;
- Providing information about any awards for effective communication with employees;
- Providing information about communication with employees on management styles and management programmes which may directly affect the employees.

(8) Industrial relations

- Reporting on the company's relationship with trade unions and/or workers;
- Reporting on any strikes, industrial actions/activities and the resultant losses in terms of time and productivity;
- Providing information on how industrial action was reduced/negotiated.

(9) Other

- Improvements to the general working conditions - both in the factories and for the office staff;
- Information on the re-organization of the company/discussions/branches which affect the staff in any way;
- The closing down of any part of the organization, the resultant redundancies created, and any relocation/retraining efforts made by the company to retain staff;
- Information and statistics on employee turnover;
- Information about support for day-care, maternity and paternity leave.

Products

(1) Product development

- Information on developments related to the company's products, including its packaging, e.g. making containers reusable;
- The amount/percentage figures of research and development expenditure and/or its benefits;
- Information on any research projects set up by the company to improve its product in any way.

(2) Product safety

- Disclosing that products meet applicable safety standards;
- Making products safer for consumers;
- Conducting safety research on the company's products;
- Disclosing improved or more sanitary procedures in the processing and preparation of products;
- Information on the safety of the firm's product.

(3) Product quality

- Information on the quality of the firm's products as reflected in prizes/awards received;
- Verifiable information that the quality of the firm's product has increased (e.g. ISO 9000).

Community involvement

- Donations of cash, products or employee services to support established community activities, events, organizations, education and the arts;
- Summer or part-time employment of students;
- Sponsoring public health projects;
- Aiding medical research;

- Sponsoring educational conferences, seminars or art exhibits;
- Funding scholarship programmes or activities;
- Other special community related activities, e.g. opening the company's facilities to the public;
- Supporting national pride/government sponsored campaigns;
- Supporting the development or local industries or community programmes and activities.

Others

- Corporate objectives/policies: general disclosure of corporate objectives/policies relating to the social responsibility of the company to the various segments of society.
- Other: disclosing/reporting to groups in society other than shareholders and employees, e.g. consumers; any other information that relates to the social responsibility of the company.

Appendix B: CSR Keywords

Pollution
Poison
Abatement
Repair
Reduction
Conservation
Recycle
Award
Mitigation
Art
Contribution
Protection
Energy
Efficiency
Eliminating
Employee/Employ
Health
Safe
Male
Female
Minorities/Minority
Training
Education/Educate
Staff
Disability
Communication
Strike
Morale
Reuse
Donation
Social
Responsibility
Public
Aid
Consumers/Customer
Pension
Help
Charity
Harmonise
Green
Toxin
Prevent
Environment
Restoration
Natural
Litter
Waste
Rubbish
Sport
Wildlife
Clean
Consumption
Programme
Hazard
Accident
Ethic
Ethnicity
Gender
Race
Statistics
Assist
Trust
Remuneration
Occupation
Union
Conditions
Stability
Sanitary
Community
Society
Sponsor
Hospital
Scholarship
Stakeholder
Foundation
Voluntary
School

Appendix C: Companies - Industries, CSRScore and CSRWord

Companys	Industry	CSRScore	CSRWord
42 Bellow	Production	49	63.381
A2	Production	27	35.373
Abano	Service	141	63.101
Affco	Production	56	41.053
Air New Zealand	Service	371	98.328
Allied Farmers	Production	50	43.615
AMP Investment	Service	1	2.061
AMP Limited	Service	221	36.302
AMP Trust	Service	28	14.946
ANZ	Service	385	70.905
APN	Service	147	40.276
ASB	Service	33	17.297
Auckland Airport	Service	212	76.809
Austral Pacific	Production	23	16.674
AXA	Service	285	85.222
BLIS Technologies	Service	26	33.062
Botry-Zen	Service	31	50.219
Briscoes	Service	44	36.688
Cabletalk Group	Service	29	31.467
CACI	Service	9	14.749
Cadmus Technology	Production	19	19.948
Calan Healthcare Properties Trust	Service	6	4.194
CanWest MediaWorks (NZ)	Service	79	74.158
Cavotec	Service	27	34.731
CDL Ltd	Service	21	8.274
CER Group	Service	16	29.363
Charlies	Production	17	20.350
Comtvita	Production	196	128.146
Contact Energy	Production	309	102.607
Delegates	Production	13	19.596
Dorchester	Service	43	29.153
Ebos	Production	83	58.686
Evergreen	Production	41	36.003
Feltex	Production	84	50.360
Finzsoft	Service	11	21.227
Fisher & Paykel Appliances	Production	141	68.493
Fisher & Paykel Health Care	Production	214	87.863

[redacted]

Property for Industry	Service	14	11.949
Provenco	Production	45	31.712
Pumpkin Patch	Service	73	58.098
Pyne	Service	44	30.585
Renaisance	Service	25	28.732
Repco	Service	91	41.080
Resteraunt Brands	Service	40	28.520
Richina Pacific	Service	73	37.235
RMG	Service	67	40.187
Rubicon	Service	19	12.579
Ryman	Service	55	80.327
Sanford	Production	549	194.233
Savoy	Service	8	20.460
Sealegs	Service	20	30.623
Seeka	Production	44	52.663
Skellerup	Production	128	93.172
Sky	Service	60	24.364
Sky City	Service	263	77.092
Smith City	Service	28	25.749
Software of Excellence	Production	29	22.411
South Port	Service	72	65.035
Speirs	Production	28	18.222
Steel & Tube Holdings	Production	58	76.882
Summit	Production	27	20.067
Taylors	Service	16	25.225
Teamtalk	Service	43	45.206
Telecom	Service	456	74.485
Telstra	Production	523	25.374
Tenon	Production	226	80.616
Toll	Service	131	50.991
Tower	Service	167	52.690
Training Solutions Plus	Service	18	18.641
Trans Tasman Investment	Service	29	24.899
Trustpower	Production	244	151.515
Turners and Growers	Production	42	31.376
Turners Auctions	Service	31	30.590
Vector	Production	265	206.934
Wakefield	Service	45	48.744
Warehouse	Service	738	155.254
Wellington	Production	29	40.006
Widespread Portfolios	Production	1	3.073
Windflow	Production	27	31.406
Wool Equities	Production	62	37.626
Zintel	Service	28	35.551

Appendix D: Tests of Normality

D.1: Kolmogorov-Smirnov and Shapiro-Wilk Statistics

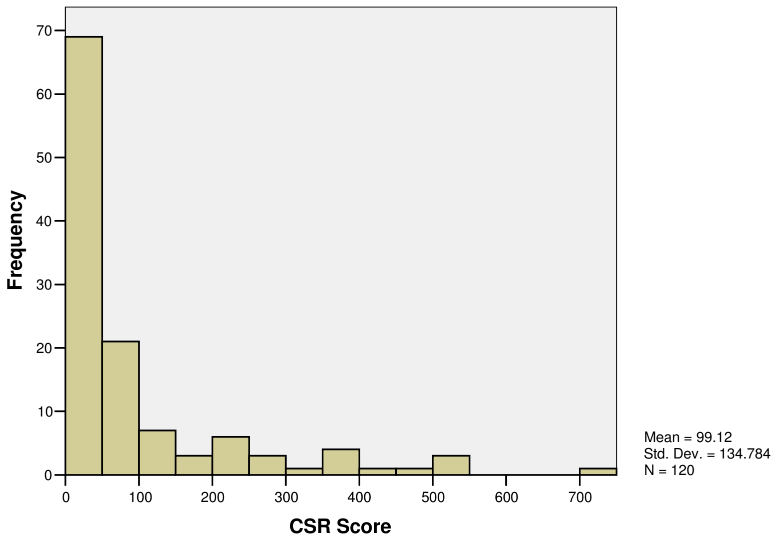
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CSR Score	.271	120	.000	.674	120	.000
CSR/Word x 10000	.170	120	.000	.812	120	.000
2005 ROE	.152	120	.000	.905	120	.000
2005 ROA	.313	120	.000	.520	120	.000

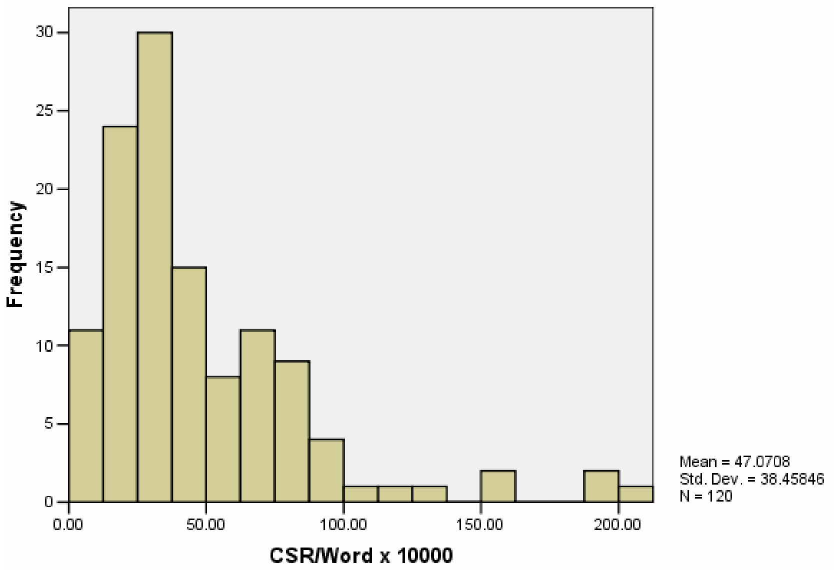
a. Lilliefors Significance Correction

D.2: Histograms of Variables

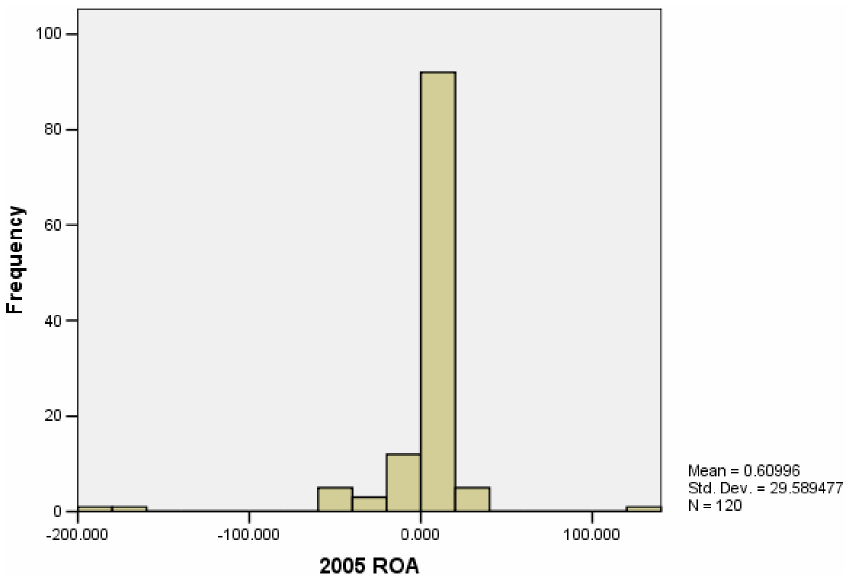
Histogram of CSRScore



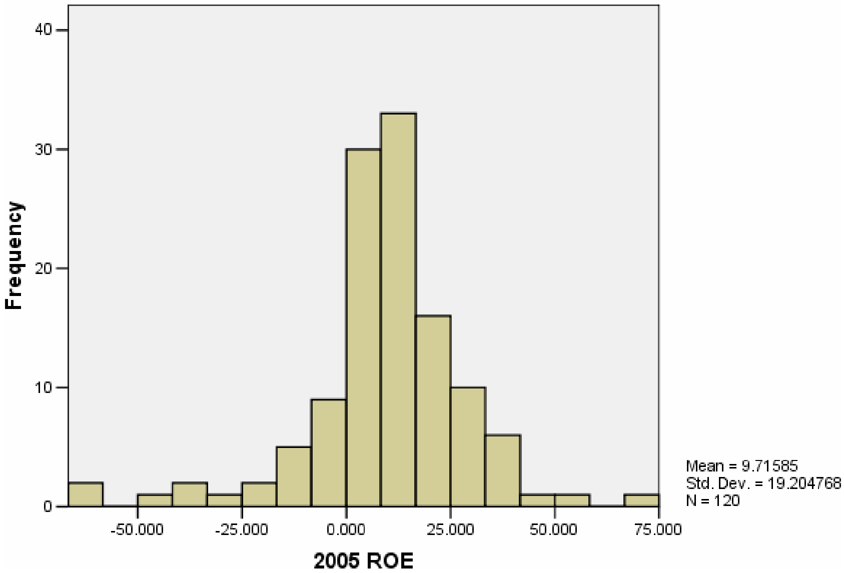
Histogram of CSRWord



Histogram of ROA



Histogram of ROE



Appendix E: CSRScore Data Analysis

Descriptives

			Statistic	Std. Error
CSR Score	Mean		96.35	11.877
	95% Confidence Interval for Mean	Lower Bound	72.84	
		Upper Bound	119.86	
	5% Trimmed Mean		77.46	
	Median		43.00	
	Variance		17632.343	
	Std. Deviation		132.787	
	Minimum		1	
	Maximum		738	
	Range		737	
	Interquartile Range		69	
	Skewness		2.416	.217
	Kurtosis		6.135	.430

Appendix F: Mahalanobis Distance

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-43.28	154.31	96.35	26.974	125
Std. Predicted Value	-5.177	2.148	.000	1.000	125
Standard Error of Predicted Value	11.777	131.012	15.818	12.785	125
Adjusted Predicted Value	-488.57	158.94	91.97	59.218	125
Residual	-111.316	636.212	.000	130.018	125
Std. Residual	-.849	4.854	.000	.992	125
Stud. Residual	-.856	4.874	.002	.998	125
Deleted Residual	-113.084	641.566	4.380	139.383	125
Stud. Deleted Residual	-.855	5.409	.012	1.034	125
Mahal. Distance	.009	122.880	1.984	11.421	125
Cook's Distance	.000	5.151	.045	.461	125
Centered Leverage Value	.000	.991	.016	.092	125

a. Dependent Variable: CSR Score

Appendix G: Mann Whitney U Test

Mann Whitney U Test - CSRScore Variable

Ranks

	Industry	N	Mean Rank	Sum of Ranks
CSR Score	Production Industry	45	69.67	3135.00
	Service Industry	76	55.87	4246.00
	Total	121		

Test Statistics[a]

	CSR Score
Mann-Whitney U	1320.000
Wilcoxon W	4246.000
Z	-2.092
Asymp. Sig. (2-tailed)	.036

a. Grouping Variable: Industry

Mann Whitney U Test - CSRWord Variable

Ranks

	Industry	N	Mean Rank	Sum of Ranks
CSR/Word x 10000	Production Industry	45	71.18	3203.00
	Service Industry	76	54.97	4178.00
	Total	121		

Test Statistics[a]

	CSR/Word x 10000
Mann-Whitney U	1252.000
Wilcoxon W	4178.000
Z	-2.456
Asymp. Sig. (2-tailed)	.014

a. Grouping Variable: Industry

Appendix H: Spearman's Rank-Order Correlation

H.1: Correlation Between CSR and Financial Performance

Correlation Between CSR and ROA

Correlations

			2005 ROA	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROA	Correlation Coefficient	1.000	.118	.066
		Sig. (2-tailed)	.	.201	.475
		N	120	120	120
	CSR Score	Correlation Coefficient	.118	1.000	.869**
		Sig. (2-tailed)	.201	.	.000
		N	120	120	120
	CSR/Word x 10000	Correlation Coefficient	.066	.869**	1.000
		Sig. (2-tailed)	.475	.000	.
		N	120	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation Between CSR and ROE

Correlations

			2005 ROE	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROE	Correlation Coefficient	1.000	.271**	.094
		Sig. (2-tailed)	.	.003	.307
		N	120	120	120
	CSR Score	Correlation Coefficient	.271**	1.000	.869**
		Sig. (2-tailed)	.003	.	.000
		N	120	120	120
	CSR/Word x 10000	Correlation Coefficient	.094	.869**	1.000
		Sig. (2-tailed)	.307	.000	.
		N	120	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

H.2: Correlation Between CSR and Financial Performance for Firms in the Production Industry

Correlation Between CSR and ROA - Production Industry

Correlations

			2005 ROA	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROA	Correlation Coefficient	1.000	.559**	.406**
		Sig. (2-tailed)	.	.000	.006
		N	44	44	44
	CSR Score	Correlation Coefficient	.559**	1.000	.856**
		Sig. (2-tailed)	.000	.	.000
		N	44	44	44
	CSR/Word x 10000	Correlation Coefficient	.406**	.856**	1.000
		Sig. (2-tailed)	.006	.000	.
		N	44	44	44

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation Between CSR and ROE - Production Industry

Correlations

			2005 ROE	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROE	Correlation Coefficient	1.000	.473**	.289
		Sig. (2-tailed)	.	.001	.057
		N	44	44	44
	CSR Score	Correlation Coefficient	.473**	1.000	.846**
		Sig. (2-tailed)	.001	.	.000
		N	44	44	44
	CSR/Word x 10000	Correlation Coefficient	.289	.846**	1.000
		Sig. (2-tailed)	.057	.000	.
		N	44	44	44

**. Correlation is significant at the 0.01 level (2-tailed).

H.3: Correlation Between CSR and Financial Performance for Firms in the Service Industry

Correlation Between CSR and ROA - Service Industry

Correlations

			2005 ROA	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROA	Correlation Coefficient	1.000	-.047	-.054
		Sig. (2-tailed)	.	.685	.641
		N	76	76	76
	CSR Score	Correlation Coefficient	-.047	1.000	.860**
		Sig. (2-tailed)	.685	.	.000
		N	76	76	76
	CSR/Word x 10000	Correlation Coefficient	-.054	.860**	1.000
		Sig. (2-tailed)	.641	.000	.
		N	76	76	76

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation Between CSR and ROE - Service Industry

Correlations

			2005 ROE	CSR Score	CSR/Word x 10000
Spearman's rho	2005 ROE	Correlation Coefficient	1.000	.202	.107
		Sig. (2-tailed)	.	.080	.355
		N	76	76	76
	CSR Score	Correlation Coefficient	.202	1.000	.852**
		Sig. (2-tailed)	.080	.	.000
		N	76	76	76
	CSR/Word x 10000	Correlation Coefficient	.107	.852**	1.000
		Sig. (2-tailed)	.355	.000	.
		N	76	76	76

**. Correlation is significant at the 0.01 level (2-tailed).